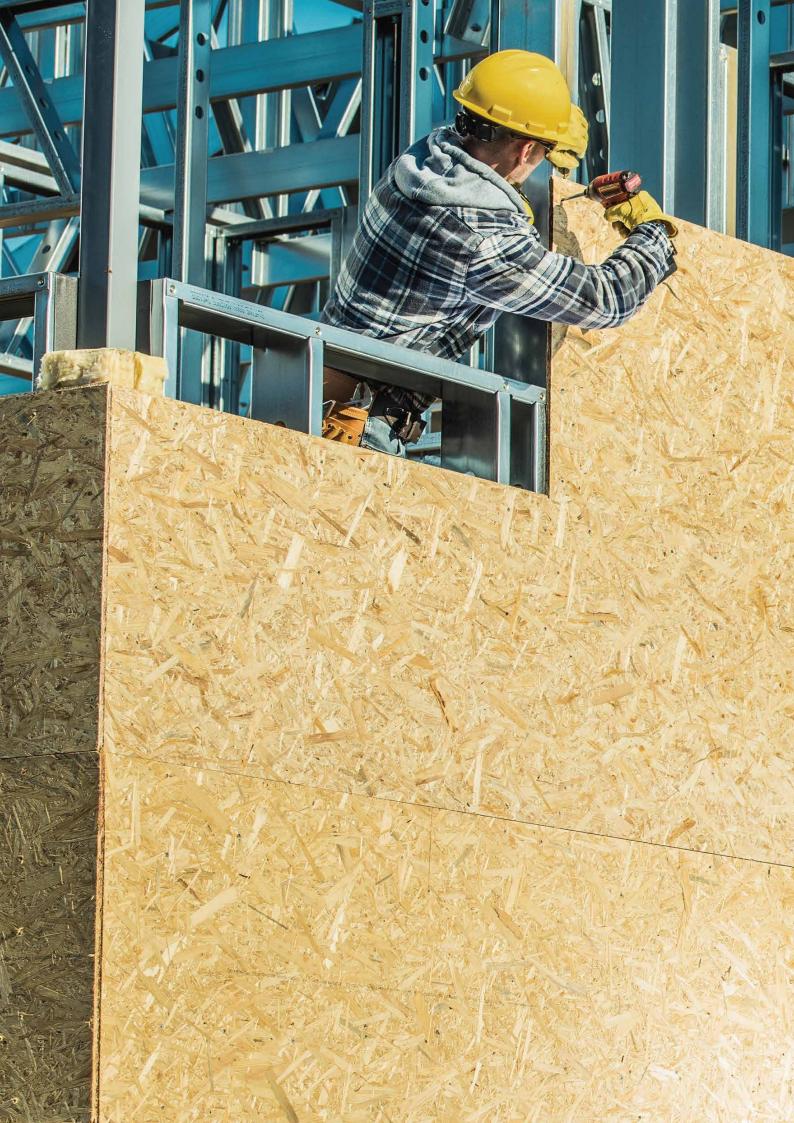
# Arnold Laver Plywood Guide



# Elliottis Pine Plywood Structural Grade



### **Elliottis Pine Plywood Structural Grade**

Elliottis plywood is a multi-use plywood manufactured from a single species of Elliottis pine and is used in structural applications such as hoarding, shuttering, packaging, structural & non-structural building work.

The front face of the veneered board contains knots which are filled and sanded to give a smooth finish, whilst the reverse face has open knots, leaving a slightly uneven finish. The directional grain of the face and reverse veneers is almost always in the direction of the longest dimension.

Alternatively known as: shuttering plywood, roofing plywood, sheathing plywood.

Note: Keep boards out of wet conditions during construction work.

### **Structural Composition**

Country of Origin Timber Species Structural Grade Face Veneer Grade Reverse Veneer Grade Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification Brazil Elliottis Pine CE2+ C+ C E1 EN 314-2 Class 3 EN 636-2 S EN 13986: 2004 EN 635-3 FSC® Certified

2440 x 1220 x 24mm		(37ppp)	2440 x 1220 x 12mm		(75ppp)
2440 x 1220 x 18mm	Í	(50ppp)	2440 x 1220 x 9mm	Í	(100ppp)

# **Elliottis Pine Plywood Structural Grade BCX**



### Elliottis Pine Plywood Structural Grade BCX (Good One Side)

Elliottis plywood (or BCX plywood) is made from Elliottis pine and is suitable for applications such as hoarding, shuttering, packaging, structural & non-structural building work.

BCX plywood has a smooth, well-sanded finish to the front face, with the reverse face has a slightly uneven finish whereby plywood plugs replace the knot holes. The face and reverse veneers are almost always oriented in the direction of the longest dimension.

Note: Keep panels out of wet conditions during construction work.

