



**Norbord®**

make it better



**SterlingOSB®**

[www.norbord.com](http://www.norbord.com)



About Norbord

Norbord is one of the World’s leading manufacturers of engineered wood-based panel products. Our products are used extensively in the construction, furniture and DIY sectors.

Norbord’s success comes from the pursuit of excellence in all areas. This is a key driver within Norbord and is integral to how we manage our business. Across all functions we aim to deliver the highest level of achievement as standard.

The result is a company that is responsive with dependable and dedicated customer service without compromising safety or the environment.

Norbord is committed to sourcing all of its timber from responsibly managed forests. All of our European manufacturing facilities have the capacity to produce products certified to Forest Stewardship Council standards.

The FSC product label allows consumers worldwide to recognise products that support the growth of responsible forest management. In an increasingly environmentally aware marketplace, many demand the FSC mark on their wood products. With Norbord it comes as standard.

OUR VALUES

TRUST



EXCELLENCE



CUSTOMERS



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About SterlingOSB

SterlingOSB is designed to perform. Its strength is down to the tens of thousands of strands of real wood that go into each and every board. This precision engineered board is the natural successor to softwood plywood. No knots. No voids. No debates.

Smaller logs used efficiently

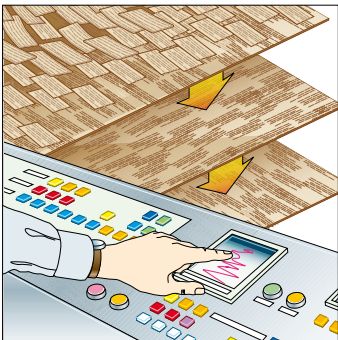
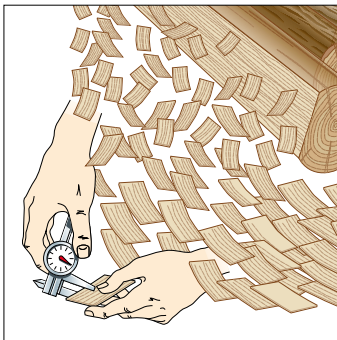
SterlingOSB is made from smaller logs, usually from the small trees that are removed to allow the bigger trees in the forest room to grow. Forest thinning improves growth and sustainability of plants, trees and wildlife.

Uniform strands oriented for strength

The logs are cut to length, debarked and processed into precise strands averaging 120mm long and 25mm wide. The strands are dried, blended with resin binder and wax. The strands are laid in cross directional layers in a precisely oriented fashion. These form a large continuous mat.

The cross directional forming of the strands gives SterlingOSB its increased strength. The resulting mat passes through a high heat and pressure press resulting in uniform and high quality panels that are then cooled and cut to size.

Throughout this highly automated and fully engineered process, panels are monitored and tested to meet stringent quality standards.





Product range

SterlingOSB2

Structural use in dry conditions

Made right here in the UK, SterlingOSB2 is the board of choice when you want the job done right.

Tough, consistent and great value for money – SterlingOSB2 is the perfect board for general applications. From boarding up to hoarding; crates to DIY; shelving to sheds – SterlingOSB is the perfect choice.

Typical uses include:

- Site hoarding
- Interior decorative panels
- Exhibition displays
- Shelving and racking
- Packaging, pallets, crating
- Garden sheds
- DIY projects

SterlingOSB3

Structural use in humid conditions

A precision engineered board ideal for structural applications. SterlingOSB3 is BBA approved and available in square edged and T&G formats.

This precision engineered board is designed to withstand all the punishment you can throw at it (provided it is installed to manufacturer’s recommendations). It literally sets the standards and is an excellent choice for humid structural applications.

Typical uses include:

- Timber frame housing
- Flat and pitched roofs
- Wall sheathing
- Flooring
- Portable buildings
- Caravans
- Agricultural buildings



Product range

SterlingOSB3 T&G

Structural use

Sanded and machined to exact tolerances, SterlingOSB3 T&G delivers. You get the same high quality product – board, after board, after board. So forget about knots or voids spoiling your plans. And just get on with the job, with a board that’s engineered to deliver.

This board has a hard-wearing Tongue and Groove profile. This makes it perfect for platform floors – anything you build on top will be resting on the proven strength of SterlingOSB3 T&G.

SterlingOSB3 T&G is BBA approved and is widely used in house building. What’s more it is recognised by NHBC technical standards and Zurich Municipal for housing applications.



Sterling Roofdek

Sterling Roofdek is designed specifically for flat roof decking and pitched roof applications. The board combines all the features and benefits of SterlingOSB T&G and measures 2440x1200mm; perfect for roofing.

The sanded surface is designed to offer excellent adhesion for glues, self-adhesive felts and bitumen. The board is completely free from voids and knots and provides the ideal solution for roofing.

In other words, it’s as hard working as you are. Sterling Roofdek is BBA approved, and permitted for structural applications under BS 5268: Part 2.2002 and Eurocode.





