SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Drywall Manual

www.speedlinedrywall.co.uk

REVISED
V2
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INTRODUCTION

INTRODUCING SPEEDLINE DRYWALL SYSTEMS | Part of SIG

WELCOME TO THE NEW SPEEDLINE DRYWALL SYSTEMS MANUAL.

The Speedline Drywall Systems manual is a guide to offer you the best dry lining solution for your project utilising the extensive, independently tested range of Speedline Drywall Systems. Within this manual, is a range of fully tested UKAS accredited drywall solutions.

Selecting the right solution is simple by following the easy navigation process. Speedline solutions are separated within this manual by performance type and plasterboard brand. These solutions can be used in all construction sectors including Residential, RMI, Retail, Leisure, Education, and Healthcare.

Each system has a unique reference number, and allows you to link the relevant information easily to a specification. This data is also available to download in various formats, and will incorporate test results, and BIM Revit/IFC files (.rvt or .ifc).

- **Contact the Speedline technical team for advice and support on your project enquiries@speedlinedrywall.co.uk**

Fundamental to the range is a comprehensive choice of Speedline metal profiles and Speedline components which form the basis of dry lining, partitioning, and ceiling systems. Speedline provides a full technical service with assistance on design, procurement and on-site project support.

QUALITY AND STANDARDS

Thanks to extensive research and development, combined with advanced manufacturing techniques, all Speedline Drywall System products conform to the latest British and European standards. These systems have also been fully and independently tested with proprietary gypsum products, providing reassurance that Speedline products will meet the most stringent standards of rigidity, fire resistance, sound, thermal and hygrothermal insulation.

NATIONWIDE SERVICE

Speedline Drywall Systems are available exclusively from SIG branches throughout the UK. Branches carry extensive stocks of all products, plus a comprehensive choice of Speedline accessories, such as fixings, adhesives, joint compounds, tapes and sealants. Experienced staff offer a fast and efficient service whilst product specialists are on hand to assist with technical issues and complex specifications.

Contact the Speedline technical team for advice and support on your project:

E: enquiries@speedlinedrywall.co.uk

T: 0117 301 3634

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SPEEDLINE INTRODUCTION

SPEEDLINE SYSTEMS ASSURANCE

SPEEDLINE SYSTEMS ASSURANCE

DRYWALL SYSTEMS | Part of SIG

Speedline Systems Assurance is a dedicated warranty covering a comprehensive range of drywall solutions, offering peace of mind for clients, specifiers and contractors. Speedline Metal Dry Lining systems include Partitioning, Wall Lining, Ceiling and Floor Systems, as detailed in the Drywall Manual.

All Speedline systems are covered by the Speedline Systems Assurance when installed in accordance with the Speedline Drywall Manual, and all relevant supporting documentation. All components must be supplied by SIG plc in order to qualify for the Speedline Systems Assurance Warranty.

Speedline ensures that our systems are consistently meeting customers' expectations, and the Speedline Metal Dry Lining Systems are manufactured to multiple BSI Group Standards in respect of fire, acoustics, mechanics and general manufacture.

Our commitment ensures that all Speedline Drywall Systems are:

- **Tested in UKAS accredited laboratories for fire performance, acoustic insulation and robustness.**
- **Tested with all three major plasterboard manufacturers to ensure solutions meet the challenging needs of today's building requirements and building regulations.**
- **Fully supported with technical expertise and advice.**
- **Supported with a bespoke Speedline Project Pack, tailor made for your project which includes dedicated technical support.**
- **Undergoing constant review and focusing on innovation to deliver optimum performance.**
- **Meeting the performances within published documentation.**

Speedline Technical Support

From the initial concept of your project, we can provide full technical support, including specification advice and provide NBS clauses and specific design details.

Throughout the installation process, on-site advice is provided by our technical team and different levels of training is available to ensure you are fully supported throughout the project.

Speedline Project Pack

A tailor made Speedline Project Pack can be produced to clearly display the solutions proposed for your project. This will highlight a walk through approach, meeting the requirements of your design intentions.

Delivering Performance

Speedline Drywall Systems undergo constant review and development focusing on innovation to deliver optimum performance to ensure cost effective solutions for your project.

Nationwide Service

The comprehensive range of Speedline metal products and accessories are available exclusively through the nationwide branch network of SIG.

Experienced staff offer a fast and efficient service whilst product specialists are on hand to assist with technical issues and complex specifications.

Speedline Systems Assurance Qualification

- **All components must be supplied by SIG plc in order to qualify for the Speedline Systems Assurance Warranty.**
- **Specify and Install Speedline Drywall Systems in accordance with the recommendations in the current Speedline Drywall Manual.**

For further assistance and support please contact **enquires@speedlinedrywall.co.uk**

SIG Compliance Tracking System

SIG Compliance Tracking System, has been designed to offer all our customers complete peace of mind when buying products from SIG.

For the last three years we have been working with our suppliers to ensure all the products that we stock meet with essential regulatory compliance. This means we can supply compliance documents for Reach, CE marking and EUTR in addition to Safety Data Sheets at a moments' request, all of which have been independently verified to ensure validity.

SIG Compliance Tracking System will always be evolving to meet with the fast pace of changing legislation and product development.

You can be sure that by working together with an industry leading independent partner, we now have robust processes to track and monitor who is, and which products are compliant.

In addition to this we have an on-line storage service in place that will provide you with up to date compliance and legal information about the suppliers we work with and the diverse range of products we stock.

So whenever you see the SIG 'shield of assurance' stamp you can be confident that your purchase is fully traceable and supported by independent specialist appraisal.

For more information visit our website www.sigassured.co.uk

Our guarantee to our customers

We **won't** stock products that **don't** meet the following legislative requirements;

- CE Marking
- REACh
- Safety Data Sheets
- Explosive Precursors
- EUTR

All products are supported by the appropriate and where relevant documentation

All documentation is compliant

We have verified our suppliers claims around the legislative regulations of the products we source from them

We can trace the provenance of all our products

Supplier claims are supported by Compliance Tracking System appraisal

Safety Data Sheets CE

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

How to find your Speedline Systems

Speedline Drywall Systems have been independently tested for Fire, Acoustics and Rigidity (see pages 7-11 for definitions) and offer value engineered, cost effective solutions to satisfy the stringent requirements needed for:

- Residential (including Code for Sustainable Homes uplifts)
- Healthcare
- Education
- Commercial

- The result of this testing can be found in the charts on pages 25-45, 48-51, 63-66, 71, 76-77, 80, 84-87.

Speedline systems performance tables are designed to access the information you need quickly and accurately.

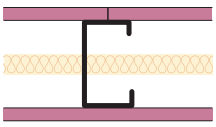
You will find:

- **Speedline Standard system:**
  Results of UKAS accredited tests carried out with Speedline metal profiles and British Gypsum Gyproc, Knauf and Siniat GTEC standard wallboards.
- **Speedline Fire system:**
  Results of UKAS accredited tests carried out with Speedline metal profiles and British Gypsum Gyproc Fireline, Knauf Fire Panel and Siniat GTEC Fire Board.
- **Speedline Acoustic system:**
  Results of UKAS accredited tests carried out with Speedline metal profiles and British Gypsum Gyproc Soundbloc and Soundbloc F, Knauf Soundshield Plus and Siniat GTEC dB Board.
- **Speedline High Impact system:**
  Results of UKAS accredited tests carried out with Speedline metal profiles and British Gypsum Gyproc Duraline, Knauf Impact Panel and Siniat GTEC Megadeco.

Each combination of Speedline metal, plasterboard and insulation has a unique reference code.

From the table below Speedline 50mm C stud clad with one layer of 15mm British Gypsum Fireline and 25mm APR has the unique reference 50-B-56(25) and the properties of 60 minutes fire certification, Heavy Duty to BS 5234 and R_w 40dB acoustically to a maximum height of 2.8m with studs at 600mm centres.

SPEEDLINE FIRE SYSTEM SPEEDLINE C STUDS INCORPORATING BRITISH GYPSUM GYPROC FIRELINE



One layer of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table

1 x 15mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	40	50-B-56(25)
70mm C stud	HD	3.8	102	60	41	70-B-56 (25)
92mm C stud	HD	4.4	124	60	41	92-B-56 (25)
146mm C stud	HD	6.5	178	60	41	146-B-56 (25)

You can obtain the correct and most effective solution for your dry wall needs through using the Speedline Partitioning system charts and filtering in your requirements i.e. fire, acoustics, duty rating. This unique reference number allows you to download all relevant information, also available will be appropriate BIM Revit files .rvt or IFC files .ifc – for further information please contact Speedline at **enquiries@speedlinedrywall.co.uk**

Available exclusively from SIG, Speedline can offer assistance with design, procurement and on site technical help and know how.

Correct installation and specification of Speedline Drywall Systems and components is the responsibility of the contractor and design team. Construction should be in accordance to all relevant regulatory requirements and appropriate UK construction guidance and guidelines. These are laid out on page 13.

SPEEDLINE INTRODUCTION

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

FIRE

Fire

The requirements for fire protection will normally be found in the relevant appendix of the Building Regulations and often specific fire strategy reports are generated.

The fire ratings published in this document are for the Speedline systems as highlighted.

All performance claims for fire resistance must be substantiated by test or assessment reports by UKAS accredited laboratories. Installations must be in strict accordance with the report data of the Speedline components, other materials and assembly details. Non approved site modifications can jeopardize performance, in particular service penetrations, which should be suitably fire stopped by others.

All fire test data in this publication is to BS 476 Part 22:1987, if BS EN 1364-1:2015 test data is required please contact **enquiries@speedlinedrywall.co.uk**. Partitions built to BS EN may have a different specification when compared to BS 476, this would impact on maximum heights permissible for example. All test data is based on unique UKAS accredited tests and UKAS accredited scope of testing. The tests are carried out in UKAS accredited furnaces measuring 3m square. Maximum heights are determined via tests under BS 5234 to a maximum limiting deflection of L/240 at 200 pascals. The maximum height is determined by its ability to resist a uniformly distributed load at 0.2kN/m^2.

These structural calculations are available upon request.

The results of fire tests are the lower of insulation and/or integrity failure rounded down to the nearest 30 minutes i.e. measured as 30, 60, 90 or 120 minutes.

Please contact **enquiries@speedlinedrywall.co.uk** for further information on the individual tests or to see where the test or assessment was carried out quoting the system references.

Example:

SPEEDLINE FIRE SYSTEM INCORPORATING KNAUF FIRE PANEL

50mm C Stud	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
1 x 12.5mm Knauf Fire Panel	MD	2.5	77	30	n/a	50-K-55
1 x 15mm Knauf Fire Panel	HD	2.8	82	60	n/a	50-K-56
2 x 12.5mm Knauf Fire Panel	SD	3.4	102	120	42	50-K-61
2 x 15mm Knauf Fire Panel	SD	3.7	112	120	42	50-K-62

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

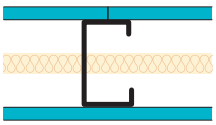
ACOUSTICS

Acoustics

Sound insulation performance must be substantiated and based on UKAS accredited laboratories test reports, tested to BS EN ISO 717-1:1997 and BS EN ISO 10140-2:2010.

The quoted figures in this publication are laboratory tested measured as the Weighted Sound Reduction Index (R_w) measured in decibels (dB), hence all values are R_wdB figures.

SPEEDLINE C STUDS INCORPORATING BRITISH GYPSUM ACOUSTIC BOARDS



One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	44	50-B-53 (25)
70mm C stud	MD	3.6	97	30	46	70-B-53 (25)
92mm C stud	MD	3.9	119	30	46	92-B-53 (25)
146mm C stud	MD	6.2	173	30	46	146-B-53 (25)
AS70 Acoustic C stud	MD	3.6	97	30	47	AS70-B-153(25)

Example – Speedline when tested in a UKAS accredited laboratory achieved R_w46 dB Ref.70-B-53 (25) with 25mm APR insulation.

All sound insulation data is based on laboratory evaluation of the building element in isolation and cannot reproduce your installed local conditions. It is important that flanking transmission is considered at design stage.

On site testing is measured using a different scale. It uses $D_{nT,w}$ Standardised Level Difference. Values on site are approximately 7 to 8 decibels lower than achieved in the laboratory. One of the primary reasons for this difference will be the downgrading due to flanking transmission. This highlights the importance for good design and flanking details to help minimise these reductions. Deflection head details, if used, can also be expected to impact negatively on the decibel rating achieved on site.

Residential requirements

Party walls, under Building Regulations Approved Document Part 'E' are measured as $D_{nT,w}+C_{tr}$. Within this literature we print the C and C_{tr} figures in brackets as (C,C_{tr}). For example Twin I stud wall TWPI50-B-60 (50) on page 71 has an acoustic value of 67 (-4;-10).

Twin 50mm I Stud Utilising British Gypsum Boards	Duty Grade[1]	Partition Height m	Max Width[2] mm	Fire Resistance[3] mins	Sound Insulation with 1 x 50mm APR Infill R_wdB (C,C_{tr})	Test Reference with 50mm APR
Twin PI 50 clad with 2 x 15mm British Gypsum Gyproc Sounbloc and 1 x 50mm APR	SD	2.7	200	90	67 (-4:-10)	TWPI50-B-60 (50)

The actual tests carried out are used to offer an order of magnitude comparison for the performance of the various systems. Sound insulation on site is a function of the partition chosen and the associated structures in which it is installed. Speedline take no responsibility for overall design and we would advise that specialist advice is sought at an early stage. It is essential that consideration is giving to blocking all air paths and flanking sound.

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

For further information on the individual tests or to see where the test or assessment was carried out please quote the system references.

All test data and system specifications are for systems constructed with materials and components as shown. The inclusion of other components without prior approval or constructed on site contrary to these documents will invalidate test certification and system performance.

All acoustic values are based on studs at 600mm centres. If the stud centres are reduced to either 400mm or 300mm, this could impact negatively on acoustic performance. Please refer to page 24 for further details.

SPEEDLINE INTRODUCTION

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

ACOUSTICS

Flanking Noise

Flanking transmission occurs when sound travels along elements shared by adjacent structures. Sound does not always travel straight through the building element. If the wall, floor or partition concerned has good sound-reducing capabilities, the sound will travel from A to B by the easiest route, often around the sides or over the top.

Please note that flanking transmission can exceed direct transmission and damage the overall capabilities of the construction if flanking constructions are not correctly specified and constructed.

To overcome this problem of flanking, any gaps in the installation must be filled with Speedline Fire Rated Acoustic Sealant on all edges and on both sides of the partition.

Explanation of Terms

- Every time an amendment to the Building Regulations is introduced a new list of terms and abbreviations follows.
- Our comprehensive list will help you to decipher some of the terms and abbreviations relating to acoustics.

Building Element	Walls, floors and roofs, etc.
C_{tr}	The correction to a sound insulation quality to take into account low frequency noise.
Decibel (dB)	The most commonly used unit to measure sound.
$D_{nT,w}$	The measurement used to measure the airborne sound insulation between two rooms (on site).
$D_{nT,w}+C_{tr}$	See above, but with the low frequency correction factor included.
Flanking Transmission	Sound transmitted between two rooms using an indirect path e.g. the top or bottom of a separating wall (see further details below).
Frequency	The number of pressure variations per second that gives a sound its distinctive tone.
Hertz (Hz)	The unit of the frequency of the sound.
Impact Sound	Sound resulting from direct impact on a building element.
Internal Floor	Any floor that is not a separating floor.
Internal Wall	Any wall that does not have a separation function.
$L_{nT,w}$	The measurement used to measure the impact sound insulation of floors (on site). L_{nw} = laboratory testing.
Noise	Unwanted sound.
Pre-Completion Testing (PCT)	A new requirement to Part E where structures not conforming to the RSD will be tested prior to completion to check they reach the required standards.
Robust Standard Detail (RSD)	A collection of pre-approved constructions that, if used, negate the need for PCT
R_w	The measurement used to relate the sound insulation of a material or building element in a laboratory.
Separating Floor	Floor that separates flats or rooms for residential purposes.
Separating Wall	Wall that separates adjoining dwellings, houses, flats or rooms.
Sound Reduction Index (SRI)	A quantity measured in a laboratory that characterises the sound insulation properties of a material or building element in a stated frequency band.

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

DUTY

Duty

Speedline partitions have to withstand various dynamic and static loadings. To achieve a particular strength grade, the partition system must satisfy six (Annexes A-F) essential performance criteria by testing to BS 5234:1992 Part 1 and 2. Strength performance must be substantiated based on test reports from laboratories accredited by the United Kingdom Accreditation Service (UKAS) for testing to BS 5234.

BS 5234 defines four strength or duty claims

- **Light (LD): suitable where possibility of damage is small**
- **Medium (MD): For use e.g. General office areas**
- **Heavy (HD): For use e.g. Public circulation areas**
- **Severe (SD): For use e.g. Areas prone to high traffic**

Annexes A-F with BS 5234 include:

A. **Partition stiffness**
B. **Resistance to damage from small hard body impact**
C. **Resistance to damage from a large soft body impact**
D. **Resistance to perforation from a small hard body impact**
E. **Resistance to structural damage from a large soft body impact**
F. **Resistance to damage from door slam tests**

Relevant tests must satisfy all six components.

Within the Speedline Drywall Manual system performance charts you will find the classification of the strength of the partition under the column heading Duty Grade BS 5234.

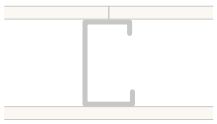
Maximum heights are determined via tests under BS 5234 to a maximum limiting deflection of L/240 at 200 pascals. The maximum height is determined by its ability to resist a uniformly distributed load at 0.2kN/m^2. Information gathered from these tests is used to give structural calculations to support maximum permissible heights.

Care must be taken when building to ensure loads do not exceed those stated. Where it may be possible that wind loading (for example in high bay warehouses) is greater than stated, please speak to the Speedline technical team to verify usage.

Of particular interest may be the range of Severe Duty rated walls achieved using single layer configurations of plasterboard described later in the high impact section of this manual, saving both time and money.

Please contact **enquiries@speedlinedrywall.co.uk** for further information on the individual tests or to see where the test or assessment was carried out quoting the system references.

SPEEDLINE HIGH IMPACT SOLUTION INCORPORATING BRITISH GYPSUM GYPROC DURALINE



One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70- Heavy Duty Stud	SD	4.2	102	60	44	PSHD70-B-63

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

SPEEDLINE INTRODUCTION

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

THERMAL

Thermal

Around a third of all heat lost within un-insulated or poorly insulated buildings escapes through external walls. Heat naturally flows from a warm area into a cold one and in colder months this cycle is increased causing a greater degree of heat loss. While improving efficiency and performance of energy systems may be perceived as a potential solution, it is commonly recognised that enhancing the thermal fabric of a building is fundamental in reducing heat loss and fuel consumption within the built environment.

Speedline Thermal Laminate Board provides a dry lining and thermal insulation solution in a single application and is suitable for internal lining of masonry walls, lining the underside of rafters within a pitched roof application and the underside of joists within a flat roof location.

Speedline Thermal Laminate Board will assist you to meet or upgrade to the current Building Regulations and avoid the risk of condensation. Locating the thermal insulation layer on the internal side of the structure is more responsive to heating conditions, this results in the ambient internal temperature of a building becoming comfortable quicker within colder months, in addition to reducing thermal bridging through the structure. This makes Speedline Thermal Laminate Board the ideal solution for internal lining of external walls, pitched roofs and ceilings.

Description

A high performance insulation solution comprising a PIR foam with a kraft paper/aluminium multi-layer finish, factory bonded to a 12.5mm tapered edge plasterboard offered in a board size of 1.2m x 2.4m.

The foam has a very low thermal conductivity (k) of 0.022W/mK with the plasterboard 0.19W/mK providing an optimum thermal insulation solution.

SPEEDLINE THERMAL LAMINATE RANGE

Board Thickness	Length	Width	Thermal Resistance (m^2K/W)	Weight (kg)*
37.5mm	2400mm	1200mm	1.21	27
52.5mm	2400mm	1200mm	1.88	28
62.5mm	2400mm	1200mm	2.31	29
72.5mm	2400mm	1200mm	2.79	30
82.5mm	2400mm	1200mm	3.30	31
92.5mm	2400mm	1200mm	3.70	31.5

* Weight indicated is approximate.

BENEFITS

- Dry lining and thermal insulation solution in a single board.
- Suitable for both direct bonding ('dot and dab') and mechanical fixing.
- Achieves a thermal resistance range of between 1.21m^2K/W and 3.70m^2K/W.
- Easy to handle and install.
- Ideal for new build and refurbishment projects.
- Manufactured in accordance with ISO 14001:2004.
- The plasterboard facing used within Speedline Thermal Laminate Board achieves an ODP (Ozone Depletion Potential) and GWP (Global Warming Potential) of less than 5.
- The PIR insulation used within Speedline Thermal Laminate Board achieves Zero ODP and GWP of less than 5.
- Board weights range from 27kg – 31.5kg.

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

RELEVANT SPEEDLINE STANDARDS

Standards

Correct installation and specification of Speedline Drywall Systems and components is the responsibility of the contractor and design team. Construction should be in accordance to all relevant regulatory requirements and appropriate UK construction guidance and guidelines.

Fire

BS 476:1987
Fire tests on building materials and structures.
Part 20 Method for determination of the fire resistance of elements of construction (general principles).
Part 22 Method of determination of the fire resistance of non-load bearing elements of construction.
Part 23 Method for the determination of the contribution of components to the fire resistance of a structure.

BS EN 1364 – 1:1999
Fire tests on building materials and structures.

BS EN 1365 – 2:2014
Fire resistance tests for load bearing elements
Part 2 Floors & Ceilings.

Acoustics

BS EN ISO 10140-2:2010
Acoustics – laboratory measurement of should insulation of building elements.

BS EN ISO 717-1:2020
Acoustics – rating of sound insulation in buildings and of building elements.
Part 1 Airborne Sound Insulation.
Part 2 Impact Sound Insulation.

Mechanical

BS 5234 – 2:1992
Partitions (including matching linings).
Part 1 Code of practice for design & installation.
Part 2 Specification for performance requirements for strength and robustness including methods of test.

General

BS EN 14195:2014
Metal framing components for gypsum plasterboard systems – Definitions, requirements and test methods.

BS EN 10143:1993
Specification for continuously hot-dip metal coated steel.

BS EN 10162:2003
Specification for cold rolled steel sections.

BS 8212:1995
British Standard code of practice for dry lining and partitioning using gypsum plasterboard.

BS 4787:1995
Part 1 Internal and external wood door sets, door leaves and frames.

Suspended Ceilings

BS 8290:1991
Part 1 Code of practice for design.
Part 2 Specification for performance requirements of components and assemblies and methods of test.
Part 3 Code of practice for installation and maintenance.

BS EN 13964:2014
Suspended Ceilings – Requirements and Test Methods.

BS 8000-8:1994 Workmanship on building sites.

BS EN 520:2004
Gypsum plasterboards – Definitions requirements and test methods.

BS 7364:1990
Galvanised steel studs and channels for stud and sheet partitions and linings using screw fixed gypsum wallboards.

BS EN 10327:2004
Continuously hot-dip coated strip and sheet of low carbon steel for cold forming.

BS EN 10162:2003
Specification for cold rolled steel sections.

Testing Facilities

The Speedline range of dry lining and ceiling systems have been independently tested or assessed by accredited laboratories.

This document comprises of a collation of data carried out using a number of different testing facilities.

Facilities used:
BRE Garston – Fire, Acoustic & Mechanical

BTC East Leake – Fire & Acoustic

Salford University – Acoustic & Mechanical

Strathclyde University – Mechanical

WFRC Warrington – Fire

Aycliffe Research – Fire

SRL Sudbury – Acoustic

BM TRADA – Fire

Please contact **enquiries@speedlinedrywall.co.uk** for further information on the individual tests or to see where the test or assessment was carried out quoting the system references.

All test data and system specifications are for systems constructed with materials and components as shown. The inclusion of other components without prior approval or constructed on site contrary to this document will invalidate test certification and system performance.

SPEEDLINE INTRODUCTION

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

SUSTAINABILITY

Sustainability

SIG plc regard the issue of sustainability as a core social, as well as corporate, responsibility. The manufacturer of the Speedline metal systems has been recognised by the award of BS ISO 14001:2004 for it's Environmental Management System and the Steel Construction Sustainability Charter and were the first cold roll-forming company to be awarded the prestigious Gold standard.

It is recognised that Environmental Responsibility is a local as well as a global issue. The Speedline manufacturing process has been awarded a Local Authority Borough Platinum Environmental Charter Award following an audit of Environmental management procedures and award of BS ISO 14001:2004.

If you are designing your building to BREEAM please note.

- **Speedline metal systems are manufactured in accordance with Environmental Management system ISO 14001:2004.**
- **Speedline metal systems are manufactured in accordance with responsible sourcing of products BES 6001 – Very Good.**
- **Speedline metal systems are manufactured to Quality Management system ISO 9001:2008.**
- **Speedline metal systems are manufactured in accordance with Occupational Health and Safety management System BS OHSAS 18001:2007.**
- **Speedline Twin frame systems with 2 layers of plasterboard and insulation are A rated to the BRE Green Guide 2007.**
- **Speedline partitions with plasterboard are A rated to the BRE Green Guide 2007.**

Environmental Impact of Steel Production and Processing and recycled contents are available on request.

Speedline will continue to pursue sustainability as a key business objective through manufacturing processes. The cornerstone of this is the societal, economic and environmental sustainability review of operations carried out in the SPeAR Report from Arup. This report gives both an assessment of the current environmental position as well as identifying key areas for improvement in the future.

CE Marking

All relevant profiles conform to BS EN 14195:2014. The products within this range are intended for use as metal framing components within building construction works in conjunction with gypsum plasterboard where the assembly is non load bearing. The reaction to fire is Euroclass A1, being no contribution to fire. All relevant products are ink marked with the official CE logo.

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

HEALTH & SAFETY

Speedline metal systems are manufactured in accordance with Occupational Health and Safety management System BS OHSAS 18001:2007.

Health & Safety Product Information

Products

Cold rolled sections manufactured from pre-galvanised mild steel. Some sections may be manufactured from pre-painted material.

Product Use

Always use products for the purpose intended as described in the technical literature.

When subjected to elevated temperatures during welding or cutting, toxic fumes are produced. Inhalation of these may cause metal fume fever, a short lasting condition with symptoms similar to those of influenza. Therefore adequate ventilation or fume extraction should be provided, and where necessary, protective masks should be worn.

If skin irritation occurs, rinse well with clean cold water, then wash thoroughly. If symptoms persist obtain medical advice.

In the event of eye contamination or if any product is swallowed seek medical advice immediately.

Metal products may have sharp corners and edges which can cause lacerations. Always use suitable gloves when handling as per HSE guidelines.

When working overhead or when cutting metal products, the use of protective eye glasses is advisable.

Metal is a good conductor of electricity. Proper precautions should be taken when working near live power lines or electrical equipment.

Metal can become charged. Static electricity may cause sparks when earthed.

Personal hygiene is important, always wash hands well particularly before eating.

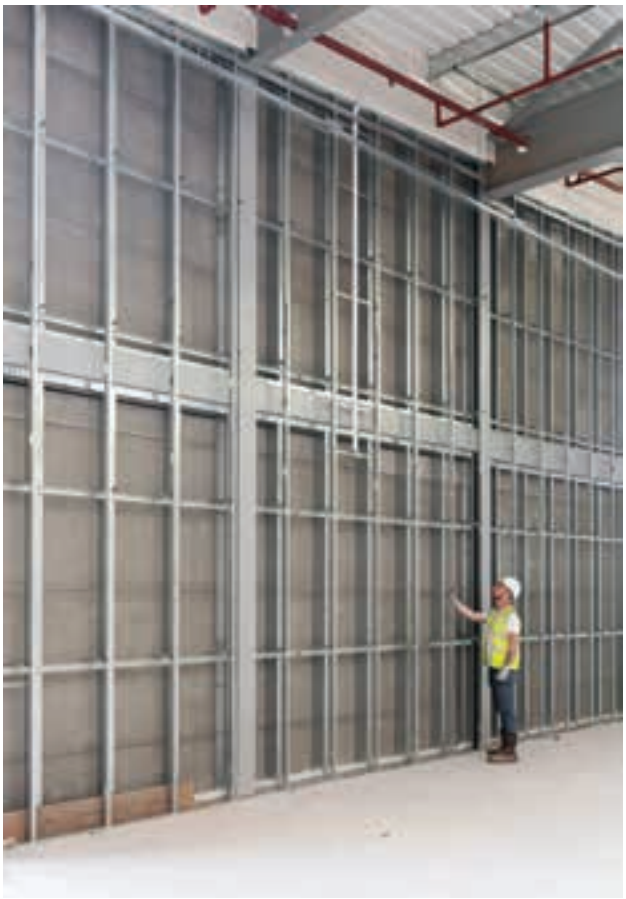
Health & Safety Relevant References

- **No 43 Safety in Mechanical Handling.**
- **No 47 Safety in Stacking Materials.**
- **No EH40 Occupational Exposure Limit.**

Product Storage

Products should be stored in a safe manner. Never rely on banding for lifting, always use suitable slings.

Dispose of product in accordance with local authority regulations.



SPEEDLINE INTRODUCTION

FUNDAMENTALS FOR THE DESIGN OF SPEEDLINE DRYWALL SYSTEMS

BIM

Building Information Modelling

Speedline is totally committed to the concept and future success of supporting BIM.

We have set out to make using Speedline as easy as possible to populate your own BIM model.

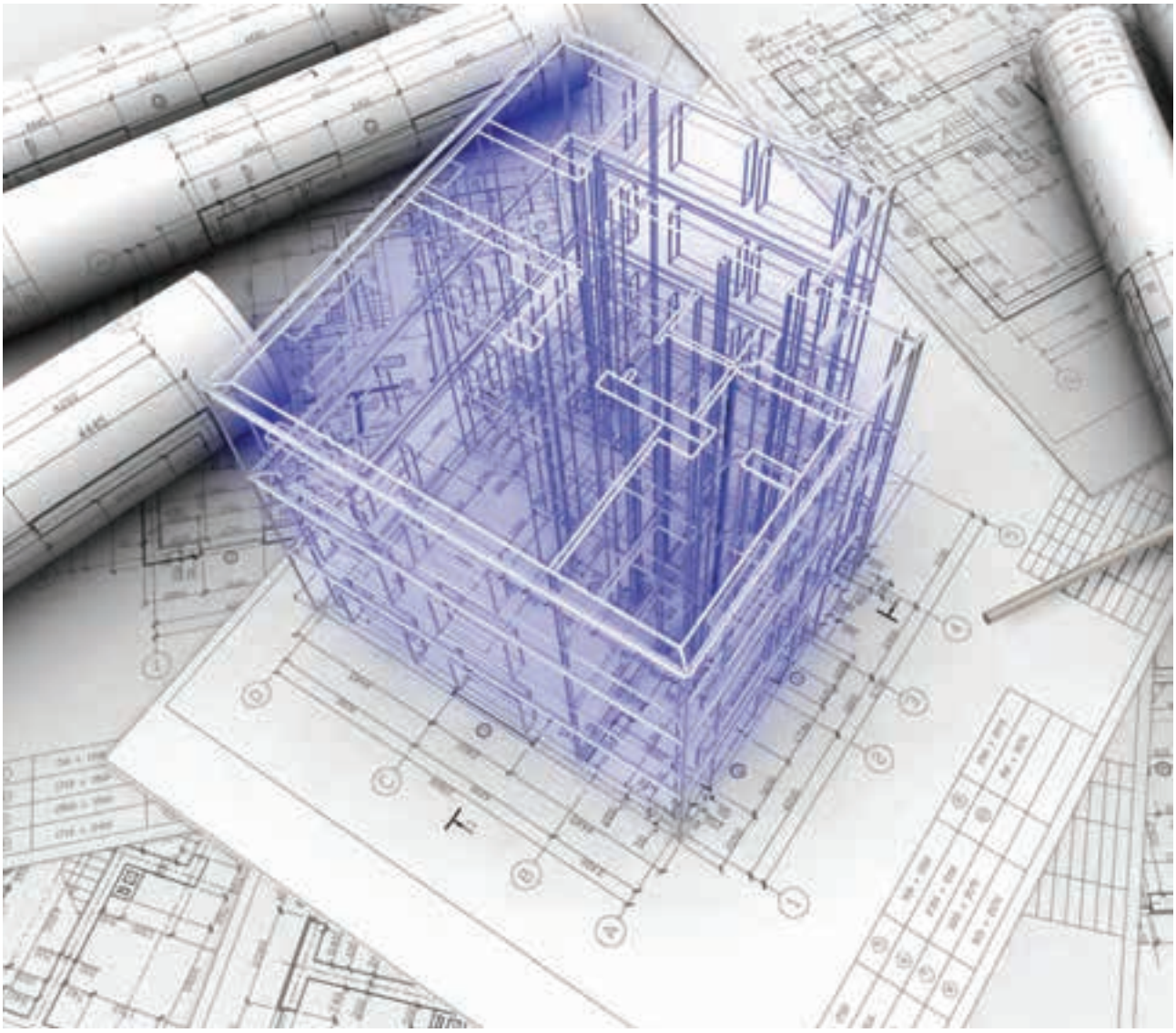
Speedline has designed the "Speedline Revit APP". Working within the Revit model enables the designer the ability to filter and search the extensive Speedline UKAS accredited tests to find the best fit for the model.

The Designers can filter by a number of different requirements:

- **Height.**
- **Duty.**
- **Fire.**
- **Acoustics.**
- **Deflection Head.**

Relevant solutions will be advised to satisfy your requirements, which can then be imported into the model from the App already within Revit. There will also be a link to the system; own individual website page where you will find IFC (.IFC) files, Cad drawings (.dwg), Installation guidelines and performance data sheets.

For further assistance please contact the Speedline technical team on **enquiries@speedlinedrywall.co.uk**



SPEEDLINE

DRYWALL SYSTEMS | Part of SIG

Partitioning Systems

www.speedlinedrywall.co.uk

REVISED
30/08/2022

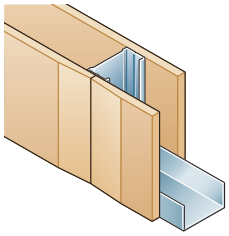
Partitioning Systems

INTRODUCING PARTITIONING SYSTEMS

Speedline offers a full range of metal stud partition systems for use in commercial, education, health & domestic situations. The following section provides details of system performance as well as best practice construction guidance. Changes to components and construction details may effect the stated performances.

Contact the Speedline Technical team for advice and support on your project:
enquiries@speedlinedrywall.co.uk

Contents



PARTITIONING SYSTEMS

SPEEDLINE METAL COMPONENTS

SOLUTIONS

Benefits

- Quick to erect, lightweight and clean.
- Metal Stud is dimensionally accurate and will not twist or bow.
- Range of stud widths – 48mm, 50mm, 60mm, 70mm, 92mm and 146mm to meet different performance requirements.
- Services are easy to install.
- Acoustic insulation can easily be installed to uprate sound insulation.
- Easy to cut to length using tin snips.
- Frames easily fit together.
- Door frames simply formed.
- Range of UKAS accredited tests available for:
  - Fire 30-120 mins.
  - Acoustics 37-60dB (refer to Resilient Bar and Twin Frame Solutions for increased sound insulation performance).
  - Duty Medium, Heavy and Severe available.

Sectors

- Residential
- Offices
- Healthcare
- Education
- Commercial
- Retail
- RMI
- Student Accommodation

An economical friction-fit system to assemble frames for strong, compact, lightweight non load-bearing partitions, Speedline Partitioning Systems are ideal for use in domestic and commercial situations, for heights up to 10.2m and a wide range of partition thicknesses.

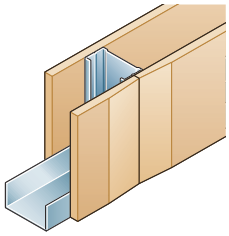
All electrical services should be suitably protected when passing through floor and wiring channels.

Simple Value Engineered solutions:

- For space dividing partitions refer to Speedline Standard System pages 25 to 30.
- For partitions with improved fire performance refer to Speedline Fire Systems pages 31 to 36.
- For partitions with improved acoustic performance refer to Speedline Acoustic Systems pages 37 to 42.
- For partitions with improved BS 5234 duty ratings performance refer to Speedline High Impact Systems pages 43 to 45.

SPEEDLINE METAL COMPONENTS

SOLUTIONS



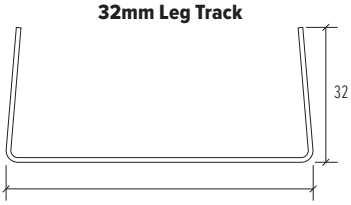
SPEEDLINE TRACK

SPT Tracks (25mm leg) and 32mm leg Tracks are **standard tracks,** both with tapered legs to enable friction fitting of studs and can be used for partition heights under 4m.

Standard Track

Available in 50, 52, 62 or 72 wide

32mm Leg Track

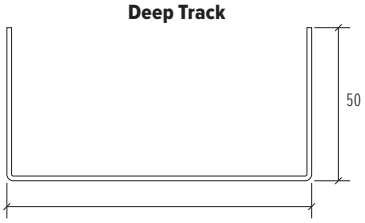


Available in 94 or 148 wide

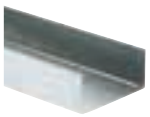
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SPT50	50mm Standard Track (25mm leg) x 0.5mm	3.00	1.13
SPT52	52mm Standard Track (25mm leg) x 0.5mm	3.00	1.15
PT62	62mm Standard Track (25mm leg) x 0.5mm	3.00	1.25
SPT72	72mm Standard Track (25mm leg) x 0.5mm	3.00	1.41
SPT94	94mm Track (32mm leg) x 0.5mm	3.00	1.81
SPT148	148mm Track (32mm leg) x 0.5mm	3.00	2.40

SPEDT (50mm legs) are described as **deep tracks**, used for partition heights between 4m and 8m, also used as a head track where a deflection head of up to 25mm is needed.

Deep Track



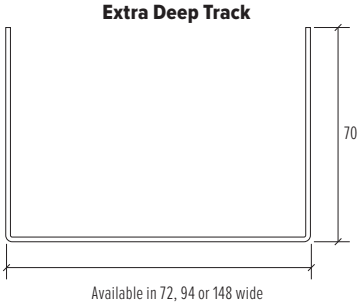
Available in 52, 62, 72, 94 or 148 wide



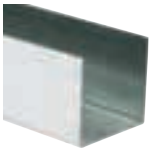
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SPEDT52	52mm Deep Track (50mm leg) x 0.5mm	3.00	1.74
PEDT62	62mm Deep Track (50mm leg) x 0.5mm	3.00	1.86
SPEDT72	72mm Deep Track (50mm leg) x 0.5mm	3.00	1.98
PEDT94	94mm Deep Track (50mm leg) x 0.5mm	3.00	2.16
SPDT148	148mm Deep Track (50mm leg) x 0.5mm	3.00	2.83

SPXDT (70mm legs) are described as **extra deep tracks**, used for partition heights between 8m and 10.2m, also used as a head track where a deflection head of up to 45mm is needed.

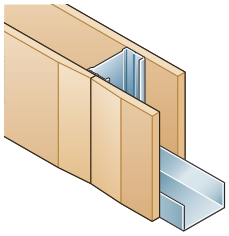
Extra Deep Track



Available in 72, 94 or 148 wide



Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SPXDT72	72mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.43
PXDT94	94mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.79
SPXDT148	148mm Extra Deep Track (70mm leg) x 0.7mm	3.00	4.68

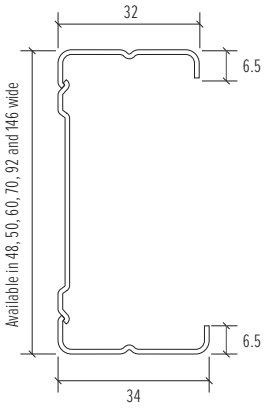


PARTITIONING SYSTEMS

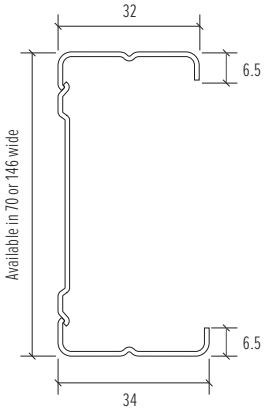
SPEEDLINE METAL COMPONENTS

SOLUTIONS

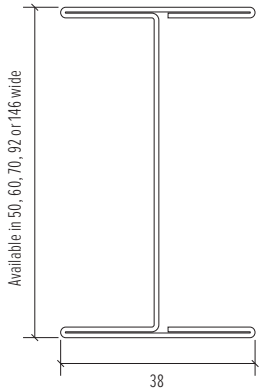
Standard C Stud



Heavy Duty C Stud



I Stud

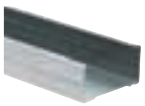


SPEEDLINE STANDARD C STUD

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SPS48	48mm C Stud x 0.5mm, flange dimensions 32/34mm	2.40 2.70 3.00 3.60	1.14 1.29 1.31 1.58
SPS50	50mm C Stud x 0.5mm, flange dimensions 32/34mm	2.40 2.70 3.00 3.60	1.17 1.35 1.46 1.75
PS60	60mm C Stud x 0.5mm, flange dimensions 32/34mm	2.40 2.70 3.00 3.60	1.26 1.46 1.58 1.89
SPS70	70mm C Stud x 0.5mm, flange dimensions 32/34mm	2.40 2.70 3.00 3.60 4.20	1.37 1.53 1.71 2.05 2.39
SPS92	92mm C Stud x 0.5mm, flange dimensions 32/34mm	3.60 4.20	2.30 2.68
SPS146	146mm C Stud x 0.5mm, flange dimensions 32/34mm	3.60 4.20 5.00 6.00	3.13 3.65 4.33 5.21

SPEEDLINE HEAVY DUTY C STUD (ROLLED TO ORDER)

Used to increase height see page 24 to increase BS 5234 rigidity duty rating see High Impact System



Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
PSHD70	70mm Heavy Duty C Stud x 0.7mm, flange dimensions 32/34mm	3.60 4.20	2.82 3.29
PSHD146	146mm Heavy Duty C Stud x 0.7mm, flange dimensions 32/34mm	3.60 4.20	4.32 5.04

SPEEDLINE I STUD

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
PI50	50mm I Stud x 0.6mm, flange dimensions 38mm	2.70 3.00 3.60	2.01 2.24 2.69
PI60	60mm I Stud x 0.6mm, flange dimensions 38mm	3.60 4.20	2.82 3.30
PI70	70mm I Stud x 0.7mm, flange dimensions 38mm	3.60 4.20	3.56 4.15
PI92	92mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	5.18 7.19 8.63
PI146	146mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	6.40 8.89 10.66

SERVICE SUPPORT PLATE

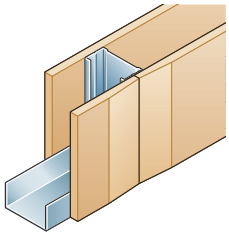
For fixing plywood within the partition

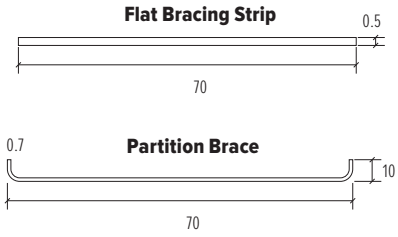
Product Code	Product Description	No in Box	Weight per Box
ASP198	Speedline Service Support Plate	100	10kg

PARTITIONING SYSTEMS

SPEEDLINE METAL COMPONENTS

SOLUTIONS





SPEEDLINE BRACING STRIP & PARTITION BRACE

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
FS24	Flat Bracing Strip 70 x 0.5mm	2.40	0.66
PB24	Partition Brace 70 x 10 x 0.7mm	2.40	1.08

Plasterboard Fixing Centres

For all partitions i.e. C Studs, I Studs, Resilient Bar and Wall Liner the following applies:-

General Points
All acoustic test data is conducted within laboratory conditions, built at 600mm centres and is measured as RwdB figures. The “on site“ conditions in which the partition is to be built may have a significant effect on the test figures quoted, and due to this it is unlikely that the RwdB figures quoted from laboratory tests will be repeated in “on site” conditions. Deflection heads and reduced stud centres can affect acoustic performance, please refer to page 24 or please contact **enquiries@speedlinedrywall.co.uk**

Plasterboard should be located on the centre line of framing (except Speedline Acoustic Studs where the sight line is off-set). Lightly butt boards together, do not force into position. Fix the boards so that the decorative paper side is on the outside ready to receive a finishing solution. Fixings must penetrate framework by a minimum of 10mm. See table below for minimum Speedline fixing lengths in relation to board thickness. Fixings should be installed not less than 13mm from cut edges and 10mm from bound edges.

Single Layer Installations
Plasterboard must be fixed at 300mm maximum centres to the metal framework with the appropriate length screw. Plasterboard joints must be staggered from one side of the partition to the other.

Double Layer Installations
Inner layers can be fixed at 600mm centres but outer layers must be fixed at 300mm centres to the metal framework with the appropriate length screw. The second layer of plasterboard should be fixed with all joints staggered in relation to the first layer assuming studs fixed at 600mm centres.

Fixing of Floor and Ceiling Tracks
All tracks must be secured to the floor and ceiling in the centre of the profile at 600mm centres with suitable fixings. For 92mm and 148mm tracks we recommend two rows of suitable fixings at 600mm centres staggered by 300mm.

Fixing of C Studs
All wall abutments and partition junction studs to be secured at 600mm maximum centres using suitable fixings.

Partition Brace
For fixing of Partition Brace or for joining stud to track (if required) we recommend the use of Speedline Wafer Head Screws.

Service Holes

All C and I studs are manufactured with 3 service holes to allow electrical cables and pipes to run through the partition.

Service hole positions are:
Hole 1 – 300mm from end to centre of hole
Hole 2 – 900mm from end to centre of hole
Hole 3 – 1500mm from end to centre of hole

All C Studs have rectangular service holes 32mm wide x 75mm long. Take care that alignment holes are concurrent.

Partition Heights

Partition heights can be increased, please refer to height table on page 24 which shows impact of reducing stud centres or use of heavier gauge studs i.e. heavy duty C studs or I studs.

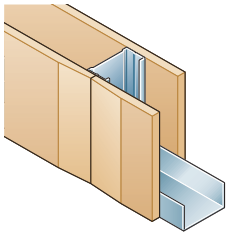
CURVED PARTITIONS

Speedline Track snipped at regular centres to form curve (see table for correct centres).

Radius	Speedline Track snipped at mm centres	Speedline Track fixed at mm centres	Studs mm centres
1-3 metres	50	300	150
3-5 metres	100	400	300
5+ metres	300	600	600

SCREW FIXING LENGTHS

Board Thickness	Speedline Drywall Fixing Length
12.5mm & 15mm	25mm
12.5mm + 12.5mm	25mm + 38mm
12.5mm + 15mm	25mm + 42mm
15mm + 15mm	25mm + 42mm



PARTITIONING SYSTEMS

MAXIMUM HEIGHTS

SPEEDLINE PARTITIONS

C STUDS

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	50mm C Stud			
12.5mm	1	2.5	2.8	2.9
15.0mm	1	2.8	3.1	3.2
12.5mm	2	3.4	4.0	4.1
15.0mm	2	3.7	4.3	4.4
	70mm C Stud			
12.5mm	1	3.6	3.9	4.0
15.0mm	1	3.8	4.1	4.2
12.5mm	2	4.6	5.2	5.4
15.0mm	2	4.9	5.5	5.7
	92mm C Stud			
12.5mm	1	3.9	4.2	4.3
15.0mm	1	4.4	4.7	4.8
12.5mm	2	5.2	5.8	5.9
15.0mm	2	5.9	6.5	6.7
	146mm C Stud			
12.5mm	1	6.2	6.5	6.6
15.0mm	1	6.5	6.8	6.9
12.5mm	2	7.6	8.2	8.4
15.0mm	2	7.9	8.5	8.7

I STUDS – WHEN BOARDED BOTH SIDES

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	50mm I Stud			
12.5mm	1	2.8	3.3	3.6
15.0mm	1	3.1	3.5	3.8
12.5mm	2	3.7	4.1	4.3
15.0mm	2	3.9	4.4	4.5
	70mm I Stud			
12.5mm	1	4.4	4.9	5.4
15.0mm	1	4.6	5.1	5.5
12.5mm	2	5.3	5.7	6.0
15.0mm	2	5.5	5.9	6.2
	92mm I Stud			
12.5mm	1	5.4	6.2	6.8
15.0mm	1	5.5	6.3	6.9
12.5mm	2	6.2	7.1	7.6
15.0mm	2	6.3	7.2	7.8
	146mm I Stud			
12.5mm	1	7.9	8.2	8.5
15.0mm	1	8.1	8.5	8.8
12.5mm	2	8.8	9.6	10.0
15.0mm	2	9.0	9.8	10.2

HEAVY DUTY C STUDS

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	70mm HEAVY DUTY C Stud			
12.5mm	1	4.0	4.4	4.6
15.0mm	1	4.2	4.6	4.8
12.5mm	2	4.8	5.3	5.6
15.0mm	2	5.3	5.5	5.9
	146mm HEAVY DUTY C Stud			
12.5mm	1	6.6	7.2	7.5
15.0mm	1	6.9	7.5	7.8
12.5mm	2	8.2	8.6	9.0
15.0mm	2	8.5	9.0	9.2

Acoustic Performance on Reduced Stud Centres

Reducing stud centres may reduce the acoustic performance of Speedline Systems. The following acoustic performance reductions are estimated:

No insulation in cavity:

Studs reduced to:	Product Description
400mm	-2 R_wdB
300mm	-3 R_wdB

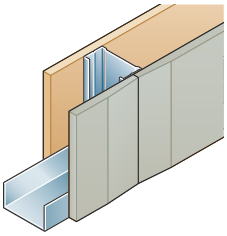
25mm insulation in cavity:

Studs reduced to:	Product Description
400mm	-0 R_wdB
300mm	-2 R_wdB

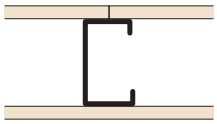
Maximum heights are calculated based on a limiting deflection of L/240 at 200 Pascals.
For Non-Fire Rated Partitions or Fire Rated to BS 476 Part 22 only.

SPEEDLINE STANDARD SYSTEMS

INCOPORATING BRITISH GYPSUM GYPROC WALLBOARD

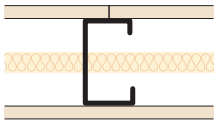


SPEEDLINE STANDARD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD



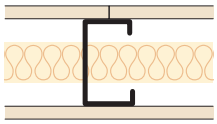
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	N/A	50-B-51
70mm C stud	MD	3.6	97	30	37	70-B-51
92mm C stud	MD	3.9	119	30	37	92-B-51
146mm C stud	MD	6.2	173	30	37	146-B-51



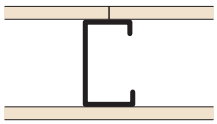
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	39	50-B-51 (25)
70mm C stud	MD	3.6	97	30	41	70-B-51 (25)
92mm C stud	MD	3.9	119	30	41	92-B-51 (25)
146mm C stud	MD	6.2	173	30	41	146-B-51 (25)



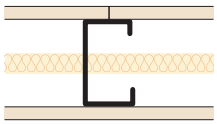
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline 50mm C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm British Gypsum Gyproc Wallboard (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	41	50-B-51 (50)



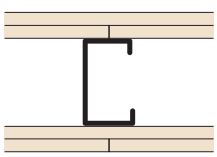
One layer of British Gypsum 15mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	N/A	50-B-52
70mm C stud	HD	3.8	102	30	37	70-B-52
92mm C stud	HD	4.4	124	30	37	92-B-52
146mm C stud	HD	6.5	178	30	37	146-B-52



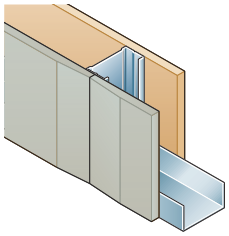
One layer of British Gypsum 15mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	40	50-B-52(25)
70mm C stud	HD	3.8	102	30	41	70-B-52 (25)
92mm C stud	HD	4.4	124	30	41	92-B-52 (25)
146mm C stud	HD	6.5	178	30	41	146-B-52 (25)



Two layers of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	43	50-B-57
70mm C stud	SD	4.6	122	60	46	70-B-57
92mm C stud	SD	5.2	142	60	46	92-B-57
146mm C stud	SD	7.6	198	60	46	146-B-57

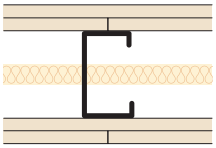


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

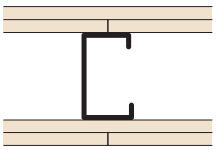
INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD



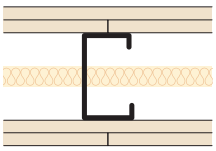
Two layers of British Gypsum 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System Reference
50mm C stud	SD	3.4	102	60	47	50-B-57 (25)
70mm C stud	SD	4.6	122	60	50	70-B-57 (25)
92mm C stud	SD	5.2	142	60	50	92-B-57 (25)
146mm C stud	SD	7.6	198	60	50	146-B-57 (25)



Two layers of British Gypsum 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System Reference
50mm C stud	SD	3.7	112	60	45	50-B-58
70mm C stud	SD	4.9	132	60	46	70-B-58
92mm C stud	SD	5.9	152	60	46	92-B-58
146mm C stud	SD	7.9	208	60	46	146-B-58



Two layers of British Gypsum 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

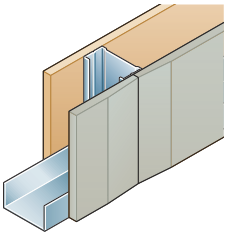
2 x 15mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System Reference
50mm C stud	SD	3.7	112	60	47	50-B-58 (25)
70mm C stud	SD	4.9	132	60	50	70-B-58 (25)
92mm C stud	SD	5.9	152	60	50	92-B-58 (25)
146mm C stud	SD	7.9	208	60	50	146-B-58 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

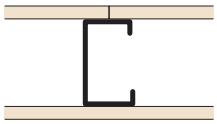
PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

INCORPORATING KNAUF WALLBOARD

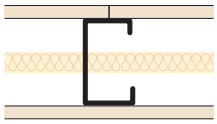


SPEEDLINE STANDARD SYSTEM INCORPORATING KNAUF WALLBOARD



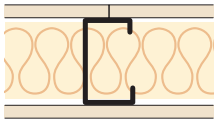
One layer of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	N/A	50-K-51
70mm C stud	MD	3.6	97	30	37	70-K-51
92mm C stud	MD	3.9	119	30	37	92-K-51
146mm C stud	MD	6.2	173	30	37	146-K-51



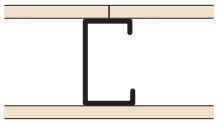
One layer of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	39	50-K-51 (25)
70mm C stud	MD	3.6	97	30	42	70-K-51 (25)
92mm C stud	MD	3.9	119	30	42	92-K-51 (25)
146mm C stud	MD	6.2	173	30	42	146-K-51 (25)



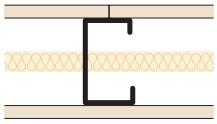
One layer of Knauf 12.5mm Wallboard each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm Knauf Wallboard (50mm APR)	Duty Grade	Max Height[1] m	Nominal Thickness[2]	Fire Resistance[3]	Sound Insulation R_wdB	System reference
50mm C stud	MD	2.5	77	30	42	50-K-51 (50)



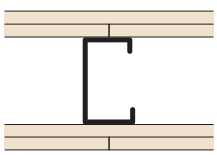
One layer of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	N/A	50-K-52
70mm C stud	HD	3.8	102	30	37	70-K-52
92mm C stud	HD	4.4	124	30	37	92-K-52
146mm C stud	HD	6.5	178	30	37	146-K-52



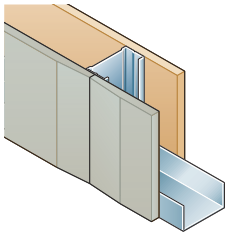
One layer of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	41	50-K-52(25)
70mm C stud	HD	3.8	102	30	42	70-K-52 (25)
92mm C stud	HD	4.4	124	30	42	92-K-52 (25)
146mm C stud	HD	6.5	178	30	42	146-K-52 (25)



Two layers of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Wallboard(No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	42	50-K-57
70mm C stud	SD	4.6	122	60	46	70-K-57
92mm C stud	SD	5.2	142	60	46	92-K-57
146mm C stud	SD	7.6	198	60	46	146-K-57

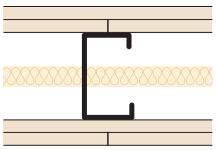


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

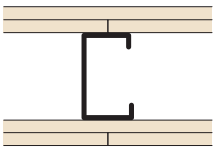
INCORPORATIING KNAUF WALLBOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING KNAUF WALLBOARD



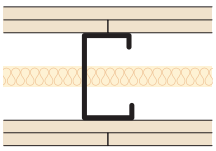
Two layers of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	47	50-K-57 (25)
70mm C stud	SD	4.6	122	60	49	70-K-57 (25)
92mm C stud	SD	5.2	142	60	49	92-K-57 (25)
146mm C stud	SD	7.6	198	60	49	146-K-57 (25)



Two layers of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	60	42	50-K-58
70mm C stud	SD	4.9	132	60	46	70-K-58
92mm C stud	SD	5.9	152	60	46	92-K-58
146mm C stud	SD	7.9	208	60	46	146-K-58



Two layers of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

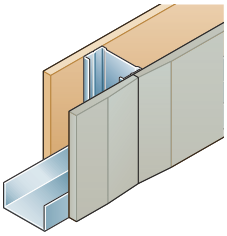
2 x 15mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	60	47	50-K-58 (25)
70mm C stud	SD	4.9	132	60	49	70-K-58(25)
92mm C stud	SD	5.9	152	60	49	92-K-58 (25)
146mm C stud	SD	7.9	208	60	49	146-K-58 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

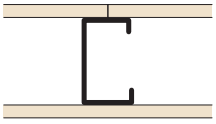
PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

INCORPORATIING SINIAT GTEC STANDARD BOARD

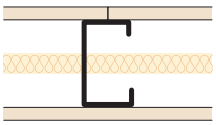


SPEEDLINE STANDARD SYSTEM INCORPORATING SINIAT GTEC STANDARD BOARD



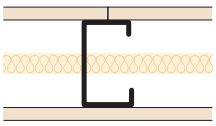
One layer of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	0	N/A	50-S-51
70mm C stud	MD	3.6	97	30	N/A	70-S-51
92mm C stud	MD	3.9	119	30	N/A	92-S-51
146mm C stud	MD	6.2	173	30	N/A	146-S-51



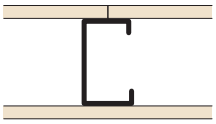
One layer of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	0	N/A	50-S-51 (25)
70mm C stud	MD	3.6	97	30	40	70-S-51 (25)
92mm C stud	MD	3.9	119	30	40	92-S-51 (25)
146mm C stud	MD	6.2	173	30	40	146-S-51 (25)



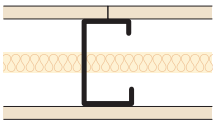
One layer of Siniat 12.5mm GTEC E Board each side of a Speedline C stud at 600mm centres. 25mm APR in cavity.

