



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 timber construction 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.

As part of the Coillte Group, we pride ourselves on our sustainable supply chain and manufacturing processes, meaning our products are as environmentally conscious in their make up as they are in their application.

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

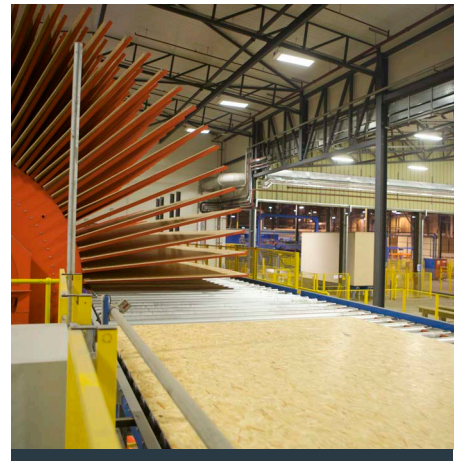
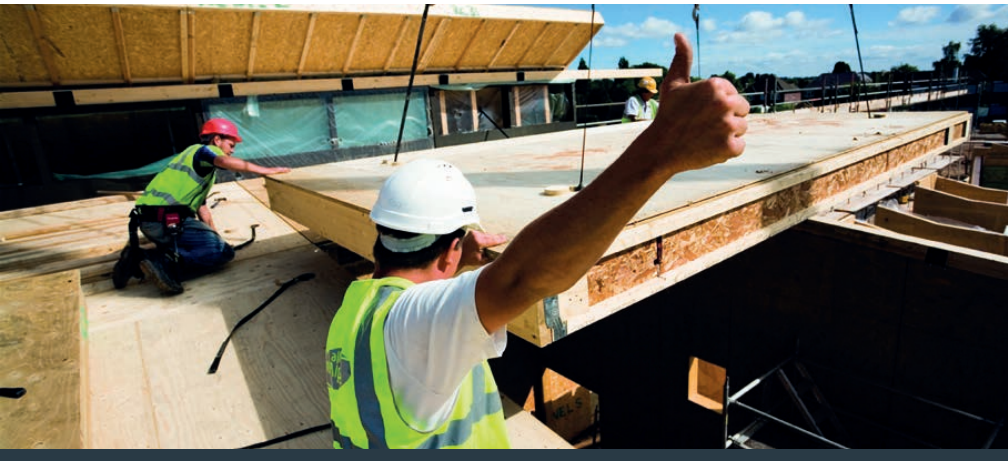
MEDITE SMARTPLY provides a diverse range of MDF and OSB panels with the aim of solving design and installation issues faced by the industry today.

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

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

SMARTPLY OSB boards are fully certified, structurally approved, CE 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 timber 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 OSB3, while **SMARTPLY ULTIMA** is OSB4. 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 largescale 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 m² of **SMARTPLY ULTIMA OSB4** 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 OSB4**.

"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



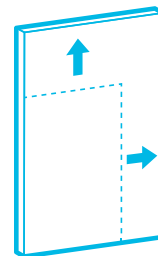
**Recognised
as a suitable
alternative
to plywood**

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 OSB3 or OSB4, moisture resistance and fire protection, depending on project needs.

As timber board 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** board that only does one thing. While each

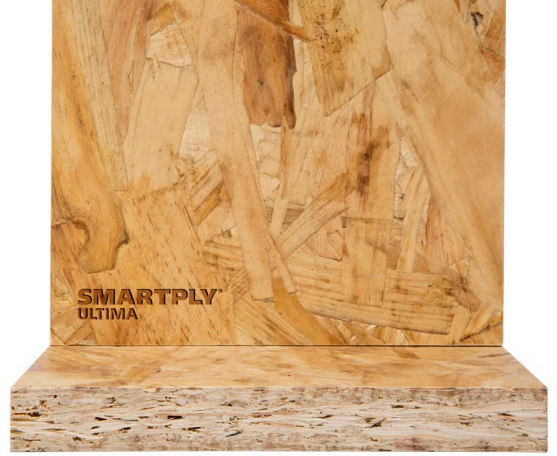
has its specialisation, be it moisture resistance or a superior reaction to fire, we understand that other qualities, while they may not be front line, are also extremely important and necessary.

