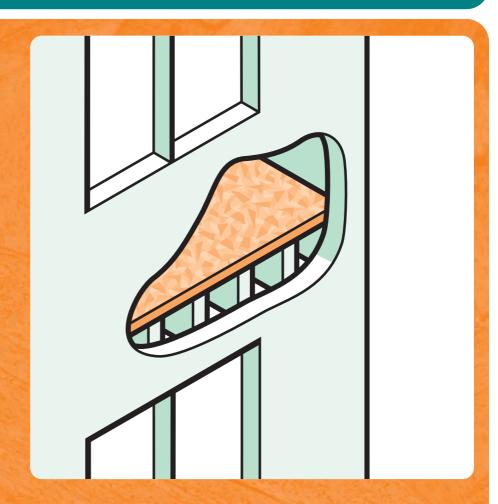
# SmartPly®Floor

The Smart Answer for Flooring



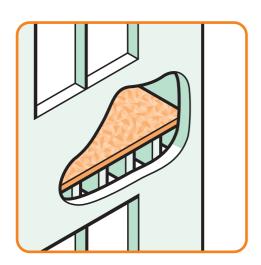
designed for use in flooring applications.

Available with a weather-resistant peel-off film for protection against moisture and dirt during building



## smart flooring

SmartPly Floor is incredibly strong and versatile. This OSB (Oriented Strand Board) panel is load-bearing and manufactured using an exterior grade glue, making it suitable for structural use in humid environments including kitchen and bathrooms. It can be laid on joist centres up to 600mm in domestic applications.



#### defect free and easy-to-use

SmartPly Floor has no structural defects, such as knotholes and core voids, and is easy to work with. It cuts easily, will not delaminate, and can be bored, routed and planed with consistent results. Panels can be nailed 10mm from the edge without splitting or breaking out – critical to structural applications.

#### safer, faster, cleaner flooring

SmartPly Floor provides a safe working platform and weather protection prior to and during roof construction, allowing work to proceed, even during bad weather.

#### zero-added formaldehyde

In keeping with current construction methods of working towards healthier homes, SmartPly Floor has been manufactured using zero-added formaldehyde.

### smarter floors - higher standards

SmartPly Floor is manufactured to EN 300 from a structural panel that satisfies standards BS 5268 Part 2, and is approved by the British Board of Agrément (BBA) and the Irish Agrément Board (IAB). Its suitability for structural use is also recognised by Homebond, Local Authority Building Inspectors and the NHBC.

All SmartPly OSB products are compliant with the Construction Products Directive (CPD) for structural use. Every board of SmartPly 3 is marked CE 2+ structural. SmartPly has achieved I.S. EN ISO9001: 2000, the internationally recognised quality management system.

#### environmentally approved

At least 90% of the timber used in the manufacture of SmartPly Floor comes from well-managed forests, independently certified according to the rules of the Forest Stewardship Council (FSC).

All SmartPly 3 products are made with formaldehyde-free resins.

#### party floor (timber beams)

1 x 18mm SmartPly T&G (4E) (12.4 kg/m²), joints taped and perimeter sealed, bonded with adhesive dabs

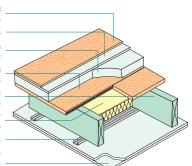
1 x 15mm dBcheck plasterboard (13 kg/m²) 20mm mineral wool (150 kg/m³), laid on 30mm mineral wool (175 kg/m³)

1 x 15mm SmartPly 3 (9 kg/m²), screw fixed with 41mm drywall hi-thread screws at 300mm centres Derome pine SC3 timber joists (50mm x 200mm) at 400mm centres

2 x 50mm mineral wool (38 kg/m²), supported by brackets between joists

Resilient sound bars at 400mm centres

 $2 \times 15$ mm tapered edge dBcheck plasterboard (13 kg/m²) fixed to resilient bars with 32mm drywall self-tapping screws at 230mm centres, perimeter sealed, joints taped and filled



#### storage and handling

Careful storage and handling is important to maintain panels in their correct condition for use. Boards should be stacked flat, off the ground and on a level surface with all four edges flush. Stacking on the edge should be avoided. Wherever possible, panels should be stored in an enclosed dry building, protected from rain and accidental wetting.

Stack on battens of equal thickness at centres not exceeding 600mm (as per recommendations of BS 7916). Care should be taken to avoid damage from banding. Bands should be cut as soon as practical to avoid permanently deforming the boards.

During transport it is particularly important to protect edges and corners with suitable coverings.

#### preparation

SmartPly Floor is a conditioned panel product with a minimum moisture content of 5% to limit expansion and contraction in use. It is recommended that boards should be conditioned on-site to ensure a moisture content close to operating conditions. This can normally be achieved by loose stacked storage under the atmospheric conditions in which they will be used for a minimum of 48 hours before fixing. Ideally the floor should not be installed until the house has been made sufficiently wind and watertight. When this is impractical, store boards as described above, and ensure exposure to wetting is kept to a minimum. Allow boards to dry out before applying a surface finish or exposure to full design load.