1 x 12.5mm Siniat GTEC E Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	0	41	50-S-64 (25)
70mm C stud	MD	3.6	97	30	41	70-S-64 (25)



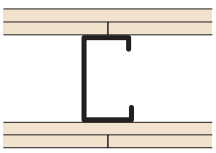
One layer of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	N/A	50-S-52
70mm C stud	HD	3.8	102	30	N/A	70-S-52
92mm C stud	HD	4.4	124	30	N/A	92-S-52
146mm C stud	HD	6.5	178	30	N/A	146-S-52



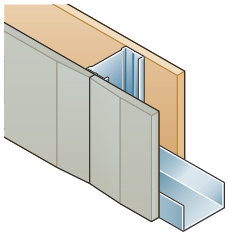
One layer of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	40	50-S-52 (25)
70mm C stud	HD	3.8	102	30	41	70-S-52 (25)
92mm C stud	HD	4.4	124	30	41	92-S-52 (25)
146mm C stud	HD	6.5	178	30	41	146-S-52 (25)



Two layers of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	42	50-S-57
70mm C stud	SD	4.6	122	60	45	70-S-57
92mm C stud	SD	5.2	142	60	45	92-S-57
146mm C stud	SD	7.6	198	60	45	146-S-57

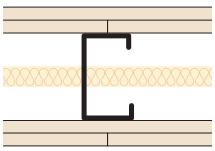


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

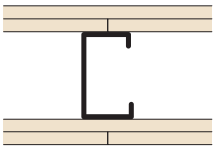
INCORPORATIING SINIAT GTEC STANDARD BOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING SINIAT GTEC STANDARD BOARD



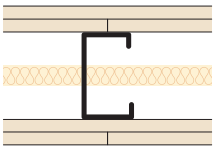
Two layers of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	46	50-S-57 (25)
70mm C stud	SD	4.6	122	60	49	70-S-57 (25)
92mm C stud	SD	5.2	142	60	49	92-S-57 (25)
146mm C stud	SD	7.6	198	60	49	146-S-57 (25)



Two layers of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	60	42	50-S-58
70mm C stud	SD	4.9	132	60	45	70-S-58
92mm C stud	SD	5.9	152	60	45	92-S-58
146mm C stud	SD	7.9	208	60	45	146-S-58



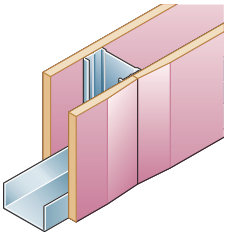
Two layers of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	60	46	50-S-58 (25)
70mm C stud	SD	4.9	132	60	49	70-S-58(25)
92mm C stud	SD	5.9	152	60	49	92-S-58 (25)
146mm C stud	SD	7.9	208	60	49	146-S-58 (25)

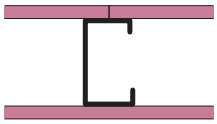
1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

SPEEDLINE FIRE SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC FIRELINE

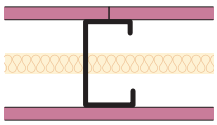


SPEEDLINE FIRE SYSTEM INCORPORATING BRITISH GYPSUM GYPROC FIRELINE



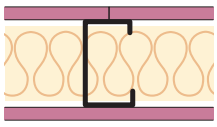
One layer of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	N/A	50-B-55
70mm C stud	MD	3.6	97	30	37	70-B-55
92mm C stud	MD	3.9	119	30	37	92-B-55
146mm C stud	MD	6.2	173	30	37	146-B-55



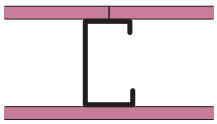
One layer of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	39	50-B-55 (25)
70mm C stud	MD	3.6	97	30	41	70-B-55 (25)
92mm C stud	MD	3.9	119	30	41	92-B-55 (25)
146mm C stud	MD	6.2	173	30	41	146-B-55 (25)



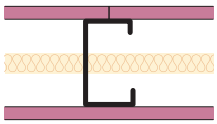
One layer of British Gypsum 12.5mm Gyproc Fireline each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm British Gypsum Gyproc Fireline (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	41	50-B-55 (50)



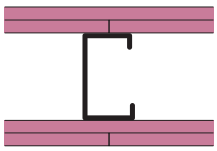
One layer of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	37	50-B-56
70mm C stud	HD	3.8	102	60	39	70-B-56
92mm C stud	HD	4.4	124	60	39	92-B-56
146mm C stud	HD	6.5	178	60	39	146-B-56



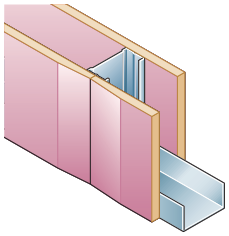
One layer of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	40	50-B-56 (25)
70mm C stud	HD	3.8	102	60	42	70-B-56 (25)
92mm C stud	HD	4.4	124	60	42	92-B-56 (25)
146mm C stud	HD	6.5	178	60	42	146-B-56 (25)



Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	120	43	50-B-61
70mm C stud	SD	4.6	122	120	47	70-B-61
92mm C stud	SD	5.2	142	120	47	92-B-61
146mm C stud	SD	7.6	198	120	47	146-B-61

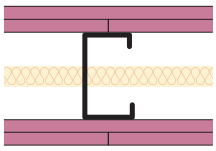


PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

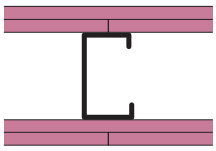
INCORPORATING BRITISH GYPSUM GYPROC FIRELINE

SPEEDLINE FIRE SYSTEM INCORPORATING BRITISH GYPSUM GYPROC FIRELINE



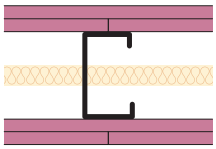
Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	120	47	50-B-61 (25)
70mm C stud	SD	4.6	122	120	50	70-B-61 (25)
92mm C stud	SD	5.2	142	120	50	92-B-61 (25)
146mm C stud	SD	7.6	198	120	50	146-B-61 (25)
AS70 70mm Acoustic stud	SD	4.6	122	120	51	AS70-B-161 (25)



Two layers of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	45	50-B-62
70mm C stud	SD	4.9	132	120	47	70-B-62
92mm C stud	SD	5.9	154	120	47	92-B-62
146mm C stud	SD	7.9	208	120	47	146-B-62



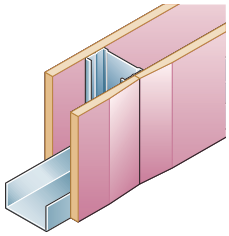
Two layers of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	47	50-B-62 (25)
70mm C stud	SD	4.9	132	120	50	70-B-62(25)
92mm C stud	SD	5.9	154	120	50	92-B-62 (25)
146mm C stud	SD	7.9	208	120	50	146-B-62 (25)

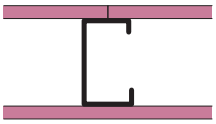
1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

SPEEDLINE FIRE SYSTEMS

INCORPORATING KNAUF FIRE PANEL

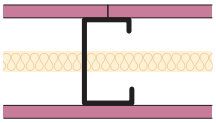


SPEEDLINE FIRE SYSTEM INCORPORATING KNAUF FIRE PANEL



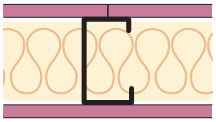
One layer of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	N/A	50-K-55
70mm C stud	MD	3.6	97	30	37	70-K-55
92mm C stud	MD	3.9	119	30	37	92-K-55
146mm C stud	MD	6.2	173	30	37	146-K-55



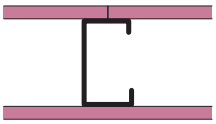
One layer of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	39	50-K-55 (25)
70mm C stud	MD	3.6	97	30	42	70-K-55 (25)
92mm C stud	MD	3.9	119	30	42	92-K-55 (25)
146mm C stud	MD	6.2	173	30	42	146-K-55 (25)



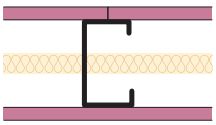
One layer of Knauf 12.5mm Fire Panel each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm Knauf Fire Panel (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	42	50-K-55 (50)



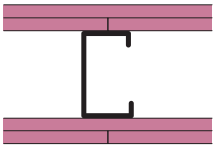
One layer of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	N/A	50-K-56
70mm C stud	HD	3.8	102	60	37	70-K-56
92mm C stud	HD	4.4	124	60	37	92-K-56
146mm C stud	HD	6.5	178	60	37	146-K-56



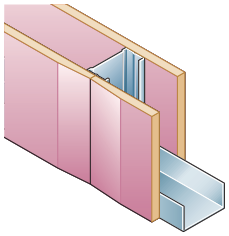
One layer of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	41	50-K-56 (25)
70mm C stud	HD	3.8	102	60	43	70-K-56 (25)
92mm C stud	HD	4.4	124	60	43	92-K-56 (25)
146mm C stud	HD	6.5	178	60	43	146-K-56 (25)



Two layers of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	120	42	50-K-61
70mm C stud	SD	4.6	122	120	46	70-K-61
92mm C stud	SD	5.2	142	120	46	92-K-61
146mm C stud	SD	7.6	198	120	46	146-K-61

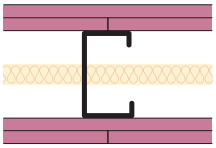


PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

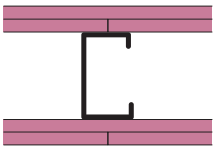
INCORPORATING KNAUF FIRE PANEL

SPEEDLINE FIRE SYSTEM INCORPORATING KNAUF FIRE PANEL



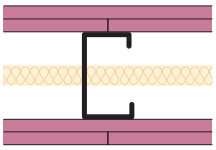
Two layers of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	120	47	50-K-61 (25)
70mm C stud	SD	4.6	122	120	49	70-K-61 (25)
92mm C stud	SD	5.2	142	120	49	92-K-61 (25)
146mm C stud	SD	7.6	198	120	49	146-K-61 (25)



Two layers of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	42	50-K-62
70mm C stud	SD	4.9	132	120	46	70-K-62
92mm C stud	SD	5.9	154	120	46	92-K-62
146mm C stud	SD	7.9	208	120	46	146-K-62



Two layers of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

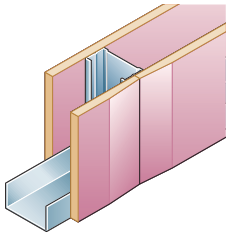
2 x 15mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	47	50-K-62 (25)
70mm C stud	SD	4.9	132	120	49	70-K-62 (25)
92mm C stud	SD	5.9	154	120	49	92-K-62 (25)
146mm C stud	SD	7.9	208	120	49	146-K-62 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

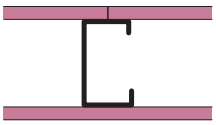
PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

INCORPORATING SINIAT GTEC FIRE BOARD

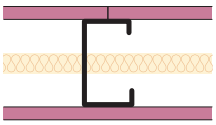


SPEEDLINE FIRE SYSTEM INCORPORATING SINIAT GTEC FIRE BOARD



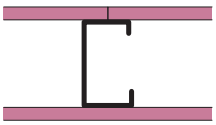
One layer of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	MD	3.6	97	30	N/A	70-S-55
92mm C stud	MD	3.9	119	30	N/A	92-S-55
146mm C stud	MD	6.2	173	30	N/A	146-S-55



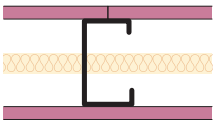
One layer of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	MD	3.6	97	30	40	70-S-55 (25)
92mm C stud	MD	3.9	119	30	40	92-S-55 (25)
146mm C stud	MD	6.2	173	30	40	146-S-55 (25)



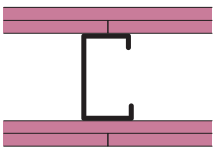
One layer of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	HD	2.8	82	60	N/A	50-S-56
70mm C stud	HD	3.8	102	60	N/A	70-S-56
92mm C stud	HD	4.4	124	60	N/A	92-S-56
146mm C stud	HD	6.5	178	60	44	146-S-56



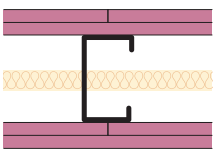
One layer of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	HD	2.8	82	60	41	50-S-56(25)
70mm C stud	HD	3.8	102	60	42	70-S-56 (25)
92mm C stud	HD	4.4	124	60	42	92-S-56 (25)
146mm C stud	HD	6.5	178	60	48	146-S-56 (25)



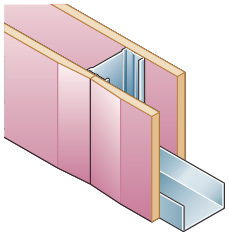
Two layers of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	SD	3.4	102	90	42	50-S-61
70mm C stud	SD	4.6	122	90	45	70-S-61
92mm C stud	SD	5.2	142	90	45	92-S-61
146mm C stud	SD	7.6	198	90	45	146-S-61



Two layers of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	SD	3.4	102	90	46	50-S-61 (25)
70mm C stud	SD	4.6	122	90	49	70-S-61 (25)
92mm C stud	SD	5.2	142	90	49	92-S-61 (25)
146mm C stud	SD	7.6	198	90	49	146-S-61 (25)

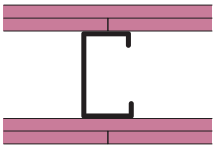


PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

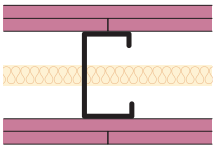
INCORPORATING SINIAT GTEC FIRE BOARD

SPEEDLINE FIRE SYSTEM INCORPORATING SINIAT GTEC FIRE BOARD



Two layers of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	42	50-S-62
70mm C stud	SD	4.9	132	120	50	70-S-62
92mm C stud	SD	5.9	154	120	50	92-S-62
146mm C stud	SD	7.9	208	120	54	146-S-62



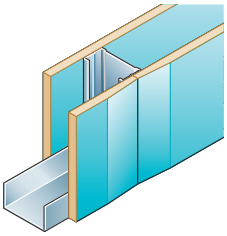
Two layers of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	46	50-S-62 (25)
70mm C stud	SD	4.9	132	120	53	70-S-62 (25)
92mm C stud	SD	5.9	154	120	53	92-S-62 (25)
146mm C stud	SD	7.9	208	120	55	146-S-62 (25)

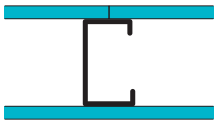
1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC

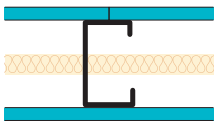


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



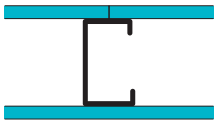
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	N/A	50-B-53
70mm C stud	MD	3.6	97	30	40	70-B-53
92mm C stud	MD	3.9	119	30	40	92-B-53
146mm C stud	MD	6.2	173	30	40	146-B-53
AS70 Acoustic C stud	MD	3.6	97	30	42	AS70-B-153



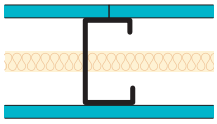
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	MD	2.5	77	30	44	50-B-53 (25)
70mm C stud	MD	3.6	97	30	46	70-B-53 (25)
92mm C stud	MD	3.9	119	30	46	92-B-53 (25)
146mm C stud	MD	6.2	173	30	46	146-B-53 (25)
AS70 Acoustic C stud	MD	3.6	97	30	47	AS70-B-153 (25)



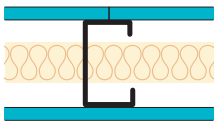
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	40	50-B-54
70mm C stud	HD	3.8	102	30	42	70-B-54
92mm C stud	HD	4.4	124	30	42	92-B-54
146mm C stud	HD	6.5	178	30	47	146-B-54



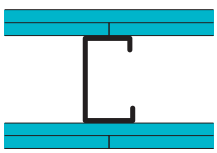
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	44	50-B-54 (25)
70mm C stud	HD	3.8	102	30	46	70-B-54 (25)
92mm C stud	HD	4.4	124	30	47	92-B-54 (25)
146mm C stud	HD	6.5	178	30	52	146-B-54 (25)



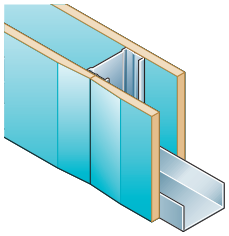
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	30	45	50-B-54 (50)
AS70 Acoustic C stud	HD	3.6	102	30	50	AS70-B-154 (50)
AS92 Acoustic C stud	HD	4.4	124	30	54	AS92-B-154 (50)
146mm C Stud	HD	6.5	178	30	52	146-B-54 (50)



Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	48	50-B-59
70mm C stud	SD	4.6	122	60	53	70-B-59
92mm C stud	SD	5.2	142	60	53	92-B-59
146mm C stud	SD	7.6	198	60	53	146-B-59

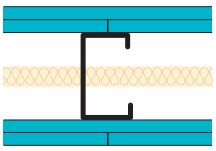


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

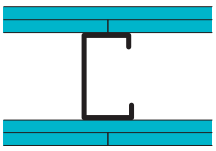
INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



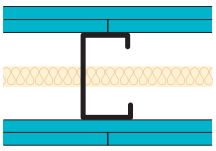
Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	54	50-B-59 (25)
70mm C stud	SD	4.6	122	60	56	70-B-59 (25)
92mm C stud	SD	5.2	142	60	56	92-B-59 (25)
146mm C stud	SD	7.6	198	60	56	146-B-59 (25)
AS70 Acoustic C stud	SD	4.6	122	60	58 (-3:-8)	AS70-B-159 (25)



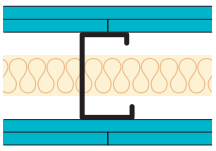
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	90	48	50-B-60
70mm C stud	SD	4.9	132	90	53	70-B-60
92mm C stud	SD	5.9	154	90	53	92-B-60
146mm C stud	SD	7.9	208	90	56	146-B-60



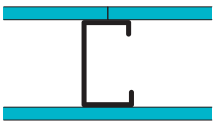
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	90	54	50-B-60 (25)
70mm C stud	SD	4.9	132	90	56	70-B-60 (25)
92mm C stud	SD	5.9	154	90	56	92-B-60 (25)
146mm C stud	SD	7.9	208	90	59 (-2;-6)	146-B-60 (25)



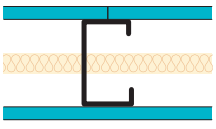
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS92 Acoustic C stud	SD	5.9	154	90	58 (-3:-5)	AS92-B-160 (50)
146mm C stud	SD	7.9	208	90	59 (-2;-6)	146-B-60 (50)



One layer of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc F (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	40	50-B-54F
70mm C stud	HD	3.8	102	60	42	70-B-54F
92mm C stud	HD	4.4	124	60	42	92-B-54F
146mm C stud	HD	6.5	178	60	42	146-B-54F



One layer of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc F (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	HD	2.8	82	60	44	50-B-54F (25)
70mm C stud	HD	3.8	102	60	46	70-B-54F (25)
92mm C stud	HD	4.4	124	60	47	92-B-54F (25)
146mm C stud	HD	6.5	178	60	52	146-B-54F (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

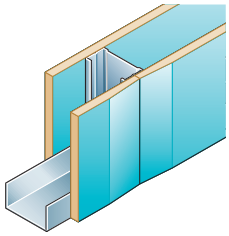
NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	**Fire Rating**
1 x 15mm Soundbloc	30 minutes
1 x 15mm Soundbloc F	60 minutes
2 x 15mm Soundbloc	90 minutes
2 x 15mm Soundbloc F	120 minutes

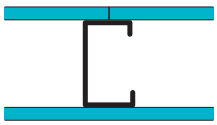
Substantiating Fire Reports are available.

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING KNAUF SOUNDSHIELD PLUS

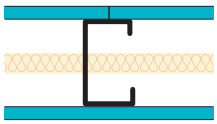


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING KNAUF SOUNDSHIELD PLUS



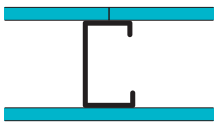
One layer of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	MD	2.5	77	30	N/A	50-K-53
70mm C stud	MD	3.6	97	30	42	70-K-53
92mm C stud	MD	3.9	119	30	42	92-K-53
146mm C stud	MD	6.2	173	30	42	146-K-53



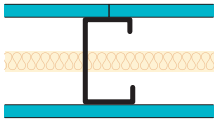
One layer of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	MD	2.5	77	30	44	50-K-53 (25)
70mm C stud	MD	3.6	97	30	47	70-K-53 (25)
92mm C stud	MD	3.9	119	30	47	92-K-53 (25)
146mm C stud	MD	6.2	173	30	47	146-K-53 (25)



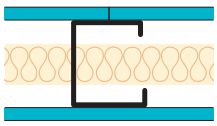
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	SD	2.8	82	30	38	50-K-54
70mm C stud	SD	3.8	102	60	42	70-K-54
92mm C stud	SD	4.4	124	60	42	92-K-54
146mm C stud	SD	6.5	178	60	42	146-K-54



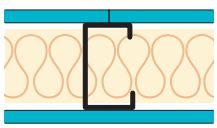
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	SD	2.8	82	30	44	50-K-54 (25)
70mm C stud	SD	3.8	102	60	47	70-K-54 (25)
92mm C stud	SD	4.4	124	60	47	92-K-54 (25)
146mm C stud	SD	6.5	178	60	47	146-K-54 (25)



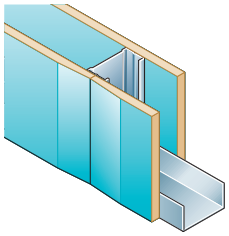
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-K-154 (50)



One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 100mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (100mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
92mm C stud	SD	4.4	124	60	48	92-K-54 (100)
146mm C stud	SD	6.5	178	60	48	146-K-54 (100)

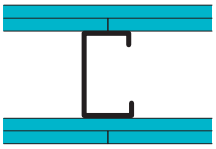


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

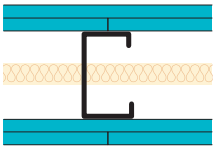
INCORPORATING KNAUF SOUNDSHIELD PLUS

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING KNAUF SOUNDSHIELD PLUS



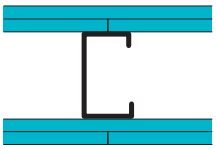
Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	49	50-K-59
70mm C stud	SD	4.6	122	60	53	70-K-59
92mm C stud	SD	5.2	142	60	53	92-K-59
146mm C stud	SD	7.6	198	60	53	146-K-59



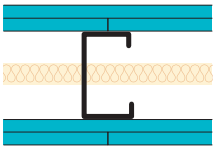
Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.4	102	60	52	50-K-59 (25)
70mm C stud	SD	4.6	122	60	55	70-K-59 (25)
92mm C stud	SD	5.2	142	60	55	92-K-59 (25)
146mm C stud	SD	7.6	198	60	55	146-K-59 (25)



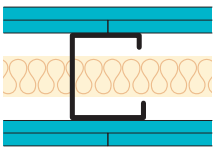
Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	49	50-K-60
70mm C stud	SD	4.9	132	120	53	70-K-60
92mm C stud	SD	5.9	154	120	53	92-K-60
146mm C stud	SD	7.9	208	120	53	146-K-60



Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	120	52	50-K-60 (25)
70mm C stud	SD	4.9	132	120	55	70-K-60 (25)
92mm C stud	SD	5.9	154	120	55	92-K-60 (25)
146mm C stud	SD	7.9	208	120	55	146-K-60 (25)



Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

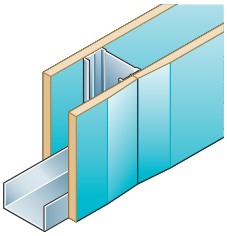
2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	120	57 (-2, -5)	AS70-K-160 (50)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

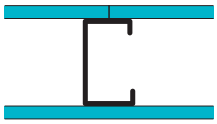
PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING SINIAT GTEC dB BOARD

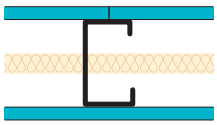


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING SINIAT GTEC dB BOARD



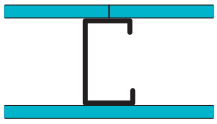
One layer of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	MD	3.6	97	30	40	70-S-53
92mm C stud	MD	3.9	119	30	40	92-S-53
146mm C stud	MD	6.2	173	30	40	146-S-53



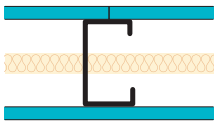
One layer of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	MD	3.6	97	30	45	70-S-53 (25)
92mm C stud	MD	3.9	119	30	45	92-S-53 (25)
146mm C stud	MD	6.2	173	30	45	146-S-53 (25)



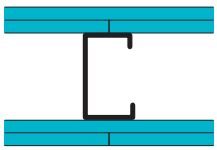
One layer of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	HD	2.8	82	30	38	50-S-54
70mm C stud	HD	3.8	102	30	41	70-S-54
92mm C stud	HD	4.4	124	30	41	92-S-54
146mm C stud	HD	6.5	178	30	41	146-S-54



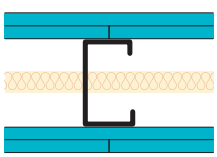
One layer of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	HD	2.8	82	30	42	50-S-54 (25)
70mm C stud	HD	3.8	102	30	45	70-S-54 (25)
92mm C stud	HD	4.4	124	30	45	92-S-54 (25)
146mm C stud	HD	6.5	178	30	45	146-S-54 (25)



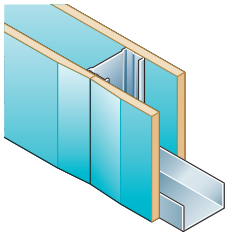
Two layers of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
50mm C stud	SD	3.4	102	60	47	50-S-59
70mm C stud	SD	4.6	122	60	50	70-S-59
92mm C stud	SD	5.2	142	60	50	92-S-59
146mm C stud	SD	7.6	198	60	50	146-S-59



Two layers of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation RwdB[5]	System reference
50mm C stud	SD	3.4	102	60	50	50-S-59 (25)
70mm C stud	SD	4.6	122	60	52	70-S-59 (25)
92mm C stud	SD	5.2	142	60	52	92-S-59 (25)
146mm C stud	SD	7.6	198	60	52	146-S-59 (25)

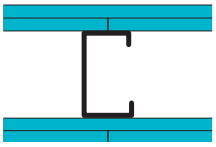


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

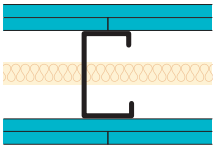
INCORPORATING SINIAT GTEC dB BOARD

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING SINIAT GTEC DB BOARD



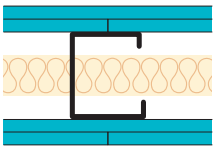
Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	90	47	50-S-60
70mm C stud	SD	4.9	132	90	50	70-S-60
92mm C stud	SD	5.9	154	90	50	92-S-60
146mm C stud	SD	7.9	208	90	50	146-S-60



Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
50mm C stud	SD	3.7	112	90	50	50-S-60 (25)
70mm C stud	SD	4.9	132	90	53	70-S-60 (25)
92mm C stud	SD	5.9	154	90	53	92-S-60 (25)
146mm C stud	SD	7.9	208	90	53	146-S-60 (25)



Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

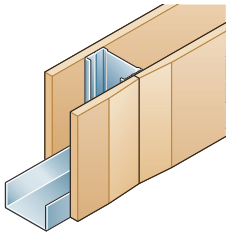
2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	90	56 (-2, -4)	AS70-S-160 (50)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

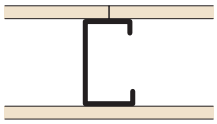
PARTITIONING SYSTEMS

SPEEDLINE HIGH IMPACT SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC DURALINE

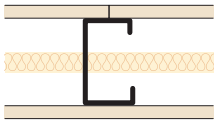


SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC DURALINE



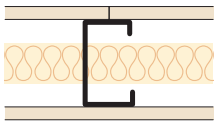
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70- Heavy duty stud	SD	4.2	102	60	44	PSHD70-B-63



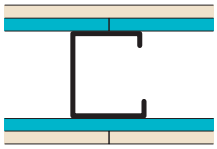
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70- Heavy duty stud	SD	4.2	102	60	47	PSHD70-B-63 (25)
AS70 Acoustic stud	SD	3.8	102	60	48	AS70-B-163 (25)



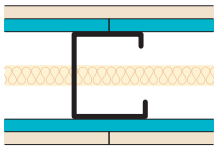
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70- Heavy duty stud	SD	4.2	102	60	48	PSHD70-B-63 (50)
AS70 Acoustic stud	SD	3.8	102	60	50	AS70-B-163 (50)
AS92 Acoustic stud	SD	4.4	124	60	53	AS92-B-163 (50)



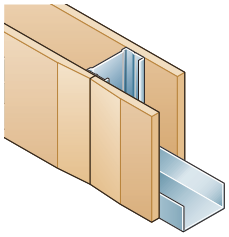
Inner layer of British Gypsum 12.5mm Gyproc Soundbloc, outer layer of British Gypsum 15mm Gyproc Duraline to each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc Inner 1 x 15mm British Gypsum Gyproc Duraline outer (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic stud	SD	4.6	127	60	53	AS70-B-165



Inner layer of British Gypsum 12.5mm Gyproc Soundbloc, outer layer of British Gypsum 15mm Gyproc Duraline to each side of Speedline C stud at 600mm centres. Size 25mm APR in cavity of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc Inner 1 x 15mm British Gypsum Gyproc Duraline outer (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic stud	SD	4.6	127	60	60 (-3:-8)	AS70-B-165 (25)

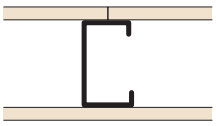


PARTITIONING SYSTEMS

SPEEDLINE HIGH IMPACT SYSTEMS

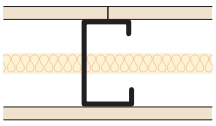
INCORPORATING KNAUF IMPACT PANEL

SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING KNAUF IMPACT PANEL



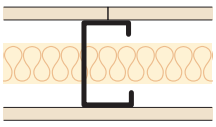
One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70 – Heavy duty stud	SD	4.2	102	60	39	PSHD70-K-63
AS70 Acoustic stud	SD	3.8	102	60	40	AS70-K-163



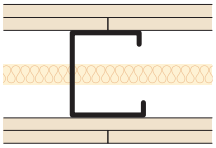
One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
PSHD70 – Heavy duty stud	SD	4.2	102	60	43	PSHD70-K-63 (25)
AS70 Acoustic stud	SD	3.8	102	60	43	AS70-K-163 (25)



One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic stud	SD	3.8	102	60	48	AS70-K-163 (50)



Two layers of Knauf 15mm Impact Panel to each side of Speedline C stud at 600mm centres. Size of C stud as per table. 25mm APR in cavity.

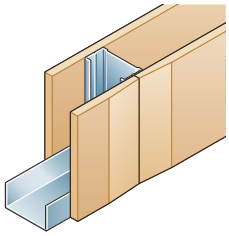
2 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic stud	SD	4.9	132	120	57 (-3:-7)	AS70-K-166 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

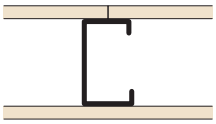
PARTITIONING SYSTEMS

SPEEDLINE HIGH IMPACT SYSTEMS

INCORPORATING SINIAT GTEC MEGADECO

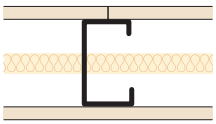


SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING SINIAT GTEC MEGADECO



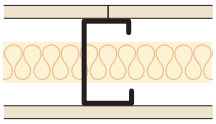
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	SD	3.8	102	60	40	70-S-63
92mm C stud	SD	4.4	124	60	40	92-S-63
146mm C stud	SD	6.5	178	60	40	146-S-63



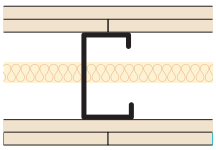
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	SD	3.8	102	60	44	70-S-63 (25)
AS70 Acoustic stud	SD	3.8	102	60	47	AS70-S-163 (25)
92mm C stud	SD	4.4	124	60	44	92-S-63 (25)
146mm C stud	SD	6.5	178	60	44	146-S-63 (25)



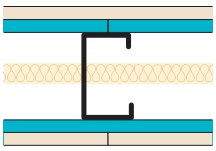
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. 50mm APR in cavity.
Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	SD	3.8	102	60	47	70-S-63 (50)
AS70 Acoustic stud	SD	3.8	102	60	48	AS70-S-163 (50)
92mm C stud	SD	4.4	124	60	47	92-S-63 (50)
146mm C stud	SD	6.5	178	60	47	146-S-63 (50)



Inner layer of Siniat 12.5mm GTEC Standard Board, outer layer of Siniat 15mm GTEC Megadeco to each side of Speedline C stud at 600mm centres. Size of C stud as per table.

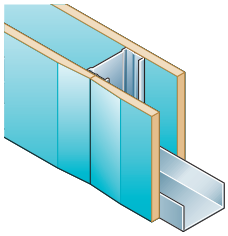
1 x 12.5mm Siniat GTEC Standard Board inner 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	SD	4.6	127	60	52	70-S-65 (25)



Inner layer of Siniat 15mm GTEC dB Board, outer layer of Siniat 15mm GTEC Megadeco to each side of Speedline C stud at 600mm centres. Size of C stud as per table 25mm APR in cavity.

1 x 15mm Siniat GTEC dB Board inner 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5	System reference
70mm C stud	SD	4.9	132	90	53	70-S-66 (25)
AS70 Acoustic stud	SD	4.9	132	90	56 (-2:-7)	AS70-S-166 (25)

Finishing as per manufacturers recommendations



PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

SOLUTIONS

Benefits

- Extremely cost-effective.
- Ideal for domestic and commercial use.
- Reduced installation time.
- Slimmer partitions maximise floor space.
- Quieter living spaces.
- Greater sound insulating performance.
- Reduces the transfer of common noise.
- Fire 30-120 mins.
- Acoustic 40-63 RwdB.
- Duty Rating Medium, Heavy and Severe available.

Sectors

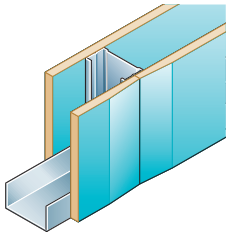
- Residential
- Offices
- Healthcare
- Education
- Commercial
- Retail
- RMI
- Student Accommodation

A cost-effective way to achieve improved acoustic performance in both domestic and commercial situations, our Acoustic Stud has built in discontinuity which results in improved sound insulation.

Acoustic Stud is designed to offer better sound insulation in the key speech frequency bands (250 to 1000 Hz) whilst maintaining structural strength and integrity. This enables slimmer partitions to be constructed, maximising floor space but still satisfying high acoustic requirements.

SPEEDLINE ACOUSTIC C STUD SYSTEMS

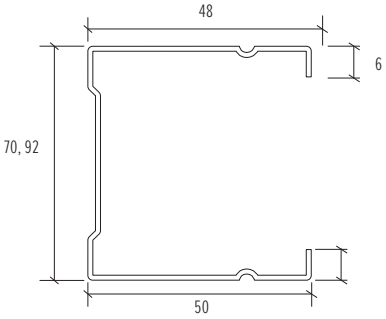
SOLUTIONS



Acoustic Stud

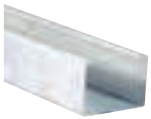
Speedline Acoustic C stud partitions are constructed in the same way as standard C stud systems. With the exception that the plasterboard edge should be aligned with the offset sight line on the acoustic stud. Plasterboard fixing centres remain the same.

Acoustic Stud



When fixing plasterboards to Speedline Acoustic Stud ensure the plasterboard edge is aligned to the offset sight line.

ACOUSTIC STUD



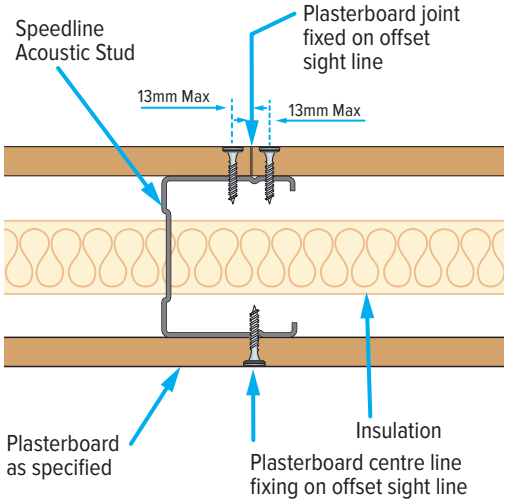
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
AS70	70mm Acoustic stud x 0.5mm flange dimensions 50/48mm	2.70 3.00 3.60 4.20	1.66 1.85 2.22 2.59
AS92	92mm Acoustic stud x 0.5mm flange dimensions 50/48mm	3.60 4.20	2.56 3.00

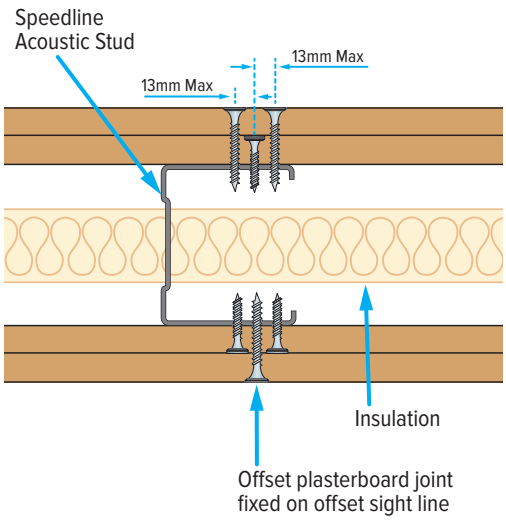
Construction

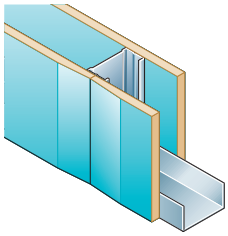
Attention to detail is essential. Care must be taken in construction to ensure a soundproof structure performs to its maximum capability. As sound – like water, light or air – will find the smallest crack and expose it as a weak point, your structure should be built as if it needs to be waterproofed.

A single 25mm hole in an otherwise acoustically sound partition can reduce performance by up to an incredible 15dB. Although a 25mm hole should be visible a crack 1mm x 1m will not always be obvious and, if not treated with an acoustic sealant, will be detrimental to the structure.

An acoustic construction is only as good as its weakest point.





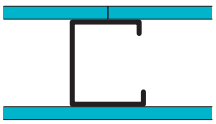


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

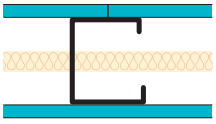
INCORPORATING BRITISH GYPSUM GYPROC BOARDS

SPEEDLINE ACOUSTIC STUDS SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



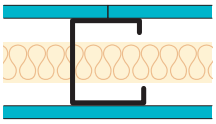
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	MD	3.6	97	30	42	AS70-B-153



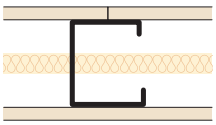
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	MD	3.6	97	30	47	AS70-B-153 (25)



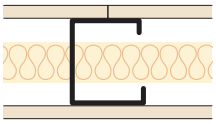
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	HD	3.8	102	30	50	AS70-B-154 (50)
AS92 Acoustic C stud	HD	4.4	124	30	54	AS92-B-154 (50)



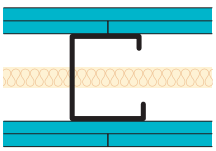
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-B-163 (25)



One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	50	AS70-B-163 (50)
AS92 Acoustic C Stud	SD	4.4	124	60	53	AS92-B-163 (50)

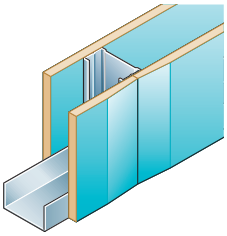


Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

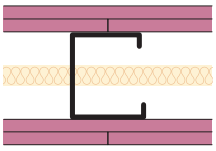
2 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.6	122	60	58 (-3:-8)	AS70-B-159 (25)

SPEEDLINE ACOUSTIC C STUD SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC BOARDS

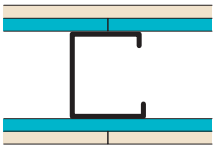


SPEEDLINE ACOUSTIC STUDS SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



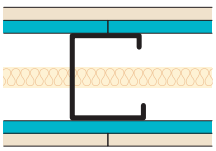
Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.6	122	120	51	AS70-B-161 (25)



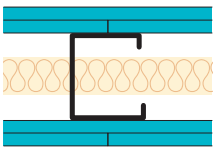
Two layers made up of 1 x British Gypsum 12.5mm Gyproc Soundbloc inner and 1 x British Gypsum 15mm Gyproc Duraline outer each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc inner 1 x 15mm British Gypsum Gyproc Duraline outer (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.6	127	60	53	AS70-B-165



Two layers made up of 1 x British Gypsum 12.5mm Gyproc Soundbloc inner and 1 x British Gypsum 15mm Gyproc Duraline outer each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc inner 1 x 15mm British Gypsum Gyproc Duraline outer (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.6	127	60	60 (-3:-8)	AS70-B-165 (25)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

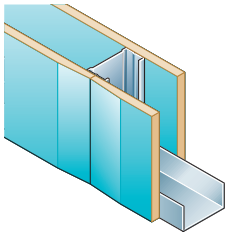
2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS92 Acoustic C stud	SD	5.9	154	90	58 (-3:-5)	AS92-B-160 (50)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm stud centres, greater heights can be achieved by reducing centres. Refer to page 24.
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

NOTE: Substituting 15mm Soundbloc to 15mm Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	**Fire Rating**
1 x 15mm Soundbloc	30 minutes
1 x 15mm Soundbloc F	60 minutes
2 x 15mm Soundbloc	60 minutes
2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

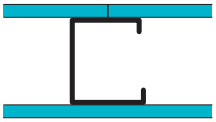


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

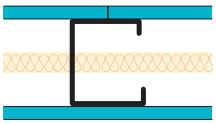
INCORPORATING KNAUF BOARDS

SPEEDLINE ACOUSTIC C STUD SYSTEM INCORPORATING KNAUF BOARDS



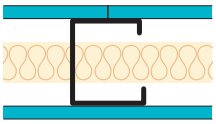
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	42	AS70-K-154



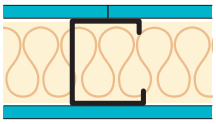
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	47	AS70-K-154 (25)



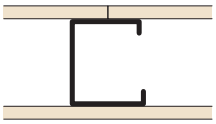
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-K-154 (50)



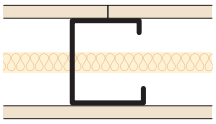
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 100mm APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (100mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS92 Acoustic C stud	SD	4.4	124	60	52	AS92-K-154 (100)



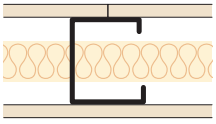
One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Impact Panel (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	40	AS70-K-163



One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity.
Size of Acoustic C stud as per table.

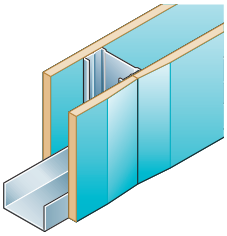
1 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	43	AS70-K-163 (25)



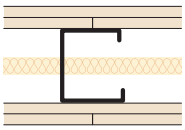
One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity.
Size of Acoustic C stud as per table.

1 x 15mm Knauf Impact Panel (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-K-163 (50)

SPEEDLINE ACOUSTIC C STUD SYSTEMS

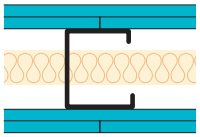


SPEEDLINE ACOUSTIC C STUD SYSTEM INCORPORATING KNAUF BOARDS



Two layers of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

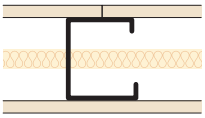
2 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	120	57 (-3, -7)	AS70-K-166 (25)



Two layers of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

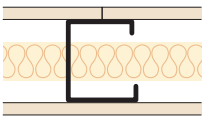
2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	120	57 (-2:-5)	AS70-K-160 (50)

SPEEDLINE ACOUSIC C STUD SYSTEM INCORPORATING SINIAT GTEC BOARDS



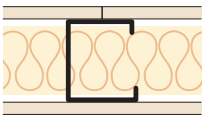
One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Siniat GTEC Megadeco (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	47	AS70-S-163 (25)



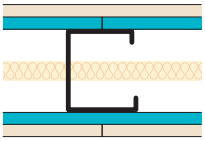
One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Siniat GTEC Megadeco (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-S-163 (50)
AS92 Acoustic C Stud	SD	4.4	124	60	49	AS92-S-163 (50)



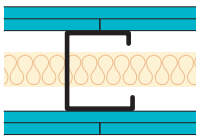
One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 100mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Siniat GTEC Megadeco (100mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS92 Acoustic C Stud	SD	4.4	124	60	50	AS92-S-163 (100)



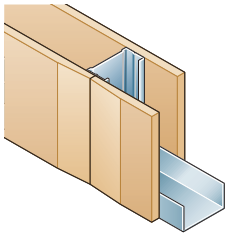
Two layers comprising of Siniat GTEC 1 x 15mm dB Board inner and 1 x 15mm Siniat GTEC Megadeco outer each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Siniat GTEC dB Board 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	90	56 (-2:-7)	AS70-S-166SR (25)



Two layers of Siniat GTEC 15mm GTEC dB Board each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
AS70 Acoustic C stud	SD	4.9	132	90	56(-2:-4)	AS70-S-160 (50)

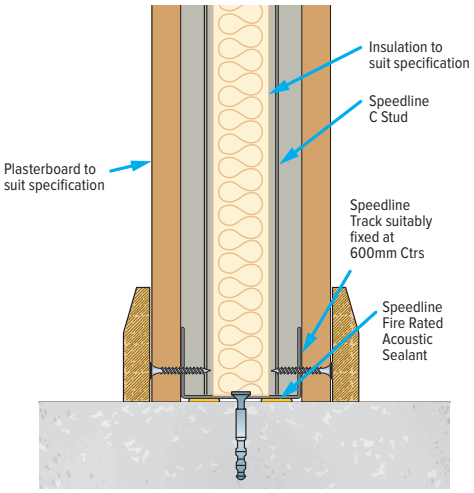


PARTITIONING SYSTEMS

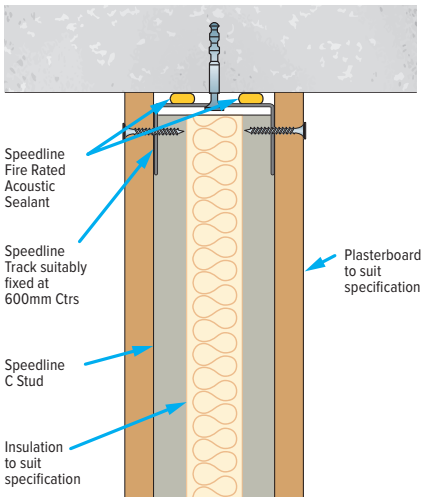
SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

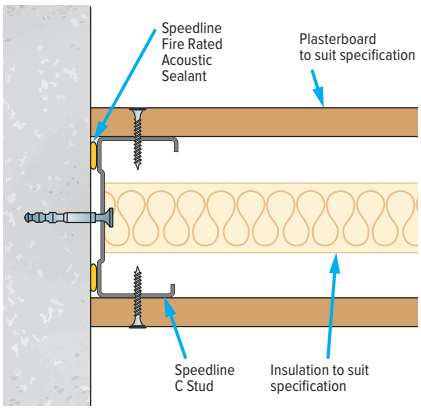
C STUD
SKIRTING DETAIL



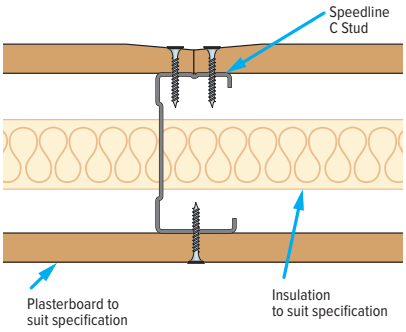
C STUD
FIXED HEAD DETAIL



C STUD
WALL ABUTMENT DETAIL

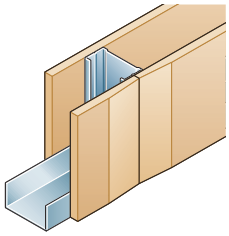


C STUD
STAGGERED JOINT

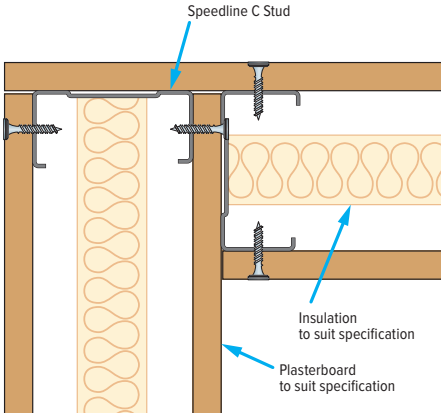


SINGLE FRAME CONSTRUCTION DETAILS

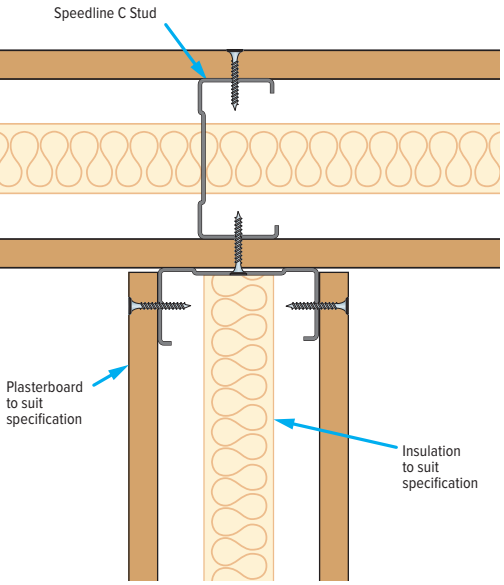
SINGLE LAYER



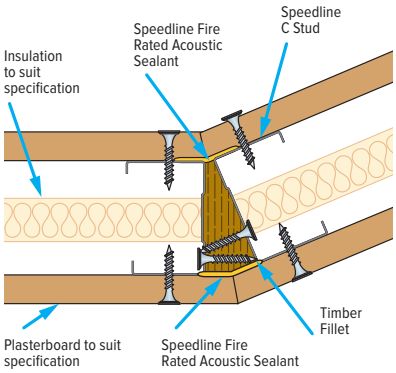
C STUD
CORNER DETAIL



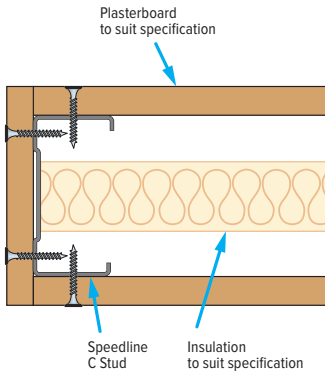
C STUD
T JUNCTION

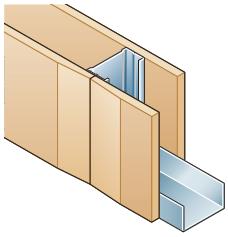


C STUD
IRREGULAR ANGLE CORNER DETAIL



C STUD
STOP END DETAIL





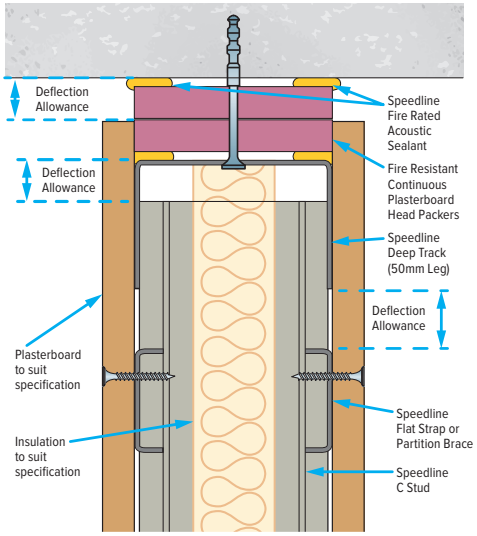
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

C STUD

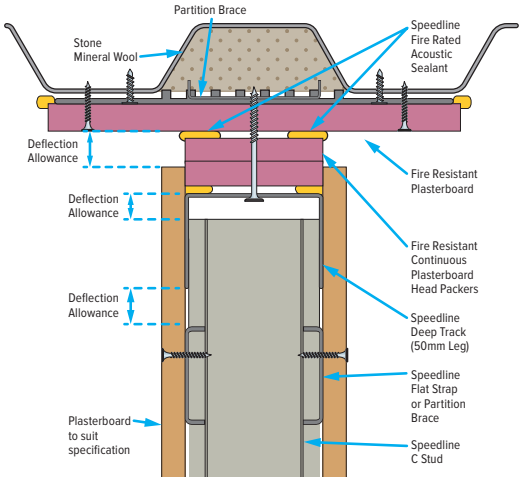
DEFLECTION HEAD – UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

C STUD

DEFLECTION HEAD – PARALLEL TO PROFILED SOFFIT – UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

For various deflection requirements please refer to table below:

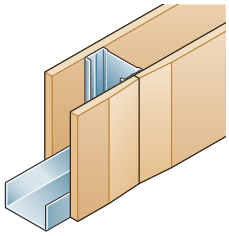
HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE		
Deflection	**Board Thickness**	**Head Track**
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboard or 3 x 12.5mm Fire Boards	SPXDT 70mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPDT 70mm Leg

For deflection requirements greater than 45mm please contact **enquiries@speedlinedrywall.co.uk**

PARTITIONING SYSTEMS

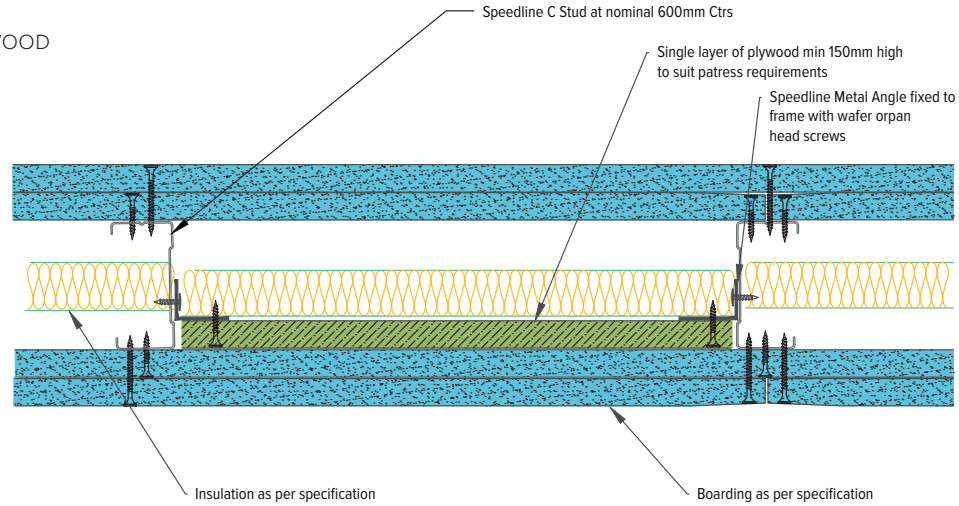
SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER



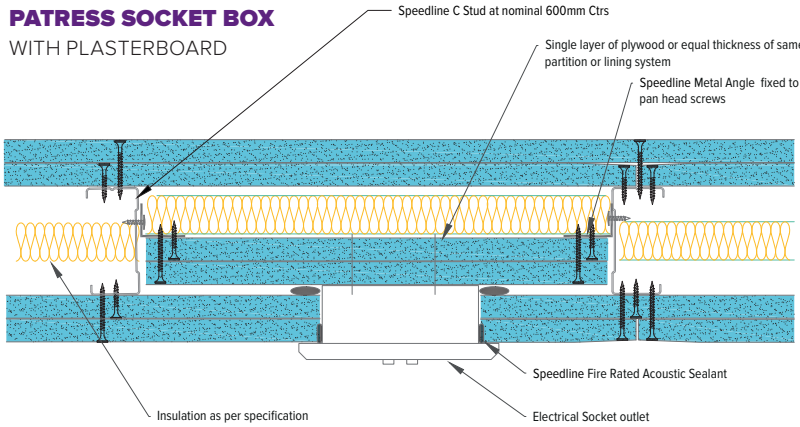
PATRESS

WITH PLYWOOD



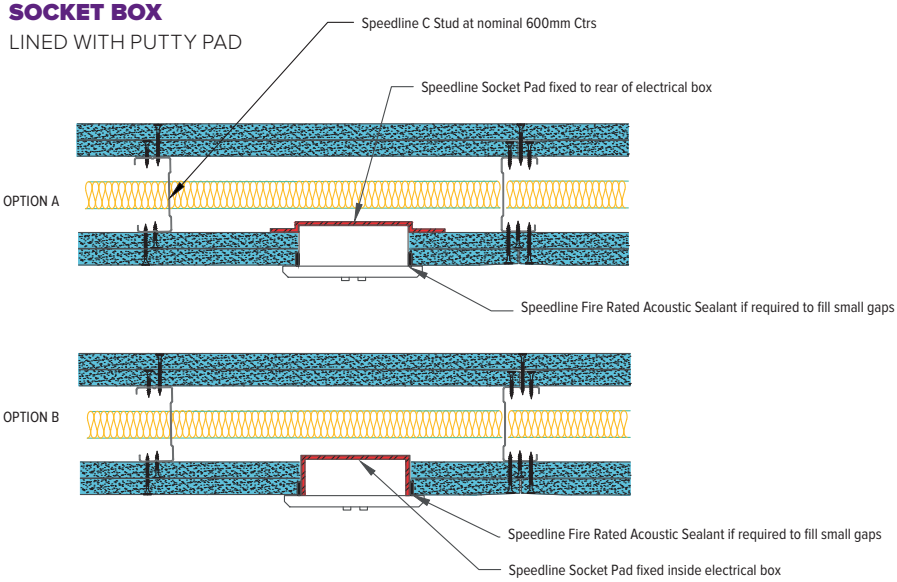
PATRESS SOCKET BOX

WITH PLASTERBOARD

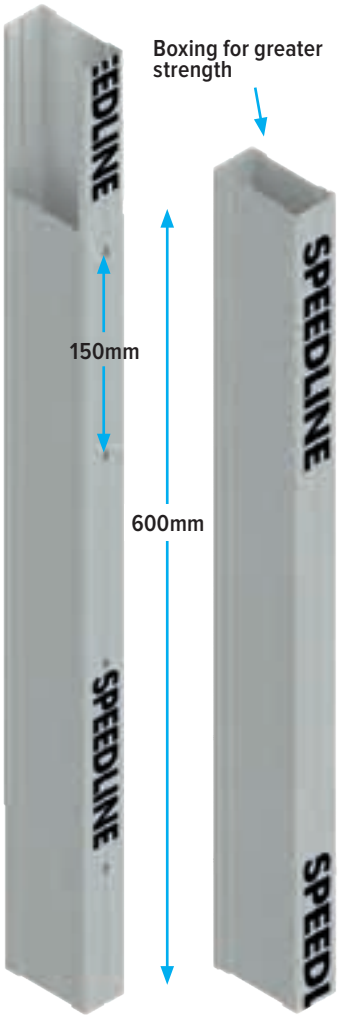


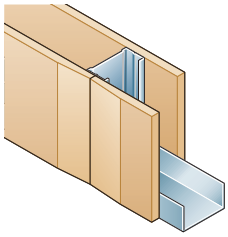
SOCKET BOX

LINED WITH PUTTY PAD



Splicing for greater height.
Overlap 600mm. Four Speedline Wafer Head Drywall screws at 150mm centres.