Application guidance

The following table provides general guidance. For advice on the best product for your specific application, please contact Norbord customer services or technical support on +44 (0)1786 812921.

|                  | Structural use in humid conditions |                        |                |          |                    |          |                        | Structural use in dry conditions |                     |                     |          |                    |              |              |
|------------------|------------------------------------|------------------------|----------------|----------|--------------------|----------|------------------------|----------------------------------|---------------------|---------------------|----------|--------------------|--------------|--------------|
|                  | Timber frame                       | Flat and pitched roofs | Wall sheathing | Flooring | Portable buildings | Caravans | Agricultural buildings | Site hoardings                   | Interior decorative | Exhibition displays | Shelving | Packaging, Pallets | Garden sheds | DIY projects |
| SterlingOSB2     |                                    |                        |                |          |                    |          |                        | ✓                                | ✓                   | ✓                   | ✓        | ✓                  | ✓            | ✓            |
| SterlingOSB3     | ✓                                  | ✓                      | ✓              | ✓        | ✓                  | ✓        | ✓                      | ✓                                | ✓                   | ✓                   | ✓        | ✓                  | ✓            | ✓            |
| Sterling Roofdek | ✓                                  | ✓                      | ✓              | ✓        | ✓                  | ✓        | ✓                      | ✓                                | ✓                   | ✓                   | ✓        | ✓                  | ✓            | ✓            |

✓ Suitable



Sterling Roofdek T&G



SterlingOSB3



Installation advice

SterlingOSB

SterlingOSB is easy to saw, drill, nail, plane, file or sand. Nails can be driven as close as 8mm from the panel edge without splitting. Panels may be glued with any PVA adhesive recommended for wood, and painted with any quality wood-paint system. Panels can be unsanded, touch sanded, or fully sanded on both sides for industrial or decorative uses.

| Fixing   | Expansion gaps   |
|--|--|
| <p>The following general fixing instructions should be noted:</p> <ul style="list-style-type: none"><li>• Panels must be laid with long edges at 90° to supports and short edge joints must be staggered.</li><li>• All short edges must be supported on joists/studs or noggins.</li><li>• Panel edges must bear approx. 18mm onto joists.</li><li>• Nailing must be at least 8mm from the panel edges.</li><li>• All T&amp;G joints should be glued with a PVA adhesive.</li><li>• Panels should be fixed using approx. 3mm ring-shank nails or screws whose length is 2.5 times the thickness of the panel in flooring or 50mm in roofing.</li><li>• Whilst not essential, gluing of the panels to joists increases the stiffness and strength of the structure. Additionally gluing can help reduce any potential squeaks or creaks. We recommend you use our NoSqueak glue.</li></ul> | <p>SterlingOSB should be face fixed using approx. 3mm diameter ring-shank nails or screws, 50mm long at 100mm centres across the supporting joists.</p> <p><b>Square edged</b></p> <p>With all square edged panels a 3mm expansion gap should be allowed between boards and edges.</p> <p><b>T&amp;G</b></p> <p>Tongue and Groove has an expansion gap included in the T&amp;G joint. A 10mm expansion gap, or a total of 2mm per metre of boarding, (whichever is the greater), must be left at perimeters and upstands for both square edged and Tongue and Groove panels.</p> |

Spans & Nailing Centres

|                                 | Flooring |      | Flat Roofing |     |     | Sarking | Sarking Under Slates | Sheathing |
|---------------------------------|----------|------|--------------|-----|-----|---------|----------------------|-----------|
| Thickness mm                    | 15       | 18   | 11           | 15  | 18  | 9       | 18                   | 9         |
| Max. span* (domestic) mm        | 450      | 600  | 400          | 600 | 610 | 600     | 610                  | 610       |
| Nail centres (edges) mm         | 300      | 300  | 100          | 100 | 100 | 150     | 100                  | 150       |
| Nail centres (intermediate) mm  | 300      | 300  | 100          | 100 | 100 | 300     | 100                  | 300       |
| Weight kg/m² (approx.)          | 9.6      | 11.7 | 7.3          | 9.6 | 11  | 3.5     | 11                   | 3.5       |
| Face smooth nail retention**(N) | 265      | 320  | 184          | 265 | 320 | 158     | 320                  | 158       |
| Edge screw retention (N)        | 673      | 647  | 592          | 673 | 647 | –       | 647                  | –         |
| Face screw retention (N)        | 833      | 854  | 692          | 833 | 854 | 625     | 854                  | 625       |

\* Please refer to tables 1 and 2 on page 14 regarding UDL limits.  
\*\* Compared to smooth nails, improved nails will improve retention performance by around 50%.

