## PANEL SUPPLIES LIMITED

Worldwide Traders in Plywood and Wood Based Panel Products





PLYWOOD

FSC CERTIFIED PANELS

MELAMINE FACED PANELS

MEDIUM DENSITY FIBREBOARD

CHIPBOARD

FLAME RETARDANT PANELS

HARDBOARD

FLEXIBLE PANELS

ORIENTED STRAND BOARD

DOORBLANKS

DECORATIVE VENEERED PANELS

BLOCKBOARD

**Product Catalogue** 

## Contents

Page 3

Page 4 About Panel Supplies

Page 5 Panel Supplies and the Environment

Page 6-8 Hardwood Plywood

Page 9 Softwood Plywood

Page 10 MDO/Film Face/Mesh Plywood

Page 11-12 Miscellaneous

Page 13 OSB & Chipboard

Introduction/Contact info/Weblinks

Page 14 MDF

Page **15** Specialised Products

Page **16-17** Appendices

Page 18 Glossary

Page 19 Plywood Explained











## Welcome to Panel Supplies

Panel Supplies, part of the International Plywood Group, is one of the UK's leading independent distributors of timber based sheet materials. In an extremely competitive market we pride ourselves in always striving to achieve value for money for every customer.

Being part of the group's rapid growth is testimony to our success. From a turnover of £14m in 1998, the group looks set to exceed £200m in 2021/2022.

Quality and service are the foundations to Panel Supplies growing success. Our aim is to ensure that all customers are supplied with the right product for the job and with a wealth of experience we are confident that whatever the panel product requirement, we can find the solution.

## Contact information

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Weblinks

Panel Supplies Ltd: www.panelsupplies.co.uk

International Plywood (Importers) Ltd: www.plywooduk.com

International Panel Products: www.internationalpanelproducts.com

Forest Stewardship Council (FSC®): www.fsc.org

Programme for the Endorsement of

Forest Certification (PEFC™): www.pefc.org

Timber Trade Federation (TTF): www.ttf.co.uk

Timber Research and Development
Association (TRADA): www.trada.co.uk

British Board of Agrément: www.bbacerts.co.uk



## **About Panel Supplies**

Established in 1994 in a small office in Hockley, Panel Supplies saw considerable growth in the first few years which took the company to our first small warehouse also in Hockley, to a 25,000sqft warehouse in Basildon. In 2007 we became part of the International Plywood group which enabled us to continue this growth, which then lead us to our current site, in excess of 85,000sqft within Tilbury Docks. This latest move coupled with expertise in the handling and distribution of stock, means we are able to meet customer requirements from single sheets to full loads, to destinations throughout the UK and each customer receives the same excellent service and customer care.

As importers of products made from one of the oldest building materials known to man, we take our responsibility to the environment and the sustainability of the planet very seriously. As a member of the Timber Trade Federation and a signatory to their Responsible Purchasing Policy, our chain of supply gives customers peace of mind from whichever part of the world their products are sourced.

From quality manufacturers all over the world we import a wide range of products which are destined for use in a diverse range of industries, from construction to marine, automotive to interiors. Our large stockholding ensures a prompt ex stock delivery on a vast range of products.

Despite our rapid growth, we remain committed to the friendly, informal and personal service on which our success has been built.

Panel Supplies recognises that we have a responsibility to the environment and endeavour to carry out every aspect of our business in ways which are as environmentally friendly as possible.

Our commitment to environment policy is demonstrated by our FSC® chain of custody (CU-COC-805640) which is awarded to companies that can demonstrate that their products contain wood from well managed forests. This is an independent certification and our chain of custody allows us to sell FSC® Certified Plywood and Timber Products as a part of our stock range.

In 2006 we were awarded PEFC<sup>™</sup> chain of custody (CU-PEFC-805640) which enabled us to widen our stock range of certified products.









## Panel Supplies and the Environment

Commitment to the environment is part of every aspect of our business. As an ISO 9001:2015 approved organisation, Panel Supplies regularly appraise our suppliers to ensure their products and services meet the exacting standards and new supplier's environmental policy is thoroughly checked before entering into a partnership.

