

A GUIDE TO OSB  
Roofing

Let's do the right thing!

**MEDITE®  
SMARTPLY®**   
INNOVATIVE TIMBER PRODUCTS

# AN INTRODUCTION TO **MEDITE SMARTPLY**

**MEDITE SMARTPLY** is a market leading manufacturer of sustainable wood-based panels. Our award-winning brands **MEDITE** and **SMARTPLY** are renowned for delivering the highest quality products, customer-led innovation and industry leading customer service.

Our manufacturing sites in Clonmel (**MEDITE**) and Waterford (**SMARTPLY**) in Ireland feature the latest production technology to deliver straighter, flatter and more consistent boards than ever before, in a range of sizes and thicknesses unparalleled within the industry. Constant progression and investment have allowed **MEDITE SMARTPLY** to enter new diverse markets and sectors, meaning that there is always a fresh pipeline of new products to address market demands.

Our commitment to sustainability is core to all levels of our business at **MEDITE SMARTPLY**; from our sustainably managed forests, to the manufacture of low embodied carbon materials, which contribute to sustainable building.

We have become known for adapting products and services to suit end users' needs, while maintaining a consistent stance on sustainability and creating products that add value throughout the supply chain.



## A new standard

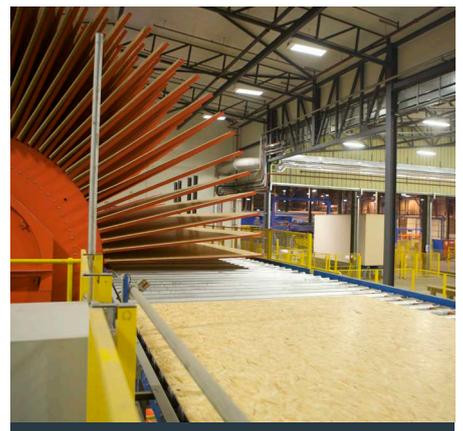
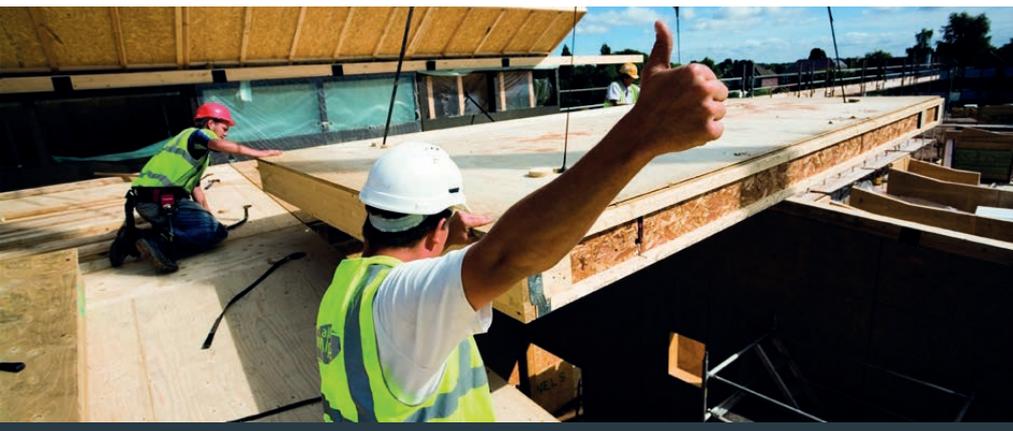
**MEDITE SMARTPLY** provides a diverse range of MDF and OSB panels with the aim of solving design and installation issues faced by the industry today.

With unrivalled quality and environmental certification, **SMARTPLY OSB** is one of the most environmentally efficient building materials on the market. Each panel is made from sustainable, FSC® certified, fast-growing timber: the forest

thinings of new-growth pine and spruce. This includes the tops, which are not usually used to make any other wood-based product.

**SMARTPLY OSB** panels are fully certified, suitable for structural applications, CE and UKCA compliant, legal and sustainable alternatives to tropical plywood. We set the standard in fire performance, structural integrity and largescale projects.

Furthermore, all our OSB products are manufactured with no added formaldehyde as standard. This means that when working closely with our products, contractors can rest assured that each panel contains only the smallest possible level that is naturally occurring in all wood products. This is also part of our aim to better enable the continued conscious creation of safe, healthy environments for building occupants.



# We define the standard of OSB.



# WHAT DOES MEDITE SMARTPLY BRING TO ROOFING?

Staying at the forefront of the timber industry, **MEDITE SMARTPLY** has sought to develop wood panel products to service the entire building envelope, including roofing.