Installation advice

Sterling Roofdek

| Roofing   | Fixings  | Ventilation  | Specification guidance   |
|---|--|--|--|
| <p>Sterling Roofdek is quick and easy to install, while ensuring full compliance to BS6229. The following general fixing instructions should be noted:</p> <ul style="list-style-type: none"><li>• Panels must be laid with the long edges at 90° to supports and short edge joints must be staggered.</li><li>• All short edges must be supported on joists or noggins.</li><li>• Panel edges must bear approx. 20mm into joists.</li><li>• Nailing must be at least 8mm from the panel edges.</li><li>• The Tongue and Groove edge does not require to be continuously supported.</li><li>• Sterling Roofdek is sanded to give improved adhesion qualities for all flat roofing applications.</li></ul> | <p>Sterling Roofdek should be fixed using approx. 3mm diameter ring-shank nails or screws, 50mm long at 100mm centres across the supporting joists.</p> <p><b>Expansion gaps</b></p> <p>It is well documented and strongly recommended that additional movement gaps are incorporated in large roof areas or long runs.</p> <p>An expansion provision should be allowed of 2mm per metre plus 1mm for every metre above 12m of the width or breadth of the area.</p> <p>On large roofs, a movement joint should be included every 12m approximately in either direction or at the particular requirement of the advising Structural Design Engineers/Architects. This movement joint should be approx. 25mm.</p> | <p>Design and applications of panels in flat roof decking is covered in section 2.5 of ‘Panel Guide’ issued by Wood Panel Industries Federation (WPIF).</p> <p><b>Safety</b></p> <p>As roof decking may be slippery when wet or covered with frost, snow, ice or sawdust, installers should wear rubber soled footwear. The use of a safety harness is recommended.</p> <p><b>Coverings</b></p> <p>A range of proprietary products may be used to cover Sterling Roofdek - refer to appropriate trade associations for guidance e.g. the Flat Roofing Alliance who can be contacted on 01444 440027.</p> | <p>Further guidance on the selection and use of wood-based panels and other essential design information can be found in: WPIF Panel Guide, BS 6229, BBA Agrément Certificate No 01/3857 and DD ENV 12872: 2000.</p> <p>For further details please contact Norbord technical support or;</p> <ul style="list-style-type: none"><li>• <a href="http://www.wpif.org.uk">www.wpif.org.uk</a></li><li>• <a href="http://www.bbacerts.co.uk">www.bbacerts.co.uk</a></li></ul> |



Coating

When choosing a coating system, the desired longevity, decorative effect and level of maintenance should be considered.

Where a fine finish is required, factory sanded panels should be used. With unsanded panels, surfaces should be first wire brushed to remove any loose wafers and resin deposits. Priming and top coating with a spirit based coating, as directed by the manufacturers, will give the highest quality finish. Where the final appearance is less important, water-based products may be used. These may cause some slight swelling of the surface wafers emphasising their outline.

Small test areas are recommended as Norbord Ltd cannot be held responsible for other manufacturers’ product claims in this respect. Manufacturers’ guidelines on application should always be followed.

Treating

If required, SterlingOSB can be treated to further protect against fungal or insect attack. It is recommended that a 3-minute dip cycle rather than a double vacuum cycle be used, and a solvent based system should be used in preference to a water based system. Experience shows that adequate preservative uptake is provided by this method.

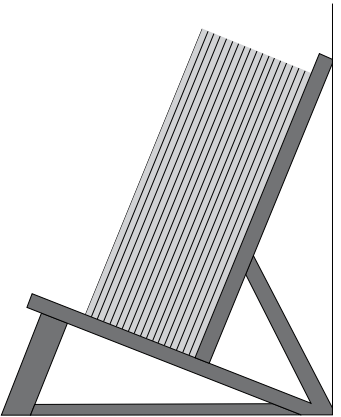
Double vacuum systems and the use of water based chemicals can, as with most panel products, adversely affect the structural properties of the panel. All fire-retardant impregnation systems are water based and usually involve a double vacuum and pressure cycle. It is essential to obtain structural performance characteristics from the treatment company and follow their end-use recommendations. Fire-retardant paints and finishes can be used on SterlingOSB. Visit [www.wfrc.co.uk](http://www.wfrc.co.uk) for up to date information.

Norbord Ltd cannot be held responsible for any independently handled process which may affect the strength properties of the finished panel.

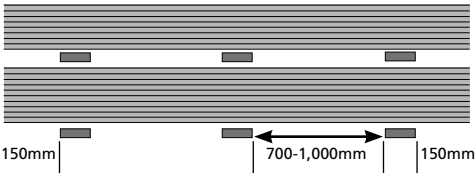
Storing

Panels should be stored under cover, on a level base with sufficient bearers to prevent sagging or other distortion. Care should be taken to protect edges. Where the panel is to be stored for a prolonged period, additional bearers should be installed.

An HSE information sheet on the ‘safe stacking of sawn material and board materials’ is available on request.



Correct method of edge stacking



Correct method of storage on bearers

Conditioning

In common with other wood and wood-based products, OSB may expand or contract slightly when exposed to changes of moisture in the atmosphere. Boards should be allowed to reach equilibrium by storing them under the atmospheric conditions in which they are to be used for a minimum of 48 hours prior to installation.

