



# NyRock® Frame Slab 032

Non-combustible stone wool insulation designed specifically for use within timber and steel frames

NyRock Frame Slab 032 is a semi-rigid stone wool insulation slab designed specifically for use between the studwork of external timber or light gauge steel frame walls.

The slabs deliver insulation with optimised density and performance, offering a low thermal conductivity, manufactured in accordance with 13162:2012 + A1:2015.

Manufactured using NyRock technology, NyRock Frame Slab 032 has a more efficient fibre structure that increases the density of air pockets trapped within each slab. This results in an improved thermal performance when compared to traditional stone wool products.

- Low thermal conductivity of 0.032 W/mK.
- NyRock Frame Slab 032 is able to resist temperatures of over 1,000°C achieving the highest Euroclass A1 non-combustibility classification as defined in EN13501-1.
- Stone wool is dimensionally stable and has been proven to provide the same performance for more than 65 years after installation.\*
- The dimensional stability means the slabs will not slump or sag after installation.
- The slabs come in 570mm (timber) or 600mm (steel) widths allowing for quick and easy installation into frame walls.

\*FIW, Durability Project Mineral Wool (2016), "Conclusions and Outlook." Available via EURIMA (European Insulation Manufacturers Association) at: [www.eurima.org/uploads/ModuleXtender/Publications/168/2017-02-21\\_EURIMA-55YearsOfUse\\_Info\\_Sheet\\_V08\\_final.pdf](http://www.eurima.org/uploads/ModuleXtender/Publications/168/2017-02-21_EURIMA-55YearsOfUse_Info_Sheet_V08_final.pdf)



**Low lambda non-combustible stone wool insulation designed specifically for use within timber and steel frame constructions.**

NyRock Frame Slab 032 is manufactured using NyRock technology, a high-speed technological innovation.

# NyRock Frame Slab 032



## APPLICATIONS

NyRock Frame Slab 032 has been designed specifically for quick and easy installation into the standard size 600mm studs, of external timber or steel frame walls.

Stone wool insulation has a unique physical structure and durability, meaning that it keeps its shape over time, despite changes in temperature or humidity. With its dense fibre structure, NyRock Frame Slab 032 easily fits into frame walls, reducing the need for cutting, minimising waste and speeding up installation.

The dimensional stability means the slabs will not sag or slump after installation, with no gaps in the insulation layer, helping to maintain a consistent thermal performance for the lifetime of the building.

## PERFORMANCE

### Thermal performance

Tested to BS EN 13162:2012 + A1:2015 achieving a thermal conductivity  $\lambda$  value of 0.032 W/mK.

### Fire performance

NyRock Frame Slab 032 is non-combustible achieving a reaction to fire classification of A1, as defined in EN13501-1.

### Acoustic performance

The non-directional fibre orientation and density of stone wool means that sound waves are trapped, and vibrations dampened which can significantly reduce outside sources of noise when used in an external wall.

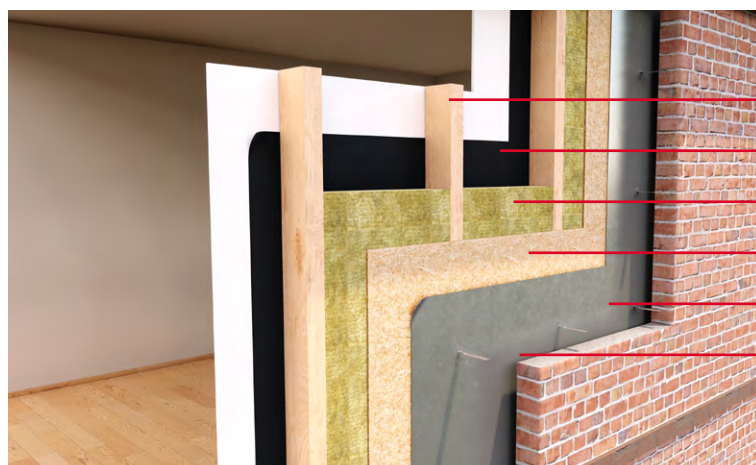
When used within an external wall consisting of a rainscreen facade, in combination with NyRock Rainscreen 032, NyRock Frame 032 can deliver result as high as  $R_w$  60dB in a typical wall system, as demonstrated by independent in-situ laboratory testing.