### **Structural Composition**

Country of Origin Timber Species Structural Grade Face Veneer Grade Reverse Veneer Grade Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification Brazil Elliottis Pine CE2+ B C E1 EN 314-2 Class 3 EN 636-2 S EN 13986: 2004 EN 635-3 FSC® Certified

### **Dimensions / Pack Qty**

2440 x 1220 x 18mm | (50ppp)

# WISA-Spruce Softwood Plywood Structural Grade



### **WISA-Spruce Softwood Plywood Structural Grade**

WISA-Spruce is a truly versatile plywood panel for numerous end uses. The panel is light in weight yet strong and rigid – therefore most suitable in structural uses and load bearing applications like roofing, flooring, wall sheathing, packaging and joinery.

The wide size range with several thicknesses and sizes, the CNC machining possibilities in addition to three different surface qualities widen the usage potential beyond traditional end uses. Moreover, a key aspect is the sustainability of the product as it is made from sustainably certified Nordic Spruce and meets all the relevant sustainability requirements.

Finland

Note: Panels should be stored in a covered and dry place and to be kept flat.

### **Structural Composition**

Country of Origin Timber Species Structural Grade Face Veneer Grade Reverse Veneer Grade Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification

Spruce CE2+ 11 111 E1 EN 314-2 Class 3 EN 636-2 S EN 13986: 2004 EN 635-3 FSC® Certified / PEFC Certified

2440 x 1220 x 24mm	(40ppp)	2440 x 1220 x 12mm	(75ppp)
2440 x 1220 x 18mm	(50ppp)	2440 x 1220 x 9mm	(100ppp)
2440 x 1220 x 15mm	(60ppp)	2440 x 600 x 18mm TG4	(100ppp)
2440 x 600 x 22mm TG4	(82pp)		

## Hardwood Faced Plywood Structural Grade



### Hardwood Faced Plywood Structural Grade

Hardwood faced structural plywood is used in permanent structures where the board is likely to be used in humid or interior conditions. This high-grade structural panel is less prone to bending and twisting and with its great strength to weight ratio, makes it versatile and easy to handle. This general-purpose utility grade plywood is suitable for a wide range of applications.

This plywood has hardwood faced veneers and a core that comprises of mixed light hardwoods, Poplar or a combination of these.

Note: Suitable for humid conditions but not fully permanent exterior conditions.

### **Structural Composition**

Country of Origin Timber Species (face) Structural Grade Face Veneer Grade Reverse Veneer Grade Core Veneer Species Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification China Eucalyptus / Mixed Red Hardwood CE2+ (except in 3.6mm / 5.5mm which is CE4) B BB Eucalyptus / Poplar E1 EN 314-2 Class 2 EN 636-2 EN 13986: 2004 EN 635-3 Non-Certified / FSC® Certified

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

### Hardwood Faced Plywood Structural Grade 72-hour Glued or TRADA Q Mark Verified



### Hardwood Faced Plywood Structural Grade: 72-hour glued or TRADA Q Mark Verified

72-hour Hardwood faced plywood is used in permanent structures where the board is likely to be used in exposed conditions. This high-grade structural panel is less prone to bending and twisting and with its great strength to weight ratio, makes it versatile and easy to handle. This type of plywood is suitable for a range of applications including flooring, beams, roofing, formworks, soffit and fascias.

Structural grade hardwood plywood is manufactured using a eucalyptus core with a mixed red hardwood backing veneer to the front face and reverse face of the panel.

Note: Keep panels out of wet conditions during construction work. All exterior plywood should be sealed on all faces / edges to ensure longevity in use.

#### **Structural Composition**

Country of Origin Timber Species (face) Structural Grade Face Veneer Grade Reverse Veneer Grade Core Veneer Species Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification China Eucalyptus / Mixed Red Hardwood CE2+ (except in 3.6mm / 5.5mm which is CE4) B BB Eucalyptus / Mixed Light Hardwood E1 EN 314-2 Class 3 EN 636-3 EN 13986: 2004 EN 635-3 FSC® Certified

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

# Far Eastern Hardwood Plywood Structural Grade



### Far Eastern Hardwood Plywood Structural Grade

Far Eastern hardwood plywood is used in permanent structures where the board is likely to be used in exposed conditions. This high-grade structural panel is less prone to bending and twisting and with its great strength to weight ratio, makes it versatile and easy to handle. This type of plywood is suitable for a range of applications including flooring, beams, roofing, formworks, soffit and fascias.

Note: Keep panels out of wet conditions during construction work. All exterior plywood should be sealed on all faces / edges to ensure longevity in use.

