



# SMARTPLY® PATTRESS PLUS

**SMARTPLY PATTRESS PLUS**

is designed to provide support for fixtures and fittings in non-structural drywall partitions.

**SMARTPLY PATTRESS PLUS** is an engineered SMARTPLY OSB/3 panel incorporating a continuous recess to accommodate 'C' shaped metal studs used in the construction of light weight drywall partition systems.

**SMARTPLY PATTRESS PLUS** is tested to the relevant sections of BS5234 Part 2 relating to

anchorage and pull-out fixing tests is suitable for use in public access areas including corridors and stairwells, contributing to higher levels of impact resistance.

**SMARTPLY PATTRESS PLUS** is an OSB panel with no added formaldehyde and therefore may also be useful in environmentally sensitive interior applications where formaldehyde emissions need to be kept to a minimum such as hospitals, laboratories, museums and schools.

AT A GLANCE > PATTRESS PLUS:



HIGH STRENGTH OSB/3 PANEL WITH A CONTINUOUS RECESS



PRE-CUT AND PRE-REBATED OFFSITE



SPEEDS UP INSTALLATION OF PATTRESSING



FITS PERFECTLY BETWEEN STUD WALLS



UKCA AND CE MARKED



NO ADDED FORMALDEHYDE



FSC® CERTIFIED

## FEATURES & BENEFITS

- ✓ Ready prepared modular panels – quick and easy to use
- ✓ Fully certified alternative to plywood – UKCA and CE marked
- ✓ Manufactured using no added formaldehyde resins
- ✓ Provides secure anchorage for fixtures and fittings
- ✓ Versatile – fits most commercially available systems
- ✓ Solid core – fix to any point on panel face
- ✓ Does not add to finished partition thickness
- ✓ Tested to BS5234 part 2
- ✓ Manufactured from FSC® certified timber

## SUITABILITY

**SMARTPLY PATRESS PLUS** is designed for use in non-structural metal frame drywall partition applications where the in-service climatic conditions and ambient relative humidity (RH) levels are similar to those expected in dry, sheltered construction environments.

In addition to 'in-service' conditions, careful consideration must be given to the construction phase where higher levels of moisture or humidity can exist, which if excessive, may lead to higher than expected levels of expansion or even distortion of the **SMARTPLY PATRESS PLUS** panels. **SMARTPLY PATRESS PLUS** OSB3 panels are manufactured with 'built-in' innovative moisture resistant resin chemistry to minimise such panel movement, however we recommend that this Technical Datasheet is read in conjunction with SMARTPLY OSB/3 Technical Datasheet which gives expert and practical design guidance on the specification of OSB/3 in service class 1 or 2 conditions as defined in EN 1995-1-1 (Eurocode 5).



## SPECIFICATION AND DESIGN

As design values can vary between manufacturers, it is important to ensure that the **SMARTPLY PATRESS PLUS** panels specified by the designer are those used on site. All SMARTPLY panels are clearly marked with the following information:

- a** SMARTPLY logo
- b** UKCA marking
  - i. UKCA logo
  - ii. Accredited body
  - iii. DOP number
- c** FSC® certification (if applicable)
- d** CE marking
  - i. CE logo
  - ii. Notified body
  - iii. DOP number
- e** Relevant Standard (EN13986/EN300) and AVCP level (2+ structural)
- f** Panel grade (OSB/3 - OSB/4)
- g** Thickness
- h** Formaldehyde class (eg - E1)
  - i. Additional marking:
    - i. Date and time stamp
    - ii. Main axis arrow
    - iii. Product certification (IAB, BBA, WPA, FR BUILD) if applicable

**Note:** Markings may vary depending on product type.

## SIZES

**SMARTPLY PATTRESS PLUS** is available in a variety of sizes, with other sizes available on request (minimum order quantity may apply).