We encourage all staff, suppliers and contractors to adopt sound environmental practices that will promote efficiency and minimise waste. All staff members are empowered to review their activities within the company to improve our performance in this important area.

Disposal of waste materials and packaging is carried out only by approved sub-contractors to ensure safe removal and disposal in an environmentally friendly manner.

Our long-term intention is to source all our forest products from well managed forests that have been certified to credible certification standards. This is a goal to which we are totally committed.

A stepwise approach to responsible purchasing that utilises the best available techniques and information is the way in which this commitment will be achieved.

At Panel Supplies we abide by all relevant national legislation and international conventions (such as CITIES) relating to our purchase of forest products. We never knowingly purchase products which have been manufactured from illegally sourced materials.

To ensure these goals, Panel Supplies actively encourages all our suppliers to engage in a process of time-bound, transparent stepwise commitment to credible certification.

We work with all suppliers to encourage the promotion of best practice in all aspects of business.

As a member of the Timber Trade Federation, we closely follow the Responsible Purchasing Policy of Forest Forever – the environmental voice of the Federation. Forests Forever aims to promote the environmental case for timber and timber products, promote sustainable improvements in the environmental performance of the industry, encourage responsible forest practices and provide education and information to members of the trade and general public.

Responsible purchasing is the key to the sustainability of the environment and the success of our business. Panel Supplies never knowingly source products from suppliers who do not comply with relevant national legislation relating to forest products trade, or who source products from forest areas that are protected or have high conservation value.





## Hardwood Plywood

## "Q-Mark" Plywood

Chinese Hardwood Throughout Plywood

#### **FSC®** Certified

B/BB EN636-3S EN314-2 Class 3

Brands	QPly/QDek	
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
25mm	2440 x 1220 Structural	(36)

## Jadeply 72

Chinese Hardwood Throughout Plywood

#### **FSC®** Certified

B/BB EN636-2 EN314-2 Class 2

5.5mm	2440 x 1220 Structural	(165)

## FSC® Certified

B/BB EN636-3S EN314-2 Class 3

2440 x 1220 Structural	(100)
2440 x 1220 Structural	(75)
2440 x 1220 Structural	(60)
2440 x 1220 Structural	(50)
2440 x 1220 Structural	(40)
2440 x 1220 Structural	(36)
	2440 x 1220 Structural 2440 x 1220 Structural 2440 x 1220 Structural 2440 x 1220 Structural



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## **QPly Plywood**

Chinese Hardwood Throughout Plywood

#### **FSC® Certified**

B/BB EN636-2 EN314-2 Class 2

3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)

## Far Eastern Plywood

In this context, "Far Eastern" is generally assumed to be tropical hardwood plywood manufactured in Indonesia or Malaysia. We offer a full range of sizes and grades from stock. We also supply to specific order, cut-to-size, pre-painted and flame retardant panels.

Hardwood Throughout Plywood BB/CC B/BB EN636-3 EN314-2 Class 3 Can be FSC® or PEFC™ Certified

3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
22mm	2440 x 1220 Structural	(40)
25mm	2440 x 1220 Structural	(36)

# FSC® Certified and PEFC™ Certified Products always available in stock

The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)



## Chinese Hardwood Faced Combi Core Plywood

### **FSC®** Certified

B/BB EN636-2 EN314-2 Class 2

Brands	ds Stable/Jadeply/Tiger/Eucamax/Zp	
3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
22mm	2440 x 1220 Structural	(40)
25mm	2440 x 1220 Structural	(36)

#### B/BB EN636-2 EN314-2 Class 2

Brands	Stable/Jadeply/Tiger/Eucamax/Zply/ Xtraplex	
3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
22mm	2440 x 1220 Structural	(40)
25mm	2440 x 1220 Structural	(36)



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# Chinese Hardwood Faced Poplar Core Plywood