# NyRock Frame Slab 032

## Application performance

Timber frame external wall with brick finish / Insulation between the studs, without service void

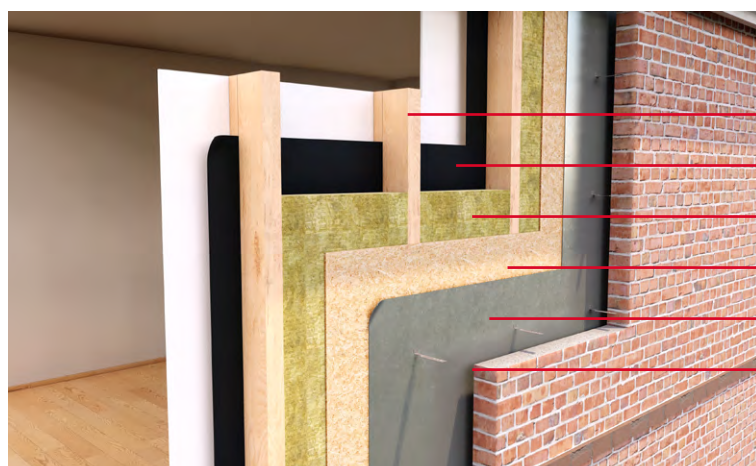
Timber Frame Slab (mm)	Stud depth	U-value (W/m <sup>2</sup> K)	Vapour control layer		Breather membrane	
			Standard	Standard	Tyvek Reflex	Protect TF200 Thermo
140	140	0.27	✓	✓		
140	140	0.24	✓		✓	
140	140	0.23	✓			✓



- Timber stud
- Vapour control layer
- NyRock Frame Slab 032 insulation
- OSB
- Breather membrane
- 50mm clear cavity

Insulation between the studs, with service void

Timber Frame Slab (mm)	Stud depth	U-value (W/m <sup>2</sup> K)	Vapour control layer			Breather membrane		
			Standard	Tyvek Air guard	Protect VC Foil Ultra	Standard	Tyvek Reflex	Protect TF200 Thermo
90	89	0.35	✓			✓		
90	89	0.27		✓			✓	
90	89	0.25			✓			✓
140	140	0.25	✓			✓		
140	140	0.21		✓			✓	
140	140	0.20			✓			✓



- Timber studs with 25mm service void
- Vapour control layer
- NyRock Frame Slab 032
- OSB
- Breather membrane
- 50mm clear cavity



# NyRock Frame Slab 032

## Steel frame external wall

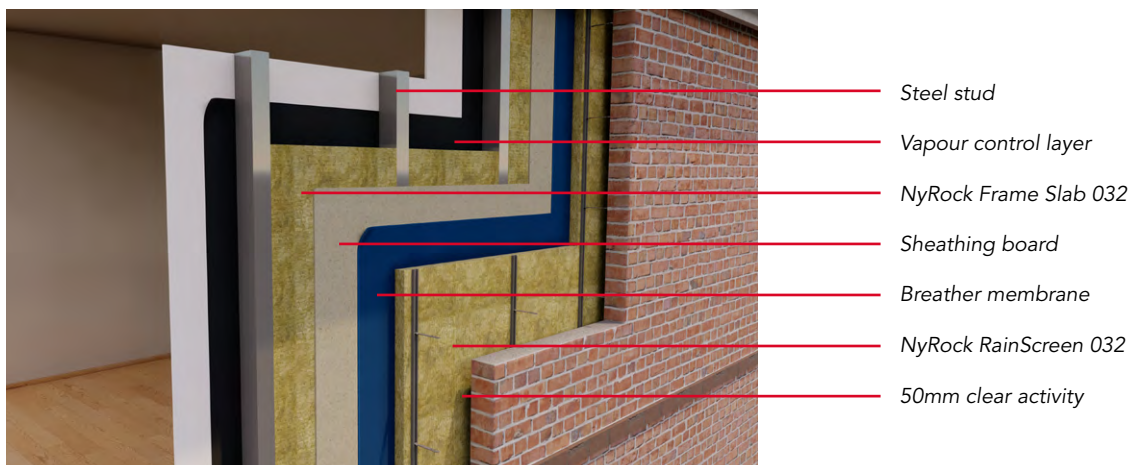
Steel Framing System / In-fill Walling with RainScreen Façade