Dimensions	Thickness
1250x597mm	15, 18mm
2397x597mm	15, 18mm

## TECHNICAL DATA

Anchorage values according to BS 5234-2:1992 - Partitions - Part 2: Specification for performance requirements for strength and robustness including methods of test:

Pull-out Safe Working Loads (S.W.L.)		
Fixing type	18mm	15mm
3.5 x 50mm wood screws	125kg	80kg
4.5 x 50mm wood screws	150kg	80kg
Pull-down Safe Working Loads (S.W.L.)		
Fixing type	18mm	15mm
3.5 x 50mm wood screws	35kg	20kg
4.5 x 50mm wood screws	45kg	20kg
Heavyweight anchorage (wash basin) Safe Working Loads (S.W.L.)		
Fixing type	18mm	15mm
4.5 x 50mm wood screws	100kg	70kg
M8 x 70mm coach screws	150kg	125kg
Heavyweight anchorage (wall cupboard) Safe Working Loads (S.W.L.)		
Fixing type	18mm	15mm
3.5 x 50mm wood screws	200kg	200kg
4.5 x 50mm wood screws	250kg	200kg
M8 x 70mm coach screws	250kg	250kg

## TRANSPORTATION STORAGE AND HANDLING

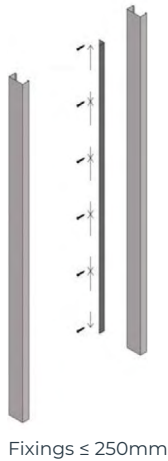
Careful transportation, storage and handling are important to maintain panels in optimum condition prior to use.

- a Panels should be stacked flat and fully supported.
- b Panels should never be stacked on their edges otherwise panel distortion may result.
- c Protect panels from the elements during storage to avoid damage to the face and edge.
- d Do not leave packs or panels exposed to the weather prior to erection.
- e As with all timber products **SMARTPLY PATTRESS PLUS** should be conditioned, on site, for a suitable period of time prior to installation.

## STANDARD INSTALLATION

### 1. INSTALL STEEL ANGLE

- Steel angle to be standard galvanised 25 x 25mm x 0.7mm gauge, manufactured in accordance with the relevant BS EN standards.
- Steel angle to be fixed to flat face of c-stud web to provide continuous support for non-recessed edge of PATTRESS PLUS panel.
- Position the outer face of the angle 15mm or 18mm back from the outer face of the c-stud flange (to accommodate PATTRESS PLUS panel thickness). See PATTRESS PLUS fixing detail.
- Steel angle to be fixed to the c-stud using 13mm self-tapping wafer head metal to metal drywall screws manufactured in accordance with BS EN 14566.
- Position the first screw fixing min. 10mm from the top of the steel angle and continue to fix at max. 250mm centres, ensuring that the last fixing is positioned min. 10mm from the bottom of the steel angle.



### 2. INSERT SMARTPLY PATTRESS PLUS

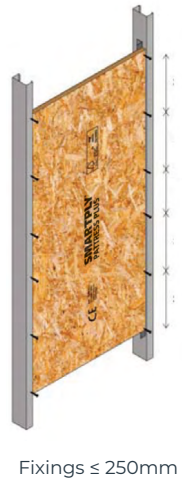
- Insert the recessed side of PATTRESS PLUS panel into position, with the return on the c-stud fitting into the recess in the PATTRESS PLUS panel, ensuring good contact between the panel face and inner surface of c-stud flange.
- Swing the non-recessed side of PATTRESS PLUS panel into position against the steel angle, again ensuring good contact between the two surfaces.
- Slide the PATTRESS PLUS panel up or down to the required level.
- Leave a 1mm expansion gap between panel edge and c-stud web on both sides (SMARTPLY PATTRESS PLUS is machined to fit between



c-studs spaced at 400 or 600mm centres).

### 3. FIX INTO POSITION

- PATTRESS PLUS panel to be fixed to the steel angle and c-stud using minimum 25mm self-tapping drywall screws in accordance with EN 14566.
  - Fix the non-recessed side of PATTRESS PLUS to the steel angle. Position the first screw fixing in the top corner of the panel, min. 10mm down from the top edge of the panel and also min. 10mm in from the vertical edge.
- Continue to fix at max. 250mm centres, ensuring that the last fixing is positioned min. 10mm from the bottom of the panel.
- Fix the recessed side of PATTRESS PLUS to the c-stud by screwing through the flange into the panel. Position the first screw fixing in the top corner of the panel, min. 10mm down from the top edge, and also on the centreline of the c-stud flange (or min. 10mm in from the vertical edge of panel). See PATTRESS PLUS fixing detail. Continue to fix at max. 250mm centres, ensuring that the last fixing is positioned min. 10mm from the bottom of the panel.