### **FSC®** Certified

B/BB EN636-2 EN314-2 Class 2

Brands	Emerald/Grandply/Eko Dragon/ Greenplex	
3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
22mm	2440 x 1220 Structural	(40)
25mm	2440 x 1220 Structural	(36)

### B/BB EN636-2 EN314-2 Class 2

Brands	Emerald/Grandply/Eko Dragon/ Greenplex	
3.6mm	2440 x 1220 Non Structural	(250)
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)
22mm	2440 x 1220 Structural	(40)
25mm	2440 x 1220 Structural	(36)

# FSC® Certified and PEFC™ Certified Products always available in stock

The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)



## Hardwood Plywood

# Chinese Hardwood Faced Poplar Core Plywood

### **FSC® Certified**

B/BB EN636-1 EN314-2 Class1

Brand	Maxply	
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Non Structural	(100)
12mm	2440 x 1220 Non Structural	(75)
18mm	2440 x 1220 Non Structural	(50)

B/BB EN636-1 EN314-2 Class1

Faced	Maxply	
5.5mm	2440 x 1220 Non Structural	(165)
9mm	2440 x 1220 Non Structural	(100)
12mm	2440 x 1220 Non Structural	(75)
18mm	2440 x 1220 Non Structural	(50)

Structural Maxply is available on a forward order basis only.



The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)

FSC® Certified and PEFC™ Certified Products always available in stock

# 3rd Party Verified Marine Plywood - Malaysian/Indonesian

BS1088: 2003 EN636-3 EN314-2 Class 3 Can be FSC® Certified or PEFC™ Certified

The Q-Mark marine plywood certification scheme is designed to improve the quality and performance of marine plywood used in the construction industry and demonstrate compliance with BS 1088.

The Timber Trade Federation now requires all marine plywood sold by its members to comply with BS 1088 and has recommended that future claims of compliance should be supported by independent third party quality assurance.

6mm	2440 x 1220	(150)
9mm	2440 x 1220	(100)
12mm	2440 x 1220	(75)
15mm	2440 x 1220	(60)
18mm	2440 x 1220	(50)
25mm	2440 x 1220	(36)

## Large Press Chinese Hardwood Plywood

B/BB EN636-2 EN314-2 Class 2

Can be FSC® Certified or PEFC™ Certified

Brands Jiangshan/Samply/Ecoplex

3.6mm	3050 x 1525/1220	(170)
5.5mm	3050 x 1525/1220	(110)
9mm	3050 x 1525/1220	(70)
12mm	3050 x 1525/1220	(50)
15mm	3050 x 1525/1220	(40)
18mm	3050 x 1525/1220	(35)
25mm	3050 x 1525/1220	(25)



# Chilean Radiata Pine Plywood ARAUCOPLY.

#### **FSC®** Certified

CDTS/CPD/BCX EN636-2S EN314-2 Class 3 BBA Structural Grade

9mm	2440 x 1220	(108)
12mm	2440 x 1220	(80)
15mm	2440 x 1220	(65)
18mm	2440 x 1220	(54)
18mm	2440 x 1220 TG2LE	(54)
18mm	2400 x 600	(108)
21mm	2440 x 1220	(46)
21mm	2440 x 1220 TG2LE	(46)
21mm	2400 x 600 TG4E	(92)

## Chinese Pine Pinex Plywood

### **FSC® Certified**

C+/C EN636-2S EN314-2 Class 2

9mm	2440 x 1220 Structural	(100)
12mm	2440 x 1220 Structural	(75)
15mm	2440 x 1220 Structural	(60)
18mm	2440 x 1220 Structural	(50)



# Brazilian Elliottis Pine Plywood Sudati/Guararapes

### **FSC® Certified**

C+/C/BCX EN636-2 EN314-2 Class 2 Structural BBA/CE2+ & Non Structural CE4

9mm	2440 x 1220	(100)
12mm	2440 x 1220	(75)
15mm	2440 x 1220	(60)
18mm	2440 x 1220	(50)
24mm	2440 x 1220	(38)







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The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)



