



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



About Caberboard

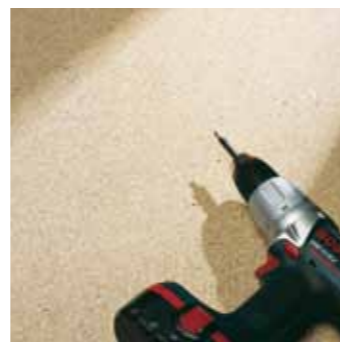
Caberboard is an engineered panel product used in several applications throughout the construction and furniture industries. The range consists of some of the UK's best known brands in both flooring and furniture grade panels.

The manufacturing process

A large percentage of the raw materials used in manufacturing Caberboard are sourced from recycled materials. The recycled components are sorted and broken down into fine strands which have to continuously pass stringent quality examinations.

The Caberboard particleboard range is manufactured at our state-of-the-art mills in the UK. By continually providing high quality boards, the Caberboard name is well known and respected throughout the construction industry.

The mixture of fresh softwood chips and recycled chips are bonded together with a resin under heat and pressure to form a rigid board with a smooth surface. The finished panels are then sanded and cut to size.



Product range

Caberfloor

With consistency, high density and a precision tongued and grooved profile, Caberfloor is the leading flooring. The moisture resistant P5 grade is the most commonly specified in the UK and is frequently used in the construction of cassette floors.

Caberdek

A winning combination. Caberdek combines the advantages of Caberfloor with a waterproof, slip-resistant film that further enhances its appeal. With health and safety of paramount importance, Caberdek is commonly specified throughout the UK construction industry.

About Caberfloor

A high-density particleboard designed specifically for flooring applications. Available in tongued & grooved or square edged formats - in 18mm and 22mm thickness - Caberfloor is the ideal solution for all domestic and specific commercial flooring. Caberfloor is available in P5 grade.

About Caberdek

With a commitment to continuous improvement and new product development, Caberdek is an innovative answer to the demands of the building industry. Caberdek incorporates a waterproof, slip-resistant film adhered to moisture resistant Caberfloor P5.

Caberfloor P4

Should be used for dry internal applications where no moisture will be encountered during or after construction.

Caberfloor P5

The most commonly specified particleboard flooring in the UK. It is extensively used in new build and refurbishment markets. Durability is achieved by using highly moisture resistant resin systems, in the manufacturing process.

Caberfloor is available in a range of panel sizes, and can be quickly and easily laid. It offers precision, stability and provides an excellent surface for subsequent floor laying operations.

With today's demands for rapid construction of both houses and flats, Caberfloor is the ideal solution for the off-site construction of cassette floors.

Features and benefits

As well as providing extra protection against the elements, Caberdek provides a safe working platform and should be considered by specifiers within the Construction Design and Management regulations 1994 and NHBC standards. When correctly installed, Caberdek assists with 'Falls Protection' required within latest regulations.

The protective film has high impact, puncture and tear resistance which stands up to intensive on-site traffic.

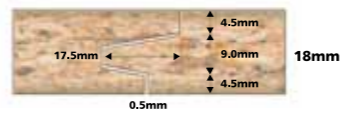
On completion of construction the Caberdek film can be easily removed; leaving a clean floor surface for the new property owner, saving clean-up costs for the builder.



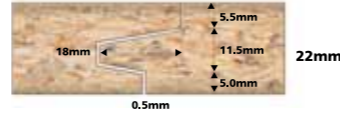
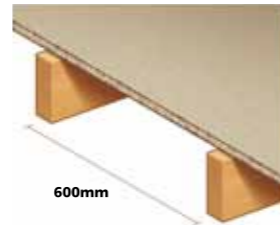
Application guidance

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.

On joists up to 450mm centres use 18mm board



On joists up to 600mm centres use 22mm board



Specification		General Applications		Flooring		
Grade	Thickness	Kitchen worktops	General use Non Structural	Dry domestic	Domestic New Build & refurbishment	Commercial
Caberfloor P5	18			✓	✓	
Caberfloor P5	22			✓	✓	✓
Caberdek P5	18			✓	✓	
Caberdek P5	22			✓	✓	✓
Caberboard P1	12, 18		✓			
Caberboard P2/P3	28, 38	✓				

✓ Suitable



Caberfloor P5 Square Edged



Caberdek T&G



Norbord Flooring Solutions Caberdek and Caberfix

With a commitment to continuous improvement and new product development the Norbord Flooring solutions offer a range of BBA approved systems to meet a variety of preferred fixing methods. All systems incorporate the leading brand of peel clean flooring, Caberdek, with its waterproof, slip-resistant film adhered to moisture resistant Caberfloor P5, and Caberfix sealing and adhesive solutions.