### **Structural Composition**

Country of Origin Timber Species (face) Structural Grade Face Veneer Grade Reverse Veneer Grade Core Veneer Species Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification

### **Dimensions / Pack Qty**

Malaysia / Indonesia Mixed Red Hardwood CE2+ (except in 3.6mm / 5.5mm which is CE4) BB CC Mixed Light Hardwood (Pine if FSC® Certified) E1 EN 314-2 Class 3 EN 636-3 EN 13986: 2004 EN 635-3 PEFC Certified / FSC® Certified

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

# Hardwood Marine Plywood (Third Party Verified BS 1088)



### Hardwood Marine Plywood (Third Party Verified BS 1088)

Marine plywood is manufactured from durable face and core veneers, with few defects so it performs longer in both humid and wet conditions and resists delaminating and fungal attack and is especially suited for use in the ship and boat building industries.

Its construction is such that it can be used in environments where it is exposed to moisture for long periods and where veneer durability is key such as trailer / van linings, external joinery, walkways and temporary structures.

Note: Seal and protect panels on faces and all edges before installation to increase performance and service life.

### **Structural Composition**

Country of Origin Timber Species (face) Structural Grade Face Veneer Grade Reverse Veneer Grade Core Veneer Species Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification

### **Dimensions / Pack Qty**

2440 x 1220 x 25mm	(36ppp)
2440 x 1220 x 18mm	(50ppp)
2440 x 1220 x 12mm	(75ppp)

Malaysia / Indonesia Selected Durable Hardwood CE2+ BB CC Selected Durable Hardwood E1 EN 314-2 Class 3 EN 636-3 EN 13986: 2004 EN 635-2 PEFC Certified / SVLK / FSC<sup>®</sup> Certified

2440 x 1220 x 9mm	(100ppp)
2440 x 1220 x 6mm	(150ppp)

## **Birch Plywood**



### **Birch Plywood**

Birch plywood is a high-quality panel with excellent physical properties. The smooth surface and durability of the panel makes it a perfect choice for various end uses. Birch plywood is known for its high-quality finish and makes it ideal for a range of applications, both interior and exterior, including furniture, joinery, sports equipment, toy making as well as building and construction.

Birch plywood is constructed using a Birch core with Birch veneers used as a backing to the front face and reverse face of the panel.

Note: Seal and protect panels before installation to ensure best performance in an external application.

### **Structural Composition**

Country of Origin Timber Species Structural Grade Face Veneer Grade Reverse Veneer Grade Core Veneer Species Release of Formaldehyde Standard Glue Line Standard Durability Standard Harmonized Standard Surface Appearance Standard Certification Russia / Latvia / Finland Birch CE2+ B / S+ / BB / CP / C BB / CP / C Birch E1 EN 314-2 Class 3 EN 636-2 EN 13986 +A1:2015 EN 635-2 FSC® Certified

### **Dimensions / Pack Qty**

2440 x 1220 x 24mm 2440 x 1220 x 21mm 2440 x 1220 x 18mm 2440 x 1220 x 15mm 2440 x 1220 x 12mm 2440 x 1220 x 6mm 2440 x 1220 x 4mm

Also available in large sheet format (1525 x 3050mm) and Interior Birch squares (1525 x 1525mm) Pack quantities vary according to country of origin / manufacturing mill

# **Oriented Strand Board (OSB3)**



### **Oriented Strand Board (OSB)**

OSB is a dimensionally stable and strong engineered wood panel, which with the combination of wood and adhesives creates a natural resistance to delamination and warping.

OSB is a versatile, strong and cost-effective panel ideal for use in structural and non-structural applications like roofing, flooring, site hoarding and wall sheathing as well as furniture, garden sheds and van linings.

OSB is made up of small thin strands of wood compressed into layers to form a mat. It has good dimensional stability with no knots or voids in the structure and is a lightweight panel with great load-bearing qualities, making it easy to install.

### **Structural Composition**

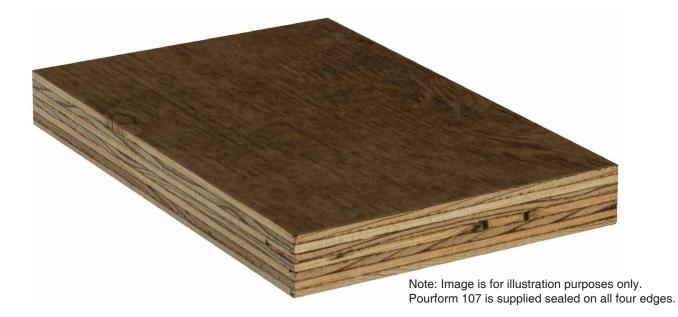
Country of Origin Timber Species Structural Grade Release of Formaldehyde Standard Harmonized Standard Certification UK / Ireland / Various EU countries Picea Abies / Pinus Sylvestris CE2+ E1 BS EN300 (OSB3 – Load bearing boards for use in humid conditions) FSC® Certified

### **Dimensions / Pack Qty**

2440 x 1220 x 18mm	(50ppp)	2397 x 1197 x 18mm		(50ppp)
2440 x 1220 x 15mm	(60ppp)	2397 x 1197 x 15mm	Ì	(60ppp)
2440 x 1220 x 11mm	(82ppp)	2397 x 1197 x 11mm	Ì	(82ppp)
2440 x 1220 x 9mm	(100ppp)	2397 x 1197 x 9mm	Ì	(100ppp)
2440 x 600 x 18mm TG4	(100ppp)			

Also available in pre-coated site hoarding panels and machined grooved panels for plasterboard backing.