## **Euroform MDO**

#### **FSC®** Certified

Chinese MDO Plywood – Edge Sealed EN636-2 EN314-2 Class 2

Medium Density Overlay plywood for concrete formwork MDO333 Face/120g Film Reverse

18mm	2440 x 1220	(50)
	Z I IO X IZZO	(30)

## Europlex

## Chinese Film Faced Plywood

#### **FSC®** Certified

EN636-2 EN314-2 Class 2

Combi Core - Edge Sealed Brown film 180g Face/180g Reverse

18mm	2440 x 1220	(50	))

## Chinese Film Faced Plywood

### **FSC® Certified**

EN636-2 EN314-2 Class 2

Poplar Core - Edge Sealed Brown or Black film 120g Face/120g Reverse

18mm	2440 x 1220/2500 x 1250	(50)

## Chinese Film Faced Plywood

EN636-2 EN314-2 Class 2

Poplar Core - Edge Sealed Brown or Black film 120g Face/120g Reverse

18mm	2440 x 1220/2500 x 1250	(50)

## Chinese Wiremesh Plywood

### **FSC® Certified**

Chinese Mesh Faced Birch Plywood EN636-2 EN314-2 Class 2

Brown Mesh Face 240g/120g Smooth Reverse

12mm	2440 x 1220	(75)
18mm	2440 x 1220	(50)

## Russian Birch Mesh Plywood

### **FSC® Certified**

Russian Mesh Faced Birch Plywood EN636-2 EN314-2 Class 2

Brown Mesh Face 240g/120g Smooth Reverse

12mm	2440 x 1220	(75)
18mm	2440 x 1220	(50)

The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)







# Russian/Latvian Birch Plywood BB/CP – BB/BB

EN636-2 EN314-2 Class 2 - FSC® Certified

4mm	2440 x 1220	(100)
6mm	2440 x 1220	(65)
9mm	2440 x 1220	(44)
12mm	2440 x 1220	(33)
15mm	2440 x 1220	(26)
18mm	2440 x 1220	(22)
24mm	2440 x 1220	(16)

## Flexible Plywood

5mm	2440 x 1220	(190)
8mm	2440 x 1220	(110)
5mm	1220 x 2440	(190)
8mm	1220 x 2440	(110)

# Flame Retardant Plywood Sentrin Euroclass B

### **FSC® Certified**

Internal Fire Treated EN636-3 Plywood. WPA Type HR treatment

5.5mm	2440 x 1220	(165)
9mm	2440 x 1220	(100)
12mm	2440 x 1220	(75)
15mm	2440 x 1220	(60)
18mm	2440 x 1220	(50)
25mm	2440 x 1220	(36)

## Blockboard

18mm	2440 x 1220	(50)

## Doorblanks

## Pacifire/Sentry

Can be FSC® Certified

FD30 (Fire Resistant for up to 30 minutes)

44mm	2135 x 915	(26)
44mm	2440 x 1220	(20)

Can be FSC® Certified

FD60 (Fire Resistant for up to 60 minutes)

54mm	2135 x 915	(20)
54mm	2440 x 1220	(20)

# Lightweight Doorblanks Pacifire/Sentry

Can be FSC® Certified

FD30 (Fire Resistant for up to 30 minutes)

44mm	2135 x 915	(26)
44mm	2440 x 1220	(20)





The term WBP which referred to plywood's glue bond is obsolete. The correct terminology is plywood with an EN314-2 Class 3 glue bond. (See page 19 for full information)



## **Eucalyptus Hardboard**

#### **FSC®** Certified

3mm	1220 x 610	(300)
3mm	2440 x 1220	(200)

## White Melamine Faced MDF

### **FSC® Certified**

3mm	2440 x 1220	(240)
12mm	2440 x 1220	(60)
15mm	2440 x 1220	(50)
18mm	2440 x 1220	(40)

# White Melamine Faced Chipboard

### **FSC® Certified**

15mm	2440 x 1220	(50)
18mm	2440 x 1220	(40)

## Magply

### **Euroclass A1 Non Combustible Board**

A high performance multi-functional MGO board, which offers a fire-safe and environmentally friendly alternative to conventional wood, plywood or OSB products.