NyRock Frame Slab 032 (mm)	Stud depth	U-value (W/m <sup>2</sup> K)	NyRock RainScreen 032 (mm)
150	150	0.14	190
150	150	0.15	170
150	150	0.16	150
150	150	0.17	125
100	100	0.15	200
100	100	0.16	180
100	100	0.17	160
100	100	0.18	145



## Steel Frame System with Brick Outer

NyRock Frame Slab 032 (mm)	Stud depth	U-value (W/m <sup>2</sup> K)	NyRock RainScreen 032 (mm)
100	100	0.25	50
120	120	0.24	50
150	150	0.22	50
100	100	0.17	100
120	120	0.17	100
150	150	0.16	100



# NyRock Frame Slab 032

## PRODUCT INFORMATION

Thickness	Thermal resistance m <sup>2</sup> K/W	Width (mm)	Length (mm)	Pieces/ pack	Area/ pack (m <sup>2</sup> )	Packs/ pallet	Pieces/ pallet
<b>Timber application</b>							
90	2.81	570	1200	4	2.74	12	48
140	4.38	570	1200	3	2.05	12	36
<b>Steel application</b>							
100	3.13	600	1200	3	2.16	16	48
120	3.75	600	1200	2	1.44	20	40
150	4.69	600	1200	2	1.44	16	32

## ADDITIONAL INFORMATION

### Durability

ROCKWOOL stone wool is durable by nature. Sample testing from existing buildings shows that ROCKWOOL stone wool retains its performance for at least 65 years\* without being affected by compression or temperature and humidity changes.

*\*FIW, Durability Project Mineral Wool (2016)*

### Water resistance and moisture

ROCKWOOL stone wool repels liquid water due to its fibre orientation and a water repellent additive.

### Condensation

ROCKWOOL stone wool insulation allows the construction to breathe, reducing the risk of condensation, which can lead to rot, mould and humidity damage.

### Vapour control and breather membranes – managing moisture

A vapour control layer is essential on the 'warm' side of the insulation and frame, to reduce the risk of condensation forming inside the building. Thermal benefits can be achieved by using high performance vapour control membranes when they have a low emissivity reflective surface, and 20mm or more of non-ventilated air space. The benefit to the u-value can be seen in the performance tables.

The low emissivity R-values used in the calculations for the service zone are based on manufacturers claims:

- Standard VCL = 0.180 m<sup>2</sup>K/W
- TYVEK AirGuard = 0.680 m<sup>2</sup>K/W
- Protect VC Foil = 0.780 m<sup>2</sup>K/W

### Breather membranes

A vapour permeable membrane on the outside of the sheathing board is also necessary, this protects the timber frame from water penetration whilst allowing water vapour to escape. Again, enhanced thermal benefits are offered by reflective low emissivity membranes, where there is a clear air space of 20mm or more. The effect on the overall wall u-value can be seen in the tables.

