About Smart*Ply* OSB

SmartPly Oriented Strand Board (OSB) is the smart, cost-effective and environmentally friendly alternative to many plywoods. It is suitable for use in structural and non-structural applications. It comes with unrivaled quality and environmental certification. It is manufactured from a locally-grown sustainable forest resource in an energy efficient process, and therefore has a lower carbon footprint than many types of plywood. It is the Smart OSB answer to plywood.

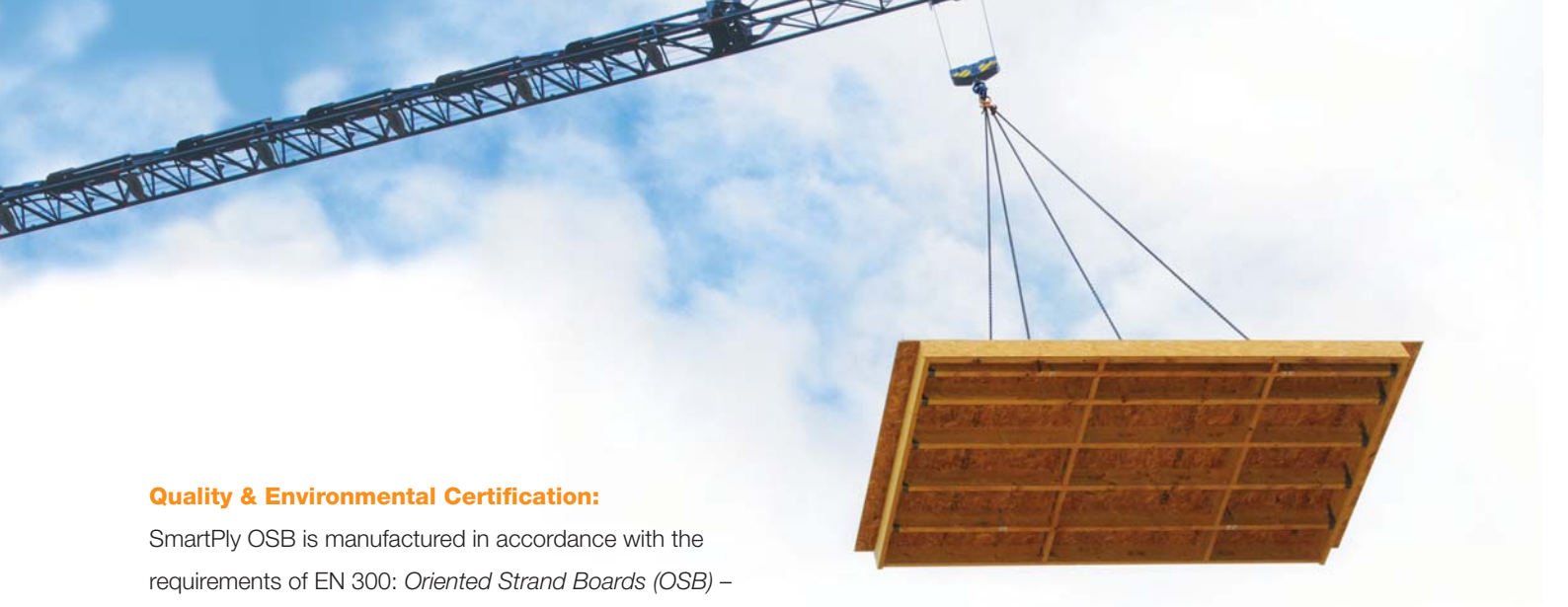
SmartPly OSB is manufactured from longitudinal timber strands measuring approximately 100mm in length x 40mm in width x 0.65mm in thickness. The strands are sliced from the logs in the direction of the grain to achieve maximum strength in the resulting panel.

The strands are blended with a high quality synthetic resin and wax and formed into a three-layer mat. The grain of the strands in the face layers are oriented along the length of the panel and those of the core layer are oriented across the width of the panel. The mat is then compressed under intense heat and pressure into a rigid, high quality structural panel. Orientation of the strands in this way distributes the strength, stiffness and spanning capacity of the finished OSB panels, which are approximately twice as strong in the length (major axis) than in the width (minor axis).

This combination of strand preparation, specific strand geometry and high degree of orientation of the strands ensures optimum technical properties in the resulting panels, and is what makes SmartPly OSB the perfect wood-based panel for a wide variety of load-bearing construction, general building and joinery applications, and as a result it is the preferred alternative to plywood.

Throughout this advanced process, the OSB panels are continuously monitored and tested to ensure consistent quality, from incoming raw material to finished product.

SmartPly®
The Smart OSB Answer to Plywood



Quality & Environmental Certification:
SmartPly OSB is manufactured in accordance with the requirements of EN 300: *Oriented Strand Boards (OSB) – definitions, classification and specifications.*

SmartPly OSB is CE marked in accordance with the harmonised standard EN 13986: *Wood-based panels for use in construction – characteristics, evaluation of conformity and marking.* This standard is a technical specification for wood-based panels which implements the provisions of the Construction Products Directive (CPD). In addition to the CE mark, SmartPly OSB panels are marked 2+ Structural for ease of reference.

SmartPly OSB/2 is certified by the Irish Agrément Board (IAB). SmartPly OSB/3 is certified by the Irish Agrément Board (IAB) and the British Board of Agrément (BBA), and due to this certification it is permitted for structural use by Homebond (Ireland) and NHBC (UK) when used in accordance with the requirements of the Building Regulations in the country of use. Other quality certification includes SINTEF (Norway) and KOMO (Netherlands).

SmartPly has achieved I.S. EN ISO 9001:2008, the internationally recognised quality management system which is certified by the National Standards Authority of Ireland (NSAI).