9mm	2400 x 1220	(100)
12mm	2400 x 1220	(75)

## T&G and Cut To Size Panels

We offer a comprehensive cutting and tongue and grooving service on most panels, subject to minimum quantities.

Fax enquiries to: 01375 488090

Email enquiries to: sales@panelsupplies.co.uk









## Oriented Strand Board (OSB)

OSB is and engineered wood based panel where strands of wood are laid in cross-oriented layers and bonded with ECO resin. The result is a strong board that resists moisture, giving it high load capacity. Typical uses include timber frame buildings, roofing, sarking, site hoardings and flooring.

### OSB<sub>3</sub>

### **FSC® Certified**

EN300 – Type 3, EN13501-1 BBA Certified for Structural Use

9mm	2440 x 1220	(72)
9mm	2397 x 1197	(72)
9mm	2697 x 1197	(72)
11mm	2440 x 1220	(60)
11mm	2397 x 1197	(60)
14mm	2440 x 1220	(48)
15mm	2397 x 1197	(44)
15mm	2440 x 1220	(44)
18mm	2440 x 1220	(36)
18mm	2397 x 1197	(36)
18mm	2440 x 1220 TG2LE	(36)
18mm	2440 x 590 TG4E	(36)
18mm	2500 x 1250	(36)
22mm	2500 x 1250	(30)



## P5 T&G Flooring Grade Chipboard

### **FSC® Certified**

18mm	2400 x 600	(100)
22mm	2400 x 600	(80)

# P5 T&G Peel Clean Flooring Grade Chipboard



### **FSC® Certified**

18mm	2400 x 600	(80)
22mm	2400 x 600	(64)

# P5 T&G Protect Flooring Grade Chipboard



### **FSC® Certified**

22mm	2400 x 600	(64)
22111111	2 100 X 000	(01)

## Accessories

Jointing Tape 50mm x 25m	(30)
D3 PVA Joint Adhesive 1ltr	(6)
D4 PVU Edge & Board Adhesive 1ltr	(6)









# Medium Density Fibreboard (MDF)

MDF offers smooth surfaces and a uniformly dense core which make it suitable for cutting, machining and moulding. It is also widely used in furniture manuf-acturing and can be veneered, laminated or painted to offer a range of finishes. Standard MDF is unsuitable in applications where the panels are to be exposed to moisture; MR grade is available for such purposes. We stock a full range of sizes in both grades to ensure the right product is available for all our customers at all times.

### Standard Grade MDF

### **FSC®** Certified

Suitable for general applications, including mouldings, joinery and furniture.

3mm	2440 x 1220	(227)
4mm	2440 x 1220	(192)
6mm	2440 x 1220	(120)
9mm	2440 x 1220	(90)
22mm	2440 x 1220	(32)
30mm	2440 x 1220	(27)
38mm	2440 x 1220	(21)
50mm	2440 x 1220	(18)

## Lightweight MDF

### **FSC® Certified**

Suitable for use in shopfitting, caravans, exhibition stands and other applications where weight saving is of importance.

12mm	2440 x 1220	(75)
15mm	2440 x 1220	(60)
18mm	2440 x 1220	(50)
25mm	2440 x 1220	(32)

### Moisture Resistant MDF

### **FSC® Certified**

Suitable for use in humid conditions when used in accordance with manufacturers' recommendations.

6mm	2440 x 1220	(120)
9mm	2440 x 1220	(90)
12mm	2440 x 1220	(60)
15mm	2440 x 1220	(50)
18mm	2440 x 1220	(40)
22mm	2440 x 1220	(32)
25mm	2440 x 1220	(28)
30mm	2440 x 1220	(24)

### Flame Retardant MDF

#### **Euroclass B**

Can be FSC® Certified or PEFC™ Certified

12mm	2440 x 1220	(60)
18mm	2440 x 1220	(40)
12mm	3050 x 1220	(60)
18mm	3050 x 1220	(40)

# FSC® Certified and PEFC™ Certified Products always available in stock



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## **Specialised Products**

## Veneered MDF

Can be FSC® Certified or PEFC™ Certified

### Crown Cut Oak



European Oak, ranging from almost white to light brown and can have some very heavy grain structure.