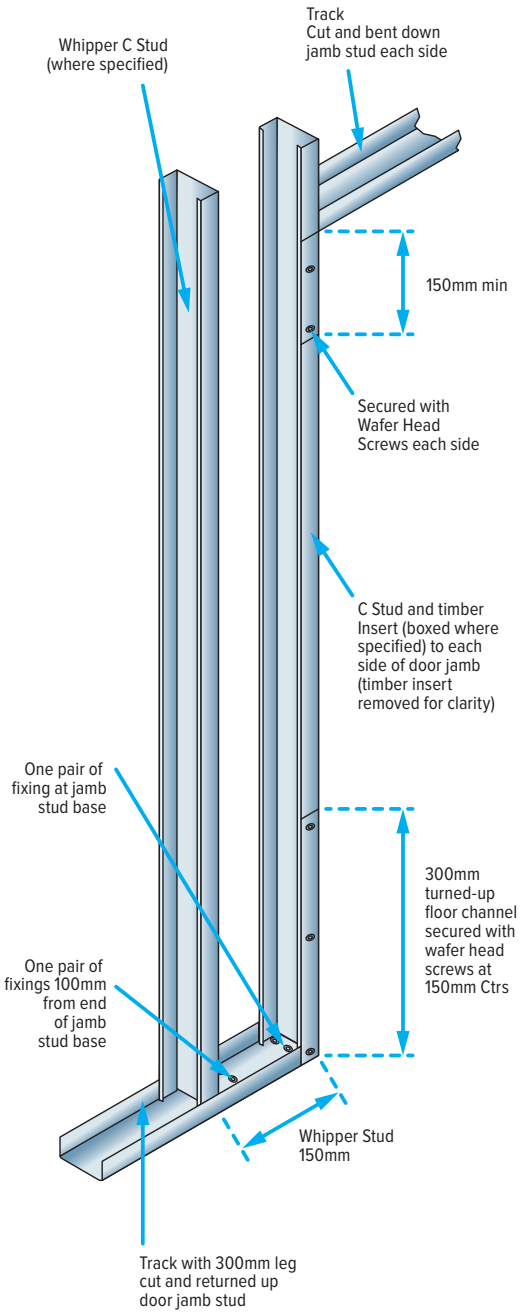
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

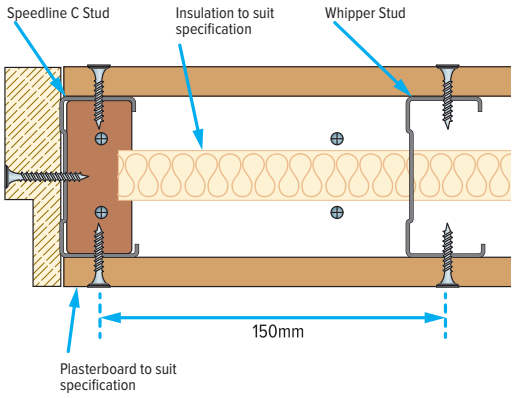
DOOR FRAME

DETAILS



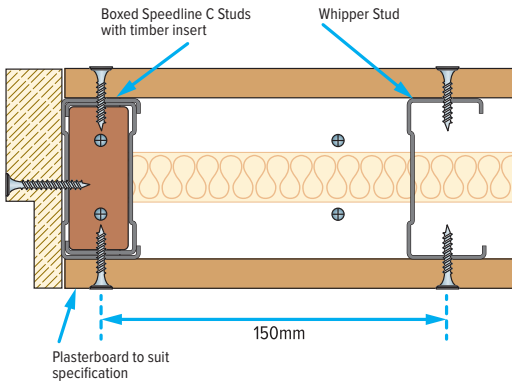
DOOR JAMB

DETAIL – DOORS UP TO 25kgs



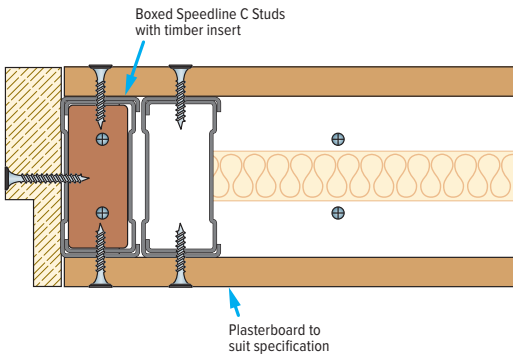
DOOR JAMB

DETAIL – DOORS UP TO 60kgs



DOOR JAMB

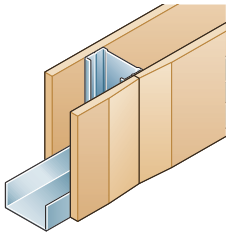
DETAIL – DOORS UP TO 100kgs
(Do not usee on 50mm or 60mm Studs)



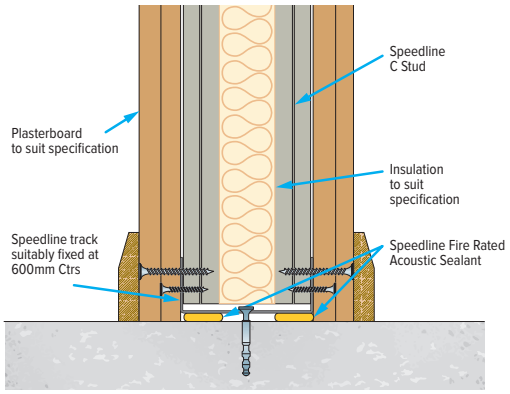
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

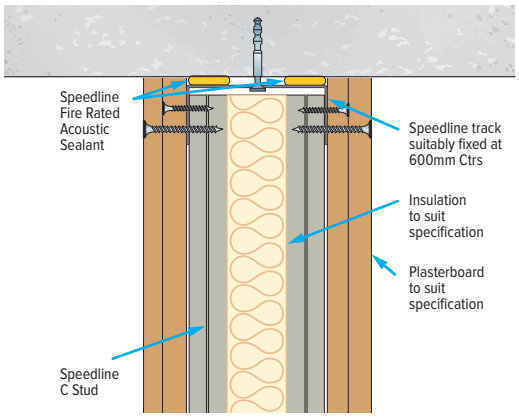
DOUBLE LAYER



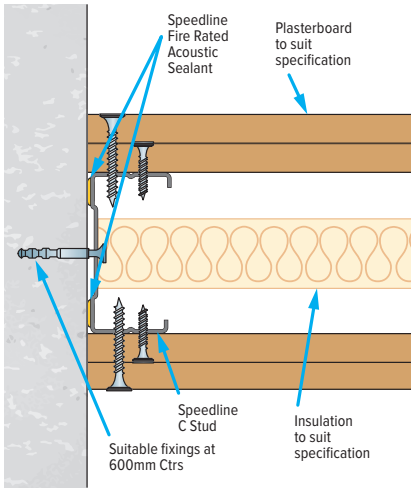
C STUD
SKIRTING DETAIL



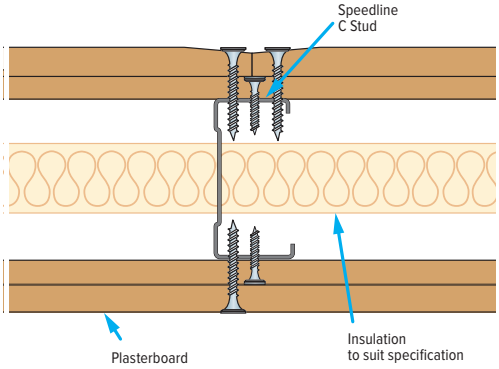
C STUD
HEAD DETAIL

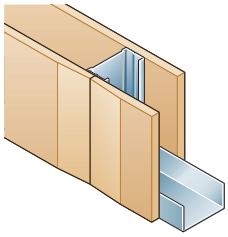


C STUD
WALL ABUTMENT DETAIL



C STUD
STAGGERED JOINT



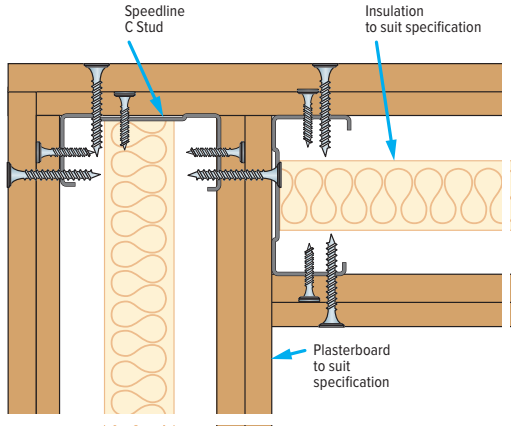


PARTITIONING SYSTEMS

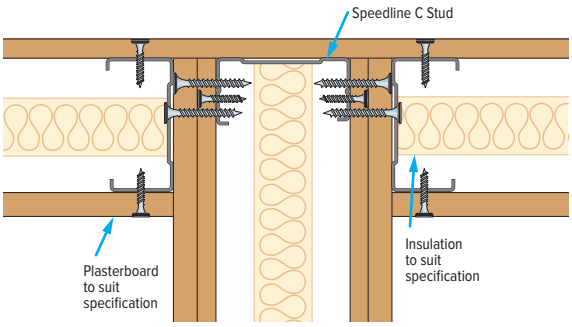
SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER

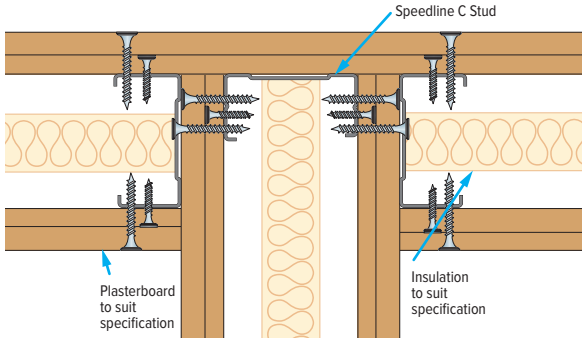
C STUD
CORNER DETAIL



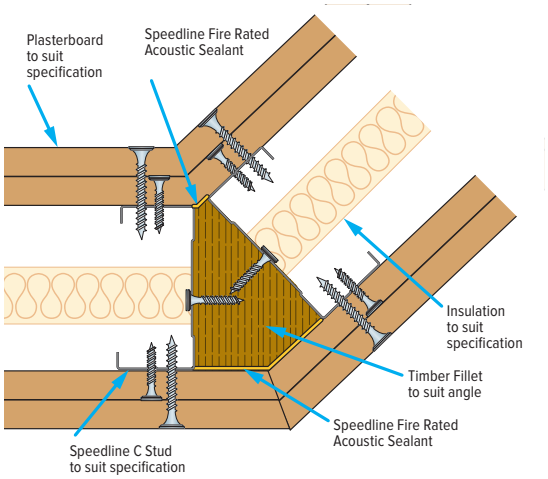
C STUD
T JUNCTION – DOUBLE LAYER
INTO SINGLE LAYER



C STUD
T JUNCTION

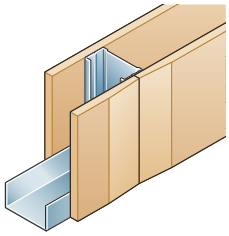


C STUD
IRREGULAR ANGLE CORNER



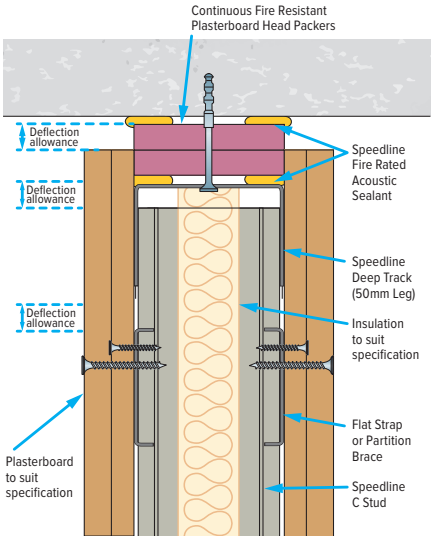
SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER



C STUD

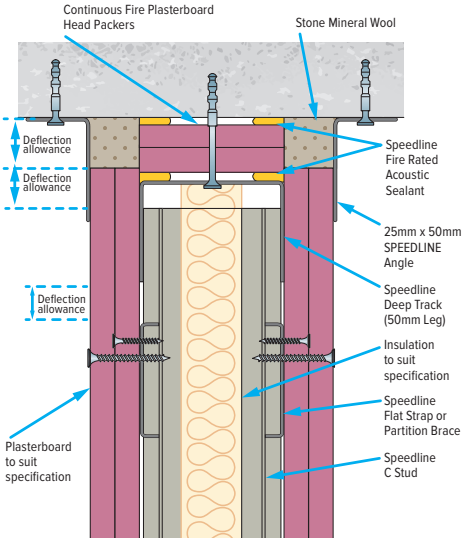
DEFLECTION HEAD – UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

C STUD

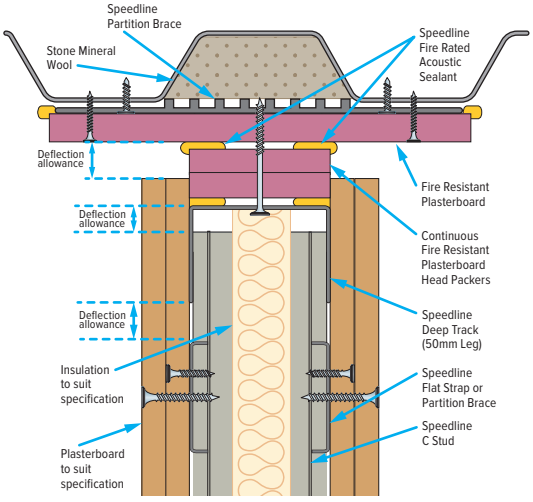
DEFLECTION HEAD - UP TO 120 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

C STUD

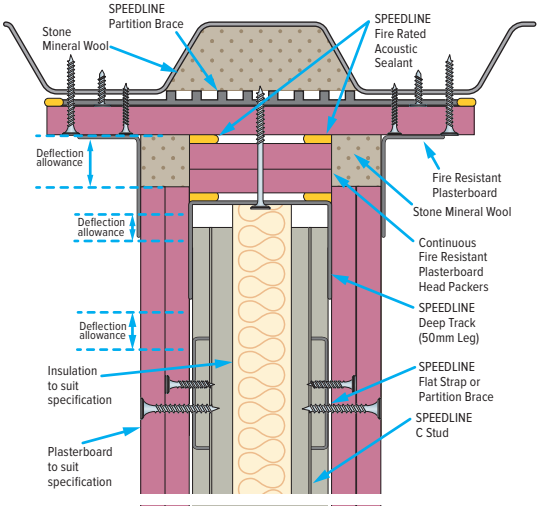
DEFLECTION HEAD - PARALLEL TO PROFILED SOFFIT - UP TO 60 MINS FIRE RESISTANCE



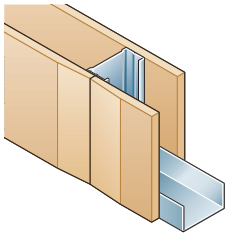
To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

C STUD

DEFLECTION HEAD - PARALLEL TO PROFILED SOFFIT - UP TO 120 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.



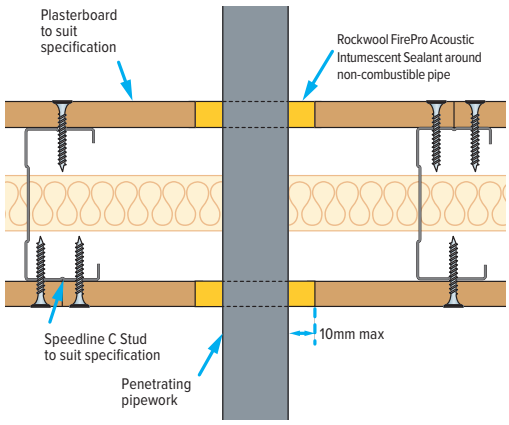
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER

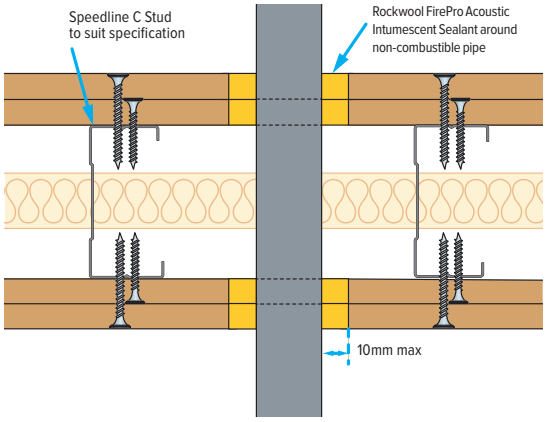
SINGLE LAYER

PIPE PENETRATION (UP TO 39mm DIAMETER)



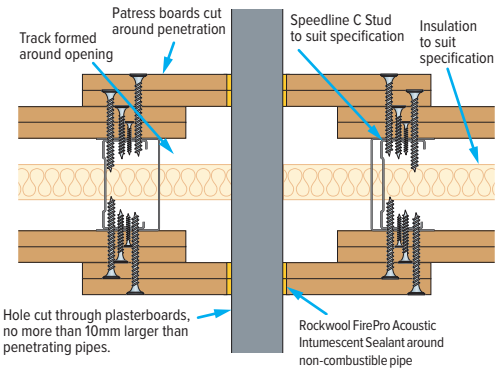
DOUBLE LAYER

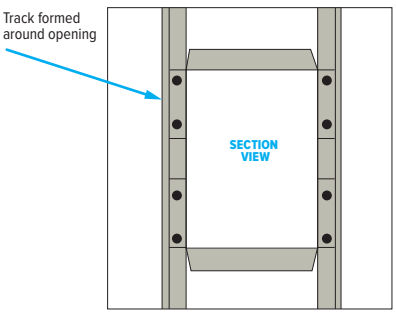
PIPE PENETRATION (UP TO 39mm DIAMETER)



DOUBLE LAYER

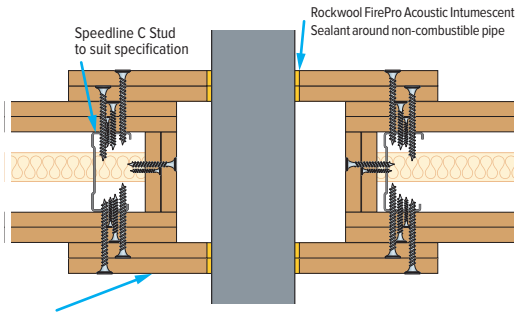
PIPE PENETRATION (BOX OUT FRAME)

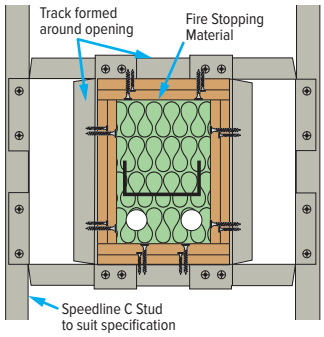




DOUBLE LAYER

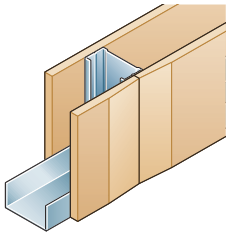
LETTERBOX PENETRATION (BOX OUT FRAME)

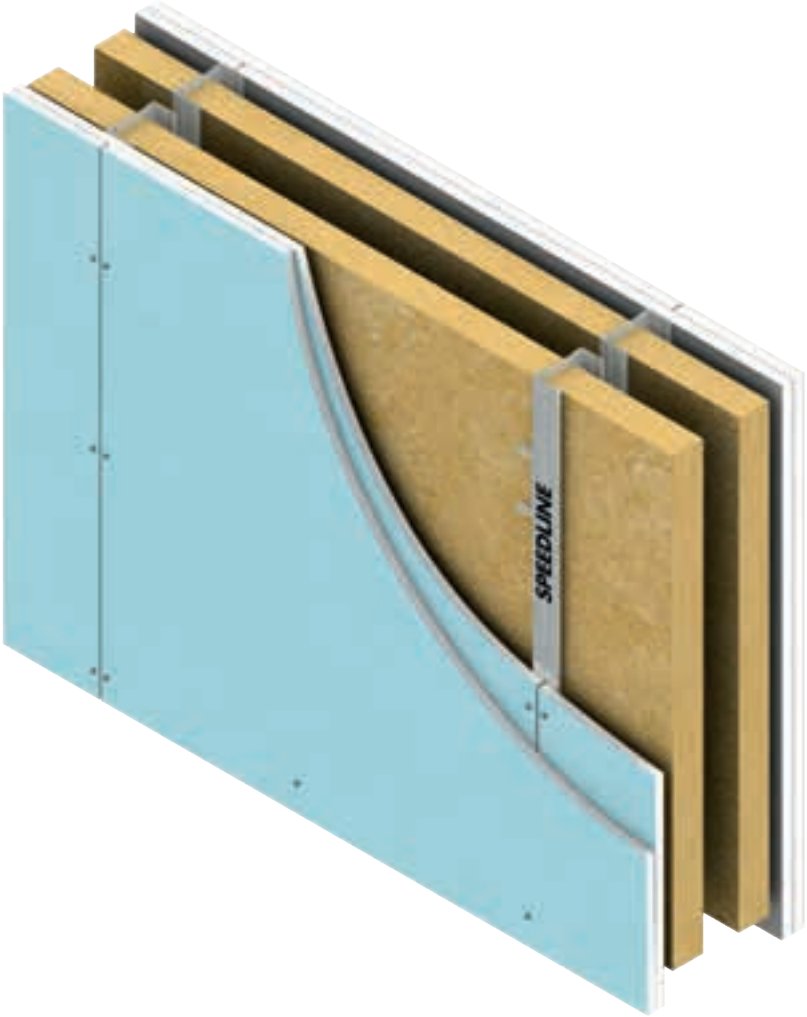




PARTITIONING SYSTEMS

SPEEDLINE TWIN FRAME SOLUTIONS





Benefits

- Quick and easy to install lightweight construction.
- Variable cavity thickness.
- Overall construction 200mm to 400mm on tested configurations.
- R_w figures from 58 to 70R_wdB.
- Speedline thermal braced twin frame C stud achieves Rw65dB and a theoretical U value of 0.0W/m²K.

Speedline range of twin frames partitions are available in three options:

- Braced C stud twin frames with performance up to R_w65dB.
- Unbraced heavy duty C stud twin frames performance up to R_w68dB.
- Unbraced I stud twin frames performance up to R_w70dB.

Separating walls in residential applications, partitions between noisy rooms in commercial, healthcare or education buildings require wall build ups with high levels of acoustic insulation. Bracing C studs every 1200mm vertically.

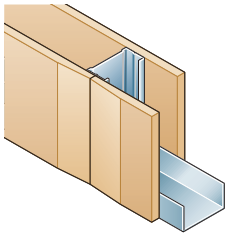
All sound insulation data is based on laboratory evaluation of the building element in isolation and cannot reproduce your installed local conditions. It is important that flanking transmission is considered at design stage.

On site testing is measured using a different scale. It uses $D_{nT,w}$ Standardised Level Difference. Values on site are approximately 7 to 8 decibels lower than achieved in the laboratory, one of the primary reasons for this difference will be the downgrading due to flanking transmission. This highlights the need for good design and flanking details to help minimise these reductions. Deflection head details if used can also be expected to impact negatively on the decibel rating achieved on site.

Residential requirements for party walls under Building Regulations Approved document E are measured as $D_{nT,w}$ + C_{tr}. We print the C & C_{tr} figures in brackets after the RwdB figures. For example Twin I stud wall TWPI50-B-60 (50) on pages 71 is 67 (-4;-10).

NB Please refer to pages 21-23 for product codes.

Utilising British Gypsum Boards	Rigidity Grade	Partition Height m	Min Width mm	Nominal Fire Resistance mins BS 476	Sound Insulation with 2 x 50mm APR Infill R_wdB (C,C_{tr})	Sound Insulation with 1 x 50mm APR Infill R_wdB (C,C_{tr})	Test Reference with 2 x 50mm APR	Test Reference with 50mm APR
Twin PI 50 stud with 2 x 15mm British Gypsum Gyproc Soundbloc and APR as per table	SD	2.7	200	90	70 (-3:-10)	67 (-4:-10)	TWI50-B-60 (2x50)	TWI50-B-60 (50)



PARTITIONING SYSTEMS

SPEEDLINE TWIN FRAME SOLUTIONS

This information is provided only as a guide and should be read in conjunction with Building Regulations Approved Document E.

Building Regulations Approved Document E, was implemented on 1st July 2003 and it's primary objective is to raise the standard of sound insulation in all dwellings as well as between rooms in hostels, hotels and residential homes. This applies in all new builds, refurbishments and conversions.

The solutions in the residential sector of this document are aimed at satisfying:

E1 Protection against sound from other parts of the building and adjoining buildings.

E2 Protection against sound within a dwelling/house etc.

Dwelling-houses and flats – performance standards for separating walls, separating floors and stairs that have a separating function.		Airborne sound insulation $D_{nTw} + C_{tr}$ dB (Minimum values)	Impact sound insulation L_{nTw} dB (Maximum values)
Purpose built dwelling - houses and flats	Walls	45	–
	Floors and Stairs	45	62
Dwelling houses and flats formed by material change of use	Walls	43	–
	Floors and Stairs	43	64

All internal walls and floors, within a dwelling, are required to achieve R_W40dB, with the exception of walls which include a door.

Wall Lining

Most Common Builds:

- **Two layers 12.5mm sound resistant plasterboard, subject to board having combined mass of 22 kg/m².**
- **12.5mm sound resistant plasterboard outer leaf and 19mm plank inner leaf (mounted horizontally). Subject to combined mass of 22 kg/m².**
- **Two or more layers of gypsum-based board minimum (total nominal mass per unit area 22 kg/m²) both sides.**
- **All joints staggered.**

Wall Width

200mm (min) between inner faces of wall linings.

Pre-Completion Testing

- **Buildings are to be tested prior to completion in order to confirm they meet or exceed Part E standards.**
- **The Regulations require that one in ten of each construction type requires testing.**

Full details of pre-completion testing are explained in Section 1 of the Approved Document E.

Robust Details

The robustdetails® have undergone an extensive sound insulation testing regime, robust design analysis and independent audit and have satisfied the robustdetails® Management Board that they should provide a level of sound insulation compliant with Part E (England and Wales) and Part G (Northern Ireland).

The robustdetails® scheme provides an alternative to pre-completion testing for demonstrating compliance with the performance standards for new build dwellings. Every dwelling built using the scheme needs to be registered with robustdetails® and a plot registration fee paid.

Absorbent Material

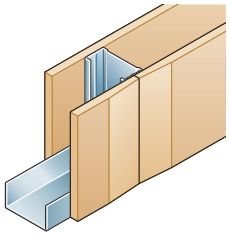
- **One layer 50mm (min) unfaced mineral wool batts (density 33-60 kg/m³).**
- **Two layers 25mm (min) unfaced mineral wool batts (density 33-60 kg/m³).**
- **Two layers 25mm (min) unfaced mineral wool quilt (density min 10 kg/m³).**
- **Refer to robust details specification for checklists and construction details.**

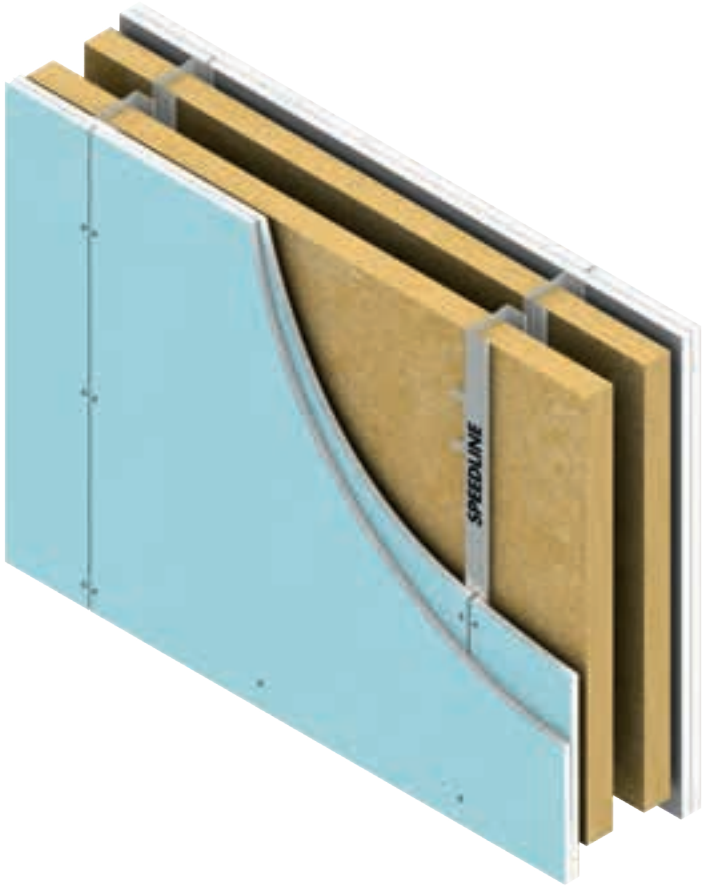
Do

- **Keep wall linings at least 200mm apart.**
- **Ensure the batts cover whole wall area and are fitted together tightly.**
- **Make sure batts are not tightly compressed by the twin frames.**
- **Ensure that all cavity stops/closers are flexible or are fixed to one frame only.**
- **Make sure there is no connection between the two leaves except where ties are necessary for structural reasons.**
- **Stagger joints in wall linings to avoid air paths.**
- **Seal all joints in outer layer with tape or caulk with sealant.**

PARTITIONING SYSTEMS

SPEEDLINE TWIN FRAME SOLUTIONS





Where pre completion testing is to be used, Part E stipulates that the builder needs to demonstrate that the prescribed acoustic rating has been achieved. To satisfy, 10% of all new dwellings should be pre completion tested on site. The testing is applicable to separating walls and floors. The testing will need to be carried out by an accredited third party. Twin Frame walls have the potential to satisfy the relevant criteria.

All acoustic test data is conducted under laboratory conditions, built at 600mm centres and measured as R_wdB figures. The “on site“ conditions in which the partition is to be built may have a significant effect on the test figures quoted, and due to this it is unlikely that the R_wdB figures quoted from laboratory tests will be repeated in “on site” conditions. Deflection head details can also negatively affect performance please contact **enquiries@speedlinedrywall.co.uk** for further details.

Thermal Efficient Braced C Stud Wall

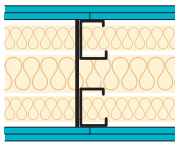
Braced C stud with void completely filled to give a theoretical U value of 0.0W/m²K

In order to assist with SAP calculations, Theoretical Party wall U values, cavities within party walls need to be fully filled with insulation.

Speedline have conducted testing with the cavity fully filled with insulation. Please see system reference TWC50-B-59(2x50+100).

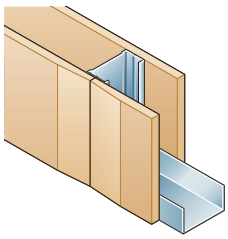
For further assistance and additional solutions please contact **enquiries@speedlinedrywall.co.uk**

Example



Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as per table. (1 x 100mm APR & 2 x 50mm APR in cavity).

2 x 12.5mm British Gypsum Gyproc Soundbloc (1 x 100mm APR & 2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	240	60	65 (-2:-8)	TWC50-B-59 (2x50 + 100)

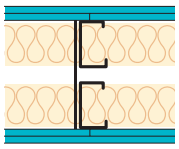


PARTITIONING SYSTEMS

SPEEDLINE BRACED TWIN FRAME SYSTEMS

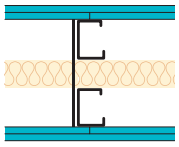
INCORPORATING BRITISH GYPSUM GYPROC BOARDS

SPEEDLINE BRACED TWIN FRAME SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



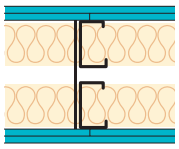
Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as pertable. (2 x 50mm APR in cavity).

2 x 12.5mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	240	60	63 (-3:-9)	TWC50-B-59 (2x50)



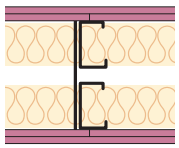
Double layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	90	62 (-3:-9)	TWC50-B-60 (50)



Double layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

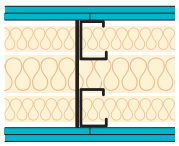
2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	90	65 (-2:-8)	TWC50-B-60 (2x50)



Double layer of British Gypsum 15mm Gyproc Fireline each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Fireline (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	62 (-3:-8)	TWC50-B-62 (2x50)

Braced C stud Twin Frame constructed with a fully filled Cavity. Often with new SAP regulations we are asked to increase the amount of insulation to fully fill the cavity. Designers should refer to the latest Part L requirements in new build to ensure their requirements are satisfied. The constructions above can all be reproduced with a fully filled cavity and as long as the compression of the insulation is less than 10 percent we would expect no loss of acoustic performance.
Speedline has a fully tested system with a full filled cavity (refer to table below).



Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as per table. (1 x 100mm APR & 2 x 50mm APR in cavity).

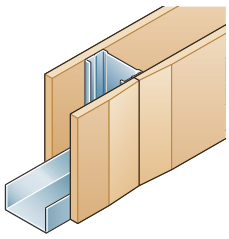
2 x 12.5mm British Gypsum Gyproc Soundbloc (1 x 100mm APR & 2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	250	60	65 (-2:-8)	TWC50-B-59 (2x50 + 100)

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

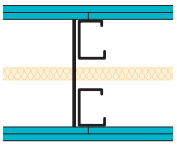
Board Configuration		**Fire Rating**	
	2 x 15mm Soundbloc		90 minutes
	2 x 15mm Soundbloc F		120 minutes substantiating fire reports are available.

SPEEDLINE BRACED TWIN FRAME SYSTEMS

INCORPORATING KNAUF BOARDS

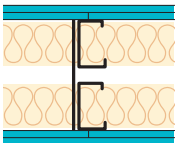


SPEEDLINE BRACED TWIN FRAM SYSTEM INCORPORATING KNAUF BOARDS



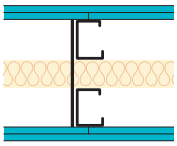
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	58 (-3:-8)	TWC50-K-60 (25)



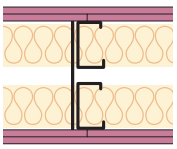
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	63 (-3:-8)	TWC50-K-60 (2x50)



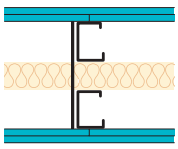
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	62 (-2:-7)	TWC50-K-60 (50)



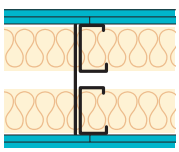
Two layers of Knauf 15mm Fire Panel each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Fire Panel (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	64 (-2:-8)	TWC50-K-62 (2x50)



Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

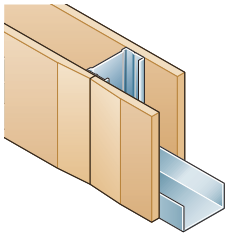
2 x 12.5mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	60	63 (-2:-7)	TWC50-K-59 (50)



Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (2x50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	60	63 (-2:-7)	TWC50-K-59 (2x50)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Stud Centres
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2021

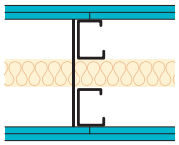


PARTITIONING SYSTEMS

SPEEDLINE BRACED TWIN FRAME SYSTEMS

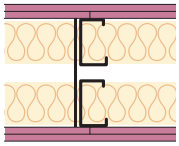
INCORPORATING SINIAT GTEC BOARDS

SPEEDLINE BRACED TWIN FRAME SYSTEM INCORPORATING SINIAT GTEC BOARDS



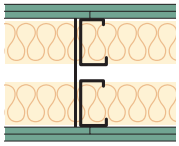
Two layers of Siniat 15mm GTEC dB Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 1 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (1 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	90	62 (-2:-7)	TWC50-S-60 (50)



Two layers of Siniat 15mm GTEC Fire Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	64 (-3:-9)	TWC50-S-62 (2x50)



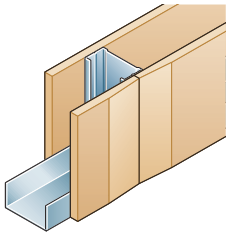
Two layers of Siniat 15mm GTEC MR Fire Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC MR Fire Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Braced Twin Frame 50mm C stud wall	SD	6.2	200	120	63 (-4:-10)	TWC50-S-62MR (2x50)

1. Duty Grade BS 5234-2:1992 Annexes A-F
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Stud Centres
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes
5. BS EN ISO 10140-2:2010

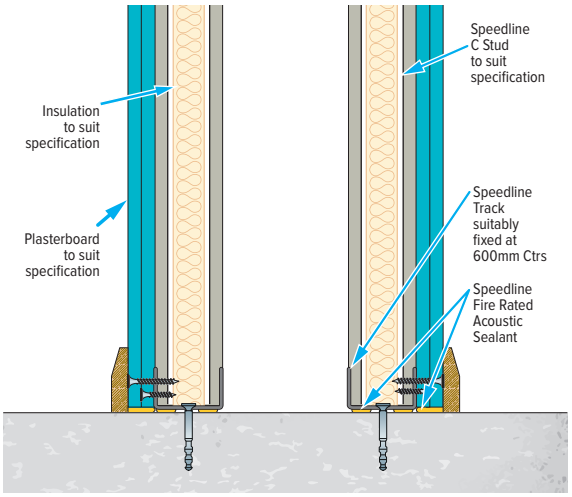
SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS



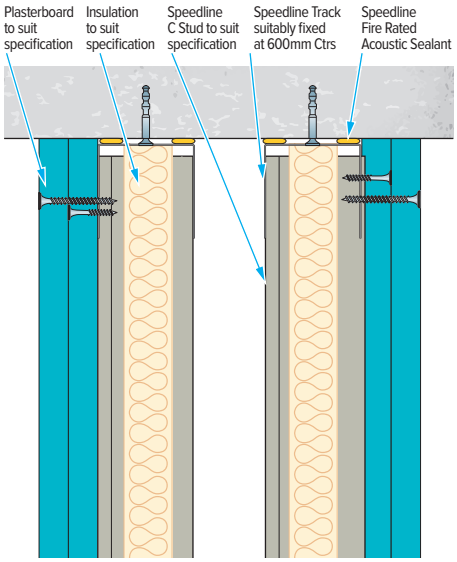
BRACED C STUD TWIN FRAME

SKIRTING DETAIL



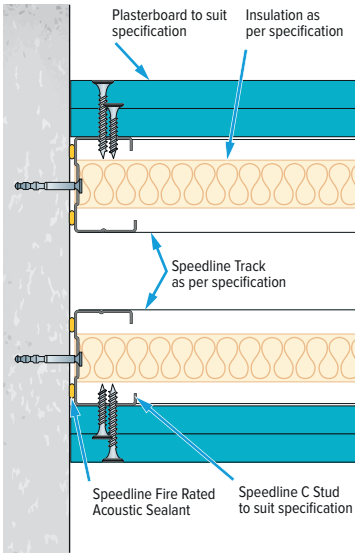
BRACED C STUD TWIN FRAME

FIXED HEAD DETAIL



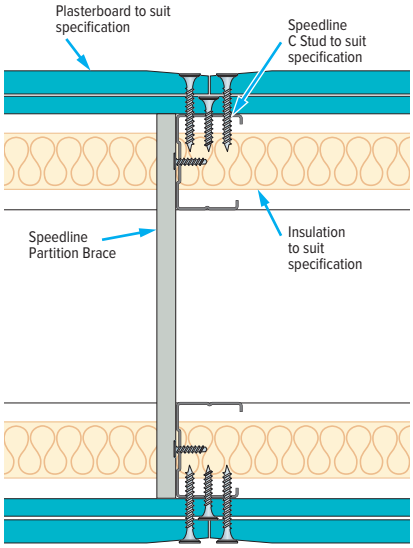
BRACED C STUD TWIN FRAME

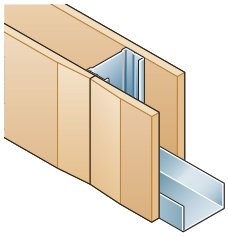
WALL ABUTMENT



BRACED C STUD TWIN FRAME

STAGGERED JOINT





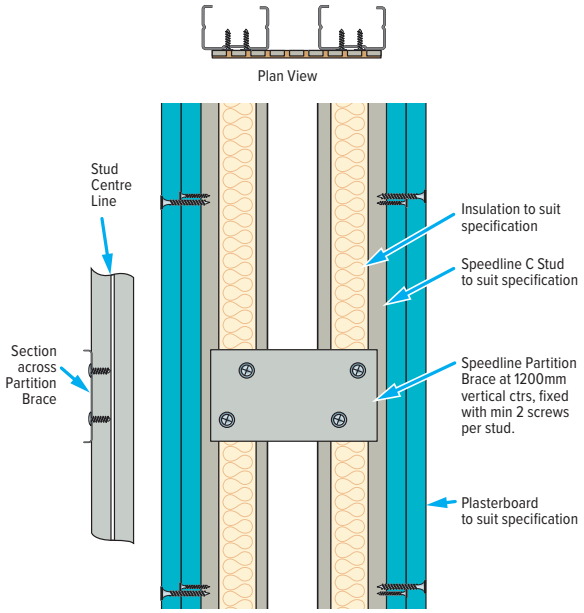
PARTITIONING SYSTEMS

SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS

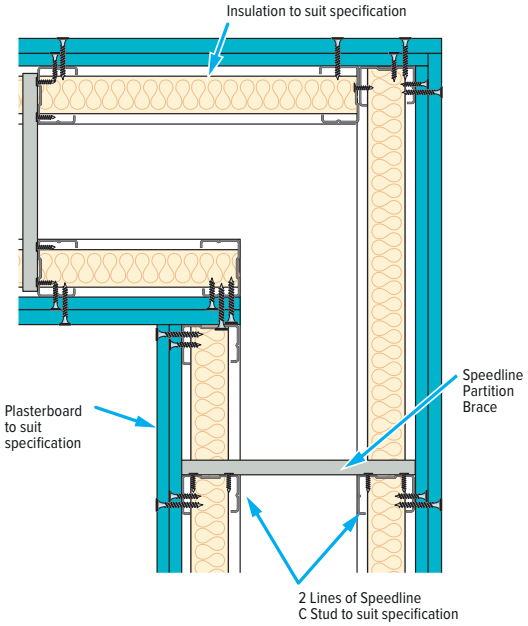
BRACED C STUD TWIN FRAME

HORIZONTAL BOARD JOINT



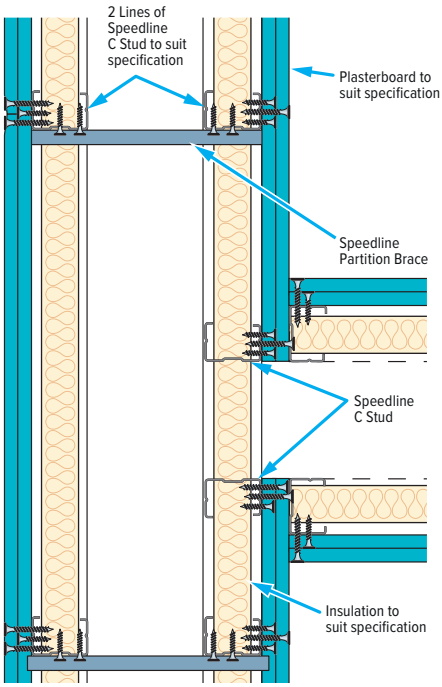
BRACED C STUD TWIN FRAME

CORNER DETAIL



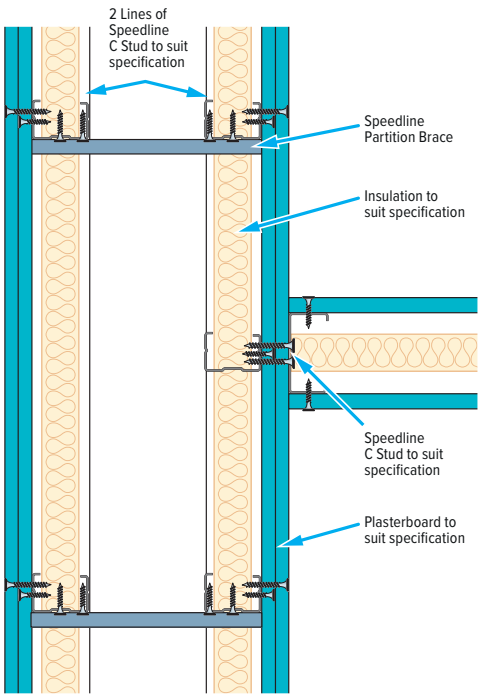
BRACED C STUD TWIN FRAME

ACOUSTIC T JUNCTION



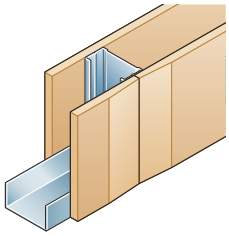
BRACED C STUD TWIN FRAME

T JUNCTION TO STANDARD PARTITION



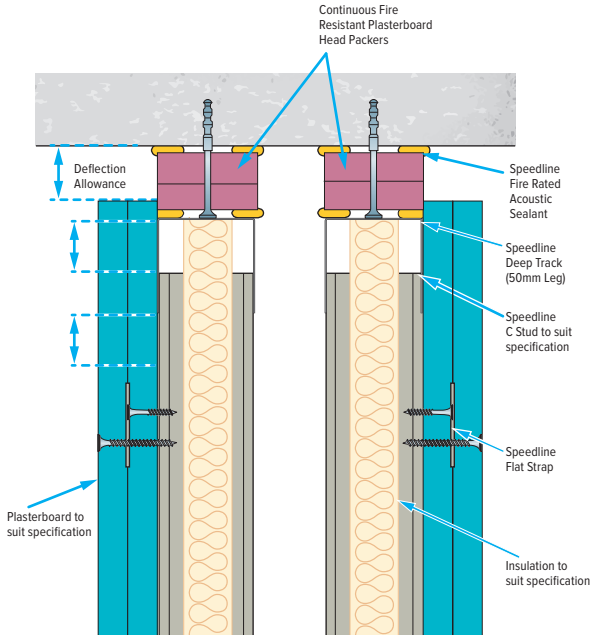
SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS



BRACED C STUD TWIN FRAME

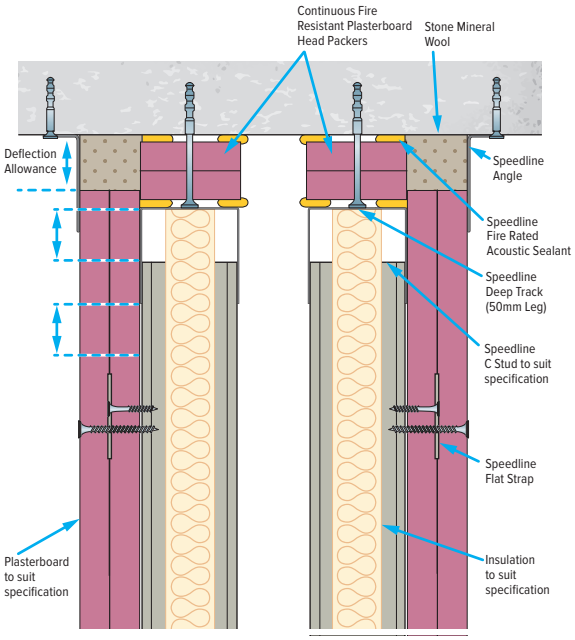
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

BRACED C STUD TWIN FRAME

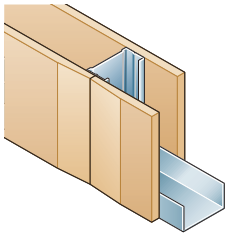
DEFLECTION HEAD UP TO 120 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

For various deflection requirements please refer to table below:

HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE		
Deflection	**Board Thickness**	**Head Track**
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboards or 3 x 12.5mm Fire Boards	SPXDT 70mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPXDT 70mm Leg



PARTITIONING SYSTEMS

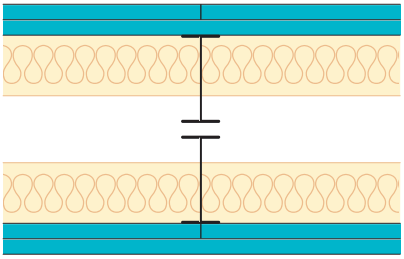
SPEEDLINE UNBRACED TWIN STUD SYSTEMS

SOLUTIONS

SPEEDLINE UNBRACED TWIN I STUDS

High Performance Walls

Lightweight, quick to construct, cost-effective, compact and able to achieve high levels of fire resistance and sound insulation. Our non-load bearing high performance walls, constructed from plasterboard facings on metal studs, offer considerable advantages over traditional heavy masonry construction.



Speedline can offer two options:

- Unbraced I studs
- Unbraced heavy duty Speedline C studs i.e. PSHD70 (0.7mm gauge)

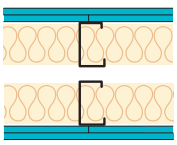
Benefits

- Acoustics up to R_w70dB with C_{tr} of -10.
- Suitable for use with Code for Sustainable Homes or BREEAM.
- Suitable for party wall construction with requirements of +3 to +8dB $D_{nT,w}$ on ADE requirements of 45 $D_{nT,w}$ + C_{tr}.
- Fire resistance up to 120 mins BS 476: Part 22.
- Structural columns can be incorporated within the partition cavity due to unbraced twin frame design.

SPEEDLINE UNBRACED HEAVY DUTY C STUDS

Benefits

- Utilising Speedline PSHD Heavy Duty C Studs provides a cost effective solution
- Tested to BS 5234 achieved Severe duty rating
- Up to 120 minutes fire rating
- Achieves R_w68dB (C_{tr} -8)
- Suitable for use with Code for Sustainable Homes or BREEAM
- Structural columns can be incorporated within with the partition cavity due to unbraced twin frame design



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline unbraced Twin Frame PSHD70 Heavy Duty C stud at 600mm centres. 2 x 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
Unbraced Twin Frame 70mm PSHD70 Heavy Duty C stud	SD	3.0	220	90	68 (-3:-8)	TWHD70-B-60 (2x50)

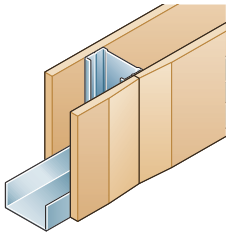
1. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Centres
2. Excluding finishes
3. BS 476 1987 Part 22
4. BS EN ISO 10140-2:2021
5. Duty Grade BS 5234-2:1992 Annexes A-F

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

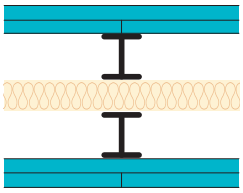
Board Configuration	2 x 15mm Soundbloc	**Fire Rating**	90 minutes
	2 x 15mm Soundbloc F		120 minutes

Substantiating Fire Reports are available.