This roofing offer has manifested in the creation of three products: **SMARTPLY ULTIMA**, **SMARTPLY MAX** and **SMARTPLY MAX FR** where Euroclass B is required, as the results of years of research into strength and flame-retardant solutions.

Both **SMARTPLY MAX** and its fire rated sister **SMARTPLY MAX FR** are extremely high-performance engineered OSB/3, while **SMARTPLY ULTIMA** is OSB/4. All are developed with demanding structural applications in mind, including those in offsite construction. State of the art ContiRoll®

technology creates a smooth, consistent wood panel that can be produced in large scale formats of up to 2.8m wide by 7.5m long and up to 40mm thick, allowing entire roofs or sides of buildings to be sheathed with minimal effort and time spent.

For **SMARTPLY MAX FR** specifically, **MEDITE SMARTPLY** has spent years researching timbers reaction to fire in order to discover a flame retardance solution that opens up the door to greater possibilities within timber frame buildings.

**SMARTPLY MAX FR** is treated during manufacture, meaning the wood chips in each panel are treated with a flame-retardant solution before pressing, making its fire performance integral and embedded within. This stands

in contrast to the post-manufacture treatment of most plywood and other engineered wood panels which coat the surface of the board. This process runs the risk of omitting the centre and edges of the panel from the flame-retardant treatment, resulting in an inaccurate final product.

**SMARTPLY ULTIMA**, **SMARTPLY MAX** and **SMARTPLY MAX FR** are manufactured with no added formaldehyde, as is standard across the **SMARTPLY** range, and are produced from FSC® certified timber.



# IT'S ALL GO WITH MEDITE SMARTPLY

In a £3.6 million regeneration project, 4000 m<sup>2</sup> of **SMARTPLY ULTIMA OSB/4** panels were used for the construction of 11 new barn style houses in Solihull, UK, featuring in the roofs as well as the walls.

'Home Farm' is a brand-new residential housing development project that has transformed a derelict farmyard. The 11 barns on the site presented large sides and high ceilings, meaning heavy duty, large scale timber panels were required. The perfect application for **SMARTPLY ULTIMA OSB/4**.

"We chose to use **SMARTPLY ULTIMA** as an alternative to plywood as we needed something really strong and reliable," said Chris Watson, Quantity Surveyor for Nobles Construction, the contractor for the project.

**SMARTPLY ULTIMA**, manufactured by **MEDITE SMARTPLY**, is an extremely high-performance engineered OSB4 wood panel developed for the most demanding structural

applications, including those in offsite manufacturing and construction.

"One of **SMARTPLY ULTIMA's** features that we appreciate the most is the fact that it is a high performance yet cost-effective solution in humid and high-load structural applications."

"I would definitely recommend using **SMARTPLY ULTIMA**. Not only are they FSC® Certified, but they are also ideal for timber frame and construction projects with large spans," Chris explains.

"We have really felt the benefit of **SMARTPLY ULTIMA's** high load-bearing capacity, and overall improved rigidity, both pluses for this type of project."

"This is my first time working on a project using **MEDITE SMARTPLY** products and it has been a very satisfying experience. I will definitely specify the company's products in the future."

Chris Watson,  
Quantity Surveyor for  
Nobles Construction



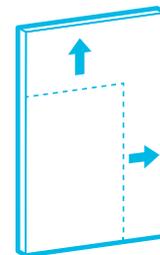
Recognised  
as a suitable  
alternative  
to plywood

Features no knots or inconsistencies and certified for use in heavy load bearing applications



No added  
formaldehyde

No formaldehyde manufacturing process ensures only naturally occurring formaldehyde.



Larger  
boards

Cover more meterage  
in less time.

# MEDITE AND SMARTPLY

## THE RIGHT ROOFING SOLUTION

With three structural **SMARTPLY OSB** solutions catering to the roofing sector, **MEDITE SMARTPLY** have sought to ensure the core qualities of strength, versatility and sustainable manufacturing are present throughout, while offering customers the choice of OSB/3 or OSB/4, moisture resistance and fire protection, depending on project needs.