Ideal veneer for all types of finish from clear to dark stains, to blacking or liming.

6mm-26mm

## American Black Walnut



North American, predominantly crown, from darkish purple with black streaks. Typically large crowns due to the dimensions of the trees the logs are cut from. Walnut is best suited to clear finishes rather than stains

19mm

Iron on Edging Strip is available in 22mm and 30mm widths, 50mtr rolls.

### **FSC® Certified and PEFC™ Certified Products** always available in stock







## V-Grooved & Beaded MDF **Richmond Profile**

### Moisture Resistant MDF

### FSC® Certified

9mm	2440 x 1220	(40)
9mm	1220 x 2440	(40)



### Moisture Resistant Primed MDF

### **FSC® Certified**

9mm	2440 x 1220	(40)
9mm	1220 x 2440	(40)



## **Appendices**

### Fire Ratings Explained

The use of fire retardant products is a crucial part of safety in public buildings in the event of fire.

The two main classes of fire retardant timber sheet materials are Euroclass B (limited combustability and low surface spread of flame) and Euro-class C (low surface spread of flame).

Panel Supplies offer a number of fire retardant products ex stock. We can also offer treatments on most panel products to these classes.

The Euroclass B & C ratings have superseded the old BS476 Class 0 and 1 ratings respectively. Although Euroclass C products are a directly com-patible replacement for Class 1, please note that Euroclass B is not a direct substitution for Class 0. Please check carefully with your specification to ensure you order the correct panel.

#### **British Standards (other than ENs)**

- BS 1088 Marine plywood.
- BS 1088-1:2003 Marine plywood. Requirements.
- **BS 1088-2:2003** Marine plywood. Determination of bonding quality using the knife test.

### **European Standards**

- BS EN 300:2006 Oriented strand boards (OSB).
   Definitions, classification and specification.
- BS EN 309:2005 Particleboards. Definition and classification.
- **BS EN 310:1993** Wood-based panels. Determination of modulus of elasticity in bending and of bending strength.
- BS EN 311:2002 Wood based panels. Surface soundness.
   Test method.
- BS EN 312:2010 Particleboards. Specifications.
- **BS EN 313-2:2000** Plywood. Classification and terminology.
- **BS EN 314-1:2004** Plywood. Bonding quality. Test methods.

- **BS EN 314-2:1993** Plywood. Bonding quality. Requirements.
- BS EN 315:2000 Plywood. Tolerances for dimensions.
- BS EN 316:2009 Wood fibreboards. Definition, classification and symbols.
- BS EN 317:1993 Particleboards and fibreboards.
   Determination of swelling in thickness after immersion in water.
- BS EN 319:1993 Particleboards and fibreboards.
   Determination of tensile strength perpendicular to the plane of the board.
- BS EN 320:2011 Particleboards and fibreboards.
   Determination of resistance to axial withdrawal or screws.
- **BS EN 321:2002** Wood based panels. Determination of moisture resistance under cyclic test conditions.
- **BS EN 322:1993** Wood based panels. Determination of moisture content.
- BS EN 323:1993 Wood based panels. Determination of density.
- BS EN 324-1:1993 Wood-based panels. Determination of dimensions of boards. Determination of thickness, width and length.
- BS EN 324-2:1993 Wood based panels. Determination of dimensions of boards. Determination of squareness and edge straightness.
- BS EN 325:2012 Wood based panel. Determination of dimensions of test pieces.
- BS EN 326-1:1994 Wood based panels. Sampling, cutting and inspection. Part 1 Sampling and cutting of test pieces and expression of test results.
- BS EN 326-2:2010+A1:2014 Wood based panels.
   Sampling, cutting and inspection. Initial type testing and factory production control.
- BS EN 326-3:2003 Wood based panels. Sampling, cutting and inspection. Inspection of an isolated lot of panels.