SPEEDLINE UNBRACED TWIN STUD SYSTEMS

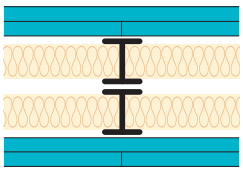


SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 50mm APR in cavity. Size of I stud as per table.

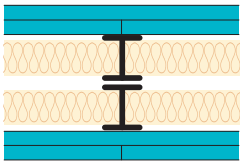
2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Unbraced Twin Frame 50mm I stud wall	SD	2.7	200	90	67 (-4:-10)	TWI50-B-60 (50)
Unbraced Twin Frame 60mm I stud wall	SD	3.3	200	90	67 (-4:-10)	TWI60-B-60 (50)
Unbraced Twin Frame 70mm I stud wall	SD	3.9	210	90	67 (-4:-10)	TWI70-B-60 (50)
Unbraced Twin Frame 92mm I stud wall	SD	5.4	250	90	67 (-4:-10)	TWI92-B-60 (50)
Unbraced Twin Frame 146mm I stud wall	SD	7.2	360	90	67 (-4:-10)	TWI146-B-60 (50)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 2 x 50mm APR in cavity. Size of I stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Unbraced Twin Frame 50mm I stud wall	SD	2.7	200	90	70 (-3:-10)	TWI50-B-60 (2x50)
Unbraced Twin Frame 60mm I stud wall	SD	3.3	200	90	70 (-3:-10)	TWI60-B-60 (2x50)
Unbraced Twin Frame 70mm I stud wall	SD	3.9	210	90	70 (-3:-10)	TWI70-B-60 (2x50)
Unbraced Twin Frame 92mm I stud wall	SD	5.4	250	90	70 (-3:-10)	TWI92-B-60 (2x50)
Unbraced Twin Frame 146mm I stud wall	SD	7.2	360	90	70 (-3:-10)	TWI146-B-60 (2x50)

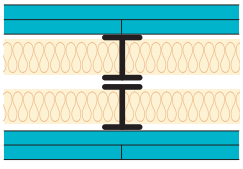
SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING KNAUF SOUNDSHIELD PLUS



Two layers of Knauf 15mm Soundshield Plus each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 2 x 50mm APR in cavity. Size of I stud as per table.

2 x 15mm Knauf Soundshield Plus (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Unbraced Twin Frame 50mm I stud wall	SD	2.7	200	120	69 (-3:-9)	TWI50-K-60 (2x50)
Unbraced Twin Frame 60mm I stud wall	SD	3.3	200	120	69 (-3:-9)	TWI60-K-60 (2x50)
Unbraced Twin Frame 70mm I stud wall	SD	3.9	210	120	69 (-3:-9)	TWI70-K-60 (2x50)
Unbraced Twin Frame 92mm I stud wall	SD	5.4	250	120	69 (-3:-9)	TWI92-K-60 (2x50)
Unbraced Twin Frame 146mm I stud wall	SD	7.2	360	120	69 (-3:-9)	TWI146-K-60 (2x50)

SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING SINIAT GTEC dB BOARDS



Two layers of Siniat 15mm GTEC dB Board each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

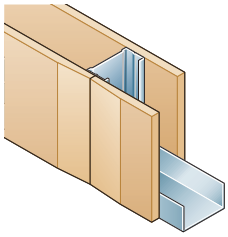
2 x 15mm Siniat GTEC dB Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
Unbraced Twin Frame 50mm I stud wall	SD	2.7	200	90	69 (-2:-8)	TWI50-S-60 (2x50)
Unbraced Twin Frame 60mm I stud wall	SD	3.3	200	90	69 (-2:-8)	TWI60-S-60 (2x50)
Unbraced Twin Frame 70mm I stud wall	SD	3.9	210	90	69 (-2:-8)	TWI70-S-60 (2x50)
Unbraced Twin Frame 92mm I stud wall	SD	5.4	250	90	69 (-2:-8)	TWI92-S-60 (2x50)
Unbraced Twin Frame 146mm I stud wall	SD	7.2	360	90	69 (-2:-8)	TWP146-S-60 (2x50)

1. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Centres
2. Excluding finishes
3. BS 476 1987 Part 22
4. BS EN ISO 10140-2:2010
5. Duty Grade BS 5234-2:1992 Annexes A-F

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration		**Fire Rating**
	2 x 15mm Soundbloc	90 minutes
	2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

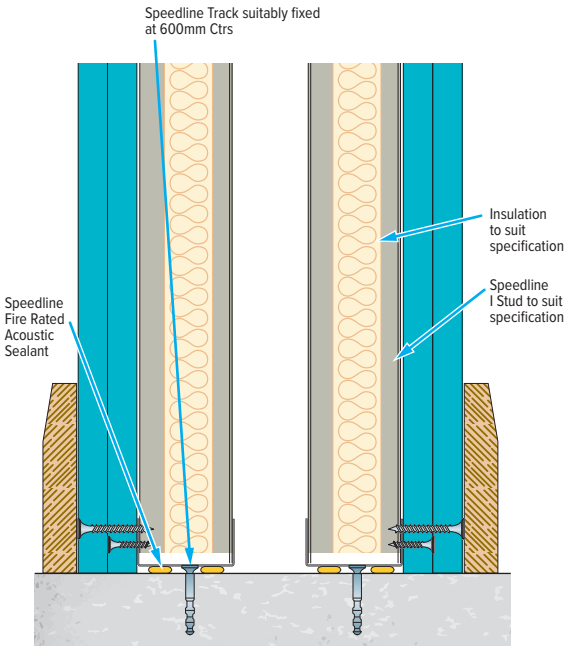


PARTITIONING SYSTEMS

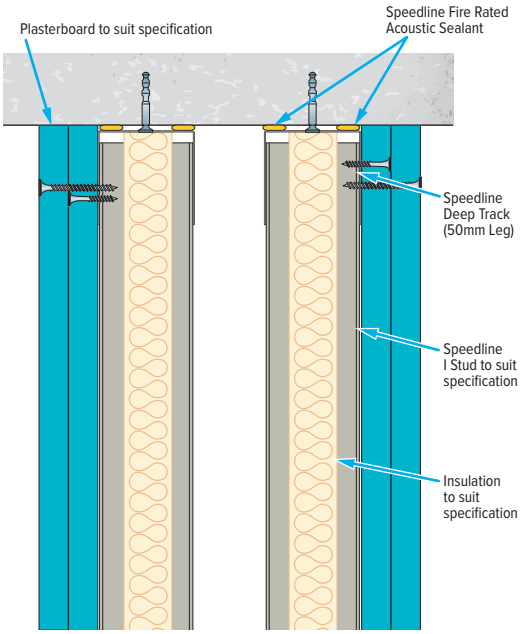
TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

TWIN FRAME CONSTRUCTION DETAILS – UNBRACED

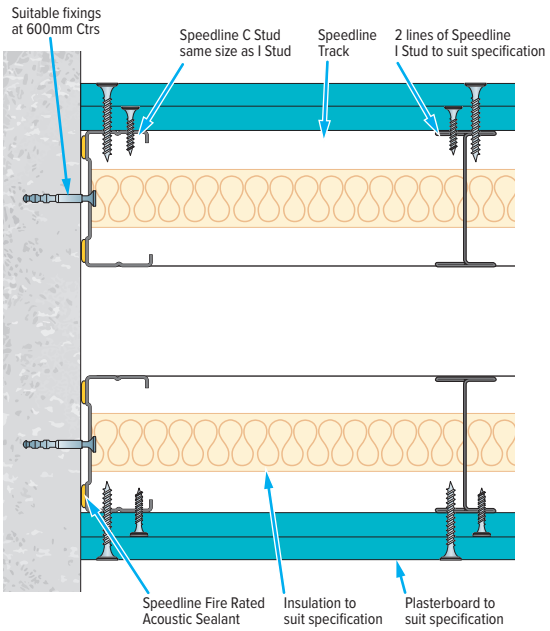
I STUD TWIN FRAME
SKIRTING DETAIL



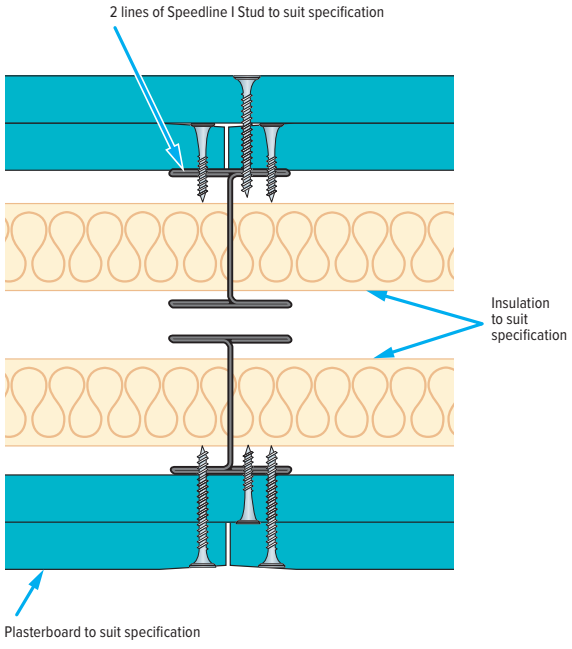
I STUD TWIN FRAME
FIXED HEAD DETAIL



I STUD TWIN FRAME
WALL ABUTMENT

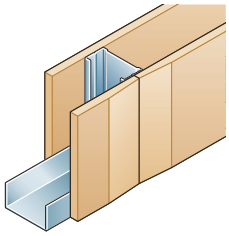


I STUD TWIN FRAME
STAGGERED JOINT



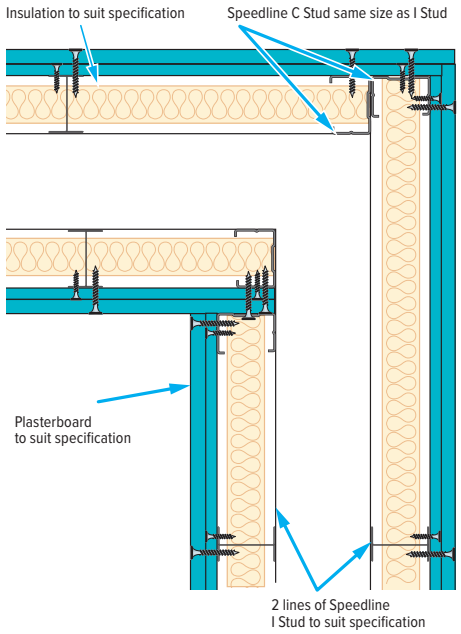
TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

TWIN FRAME CONSTRUCTION DETAILS – UNBRACED



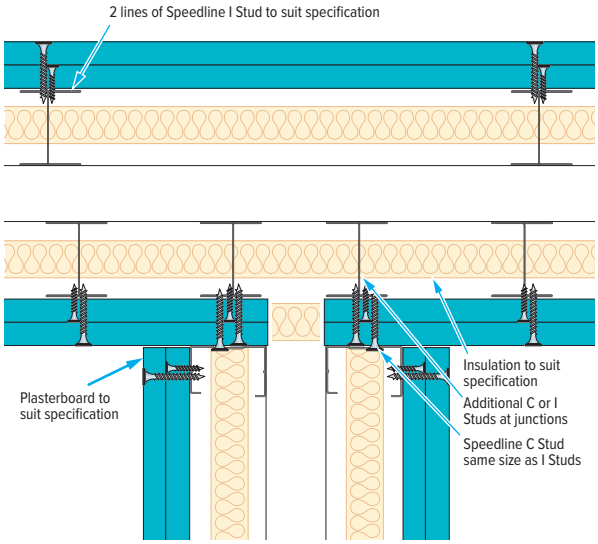
I STUD TWIN FRAME

CORNER DETAIL



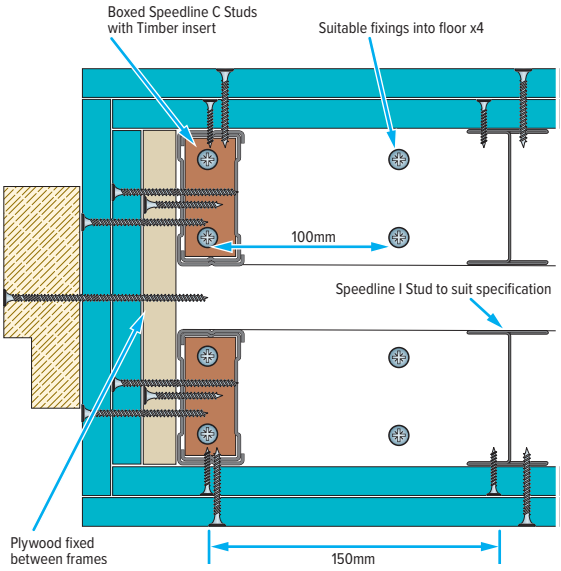
I STUD TWIN FRAME

ACOUSTIC T JUNCTION

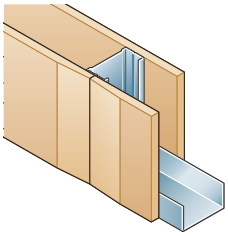


I STUD TWIN FRAME

DOOR UP TO 60kgs WITH PLYWOOD



- For socket box, pattressing and service penetrations please refer to pages 55 & 60 for details.



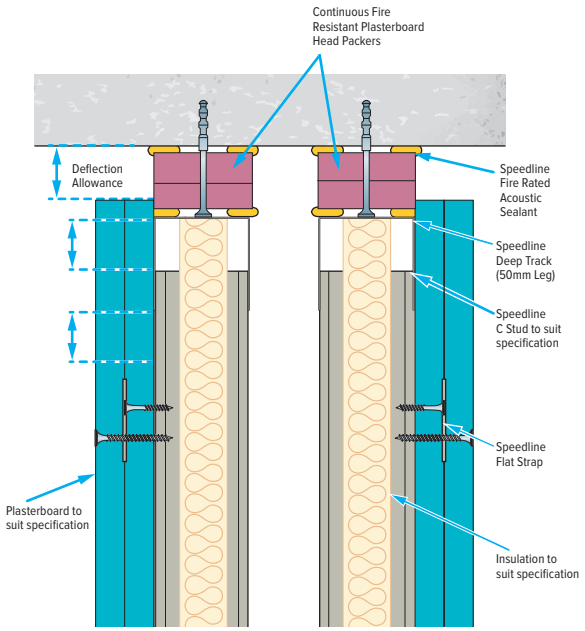
PARTITIONING SYSTEMS

TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

TWIN FRAME CONSTRUCTION DETAILS – UNBRACED

TWIN I DEFLECTION HEAD

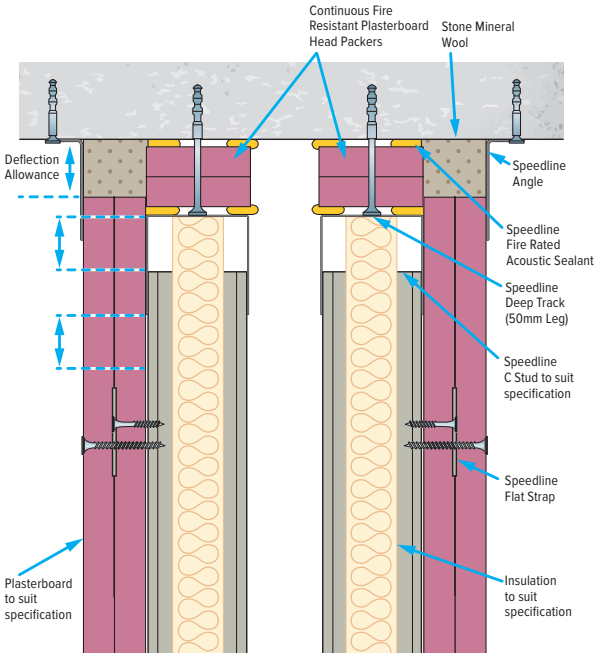
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

TWIN I DEFLECTION HEAD

DEFLECTION HEAD UP TO 120 MINS FIRE RESISTANCE

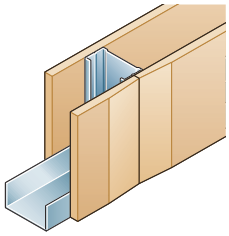


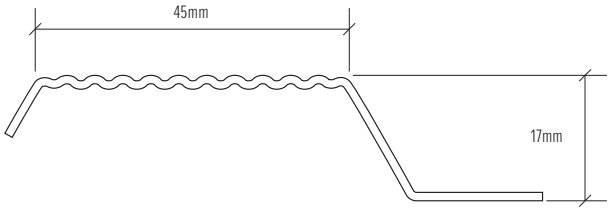
For various deflection requirements please refer to table below:

HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE		
Deflection	**Board Thickness**	**Head Track**
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboards or 3 x 12.5mm Fire Boards	SPXDT 70mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPXDT 70mm Leg

PARTITIONING SYSTEMS

SPEEDLINE RESILIENT BAR SYSTEMS





SPECIFICATIONS

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	RB565	Resilient Bar x 0.5mm	3.0	1.05

Resilient Bar

Where Speedline Resilient Bar is to be fixed to metal studs, fix bar at 600mm vertical centres. Fix the initial Speedline Resilient Bar 50mm down from the head of partition and the last bar 50mm from the floor. Screw fix the Speedline Resilient Bars to the studs using Speedline Wafer Head Self-tapping Screws. Screw fix the plasterboard to the Speedline Resilient Bar only, ensuring the screw does not touch the metal substrate. Bars are joined by butting together on the stud.

- **Reduced overall construction nominal width.**
- **Pre-completion testing needed.**
- **Part E requirements: Refurbishments 43 $D_{nT,w}$ + C_{tr}.**

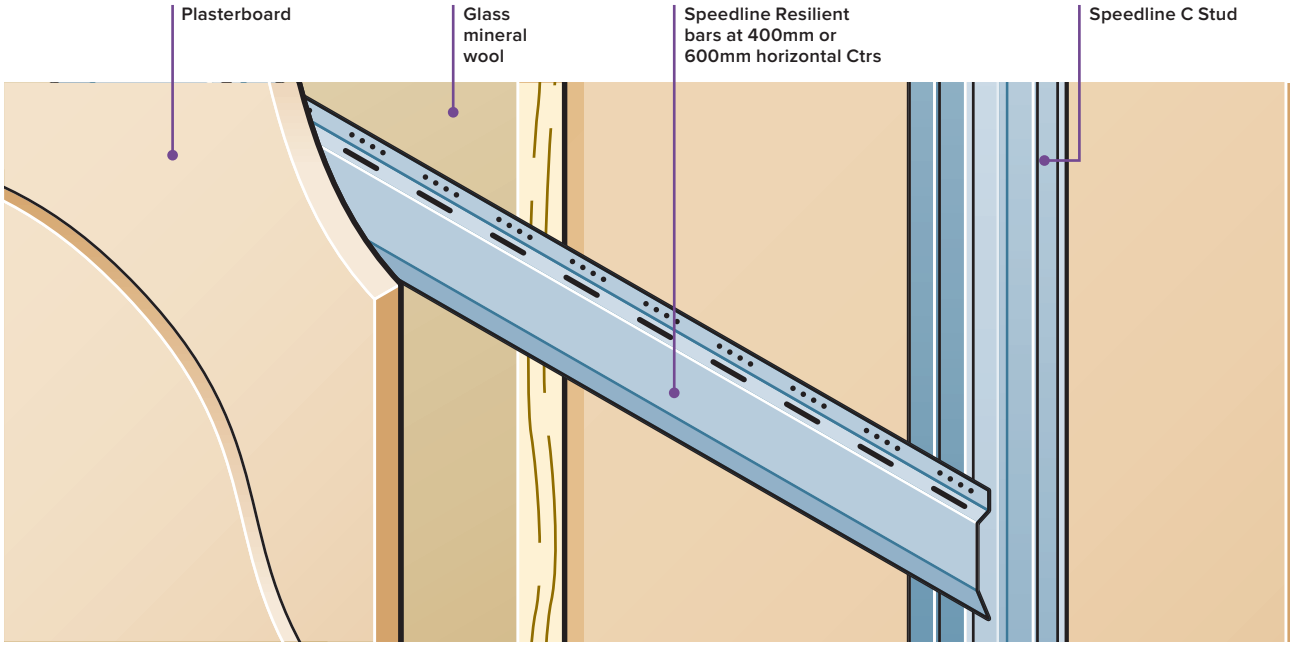
All sound insulation data is based on laboratory evaluation of the building element in isolation and cannot reproduce your installed local conditions. The actual tests carried out are used to offer an order of magnitude comparison for the performance of the various systems. Sound insulation on site is a function of the partition chosen and the associated structures in which it is installed.

Speedline take no responsibility for overall design and we would advise that specialist advice is sought at an early stage. All test data and system specifications are for systems constructed with materials and components as shown. The inclusion of other components without prior approval or constructed on site contrary to these documents will invalidate test certification and system performance.

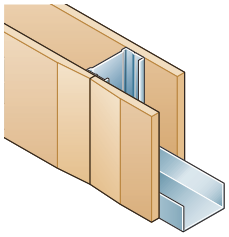
The use of resilient bar walls has a greater emphasis on standard of workmanship. If installed correctly it has the potential to satisfy requirements for material change of use applications.

Sectors

- **Hotels**
- **Residential**
- **Student Accommodation**



PLEASE NOTE: Resilient Bar hanging from screw, apart from uppermost .

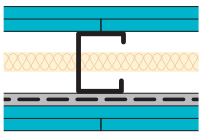


PARTITIONING SYSTEMS

SPEEDLINE RESILIENT BAR SYSTEMS

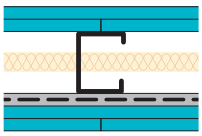
INCORPORATING BRITISH GYPSUM GYPROC BOARDS

SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BARS (ONE SIDE ONLY) WITH BRITISH GYPSUM GYPROC BOARDS



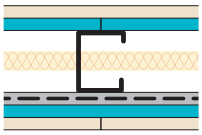
Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 12.5mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.0	138	60	59 (-2:-7)	RB70-B-59 (50)



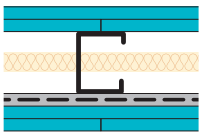
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	90	61 (-3:-8)	RB70-B-60 (50)



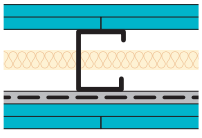
Two layers made up of 1 x British Gypsum 15mm Gyproc Soundbloc Inner Layer and 1x British Gypsum 15mm Gyproc Duraline outer layer each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

1x 15mm British Gypsum Gyproc Soundbloc Inner Layer 1 x 15mm British Gypsum Gyproc Duraline Outer Layer (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	90	61(-3:-8)	RB70-B-66SR (50)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline 92mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
92mm C stud with Resilient bar one side only	SD	5.0	170	90	63 (-3:-7)	RB92-B-60 (50)



Two layers of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc F (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB^5 (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	120	61 (-3:-8)	RB70-B-60F (50)

1. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Centres
2. Excluding finishes
3. BS 476 1987 Part 22
4. BS EN ISO 10140-2:2010
5. Duty Grade BS 5234-2:1992 Annexes A-F

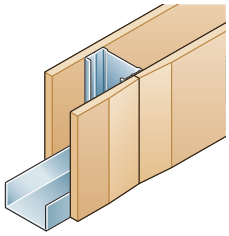
NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration		Fire Rating
	2 x 15mm Soundbloc	90 minutes
	2 x 15mm Soundbloc F	120 minutes

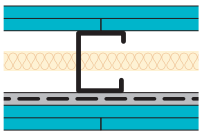
Substantiating Fire Reports are available.

SPEEDLINE RESILIENT BAR SYSTEMS

INCORPORATING KNAUF BOARDS
INCORPORATING SINIAT GTEC BOARDS



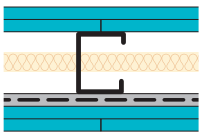
SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BARS (ONE SIDE ONLY) WITH KNAUF BOARDS



Two layers of Knauf 15mm Soundshield Plus each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

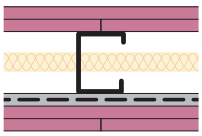
2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation $R_w dB^5$ (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	120	61 (-3:-7)	RB70-K-60 (50)

SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BARS (ONE SIDE ONLY) WITH SINIAT GTEC BOARDS



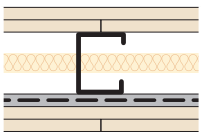
Two layers of 15mm Siniat 15mm GTEC dB Board each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation $R_w dB^5$ (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	90	61 (-2:-7)	RB70-S-60 (50)



Two layers of 15mm Siniat 15mm GTEC Fire Board each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

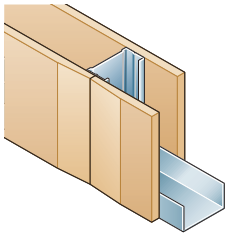
2 x 15mm Siniat GTEC Fire Board (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation $R_w dB^5$ (C, C_{tr})	System reference
70mm C stud with Resilient bar one side only	SD	4.2	148	120	62 (-3:-9)	RB70-S-62 (50)



Two layers made up of 1 x 19mm Siniat 19mm GTEC Plank inner layer and Siniat 12.5mm GTEC Standard Board outer layer each side of Speedline 70mm C stud at 600mm centres with Speedline. Resilient Bar fixed perpendicular to the stud one side only. 50mm APR in cavity.

1 x 19mm Siniat GTEC Plank Inner Layer 1 x 12.5mm Siniat GTEC Standard Board (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation RwdB[5] (C,Ctr)	System reference
70mm C stud with Resilient bar one side only	SD	4.2	150	60	63 (-4:-10)	RB70-S-76 (50)

1. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Centres
2. Excluding finishes
3. BS 476 1987 Part 22
4. BS EN ISO 10140-2:2010
5. Duty Grade BS 5234-2:1992 Annexes A-F

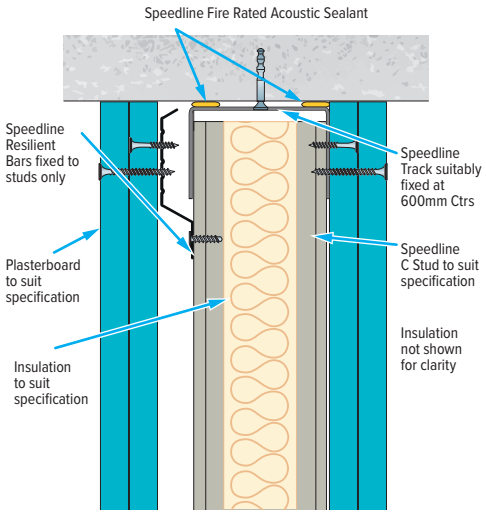


PARTITIONING SYSTEMS

RESILIENT BAR CONSTRUCTION DETAILS

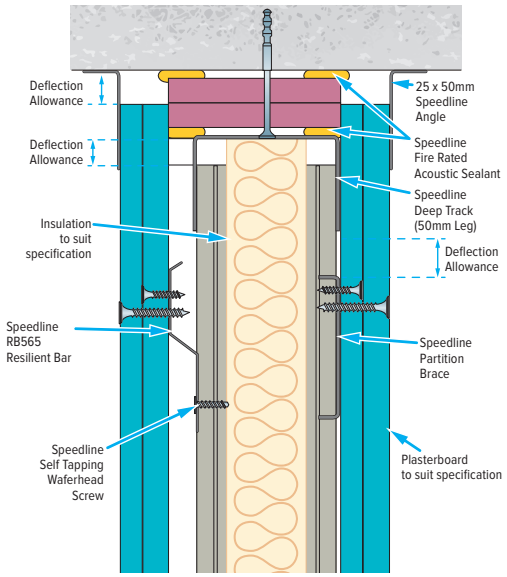
C STUD WITH RESILIENT BAR

FIXED HEAD



C STUD WITH RESILIENT BAR

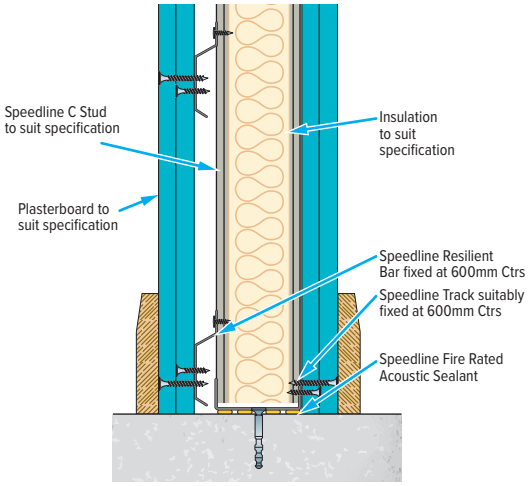
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

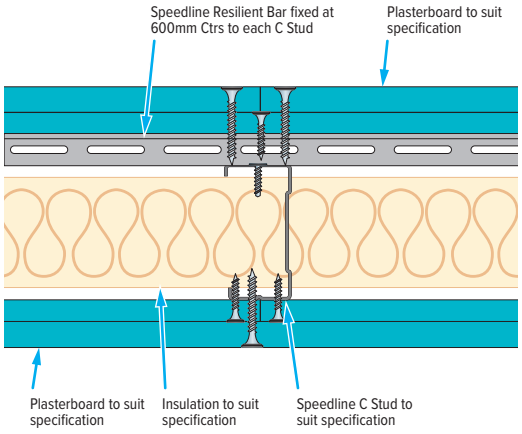
C STUD WITH RESILIENT BAR

BASE DETAIL



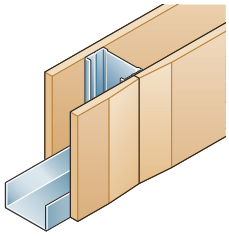
C STUD WITH RESILIENT BAR

STAGGERED JOINT



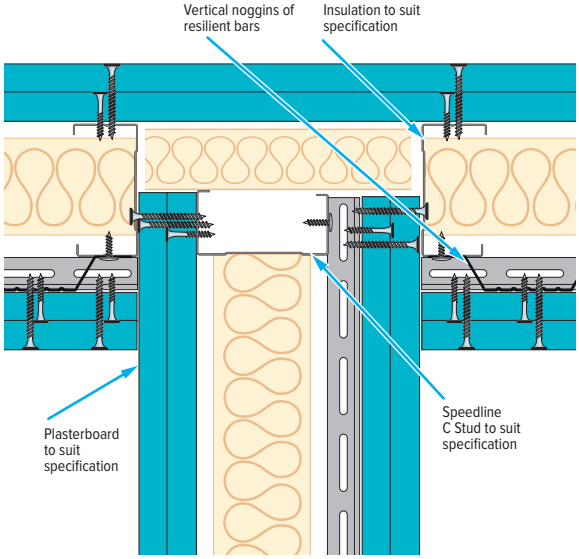
PARTITIONING SYSTEMS

RESILIENT BAR CONSTRUCTION DETAILS



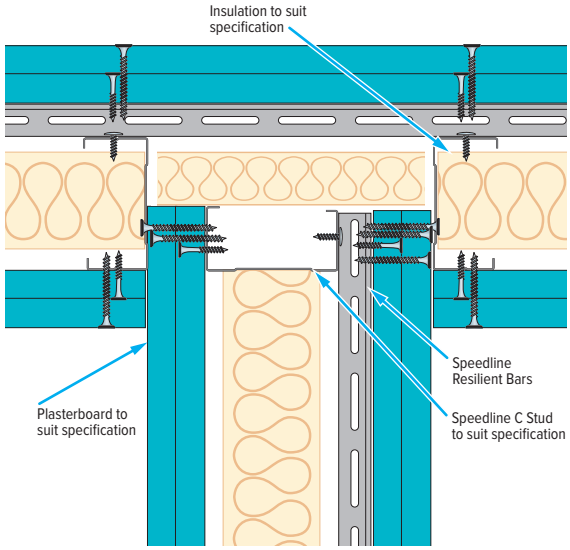
C STUD WITH RESILIENT BAR

T JUNCTION DETAIL 1



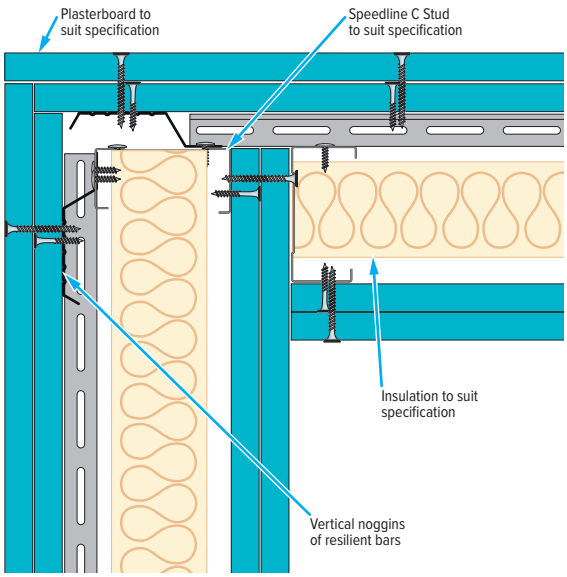
C STUD WITH RESILIENT BAR

T JUNCTION DETAIL 2



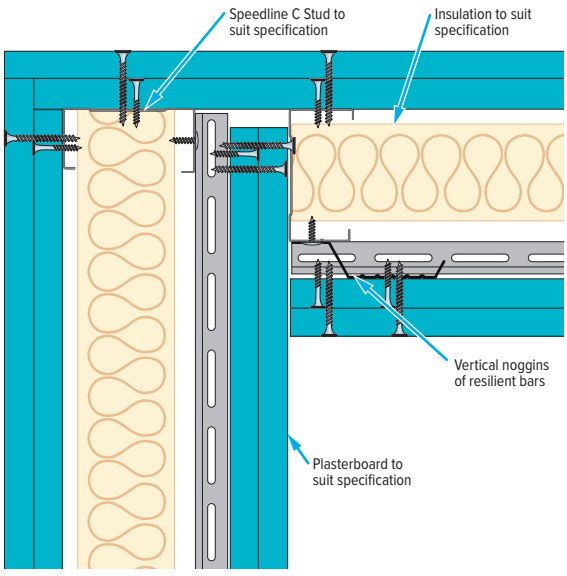
C STUD WITH RESILIENT BAR

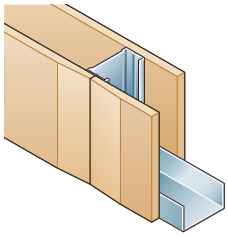
EXTERNAL CORNER



C STUD WITH RESILIENT BAR

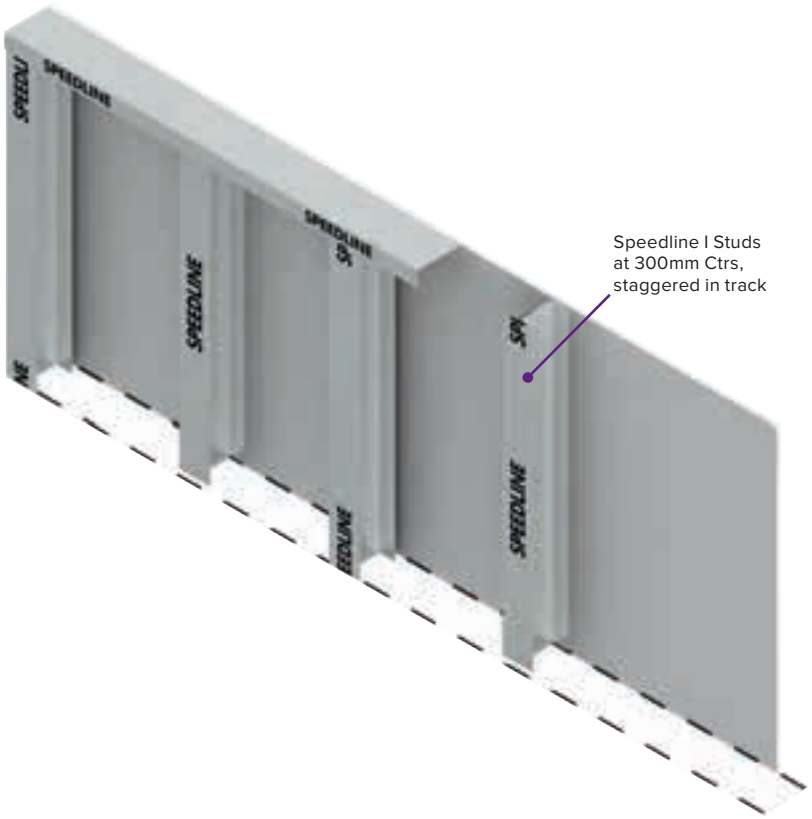
INTERNAL CORNER





PARTITIONING SYSTEMS

SPEEDLINE STAGGERED I STUD SYSTEMS



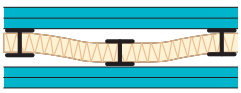
Installation Benefits

- Easy to cut to length using tin snips.
- Door frames simply formed.
- Frames easily fit together.
- Cut outs in studs for electrical and service requirements.
- Sight line in studs for lining up with plasterboard.

Sectors

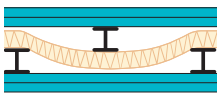
- Education
- Healthcare
- Leisure
- Residential
- Student Accommodation

SPEEDLINE STAGGERED I STUD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline staggered I stud frames at 300mm centres. 25mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
60mm I stud in 72mm track. I studs at 300mm Ctrs	SD	3.3	132	90	58 (-3:-8)	SS60-B-60 (25)
70mm I stud in 94mm track. I studs at 300mm Ctrs	SD	3.9	154	90	58 (-3:-8)	SS70-B-60 (25)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline staggered I stud frames at 300mm centres. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5] (C, C_{tr})	System reference
92mm I stud in 148mm track. I studs at 300mm Ctrs	SD	5.4	208	90	61 (-2:-6)	SS92-B-60 (50)

1. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Centres
2. Excluding finishes
3. BS 476 1987 Part 22
4. BS EN ISO 10140-2:2010
5. Duty Grade BS 5234-2:1992 Annexes A-F

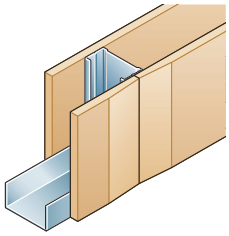
NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	**Fire Rating**
2 x 15mm Soundbloc	90 minutes
2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

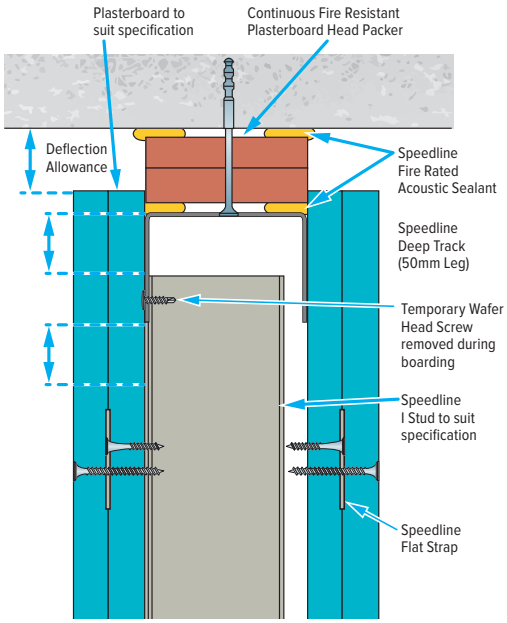
PARTITIONING SYSTEMS

SPEEDLINE STAGGERED I STUD SYSTEMS



STAGGERED I STUD

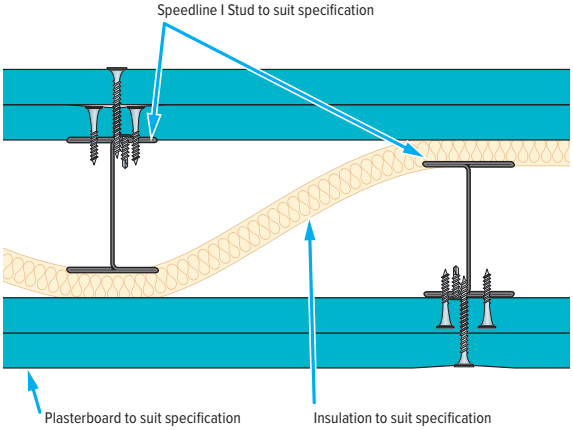
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Fire Rated Acoustic Sealant.

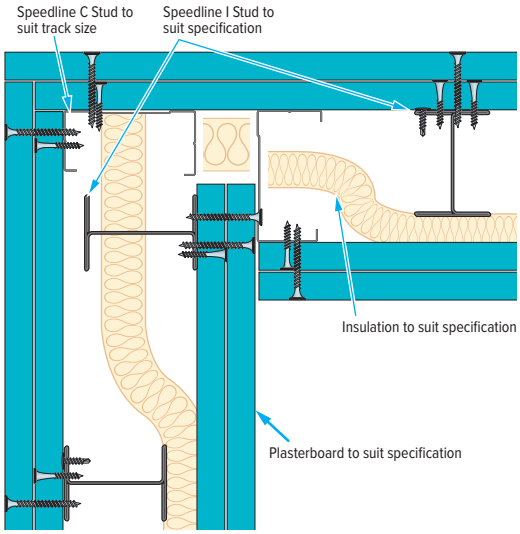
STAGGERED I STUD

STRAGGERED JOINT



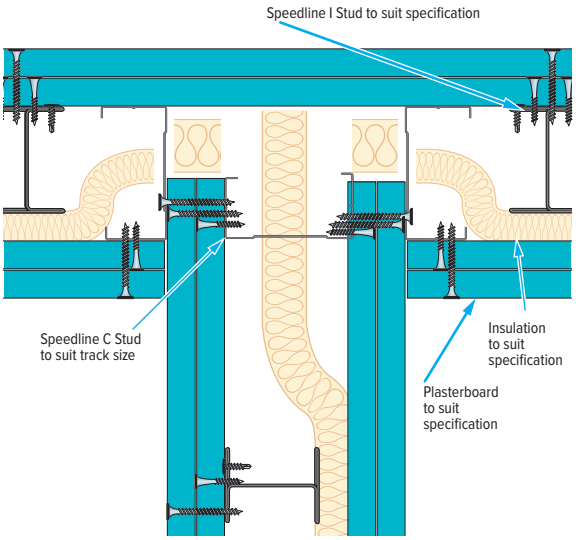
STAGGERED I STUD

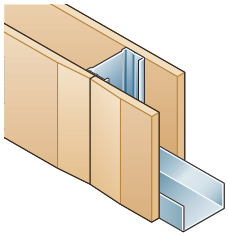
CORNER DETAIL



STAGGERED I STUD

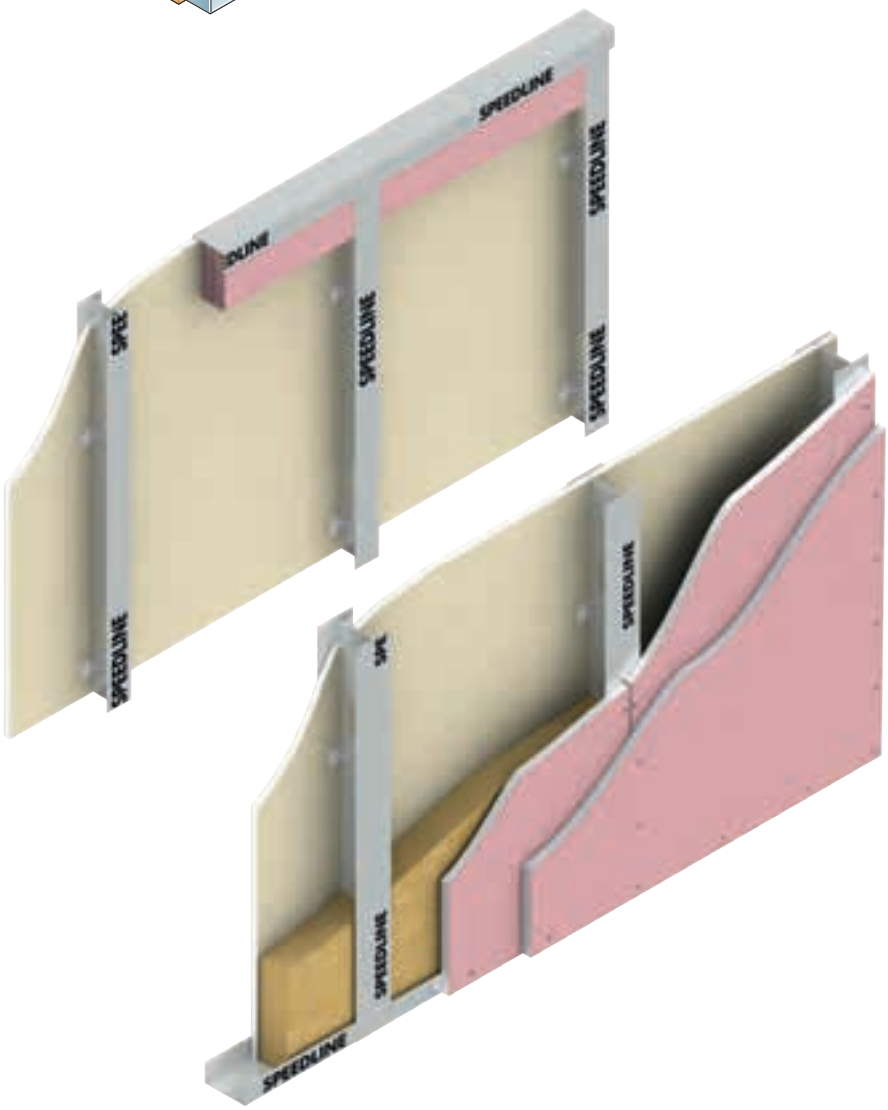
TEE JUNCTION DETAIL





PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS



Benefits

- Fast and simple to erect.
- Cost effective.
- Good impact resistance and stiffness.
- Lighter in weight than masonry.
- High level of fire protection.
- Allows any thickness of coreboard to be used.

A high performance fire protection system to enclose lift shafts and service rises.

The Speedline Shaft Encasement System allows installation to take place from the landing side only.

This system is non load bearing and designed to fit between structural floors.

Sectors

- High Rise Residential
- Education
- Healthcare
- Leisure
- Student Accommodation
- Offices

Construction

The Speedline Shaft Encasement System is installed from the non shaft side using I Stud framing.

Fix extra deep (70mm leg) track to ceiling with suitable fixings spaced at 600mm maximum centres. Fix either 25mm standard or 32mm leg track along the floor with suitable fixings spaced at 600mm maximum centres. For 94mm and 148mm tracks we recommend two rows of staggered fixings at 600mm maximum centres.

Coreboard nominally 595mm wide by 19mm thick is cut to length 25mm less than the overall height for standard track and 32mm for 32mm leg track. The Coreboard is located between the I Studs and secured using shaft encasement brackets spaced at 600mm maximum centres.

The 25mm or 32mm gap is left at the top of the partition.

Fire resistant plasterboard packers 100mm deep are screw fixed to the Head Tracks at the head of the partition.

It is important that the packers are tight against the head track and that the packers fill the full width of the track.

Speedline Fire Rated Acoustic Sealant must be used:

- On all metal to structure surfaces
- On all metal to coreboard surfaces
- Between plasterboard packers and coreboard at the head detail.

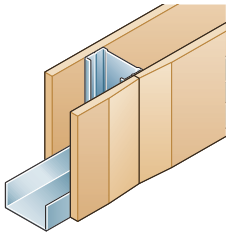
Corner and junction information is detailed separately.

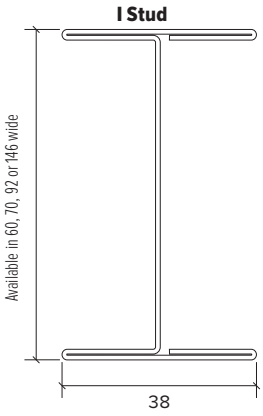
Fire resistant plasterboard is fixed to the outside of the framework on the non shaft side of the partition.

Two Layer and Three Layer Installations
Inner layers of fire resistant plasterboard can be fixed at 600mm maximum centres but outer layer must be fixed at 300mm maximum centres to the metal framework with the appropriate screw. All layers of fire resistant plasterboard should be fixed with all joints staggered.

PARTITIONING SYSTEMS

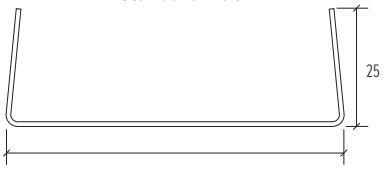
SPEEDLINE SHAFT ENCASEMENT SYSTEMS

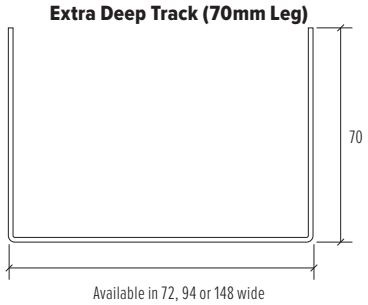




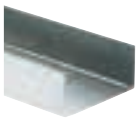
I STUD

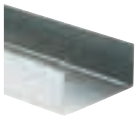
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
PI60	60mm I Stud x 0.6mm, flange dimensions 38mm	3.60 4.20	2.82 3.30
PI70	70mm I Stud x 0.7mm, flange dimensions 38mm	3.60 4.20	3.56 4.15
PI92	92mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	4.59 6.37 7.65
PI146	146mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	5.65 7.86 9.43





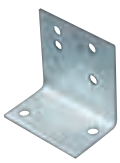
TRACK



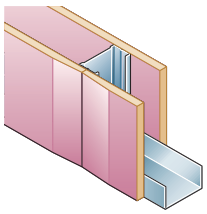


Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
PT62	62mm Track (25mm leg) x 0.5mm	3.00	1.25
SPT72	72mm Track (25mm leg) x 0.5mm	3.00	1.41
SPT94	94mm Track (32mm leg) x 0.5mm	3.00	1.81
SPT148	148mm Track (32mm leg) x 0.5mm	3.00	2.40
PEDT62	62mm Deep Track (50mm leg) x 0.5mm	3.00	1.86
SPEDT72	72mm Deep Track (50mm leg) x 0.5mm	3.00	1.98
SPEDT94	94mm Deep Track (50mm leg) x 0.5mm	3.00	2.16
SPDT148	148mm Deep Track (50mm leg) x 0.5mm	3.00	2.83
SPXDT72	72mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.43
SPXDT94	94mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.79
SPXDT148	148mm Extra Deep Track (70mm leg) x 0.7mm	3.00	4.68

ACCESSORIES



Product Code	Product Description	Qty Per Box	Weight per Box Kgs
ASB62	Shaft Encasement Fixing Bracket	1000	17.6

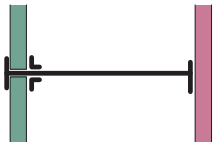


PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

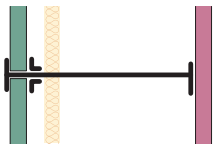
INCORPORATING BRITISH GYPSUM GYPROC 19MM COREBOARD AND GYPROC FIRELINE

SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC 19mm COREBOARD AND GYPROC FIRELINE



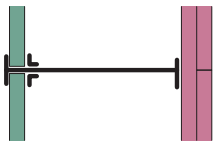
One layer of British Gypsum 15 mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 1 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	HD	3.8	77	60	39	SE60-B-56
70mm I stud	HD	4.2	87	60	39	SE70-B-56
92mm I stud	HD	6	109	60	40	SE92-B-56
146mm I stud	HD	7	163	60	43	SE146-B-56



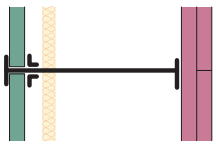
One layer of British Gypsum 15 mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 1 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	HD	3.8	77	60	42	SE60-B-56 (25)
70mm I stud	HD	4.2	87	60	42	SE70-B-56 (25)
92mm I stud	HD	6	109	60	43	SE92-B-56 (25)
146 mm I stud	HD	7	163	60	46	SE146-B-56 (25)



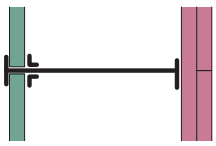
Two layers of British Gypsum 12.5mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 12.5mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.4	87	60	37	SE60-B-61
70mm I stud	SD	4.4	97	60	40	SE70-B-61
92mm I stud	SD	6.4	119	60	42	SE92-B-61
146mm I stud	SD	7.5	173	60	45	SE146-B-61



Two layers of British Gypsum 12.5mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 12.5mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.4	87	60	46 #	SE60-B-61 (25)
70mm I stud	SD	4.4	97	60	46 #	SE70-B-61 (25)
92mm I stud	SD	6.4	119	60	46 #	SE92-B-61 (25)
146mm I stud	SD	7.5	173	60	50	SE146-B-61 (25)

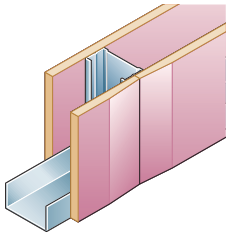


Two layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

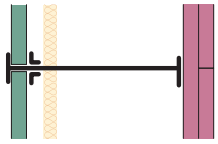
1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	120	41	SE60-B-62
70mm I stud	SD	4.5	102	120	41	SE70-B-62
92mm I stud	SD	6.7	124	120	43	SE92-B-62
146mm I stud	SD	7.9	178	120	45	SE146-B-62

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC 19MM COREBOARD AND GYPROC FIRELINE

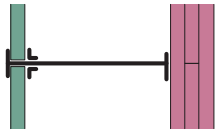


SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC 19mm COREBOARD AND GYPROC FIRELINE



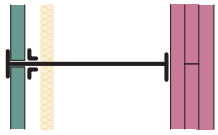
Two layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	120/90 Landing Side	47 #	SE60-B-62 (25)
70mm I stud	SD	4.5	102	120/90 Landing Side	47 #	SE70-B-62 (25)
92mm I stud	SD	6.7	124	120/90 Landing Side	47 #	SE92-B-62 (25)
146mm I stud	SD	7.9	178	120/90 Landing Side	50	SE146-B-62 (25)



Three layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 3 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[6]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	107	120	42	SE60-B-72
70mm I stud	SD	4.5	117	120	43	SE70-B-72
92mm I stud	SD	6.7	139	120	45	SE92-B-72
146mm I stud	SD	7.9	193	120	47	SE146-B-72

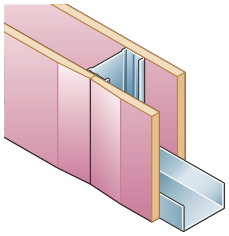


Three layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 3 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[6]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	107	120	49 #	SE60-B-72 (25)
70mm I stud	SD	4.5	117	120	49 #	SE70-B-72 (25)
92mm I stud	SD	6.7	139	120	49 #	SE92-B-72 (25)
146mm I stud	SD	7.9	193	120	50	SE146-B-72 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F. Estimated from loading side only.
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Stud Centres
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes. Exposure to fire from shaft side
5. BS EN ISO 10140-2:2010
6. BS EN 1364-1: 2015 when exposed from both sides
7. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft. The system will satisfy the insulation criteria for 60 minutes if the studs are included.

NOTE: Acoustic performance for Shaft Encasement system is a mixture of tested configurations and estimates. All sound insulation data marked with a # are actual UKAS accredited test results. All Knauf Sound insulation data is estimated. Please note – when exposed to fire on landing side these systems may not satisfy the insulation performance criteria on framing members. Therefore when specifying these systems it must be checked with the relevant approval authority for the building project that this is acceptable, perhaps on the grounds that there will be no combustible materials in close proximity of the framing sections within the shaft.