As wood panel manufacturers who pride ourselves on innovation and catering to the needs of those who will actually use our products, you won't ever find a **MEDITE SMARTPLY** panel that only does one thing. While each

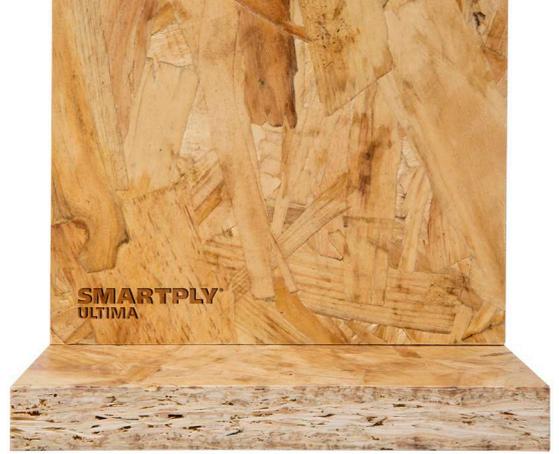
has its specialisation, be it moisture resistance or a superior reaction to fire, we understand that other qualities, while they may not be front line, are also extremely important and necessary.

Use the table below to clearly see which properties each product holds, and find their full specification sheet further on in the brochure.

### Applications

PRODUCT	Moisture Resistance	Enhanced Moisture Resistance	Flame Retardance	No Added Formaldehyde	Structurally Sound/ Weightbearing
SMARTPLY ULTIMA		●		●	●
SMARTPLY MAX	●			●	●
SMARTPLY MAX T&G	●			●	●
SMARTPLY MAX FR	●		●	●	●

# SMARTPLY ULTIMA SPECIFICATION



**SMARTPLY ULTIMA** is an extremely high-performance engineered wood panel (OSB/4) suitable for the most demanding structural applications including in offsite manufacturing and construction.

**SMARTPLY ULTIMA** is manufactured using state of the art ContiRoll® technology consisting of moisture resistant and formaldehyde-free bonding of wood strands, precision strand orientation and continuous pressing to produce large panels up to 2.8m wide by 7.5m long and to a maximum thickness of 40mm.

It is a cost-effective alternative in humid and high-load structural applications when compared to a similar performing structural plywood.

## Features/ Benefits:

- FSC® Certified
- A highly engineered OSB/4 panel
- Ideal for timber frame and construction projects with large spans
- High load-bearing capacity
- Enhanced moisture resistance compared to OSB/3
- Improved rigidity
- Suitable For LEED And BREEAM Projects

## Thicknesses and sizes

Available Thicknesses	18mm	22mm
Standard Sizes	1220 x 2440 1250 x 2500	1197 x 2397

## Suitability

**SMARTPLY ULTIMA** is for use in demanding structural applications such as: offsite construction systems, commercial and industrial buildings and site-based timberframe construction.

For more technical information or certification please visit [www.mdfosb.com](http://www.mdfosb.com) or contact your Technical Sales Manager.



**Suitable for demanding structural applications**

Ideal for timber frame and construction projects with large spans.



**Higher moisture resistance**

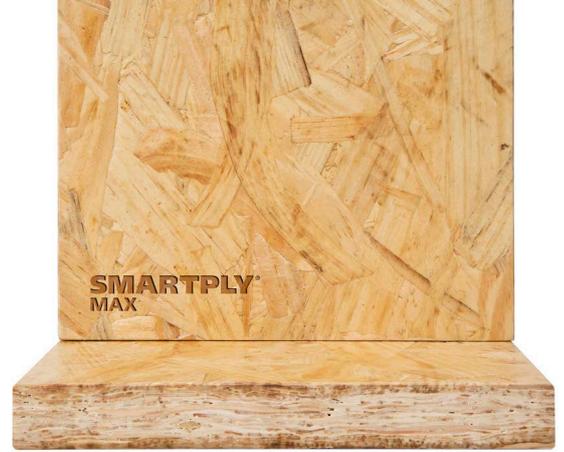
Improved for superior quality and versatility.



**High load-bearing capacity**

For the ultimate in structural applications.

# SMARTPLY MAX SPECIFICATION



**SMARTPLY MAX** is a strong, versatile board suitable for structural use in humid conditions (service Class 1 and 2), ideal for applications as diverse as roofing, flooring and wall sheathing etc.

**SMARTPLY MAX** 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 performance standard, it is the perfect choice for roofing, flooring, wall sheathing and many other applications where strength and moisture resistance are paramount.

## Features/ Benefits:

- FSC® Certified
- Durable
- Versatile
- Sustainable
- No added formaldehyde
- Excellent Load-Bearing
- CE and UKCA Certification

## Thicknesses and sizes

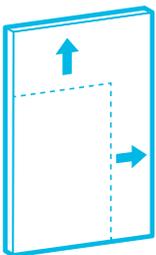
Standard Sizes	1197 x 2397	1220 x 2440	1250 x 2500	1197 x 2697	1197 x 2997
Available Thicknesses	9mm, 11mm, 15mm, 18mm, 22mm	8mm, 9mm, 11mm, 15mm, 18mm, 22mm, 24mm	9mm, 11mm, 15mm, 18mm, 22mm	9mm, 11mm, 15mm	9mm, 11mm

\*other dimensions available and T&G

## Suitability

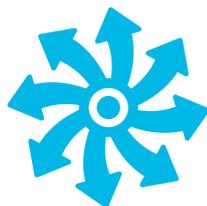
It is versatile, strong and cost-effective. Manufactured with exterior resins, **SMARTPLY MAX** is suitable for both interior and exterior structural applications such as roofing, flooring and wall sheathing.