## **Formwork Plywood**



### **Formwork Plywood**

A wide range of plywoods are available for formwork applications. The type of plywood solution is dependent on the concrete finish required, and the number of re-uses required from the formwork plywood.

The following table contains general information on our formwork offering with links to specific manufacturers' websites for more detailed information on each type of formwork solution.

Further information on our formwork range can also be supplied by your local Sales Representative.

PRODUCT	DESCRIPTION	WEB LINKS
<u>Arnold Laver</u> Formworks Offer	Formwork brochure	https://www.laver.co.uk/files/mydocs/downloads/formwork_bro.pdf
Plastform MDO	Radiata Pine (Brazilian) plywood core	http://www.thomasi.com.br/en-us/produtos/plastform-mdo-333/
Pourform 107 MDO	Douglas Fir (Canadian) plywood core	http://savonaspecialtyplywood.com/product-list/trim-blocks/
Tulsa MDO and GIS BCX	Radiata Pine (Chilean) plywood core	https://www.tulsaplywood.cl/productos-1
Tulsa-Film	Radiata Pine (Chilean) plywood core	http://www.tulsa.cl/ingles/filmstandard.php
Ultraform MDO	Douglas Fir (Canadian)plywood core	http://www.richply.com/pdf/Ultraform-Canada-English.pdf
<u>Wisa</u>	Product catalogue	https://www.wisaplywood.com/downloads/brochures/?tag=233899
Wisa Beto Film	Spruce (European) plywood core	https://www.wisaplywood.com/products/product-catalogue/wisa-form-beto/
Wisa Form Slab	Spruce (European) plywood care	https://www.wisaplywood.com/products/product-catalogue/wisa-form-slab/
<u>Wisa MDO</u>	Spruce (European) plywood core	https://www.wisaplywood.com/products/product-catalogue/wisa-form-mdo/
<u>Wisa Spruce</u>	Spruce (European) plywood core	https://www.wisaplywood.com/products/product-catalogue/wisa-spruce/
Wisa	UPM WISA Site Guidance Brochures	www.wisaplywood.com/downloads/brochures/

# **Glossary of Key Terms**

<u>BS EN 300</u>	Definition classification & specification
<u>CE2+</u>	For use in structural applications
<u>CE4</u>	For use in non-structural applications (in construction)
<u>E1</u>	Lower formaldehyde level
<u>E2</u>	Higher formaldehyde level
<u>EN636</u>	Classification of moisture resistance (wood species)
<u>EN636 – 1</u>	Suitable for use in Class 1 dry interior application only - where there is no exposure to moisture during construction
<u>EN636 – 2</u>	Suitable for use in Class 1 & 2 humid interior or covered exterior application offering limited resistance to moisture during construction phase
<u>EN636 – 3</u>	Suitable for use in Class 1, 2 & 3 for structural applications for interior and exterior construction offering resistance to weather during construction phase
<u>EN314-2</u>	Classification of bonding quality
EN314-2 Class 1	Dry conditions. Appropriate for normal interior climate
EN314-2 Class 2	Humid conditions. Appropriate for protected external applications, it is capable of resisting weather exposure for short periods of time
<u>EN314-2 Class 3</u>	Exterior conditions. Capable of withstanding exposure to weathering conditions

## NOTE: If using plywood in an exterior application, all plywood must firstly be sealed on all faces and edges

ENVIRONMENTAL CERTIFICATION		
<u>FSC</u> ®	Forest Stewardship Council (scheme certifying sustainability)	
<u>PEFC</u>	Programme for Endorsement of Forest Certification	
MTCS / MTCC	Malaysian Timber Certification Scheme	
<u>SVLK</u>	Indonesian Timber Legality Assurance System	



FSC<sup>®</sup> Certified timber from sustainable sources. Look for products which state FSC<sup>®</sup> Certified.



The mark of responsible forestry

## Where to find us

Newcastle upon Tyne

Leeds

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Rainham

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Central

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Manufacturing Sites

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BLACKPOO

PRESTON

Kidderminster

Bristol

ROURNEMOUTH

VEYMOUTH



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