Technical data

Product specification

| Property                                      | EN Standard | Unit    | Specification |
|---|-------------|---------|---------------|
| Tolerance on the mean density within a board  | 323         | mm      | ±15%          |
| Length/width deviation                        | 324-1       | mm      | ±3            |
| Thickness deviation – unsanded                | 324-1       | mm      | ±0.8          |
| Thickness deviation – sanded                  | 324-1       | mm      | ±0.3          |
| Squareness – tolerance                        | 324-2       | mm/m    | 2             |
| Straightness                                  | 324-2       | mm/m    | 1.5           |
| Linear expansion (65%- 85% relative humidity) |             | %       | 0.15          |
| Thermal conductivity “k” value                | 13986       | w/(m.k) | 0.13          |
| Reaction to fire (BS EN 135 01-1)             | 13986       |         | D             |
| Formaldehyde                                  | 120         | mg/100g | <8            |

Load bearing for use in humid conditions: Requirements for specified mechanical & swelling properties

| Property                                       | EN Standard | Unit              | OSB3 Requirement |            |          |
|--|-------------|-------------------|------------------|------------|----------|
|  |             |                   | 6-10 mm          | >10 to <18 | 18-25 mm |
| Moisture content                               | 322         | %                 | 2-12             | 2-12       | 2-12     |
| Bending strength – major axis                  | 310         | N/mm <sup>2</sup> | 22               | 20         | 18       |
| Bending strength – minor axis                  | 310         | N/mm <sup>2</sup> | 11               | 10         | 9        |
| Modulus of elastidty in bending – major axis   | 310         | N/mm <sup>2</sup> | 3500             | 3500       | 3500     |
| Modulus of elasti dty in bending – minor a xis | 310         | N/mm <sup>2</sup> | 1400             | 1400       | 1400     |
| Internal bond                                  | 319         | N/mm <sup>2</sup> | 0.34             | 0.32       | 0.30     |
| Swelling in thickness – 24hr immersion         | 317         | %                 | 15               | 15         | 15       |
| Bending strength after cydic test – major axis | 321+310     | N/mm <sup>2</sup> | 9                | 8          | 7        |

Product sizes available

| Product  | Size (mm)  | Thickness (mm)                      |
|--|--|-------------------------------------|
| Sterling OSB2 - square edged                             | 2440 x 1220  | 8, 11, 14, 18                       |
| Sterling OSB3 - square edged                             | 2400 x 1200<br>2440 x 1220<br>2700 x 1200                | 9, 11, 15, 18<br>9, 11, 15, 18<br>9 |
| Sterling OSB3<br>Tongued & Grooved – 2 edges             | 2440 x 1200 (laid measure)<br>2440 x 1200 (laid measure) | 15, 18, 22<br>15, 18, 22            |
| Sterling OSB3<br>Tongued & Grooved – 4 edges             | 2400 x 590 (laid measure)<br>2440 x 590 (laid measure)   | 15, 18, 22<br>15, 18, 22            |
| Sterling Roofdek (Sanded)<br>Tongued & Grooved – 2 edges | 2440 x 1200 (laid measure)                               | 18                                  |

Other sizes are available on request.

Boards per pack

| Thickness     | 8   | 9   | 11 | 15 | 18 | 22 | 25 |
|---------------|-----|-----|----|----|----|----|----|
| No. of Boards | 112 | 100 | 82 | 60 | 50 | 40 | 36 |



## Permissible Vertical Loads

Permissible vertical loads, per board thickness, per given span for SterlingOSB 2/3 spanning longitudinally

- Based on:**
1. Material properties to BS EN 12369-1:2001 and BS EN 300: 2006.
  2. Structural design to British Standard BS 5268-2: 2002.

| Service Classes  | Service class 1   | Service class 2   | Service class 3  |
|--|---|---|--|
| Three service classes are defined in British Standard BS 5268. | Characterised by a moisture content in the materials corresponding to a temperature of 20°C and the relative humidity of the surrounding air only exceeding 65% for a few weeks per year. | Characterised by a moisture content in the materials corresponding to a temperature of 20°C and the relative humidity of the surrounding air only exceeding 85% for a few weeks per year. | Climatic conditions leading to higher moisture contents than in service class 2. |

### Load Duration Classes

| Load-duration class | Order of accumulated duration of characteristic load | Examples of loading |
|---------------------|--|---------------------|
| Permanent           | more than 10 years                                   | self weight         |
| Long-term           | 6 months to 10 years                                 | storage             |
| Medium-term         | 1 week to 6 months                                   | imposed load        |
| Short-term          | less than 1 week                                     | snow* and wind      |
| Instantaneous       |  | accidental load     |

\*In areas which have a heavy snow load for a prolonged period of time, part of the load should be regarded as medium-term

- Notes:**
1. Permissible load per span values given in Tables 2 and 4 are for designs to BS 5268: Part 2 : 2002. Separate values are given for Service Classes 1 and 2.
  2. Permissible deflection is considered to be 1/300<sup>th</sup> of span.
  3. Point (line) loads are in kN.
  4. Uniformly distributed loads are in kN/m².