For more technical information or certification please visit [www.mdfosb.com](http://www.mdfosb.com) or contact your Technical Sales Manager.



**Larger boards**

Cover more meterage in less time.



**Versatile**

Suitable for a wide range of applications, offering quality and peace of mind.



**Excellent load-bearing**

For the ultimate in structural applications.

# SMARTPLY MAX T&G SPECIFICATION



**SMARTPLY MAX T&G** 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 to the same exacting standards as **SMARTPLY MAX** but with the addition of tongue and grooved edges.

Ideal for numerous load bearing applications such as roofing and flooring. **SMARTPLY MAX T&G** along with all other SMARTPLY products carries the FSC® certification as well as UKCA and CE marking.

## Features/ Benefits:

- FSC® Certified
- Highly Engineered
- Moisture Resistant
- Easy Installation
- UKCA and CE compliant
- Sustainable
- Tongue & Groove Edge Profile
- No added formaldehyde

## Thicknesses and sizes

Standard Sizes	1200 x 2397	1220 x 2397	1220 x 2440	590 x 2440	600 x 2440
Available Thicknesses	22mm	15mm, 18mm	18mm, 22mm	15mm, 18mm	15mm, 18mm, 22mm

## Suitability

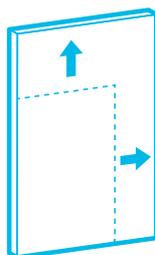
**SMARTPLY MAX T&G** is suitable for roofing and flooring applications in humid conditions (Service Class 1 & 2).

For more technical information or certification please visit [www.mdfosb.com](http://www.mdfosb.com) or contact your Technical Sales Manager.



Tongue and groove profile

Quicker and easier installation for larger application areas.



Larger boards

Cover more meterage in less time.



Highly engineered

Designed to perform to an exceptional standard.

# SMARTPLY MAX FR B SPECIFICATION



**SMARTPLY MAX FR B** is a structural, moisture resistant OSB/3 panel with reliable reaction to fire properties.

Ideal for use where strength, moisture resistance and improved flame retardance are paramount. **SMARTPLY MAX FR B** achieves a Reaction to Fire Classification of B-s2, d0, and Bfl-s1 (flooring) in accordance with EN13501-1.

**SMARTPLY MAX FR** offers the same quality and structural strength as all OSB/3 manufactured by **SMARTPLY** in accordance with the requirements of European Standards EN 300 and EN 13986.

## Features/ Benefits:

- Reaction to fire classification (Euroclass) of B-s2, d0 and Bfl-s1 (flooring)
- CPR Compliant
- Flame retardant treatment of wood strands during manufacture
- No Added Formaldehyde (NAF) or any harmful substances
- Reduces fire spread and improves fire protection during construction.
- High racking strength
- Light weight and easy to cut and fix
- Manufactured using FSC® certified timber from our own forests
- Climate Positive

## Thicknesses and sizes

Available Thicknesses	11mm	15mm	18mm
Standard Sizes	2397 x 1197	2397 x 1197, 2397 x 1200	2397 x 1197*, 2397 x 1200

\*other dimensions available and T&G

## Suitability

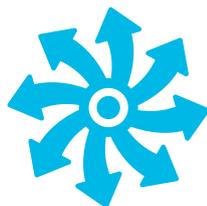
**SMARTPLY MAX FR** is suitable for a wide variety of applications where a predictable reaction to fire class is the highest priority as required by Building Regulations or health & safety legislation.

For more technical information or certification please visit [www.mdfosb.com](http://www.mdfosb.com) or contact your Technical Sales Manager.



**Flame  
retardancy  
built-in**

Individual wood chips treated before manufacture into each board making flame retardancy integral.



**Versatile**

Suitable for a wide range of applications, offering quality and peace of mind.



**Suitable for  
demanding  
structural  
applications**

Ideal for timber frame and construction projects with large spans.



To find out how we are setting new standards in timber panel engineering, and to request a sample, go to: [www.mdfosb.com/en/application/roofing](http://www.mdfosb.com/en/application/roofing)

**Let's do the right thing!**