## **Appendices**

#### **European Standards**

- BS EN 336:2013 Durability of wood and wood based products. Use classes: Definition, application to solid wood and wood based products.
- BS EN 350-1:1994 Durability of wood and wood based products. Natural durability of solid wood. Guide to principals of testing and classification of natural durability of wood.
- BS EN 350-2:1994 Durability of wood and wood based products. Natural durability and treatability of selected wood species of importance in Europe.
- BS EN 594:2011 Timber structures. Test methods.
   Racking strength and stiffness of timber frame wall panels.
- **BS EN 596:1995** Timber structures. Test methods. Soft body impact test of timber framed walls.
- BS EN 622-1:2003 Fibreboards. Specifications.
   General requirements.
- BS EN 622-2:2004 Fibreboards. Specifications.
   Requirements for hardboards.
- **BS EN 622-3:2004** Fibreboards. Specifications. Requirements for medium boards.
- **BS EN 622-4:2009** Fibreboards. Specifications. Requirements for soft boards.
- **BS EN 622-5:2009** Fibreboards. Specifications. Requirements for dry process boards (MDF).
- BS EN 633:1994 Cement-bonded particleboards Definition and classification.
- **BS EN 634-1:1995** Cement-bonded particleboards. Specifications. General requirements.
- BS EN 634-2:2007 Cement-bonded particleboards.
   Specifications. Requirements for OPC bonded particle-boards for use in dry, humid and external conditions.
- **BS EN 635-1:1995** Plywood. Classification by surface appearance. General.
- **BS EN 635-2:1995** Plywood. Classification by surface appearance. Hardwood.

- **BS EN 635-3:1995** Plywood. Classification by surface appearance. Softwood.
- BS EN 635-5:1999 Plywood. Classification by surface appearance. Methods for measuring and expressing characteristics and defects.
- BS EN 636:2012 Plywood. Specifications.
- **BS EN 717-1:2004** Wood based panels. Determination of formaldehyde release. Formaldehyde emission by the chamber method.
- BS EN 717-2:1995 Wood based panels. Determination of formaldehyde release. Formaldehyde release by gas analysis method.
- BS EN 717-3:1996 Wood based panels. Determination of formaldehyde release. Formaldehyde release by the flask method.
- BS EN 789:2004 Timber Structures. Test methods.
   Determination of mechanical properties of wood based panels.
- BS EN 1058:2009 Wood based panels. Determination of characteristic 5-percentile values and characteristics mean values.
- BS EN 1072:1995 Plywood. Description of bending properties for structural plywood.
- **BS EN 1087-1:1995** Plywood. Description of bending properties for structural plywood.
- BS EN 12871:2013 Wood based panels. Determination of performance characteristics for load bearing panels for use in wood floors, roofs and walls.
- BS EN 13810-1:2002 Wood based panels. Floating floors. Performance specifications and requirements.
- BS EN 13823:2003:2010+A1:2014 Reaction to fire tests for building products. Building products excluding floorings exposed to the thermal attack by a single burning item.
- BS EN 13986:2004 Wood based panels for use in construction. Characteristics, evaluation of conformity and marking.



## Glossary of terms

EN 13986	EU Regulation for Construction	Q-Mark	The Q-Mark Structural Plywood
2.1 13700	Products (CPR)	Q IVIGIR	Scheme is a third party product
E1	Lower formaldehyde level		certification scheme operated by BM TRADA certification Ltd.
E2 BBA	Higher formaldehyde level  British Board of Agrément UK's major authority offering approval of construction panels, systems and installers – we refer to BBA load bearing		The scheme is based on the principles of ISO 9001, EN 45011, ISO IEC 17025, ISO Guide 62/65 and confirms compliance with EN 13986, together with a specific set of performance criteria set by BM TRADA, as defined
FSC®	Forest Stewardship Council (scheme certifying sustainability and legality)		in TRADA documents, in order to attain a product which performs to a high standard. As the scheme meets all the
PEFC™	Programme for Endorsement of Forest Certification (scheme certifying sustainability and legality)		requirements of the harmonised standard EN 13986 CE marking is also possible following a favourable assessment. The scheme covers factory
VLO	Verified Legal Origin (standard verifying legal source)	production control, of and test/assessment	production control, documentation and test/assessment evidence and the
Grades	Grade of face and back of sheet of plywood, e.g. C+/C, B/C, B/B, B/BB, BB/CC, etc.		resultant certification is specific to clearly defined products and their constituent components.
SE	Square edged		The objectives of the scheme are:
T&G	Tongued and grooved		<ul> <li>To improve the quality and performanance of structural plywood.</li> </ul>