## Permissible Vertical Loads in kN/m²

**Table 1**  
**Multi-span (3 point support) – Uniformly distributed load (BS 5268-2: 2002)**  
**(a) Service class 1**

| Span (mm) | SterlingOSB3 board thickness (mm) |      |               |      |               |       |               |       |               |       |
|-----------|-----------------------------------|------|---------------|------|---------------|-------|---------------|-------|---------------|-------|
|           | 9                                 |      | 11            |      | 15            |       | 18            |       | 22            |       |
|           | Load duration                     |      | Load duration |      | Load duration |       | Load duration |       | Load duration |       |
|           | Long                              | Med  | Long          | Med  | Long          | Med   | Long          | Med   | Long          | Med   |
| 300       | 1.50                              | 3.07 | 2.90          | 5.95 | 5.38          | 11.03 | 6.73          | 13.79 | 9.95          | 20.39 |
| 350       | 1.17                              | 2.40 | 1.99          | 4.08 | 4.46          | 9.14  | 5.78          | 11.84 | 8.65          | 17.73 |
| 400       | 0.82                              | 1.68 | 1.50          | 3.07 | 3.55          | 7.28  | 4.86          | 9.96  | 7.26          | 14.88 |
| 450       | 0.58                              | 1.18 | 1.05          | 2.15 | 2.66          | 5.46  | 3.84          | 7.87  | 5.74          | 11.75 |
| 500       | 0.42                              | 0.86 | 0.76          | 1.57 | 1.94          | 3.98  | 3.11          | 6.38  | 4.65          | 9.52  |
| 550       | 0.32                              | 0.65 | 0.58          | 1.18 | 1.46          | 2.99  | 2.52          | 5.16  | 3.84          | 7.87  |
| 600       | 0.24                              | 0.50 | 0.44          | 0.91 | 1.12          | 2.30  | 1.94          | 3.98  | 3.23          | 6.61  |
| 650       | 0.19                              | 0.39 | 0.35          | 0.71 | 0.88          | 1.81  | 1.53          | 3.13  | 2.79          | 5.71  |
| 700       | 0.15                              | 0.31 | 0.28          | 0.57 | 0.71          | 1.45  | 1.22          | 2.51  | 2.23          | 4.57  |
| 750       | 0.12                              | 0.25 | 0.23          | 0.47 | 0.58          | 1.18  | 0.99          | 2.03  | 1.82          | 3.72  |
| 800       | 0.10                              | 0.21 | 0.19          | 0.39 | 0.47          | 0.97  | 0.82          | 1.68  | 1.50          | 3.07  |

Note: In timber frame housing, 15mm Sterling OSB/3 is often used as a temporary deck at 600mm centres. We recommend avoiding unduly high point loads.

**Table 2**  
**(b) Service class 2**

| Span (mm) | SterlingOSB3 board thickness (mm) |      |               |      |               |      |               |       |               |       |
|-----------|-----------------------------------|------|---------------|------|---------------|------|---------------|-------|---------------|-------|
|           | 9                                 |      | 11            |      | 15            |      | 18            |       | 22            |       |
|           | Load duration                     |      | Load duration |      | Load duration |      | Load duration |       | Load duration |       |
|           | Long                              | Med  | Long          | Med  | Long          | Med  | Long          | Med   | Long          | Med   |
| 300       | 1.15                              | 2.48 | 2.23          | 4.81 | 4.14          | 8.91 | 5.18          | 11.14 | 7.65          | 16.47 |
| 350       | 0.90                              | 1.94 | 1.53          | 3.30 | 3.43          | 7.38 | 4.44          | 9.56  | 6.66          | 14.32 |
| 400       | 0.63                              | 1.36 | 1.15          | 2.48 | 2.73          | 5.88 | 3.74          | 8.05  | 5.58          | 12.02 |
| 450       | 0.44                              | 0.95 | 0.81          | 1.74 | 2.05          | 4.41 | 2.95          | 6.36  | 4.41          | 9.50  |
| 500       | 0.32                              | 0.70 | 0.59          | 1.26 | 1.49          | 3.21 | 2.39          | 5.15  | 3.58          | 7.70  |
| 550       | 0.24                              | 0.52 | 0.44          | 0.95 | 1.12          | 2.42 | 1.94          | 4.17  | 2.95          | 6.36  |
| 600       | 0.19                              | 0.40 | 0.34          | 0.74 | 0.86          | 1.86 | 1.49          | 3.21  | 2.48          | 5.34  |
| 650       | 0.15                              | 0.32 | 0.27          | 0.58 | 0.68          | 1.46 | 1.18          | 2.53  | 2.14          | 4.62  |
| 700       | 0.12                              | 0.25 | 0.22          | 0.46 | 0.54          | 1.17 | 0.94          | 2.03  | 1.72          | 3.70  |
| 750       | 0.10                              | 0.21 | 0.18          | 0.38 | 0.44          | 0.95 | 0.76          | 1.64  | 1.40          | 3.01  |
| 800       | 0.08                              | 0.17 | 0.14          | 0.31 | 0.36          | 0.78 | 0.63          | 1.36  | 1.15          | 2.48  |