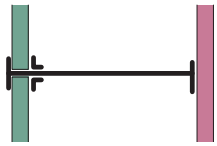


PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

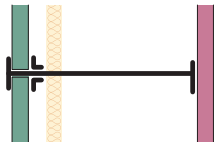
INCORPORATING KNAUF 19MM COREBOARD AND FIRE PANEL

SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING KNAUF 19mm COREBOARD AND FIRE PANEL



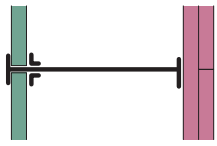
One layer of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm Knauf Coreboard between I studs 1 x 15mm Knauf Fire Panel landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	HD	3.8	77	60	39	SE60-K-56
70mm I stud	HD	4.2	87	60	39	SE70-K-56
92mm I stud	HD	6	109	60	40	SE92-K-56
146 mm I stud	HD	7	163	60	43	SE146-K-56



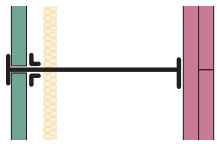
One layer of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm Knauf Coreboard between I studs 1 x 15mm Knauf Fire Panel landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	HD	3.8	77	60	42	SE60-K-56 (25)
70mm I stud	HD	4.2	87	60	42	SE70-K-56 (25)
92mm I stud	HD	6	109	60	43	SE92-K-56 (25)
146 mm I stud	HD	7	163	60	46	SE146-K-56 (25)



Two layers of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm Knauf Coreboard between I studs 2 x 15mm Knauf Fire Panel landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	120	41	SE60-K-62
70mm I stud	SD	4.5	102	120	41	SE70-K-62
92mm I stud	SD	6.7	124	120	43	SE92-K-62
146mm I stud	SD	7.9	178	120	45	SE146-K-62



Two layers of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

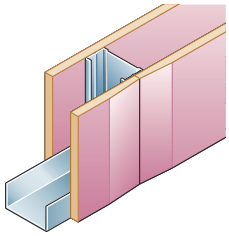
1 x 19mm Knauf Coreboard between I studs 2 x 15mm Knauf Fire Panel landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	120	47	SE60-K-62 (25)
70mm I stud	SD	4.5	102	120	47	SE70-K-62 (25)
92mm I stud	SD	6.7	124	120	47	SE92-K-62 (25)
146mm I stud	SD	7.9	178	120	50	SE146-K-62 (25)

1. Duty Grade BS 5234-2:1992 Annexes A-F. Estimated from loading side only.
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Stud Centres
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes. Exposure to fire from shaft side
5. BS EN ISO 10140-2:2010
6. BS EN 1364-1: 2015 when exposed from both sides
7. See note above
8. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft.

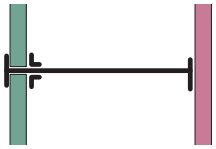
NOTE: Acoustic performance for Shaft Encasement System is a mixture of tested configurations and estimates. All sound insulation data marked with a # are actual UKAS accredited test results. All Knauf Sound insulation data is estimated. Please note – when exposed to fire on landing side these systems may not satisfy the insulation performance criteria on framing members. Therefore when specifying these systems it must be checked with the relevant approval authority for the building project that this is acceptable, perhaps on the grounds that there will be no combustible materials in close proximity of the framing sections within the shaft.

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

INCORPORATING SINIAT GTEC 19MM COREBOARD AND GTEC FIRE BOARD

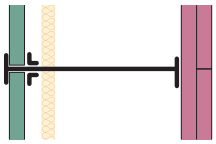


SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING SINIAT GTEC 19MM COREBOARD AND GTEC FIRE BOARD



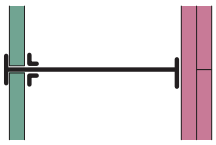
One layer of Siniat 15mm GTEC Fire Board landing side and 19mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm GTEC Coreboard between I studs 1 x 15mm Siniat GTEC Fire Board landiing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[6]	Sound Insulation R_wdB[5]	System reference
60mm I stud	HD	3.8	77	60 [8]	39	SE60-S-56
70mm I stud	HD	4.2	87	60 [8]	39	SE70-S-56
92mm I stud	HD	6	109	60 [8]	40	SE92-S-56
146mm I stud	HD	7	163	60 [8]	43	SE146-S-56



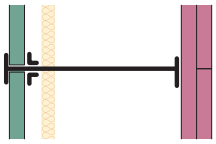
Two layers of Siniat 12.5mm GTEC Fire Board landing side and 19mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm GTEC Coreboard between I studs 2 x 12.5mm Siniat GTEC Fire Board landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[6]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.4	87	60	46	SE60-S-61 (25)
70mm I stud	SD	4.4	97	60	46	SE70-S-61 (25)
92mm I stud	SD	6.4	119	60	46	SE92-S-61 (25)
146mm I stud	SD	7.5	173	60	50	SE146-S-61 (25)



Two layers of Siniat 15mm GTEC Fire Board landing side and 19mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

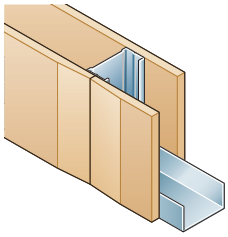
1 x 19mm GTEC Coreboard between I studs 2 x 15mm Siniat GTEC Fire Board landing side (No APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	$120/_{60 Landing Side}$ [8]	41	SE60-S-62
70mm I stud	SD	4.5	102	$120/_{60 Landing Side}$ [8]	41	SE70-S-62
92mm I stud	SD	6.7	124	$120/_{60 Landing Side}$ [8]	43	SE92-S-62
146mm I stud	SD	7.9	178	$120/_{60 Landing Side}$ [8]	45	SE146-S-62



Two layers of Siniat 15mm GTEC Fire Board landing side and 19mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm GTEC Coreboard between I studs 2 x 15mm Siniat GTEC Fire Board landing side (25mm APR)	Duty Grade[1]	Max Height[2] m	Nominal Thickness[3]	Fire Resistance[4]	Sound Insulation R_wdB[5]	System reference
60mm I stud	SD	4.5	92	$120/_{60 Landing Side}$ [8]	47	SE60-S-62 (25)
70mm I stud	SD	4.5	102	$120/_{60 Landing Side}$ [8]	47	SE70-S-62 (25)
92mm I stud	SD	6.7	124	$120/_{60 Landing Side}$ [8]	47	SE92-S-62 (25)
146mm I stud	SD	7.9	178	$120/_{60 Landing Side}$ [8]	50	SE146-S-62 (25)

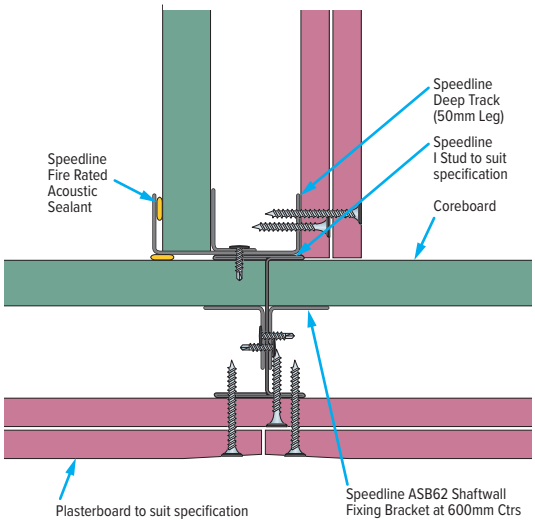
1. Duty Grade BS 5234-2:1992 Annexes A-F. Estimated from loading side only.
2. Calculated on a maximum limiting deflection of L/240 at 200 Pa at 600mm Stud Centres
3. Excluding finishes
4. BS 476:1987:Part 22 in minutes. Exposure to fire from shaft side
5. BS EN ISO 10140-2:2010
6. BS EN 1364-1: 2015 when exposed from both sides
7. See note above
8. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft.



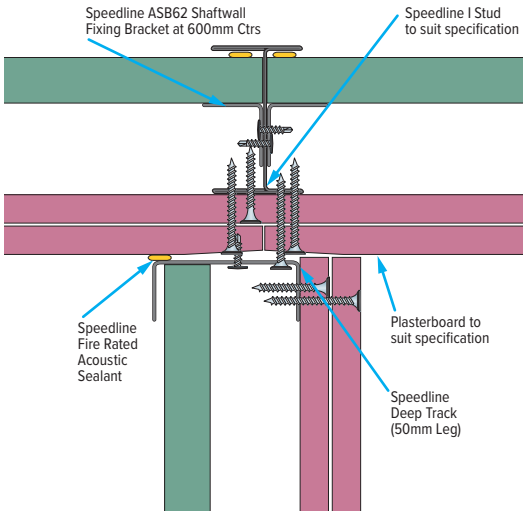
PARTITIONING SYSTEMS

SHAFT ENCASEMENT CONSTRUCTION DETAILS

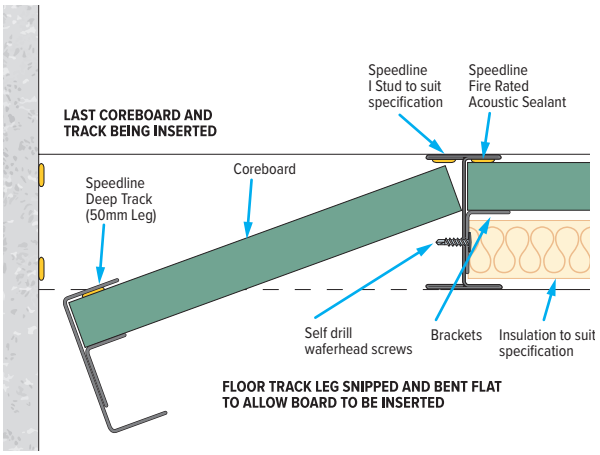
SHAFT ENCASEMENT
JUNCTION SHAFT SIDE



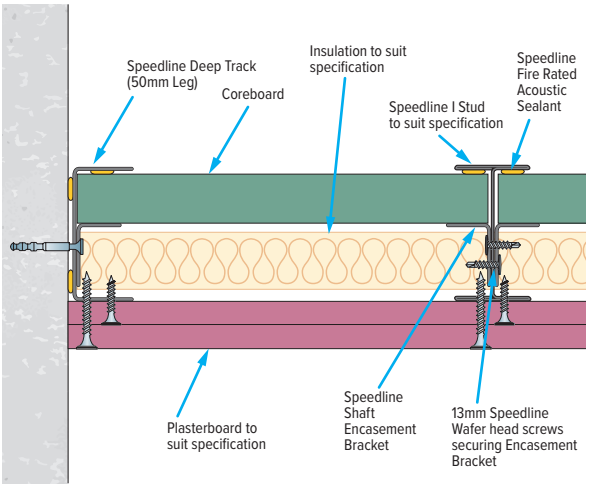
SHAFT ENCASEMENT
JUNCTION ROOM SIDE



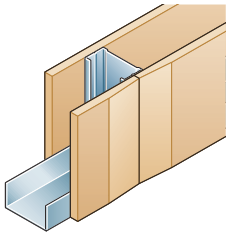
SHAFT ENCASEMENT
END WALL DETAIL



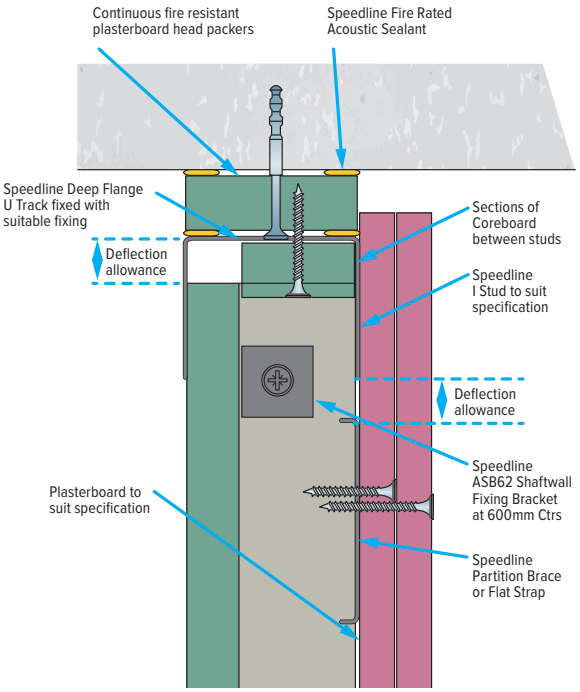
SHAFT ENCASEMENT
END WALL DETAIL



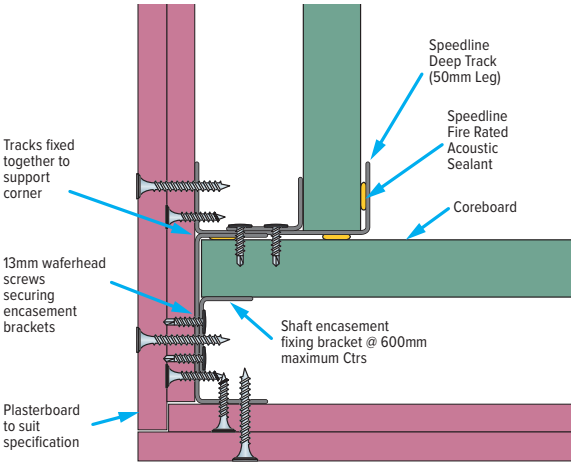
SHAFT ENCASEMENT CONSTRUCTION DETAILS



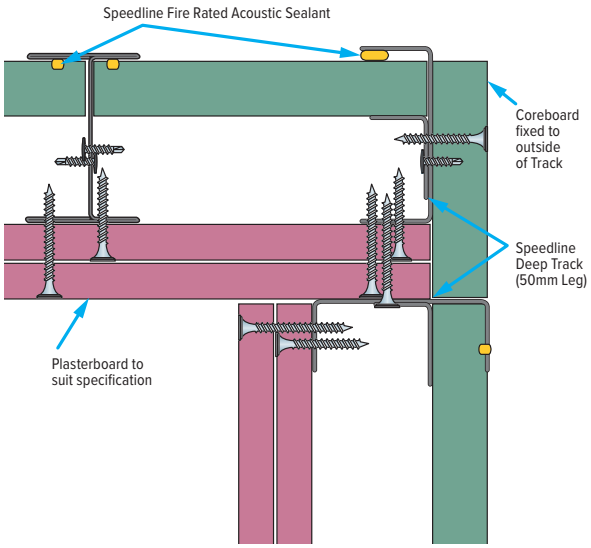
SHAFT ENCASEMENT
DEFLECTION HEAD GENERAL LAYOUT



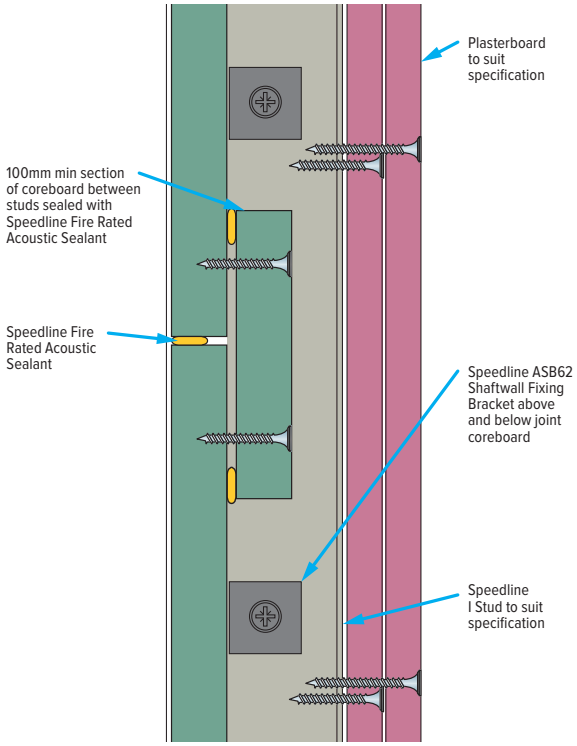
SHAFT ENCASEMENT
EXTERNAL CORNER

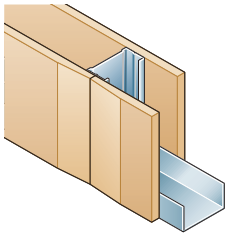


SHAFT ENCASEMENT
INTERNAL CORNER



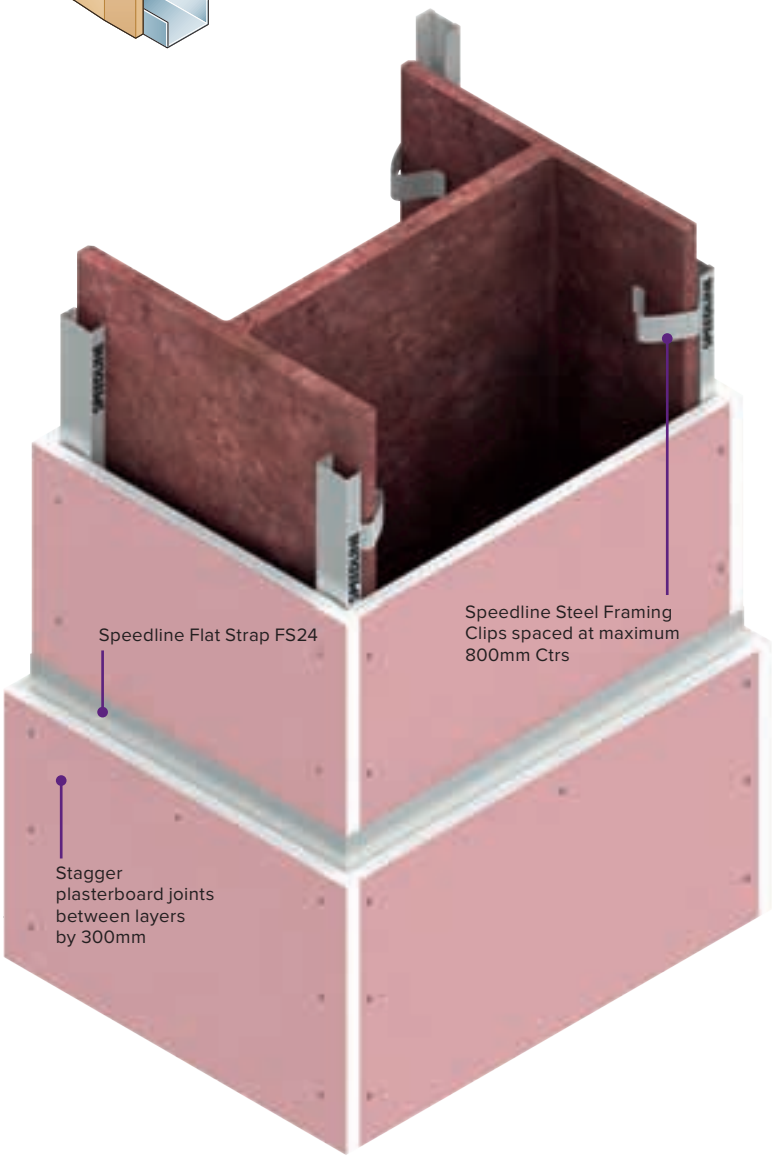
SHAFT ENCASEMENT
COREBOARD JOINT





PARTITIONING SYSTEMS

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM



Benefits

- Fast & simple method to clad structural beams and columns.
- Provides protection for 3 or 4 sided applications.
- High level of fire protection.
- No special installation techniques required.
- Cost effective.

A high performance fire protection system to enclose structural I columns and beams. The Speedline Column and Beam Encasement System provides 120 minutes fire protection up to section factor A/V $(H^p/A)m^{-1}$ 125 to BS476 Part 21:1987.

Sectors

- High Rise Residential
- Education
- Healthcare
- Commercial
- Student Accommodation
- Offices

Construction

4 Sided Column & Beam Encasement
Steel framing clips are friction fitted to the column or beams flanges at maximum 800mm centres. Speedline Wall/Ceiling Liner is located over the clips to encase the column or beam. Fire resistant plasterboard is fixed to the outside of the metal framework.

3 Sided Column & Beam Encasement
Speedline 25mm x 25mm Steel Angle is located to both sides of the wall/soffit flange and secured at 600mm centres using suitable fixings.

Steel framing clips are friction fitted to the other 2 column of beam flanges at maximum 800mm centres. Speedline Wall/Ceiling Liner is located over the clips to encase the column or beam. Fire resistant plasterboard is fixed to the outside of the metal framework.

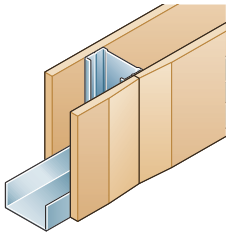
Board Installation

All layers of British Gypsum Gyproc Fireline plasterboard must be fixed at 300mm maximum centres to the framework using the appropriate length Speedline Drywall Screw with board joints staggered between layers. Speedline Partition Brace or Flat Strap must be used behind any horizontal join in the plasterboard.

Where the column or beam web flange dimensions exceed 600mm addition support will be required for the plasterboard.

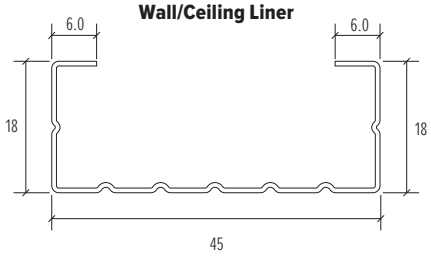
This system has been tested for up to 120 minutes fire protection using British Gypsum Gyproc Fireline Plasterboard to the steel column or beam. For advice on the combination of fire resistant plasterboard needed to achieve the required fire protection please contact our Technical Department at **enquiries@speedlinedrywall.co.uk** To determine the fire protection required the width, depth and mass of the column or beam will be required along with the type of construction being built i.e. 3 sided or 4 sided.

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM

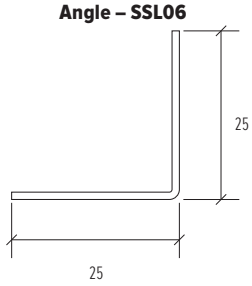


SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM 15MM GYPROC FIRELINE

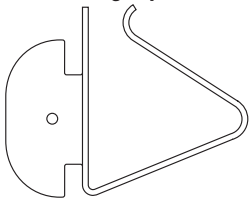
Wall/Ceiling Liner



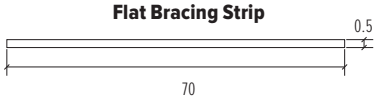
Angle – SSL06



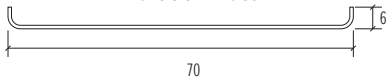
Steel Framing Clip – AWL10B



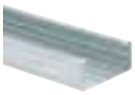
Flat Bracing Strip



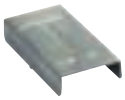
Partition Brace



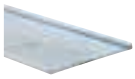
CEILING LINER SYSTEM

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	SWL507	Wall/Ceiling Liner x 0.5mm	2.40 2.70 3.00 3.60	0.83 0.94 1.04 1.24
	SSL06	25mm leg x 25mm leg x 90 deg. x 0.8mm	3.00 3.60	0.74 1.03

ACCESSORIES

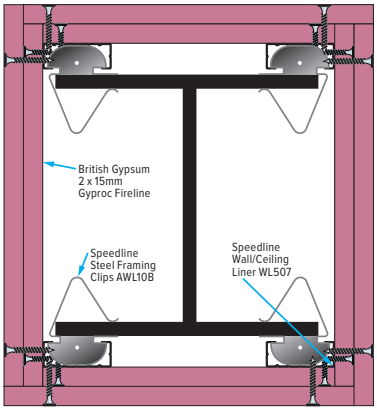
	Product Code	Product Description	Qty Per box	Weight per Box Kgs
	AWL05B	Wall/Ceiling Liner Connector	100	1.35
	AWL10B	Steel Framing Clip	100	6.90

BRACING STRIP & PARTITION BRACE

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	FS24	Flat Bracing Strip 70 x 0.5mm	2.40	0.80
	PB24	Partition Brace 70 x 6 x 0.7mm	2.40	1.08

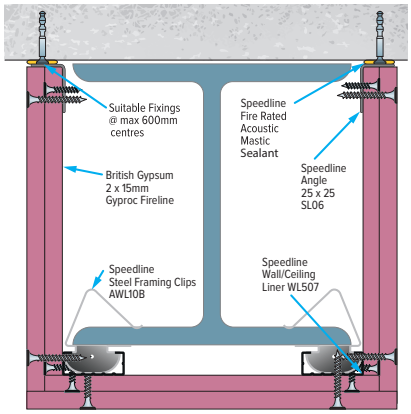
Column & Beam Encasement

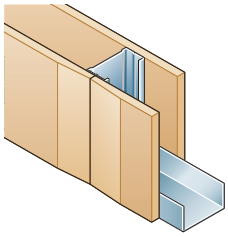
4 sided showing double layer of 15mm British Gypsum Gyproc Fireline plasterboard



Column & Beam Encasement

3 sided showing double layer of 15mm British Gypsum Gyproc Fireline plasterboard



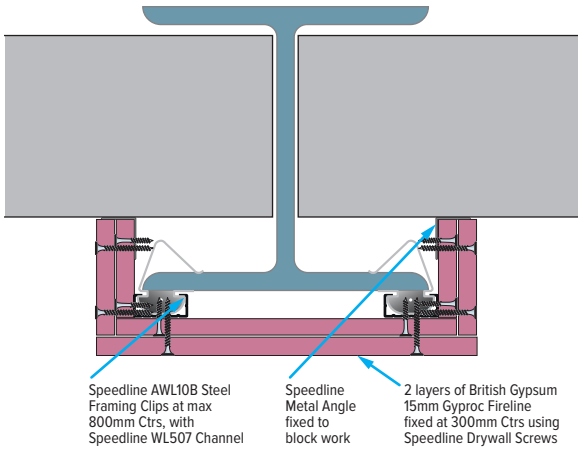


PARTITIONING SYSTEMS

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM

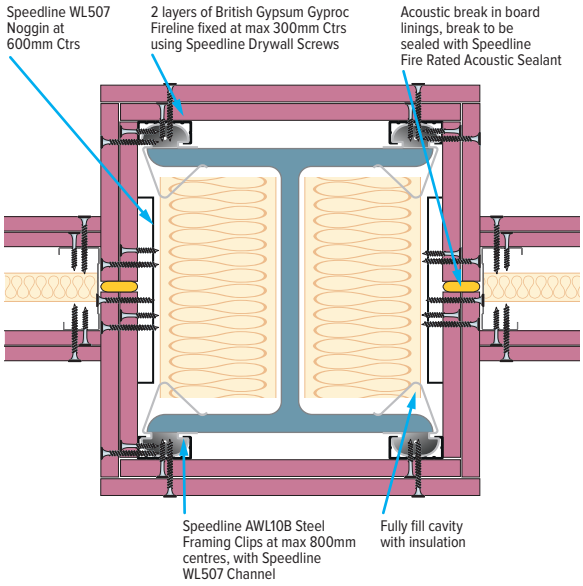
COLUMN & BEAM ENCASEMENT

COLUMN IN WALL ENCASEMENT



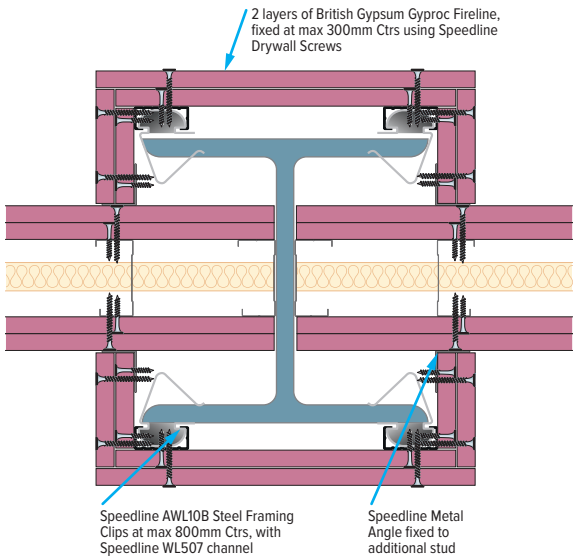
COLUMN & BEAM ENCASEMENT

PARTITION ABUTMENT



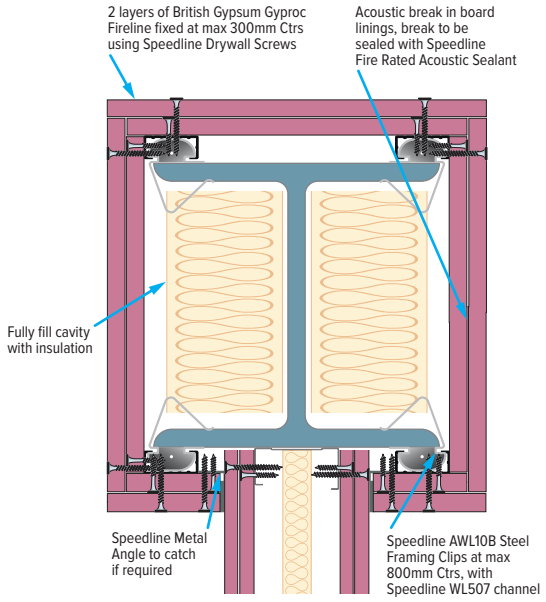
COLUMN & BEAM ENCASEMENT

PARTITION ABUTMENT BREAKING LININGS



COLUMN & BEAM ENCASEMENT

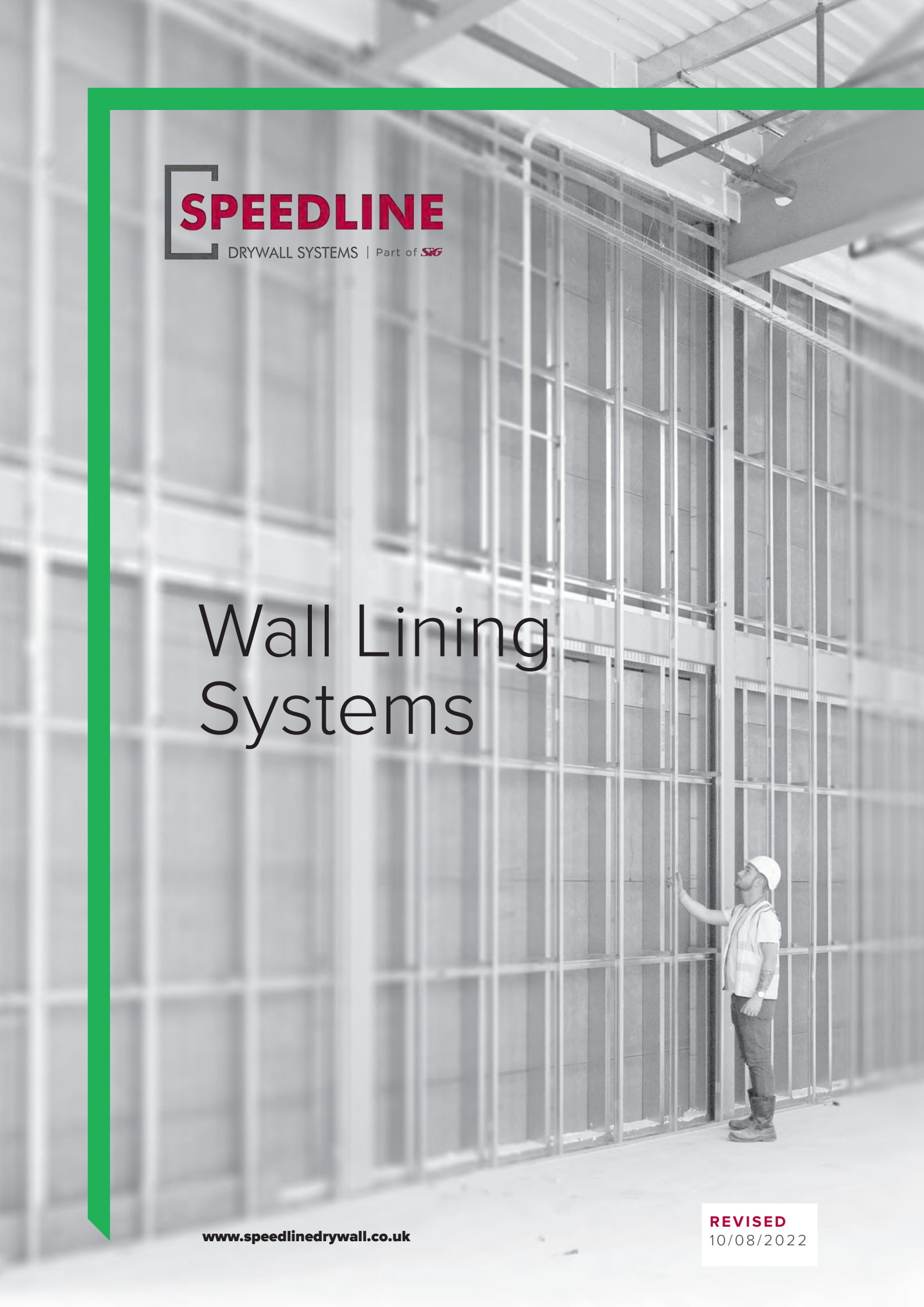
PARTITION ABUTMENT ONTO FLANGE OF STEEL



SPEEDLINE

DRYWALL SYSTEMS | Part of SIG

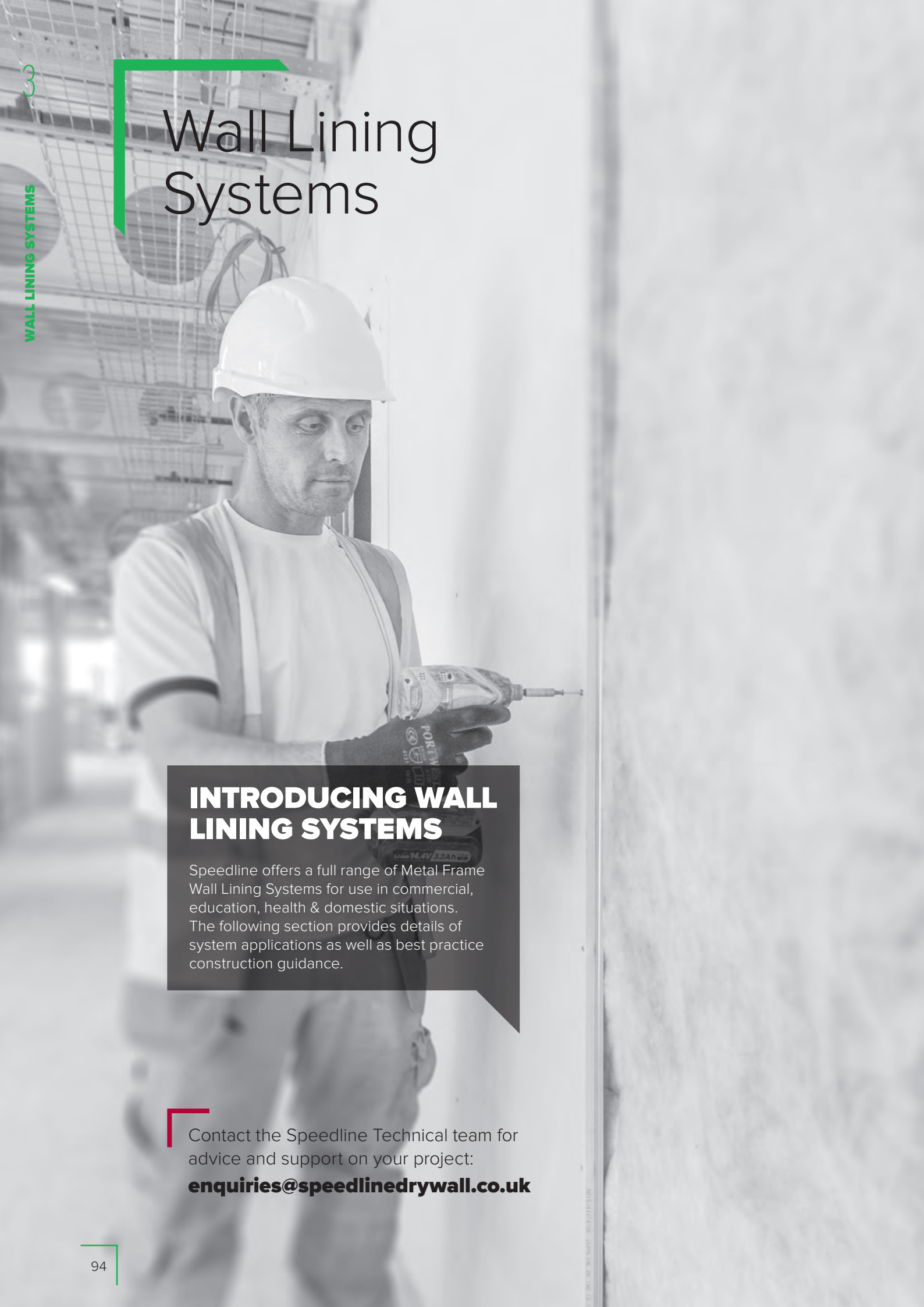
Wall Lining Systems



www.speedlinedrywall.co.uk

REVISED
10/08/2022

Wall Lining Systems

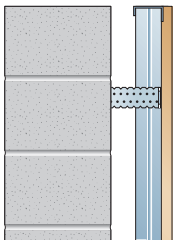


INTRODUCING WALL LINING SYSTEMS

Speedline offers a full range of Metal Frame Wall Lining Systems for use in commercial, education, health & domestic situations. The following section provides details of system applications as well as best practice construction guidance.

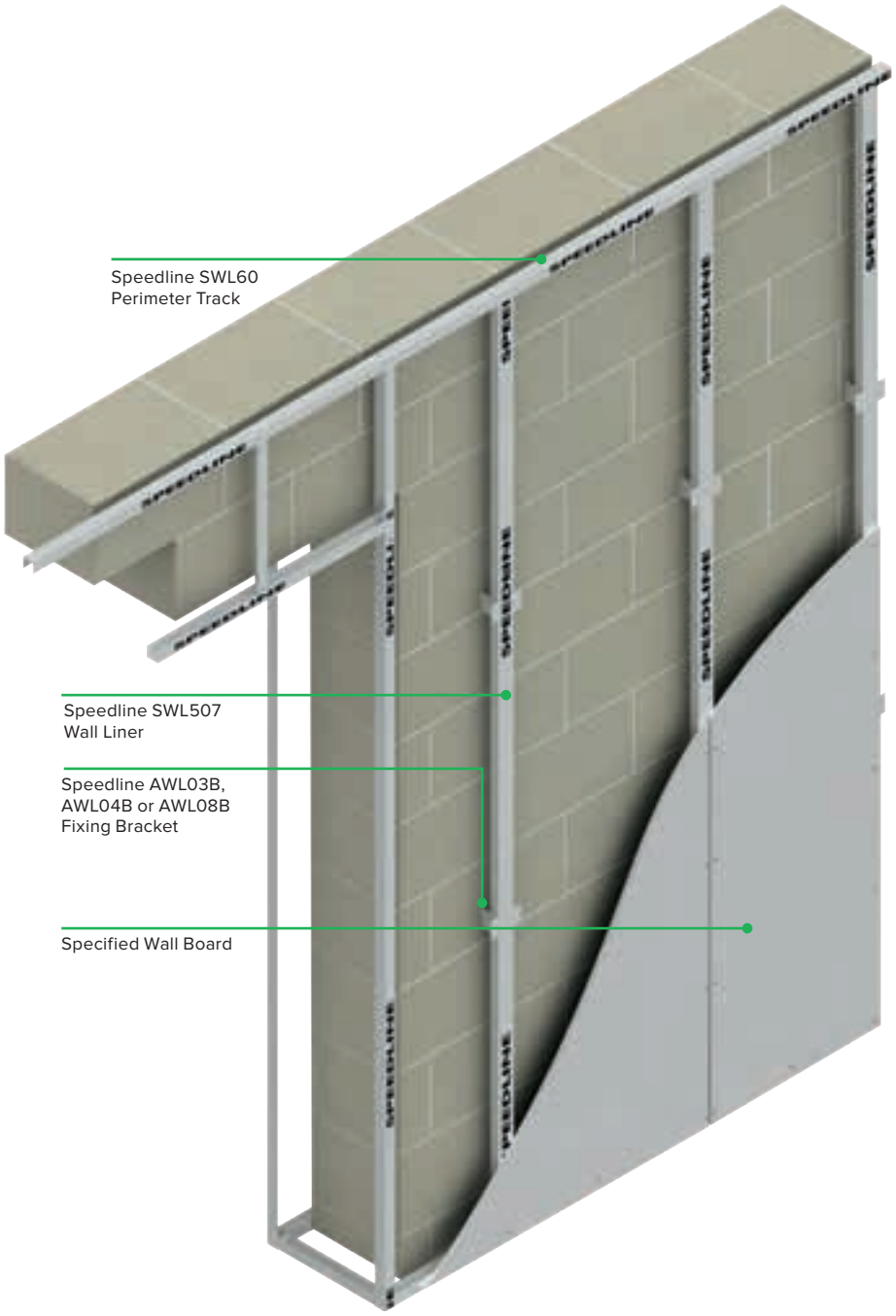
Contact the Speedline Technical team for advice and support on your project:
enquiries@speedlinedrywall.co.uk

Contents



WALL LINING SYSTEMS

SPEEDLINE WALL LINER SYSTEM



Benefits

A completely dry system using secure mechanical fixings

- **Services can be accommodated within the cavity.**
- **Can be used to improve sound insulation properties of the substrate.**
- **With the addition of Speedline Thermal Laminates thermal performance of the substrate can be improved.**
- **Can be used where plaster or Direct Bond systems are not suitable.**
- **Provides a flat, level surface whilst dealing with background irregularities.**

Quick, simple and cost-effective to use, Speedline Wall Liner System is suitable for internal use in all commercial and domestic applications.

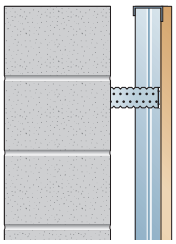
It can be used to provide a lining onto most masonry backgrounds, uneven walls and for concealing services within the cavity. With a range of fixing brackets available, cavities from 25mm up to 180mm can be formed.

Prior to installing Speedline Wall Liner System within older buildings, ensure the substrate is sound and free of any damp.

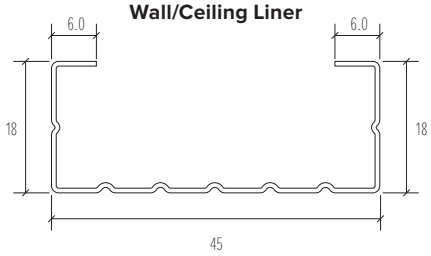
Sectors

- **Student Accommodation**
- **Hotels**
- **Healthcare**
- **Education**
- **RMI**
- **Residential**
- **Commercial**

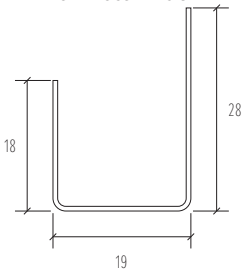
SPEEDLINE WALL LINER SYSTEM



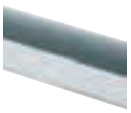
Wall/Ceiling Liner



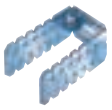
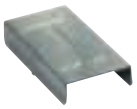
Perimeter Track



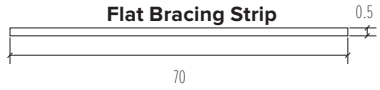
SPEEDLINE WALL LINER SYSTEM

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	SWL507	Speedline Wall/Ceiling Liner x 0.5mm	2.40 2.70 3.00 3.60	0.83 0.94 1.04 1.24
	SWL60	Speedline Perimeter Track x 0.5mm	3.00	0.74

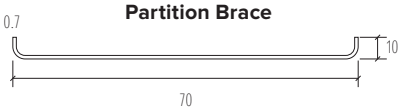
SPEEDLINE ACCESSORIES (WALL LINER SYSTEM)

	Product Code	Product Description	Weight per Box Kgs
	AWL03B	Fixing Bracket – 75mm leg	3.70
	AWL04B	Fixing Bracket – 125mm leg	5.60
	AWL08B	Fixing Bracket – 175mm leg	7.50
	AWL05B	Wall/Ceiling Liner Connector	1.35

Flat Bracing Strip

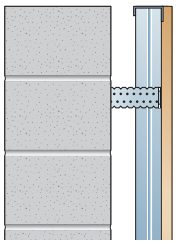


Partition Brace



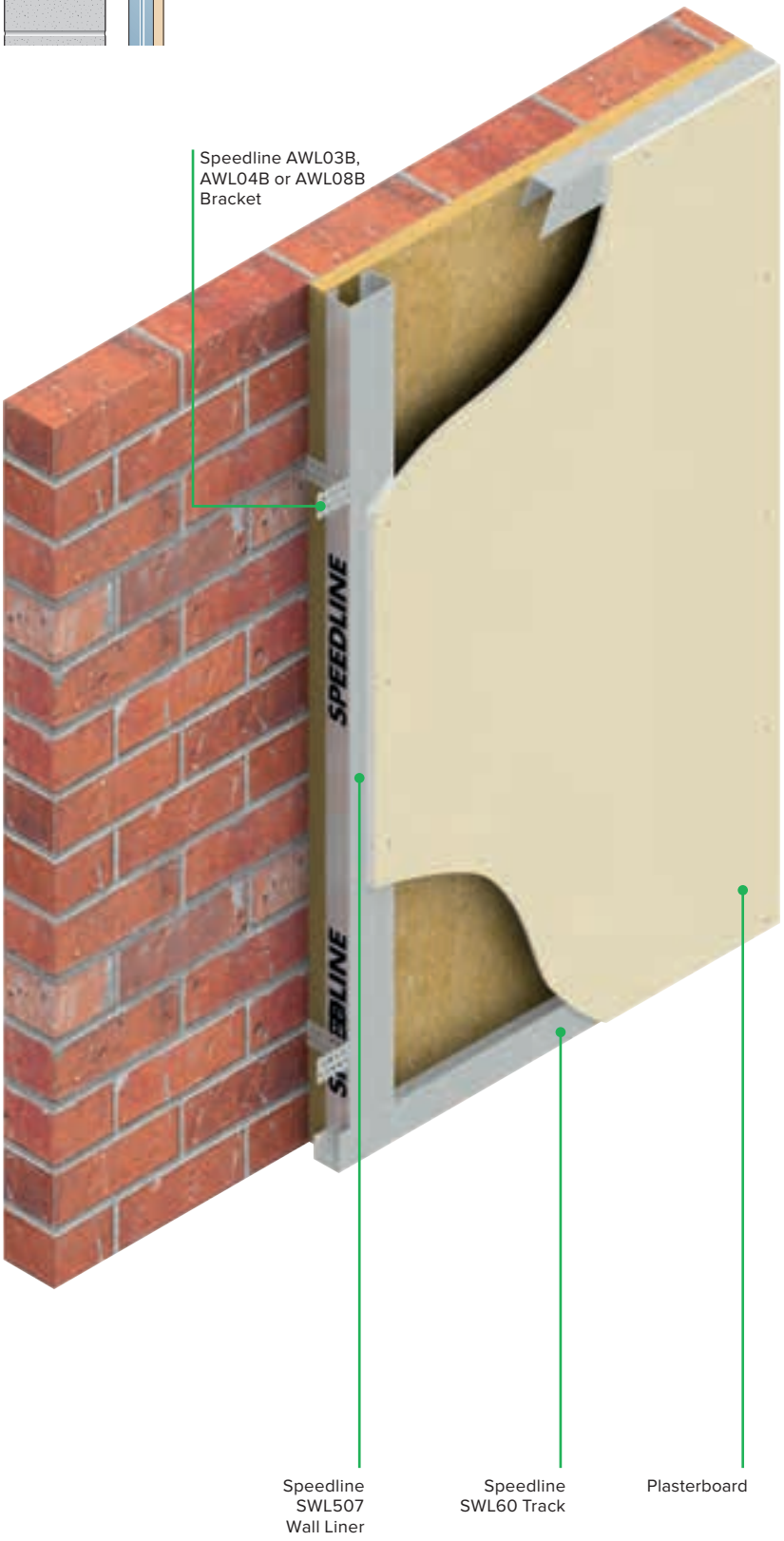
SPEEDLINE BRACING STRIP & PARTITION BRACE

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
FS24	Flat Bracing Strip 70 x 0.5mm	2.40	0.66
PB24	Partition Brace 70 x 10 x 0.7mm	2.40	1.08



WALL LINING SYSTEMS

SPEEDLINE WALL LINER SYSTEM



Construction

Establish depth of cavity required and fix Speedline SWL60 Perimeter Track at maximum 600mm centres, SWL60 should be positioned so that the longest leg is facing the room.

Mark vertical lines at maximum 600mm centres to correspond with position of Speedline SWL507 Wall Liner centres. Devide vertical lines by 800mm to indicate fixing point for Speedline AWL03B, AWL04B or AWL08B Fixing Brackets. Drill a 6mm diameter hole and fix brackets into position using Speedline Metal Nail In fixings.

Cut SWL507 Wall Liner to length and friction fit into track. To extend SWL507 Wall Liner use Speedline AWL05B Wall Liner Connectors.

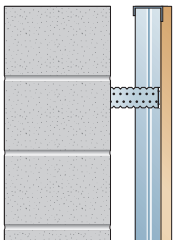
Fix each leg of bracket to SWL507 Wall Liner using Speedline Wafer Head Screws. Should leg of bracket extend beyond face of liner, simply fold back to provide a flush surface.

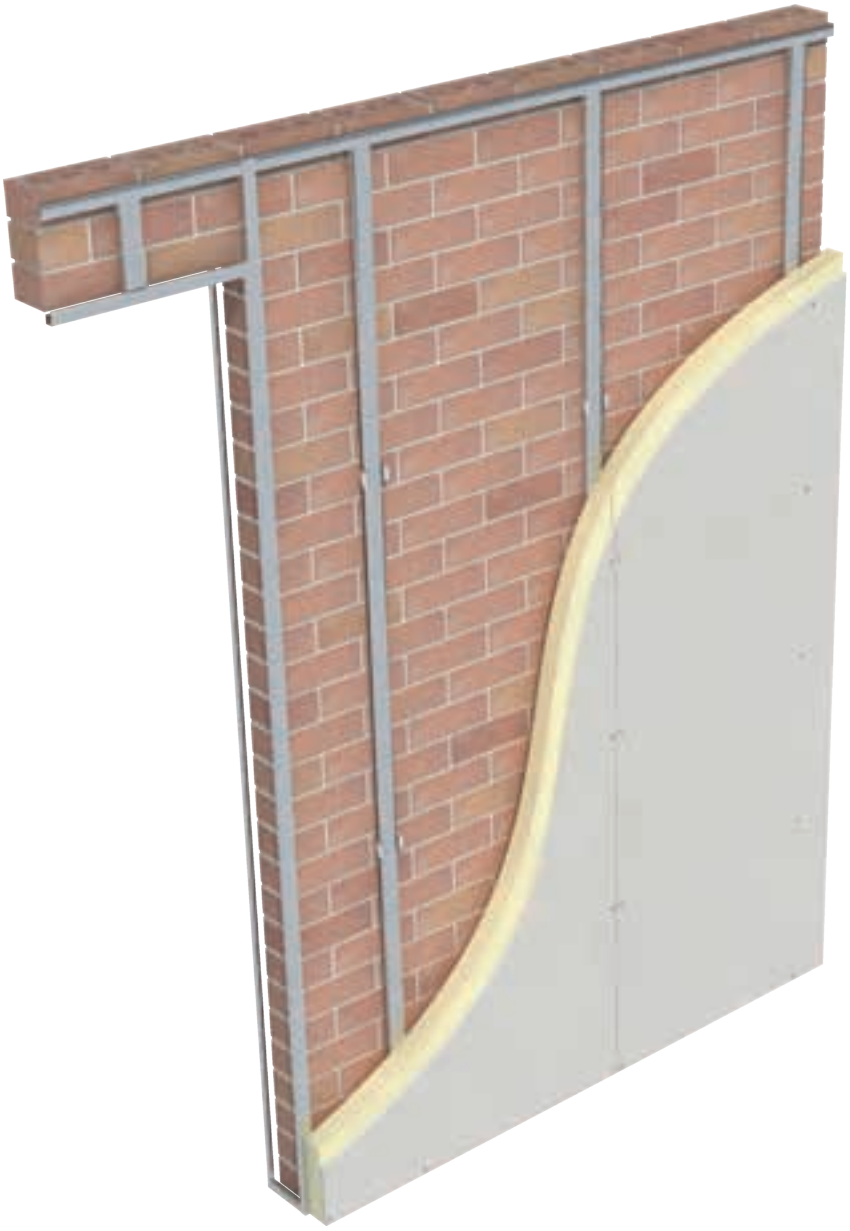
Fix board lining at maximum 300mm centres to all perimeters and intermediate wall liner sections using the appropriate length of Speedline Drywall Screw. Refer to table on page 23 for board thickness/fixing length combination.

Fixtures

Medium to heavy fixtures such as heating units, radiators, shelving and cupboards can be supported by a plywood pattress incorporated within the framing cavity (refer to construction details). For all other types of fixtures please contact **enquiries@speedlinedrywall.co.uk** for further assistance.

SPEEDLINE WALL LINER SYSTEM





Speedline Thermal Laminate Board provides a thermal insulation solution in a single application and is suitable for use with Speedline Wall Liner System.

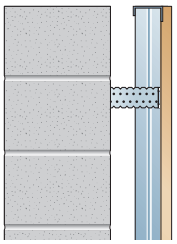
Speedline Thermal Laminate Board in conjunction with Speedline Wall Liner System will assist you to meet or upgrade to the current Building Regulations and avoid the risk of condensation. Locating the thermal insulation layer on the internal side of the structure is more responsive to heating conditions resulting in the ambient internal temperature of a building becoming comfortable quicker whilst reducing thermal bridging through the structure.

The table below provides details on U-Values (W/m²K) achievable with the stated board thickness and masonry background. Please contact **enquiries@speedlinedrywall.co.uk** for further assistance and U-Value calculations.

Speedline Masonry Walls - Mechanical fix onto Speedline Wall Liner System

Board Thickness	Thermal Resistance (M^2K/W)	U-Value (W/m^2K)
62.5mm	2.31	0.34
72.5mm	2.79	0.29
82.5mm	3.30	0.26
92.5mm	3.70	0.23

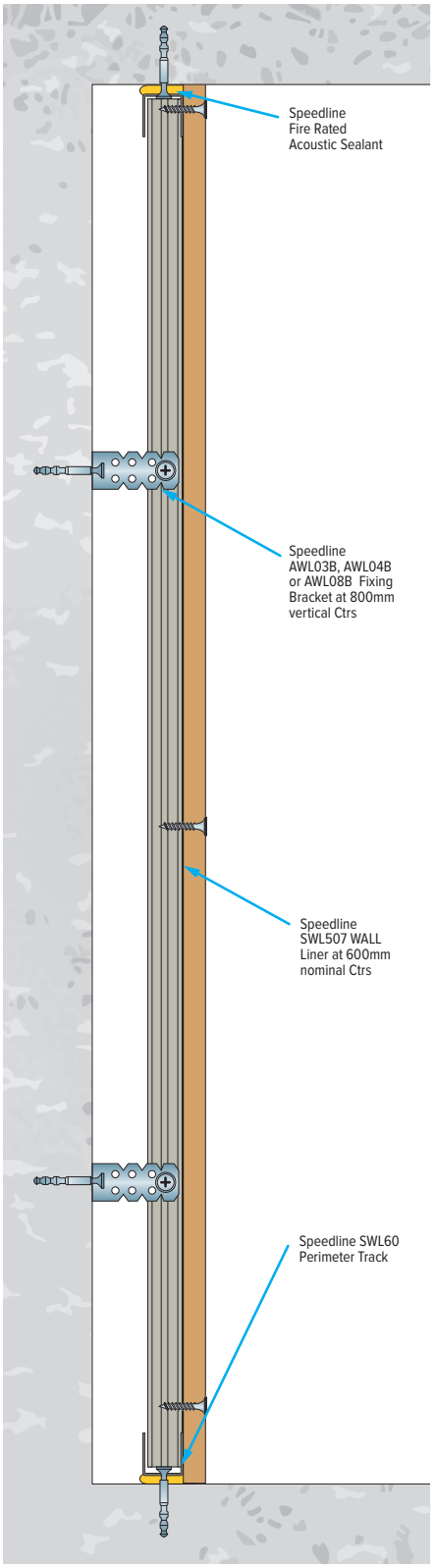
The above U Value calculation is based upon a solid 215mm masonry wall with Speedline Thermal Laminate Board being mechanically fixed into Speedline Wall Liner System.