#### party floor (i-beams)

 1 x 18mm SmartPly T&G (4E) (12.4 kg/m²), joints taped and perimeter sealed, bonded with adhesive dabs
 1 x 15mm dBcheck plasterboard (13 kg/m²)

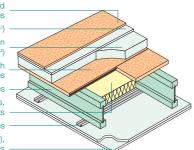
20mm mineral wool (150 kg/m³), laid on 30mm mineral wool (175 kg/m³)

1 x 15mm SmartPly 3 (9 kg/m²), screw fixed with 41mm drywall hi-thread screws at 300mm centres I-beam joists (50mm x 200mm) at 400mm centres

2 x 50mm mineral wool Flexi (38 kg/m³), between joists, supported by brackets

Resilient sound bars at 400mm centres

 $2\times15 mm$  tapered edge dBcheck plasterboard (13 kg/m²), fixed to resilient bars with 32mm drywall self-tapping screws at 230mm centres, perimeter sealed, joints taped and filled



**Notes:** These diagrams show typical robust detail examples of how to achieve part 'E'. Please refer to your structural/design engineer or insulation/dry lining provider for more accurate information. These diagrams do not imply a guarantee of compliance.

To minimise sweating of the boards, ensure protection employed provides adequate ventilation in order that surface moisture will evaporate rapidly.

Special care should be taken during all wet site operations, after laying and fixing floor, that all boards, joints and edges are protected from dirt, moisture, plaster, mortar droppings and other debris. Under no circumstances should plaster or mortar be mixed on the floor as this may cause surface staining.

In high humidity environments comply with requirements outlined in IAB Certificate No. 02/0093 and BBA Certificate No. 98/3488/C.

#### perimeter expansion gap

SmartPly Floor, when laid in a new building, will tend to absorb a small amount of moisture and expand in common with other wood-based materials.

It is important that provision be made for possible expansion by providing a gap wherever boards abut any rigid upstand such as a perimeter wall, column or fireplace surround. This gap should not be less than 10mm wide. Large floors may need a wider gap and intermediate expansion gaps to allow for a possible overwall expansion of 2mm per metre length of floor. BS 8201 provides further information for large floors or long corridors but typical small domestic houses generally do not require additional intermediate expansion gaps. Please ensure that expansion gaps are maintained at all times during construction.

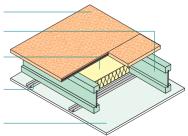
Additionally, with all square-edged panels a 2mm expansion gap should be allowed between each panel.

# internal floor (timber beams) 18mm SmartPly Floor Minimum 235mm depth joist Absorbent layer of mineral wool (minimum thickness 100mm minimum density 10kg/m²) Resilient bar at 400mm centres and mounted perpendicular to joist direction Single layer of plasterboard (minimum mass per unit area of 10kg/m²)

#### internal floor (i-beams)

18mm SmartPly Floor
195mm I-Beam or deeper
at 600mm spacing
Absorbent layer of mineral wool
(minimum thickness 100mm
minimum density 10kg/m²)
Resilient bar at 400mm centres
and mounted perpendicular
to joist direction

Single layer of plasterboard (minimum mass per unit area of 10kg/m²)



#### typical laying instructions

**Please note:** Where joist centres exceed 600mm, it is recommended that users consult a structural engineer for a more detailed specification.

- Ensure all joists are level and free from mortar droppings and debris before laying.
- Ensure that any joists treated with water borne preservative have thoroughly dried out before installation of flooring panels. Joist moisture content should not exceed 20%. High moisture content in the timbers could lead to distortion as they dry out, leading to squeaky floors.
- Boards should be laid with their long edges across the supporting joists and in a straight line. Direction arrows are provided, indicating the major axis laying direction.
  - Short edges should be centred on the support joists. A range of board lengths is available to cater for 400mm or 16" centres.
- It is important that edges around the perimeter of the floor and around pipes are continuously supported on joists or noggins. A noggin must support any board that overhangs a joist. Bridging and noggin supports should comply with the requirements.
- All flooring can be nailed or screwed 10mm from the edges. SmartPly Europe recommend that boards should be fixed to all supports using 50mm screws or 65mm ring shank nails at maximum 150mm centres on all joists.

- Adequate under floor ventilation should be provided.
- Starting from the back wall of the building, lay the first board maintaining a 10mm expansion gap from perimeter walls and around pipes or rigid upstands.
- SmartPly Floor boards should be glued along all joints and joists with a suitable PVAC adhesive.
- Continue to lay the second and third boards, maintaining the perimeter expansion gaps where necessary and ensuring a snug fit with all tongue & groove joints. Stagger boards in adjacent rows (to ensure cross-joints on the boards are staggered).
- Once installed correctly, care must be taken not to overload the floor beyond its design load (particularly in relation to stockpiling bales of blocks).
- Any access traps for under floor services should be pre-planned and support provided.

