

## The Plywood Specifiers Guide

A clear and concise reference for all applications.



nson

PLYW

# Helping architects and specifiers to make the correct choices

The quality of plywood available on the market can vary significantly. As such, specifiers face the increasing challenge of making informed decisions regarding the selection of high quality plywood that is not only suitable for the intended end use, but also satisfies the required performance criteria. As an example, there is a tendency to select Marine grade plywood for many construction end uses in the belief that a high-quality board has been specified; the reality may be far from the case potentially leading to performance issues in service.

The Hanson Plywood Specifiers Guide details panels which have stringent technical characteristics that meet all relevant industry standards. This ensures the specification of a plywood product that will provide assured, high-level performance.

Hanson Plywood offers a comprehensive specification guidance service to ensure the plywood product selected fully meets the requirements of the intended application.

## **H** Quick Reference Guide

#### 3 - Exterior 2 - Humid 1 - Dry **Typical Applications: Typical Applications: Typical Applications:** Internal joinery, flooring Floors, flooring underlay, walls, Floors, walls, roof decking, roofs, roof decking, linings, underlay, pipe boxing, doors, soffits, linings, signs etc. hatches, weight saving hoardings, protection etc. applications etc. **Applicable Standards: Applicable Standards: Applicable Standards:** · EN 636:2012 (Class 1) • EN 636:2012 (Class 2) · EN 636:2012 (Class 3) • EN 314-2 Plywood bond · EN 314-2 Plywood bond · EN 314-2 Plywood bond quality (Class 1) quality (Class 2) quality (Class 3) • EN 335 - Durability of wood • EN 335 - Durability of wood • EN 335 - Durability of wood and wood-based panel and wood-based panel and wood-based panel products (Use Class 1) products (Use Class 3) products (Use Class 2) • EN 310 - Bending test • EN 310 - Bending test • EN 310 - Bending test (Refer to test data) (Refer to test data) (Refer to test data) • EN 13986 - Wood-based • EN 13986 - Wood-based EN 13986 – Wood-based panels for use in construction panels for use in construction panels for use in construction (CE Marked) (CE Marked) (CE Marked)

### **Specification**



Our plywood panels are listed within NBS Source which provides specifiers with all the tools and digital information needed to find, select and specify the correct Hanson Plywood product to meet project requirements.



Hanson Plywood is proud to form part of the Approved RIBA CPD Providers Network offering a unique and informative CPD entitled: **Plywood: A Definitive Guide To Specification**.

#### To book your CPD, please contact us on 01422 330444

PERFORMANCE

MANADA

Optimum performance classification and fully compliant for use in construction applications. **EN 636 Use Class 3, EN 314-2 Class 3 Exterior Glue**.

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MAAT

Applications - construction, roofing, flooring, wall panelling, joinery, portable buildings, vehicle body building and all applications which demand full compliance with exterior classification standards. i Billing



An extensive range of birch plywood carrying very specific technical information including loading/bending strength data.

Thickness range 3mm up to 50mm.

Special thin panel range (0.4mm-6.0mm).

Applications - construction, roofing, flooring, wall panelling, shop & bar fitting, furniture, pattern making, vehicle body building, laminating, veneering, musical instruments, laser cutting, toy & model making, engineering.



Manufactured with specific attention to accurate dimensional tolerances and surface quality. **Fully compliant with BS 8203:2017-Plywood Annex A.** 

To find out more you can visit SP101.CO.UK

**Applications** - flooring underlay, laminating, veneering, joinery, furniture, shop & bar fitting.

SP101 BS 8203:2017



POPLAR PLY WOOD

Poplar/llomba construction offering stability, ease of cutting and machining and most importantly, low density with a clean and consistent grain figure.

A No Added Formaldehyde (NAF) variant of this product is available.

Applications - caravans, motorhomes, leisure vehicles, boat/yacht building, laminating, veneering, furniture, shop & bar fitting, exhibitions, scenery & staging, general joinery.





Practical panels comprised of coniferous tree species and created with structural purposes and applications in mind.

**Applications** - construction, packaging, roofing, flooring, hoarding, formwork, container lining, fencing, wall sheathing.



A range of panels manufactured to reduce the spread of flames and delay ignition in the event of a fire with either **Euroclass C** or **Euroclass B** fire performance if required.

**Applications** - entrances/foyers, offices, public libraries, schools, court houses, hospitals, cinemas, shopfitting, bar fitting, shipbuilding applications.



# **Design & Technical Information**

### EN 636:2012+A1:2015 Plywood-Specifications

The most recent edition of BS EN 636 retains the designations -1, -2 and -3 from the previous three part standard to represent dry, humid or exterior conditions of use.

These conditions are defined according to the parameters laid down for Use Classes in BS EN 335 'Durability of wood and woodbased products - Use classes: definitions applicable to solid wood and wood products.'

EN 636 also introduces bending strength and modulus classes based on bending tests to EN 310.

These designate strength (F) and modulus (E) parallel and perpendicular to the face grain. An example designation would therefore be F10/20.

EN 636 provides minimum values for each of the classes and EN 12369-2 gives corresponding characteristic values for use with each of these classes.

Plywood for use in construction must demonstrate compliance with the Construction Products Regulation (CPR). The most straightforward route to achieving this is by demonstrating compliance with EN 13986, which also involves the application of a CE mark.

			1 - Dry	2 - Humid	3 - Exterior
Property	Application	Standard	20°C with R/H 65% Interior applications no risk of wetting	20°C with R/H 85% Protected exterior applications or humid environments	Moisture content higher than 20% Unprotected exterior applications
Bonding Quality		EN 314-2	Bonding Class 1	Bonding Class 2	Bonding Class 3
Durability		EN 335	Use Class 1	Use Class 2	Use Class 3
Mechanical Properties	Structural - characteristic values - bending strength	EN 12369-1 or EN 789/EN 1058 EN 310	~	~	$\checkmark$
	Non structural - bending strength	EN 310	~	~	~
Formaldehyde Emission*	Construction	EN 13986	El or E2	El or E2	El or E2
	Non-construction	EN 636/DD ENV 717-1/EN 717-2	El or E2	El or E2	El or E2
Dimensional Tolerance		EN 315	~	~	$\checkmark$

#### The properties required of panels in EN 636 are shown in the table below:

\*All Timber Trade Federation (TTF) members adhering to the TTF Code of Conduct - Panel Products Code of Practice must trade in products that meet El Classification. Formaldehyde emissions higher than El are not acceptable.

## Plywood for permanent use in construction must demonstrate compliance with the Construction Products Regulation (CPR) via the use of CE Marking.

\*This table is designed for guidance only and all specific performance requirements for particular projects should be cross checked in detail.

#### **Decision Making Guidance**

- Consider the performance required of the component and duration of service life.
- Determine the Use Class of the situation in which the wood-component will be used and the biological agencies that threaten it.
- Assess whether the durability of the plywood to be used is sufficient. If not, select for the component a more durable type of panel or choose another solution such as design or preservative protection.
- The specification and application of plywood for Use Class 3 should take into account the importance of sealing the edges of panels in order to achieve optimum levels of performance.
- Where a project has specific requirements in terms of face grade, grain and colour please contact
  us directly to discuss details.



#### Please contact us for expert technical advice relating to your particular project.

An interactive reference resource is available at: www.theplywoodspecifiersguide.co.uk

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#### Visit our Virtual Showroom



Our Showroom is a virtual platform which is intended to be ideal for Architects, Designers & Specifiers to view a range of the products and services we offer, along with accompanying technical data/information.

#### www.hanson-plywood-showroom.co.uk