Permissible Vertical Loads in kN

Table 3  
Multi-span (3 point support) – Point load (BS 5268-2: 2002)  
(a) Service class 1

| Span (mm) | SterlingOSB3 board thickness (mm) |      |               |      |               |      |               |      |               |      |
|-----------|-----------------------------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
|           | 9                                 |      | 11            |      | 15            |      | 18            |      | 22            |      |
|           | Load duration                     |      | Load duration |      | Load duration |      | Load duration |      | Load duration |      |
|           | Long                              | Med  | Long          | Med  | Long          | Med  | Long          | Med  | Long          | Med  |
| 300       | 0.21                              | 0.43 | 0.34          | 0.70 | 0.82          | 1.68 | 1.37          | 2.81 | 2.01          | 4.11 |
| 350       | 0.16                              | 0.32 | 0.28          | 0.57 | 0.68          | 1.39 | 1.12          | 2.30 | 1.75          | 3.58 |
| 400       | 0.12                              | 0.25 | 0.22          | 0.44 | 0.55          | 1.13 | 0.95          | 1.95 | 1.51          | 3.09 |
| 450       | 0.09                              | 0.19 | 0.17          | 0.35 | 0.44          | 0.89 | 0.75          | 1.54 | 1.27          | 2.61 |
| 500       | 0.08                              | 0.16 | 0.14          | 0.29 | 0.35          | 0.72 | 0.61          | 1.25 | 1.11          | 2.28 |
| 550       | 0.06                              | 0.13 | 0.12          | 0.24 | 0.29          | 0.60 | 0.50          | 1.03 | 0.92          | 1.89 |
| 600       | 0.05                              | 0.11 | 0.10          | 0.20 | 0.24          | 0.50 | 0.42          | 0.87 | 0.77          | 1.58 |
| 650       | 0.04                              | 0.09 | 0.08          | 0.17 | 0.21          | 0.43 | 0.36          | 0.74 | 0.66          | 1.34 |
| 700       | 0.04                              | 0.08 | 0.07          | 0.15 | 0.18          | 0.37 | 0.31          | 0.64 | 0.57          | 1.16 |
| 750       | 0.03                              | 0.07 | 0.06          | 0.12 | 0.16          | 0.32 | 0.27          | 0.56 | 0.50          | 1.02 |
| 800       | 0.03                              | 0.06 | 0.06          | 0.11 | 0.14          | 0.28 | 0.24          | 0.48 | 0.44          | 0.89 |

Table 4  
(b) Service class 2

| Span (mm) | SterlingOSB3 board thickness (mm) |      |               |      |               |      |               |      |               |      |
|-----------|-----------------------------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
|           | 9                                 |      | 11            |      | 15            |      | 18            |      | 22            |      |
|           | Load duration                     |      | Load duration |      | Load duration |      | Load duration |      | Load duration |      |
|           | Long                              | Med  | Long          | Med  | Long          | Med  | Long          | Med  | Long          | Med  |
| 300       | 0.16                              | 0.35 | 0.26          | 0.57 | 0.63          | 1.36 | 1.06          | 2.27 | 1.54          | 3.32 |
| 350       | 0.12                              | 0.26 | 0.21          | 0.46 | 0.52          | 1.13 | 0.86          | 1.86 | 1.34          | 2.89 |
| 400       | 0.09                              | 0.20 | 0.17          | 0.36 | 0.42          | 0.91 | 0.73          | 1.58 | 1.16          | 2.50 |
| 450       | 0.07                              | 0.15 | 0.13          | 0.28 | 0.34          | 0.72 | 0.58          | 1.25 | 0.98          | 2.11 |
| 500       | 0.06                              | 0.13 | 0.11          | 0.23 | 0.27          | 0.58 | 0.47          | 1.01 | 0.86          | 1.84 |
| 550       | 0.05                              | 0.11 | 0.09          | 0.19 | 0.22          | 0.48 | 0.39          | 0.83 | 0.71          | 1.52 |
| 600       | 0.04                              | 0.09 | 0.07          | 0.16 | 0.19          | 0.40 | 0.33          | 0.70 | 0.59          | 1.28 |
| 650       | 0.03                              | 0.07 | 0.06          | 0.14 | 0.16          | 0.34 | 0.28          | 0.60 | 0.50          | 1.09 |
| 700       | 0.03                              | 0.07 | 0.06          | 0.12 | 0.14          | 0.30 | 0.24          | 0.52 | 0.44          | 0.94 |
| 750       | 0.02                              | 0.05 | 0.05          | 0.10 | 0.12          | 0.26 | 0.21          | 0.45 | 0.38          | 0.82 |
| 800       | 0.02                              | 0.05 | 0.04          | 0.09 | 0.10          | 0.23 | 0.18          | 0.39 | 0.34          | 0.72 |



Environmental credentials

Forest Stewardship Council®

Norbord is committed to sourcing all of its timber from responsibly managed forests and therefore all of our European sites have the capacity to manufacture to Forest Stewardship Council® standards.