The low emissivity R-values of the external cavity used in the calculations above are based on manufacturers claims:

- Standard breather membrane = 0.180 m<sup>2</sup>K/W
- TYVEK Reflex = 0.540 m<sup>2</sup>K/W
- Protect TF200 Thermo = 0.770 m<sup>2</sup>K/W

# NyRock Frame Slab 032

## STANDARDS AND APPROVALS

### Certificate

Manufactured in accordance with BS EN 13162:2012+A1:2015 Thermal insulation products for buildings. Factory made mineral wool (MW) products. Designation code: MW-EN 13162-T4-WS-WL(P)-MU1.

Manufactured under ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems.



## INSTALLATION

The product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit [www.rockwool.com/uk](http://www.rockwool.com/uk) or contact our Technical Solutions Team on 01656 868490.

## SPECIFICATION CLAUSES

The following NBS clauses include NyRock Frame Slab 032:

P10

140

K10

145

155

165

# NyRock Frame Slab 032

## BUILDING SAFETY AND PRODUCT USE

### LEGAL NOTICES

#### General safety requirements – Building Safety Act 2022

ROCKWOOL Limited is committed to supporting specifiers, resellers and users of ROCKWOOL products for the full life cycle of the product to comply with the obligations and responsibilities set out in the Building Safety Act 2022. With regard to the general safety requirements of the Act, ROCKWOOL Limited cannot control or foresee every situation where its products might be used. We therefore strongly advise that specifiers, resellers and users contact us where use of ROCKWOOL products is contemplated in applications different from those explicitly described in the latest, relevant ROCKWOOL product datasheets; especially in applications that can be reasonably foreseen as critical to safety.

ROCKWOOL Limited reserves the right to amend the specification of its products without notice. Changes to the ROCKWOOL manufacturing process, or to pertinent regulations, may be reflected in changes to tested and certified product performance. Whilst ROCKWOOL Limited endeavours to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law or other developments affecting the accuracy of the information contained in our publications.

ROCKWOOL Limited does not accept responsibility for the consequences of using (including testing or certifying) its products in applications different from those explicitly described in the relevant ROCKWOOL product datasheets. Expert advice should be sought, and ROCKWOOL Limited should be contacted, where such different use is contemplated, or where the extent of any use described by ROCKWOOL Limited is in doubt.

#### The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the most important assets of the ROCKWOOL Group, and is therefore well-protected and defended by ROCKWOOL throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion, you must apply for a Trade Mark Usage Agreement.

To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

#### Trademarks

Registered trademarks of the ROCKWOOL Group include but are not limited to:

ROCKWOOL®, RockClose®, RainScreen Duo Slab®, HardRock®, RockFloor®, Flexi®, RockFall®, FirePro®, DuctRock®, BeamClad®, NyRock®

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If you require permission to use ROCKWOOL images, you must apply for a Usage Agreement.

To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

# NyRock Frame Slab 032

## ROCKWOOL stone wool - safe to install and live alongside

There are no hazardous classifications associated with stone wool insulation manufactured by ROCKWOOL-UK according to EU REACH and UK REACH regulations on health and the environment.

ROCKWOOL safe use instruction sheets and material safety data sheets (where applicable) can be downloaded [here](#).



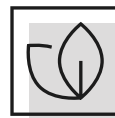
### Sustainability

ROCKWOOL products are used to enrich modern living, creating safer, healthier and more climate-resilient communities.

We transform abundant, natural volcanic rock into stone wool insulation products that are used to reduce energy demand, lower fuel bills and help address society's climate change challenges.

ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. Please contact us for details of how we can work together to recycle waste ROCKWOOL stone wool material that may be generated during on-site installation.

Our annual sustainability reports, which set out progress against our sustainability goals, and further details of the positive impacts of using our products can be found on our website.



### Environment

ROCKWOOL takes a fact-based, auditable approach to documenting our progress in maximising our products' positive impact and minimising the effect our operations have on the environment, backed by third-party references and methodologies. Further details can be found online in our annual sustainability report.

Our high-tech production process uses filters, pre-heaters, after-burners and other cleaning and collection systems that help to reduce the effects of our manufacturing operations on the environment.

ROCKWOOL stone wool insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