Tried, tested, approved.

As well as providing extra protection against the elements, **Caberdek** provides a safe working platform and should be considered by specifiers within the Construction Design and Management regulations 1994 and NHBC standards. When correctly installed, **Caberdek** assists with 'Fall Protection' plus its high impact, puncture and tear resistant properties withstands intensive on-site traffic. Once construction is complete, the film is easily removed leaving a clean floor, saving clean-up costs and time.

CaberfixPro or **CaberfixProPlus** will save significant man hours, increasingly important, of course, on larger build projects.

If you prefer using traditional methods that offer good value, **CaberfixTrade** will be your ideal choice Like all our products it's easy to use and tried, tested and approved. And that's important.

So there it is. More choice. More flexibility. More value for money.

Our **Caberfix** Floor Fixing Range is a fully approved BBA system that is guaranteed for 42 days of exposure on site when used with Caberdek P5.

The range offers exceptional value and a choice of fixing methods that will help you to save time and money as well as make life easier and safer on site. Our fast-fix solutions,

Caberdek Features & benefits

- Safe working platform – slip resistant film and assists with fall protection
- Withstands high site traffic – impact, puncture and tear resistant film
- Film is easily removed – saves clean up costs and time
- All systems are fully BBA approved – can be exposed to the elements for 42 days.
- 42db sound reduction when used in conjunction with leading I-beam manufacturers.



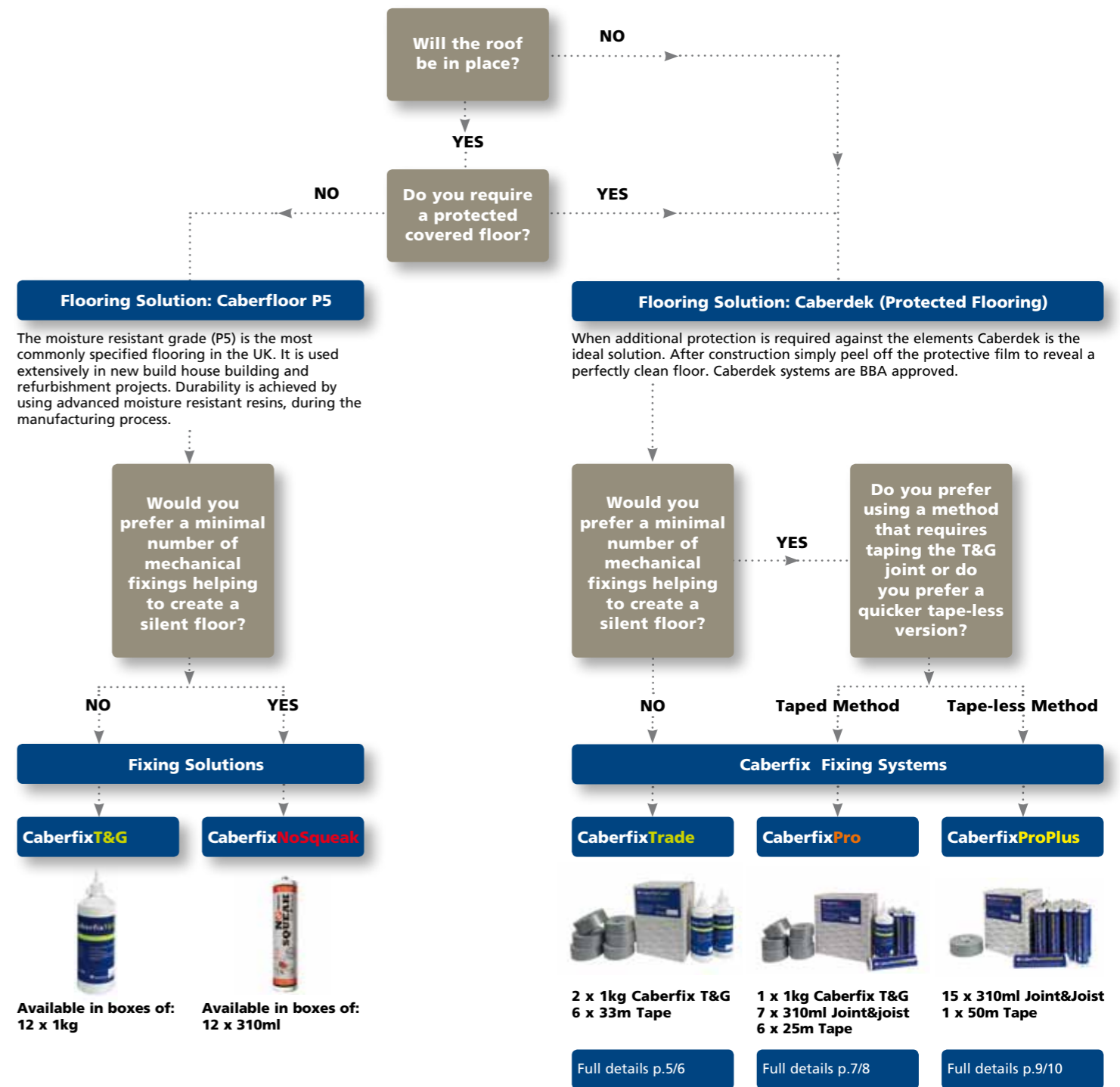
Norbords range of flooring & fixing solutions