The FSC® product label allows consumers worldwide to recognise products that support the growth of responsible forest management. In an increasingly environmentally aware marketplace many demand the FSC® mark on their wood products: with Norbord it comes as standard.



Investing in the environment

Norbord has invested heavily in environmental improvements since 1995. This includes air-cleaning technology such as state-of-the-art WESPS (wet electrostatic precipitators). It also means investment in recycling facilities. We can generate as much as half our mill's energy needs by using wood residues as fuel – composting what is left.

By reusing and conserving, we safeguard the environment and keep our costs down. In turn, our products are good for the environment and also good for your budget.

All of our plants have obtained the coveted environmental ISO 14001 accreditation. The ISO 14000 family addresses environmental management. This means what the organisation does to:

- minimise harmful effects on the environment caused by its activities, and to
- achieve continual improvement of its environmental performance.



Norbord across the globe

Norbord across the globe

Norbord is one of the World's leading manufacturers of engineered wood-based panels. With our headquarters in Toronto, we employ some 2,500 people worldwide with approximately 900 of them in Europe. We are publicly owned and listed on the Toronto Stock Exchange.

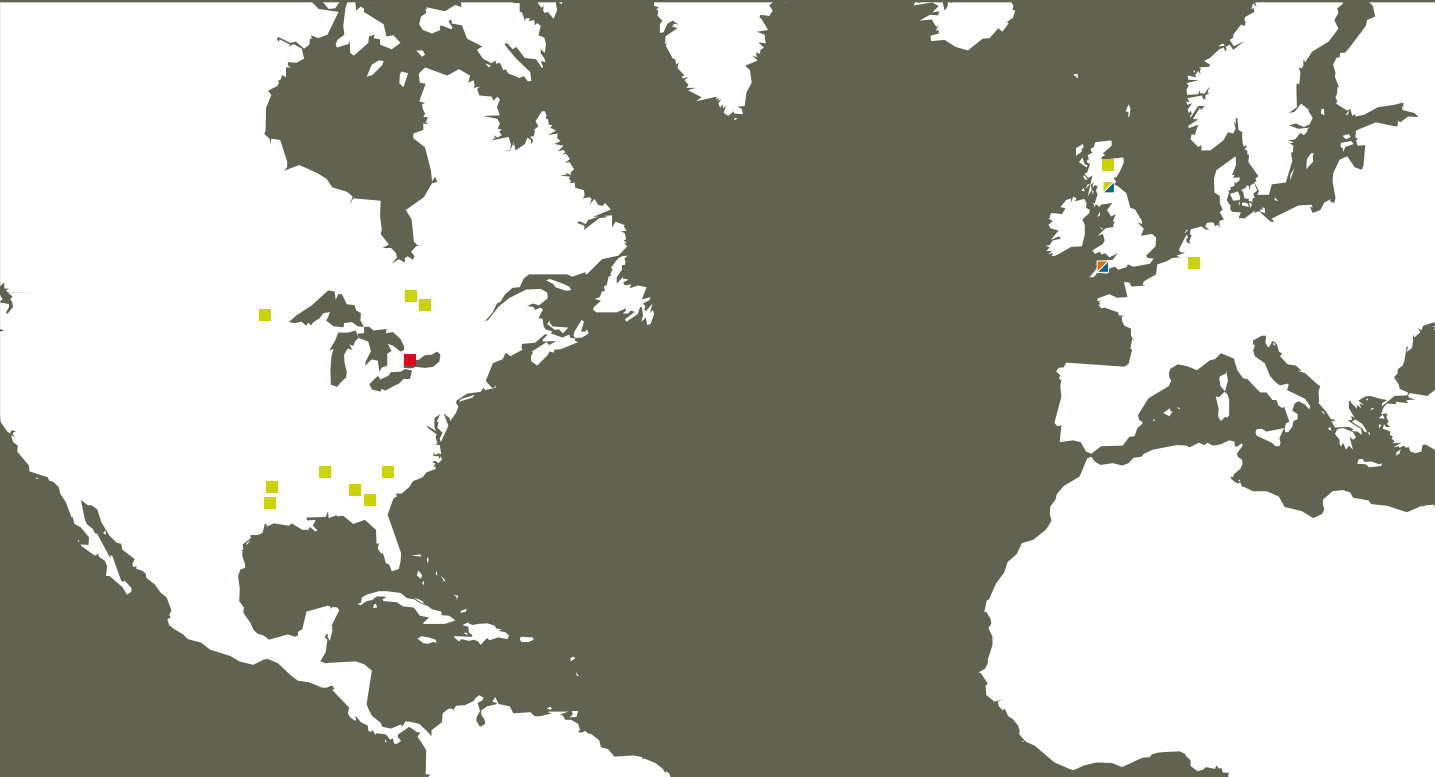
Our facilities include

- 11 OSB Mills
- 1 MDF Plant
- 2 Particleboard Plants
- 1 Furniture Plant

The result is a successful company built on integrity, listening to our customers and always improving the way we work.