- performanance of structural plywood.
- To provide unambiguous evidence of compliance with the standard or methods listed above.
- To provide specifiers, regulators and inspection authorities with the appropriate information for them to identify suitable products.

### **Third Party Testing**

In 2018 The Timber Trade Federation (TTF) National Panel Products Division agreed mandatory third party species testing and third party performance testing for all panels placed on the market outside the EU. This means all TTF members must conduct third party testing to assess technical class, along with all relevant paperwork concerning factory production control and clear identification on packaging.

#### **Technical classes**

**EN 636-1**: Suitable for use in interior/dry conditions.

EN 636-2: Suitable for use in humid/protected exterior conditions.

**EN 636-3**: Suitable for use in exterior/unprotected conditions.



## Plywood Explained

For many years plywood was categorised as Interior (MR), Exterior (WBP) and Marine. The first two were discontinued many years ago although the term WBP (Weather and Boil Proof or Water and Boil Proof) is still widely used when specifying external grade plywood. The old WBP standard only referred to the plywood's glue bond and not the durability of the wood species. This meant the plywood had a WBP glue bond but was not actually a WBP plywood. This grey area led to the British Standards being updated to give clarification. An equivalent board now would have a glue bond of EN 314-2: Class 3, however a fully external plywood would need to meet EN 636: Class 3 which requires a glue bond of EN 314-2: Class 3 plus a suitable biologically durable wood species.

### **Current British Standards explained:**

### EN 314-2: 1993 Plywood Bonding - Requirements

- Class 1: Dry conditions. This bonding class is appropriate for normal interior climate.
- Class 2: Humid conditions. This bonding class is appropriate for protected external applications (eg behind cladding or under roof coverings), but is capable of resisting weather exposure for short periods (e.g. when exposed during construction). It is also suitable for interior situations where the service moisture condition is raised above the class 1 level.
- Class 3: External conditions. This bonding class is designed for exposure to weather over Sustained periods.

### **Current British Standards explained (continued):**

### EN 636: 2012 Plywood - Specifications

- Class 1: Plywood for use in dry conditions. (EN 636-1)
  Plywood to be used in conditions characterised
  by a moisture content in the material
  corresponding to a temperature of 20°C and
  relative humidity of the surrounding air only
  exceeding 65% for a few weeks per year.
  These conditions correspond with service
  class 1 according to ENV 1995-1-1.
- Class 2: Plywood for use in humid conditions. (EN 636-2)
  Plywood to be used in conditions characterised by
  a moisture content in the material corresponding to
  a temperature of 20°C and relative humidity of the
  surrounding air only exceeding 85% for a few weeks
  per year. These conditions correspond with service
  class 2 according to ENV 1995-1-1.
- Class 3: Plywood for use in exterior conditions. (EN 636-3)
  Plywood to be used in climatic conditions leading to higher moisture contents than service class 2.
  These conditions correspond with service class 3 according to ENV 1995-1-1. This plywood is capable of withstanding exposure to weathering conditions and liquid water, or water vapour in a damp but ventilated location, under consideration 9.2.
  - 9.2 Biological Durability: Plywood shall be appropriate for the prevailing climatic conditions. The potential risk of attack outlined in Hazard (use) Class 3 of EN335-3. In this class, the performance of most plywood will be compromised if suitable preservative treatment and/or relevant surface and edges coating is not applied and if the panels are not properly maintained or installed.







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