Norbord's BBA certified flooring systems have long been the industry standard for new build housing, house extensions, remedials and maintenance. So it makes sense to offer a recommended, manufacturer approved fixing range too.

CaberfixTrade Full details p.5/6

CaberfixPro Full details p.7/8

CaberfixProPlus Full details p.9/10



Product range

CaberfixTrade

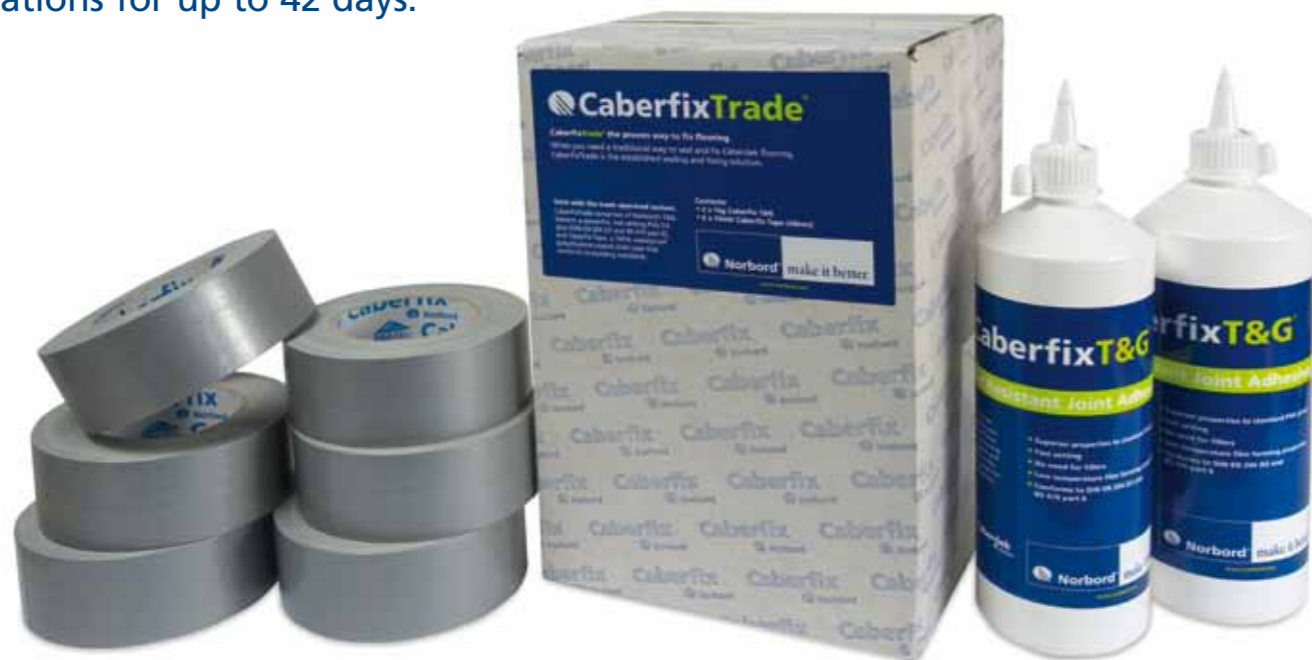
The traditional way to seal and fix Caberdek flooring.

For a flooring fixing system that offers great value for money Caberfix Trade is your solution.