SmartPly has Forest Stewardship Council (FSC) Chain of Custody certification for its manufacturing, processing, sales and distribution processes.

SmartPly operates under an Integrated Pollution Prevention Control (IPPC) licence, which is monitored by the Environmental Protection Agency (EPA) in Ireland.

All SmartPly OSB/3 products are manufactured using formaldehyde-free resin.

Suitability: EN 300 classifies OSB panels by their properties which relate to their intended use, as follows:

OSB/2: Load-bearing panels for use in dry conditions.
OSB/3: Load-bearing panels for use in humid conditions.

Structures comprising SmartPly OSB should be assigned to service class 1 or 2 as defined in EN 1995-1-1 (Eurocode 5). According to this standard, SmartPly OSB/2 is suitable for use in service class 1 and SmartPly OSB/3 is suitable for use in service classes 1 and 2.

Moisture conditions can affect the performance of wood-based panels. Therefore, it is important that the correct type of OSB is specified for a particular service class. Always check current regulations specific to the country of use.

As well as conditions in service, consideration must also be given to the construction phase where high levels of moisture or humidity often exist. Consideration should also be given to end-use applications that may be at risk of short-term wetting, such as from burst water pipes or leaking appliances. In such conditions SmartPly strongly recommends the use of OSB/3.

SmartPly OSB Product Summary:

SmartPly OSB/2: SmartPly OSB/2 is an engineered, load-bearing panel designed for use in both structural and non-structural applications in dry conditions. It is a versatile, strong and cost-effective panel. Manufactured in accordance with EN 300 quality standards, it is ideal for furniture, packaging, pallet tops, garden sheds, boarding up, van fit-outs and other similar applications.

SmartPly OSB/3: SmartPly OSB/3 is a highly engineered, moisture resistant load-bearing panel designed for use in humid conditions and is therefore ideal for many structural and non-structural applications in both internal and protected external environments. Manufactured in accordance with EN 300 quality standards, it is the perfect choice for roofing, flooring, wall sheathing, site hoarding and many other applications where strength and moisture resistance are paramount.

SmartPly Roof: SmartPly Roof is a highly engineered and moisture resistant OSB/3 panel specifically designed for the most demanding roofing applications including: pitched roof (cold & warm), sarking / bracing, flat roofs (cold deck, warm deck sandwich, warm deck inverted), roof cassettes and dormer windows.

SmartPly Floor: SmartPly Floor is a very strong and moisture resistant OSB/3 panel that is engineered to give superior performance in the most demanding load-bearing flooring applications including: ground floors, intermediate floors, party floors, floor cassettes and room-in-the-roof (attic) floors. Contributing to healthier homes, SmartPly Floor is manufactured using Formaldehyde-free resin.

SmartPly Frame: SmartPly Frame is a moisture resistant OSB/3 panel that is specifically engineered to provide superior racking resistance, stiffness and durability to framed structures. It is the ideal sheathing panel for a wide variety of load-bearing applications including: external walls, party walls, internal walls and partitions, spandrel (gable) panels, warm walls, reverse walls and Structural Insulated Panels (SIP's). Contributing to healthier homes, SmartPly Floor is manufactured using Formaldehyde-free resin.

SmartPly T&G: SmartPly T&G panels incorporate precision machined tongue & groove (T&G) profiled edges which enable quick, easy and reliable installation in many timber designs that incorporate SmartPly Roof, SmartPly Floor and SmartPly Frame products of thickness ≥ 12mm. The T&G profile is machined on two long edges (T&G2) for wide panels or on all four edges (T&G4) for narrow panels.

Optimum strength and stiffness will be obtained when the T&G joints are glued with a suitable moisture resistant adhesive. T&G panels are sanded to give a more precise fit and also provide improved adhesion qualities where required, for example in flat roofing applications. As T&G panels easily lock together, they and can reduce air leakage and wind penetration through the assembly. Detailed guidance for the installation of T&G panels is provided in the relevant SmartPly product technical data sheets.

SmartPly SiteProtect: SmartPly SiteProtect is a highly engineered and moisture resistant OSB/3 coated panel specifically designed to save both time and money in the most demanding hoarding applications. The substrate is coated with a smooth, heavy duty, exterior, cross-linked polymer surface treatment making it ideal for use in a wide range of applications from temporary hoarding through to long-lasting site security installations.

Important notes: The recommendations provided in this technical data sheet for the correct use of SmartPly OSB are specifically designed to ensure longevity and performance of these quality products in service. It is therefore essential that these recommendations are strictly followed. The products are designed to be installed by a competent general builder or contractor, experienced with these types of product, in strict accordance with the technical guidance provided in the relevant SmartPly product technical data sheets. SmartPly Europe Ltd cannot be held responsible for damages arising from non-adherence to these recommendations, or product failures resulting from inadequate structural design or misuse of these products.

In order to provide comprehensive guidance for the correct use of SmartPly OSB products, this Technical Datasheet makes reference to relevant BS & EN standards. SmartPly Europe Ltd cannot be held responsible for claims arising from the use of any information that has been extracted from such sources.

For further information and/or technical advice please contact your local SmartPly Sales Representative or SmartPly Technical Support Personnel through any of our European offices.

As we continually update our technical datasheets, please check on **www.smartply.com** that you have the latest version. V 03/11

FSC www.fsc.org FSC® C019958
The mark of responsible forestry

Bord Agrément na hÉireann Irish Agrément Board Certificate no. 02/0093

BBA BRITISH BOARD OF AGRÉMENT CERTIFICATE No 98/3488/C

CE

coillte PANEL PRODUCTS

medite SmartPly