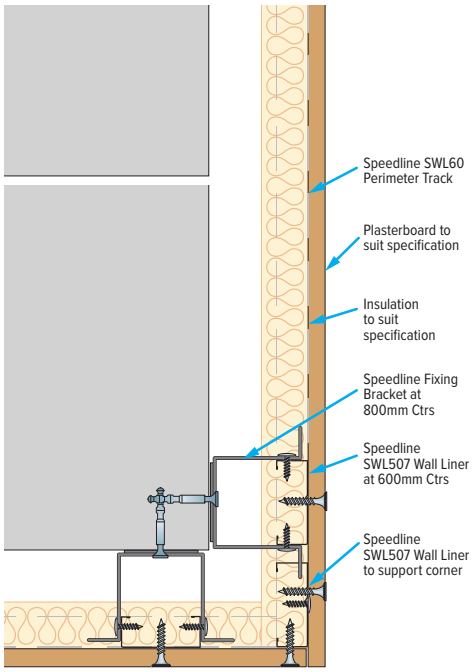
WALL LINING SYSTEMS

SPEEDLINE WALL LINER SYSTEM

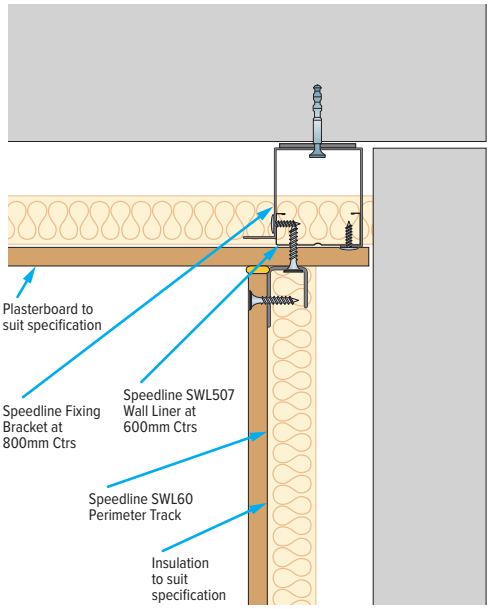
WALL LINER
HEAD, FLOOR & BRACKET



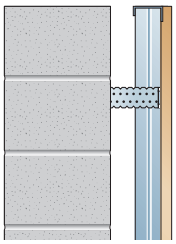
WALL LINER
EXTERNAL CORNER



WALL LINER
INTERNAL CORNER

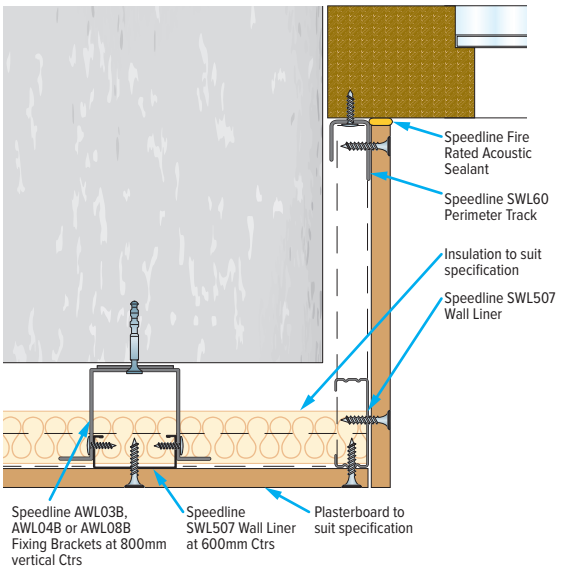


SPEEDLINE WALL LINER SYSTEM



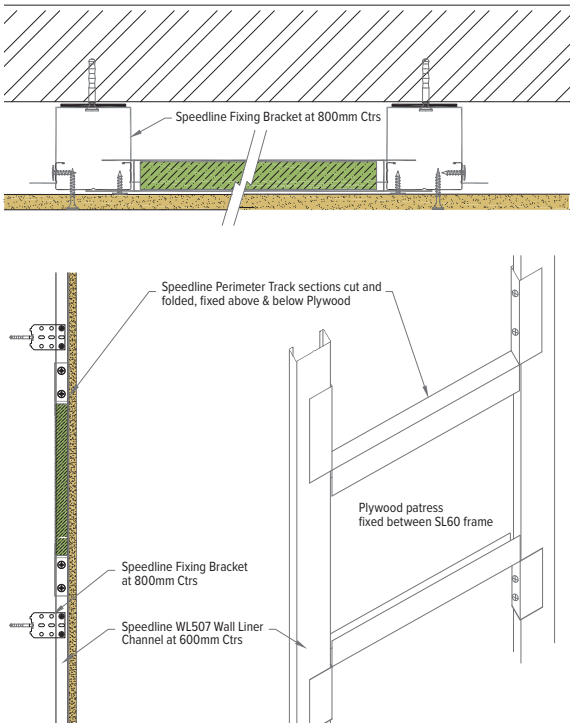
WALL LINER

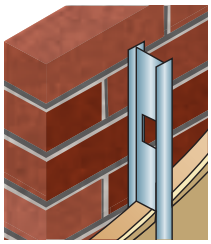
WINDOW/DOOR REVEAL



WALL LINER

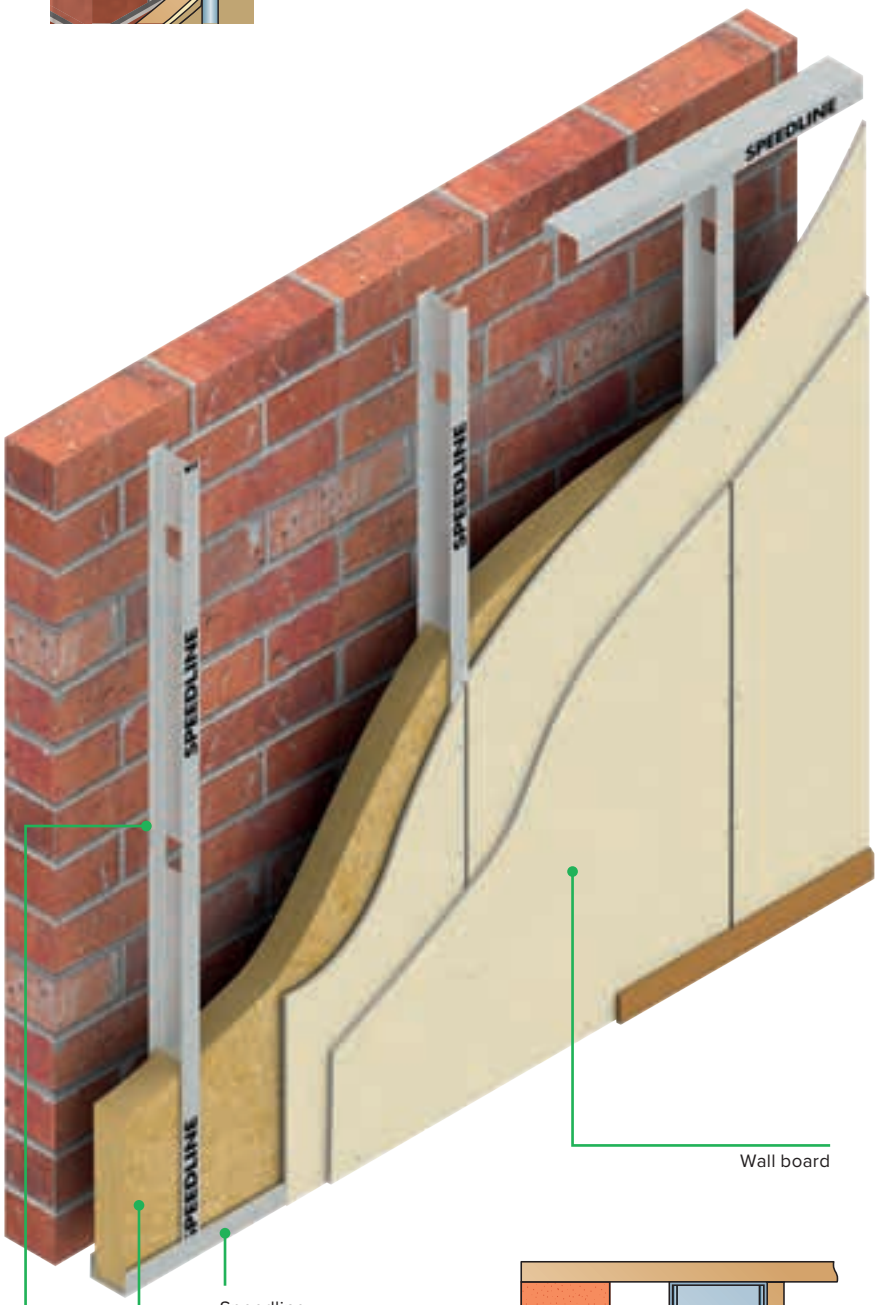
PLYWOOD PATRESS

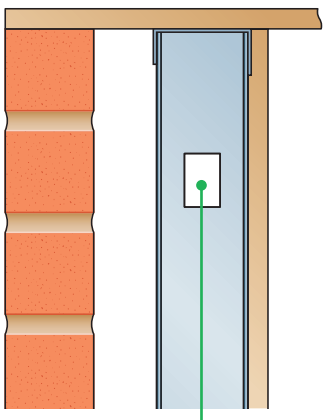




WALL LINING SYSTEMS

SPEEDLINE INDEPENDENT WALL LINING SYSTEM





Benefits

- Speedline Independent Wall Lining System provides a cavity for services to be routed through.
- Speedline Independent Wall Lining System offer a range of I stud widths of 50mm, 60mm, 70mm, 92mm & 146mm to achieve a wide range of height requirements up to 7.2 metres without any additional bracing to structure.
- Speedline systems are suitable for fixing all types of plasterboard including Speedline Thermal Laminate Boards.
- Independent of structure although it can be braced back for greater heights.
- Speedline stud holds insulation to improve levels of sound and thermal insulation.

Speedline Independent Wall Lining System has been designed to provide a lining solution that is totally free of the substrate. It can be used where other lining solutions such as plaster or direct bond are unsuitable.

Speedline I Studs are friction fitted within Speedline tracks at nominal 600mm centres. Insulation can be incorporated within the framework cavity to improve sound and thermal insulation along with the correct type of gypsum plasterboard.

Fix board lining at maximum 300mm centres to all perimeters and intermediate I studs using the appropriate length of Speedline Drywall Screw. Refer to table on page 23 for board thickness/fixing length combination.

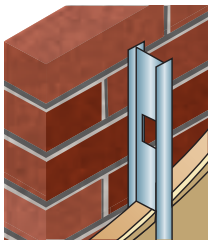
Prior to installing Speedline Independent Wall Lining System within older buildings, ensure the substrate is sound and free of any damp.

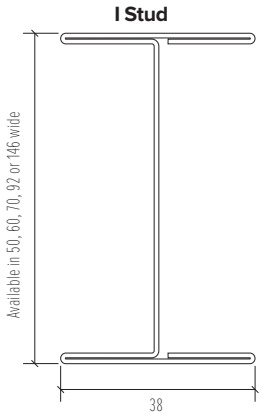
Please contact **enquiries@speedlinedrywall.co.uk** for further assistance.

Sectors

- Residential
- Healthcare
- Education
- Commercial
- Retail
- Student Accommodation
- RMI

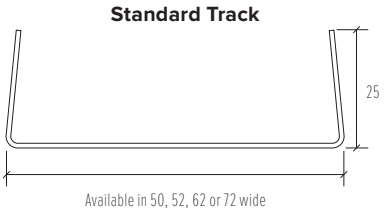
SPEEDLINE INDEPENDENT WALL LINING SYSTEM

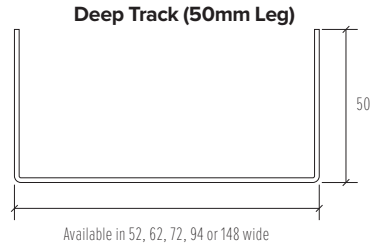


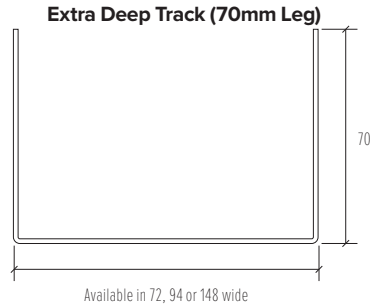


I STUD

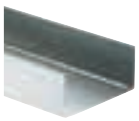
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
PI50	50mm I Stud x 0.6mm, flange dimensions 38mm	2.70 3.00 3.60	2.01 2.24 2.69
PI60	60mm I Stud x 0.6mm, flange dimensions 38mm	3.60 4.20	2.82 3.30
PI70	70mm I Stud x 0.7mm, flange dimensions 38mm	3.60 4.20	3.56 4.15
PI92	92mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	4.59 6.37 7.65
PI146	146mm I Stud x 0.9mm, flange dimensions 38mm	3.60 5.00 6.00	5.65 7.86 9.43

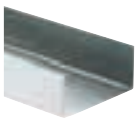




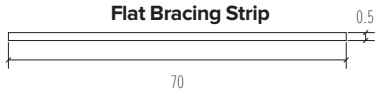


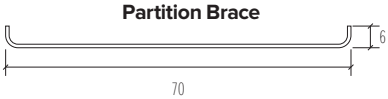
TRACK



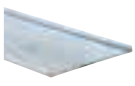


Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SPT52	52mm Track (25mm leg) x 0.5mm	3.00	1.13
PT62	62mm Track (25mm leg) x 0.5mm	3.00	1.25
SPT72	72mm Track (25mm leg) x 0.5mm	3.00	1.41
SPT94	94mm Track (32mm leg) x 0.5mm	3.00	1.81
SPT148	148mm Track (32mm leg) x 0.5mm	3.00	2.40
PEDT62	62mm Deep Track (50mm leg) x 0.5mm	3.00	1.86
SPEDT72	72mm Deep Track (50mm leg) x 0.5mm	3.00	1.98
SPEDT94	94mm Deep Track (50mm leg) x 0.5mm	3.00	2.16
SPDT148	148mm Deep Track (50mm leg) x 0.5mm	3.00	2.83
SPXDT72	72mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.43
SPXDT94	94mm Extra Deep Track (70mm leg) x 0.7mm	3.00	3.79
SPXDT148	148mm Extra Deep Track (70mm leg) x 0.7mm	3.00	4.68

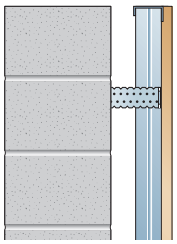




BRACING STRIP & PARTITION BRACE



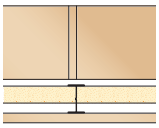
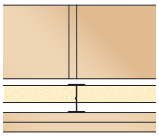
Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
FS24	Flat Bracing Strip 70 x 0.5mm	2.40	0.80
PB24	Partition Brace 70 x 6 x 0.7mm	2.40	1.08



WALL LINING SYSTEMS

SPEEDLINE INDEPENDENT WALL LINING SYSTEM

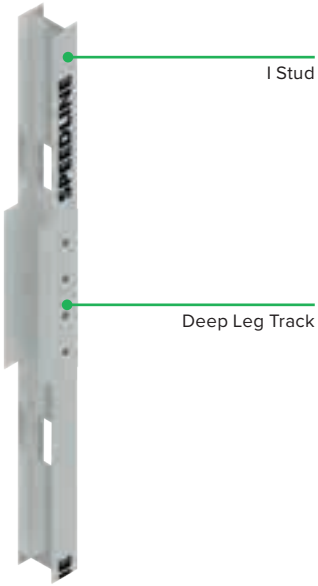
Speedline Independent Wall Lining maximum heights I Stud at 600mm centres

Maximum Height Table		I Stud Width mm	Max Height m	Nom Weight kg/m²	Nom Width mm
 100mm brickwork and I Studs. One layer of 12.5mm standard wallboard 25mm Glass mineral wool.	MD	50	2.4*	10	190
		60	2.7*	11	200
		70	3.0*	11	210
		92	4.5*	12	230
		146	6.9*	12	286
 100mm brickwork and I Studs. Two layers of 12.5mm standard wallboard 25mm Glass mineral wool.	SD	50	2.7*	19	203
		60	3.3*	20	213
		70	3.9*	20	223
		92	5.4*	21	243
		146	7.2*	21	299

*Denotes maximum unbraced height for further assistance on reduced stud centres and bracing back to structure, please contact **enquires@speedlinedrywall.co.uk**

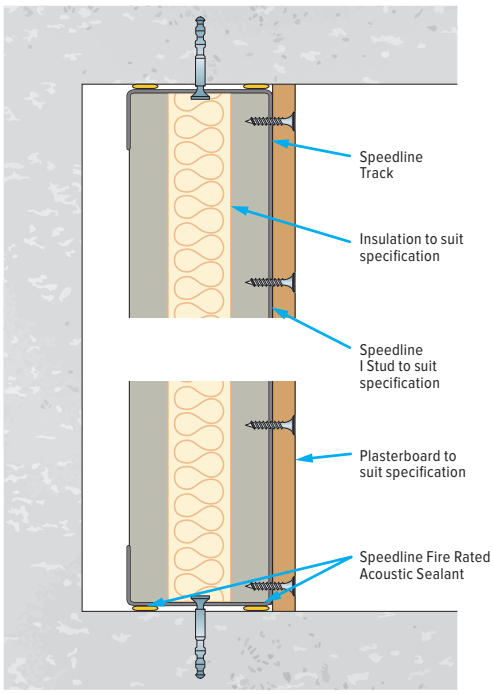
Splicing Speedline I Studs

Speedline I studs can be spliced together to create longer lengths using a 600mm length of the appropriate sized Speedline Deep Track and fixed with four Speedline Wafer Head Screws to each flange (see detail below).



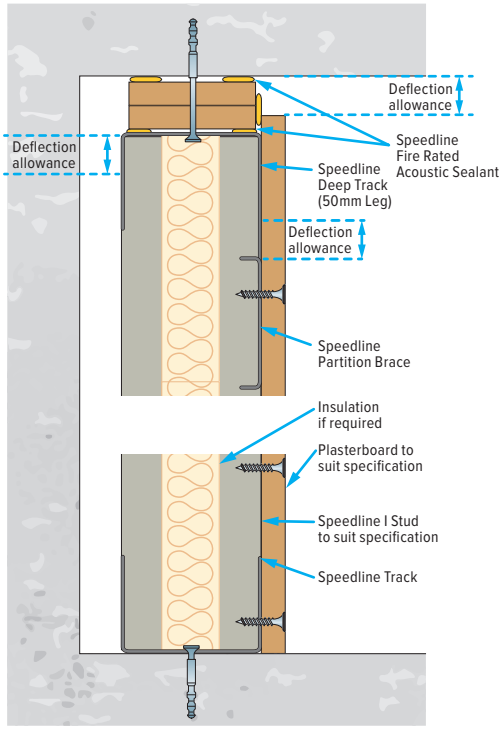
I STUD WALL LINING

HEAD AND FLOOR

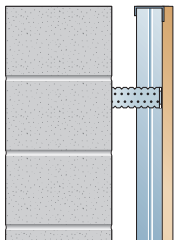


I STUD WALL LINING

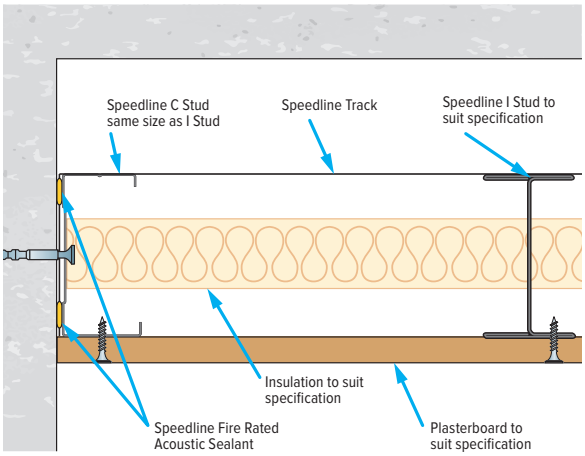
DEFLECTION HEAD



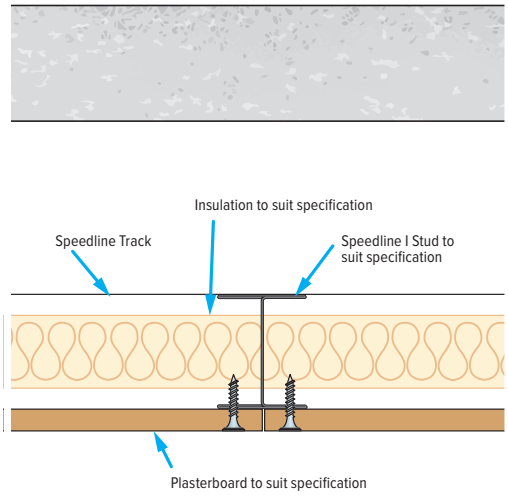
SPEEDLINE INDEPENDENT WALL LINING SYSTEM



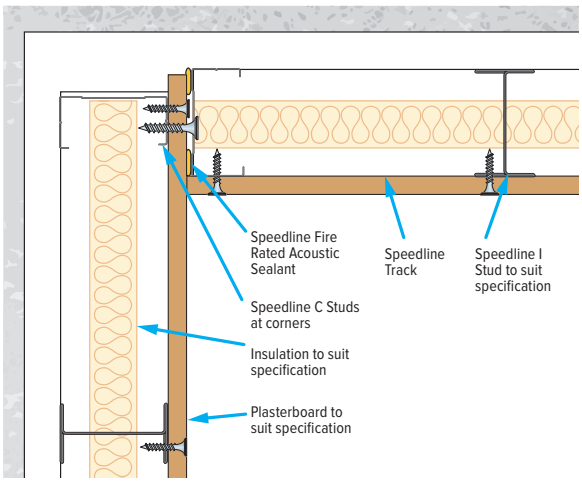
I STUD WALL LINING
WALL ABUTMENT



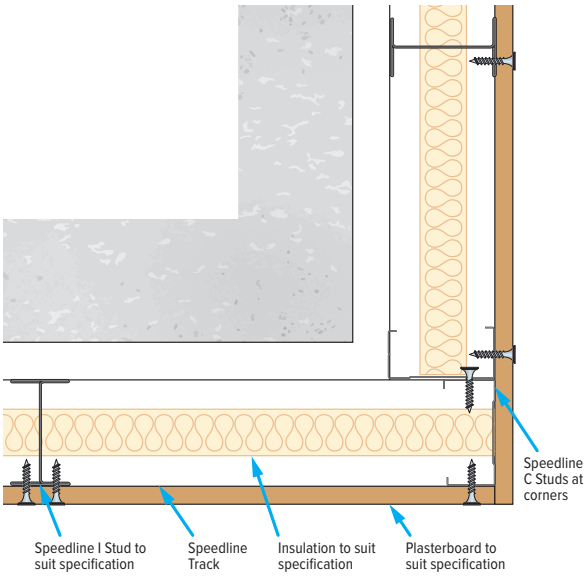
I STUD WALL LINING
BOARD JOINT

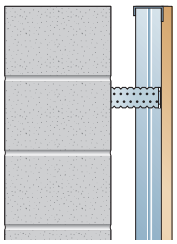


I STUD WALL LINING
INTERNAL CORNER



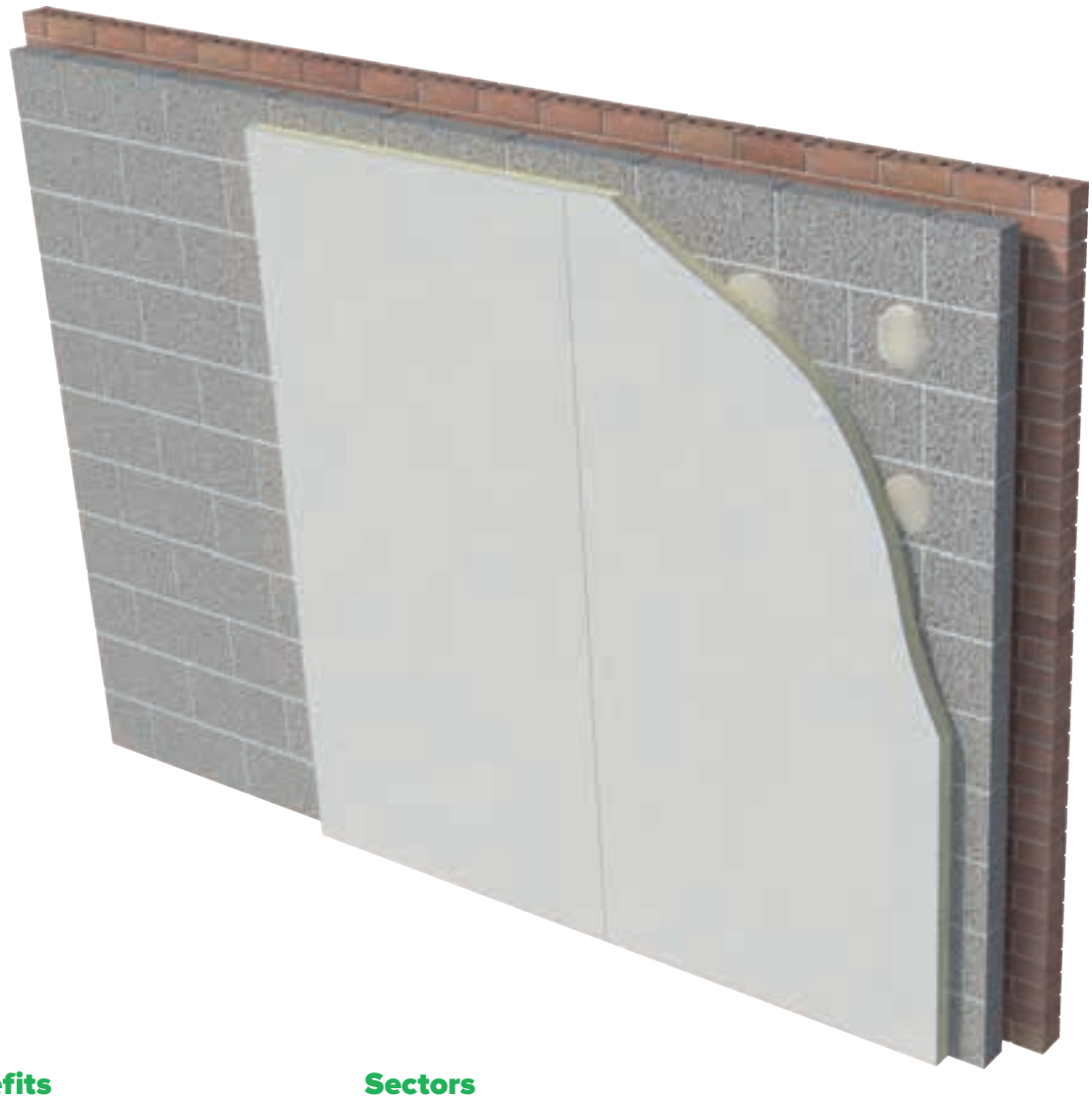
I STUD WALL LINING
EXTERNAL CORNER





WALL LINING SYSTEMS

SPEEDLINE DIRECT BOND SYSTEM



Benefits

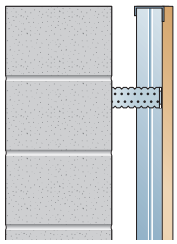
- Minimal loss of room space due to a typical cavity space of between 10mm and 25mm Maximum.
- Small surface defects can be hidden within the cavity formed by Speedline Drywall Adhesive dabs.
- Services can be incorporated behind the plasterboard, which reduces level of chasing out. (All Electrical & Plumbing guides should be adhered to).
- Speedline Thermal Laminate Board can be used to enhance thermal performance (see table on page 108 for further details).

Sectors

- Residential
- Healthcare
- Education
- Commercial
- Retail
- Student Accommodation
- RMI

WALL LINING SYSTEMS

SPEEDLINE DIRECT BOND SYSTEM



Speedline Direct Bond System

Speedline Drywall Adhesive will fix a wide range of gypsum plasterboards to most masonry backgrounds. The adhesive installation instructions should be followed while ensuring the masonry background is completely dry and free of contaminants. Additional Speedline Nylon Hammer Screws should be used to prevent early collapse of the board in the event of a fire. All perimeter joint locations should be sealed with Speedline Fire Rated Acoustic Sealant to achieve an airtight seal.

If considering using Speedline Direct Bond System onto a solid masonry wall then consideration must be given towards the condition of the wall and measures taken to ensure the external wall is fully weatherproof to prevent moisture penetration from occurring.

Speedline Drywall Adhesive is not suitable for applying foil backed plasterboards; this type of board should only be mechanically fixed onto a framing solution such as Speedline Wall Liner System.

Boards should only be applied to a maximum height of 3 metres whilst small rips should be avoided.

Speedline Thermal Laminate boards can be adhered using Speedline Drywall Adhesive, but will require additional mechanical fixing using Speedline Nylon Hammer Screws to ensure board stays in place in a fire situation. Use two fixings per board positioned at mid-height within the tapered edge, fixings should be installed after the dabs have set.

For further assistance and advice on the use of Speedline Direct Bond System, please contact **enquiries@speedlinedrywall.co.uk**

Preparation

Linings can be direct fixed to low, medium, and high suction masonry, pre-cast and in-situ concrete, ensuring all release agents, contaminants and dust have been suitably treated or removed. A suitable, proprietary bonding agent should be used when applying Speedline Drywall Adhesive onto concrete substrates, bonding agent to be applied in bands to correspond with dab centres.

Ensure all air paths & gaps in substrate are sealed, particularly at corners & junctions. Any perpendicular joints in block work should be filled to improve acoustic performance and heat loss.

Background should be checked for alignment and allowance for boards to pass over high spots on the masonry.

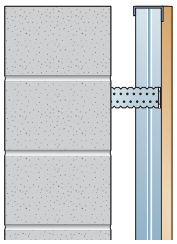
Mark guidelines on the soffit and floor, allowing for irregularities and establishing the new plumb wall plane.

Work out the position of the first board application and mark wall accordingly, allowing for board rips of less than 300mm to be eliminated.

Perimeter of Room

When installing boards a continuous band of Speedline Drywall Adhesive should be applied around the wall perimeter, at window/door openings & sockets, to improve the airtightness and reduce the effects of cold convection currents. This is particularly important with Speedline Thermal Laminate boards as it may reduce the performance of the wall construction. (Continuous bands should be applied as each board is being fixed).

If applied to an exterior wall, any Interior partitions abutting the direct bond system should be fitted first and the lining taken up to the plasterboard faces. This will aid & reduce flanking transmissions.



WALL LINING SYSTEMS

SPEEDLINE DIRECT BOND SYSTEM

Direct Bonding Dabs within field of plasterboards

Speedline Drywall Adhesive dab should be 250mm long and between 50mm & 75mm wide with a minimum dab thickness of 10mm and up to 25mm thick. Apply enough adhesive for one board at a time to give a minimum area of contact between board and substrate of 20%. Refer to table below for dab centres in relation to board thickness and width.

Once Speedline Drywall Adhesive has been applied, offer up the plasterboard and press firmly into place. Ensure board is in a plumb position and not resting on the floor, offcuts of board can be used as packing pieces, remove once dabs have set.

Speedline Thermal Laminate Boards require secondary mechanical fixing using two Speedline Nylon Hammer Screws per board, positioned at mid-height within the tapered edge. Fixings should be of a sufficient length to penetrate through board, dab and into the background by at least 25mm. Fixings to be installed once the dabs have set.

General Applications

Speedline Direct Bond System must be installed in accordance with Speedline recommendations and the recommendations of BS 8212:1995 and BS 8000: Part 8:1994.

Speedline Thermal Solutions

The table below provides details on U-Values (W/m^{2}K) achievable with the stated board thickness and masonry background. Please contact **enquiries@speedlinedrywall.co.uk** for further assistance and U-Value calculations.

Adhesive dab centres for gypsum plasterboards and Speedline Thermal Laminate Boards

Thickness/ Type of Board	Width (mm)	Adhesive Centres (mm)	Rows of dabs per board
9.5mm	900	450	3
9.5mm	1200	400	4
12.5mm	1200	600	3
All Laminates	1200	600	3

Masonry Cavity Wall

Board Thickness	Thermal Resistance (m^{3}K/W)	U-Value (W/m^{2}K)
62.5mm	2.31	0.30
72.5mm	2.79	0.26
82.5mm	3.30	0.23
92.5mm	3.70	0.21

The above U Value calculation is based upon a masonry cavity wall (103mm facing brick – 50mm clear cavity – 100mm lightweight blockwork 0.22 W/mK) with Speedline Thermal Laminate Board being directly bonded to the internal surface with Speedline Drywall Adhesive.

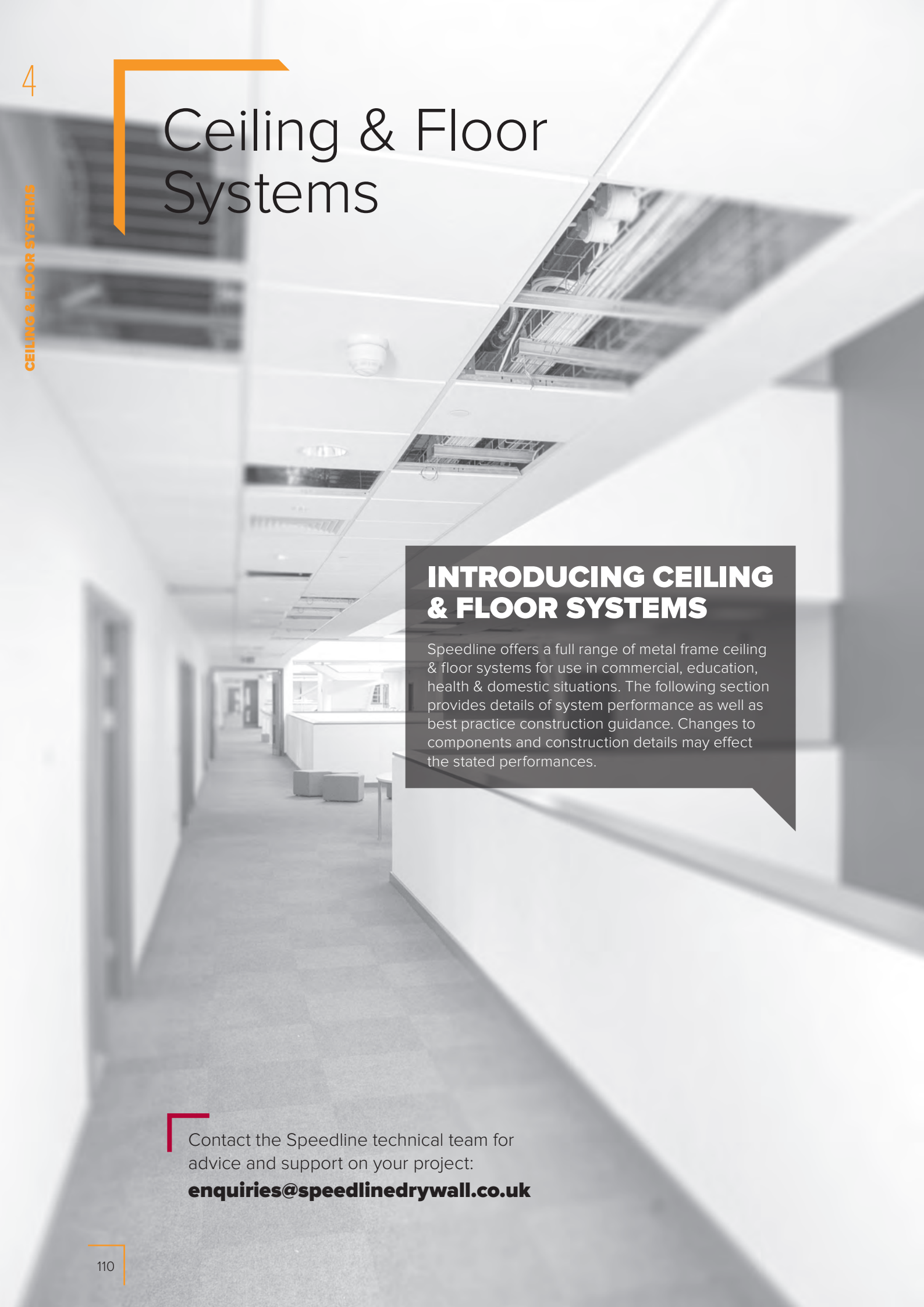
SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Ceiling & Floor Systems

www.speedlinedrywall.co.uk

REVISED
30/08/2022

Ceiling & Floor Systems

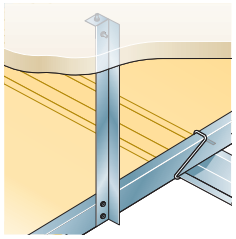


INTRODUCING CEILING & FLOOR SYSTEMS

Speedline offers a full range of metal frame ceiling & floor systems for use in commercial, education, health & domestic situations. The following section provides details of system performance as well as best practice construction guidance. Changes to components and construction details may effect the stated performances.

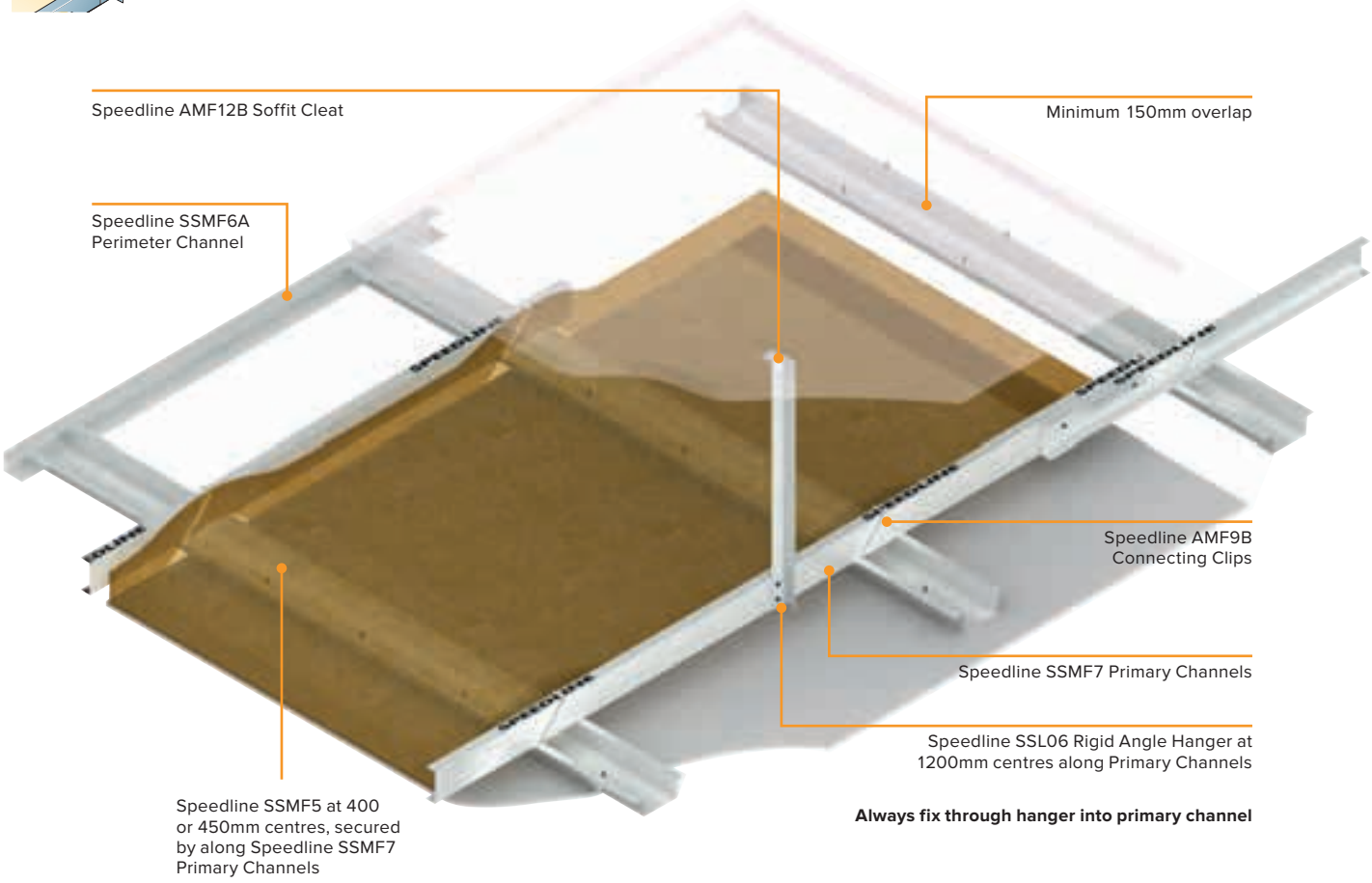
Contact the Speedline technical team for advice and support on your project:
enquiries@speedlinedrywall.co.uk

Contents



CEILINGS & FLOOR SYSTEMS

SPEEDLINE MF CEILING SYSTEMS



Speedline MF Suspended Ceiling System is ideal for commercial and domestic applications, where services are to be incorporated, or when upgrading and protecting existing structures. Plenum depth is fully variable and dependent on plasterboared type used, excellent levels of sound insulation and fire resistance can be achieved.

Always suspend heavy loads, air ducting, lighting units, etc. directly from structural soffit to prevent point loading of the ceiling system. Speedline also recommend that when using Speedline AMF9B connecting clips they are alternated along primary channals.

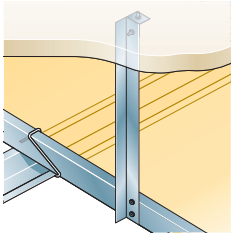
Benefits

- Easy to cut to length using tin snips.
- Mineral wool can be incorporated for thermal or acoustic insulation.
- Creates a seamless surface suitable to receive most decorative finishes.
- Fits easily together.
- Suitable for fixing all types of plasterboard.
- Creates void above the ceiling for services.
- Improved acoustic performances can be achieved by using Acoustic Hangers.

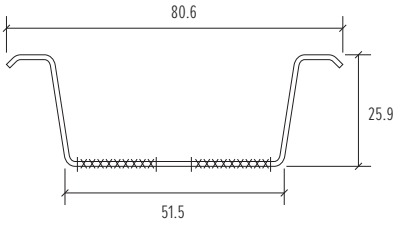
Sectors

- Residential
- Healthcare
- Education
- Commercial
- Offices
- Retail
- RMI
- Student Accommodation

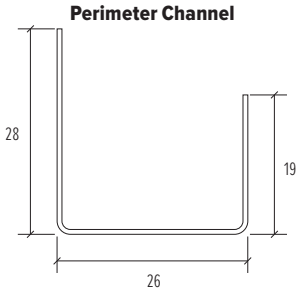
SPEEDLINE MF CEILING SYSTEMS



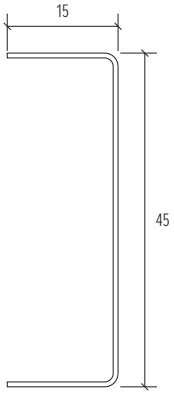
50mm Ceiling Furring (Tophat Channel)



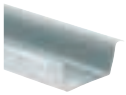
Perimeter Channel



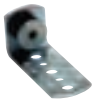
Primary Channel

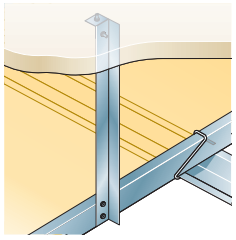


METAL FURRING SYSTEM

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	SSMF5	Speedline 50mm Ceiling Furring x 0.5mm	3.60	1.73
	SSMF6A	Speedline Perimeter Channel x 0.5mm	3.60	1.13
	SSMF7	Speedline Primary Channel x 0.7mm	3.60	1.58

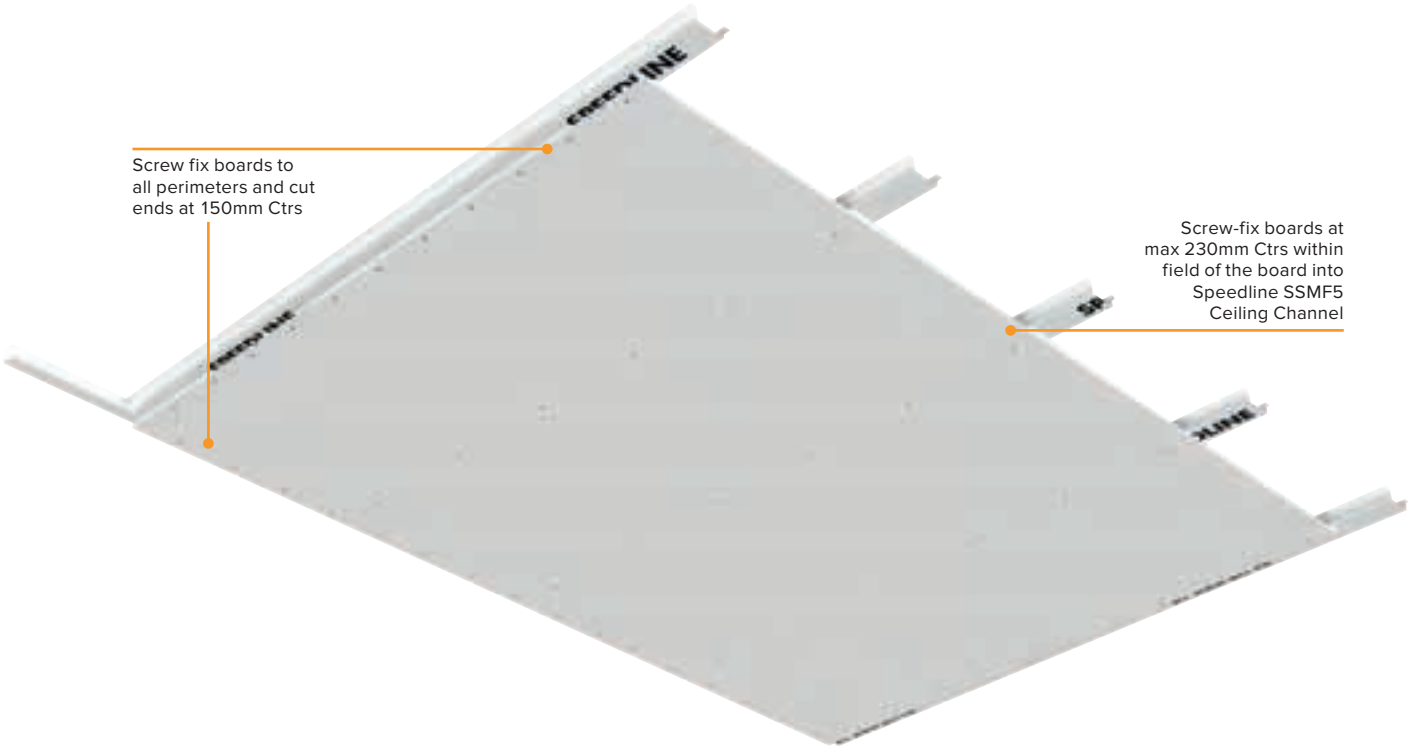
METAL FURRING SYSTEM ACCESSORIES

	Product Code	Product Description	Qty per Box	Weight per Box Kgs
	AMF9B	Pre-formed Clips	200	2.00
	SSL06	Angle 25 x 25 x 0.8m 90° Angle	3.00 3.60	0.86 1.03
	AMF12B	Angle Fixing Bracket	1000	9.00
	AAH01B	Acoustic Hanger 35mm	100	6.00
	AAH02B	Acoustic Hanger 70mm Use 6mm Threaded Bar with AH01B & AAH02B	100	7.00



CEILINGS & FLOOR SYSTEMS

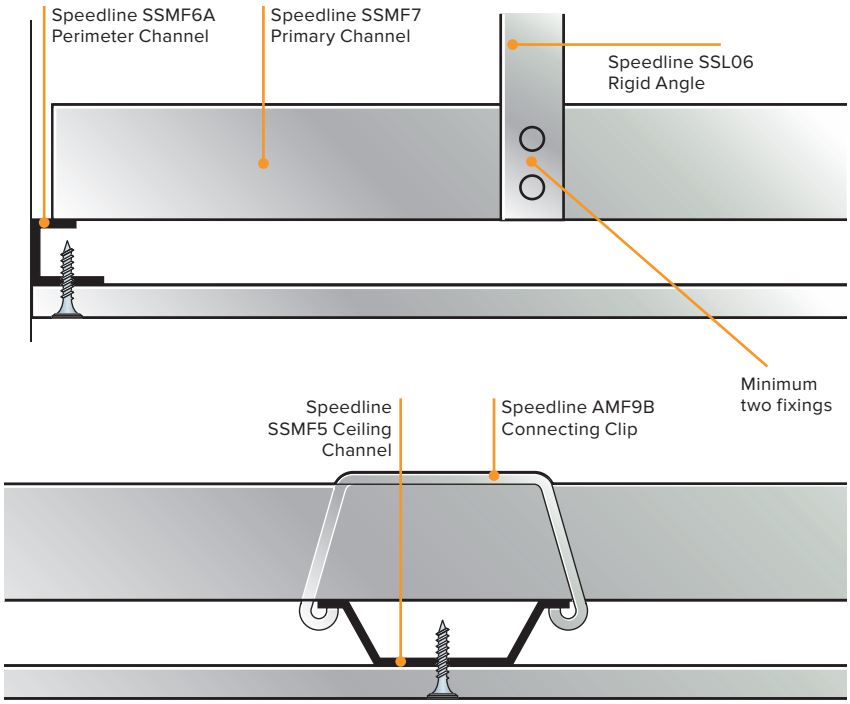
SPEEDLINE MF CEILING SYSTEMS



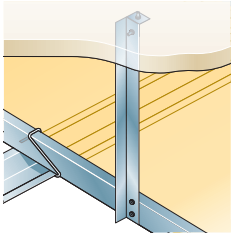
Fixing Plasterboard

When fixing plasterboard onto Speedline MF Ceiling systems, the long bound edge should be positioned at right angles to the Speedline Ceiling Channels. Plasterboard joints should be staggered by half a board length whilst end joints must occur within the centre of the ceiling channel. All joints should be lightly butted together leaving a gap no greater than 3mm. For double layer systems, ensure all joints on the outer layer are staggered in relation to the inner layer. Plasterboard should be fixed with the appropriate length of Speedline Drywall Screws at 150mm centres to all perimeters and cut ends and 230mm centres within the field of the board.

Ceiling Perimeter



SPEEDLINE MF CEILING SYSTEMS



Acoustic Sealant

Seal any air gaps at junctions of linings with walls, floors, ceilings and around openings with a continuous bead of Speedline Fire Rated Acoustic Sealant to clean dry dust free surfaces leaving no air gaps.

MF Ceiling Installations

MF Ceiling Systems are typically used within the residential sector, primarily in apartments. When they are installed in small rooms with low ceiling voids particularly where rooms have been well sealed and are airtight – in a minority of cases, movement of the metal components in the ceiling has caused unacceptable noise, typically when doors are opened and closed.

To overcome this problem, in all domestic situations we recommend that Speedline SSMF5 Ceiling Channel is fitted onto Speedline SSMF7 Primary Channel using two Speedline Drywall Pan Head Screws at each connection.

Fire Resistance

Speedline MF Ceiling System has been tested at the Building Research Establishment to BS 476; part 23:1987. The tests were conducted under steel beams that supported pre-cast concrete slabs and the tests used various densities and brands of fire resistant wallboards.

Report References:

BRE Test Reference 211722 2003
60mins with 1 x 12.5mm Siniat GTEC Fire Board

BRE Test Reference 236863 2007
60mins with 2 x 12.5mm Knauf Fire Panel

BRE Test Reference 236868 2007
60mins with 1 x 12.5mm British Gypsum Gyproc Fireline

Please contact **enquiries@speedlinedrywall.co.uk** for further assistance.

A further test has also been conducted to EN 1365-2:2000 under a loaded timber floor using 2 layers of 12.5mm British Gypsum Gyproc Fireline with minimum board mass of 10kg/m^2. The result achieved in test no 224468 is 88 minutes duration of effective protection.

Sound Insulation

Speedline MF Ceiling System offers excellent acoustic performance for airborne sound (R_w) and impact (L_{nw}) and will improve the sound insulation of both timber and concrete floors. Results are variable and mainly dependent on the depth of the ceiling void and the type of structure to which the system is fixed.

Acoustic Hangers

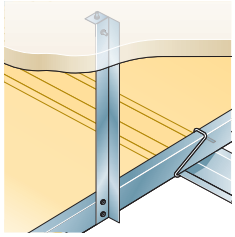
The important factors in maximising the improvements are cavity depth, insulation and acoustic hangers. Considerable sound improvement can be achieved by suspending an MF System using acoustic hangers – 35mm (232922) or 70mm (232929) which de-couple the ceiling from the structural soffit.

Joining Speedline Components

To join Speedline SSMF5 Ceiling Channels overlap by at least 150mm and secure to both sides with suitable fixings. To join Speedline SSMF7 Primary Channels overlap back to back by at least 150mm and secure with two nuts and bolts. See details below.

Speedline Primary Channel Joint

Speedline Ceiling Channel Joint



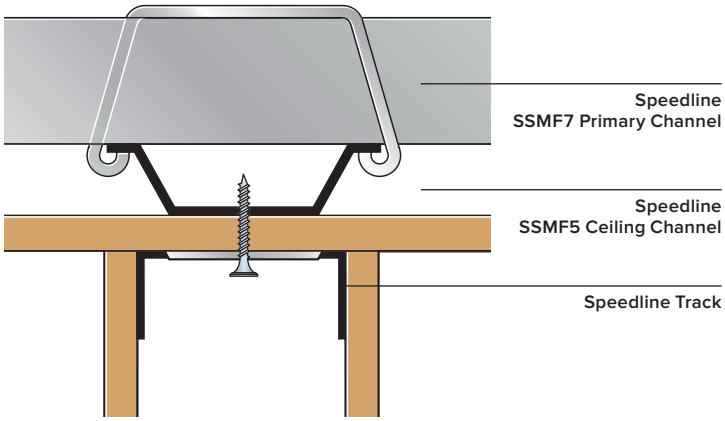
CEILINGS & FLOOR SYSTEMS

SPEEDLINE MF CEILING SYSTEMS

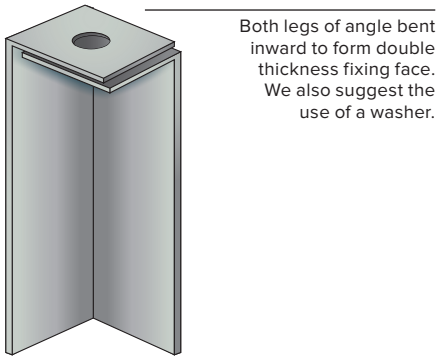
When fixing Speedline SSL06 Angle direct to the soffit without the use of Speedline AMF12B Angle Fixing Brackets, the angle can be cut and folded inwards to provide an alternative fixing detail (see detail below). A suitable fixing should pass through both legs of the angle into the structural soffit. When using this method the imposed load the system can support is reduced by 25% – refer to imposed load table below.

E.g. a 1200 x 1200 grid new safe working load is 23kg/m^2, therefore could not support a double layer of sound resistant plasterboard without reducing your Speedline SSMF7 Primary Channels to a maximum of 900mm centres.

Partition Head



Detail

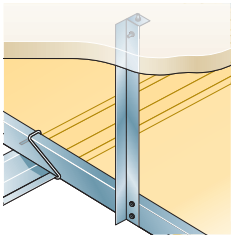


Imposed Loads

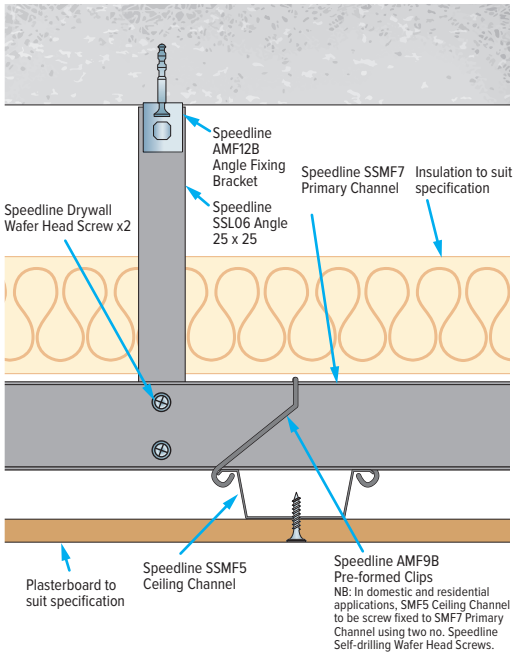
The Speedline MF Ceiling System can support the following imposed loads.

