NEW BASICS
FOR PROFESSIONAL PANEL ENGINEERING

TODAY'S MOST VERSATILE WOOD-BASED PANEL

OSB
ORIENTED STRAND BOARD
WWW.OSB-INFO.ORG
OSB STANDS FOR MORE THAN YOU THINK!

Oriented Strand Board (OSB) is the most important development in wood-based panel material to have taken place in recent years. Most people in the construction industry are familiar with its name and distinctive appearance. However, market research has shown that many people still misunderstand its capability and underestimate its potential. As a consequence, they are failing to benefit fully from one of the most versatile and economic construction materials of modern times. This little booklet aims to set the record straight.

A BRILLIANTLY ENGINEERED PRODUCT...

OSB’s remarkable properties derive from the unique way it is manufactured. Strands of timber are resin-coated, then laid in layers, with the grain in each layer being oriented differently to maximise strength and stability. The material is then cured under conditions of extreme heat and pressure, creating a dense, very strong, dimensionally stable, durable, engineered panel.
ENGINEERING

... WITH UNIQUE COMBINATION OF ADVANTAGES

**High mechanical strength** - comparable with that of equivalent grades of plywood and other structural panel products

**High rigidity**

**Resistance to distortion, splitting and delamination**

**Excellent strength-to-weight ratio**

**Impressive durability** - Dimensionally stable. Retains as-new performance levels throughout its long life when used in specified service conditions

**Precise, predictable performance** - Load bearing grades conform with exactly defined design and loading specifications in dry or humid atmospheres

**Easy to work** - Readily sawn, drilled, planed, routed and sanded. May be nailed, stapled or screwed close to the edge without splitting. Simple to glue, paint and stain
CHOOSE THE RIGHT GRADE FOR THE JOB

OSB is available for structural applications and for non-load-bearing uses. In Europe there are four basic grades available. Manufacturers also offer variants within these grades, for example, sanded and un-sanded, plain-edged or tongued-and-grooved. Here is a broad guide to which grade you will need for the job in hand:

- **OSB/1** - general purpose applications in dry conditions. Furniture and interior fitments
- **OSB/2** - load-bearing applications in dry conditions
- **OSB/3** - load-bearing applications in humid conditions
- **OSB/4** - heavy-duty load-bearing applications in dry or humid conditions

Technical specifications for these grades are set out in the European standard EN 300 and in OSB manufacturers' users manuals. For details, ask your national standards organisation, trade association, or timber supplier or check the OSB website of the European Panel Federation (www.osb-info.org).

**FLAW-FREE** - No knotholes, core voids or points of weakness

**COMPREHENSIVE CHOICE** - supplied in a variety of grades, a wide range of surface sizes, ready sanded or unsanded, plain-edged or tongued-and-grooved

**LOW ECOLOGICAL IMPACT** - No mature trees are sacrificed in the manufacture of OSB.
Only small-diameter timber from ecologically sustainable forests is used. The product itself is fully recyclable.
THINK OF IT AS A BETTER ALTERNATIVE TO PLYWOOD

OSB delivers the performance of plywood at a lower cost. It even has some important characteristics that give it the edge over veneered boards - like its uniformity, its lack of knots, its resistance to de-lamination, distortion and splitting and, not least, its low impact on global timber resources. All this may come as a surprise if you are one of those who have thought of OSB as just a ‘cheap substitute’.

But surely, you may say, plywood is a quality, precision-manufactured product available in a whole range of performance grades? Yes, but so is OSB! In fact, OSB will do the same job at least as well for less cost.
HOW WILL YOU PROFIT FROM OSB?

OSB is astonishingly adaptable. Its range of applications is growing all the time, as more and more industries discover its potential. Here are some of the most popular current uses:

- Floors
- Wall sheathing
- Roof sarking
- Timber-frame building construction
- Exhibition stand construction
- Shop fitting
- Mezzanine construction
- Packaging, crating, pallets and dry storage
- Hoardings, barriers, boarding up, fences
- Vehicle body building
- Interior partitioning and fittings for sheds, outhouses and agricultural buildings
- Decorative and laminated furniture
- Structural framework in upholstered furniture
- I-joist webs, beams, electrical conduits
- Concrete formwork, non-slip coatings