The Caberfix Trade Floor Fixing solution comprises of Norbord's T&G adhesive, a powerful, fast setting PVA D3 glue, and Caberfix Tape, a 100% waterproof polyethylene coated cloth tape. Each pack contains enough tape and adhesive to fix 50m² of flooring and, when used with Caberdek flooring, will provide a weatherproof seal that is certified by the British Board of Agreement for use in external applications for up to 42 days.

System features & benefits

- Contains enough T&G adhesive and tape for a 50m² floor.
- Easy tear, high performance tape provides 100% watertight, UV resistant bond.
- Provides puncture resistant, weatherproof, easy to clean surface.
- System acts as a safe working platform
- BBA approved for up to 42 days if installed in accordance to manufacturers guidelines.



Each Pack of CaberfixTrade contains:

- 2 x 1kg Caberfix T&G – Enough adhesive for 50m² floor
- 6 x 33m rolls of Caberfix Tape
- Enough tape for all joint and nail runs, as well as perimeter of 50m² floor

Caberfix T&G Adhesive

The adhesive for all seasons. You can be sure that it won't be Norbord's T&G sealant that causes delays on any of your customers' builds! It is fast setting, has a high solids formulation and enjoys low temperature film forming properties. That means it can be used in cold or unsettled conditions.

T&G is a D3 PVA adhesive that conforms to DIN EN 204 D3 and BS 476 part 6.

Caberfix Tape

for 100% sealing and ease of use. The CaberfixTrade solution requires the use of Caberfix Tape for all nail runs and around the perimeter of the floor to create a watertight seal. It is easy to tear and apply and even adheres well to uneven surfaces. What's more, it is puncture resistant, weather proof and very easy to clean.

Quick installation guide

- 1 Panels should be fixed to joists using annular ring-shank nails or screws at the following intervals:
 - 4 fixings per joist on each short end
 - 3 fixings per joist on each intermediate joist
- 2 A liberal application of Caberfix T&G D3 PVA should be made to both the tongue and groove of the profile joint of each panel to ensure joint is bonded
- 3 Immediately after a run of panels have been fixed, all board joints, nail runs and exposed edges around the perimeter should be sealed using Caberfix tape
- 4 When all construction and decoration work is complete and the building is weather tight, the deck should be cleaned down and peel-off film removed by pulling slowly but firmly from the short end

Stick with the trade approved sealant.



Product range

CaberfixPro

The faster way to seal and fix Caberdek flooring.

When it comes to saving time and money, Caberfix Pro is the way to go. It requires just fewer mechanical fixings per board and can save an average builder up to 30 minutes per 50m² floor – not to mention time saved clearing up at the end of the job. In a large development that can add up to significant savings.

The Caberfix Pro sealing and fixing system comprises of Norbord's Caberfix T&G adhesive, a powerful PVA D3 glue for fixing the tongue and groove joints, and Caberfix Joint&Joist sealant, a fast setting PU elastomeric adhesive for providing a structural bond between boards and joists at the same time as minimising the risk of a creaking floor. Also included is Caberfix Tape, our 100% waterproof polyethylene coated cloth tape.

System features & benefits

- The recommended way to install Caberdek flooring
- 80% reduction in mechanical fixings
- Helps create a silent floor (no creaks and squeaks)
- Glue has shock & noise absorbing properties, will not crack under expansion or contraction
- System is widely used by national housebuilders
- 42db sound reduction when used in conjunction with leading I-beam manufacturers.



Each Pack of CaberfixPro contains:

- 1 x 1kg Caberfix T&G D3 PVA for T&G joints
- 7 x 310ml Caberfix Joint&Joist adhesive for joists
- 6 x 25m rolls of Caberfix Tape
- Enough tape for all joint and nail runs, as well as perimeter of 50m² floor

Caberfix Joint&Joist

Sealing, bonding and adding strength.

Caberfix Joint&Joist is a PU elastomeric adhesive and sealant that's been developed especially for the Caberfix Pro and ProPlus fixing and sealing systems. It has unique shock and noise absorbing properties and will not break under stress.

Joint&Joist provides a strong and silent bond between the Caberdek floor and joists or I beams. It is fast setting, requires fewer mechanical fixings per board (3 instead of 17) and also adds structural strength, as it can improve racking strength.

Joint&Joist adhesive will bond in damp conditions to a variety of materials, which means it's extremely versatile.