#### floor covering

SmartPly Floor is a suitable substrate for carpet installed with underlay, thick wood strip or parquet flooring. Some wood flooring manufacturers may require additional underlayment.

Sub-floors should be clean, rigid and flat. When thin or shiny surface materials are laid over SmartPly Floor, these materials may allow the board joints to show through, particularly after heavy trafficking. Before laying materials ensure all joints are level. Some light/fine sanding is permissable.

#### complete weather protection

When laying SmartPly Floor+, a tongue & groove panel with peel-off protective film, please ensure all edges, nail runs and perimeter edges are taped after laying each two rows of boards.

Do not leave until laying is complete.

Apply SmartPly Floor+ tape in clean, dry conditions, using the applicator provided. Ensure tape is fully bonded down. Fold tape over edges before laying perimeter runs. During floor exposure sweep off standing water at regular intervals.

Minor edge wetting should be allowed to dry before sanding down any ridges.

Leave SmartPly Floor+ protective film in place until construction work is complete. Remove film by pulling from the short ends.

It is recommended that users consult a structural engineer should a more detailed specification be required.

This information is published in good faith and does not constitute any form of warranty.



#### flooring solutions

SmartPly Floor comprises a range of products suitable for use in structural flooring applications.

SmartPly T&G (tongue & groove) and SE (square edge) are load-bearing panels suitable for structural use in humid environments, providing a reliable distribution of strength, stiffness and spanning capacity along and across the board.

SmartPly Floor+ is based on the T&G panel and comes prepared with a heavy-duty peel-off protective film.

#### dimensions and thickness

SmartPly Floor is available in 15 and 18mm thickness with dimensions as shown (subject to availability).

Other thicknesses may be available as required, subject to structural design requirements.

## how do I recognise the product?

All SmartPly 3 structural panels are clearly marked with the following information:\*

- manufacturer's name (SmartPly Europe)
- ✓ european norm (EN 300 standard)
- nominal thickness
- major axis (direction of laying arrows)
- ✓ batch number or production week and year, day/shift
- ✓ certification mark (e.g. BBA, IAB)
- ☑ CE 2+ structural certification
- **▼** FSC certification

#### dimensions and thickness (mm)

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thickness	length x width		type
15	2440 x 1220	2400 x 1200	square edge
18	2440 x 1220	2400 x 1200	square edge
15	2440 x 1205	2400 x 1205	T&G (2LE)
18	2440 x 1205	2400 x 1205	T&G (2LE)
15	2400 x 600	2440 x 590	T&G (4E)
18	2400 x 600	2440 x 590	T&G (4E)
18	2397 x 1220	SmartPly Floor+	T&G (2LE)
18	2400 x 600	SmartPly Floor+	T&G (4E)

**Notes:** T&G (2LE) – tongue & grooved on two long edges only T&G (4E) – tongue & grooved on all four edges

<sup>\*</sup> Markings may vary depending on product type

## smart quality

#### certification

SmartPly Floor meets EN 300, BS 5268 Part 2, and is certified by the British Board of Agrément (BBA), Irish Agrément Board (IAB) and other European certifying bodies. This product is suitable for residential and commercial construction, including prefabricated and modular home applications.

All SmartPly OSB products are compliant with the Construction Products Directive (CPD) for structural use. Every board of SmartPly 3 is marked CE 2+ structural. SmartPly has achieved I.S. EN ISO9001:2000, the internationally recognised quality management system.

SmartPly Floor can be used for structural applications in humid environments (including kitchens and bathrooms) as defined within the terms of Service Class 2 on ENV 1995-1-1 for load-bearing boards. Also suitable for domestic use as defined in BS 6399 Part 1 for dead and imposed loads for designed joist spacings not exceeding 600mm centres (for 15mm) providing they are in accordance with IAB Certificate No. 02/0093 or BBA Certificate No. 98/3488/C.



SmartPly has full certification from the Forestry Stewardship Council, one of the largest and most credible certifiers of wood producers and has the support of major environmental groups (such as World Wildlife Fund, Greenpeace, and the Rainforest Action Network) as well as key inter-governmental forestry bodies. The FSC certification is the leading internationally-recognised standard that assures buyers of wood-based products that the timber used results from environmentally and socially responsible forestry management.









By buying products with the FSC label you are supporting the growth of responsible forest management worldwide

F: +44 (0)1322 424920

FSC Supplier Cert no. TT-COC-1572
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For more information about any SmartPly product, contact your local merchant.

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