Suspension point centres mm	SMF7 Primary Channel centres mm	Maximum load including weight of board if using angle cleats. Up to kg/m^2	Max load fixing angle direct to soffit with approved detail – kg/m^2
1200	1200	30	22
1200	900	40	30
1200	600	60	45

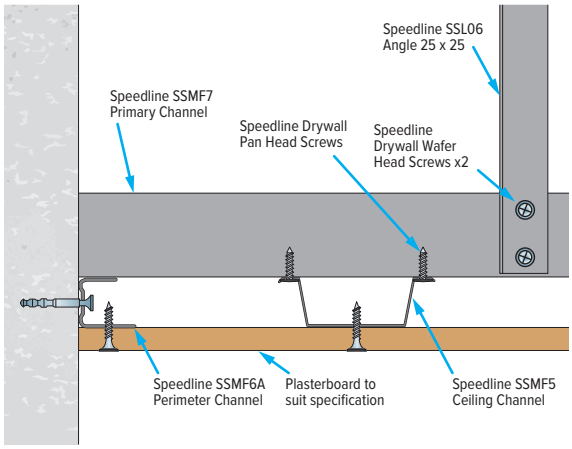
SPEEDLINE MF CEILING SYSTEMS



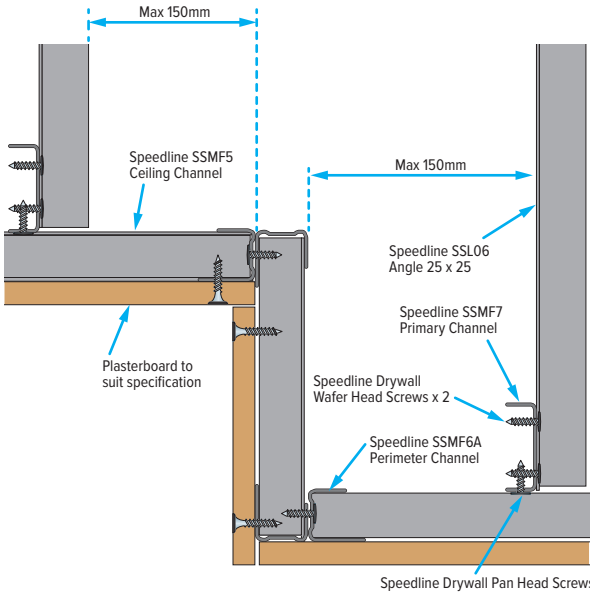
MF CEILING SYSTEM
GENERAL LAYOUT



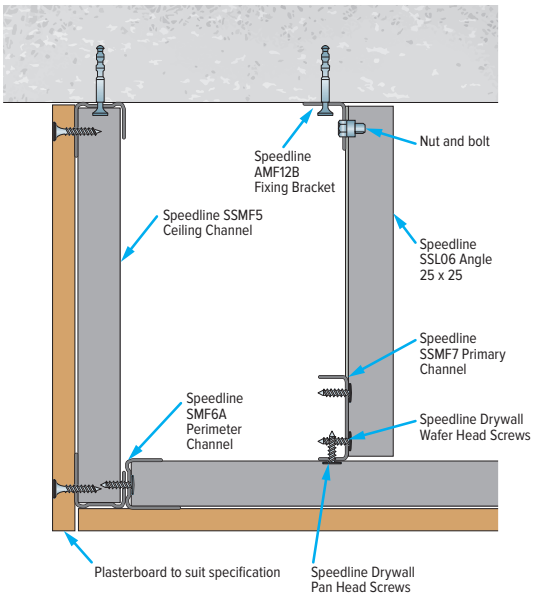
MF CEILING SYSTEM
CEILING TO WALL ABUTMENT

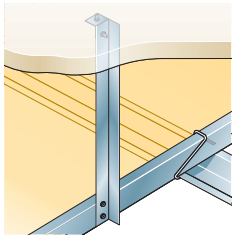


MF CEILING SYSTEM
CHANGE OF LEVEL



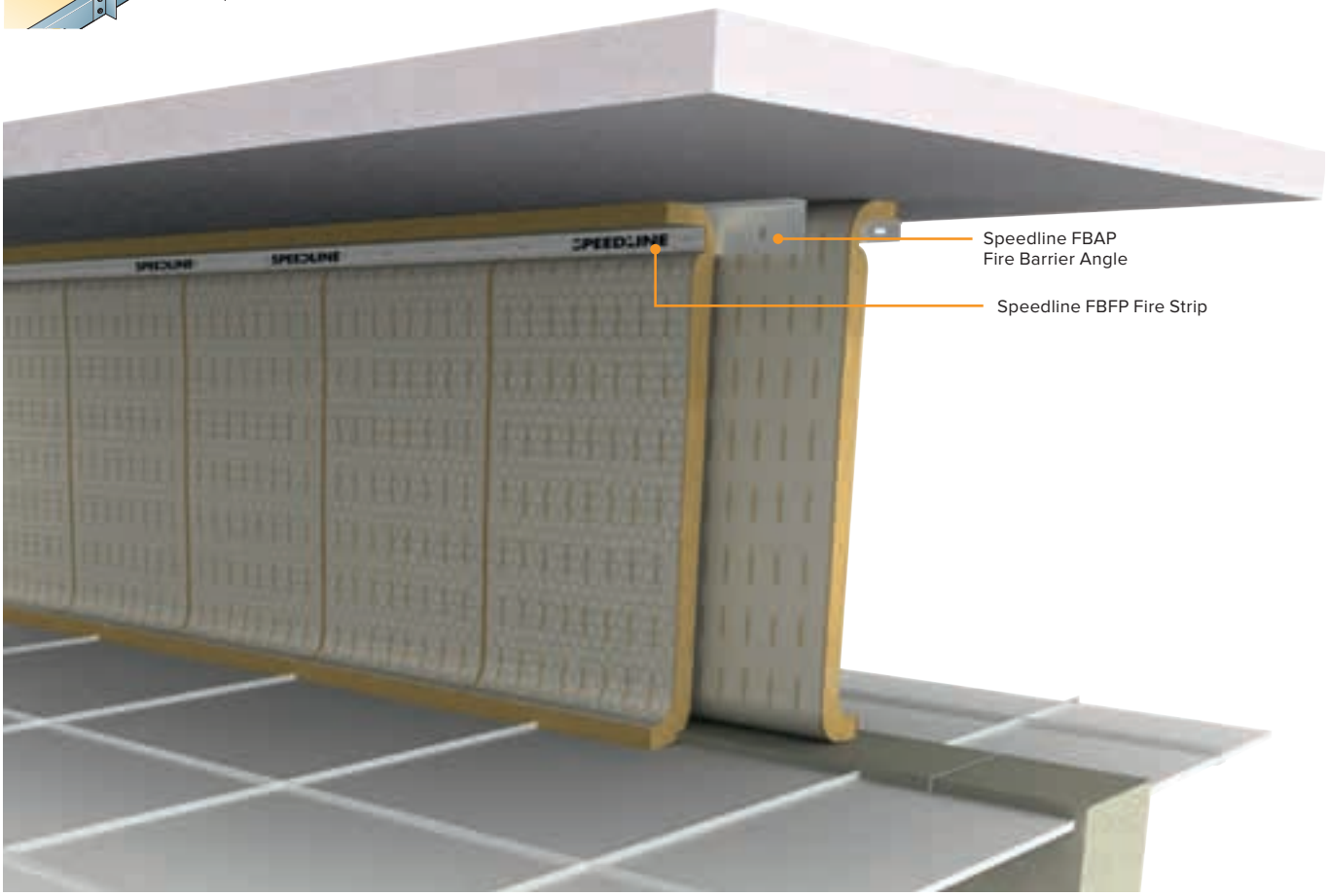
MF CEILING SYSTEM
BULKHEAD





CEILINGS & FLOOR SYSTEMS

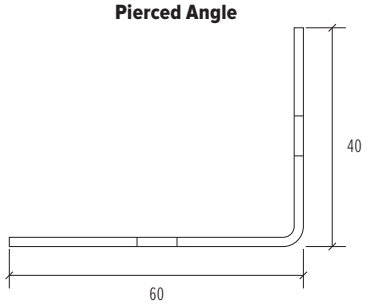
SPEEDLINE MF FIRE BARRIER SYSTEMS



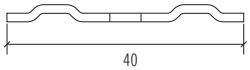
The Speedline MF Fire Cavity System is designed to restrict the passage of flames and smoke between suspended ceilings, floors or roofs. The system uses fire barrier quilt stitched with wire and faced on one side with 25mm galvanised wire mesh.

Fire tests to BS 476: Part 22:1987: Clause 5 have been carried out at Warrington Fire Research Centre using Lancaster Fireshield and at the Building Research Establishment and the Building Test Centre using 50mm Rockwool Firesafe Insulation Fire Barrier achieving 90 minutes integrity and 30 minutes insulation.

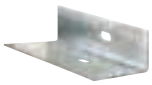
Pierced Angle



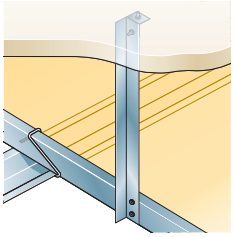
Pierced Flat Strip



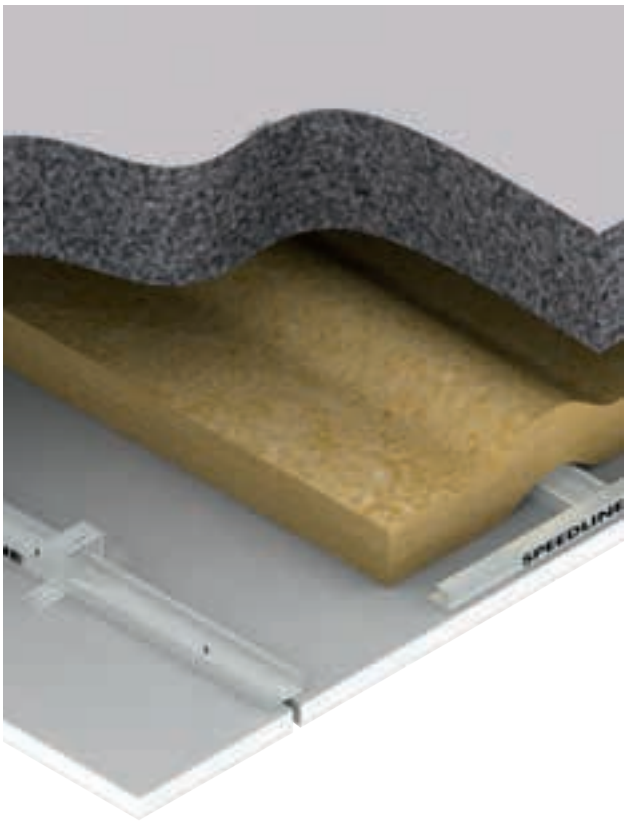
FIRE BARRIER SYSTEM

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	FBAP	60mm x 40mm x 1.5mm Angle, Pierced	3.00	3.38
	FBFP	40mm x 1.5mm Flat Strip Pierced	3.00	1.41

SPEEDLINE CEILING LINER SYSTEMS



Suitable for Concrete and Timber Floors



Often used in commercial and domestic situations and suited to both new-build and refurbishment projects. The Speedline Ceiling Lining System is suitable for most internal applications

It can be used under timber or concrete flooring with any proprietary gypsum plasterboard. Insulation can be incorporated within the ceiling cavity for improved acoustic performance.

Construction

Fix Speedline SWL60 to the perimeter of the room at maximum 600mm centres with the longer leg facing the bottom. Install Speedline AWL03B, AWL04B or AWL08B Brackets at maximum 900mm centres with suitable fixings. Locate Speedline SWL507 Ceiling Liner at 400mm or 450mm centres into perimeter channel and brackets, secure each leg of the bracket into the ceiling liner with Speedline Drywall Wafer Head Screws. See Metal Framing Centres and Fixing Bracket/Timber Connector Centres on page 122.

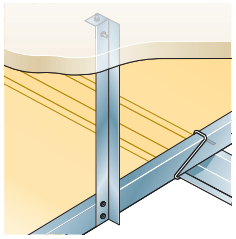
Position fixing brackets – AWL03B (75mm leg), AWL04B (125mm leg) or AWL08B (175mm leg) – to timber joists or concrete. For large areas of ceiling use connector AWL05B to join the Ceiling Liner SWL507 together.

Timber connectors are also available, reference AWL06 (55mm leg) and AWL07 (155mm leg) which allow fixing to the side of timber joists – see page 122.

Fix plasterboards with long edges at right angles to Speedline SWL507 Ceiling Liner and fix to framing with the appropriate length of Speedline Drywall Screw at 230mm maximum centres within the field of the board and at 150mm centres on cut edges and to all perimeters. For double layer systems, ensure all joints on the outer layer are staggered in relation to the inner layer. Outer layer should be fixed at the same centres as previously described.

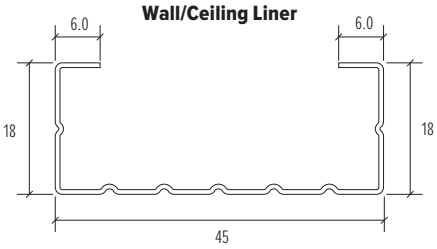
In addition to improving acoustic performance, Speedline Ceiling Liner Systems can also improve fire resistance dependent on gypsum board type being used. Please contact **enquiries@speedlinedrywall.co.uk** for further assistance.

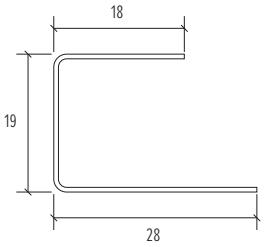
Speedline Ceiling Liner Systems also provide a cavity within which services can be routed without the need for drilling of joists.



CEILINGS & FLOOR SYSTEMS

SPEEDLINE CEILING LINER SYSTEMS





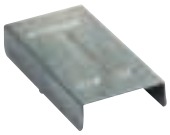
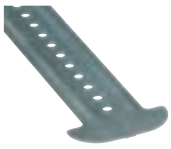
Benefits

- Easy to cut to length using tin snips.
- Mineral wool can be incorporated for thermal or acoustic insulation.
- Creates a seamless surface suitable to receive most decorative finishes.
- Fits easily together.
- Suitable for fixing all types of plasterboard.
- Creates void above the ceiling for services.
- Good method to level poor concrete and wooden floors.

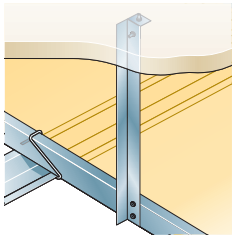
CEILING LINER SYSTEM

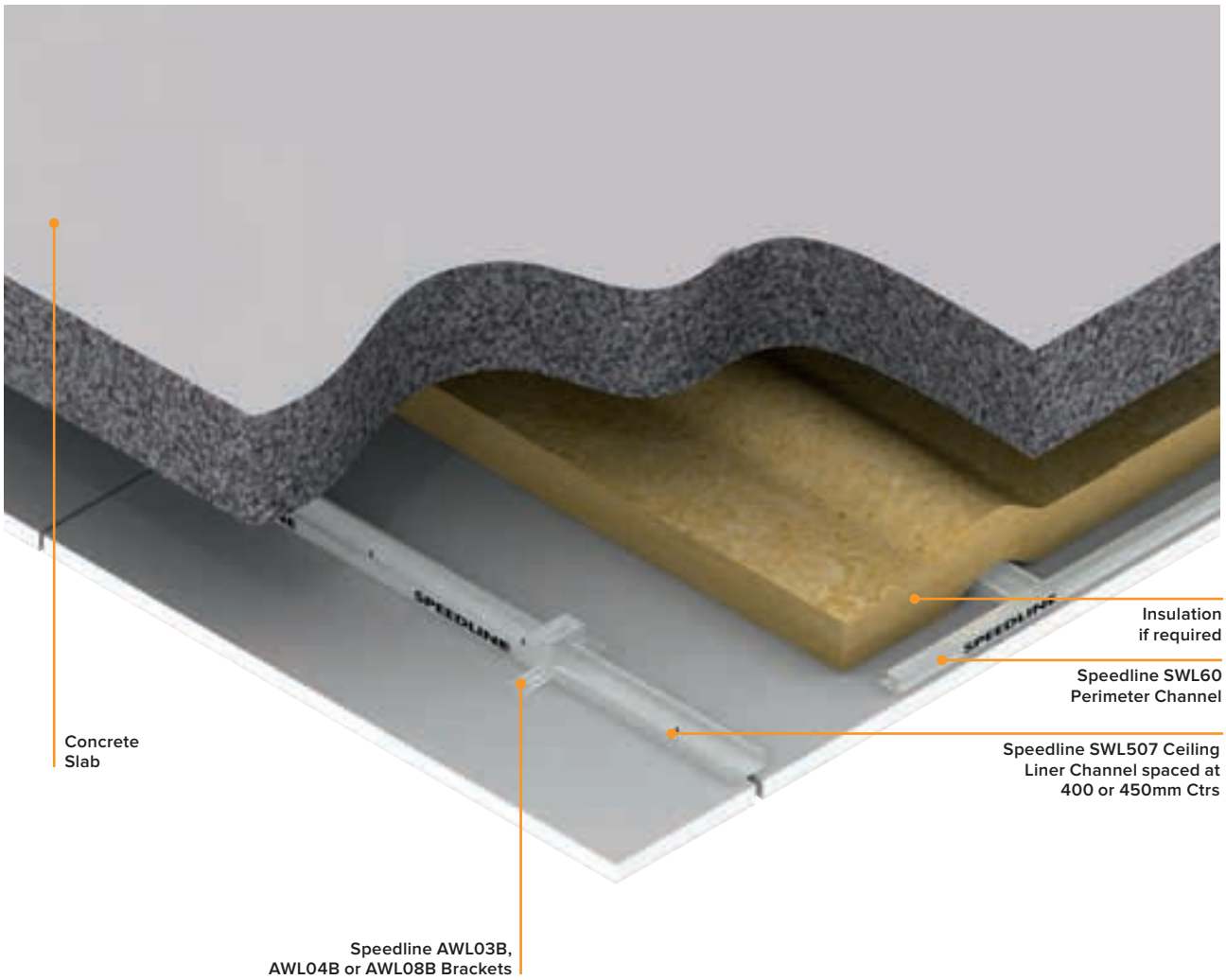
	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	SWL507	Speedline Wall/Ceiling Liner x 0.5mm	2.40 2.70 3.00 3.60	0.83 0.94 1.04 1.24
	SWL60	Speedline Perimeter Track x 0.5mm	3.00	0.74

ACCESSORIES (CEILING LINER SYSTEM)

	Product Code	Product Description	Qty Per box	Weight per Box Kgs
	AWL03B	Fixing Bracket – 75mm leg	100	3.70
	AWL04B	Fixing Bracket – 125mm leg	100	5.60
	AWL08B	Fixing Bracket – 175mm leg	100	7.50
	AWL058	Wall/Ceiling Liner Connector	50	1.35
	AWL06B	Timber Connector	200	5.00
	AWL07B	Timber Connector	100	7.00

SPEEDLINE CEILING LINER SYSTEMS





Fire Resistance

The latest test carried out at the Warrington Fire Research Establishment was tested to the new European Standard – BS EN 1365-2:2000 – Fire Resistance Tests for Load Bearing Elements/part 2: Floors and Ceilings. This test is more stringent than the previous British Standard.

The test was conducted under a wooden floor with weights loaded above, using one layer of Siniat 12.5mm GTEC Fire Board. Minimum board mass must be 10.0kg/m^2. Result achieved from test number WARRES 114632 is 60 minutes load bearing capacity, integrity and insulation.

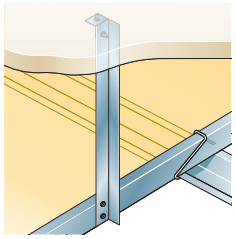
Sound Insulation

The Speedline Ceiling Lining System achieves good acoustic performance for both airborne sound (R_w) and impact (L_{nw}).

This system will improve the sound insulation of both timber and concrete floors. Results are variable mainly dependant on the depth of the ceiling void and the type of structure to which the system is fixed.

The important factors in maximising the improvements are:-

- **Cavity Depth.**
- **Cavity Insulation.**
- **Plasterboard type and density.**

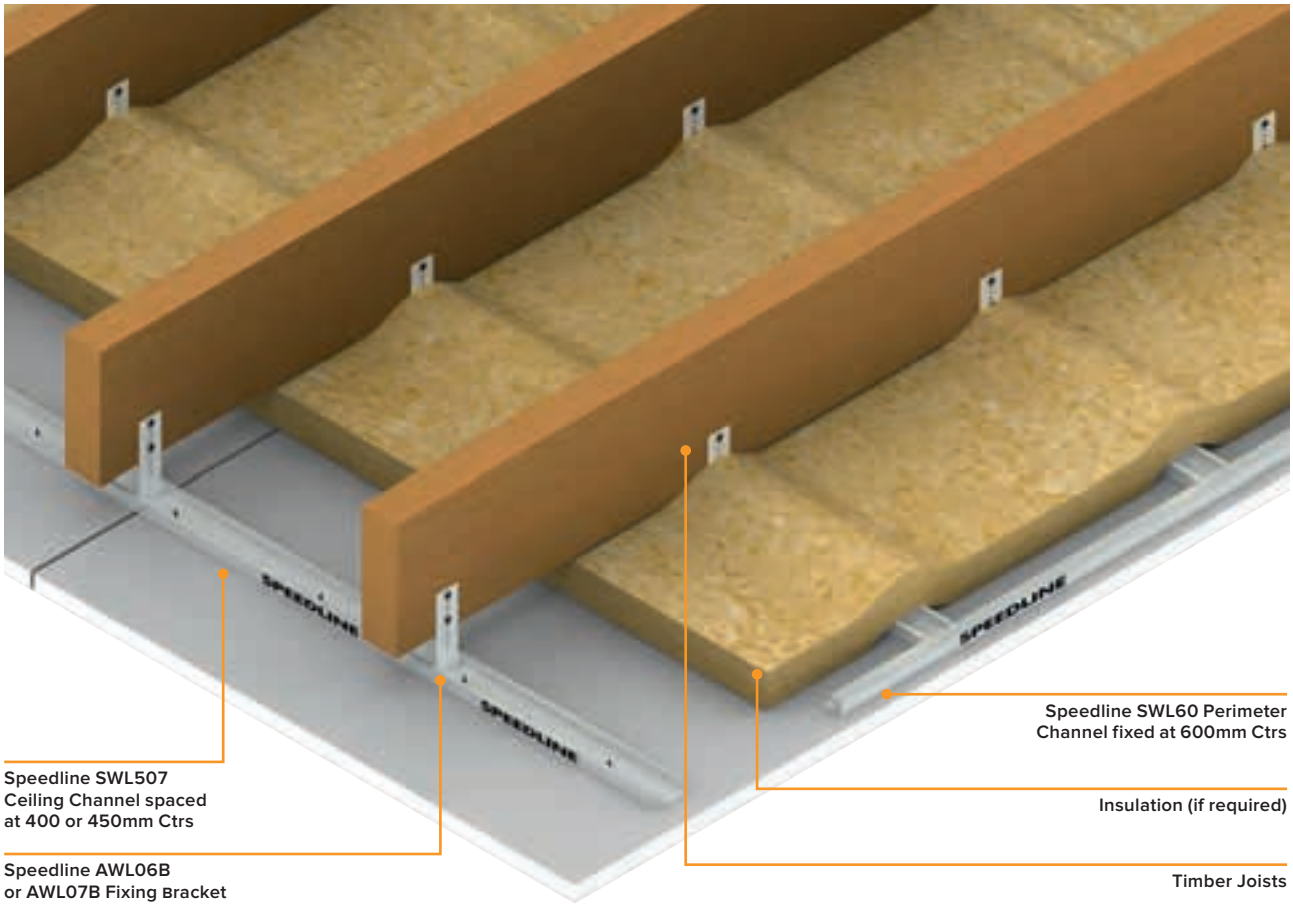


CEILINGS & FLOOR SYSTEMS

SPEEDLINE CEILING LINER SYSTEMS

SOLUTIONS

TIMBER FLOORS

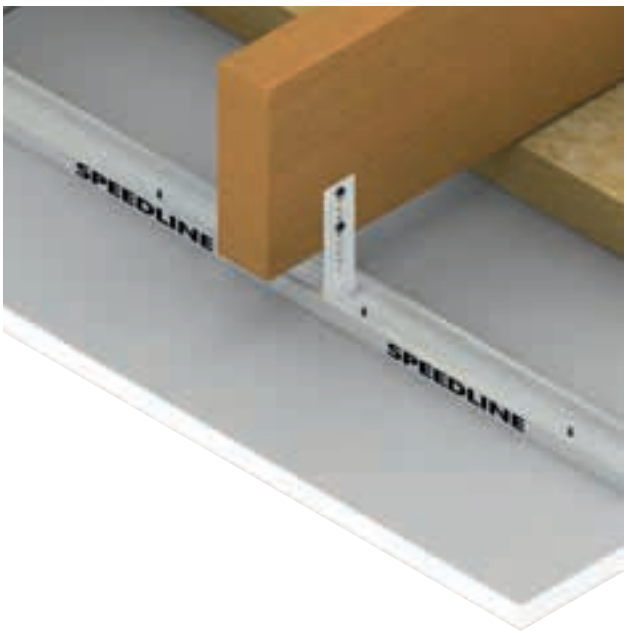


Metal Framing Centres – Quick Reference

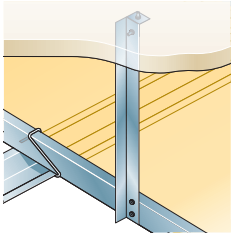
Board thickness (mm)	Board Length (mm)	Ceiling Liner (WL507) Ctrs (mm)
12.5mm, 15mm & 19mm	2400, 3600	400
	1800, 2700, 3000	450

Fixing Bracket/Timber Connector Centres – Quick Reference

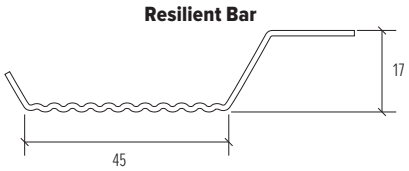
Board Thickness	Maximum (mm)
9.5mm plasterboard single layer	900
12.5mm plasterboard single layer	900
15mm plasterboard single layer	900
All double layer boarding	600



SPEEDLINE RESILIENT BAR CEILING SYSTEMS



Timber Joists

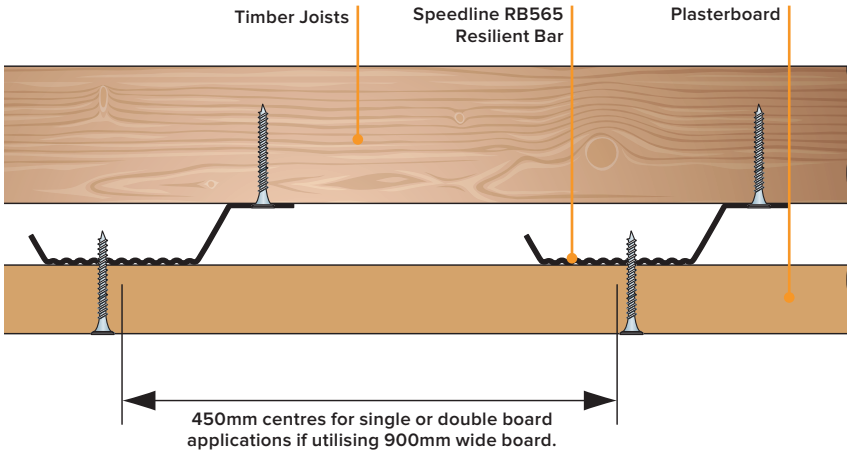


The Speedline RB565 Resilient Bar is designed to provide improved sound insulation when constructing a conventional ceiling under timber joists.

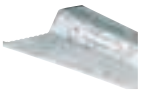
Mineral wool insulation can also be included in the floor cavity to improve acoustic performance. To ensure maximum sound insulation performance, screws fixing the plasterboard must not be in contact with the joists.

Speedline RB565 Resilient Bar is fixed to the underside of joists at 400mm or 450mm centres depending on board length with 36mm Speedline Drywall Coarse Thread Screws, additional resilient bar noggins are required around the perimeter of the ceiling. Resilient bars are joined by butting together under the timber joist.

Position plasterboards at right angles to the resilient bars and fix at 230mm centres within the field of the board and at 150mm centres on cut edges and to all perimeters using the appropriate length Speedline Drywall Screw. For double layer systems, ensure all joints on the outer layer are staggered in relation to the inner layer. Outer layer should be fixed at the same centres as previously described.



RESILIENT BAR



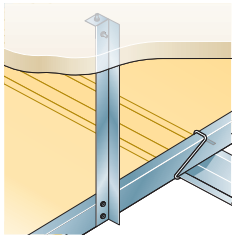
Product Code	Product Description	Stock Lengths Metre	Weight per Lenwgth Kgs
RB565	Speedline Resilient Bar x 0.5mm	3.00	1.05

The following were tested as floor applications under timber beams 235mm x 50mm spaced at 450mm centres with 15mm OSB fixed to the top of the joists.

Each ceiling was boarded with an inner layer of 19mm standard plasterboard (plank) and an outer layer of 12.5mm sound resistant wallboard. 100mm glass mineral wool was infilled into the joist cavities.

	Boards fixed direct to timber beams in the conventional method	Boards fixed to our Resilient Bar (RB565) spaced at 400mm centres
Airborne R_{wdB}	40	54
Impact Lnw	74	61
Airborne $R_w + C_{tr}$	33	45

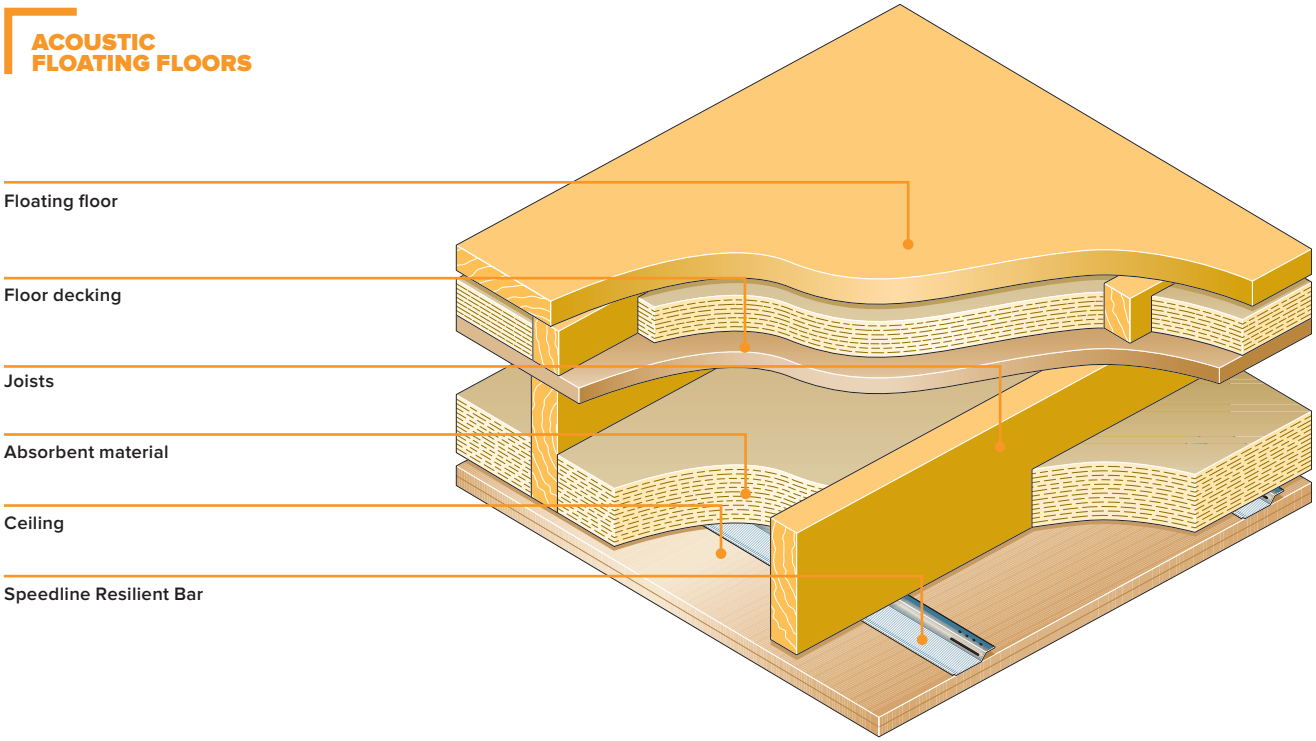
Recommendations for maximum loadings for Resilient Bars	
Centres (mm)	Uniformed distributed load (kg/m²)
400	35
450	30



CEILINGS & FLOOR SYSTEMS

SPEEDLINE RESILIENT BAR CEILING SYSTEMS

ACOUSTIC FLOATING FLOORS



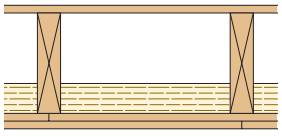
Speedline RB565 Resilient Bar

Is now fully approved within the following Robust Detail Separating Floors, solutions:

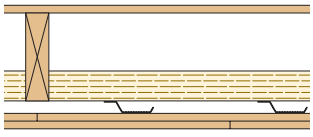
- **Concrete E-FC-1.**
- **Timber I – Joists E-FT-1.**
- **Timber Solid Joists E-FT-2.**
- **Metal Web Joists E-FT-3.**
- **Timber I Joists E-FT-4.**
- **Timber I Joists E-FT-5.**
- **Beam Metal Joists E-FS-2.**

The Robust Detail acoustic test criteria has been undertaken at the Sound Research Laboratories in Suffolk, report number C/09/5L/20805/R01 refers.

Laboratory Test Construction of Floor with Direct Fix Ceiling



Laboratory Test Construction of Floor with the Ceiling Connected via Resilient Bars



For resilient bars to be approved for use in Robust Detail separating floors they must be tested as detailed in Appendix E of the Robust Details Handbook. The testing procedure consists of testing a standard floor construction without resilient bars and then testing the same standard floor with the addition of resilient bars installed between the floor joists and the plasterboard ceiling. Both airborne sound and impact sound tests are carried out on both floor constructions.

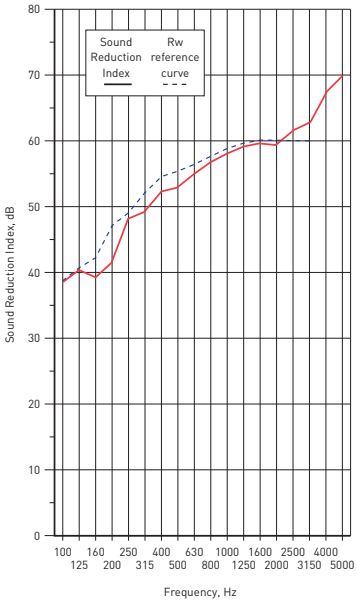
The required minimum improvements for the floor with resilient bars attached compared to the floor without rewsilient bars is 17 dB improvement in airborne sound insulation ($R_w + C_{tr}$) and 16 dB improvement in impact sound insulation (L_w). The Speedline RB565 resilient bar has achieved these minimum standards.

Speedline RB565 resilient bar can be used in Robust Detail separating floors without the need for on-site acoustic testing.

Data Sheet 3

Test Number	5	**Air temperature:**	21.1 °C
Client:	Metsec	**Air humidity:**	64%
Test Date:	23/06/2009	**Receiving room volume:**	55 m³
Sample length:	3.985 m	**Source room volume:**	50 m³
Sample width:	2.715 m	**Sample weight:**	38.1 kg/m²
Product Identification:	Timber base floor as per Robust Detail Appendix E with RB565 resilient bars installed at 400mm centres		

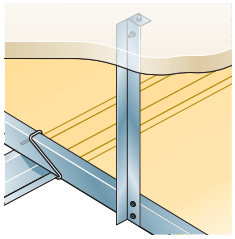
Freq f Hz	Sound Reduction Index, dB 1/3 Oct	1/1 Oct
50+	32.6	
63+	20.5	24.5
80+	29.7	
100	36.5	
125	40.4	38.2
160	38.6	
200	42.4	
250	47.4	45.3
315	49.3	
400	51.7	
500	52.4	52.7
630	54.3	
800	56.9	
1000	58.6	58.1
1250	59.1	
1600	59.0	
2000	59.4	60.0
2500	62.2	
3150	63.0	
4000	66.8	65.7
5000	70.2*	
6300+	74.0*	
8000+	75.3*	74.3
10000+	73.7*	
Average 100-3150	52.0	

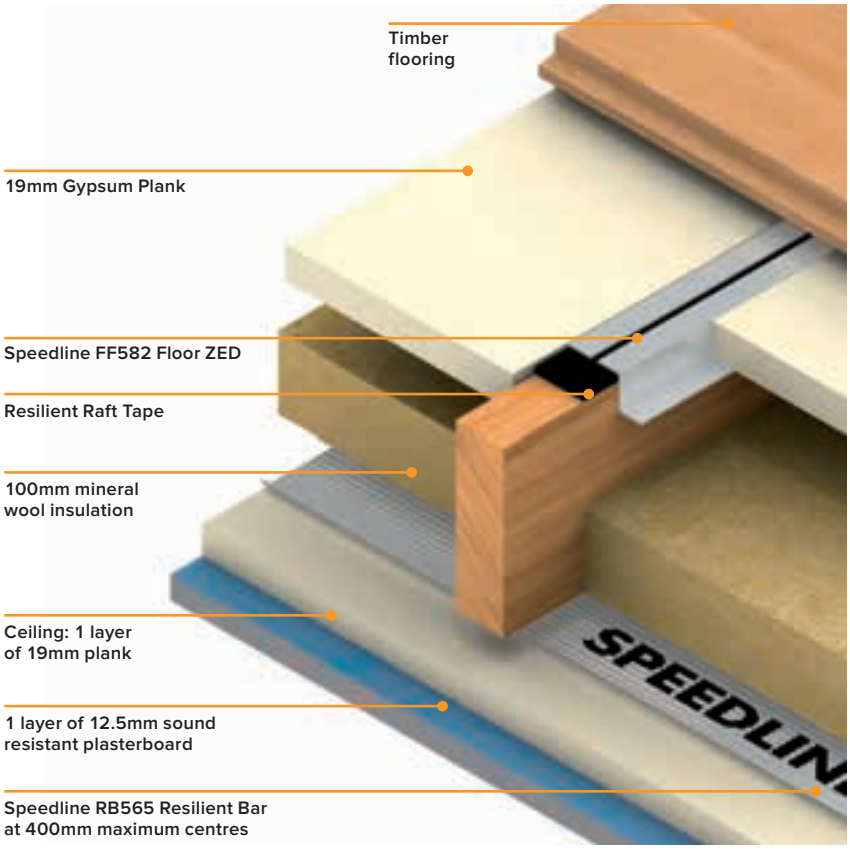


Rating according to BS EN ISO 717-1:1997
Rw(C;Ctr) = **56 (-2;-6)** dB

Notes * designates measurement corrected for background
designates limit of measurement due to background
+ designates frequency beyond standard and not UKAS accredited

SPEEDLINE SEPARATING FLOOR SYSTEM





Benefits

- Minimal increase in floor depth.
- Ideal for conversion work & refurbishment.
- Suitable for any size timber joist.
- Improvement of sound insulation.
- Floor floats independent of original structure.
- Fast and simple to fit.
- Cost effective.

The Speedline Floating Floor System offers excellent acoustic improvement for both airborne and impact sound transfer.

This system is ideal for residential conversions and refurbishments of older properties to upgrade existing timber floors. It can also be used to improve sound insulation from upper floors in new build projects.

Sectors

- Residential – change of use from House to separate Apartments.

Construction

Flooring

Fit self adhesive resilient raft tape along the length of each joist.

On top of the resilient raft tape place Speedline FF582 (Floor ZED Sections) each side of the joist with the large flange on top of the joist. For smaller joists it may be necessary to overlap the flanges of the Floor ZED Sections. On larger joists there can be a gap between the sections See details below. To help installation it may be necessary to temporarily secure the Floor ZED Sections into place using screws. The screws should be removed prior to installing the floor surface to ensure optimum performance.

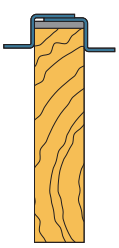
19mm plank is cut neat (not tight) to fit between the floor ZED sections. The next board should be butted tightly to the previous board.

The timber flooring is then laid across the top at 90° to the Floor ZED Sections and screw fixed through the plank and into the bottom flange of the Floor ZED Section using suitable screws. It is important to ensure that any temporary screws are removed from the Floor ZED Sections before fitting the timber flooring and that no fixings are allowed to connect the Floor ZED Section to the timber joist through the timber flooring.

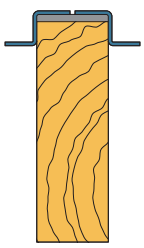
A 5mm clearance gap must be left at perimeter walls which must be fully filled with Speedline Fire Rated Acoustic Sealant.

By following this procedure a completely free floating floor has been created.

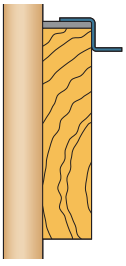
Small joist

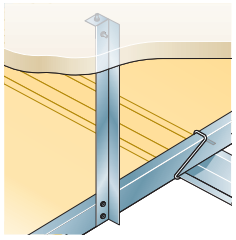


Large joist



Perimeter joist

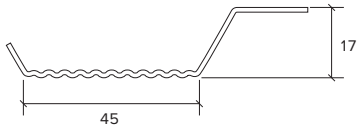




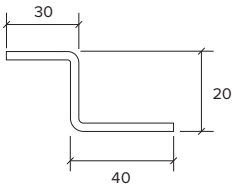
CEILINGS & FLOOR SYSTEMS

SPEEDLINE SEPARATING FLOOR SYSTEM

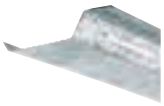
Resilient Bar



Floor Zed



RESILIENT BAR



Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
RB565	Speedline Resilient Bar x 0.5mm	3.00	1.05

FLOOR ZED

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
FF582	Speedline Floor Zed x 0.7mm	2.40	1.13

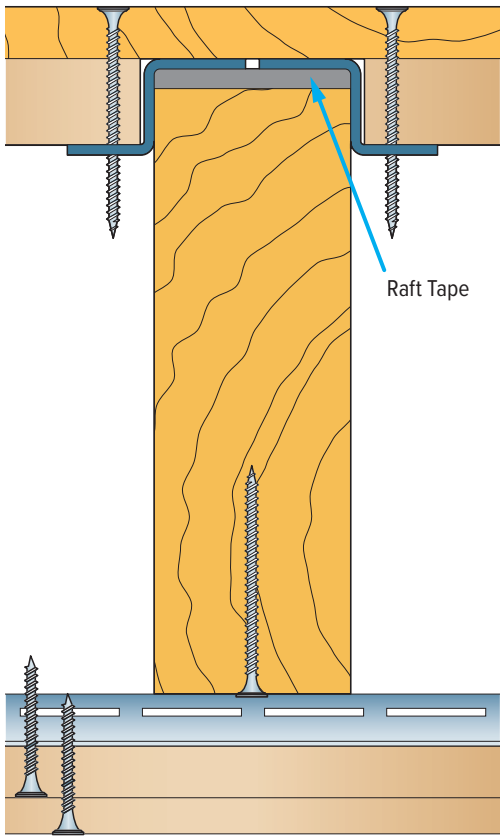
Ceilings

Speedline RB565 Resilient Bar is fixed at right angles to the joists at maximum 450mm centres for single or double board applications.

Bars are joined by butting together under the timber joist. Plasterboards are fixed with long edges at right angles to resilient bars at 230mm centres within the field of the board and at 150mm centres on cut edges and to all perimeters using the appropriate length Speedline Drywall Screw. For double layer systems, ensure all joints on the outer layer are staggered in relation to the inner layer. Outer layer should be fixed at the same centres as previously described.

To achieve maximum sound insulation performance, ensure that none of the board fixings penetrate through the resilient bar and into the timber joists.

The addition of glass mineral wool insulation within the floor cavity will improve the acoustic performance.



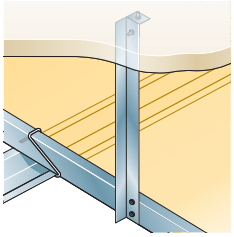
Performance Data
Floor – 19mm plank on our Floor Zed profile FF582 located over joists 235mm x 50mm spaced at 450mm centres clad with 15mm OSB board. Insulation – 100mm mineral wool in cavity. Ceiling – Resilient Bar RB565 fitted to underside of joists spaced at 400mm centres clad with 1 inner layer of 19mm plank and 1 outer layer of 12.5mm sound resistant plasterboard.

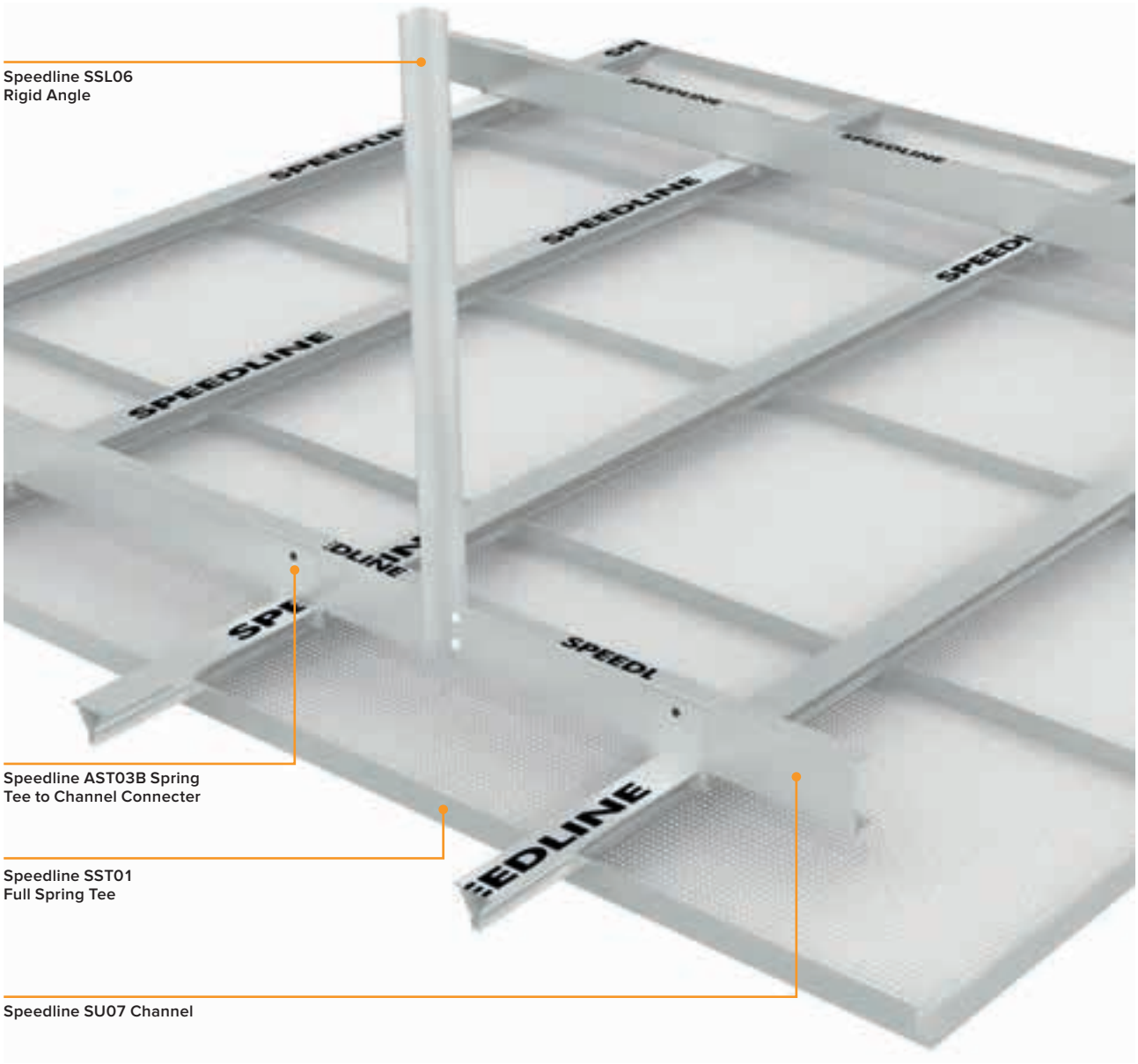
Fire Resistance
60 minutes

Sound Insulation
Airborne 60R_wdB
Impact 53L_{nw}dB

Speedline Resilient Bar is fully approved for use in Robust Detail Construction in accordance with Appendix E of the Robust Detail Part E Handbook.

SPEEDLINE SPRING TEE CEILING SYSTEM



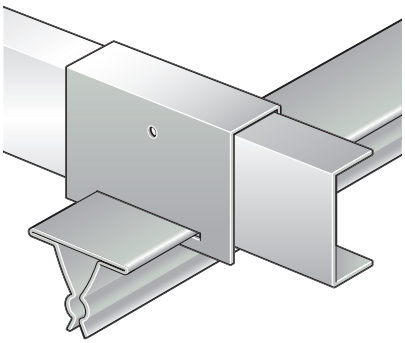


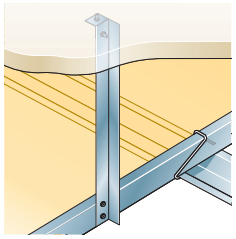
The Speedline Spring Tee System is designed for use with metal pan clip-in tiles manufactured by Armstrong. Pullout tests are conducted during manufacture as part of the quality procedure to ensure correct fitting of tiles.

Speedline CF01 Perimeter Trim is coated white to RAL 9010.

Benefits

- The system is totally downward demountable.
- Spring Tee available in lengths up to 6.0 meters.
- Quick and Easy to install.
- Accessories available.
- Formed from pre-galvanised mild steel.

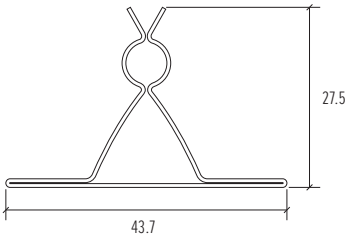




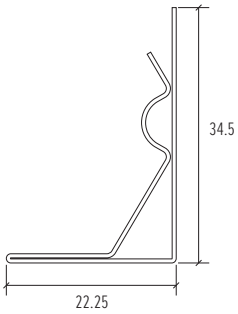
CEILINGS & FLOOR SYSTEMS

SPEEDLINE SPRING TEE CEILING SYSTEM

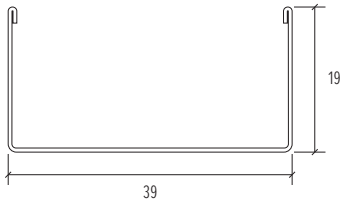
Full Spring Tee



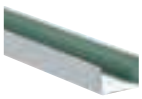
Half Spring Tee



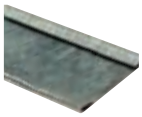
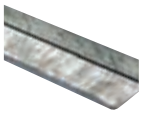
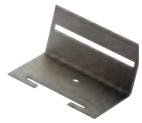
White Perimeter Trim

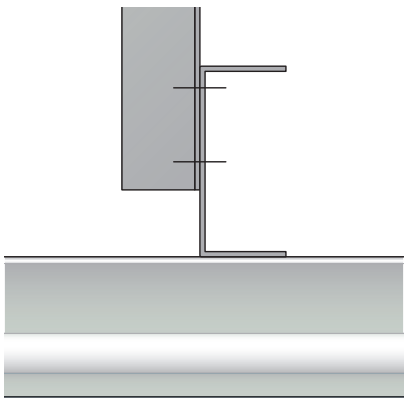


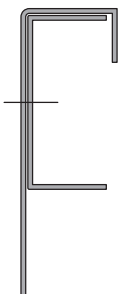
SPRING TEE SYSTEM

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
	SST01	Speedline Full Spring Tee x 0.7mm	3.00 3.60 6.00	2.14 2.57 4.28
	SST03	Speedline Half Spring Tee x 0.7mm	3.00 3.60	1.71 2.06
	CF01	Speedline White Perimeter Trim x 0.5mm	3.00	0.93
	SU07	Speedline 38mm base x 19mm leg x 1.5mm	3.00 3.60 6.00	2.40 2.88 4.79

ACCESSORIES (SPRING TEE SYSTEM)

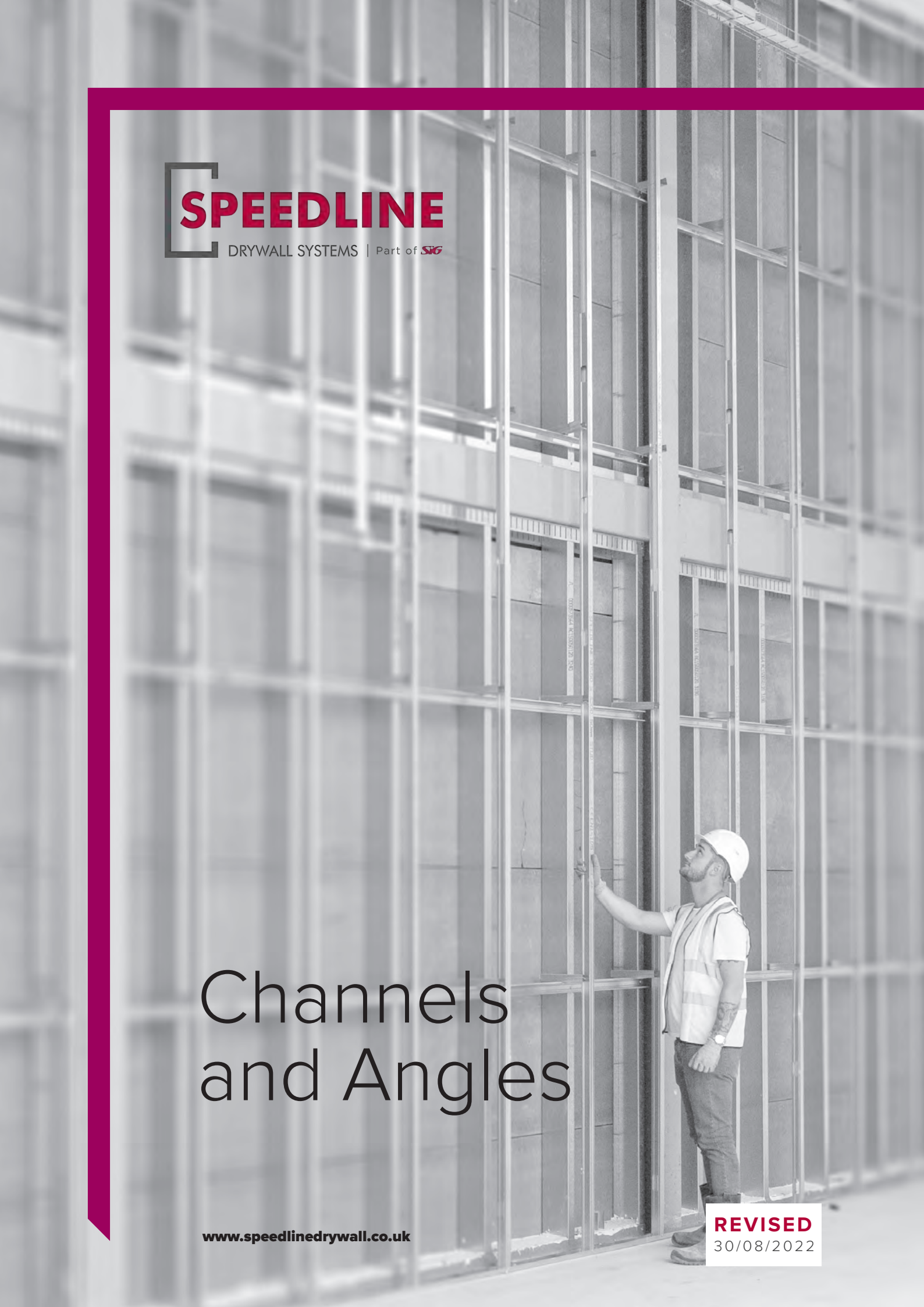
	Product Code	Product Description	Stock Lengths Metre	Weight per Box Kgs
	AST01B	Connector		20.00
	AST02B	Border Wedge		10.00
	AST03B	Spring Tee to Channel Connector		12.00
	SSL06	Angle 25 x 25 x 0.8mm	3.00 3.60	0.86 1.03





SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Channels and Angles



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30/08/2022

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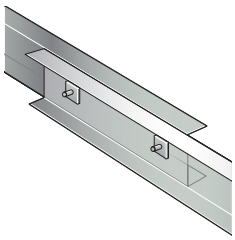
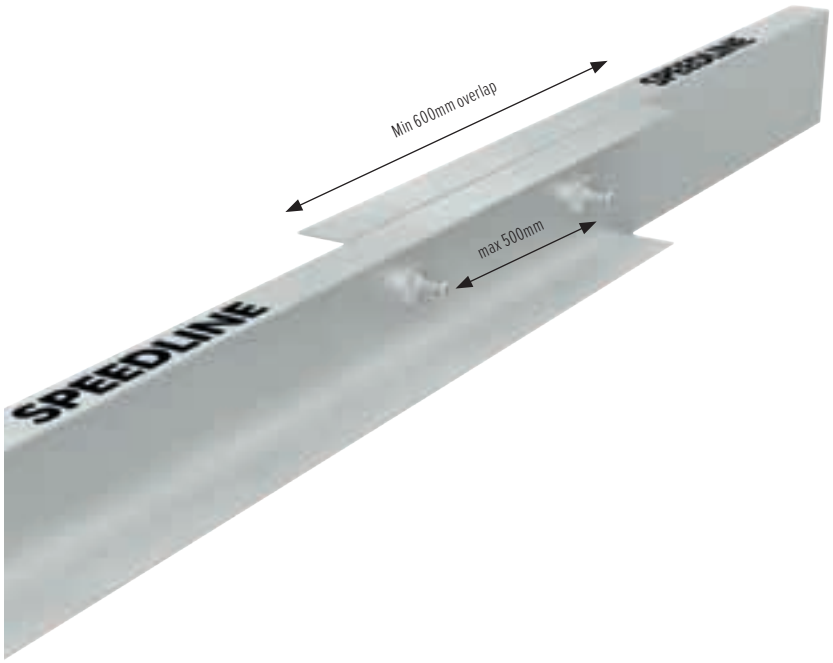
CHANNELS AND ANGLES

SPEEDLINE CHANNELS





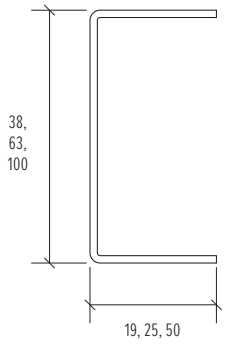
The Speedline range of channel sections have been designed to form sub grids for supporting any type of suspended ceiling.