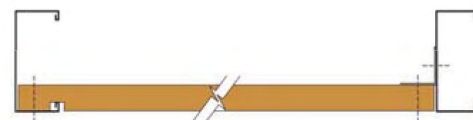


### 4. READY FOR PLASTERBOARD OVERLAY

- Ensure screw heads finish flush (or slightly countersunk) to ensure that they do not obstruct the installation of plasterboard panels. Fix plasterboard to c-studs in accordance with manufacturers recommendations.



### PATTRESS PLUS FIXING DETAIL



## QUALITY & ENVIRONMENTAL CERTIFICATION

SMARTPLY OSB panels are 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 Regulation (CPR). In addition to the CE mark, SMARTPLY OSB panels are marked 2+ Structural for ease of reference. SMARTPLY OSB is UKCA marked in accordance with the designated standard BS EN 13986.

Other quality certification includes KOMO (Netherlands).

SMARTPLY operates under an Integrated Management System (IMS) for Quality (ISO 9001), environment (ISO 14001), Health and Safety (ISO 45001) and Energy (ISO 50001), which is certified by the National Standard Authority of Ireland (NSAI).

All SMARTPLY products are manufactured from Forest Stewardship Council® (FSC®) certified timber.

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

All SMARTPLY products are manufactured using formaldehyde-free resin.



## NO ADDED FORMALDEHYDE

**SMARTPLY PATTRESS PLUS** is manufactured using advanced resin technology that results in a high performance, no added formaldehyde panel. This specialist resin formulation provides a supreme bond with

the wood strands as it has a reaction with the wood itself, when put under intense heat, creating a chemical weld. This is a different and superior type of bond to the mechanical weld that formaldehyde based products

exhibit. Depth of penetration is well beyond the minimum 0.3mm needed for a wood resin to provide adequate adhesive strength. This extra resin penetration also greatly improves the wood's resistance to thickness swell.

## EXPLORE OUR SMARTPLY RANGE

For quick reference, see below our table that highlights each product's features and benefits.

PRODUCT	OSB/3	OSB/4*	No added formaldehyde	Available in T&G	Certified Airtight	Low Slip Risk Coating	Pre-cut /Pre-rebated	Primed	Sound Reduction Compliance
SMARTPLY MAX	●		●	●					
SMARTPLY MAX DB	●		●	●					●
SMARTPLY ULTIMA		●	●	●					
SMARTPLY SURE STEP DB	●		●	●	●	●			●
SMARTPLY STRONGDECK		●	●	●					
SMARTPLY AIRTIGHT	●		●		●				
SMARTPLY PATTRESS PLUS	●		●				●		
SMARTPLY SITEPROTECT	●		●					●	

\*OSB/4 is approximately 30% stronger and 20% more moisture resistant than OSB/3 making it more suitable for humid and heavy duty load-bearing applications.

Looking for a certified airtight flooring panel for your next project? **SMARTPLY SURE STEP DB** is an airtight, tongue and grooved OSB/3 panel with a high performance, durable low slip risk coating that can be left exposed for up to 45 days with no degradation.

[Find out more.](#)



For further information and/or technical advice please contact our dedicated customer service team.

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The recommendations provided in this technical datasheet for the correct use of **SMARTPLY PATRESS PLUS** panels are specifically designed to ensure longevity and performance of this quality product in service. It is therefore essential that these recommendations are strictly followed.

The product is designed to be installed by a competent contractor, experienced with this type of product. **SMARTPLY EUROPE DAC** cannot be held responsible for damages arising from nonadherence to these recommendations, or product failures resulting from inadequate structural design or misuse of this product.

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In order to provide comprehensive guidance for the correct use of **SMARTPLY PATRESS PLUS**, this technical datasheet makes reference to relevant BS and EN standards. **SMARTPLY EUROPE DAC** cannot be held responsible for claims arising from the use of any information that has been extracted from such sources.