Industry sectors served

Our products are used extensively in the construction, furniture and DIY sectors. From tongued and grooved Caberfloor ideal for flooring solutions, to structural SterlingOSB designed to withstand the rigours of I-joists, all our products are manufactured to vigorous quality standards.



Corporate Office



OSB Mills



MDF Plant



Particleboard Plants



Furniture Plant





Norbord in Europe and Quality Credentials

In Europe, we have four sites

- Cowie, Scotland**  
Tel +44 (0)1786 812921  
Fax +44 (0)1786 815622  
Caberwood MDF  
Caberboard  
Caberfloor  
Caberdek
- Inverness, Scotland**  
Tel: +44 (0)1463 792424  
Fax: +44 (0)1463 791764  
SterlingOSB2  
SterlingOSB3  
Sterling Roofdek
- South Molton, England**  
Tel: +44 (0)1769 572991  
Fax: +44 (0)1769 572413  
Conti  
Caberboard  
Furniture Components
- Genk, Belgium**  
Tel: +32 (0)89 500300  
Fax: +32 (0)89 362971  
SterlingOSB Zero

British Board of Agrément

The BBA (British Board of Agrément) is designated by UK Government to issue European Technical Approvals. This provides third party security and further guarantee of SterlingOSB performance in modern construction applications. A copy of the certificate can be found at [www.norbord.com](http://www.norbord.com)



CE Marking

The CE mark (from the French, ‘Conformité Européan’) is intended to promote the free movement of products within the EU by showing that essential health and safety requirements have been met.

The CPD (Construction Products Directive) applies standards to the finished works into which construction products are to be used, rather than applying directly to the products themselves. These quality standards ensure that:



- The product has been subject to an appropriate system of attestation of conformity with one or more technical specifications;
- The product does in fact conform with the relevant aspects of the identified technical specifications; and
- Therefore, the product is fit for its express intended use or with its implied range of suitable uses.



Cowie Scotland



Inverness Scotland



South Molton England



Genk Belgium



Values and beliefs

The people of Norbord Europe have adopted a common set of values which have been built through open communication and dialogue reflective of mutual respect. They can be summarised in three words:



Commitment to helping our customers be successful

Our people recognise that if our customer relationships are not based on win-win outcomes, then they are not sustainable.

This belief drives our strategy of focusing on key customers and working with them to ensure mutual benefits over the long term. Benefits based on continuing improvements in customer service, product and business development, supply chain effectiveness and technical support.

The only valid gauge of our success in this commitment, is whether our customers believe and say we’re doing it.



Trust and personal responsibility in all relationships

We believe that each of our people has the capability and commitment to maximise his/her contribution and the desire to take responsibility for their actions.

Our collective goal is to set clear objectives and to deliver on all promises and commitments. This philosophy applies whether we’re engaged with customers, suppliers, fellow members of Norbord, shareholders, or with the community at large.

Excellence as our standard

Our goal is to have an organisation which is capable of excellence and of delivering it consistently in the areas critical to our business.

These include the following:

- Safety
- Managing beyond customer expectations
- Supply chain management
- Cost management
- Capacity assurance
- Organisational effectiveness



Customer support

Logistics

At Norbord, we run our own specialist logistics service. A service known for its reliability; a service that guarantees availability.

Available to selected accounts, our unique Fastrack guarantee goes even further.

How Fastrack can work for you:

- Assured supply
- Direct delivery to your customers
- One order point for all products
- Improved stock turnover

Our range of logistical options adds up to on time and in full delivery.

Technical support

At Norbord, our experienced technical team is on hand to deal with enquiries from architects, builders, contractors – in fact anyone involved in the specification or use of Norbord’s engineered wood-based panels.

Rest assured – our commitment will continue throughout your project and beyond.

MSDS

Material Safety Data-Sheets are available for all Norbord products. Please contact Norbord Technical Support or visit [www.norbord.com](http://www.norbord.com)

Training

For many years Norbord’s technical sales personnel have been providing training aimed at improving the knowledge and skills of:

- Construction professionals
- Specifiers
- Merchant and distribution staff
- Technical support staff
- Sales personnel

As a member of the Construction CPD Certification Service, you can be safe in the knowledge that Norbord’s training is amongst the best in the industry.

Notes







make it better



Norbord Ltd, Station Road, Cowie, Stirlingshire, FK7 7BQ  
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