For further assistance please contact **enquiries@speedlinedrywall.co.uk** with details listed below so that the correct channel size can be calculated for your project.

- **Type of span – single or continuous.**
- **Length of span – in metres.**
- **Total weight to be supported from sub grid (kg/square metre).**

Channel Connectors are available for SU07 only. For joining all other channels, they must be bolted back to back with a minimum overlap of 600mm. A minimum of two bolts must be used, at 500mm minimum centres.

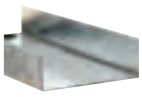
Channels – SU07, SU08, SU12



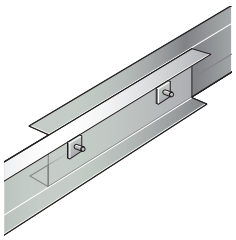
CHANNELS

Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
SU07	Speedline 38mm base x 19mm leg x 1.5mm	3.00 3.60	2.40 2.88
SU08	Speedline 63mm base x 25mm leg x 1.5mm	3.60 4.20 4.80	4.42 5.15 5.89
SU12	Speedline 100mm base x 50mm leg x 1.5mm	4.80	10.88

ACCESSORIES (CHANNELS)



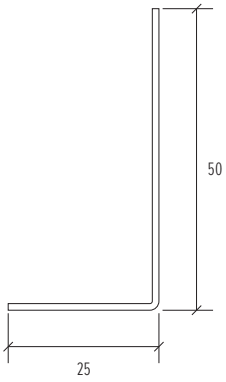
Product Code	Product Description	Weight per Box Kgs
AZ11B	38mm Channel Connectors	10.20



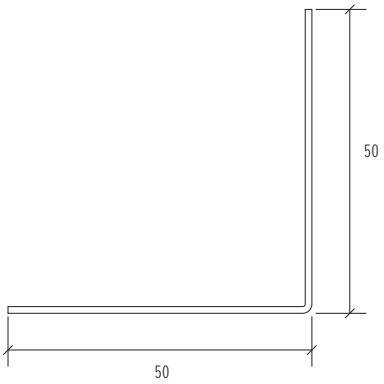
CHANNELS AND ANGLES

SPEEDLINE ANGLES

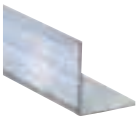
Angles – SL12



Angles – SL26



ANGLES

	Product Code	Product Description	Stock Lengths Metre	Weight per Length Kgs
		Equal Angles		
	SL04	Speedline 22mm leg x 22mm leg x 90 deg. x 0.8mm	3.00	0.77
	SSL06	Speedline 25mm leg x 25mm leg x 90 deg. x 0.8mm	3.00 3.60	0.86 1.03
	SL13	Speedline 50mm leg x 50mm leg x 90 deg. x 0.8mm	3.60	2.15
	SL26	Speedline 50mm leg x 50mm leg x 90 deg. x 1.5mm	3.60	3.96
		Unequal Angles		
	SL12	Speedline 50mm leg x 25mm leg x 90 deg. x 0.8mm	3.00 3.60	1.34 1.61

Primarily designed for the suspension of sub grids and ceiling systems. Speedline Angles can be used for many general applications in ceilings, dry lining and also for cloaking deflection heads in partitioning systems.

Sectors

- Healthcare
- Education
- Commercial
- Offices
- Retail
- Student Accommodation

SPEEDLINE
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Access Panels

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30/08/2022

Access Panels

INTRODUCING ACCESS PANELS

Speedline offers a full range of access panels, for use in commercial, education, health & domestic situations. The following section provides details of our standard, budget & premium ranges.

Contact the Speedline technical team for advice and support on your project:
enquiries@speedlinedrywall.co.uk

Contents

ACCESS PANELS

SPEEDLINE ACCESS PANELS INTRODUCTION

Access Panels

Choice

Speedline Access panels are designed to fit in a variety of internal wall and ceiling constructions of normal humidity unless stated.

Aesthetics

Typically Speedline panels are supplied with a picture frame option for use in retrofit applications allowing for installation into a structural opening and screw fixing into place. Also available is a beaded frame option which provides a more concealed solution and can be fitted at the time of fit out prior to dry lining skimming. For the ultimate discrete solution certain designs allow for use of a plasterboard or tiled door, allowing for a fully concealed finish.

Prices for all Projects

A budget range of metal door access panels and plastic access panels are available in stock sizes only, particularly useful for residential applications.

Bespoke Panels

Many of the Speedline Access Panels can be one hour fire-rated, acoustic panels or airtight. If you have a bespoke requirement, speak to your local branch of SIG as panels are available in sizes not featured in this guide. A dedicated design team can create a specialised product to fulfil your requirements.

Accessories

A comprehensive choice of Speedline accessories, such as fixings, adhesives, joint compounds, tapes and sealants are also available.

Nationwide Service

Speedline Access Panels are available exclusively from SIG throughout the UK. Branches carry extensive stocks of all products and experienced staff offer a fast and efficient service whilst product specialists are on hand to assist with technical issues and complex specifications.

ACCESS PANELS APPLICATION TABLE

	Wall Applications	Ceiling Applications*	Beaded Frame	Picture Frame	Fire Rated
Standard Panel Range					
EMAC001	•	•	•	•	–
EMAC001FD60	•	•	•	•	•
EMAC003	•	•	•	–	–
EMAC003FD60	•	•	•	–	•
Budget Panel Range					
EMAC002	•	•	–	•	–
EMAC006	•	•	–	•	–
Premium Ceiling Range					
EMAC011	–	•	•	•	–
EMAC007	–	•	–	–	–
EMAC014 & EMAC015	–	•	•	•	–
EMAC004	•	•	•	–	–
EMAC004FD60	•	•	•	–	•
Premium Wall Range					
EMAC012	•	•	•	•	–
EMAC012FD60	•	–	•	•	•
EMAC005	•	–	•	–	–

*We do not recommend plastic panels larger than 300 x 300mm to be installed in a ceiling due to potential bowing of the door over time.

ACCESS PANELS

SPEEDLINE STANDARD RANGE

EMAC001 - METAL DOOR

EMAC001 METAL DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).
- Clear available access when installed, with door in the open position is (X-36) x (Y-12).

NOTE: A one hour fire rated version is also available (see Speedline EMAC001FD60). Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

A range of steel lockable access panels offering the ultimate versatility in wall and ceiling applications.

Composition and Manufacture

A 1mm thick metal frame incorporating a simulated edge bead or picture frame profile holds a mild steel metal door through a sliding hinge system. The door is held closed with a budget lock opening towards the user. The key hole is protected by a plastic collar and bung. The hinge system allows the door to be removed during installation or if damage occurs.

A constant 2mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
300	300	3.0
450	450	4.0
600	600	6.0
600	900	8.0
600	1200	10.0

All doors hinge along dimension Y. All panels are single door

Available in sizes from 150mm x 150mm to 600mm x 1200mm. Larger panels available, see EMAC012.

EMAC001
SECTION

ACCESS PANELS

SPEEDLINE STANDARD RANGE

EMAC001FD60 - METAL DOOR (FIRE RATED)

EMAC001FD60 FIRE RATED METAL DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).
- Clear available access when installed, with door in the open position is (X-36) x (Y-12).

NOTE: Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

A one hour fire rated metal door range of lockable access panels offering versatility in wall and ceiling applications. Both beaded and picture frame options available.

Composition and Manufacture

1mm thick mild steel frame holds a metal door through a hinge system. The door is held closed with a budget lock opening towards the user. The key hole is protected by a plastic collar and bung. The hinge system allows the door to be removed during installation or if damage occurs.

A constant 2mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

A 10x2mm graphite intumescent strip surrounds the outer perimeter of the frame to provide fire protection. Fire rated to BS EN 1363-1:2002 60 minutes integrity performance.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
300	300	3.1
450	450	4.1
600	600	6.1
600	900	8.1
600	1200	10.1

All doors hinge along dimension Y. All panels are single door

Available in sizes from 150mm x 150mm to 600mm x 1200mm. Larger panels available, see EMAC012FD60.

EMAC001FD60
SECTION

ACCESS PANELS

SPEEDLINE STANDARD RANGE

EMAC003 - PLASTERBOARD DOOR

EMAC003 PLASTERBOARD DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).
- Clear available access when installed, with door in the open position is (X-36) x (Y-12).

NOTE: A one hour fire rated version is available (EMAC003FD60). Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

Supplied with a beaded frame and a fully removable plasterboard door, this product can be fitted into a pre-cut opening in a variety of wall or ceiling systems. This is ideal for a seamless finish which conceals both door and frame.

Composition and Manufacture

A 1mm thick mild steel panel incorporating a simulated edge bead profile (BD). The metal frame holds a plasterboard door through a sliding hinge system. The door is held closed with a budget lock which opens towards the user. The key hole is protected by a plastic removable bung. The hinge system allows the door to be removed during installation or if damage occurs.

A constant 2mm gap is maintained between the door and frame by the dome location system

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
300	300	3.1
450	450	5.4
600	600	7.9

All doors hinge along dimension Y. All panels are single door

Available in sizes from 150mm x 150mm to 600mm x 600mm. Larger panels available, see EMAC004.

EMAC003
SECTION

ACCESS PANELS

SPEEDLINE STANDARD RANGE

EMAC003FD60 - PLASTERBOARD DOOR (FIRE RATED)

EMAC003FD60 FIRE RATED PLASTERBOARD DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).
- Clear available access when installed, with door in the open position is (X-36) x (Y-12).

NOTE: Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

A one hour fire rated plasterboard door access panel. Available in beaded frame with lock options for wall and ceiling applications.

Composition and Manufacture

A 1mm thick mild steel, frame holding a plasterboard door through a sliding hinge system. The door is held closed with a budget lock which opens towards the user. The key hole is protected by a plastic removable bung. The hinge system allows the door to be removed during installation or if damage occurs.

A constant 2mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

A 10x2mm graphite intumescent strip surrounds the outer perimeter of the frame to provide fire protection. Fire rated to BS EN 1363-1:2002 60 minutes integrity performance.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
300	300	3.1
450	450	5.4
550	550	7.4
600	600	7.9

All doors hinge along dimension Y. All panels are single door

Available in sizes from 150mm x 150mm to 600mm x 600mm. Larger panels available, see EMAC004FD60.

EMAC003FD60
SECTION

ACCESS PANELS

SPEEDLINE BUDGET RANGE

EMAC002 - PICTURE FRAME, METAL DOOR

EMAC002 PICTURE FRAME METAL DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 40mm.
- Structural opening required for installation is (X+10) x (Y+10).
- Clear available access when installed, with door in the open position is (X-36) x (Y-12).

LOCK OPTION
COIN SLOTTED LOCK

An entry level panel offering a simple solution for areas where security is not critical. Available in picture frame only.

Composition and Manufacture

The 1mm mild steel picture frame profile is suitable for retrofit purposes. The frame holds a metal door through a simple screw hinge system. The door is held closed with a coin operated lock which opens towards the user. The screw hinge system allows the door to be removed during installation or if damage occurs.

A constant 2mm gap is maintained between the door and frame.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
200	200	1.0
300	300	1.0
450	450	3.0
600	600	4.0

All doors hinge along dimension Y. All panels are single door

Speedline EMAC002 panels are available in the above sizes only.

EMAC002
SECTION

ACCESS PANELS

SPEEDLINE BUDGET RANGE

EMAC006 - PLASTIC DOOR

EMAC006 PLASTIC DOOR

Key points to note

- X and Y dimensions are nominal outside rear frame.
- Overall frame depth is 20mm with the door in the closed position. The door in the fully open position adds a further 8mm along the hinge side.
- Structural opening required for installation should be 6-8mm larger than the panel size selected.
- See page 152 for Installation Guidelines.

Lock options

No locking facility is available on this range. The door can easily be opened with a standard flat-head screwdriver.

A plastic access panel providing an economic, non-locking solution to a multitude of ceiling and wall applications. Suitable where access to valves, plumbing and switches etc requires simple un-hindered access without the need for security. Ideally suited to domestic/residential situations, either as a new-build or retro-fit following remedial work.

Composition and Manufacture

The door and frame are manufactured separately from injection moulded high-impact white styrene plastic to a nominal material thickness of 3.5mm. Finish is self-colour white, lightly textured for painting or wall papering on-site if required.

The door is easily removable from the frame requiring no tools. A simple pivot is moulded into the door rear. The door is kept closed by concealed, integral location lugs.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
152	102	0.15
203	203	0.22
152	228	0.30
300	300	0.48

All doors hinge along dimension Y. All panels are single door

355 x 355 & 558 x 558 sizes also available for wall use only.

EMAC006
SECTION

SPEEDLINE PREMIUM RANGE

EMAC011 - CEILING LOFT HATCH

EMAC011 CEILING LOFT HATCH

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 55mm.
- Structural opening required for installation is (X+10mm) x (Y+10mm).
- Clear available access when installed, with door in the open position is (X-24mm) x (Y-60mm).

NOTE: Anti-microbial paint is available upon further enquiry.

LOCK OPTION
THREE WAY BUDGET LOCK

LOCK OPTION
5MM BIT

LOCK OPTION
IP65 LOCK

LOCK OPTION
EURO PROFILE LOCK

Designed to provide access between timber truss, joisted plaster, and plasterboard ceilings where access to loft space is required.

Composition and Manufacture

The metal frame holds a flush metal door through hinges to one side. The door is held closed with a number of lock options. The door opens down towards the user and is removable during installation or if damage occurs. Panels with simulated dry wall beaded frames are jointed/skim-plastered and then decorated on site to match the colour/texture of the adjacent finish. Picture frame panels are finished white RAL 9010 so require no finishing after installation.

A 2mm gap is maintained between the door and frame by the door locking system.

Factory assembled to specified size and finish in RAL 9010 White 30% Gloss.

Frame: 1.2mm thick, mild steel. EPDM seals are fitted all around.

Door: 1.2mm thick, mild steel flush faced tray finished white powder coated. The door rear is made up of a 30mm Rw3 Rockwool Slab covered by 12.5mm plasterboard.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
600	600	15
600	900	20

All panels are single door

Nominal only: Actual size is dependant on the selected tile. Minimum size is 200 x 200mm

EMAC011
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE (CEILINGS)

EMAC007 - CEILING LAY-IN GRID

EMAC007 LAY-IN GRID

Key points to note

- X and Y dimensions on the EMAC007 is the tee grid module size. The panel is manufactured to the specified ceiling system quoted when ordering.
- Overall frame depth is 80mm.
- If the door needs to be painted to match the colour of tee grid selected, the colour specification should be quoted at the ordering stage, or a sample sent to Speedline for matching (contact your local Speedline stockist for more information).
- Panels should be independently supported on threaded rod or angle.
- Panels 600 x 1200mm or larger should be braced to prevent any lateral movement to prevent the panel's additional weight, and operating forces exerted on it during installation and operation, being transferred to the lightweight ceiling system.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM BIT

Speedline EMAC007 is a ceiling access panel designed for mineral fibreboard tiles on exposed grid.

Composition and Manufacture

The welded metal frame holds a metal door tray designed to accept the same selected ceiling tile as in the surrounding ceiling. The door is hinged via fully adjustable concealed hinges and is held closed by either a concealed budget lock or security key lock that opens towards the user. The door is removable to facilitate installation of the ceiling board or if future damage occurs. A metal faced door option is also available.

Panels are manufactured to suit exact tile modules, either as 600mm or as 1200mm, square or rebated (regular) edge and 24mm or 15mm wide tee grid systems.

Panels are supplied in RAL 9010 White 30% Gloss unless they are specified to match the tee grid colour, as is usual for panels that contain 'dummy' tee sections.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	No. of locks (without tile)	Kgs
300	300	1	3.0
450	450	1	6.0
600	600	1	11.0
600	1200	2	22.0

All doors hinge along dimension y. All panels are single door. Larger panels are manufactured as a double door with a removable central locking spar.

Module only, actual size is dependant on the selected tile and grid.

EMAC007
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE (CEILING)

EMAC014 & EMAC015 - CEILING CIRCULAR DOOR

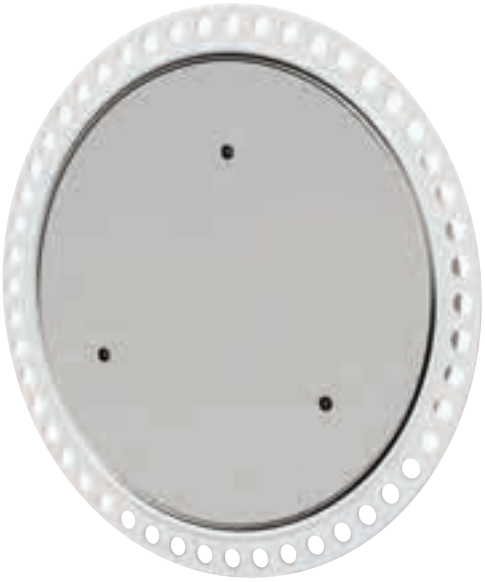
EMAC014 & EMAC015 CIRCULAR DOOR

Key points to note

- Diameter dimensions are outside rear frame.
- Overall frame depth is 35mm.
- Structural opening required for installation is (diameter +5).
- Clear available access when installed, with door in the open position is (diameter -36mm).

NOTE: Anti-microbial paint is available upon further enquiry.

EMAC014
METAL



EMAC015
PLASTERBOARD

The Speedline EMAC014 & EMAC015 range of steel lockable access panels provides entry into jointless plaster/plasterboard ceilings, where access to mechanical and electrical services is required. Both beaded and picture frame options available.

Composition and Manufacture

A metal frame (1.2mm thick steel incorporating a simulated edge bead profile finished white powder coated primer) holds a flush metal faced door or a plasterboard lined door through a bayonet lock retaining system. The bayonet lock retaining system allows the door to be removed during installation or if damage occurs. Panel frames are manufactured either as partially concealed (beaded frame) fully concealed (beaded frame and plasterboard door) or alternatively, manufactured for retrofitting where the 25mm picture frame is visible.

Factory assembled to specified size and finished in RAL 9010 White 20% Gloss.

TYPICAL SIZES AND WEIGHTS

	EMAC014	EMAC015
Dim (X) mm	Kgs	Kgs
200	1	1.5
300	1.5	2.0
450	2.6	3.2
600	4.0	4.8

All panels are single door

Available in sizes from 200mm diameter to 900mm diameter.

EMAC014
SECTION

EMAC015
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE

EMAC004 - CEILING & WALL PLASTERBOARD DOOR

EMAC004 – BEADED FRAME PLASTERBOARD DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).

NOTE: One hour fire rated version is available (see EMAC004FD60). Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

The Speedline EMAC004 standard plasterboard door range of steel lockable access panels offers the ultimate versatility in wall and ceiling applications available with a beaded frame.

Composition and Manufacture

The welded (1mm thick, factory welded, mild steel) metal frame holds a metal door tray that is hinged via sliding hinges and is held closed by either a budget lock or a tamper proof lock. The door then opens towards the user. The door is plasterboard lined and removable to aid installation or if damage occurs. Panel frames are manufactured either as fully concealed, so that after installation only a 2mm wide door line is visible, or alternatively, manufactured for retrofitting where the 25mm picture frame surround is visible.

A constant door gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (y) flush mm	Plasterboard Door (Kgs)
900	900	30
600	1200	26

All doors hinge along dimension Y. All panels are single door

Larger sizes available, please contact your local branch of SIG.

EMAC004
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE

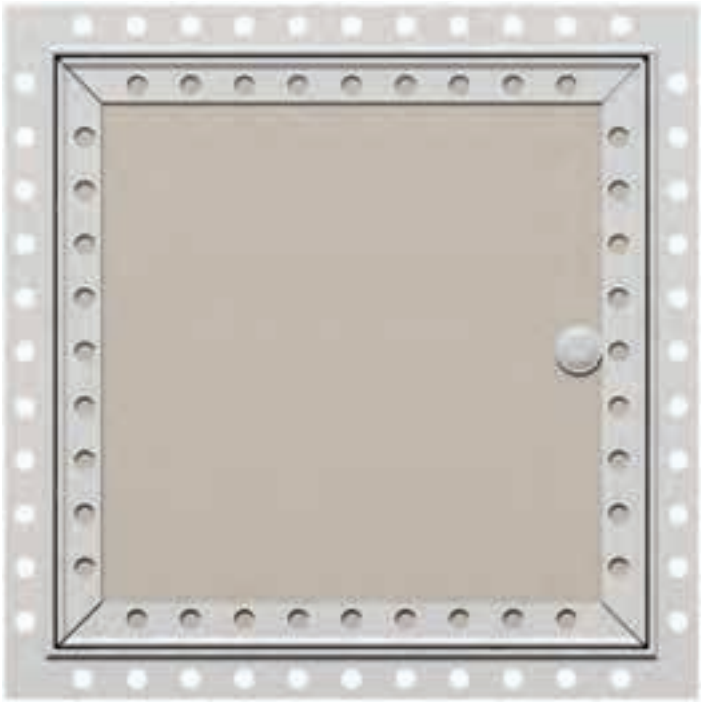
EMAC004FD60 - PLASTERBOARD DOOR (FIRE RATED)

EMAC004FD60 FIRE RATED BEADED FRAME AND PLASTERBOARD DOOR

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 50mm.
- Structural opening required for installation is (X+10) x (Y+10).

NOTE: Anti-microbial paint is available upon further enquiry.



LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
UNSUITED/SUITED TAMPERPROOF LOCK

LOCK OPTION
UNSUITED/SUITED KEY LOCK

The Speedline EMAC004FD60 is a one hour fire rated standard plasterboard door range of steel lockable access panels offering the ultimate versatility in wall and ceiling applications. Available with a beaded frame.

Composition and Manufacture

The welded (1.2mm thick, factory welded, mild steel) metal frame holds a metal door tray that is hinged and is held closed by either a budget lock or a tamper proof lock. The door then opens towards the user. The door is plasterboard lined and removable to aid installation or if damage occurs. Panel frames are manufactured either as fully concealed, so that after installation only a 2mm wide door line is visible, or alternatively, manufactured for retrofitting where the 25mm picture frame surround is visible.

A constant door gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (y) flush mm	Plasterboard Door (Kgs)
900	900	30
600	1200	26

All doors hinge along dimension Y. All panels are single door

Available in sizes from 150mm x 150mm to 600mm x 1200mm. Larger sizes are available, please contact your local branch of SIG.

EMAC004FD60
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE

EMAC012 - RISER DOORS

EMAC012 RISER DOOR FOR SIZES GREATER THAN 1200MM X 600MM

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 55mm.
- Structural opening required for installation is (X+10) x (Y+10).

NOTE: One hour fire rated version is available (see EMAC012FD60). Anti-microbial paint is available upon further enquiry.

Bespoke Panels

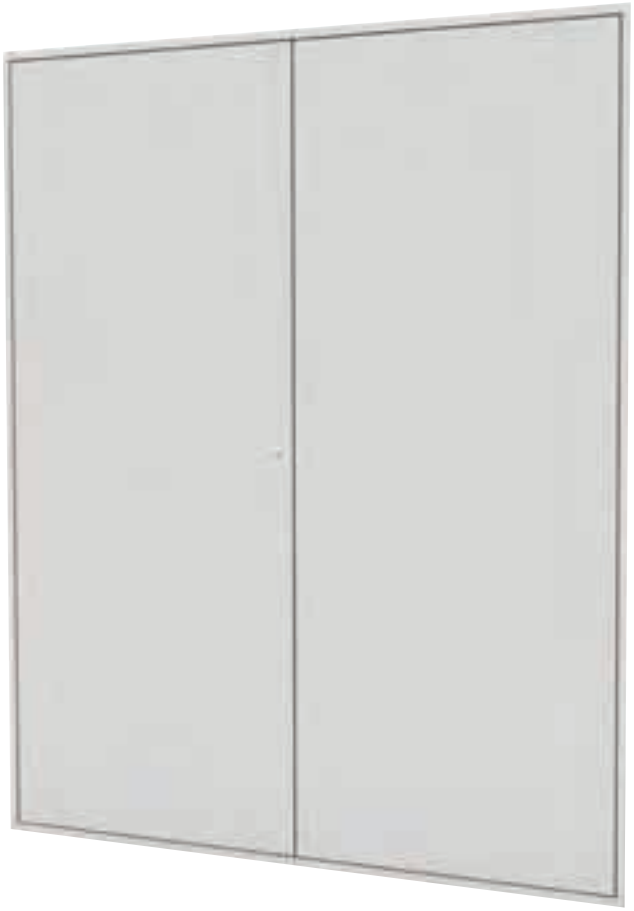
Bespoke panel sizes can be manufactured to suit non standard and site specific access requirements.

LOCK OPTION
THREE WAY BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
IP65 LOCK

LOCK OPTION
EURO PROFILE LOCK



The Speedline EMAC012 range of lockable access panels is available in a variety of designs into jointless plaster/ plasterboard and masonry walls and partitions.

Composition and Manufacture

A precision welded, strong metal frame (1.2mm thick mild steel, incorporating either a simulated dry wall edge bead profile or picture frame, holds a flush metal door through a concealed hinge. The door is held closed with a choice of locking systems and opens outwards towards the user. Doors are removable if damage occurs during installation. Panels with simulated drywall beaded frames are jointed/plastered over on site and finished to match the colour/texture of the adjacent surface. Retrofitted panels have a picture frame.

A constant 2mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
600	1200	12

All doors hinge along dimension y. All panels above are single door and come with budget three way lock as standard

EMAC012
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE

EMAC012FD60 - RISER DOORS (FIRE RATED)

EMAC012FD60 RISER DOOR FIRE RATED FOR SIZES GREATER THAN 1200MM X 600MM

Key points to note

- X and Y dimensions are outside rear frame.
- Overall frame depth is 55mm.
- Structural opening required for installation is (X+10) x (Y+10).

NOTE: Anti-microbial paint is available upon further enquiry.

LOCK OPTION
THREE WAY BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
IP65 LOCK

LOCK OPTION
EURO PROFILE LOCK

The EMAC012FD60 range of lockable access panels is available in a variety of designs that can provide up to 1 hour fire resistance into jointless plaster/plasterboard and masonry walls and partitions. Suitable for use in protected zones where access to mechanical and electrical services is required without compromising aesthetics and fire safety.

Composition and Manufacture

A precision welded, strong metal frame (1.2mm thick mild steel, incorporating either a simulated dry wall edge bead profile or picture frame) holds a flush metal door through a concealed hinge. The door is held closed with a choice of locking systems and opens towards the user. Doors are removable if damage occurs during installation. Panels with simulated drywall beaded frames are jointed/plastered over on site and finished to match the colour/texture of the adjacent surface. Retrofitted panels have a picture frame.

A constant 2mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

TYPICAL SIZES AND WEIGHTS (nominal values only)

Dim (X) mm	Dim (Y) mm	Kgs
600	1200	12

All doors hinge along dimension y. All panels above are single door and come with budget three way lock as standard

EMAC012FD60
SECTION

ACCESS PANELS

SPEEDLINE PREMIUM RANGE

EMAC005 - TILED DOOR

EMAC005 TILED DOOR

Key points to note

- X and Y dimensions on the EMAC005 are the manufactured panel size and relate to the door size that is obtained from the tile module and grout thickness multiples. Tile size, thickness and grout width must be specified when ordering.
- Overall frame depth is 50mm. Minimum grout thickness is 1 mm.
- Structural opening required for EMAC005 installation is (X+ (2 x grout width)+10) x (Y+(2 x grout width)+10). Use suitable packing at fixing points between the frame and structural wall to maintain trueness and rigidity. The resulting gaps between the full tiles and frame are filled with flexible mastic.

NOTE: Anti-microbial paint is available upon further enquiry.

LOCK OPTION
BUDGET LOCK

LOCK OPTION
5MM DOUBLE BARB INSERT LOCK

LOCK OPTION
TOUCH CATCH

The Speedline EMAC005 range of access panels provides access into tiled walls, where access to mechanical and electrical services is required. It is a strong, purpose made, access panel designed to provide a simple yet secure means of accessing building services through ceramic tile or marble/stone clad walls.

Composition and Manufacture

All standard panels are for internal use and only in areas of normal humidity. For areas of high humidity or in tile walls that will get wet, stainless steel should be used. The grout width is usually filled with soft silicone mastic for a totally concealed and sealed solution. The mastic is easily removable for emergency access and can be quickly resealed on completion of the service or repair.

The metal frame holds a plasterboard faced door through a sliding hinge system. The door is held closed with a budget lock which opens towards the user with the key hole protected by a plastic removable bung. The hinge system allows the door to be removed during installation or if damage occurs.

A constant 3mm gap is maintained between the door and frame by the dome location system.

Factory assembled to specified size and finished in RAL 9010 White 30% Gloss.

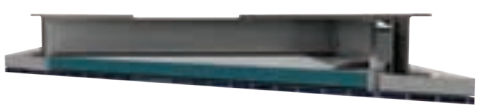
TYPICAL SIZES AND WEIGHTS

Dim (X) mm	Dim (Y) mm	Kgs
300	300	3.1
450	450	5.4
550	550	7.4
600	1200	7.9

All doors hinge along dimension Y. All panels are single door

Larger sizes available, please contact your local branch of SIG.

EMAC005
SECTION



ACCESS PANELS

SPEEDLINE ACCESS PANELS LOCKING OPTIONS

Speedline offer a range of specialist locks as featured in this guide:

BUDGET LOCK

COIN SLOTTED LOCK

DOUBLE BARB INSERT LOCK (5MM)

METAL TEE KEY

PLASTIC TEE KEY

THREE WAY BUDGET LOCK

UNSUITED - SUITED KEY LOCK

UNSUITED - SUITED TAMPERPROOF LOCK

IP65 LOCK

EURO PROFILE LOCK

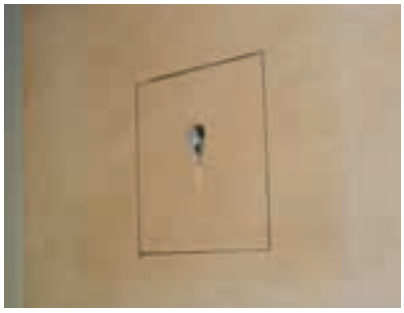
ACCESS PANELS

SPEEDLINE BUDGET RANGE INSTALLATION GUIDE

STAGE 1

It is easy to insert a plastic Speedline access panel into a wall.

STAGE 2



Mark out the inner perimeter of the access panel frame body on to the wall the panel is to be fitted in.

STAGE 3

Cut along the marking using a board saw or similar equipment.

STAGE 4

Remove the door by unclipping the hinges from the frame and offer the frame into the newly cut opening.

STAGE 5

Using a glue adhesive, apply to the back of the plastic frame.

STAGE 6

Return the frame to the opening and fit, remove any excess adhesive from the frame surround.

STAGE 7

Re-clip the door back into place.

STAGE 8

Push the door back into the frame. To reopen the door, use a flat blade screw driver and insert gently into slot.

SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Fixings and Finishing Solutions

www.speedlinedrywall.co.uk

REVISED
30/08/2022

FIXINGS AND FINISHING SOLUTIONS

SPEEDLINE FIXINGS

Drywall Screw Fine Thread

Hardened steel drywall screw, fine thread, needle point, bugle head, pozi. Available in BZP and black phosphate. For fixing plasterboard to light gauge metal stud and track.

Standards Applied: Article 7 of 89/106/EEC & EN 14566:2008 + A1:2009

CE

SIG Code – BZP	SIG Code – Black Phosphate	Length	Gauge	Box Quantity
10065194	**10065176**	25mm	3.5mm	1000
10008980	**10065177**	32mm	3.5mm	1000
10065195	**10065178**	38mm	3.5mm	1000
10065196	**10065179**	42mm	3.5mm	1000
10065197	**10065180**	45mm	3.5mm	1000
10159915	**10065181**	50mm	3.5mm	1000
10065201	**10065185**	65mm	4.2mm	500
10065202	**10065186**	75mm	4.2mm	500
10065203	**10065175**	100mm	4.8mm	500

Drywall Screw Coarse Thread

Hardened steel drywall screw, coarse thread, needle point, bugle head, pozi. Available in black phosphate. For fixing plasterboard to timber.

Standards Applied: Article 7 of 89/106/EEC & EN 14566:2008 + A1:2009

CE

SIG Code	Length	Gauge	Box Quantity
10065164	25mm	3.5mm	1000
10065165	32mm	3.5mm	1000
10065166	38mm	3.5mm	1000
10065167	42mm	3.5mm	1000
10065168	50mm	3.5mm	1000
10065169	65mm	3.5mm	500
10065170	75mm	4.2mm	500

Drywall Screw Self Drill

Self drilling, dry wall screw hardened steel, fine thread, bugle head, pozi. Available in BZP. For fixing plasterboard to metal stud and track over 0.9mm and up to 3mm.

Standards Applied: Article 7 of 89/106/EEC & EN 14566:2008 + A1:2009

CE

SIG Code	Length	Gauge	Box Quantity
10065216	25mm	3.5mm	1000
10065217	32mm	3.5mm	1000
10065218	38mm	3.5mm	1000
10065219	42mm	3.5mm	1000
10065220	50mm	3.5mm	1000
10065221	65mm	3.5mm	500
10065222	75mm	4.2mm	500
10065224	100mm	4.8mm	500

Wafer Head Screw

Hardened steel drywall screw, fine thread, needle point and self drill, wafer head, pozi. Available in BZP. Low profile, large diameter head for connecting light gauge metal components beneath plasterboard (up to 0.8mm)

Standards Applied: Article 7 of 89/106/EEC & EN 14566:2008 + A1:2009

CE

SIG Code	Length	Gauge	Box Quantity
10065255 Needle Point	13mm	4.2mm	1000
10065256 Self Drill	13mm	4.2mm	1000
10065257 Self Drill	25mm	4.2mm	1000

Pan Head Self Drill Screw

Hardened steel drywall screw, fine thread, self drill, pan head pozi.
Available in BZP. For fixing heavy gauge metal components to track over 0.8mm and up to 1.6mm.

Standards Applied: Article 7 of 89/106/EEC & EN 14566:2008 + A1 2009

CE

SIG Code	Length	Gauge	Box Quantity
10065254	13mm	4.2mm	1000

Metal Nail In

Lightweight through fixing for use in concrete, solid brickwork and stone.
(Not recommended for overhead applications such as suspended ceilings.)

Standards Applied: AT-15-7637/2008

SIG Code	Dimensions	Box Quantity
10091881	6x30mm	100
10091882	6x40mm	100
10091883	6x50mm	100
10091884	6x65mm	100

FIXINGS AND FINISHING SOLUTIONS

SPEEDLINE FIXINGS

Nylon Hammer Screws

Pre-assembled nylon hammer fixings for quick and easy fixing into concrete and solid masonry.

Standards Applied: ETA-12/0457

CE

SIG Code	Dimensions	Box Quantity
10091161	5x30mm	100
10091164	6x40mm	100
10091165	6x50mm	100
10091166	6x60mm	100
10091168	6x80mm	100
10091169	8x60mm	100
10091172	8x80mm	100
10091174	8x100mm	100
10091175	8x120mm	100

Collated Drywall Screw Fine Thread

Hardened steel collated drywall screw, fine thread, bugle head, pozi. Available in BZP and black phosphate. Universal autofeed screws for fixing plasterboard to steel stud and track.

Standards Applied: Article 7 of 89/106EEC & EN 14566:2008 + A1 2009

CE

SIG Code – Fine Thread BZP	SIG Code – Black Phosphate	Length	Gauge	Box Quantity
10073160	**10073152**	25mm	3.5mm	1000
10073161		32mm	3.5mm	1000
10073162	**10073154**	35mm	3.5mm	1000
10073163	**10073155**	38mm	3.5mm	1000
10073164	**10073157**	45mm	3.5mm	1000
10073165	**10073158**	50mm	3.5mm	1000
10073166		55mm	3.5mm	1000

Collated Drywall Screws Coarse Thread

Hardened steel collated drywall screw coarse thread, bugle head, pozi. Available in BZP and black phosphate. Universal autofeed screws for fixing plasterboard to timber studs.

Standards Applied: Article 7 of 89/106EEC & EN 14566:2008 + A1 2009

CE

SIG Code – BZP	SIG Code – Black Phosphate	Length	Gauge	Box Quantity
	10073167	25mm	3.5mm	1000
10073176	**10073168**	32mm	3.5mm	1000
10073177	**10073169**	35mm	3.5mm	1000
10073178	**10073170**	38mm	3.5mm	1000
10073179	**10073172**	45mm	3.5mm	1000
	10007711	50mm	3.5mm	1000
10073181	**10073173**	55mm	3.5mm	1000
	10073175	65mm	4.2mm	500
	10073183	75mm	4.5mm	500

PT-CS-807M-Fixing options chart

Fischer PD Plastic

KT Spring Toggle

Fischer PD Metal

Fischer UX Universal Plug

Fischer HM Cavity Fixing

DESIGN PULL-OUT LOADS (kN) including safety factor

Wallboards

	Fischer UX Universal Plug	Fischer HM Cavity Fixing	KT Spring Toggle	Fischer PD Metal	Fischer PD Plastic
Single Layer 9.5mm	0.07 KN	0.15 KN	0.17 KN	0.10 KN	–
Single Layer 12.5mm	0.08 KN	0.14 KN	0.17 KN	0.15 KN	0.07 KN
Single Layer 15mm	–	0.30 KN	0.20 KN	0.15 KN	–
Double Layer 12.5mm	0.11 KN	0.30 KN	0.50 KN	0.15 KN	–
Double Layer 15mm	–	0.70 KN	0.50 KN	0.25 KN	–

Technical Boards

Single Layer 15mm	0.11 KN	0.18 KN	0.25 KN	0.25 KN	0.09 KN
Double Layer 15mm	0.18 KN	0.28 KN	0.61 KN	0.30 KN	–

FIXINGS AND FINISHING SOLUTIONS

SPECIALIST FIXINGS

UX Universal Plug

UX R - with rim

	Without rim	Sales unit	Drill hole diameter	Min. drill hole depth	Min. panel thickness	Anchor length	Wood and chipboard screws	Max. fixture thickness
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
UX 6 x 35	062756	100	6	45	9.5	35	4 - 5	–
UX 6 x 50	072095	100	6	60	9.5	50	4 - 5	–
UX 8 x 40	505483	100	8	50	9.5	40	4.5 - 6	–
UX 8 x 50	077870	100	8	60	9.5	50	4.5 - 6	–
UX 10 x 60	077872	50	10	75	12.5	60	6 - 8	–

HM Metal Cavity Fixing

HM-S - with metric screw

HM-SS - with hexagon headed screw

Items to order only		Sales unit	Drill hole diameter	Min. drill hole depth	Anchor length	Screw	Max. panel thickness	Max. fixture thickness
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
HM 4 x 32 S	519769	50	8	42	32	M 4 x 40	3 – 13	16
HM 4 x 46 S	519760	50	8	56	46	M 4 x 52	5 – 18	23
HM 4 x 59 S	519771	50	8	69	59	M 4 x 66	35 – 42	16
HM 5 x 37 S	519772	50	10	47	37	M 5 x 45	6 – 15	19
HM 5 x 52 S	519774	50	10	62	52	M 5 x 60	7 – 21	24
HM 5 x 65 S	519775	50	10	75	65	M 5 x 73	20 – 34	24
HM 6 x 37 S	519777	50	12	47	37	M 6 x 45	6 – 15	14
HM 6 x 52 S	519778	50	12	62	52	M 6 x 60	10 – 21	24
HM 6 x 65 S	519782	50	12	75	65	M 6 x 70	20 – 34	24
HM 8 x 55 SS	519783 [1)]	50	12	65	55	M 8 x 60	10 – 21	24

1) With hexagon headed screw, assembly only by using the professional installation tool HM Z 1

HM Z Setting Tool

HM Z 1 – the professional installation tool

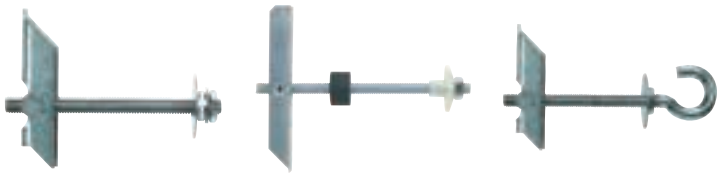
HM Z 2 – installation tool

		Sales unit	Suitable for
Item	Art.-No.	(pcs)	
HM Z 1	062320	1	For use with fischer HM cavity fixings range
HM Z 2	062321	1	For use with fischer HM cavity fixings range

KT Spring Toggle

		Sales unit	Drill hole diameter	Max. panel thickness	Min. cavity depth	Screw length
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)	(mm)
KT 3 x 50 S	42765	50	11	25	27	50
KT 5 x 50 S	42766	50	14	25	27	50
KT 6 x 75 S	42767	25	18	25	32	75

KD/KDH & KM Gravity Toggles



KD 5 + 6 + 8 - gravity toggle

		Drill hole diameter	Max. panel thickness	Min. cavity depth	Anchor length	Thread
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)	(mm)
KD 6	080185	16	63	70	100	M 6 x 100
KD 8	080178	20	55	75	100	M 8 x 100

Plasterboard Fixings

		Sales unit	Min. plasterboard thickness	Anchor length	Screw length
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)
PDM 100 (Metal) Box (1)	42793	1	9	31	35
PDN 100 (Nylon) Box (2)	42795	1	9	29	35
BP PDM 25 Pcs (3)	530784	5	9	31	35
BP PDM 50 Pcs (4)	530783	5	9	31	35
Metal Selfdrill Plasterboard 300 (5)	533674	300	–	–	–

N Hammerfix N A2

Hammerfix **N-Z-A2** with stainless steel A2 nail

	Zinc-plated steel	Sales unit	Drill hole diameter	Effect. anchoring depth	Anchor length	Min. drill-hole depth for through fixings	Max. fixture thickness
Item	Art.-No.	(pcs)	(mm)	(mm)	(mm)	(mm)	(mm)
N 6 x 40 Z A2	050372	50	6	30	40	55	10
N 6 x 60 Z A2	050373	50	6	30	60	75	30
N 8 x 60 Z A2	050374	50	8	40	60	75	20
N 8 x 80 Z A2	050375	50	8	40	80	95	40
N 8 x 100 Z A2	050376	50	8	40	100	115	60

SXR-Z Frame Fixing

POZI
SXR-Z - with zinc-plated fischer safety screw for Cross drive Pozi-bit

		Sales unit	Discount Group	Drill hole diameter	Min. drill hole depth for through fixture	Min. embedment depth	Anchor length	Max. fixture thickness	Drive bit
Item	Art.-No.			(mm)	(mm)	(mm)	(mm)	(mm)	
SXR 6 x 35 Z	503231 [1]	50	G28	6	60	30	50	20	PZ 2
SXR 6 x 50 Z	503232 [1]	50	G28	6	70	30	60	30	PZ 2
SXR 6 x 60 Z	503233 [1]	50	G28	6	70	30	60	30	PZ 2
SXR 8 x 60 Z	505261	50	G28	8	70	50	60	10	PZ 3
SXR 8 x 80 Z	505262	50	G28	8	90	50	80	30	PZ 3
SXR 8 x 100 Z	505263	50	G28	8	110	50	100	50	PZ 3
SXR 8 x 120 Z	505264	50	G28	8	130	50	120	70	PZ 3
SXR 10 x 80 Z	47977	50	G28	10	90	50	80	30	PZ 4
SXR 10 x 100 Z	47978	50	G28	10	110	50	100	50	PZ 4
SXR 10 x 120 Z	47879	50	G28	10	130	50	120	70	PZ 4
SXR 10 x 140 Z	47980	50	G28	10	150	50	140	90	PZ 4
SXR 10 x 160 Z	47981	50	G28	10	170	50	160	110	PZ 4

SPEEDLINE FINISHING SOLUTIONS

Plasterboard Jointing

Speedline Jointing products offer a high quality surface finish when applied to plasterboard, resulting in a hardwearing, crack resistant joint, ready for sealing with a primer and final decoration. Whilst producing a smooth appearance, this also provides a seal to the plasterboard, a prerequisite for all Speedline solutions to achieve specified levels of fire resistance and sound insulation.

- **Speedline offer a choice of setting or Air Drying Joint Materials to suit your preference, Ready-mixed or dry powder products are available.**
- **For larger areas, Speedline Air Drying products can be machine applied.**

Joint Reinforcement

Suitable joint reinforcement is essential to minimise the risk of the joint cracking, which could appear after decoration. To achieve a smooth, flat, crack-free surface, tapered edge plasterboard and Speedline Joint Tape should be used in conjunction with Speedline Joint Compounds. Tapered edge plasterboards provide a small channel for the joint tape to be bedded into and are more suitable for Taping & Jointing. Square edge boards can also be used and are jointed similarly, however the joint treatment will form a shallow raised section above the board surface. To overcome this, Speedline Joint Compound should be feathered out into the field of the board to conceal the joint as much as possible.

Preparation

- **Plasterboards should be secured with the correct fixings.**
- **The heads of the screws should be just below the surface of the board.**
- **Any protruding screw heads should be tightened using a hand screwdriver, prior to spotting screw heads and commencing jointing.**
- **Gaps between boards greater than 3mm should be avoided or pre-filled prior to taping with Speedline Joint Filler.**
- **The site should be watertight and Speedline Jointing materials should only be applied to backgrounds where the minimum air tempreature will remain at or above 2°C.**

Taping and Jointing

The below details show the application of Speedline Jointing Materials onto tapered edge plasterboards. When jointing cut edges or square edge plasterboard it is recommended to increase the width of the finishing joint layer to a minimum of 400mm. When the joint treatment has set and dried, the joint should be sanded down to create a smooth, monolithic surface using Speedline Sanding Paper.

Tiling

Tiling up to a weight of 32kg/m^2 (including grout and adhesive) can be applied directly to the Taped & jointed finish, in conjunction with stud centres at 400mm. All tiles to be fixed in accordance with BS 5385. Tile adhesive should be suitable for plasterboard finishes and it is recommended that a waterproof adhesive & grout is used.

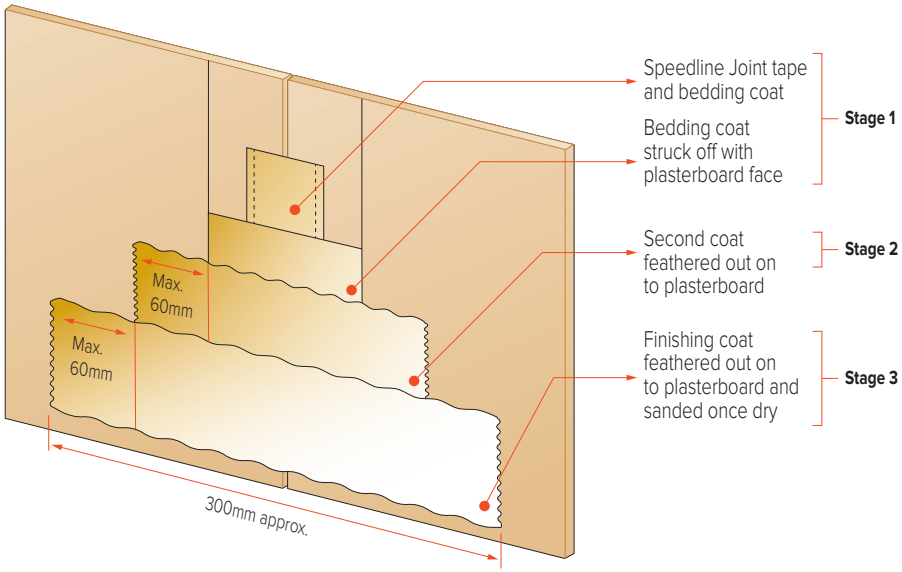
Painting

After the jointing treatment has been allowed to set, dry and final sanding is completed, dust should be removed from the surface and a suitable drywall primer applied. A primer is important as it evens out the differential suction between the plasterboard and joints providing an even surface suction for decoration finishes. It also helps to prevent plasterboards from discolouring. Surfaces should be allowed to fully dry before the application of paint in accordance with manufacturers instructions.

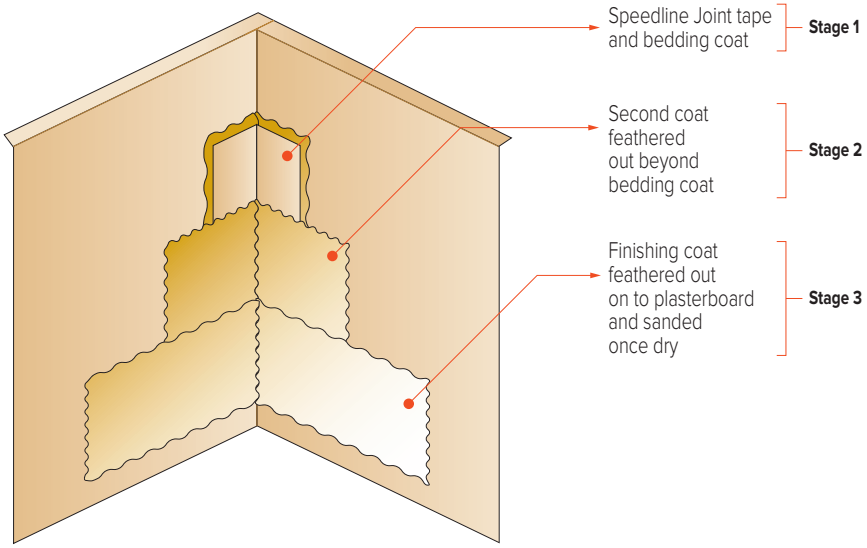
FIXINGS AND FINISHING SOLUTIONS

SPEEDLINE FINISHING SOLUTIONS

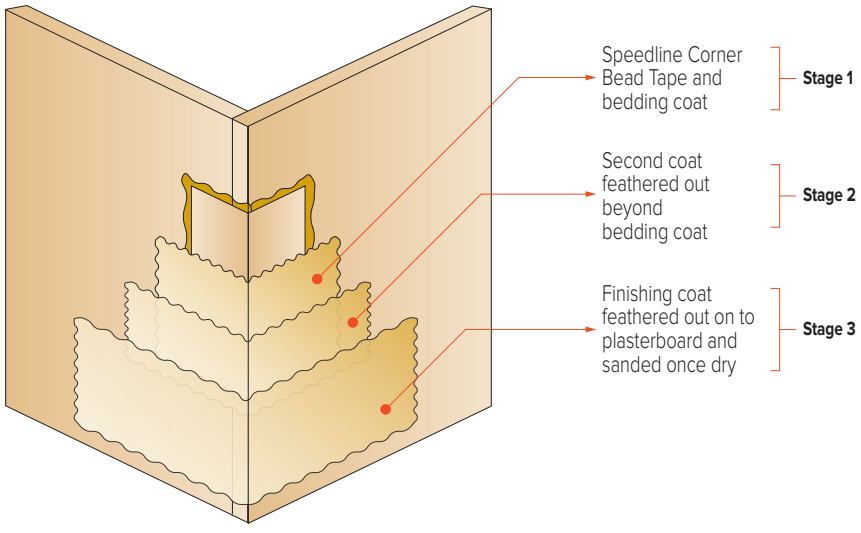
Flat Joint



Internal Corner



External Corner



SPEEDLINE FINISHING SOLUTIONS

FINISHING PRODUCTS

Speedline Drywall Fibreglass Tape

Flexible self-adhesive tape to cover plasterboard joints, also known as scrim tape.

Standards Applied: ETA – 09/0075

CE

Dimensions	Box Quantity	Pallet Quantity
48mm x 90m	24 Rolls	30 Boxes

Speedline Corner Bead Tape

Flexible paper tape with metal strips along the centre to help create edges when plastering.

Standards Applied: in accordance with European norms EN 13963 and EN ISO 9227 and EN 14353:2010

CE

Dimensions	Box Quantity	Pallet Quantity
50mm x 30m	10 Rolls	960 Rolls
50mm x 12.5m	10 Rolls	–

Speedline Sanding Paper

A4 Sanding paper 100/120/150 grit available for sanding blocks & multipurpose use.

CE

Dimensions	Pack Quantity	Box Quantity	Pallet Quantity
100mm x 280mm	25 Sheets	40 Packs	40 Boxes

FIXINGS AND FINISHING SOLUTIONS

SPEEDLINE FINISHING SOLUTIONS

Speedline Putty Pads

An acoustic intumescent putty pad for lining electrical socket boxes in drywall constructions, ensuring that the safety and performance of the drywall constructions are maintained to Building Regulations Parts B & E.

Permitted to be used as a mechanism of sealing electrical service penetrations, such as sockets in robust detail timber frame and metal frame separating walls as published in the Robust Details Part E Handbook.

Standards Applied: BS476 Part 20

CE

Dimensions	Box Quantity	Pallet Quantity
3600 x 178 x 3.2 (reel mm)	1 Reel	80 Reels

Speedline Drywall Adhesive

An extra smooth gypsum based compound suitable for direct bonding plasterboards and metal furring wall channels to walls.

Also suitable for direct bonding Speedline Thermal PIR Boards.

CE

Weight
25kg

Speedline Joint Filler

An extra smooth gypsum based setting compound suitable for filling plasterboard joints and bedding tapes.

CE

Weight
12.5kg

Speedline Ready Mix Joint Compound

A lightweight ready mixed, air drying compound suitable for bedding and finishing plasterboard joints in a two stage application.

CE

Weight
20kg

SPEEDLINE FINISHING SOLUTIONS

Speedline PVA Bond

A multi-purpose bonding agent, primer, sealer, cement and plaster admixture that adheres to most common building and DIY materials.

Ideal for priming unsound surfaces prior to plastering or painting, as an adhesive on wood, textiles and most applications where at least one surface is porous.

Standards Applied: Fully conforms to BS 5270.

CE

Size
5 Litre

Speedline Fire & Acoustic Sealant

A four hour rated, one part emulsion acrylic based, intumescent sealant which provides a firm yet flexible seal to joints in a variety of fire rated structures.

The product, in suitably designed joints, will resist the passage of fire for up to four hours. The selected fillers used in this formation also make it suitable for use as an acoustic sealant.

Standards Applied: Tested following the principles of BS EN 1366-4:2006 as detailed in Warrington Fire Research Report No. 181967 (may 2009) Acoustic rated to BS EN ISO 140/3.

Tested for air permeability to EN13141-1.

CE

Size	Box Quantity
310ml Tubes	12 Tubes
900ml Tubes	9 Tubes

NOTES

NOTES

SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Contact the Speedline technical team for advice and support on your project:

E: enquiries@speedlinedrywall.co.uk

T: 0117 301 3634

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