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 (OSB4) 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 OSB4 panel.
- Ideal for timber frame and construction projects with large spans.
- High load-bearing capacity.
- Enhanced moisture resistance compared to OSB3.
- 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 or contact your Technical Sales Manager.



Suitable for demanding structural applications

Ideal for timber frame and construction projects with large spans.



Higher moisture resistance

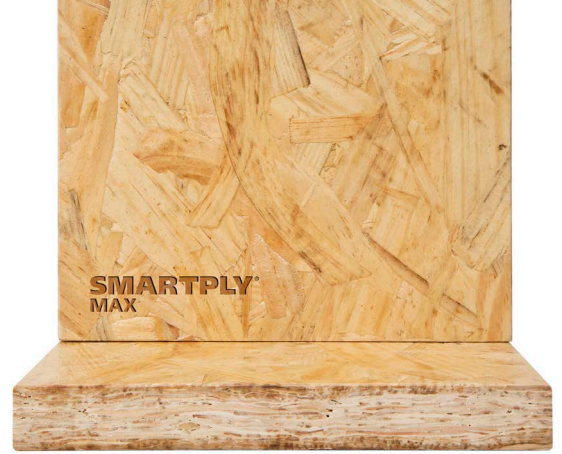
Improved for superior quality and versatility.



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
- Zero Added Formaldehyde
- Excellent Load-Bearing
- CE Certification

Thicknesses and sizes

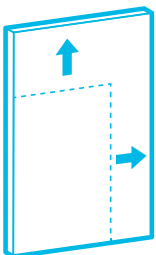
Standard Sizes	1197 x 2397	1220 x 2440	1250 x 2500	1197 x 2697	1197 x 2997
Available Thicknesses	9mm, 11mm, 15mm, 18mm	9mm, 11mm, 15mm, 18mm	9mm, 11mm, 15mm, 18mm	9mm, 11mm, 15mm, 18mm	9mm, 11mm, 15mm

*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 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 and CE Mark.

Features/ Benefits:

- FSC® Certified.
- Highly Engineered.
- Moisture Resistant.
- Easy Installation.
- CE Compliant.
- Sustainable.
- Tongue & Groove Edge Profile.
- Zero 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

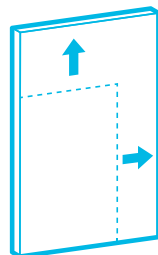
Suitability

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 or contact your Technical Sales Manager.



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 SPECIFICATION



SMARTPLY MAX FR is a structural, moisture resistant OSB3 panel with reliable reaction to fire properties.

Ideal for use where strength, moisture resistance and Euroclass C or Euroclass B flame retardance are paramount, the OSB3 panel complies with the European reaction to fire class C-s2,d0; and B^{FL}-s1.

SMARTPLY MAX FR offers the same quality and structural strength as all OSB3 manufactured by **SMARTPLY** in accordance with the requirements of European Standards EN 300 and EN 13986.

Features/ Benefits:

- FSC® Certified Timber.
- Flame Retardant.
- Easy To Cut And Install.
- High Racking Strength.
- No Added Formaldehyde.
- CE Certification.
- 100% Wood Based.
- Sustainable.
- Suitable For LEED And BREEAM Projects.

Thicknesses and sizes

Available Thicknesses	15mm	18mm
Standard Sizes	1197 x 2397	1197 x 2397*

*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 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 request a sample, visit:
www.mdfosb.com/smartply/request-samples

To find out how we are setting new standards
in timber panel engineering, go to:
www.mdfosb.com/roofing

Let's do the right thing!