Caberfix T&G Adhesive

Adhesive that won't hold you up. Norbord's T&G is a fast setting D3 PVA adhesive that is used to join tongue and groove joints in Caberdek flooring. It is classed in the same product type as other PVA D3 adhesives but with superior properties. It has a high solids formulation and enjoys low temperature film forming properties, which means it is ideal for use in cold weather conditions.

T&G Adhesive conforms to DIN EN 204 D3 and BS 476 part 6.

Caberfix Tape

Sealing the deal.

Caberfix Tape, which completes the seal, provides a 100% watertight bond. It is easy to tear and apply, adheres well to uneven surfaces and makes clearing up easy.

Quick installation guide

- 1 Apply a 6mm bead of Caberfix Joint & Joist adhesive to the top of the joist or I-joist, using a skeleton gun. Use Caberfix Joint & Joist adhesive on joists and noggins in the area that is about to be directly laid. Do not use on tongued and grooved edges.
- 2 A liberal application of T&G Adhesive D3 PVA should be made to both the tongue and groove of the profile joint of each panel to ensure that the entire joint is bonded.
- 3 Panels should be fixed at perimeter using annual ring-shank nails or screws at 200-300mm centres. Fix flush or just below panel surface. Alternatively panels may be secretly nailed through the tongue at T&G joints. After perimeter fixings for 22mm Caberdek at 600mm centres only use 3 fixings per 2400mm panel.
- 4 Immediately after a run of panels have been fixed, all board joints, nail runs and exposed edges around the perimeter should be sealed using Caberfix tape
- 5 When all construction and decoration work is complete and the building is weather tight, the deck should be cleaned down and peel-off film removed by pulling slowly but firmly from the short end.

Stick with the faster professional way.



The CaberfixPro sealing system, when used with Caberdek is certified by the BBA for external use for up to 42 days.

Product range

CaberfixProPlus

The latest innovation in tape-less floor sealing.

When speed and convenience are top of the agenda, the Caberfix ProPlus sealing and fixing solution will keep you ahead of the rest. It offers a faster, more efficient way to seal and fix Caberdek flooring. Fewer fixings can mean time savings of up to 90 minutes per 100m² floor. For large builds this can add up to significant savings.

Each pack of the Caberfix ProPlus solution is enough to seal and fix a 50m² floor and comprises of Norbord's powerful and fast-setting Joint&Joist adhesive and Caberfix Tape, a 100% waterproof polyethylene coated cloth tape for perimeters.

System features & benefits

- Ideal where speed of build is paramount (timber frame construction, cassette floors etc.)
- Single adhesive, Joint&Joist which bonds boards to joists, bonds T&G joints and provides a water tight seal on floor surface.
- Easy tear, high performance tape provides 100% watertight, UV resistant bond.
- Each pack contains enough tape and sealant for 50m².
- Certified by the BBA for external use for up to 42 days.



Each Pack of CaberfixProPlus contains:

- 15 x 310ml Caberfix Joint&Joist adhesive – Enough adhesive for 50m² floor
- 1 x 50m roll of Caberfix Tape for perimeter taping

Caberfix Joint&Joist

Sealing, bonding and adding strength

Norbord Joint&Joist forms a strong and silent bond between the Caberdek floor and joists or I beams – even in damp conditions – as well as forming a 100% waterproof seal between the tongue and groove joints. Fewer mechanical fixings are required to fix each board (3 instead of 17) so it won't hold things up. On large builds where speed and cost is of the essence it is possible to save a significant number of man hours.

Caberfix Tape

For 100% sealing

Once the floor has been fixed and sealed with Joint&Joist the last thing that remains is to seal the perimeter with Caberfix Tape. This UV resistant, quick to tear tape is easy to work with and provides a 100% watertight bond that adheres well to uneven surfaces.

Quick installation guide

- 1 Apply a 6mm bead of Caberfix Joint & Joist adhesive to the top of the joist or I-joist, using a skeleton gun. Use Caberfix Joint & Joist adhesive on joists and noggins in the area that is about to be directly laid.
- 2 In addition apply Caberfix Joint & Joist adhesive to both the tongue and groove of the profile joint of each panel to ensure that the entire joint is bonded. Glue should squeeze out when boards are joined. Any excess glue should be smoothed down using the Caberfix scraper.
- 3 Panels should be fixed at perimeter using annual ring-shank nails or screws at 200-300mm centres. For a tape-less system panels should be secretly nailed through the tongue at T&G joints. After perimeter fixings foror 22mm Caberdek at 600mm centres only use 3 fixings per 2400mm panel.
- 4 Once entire floor is laid, seal the perimeter with Caberfix tape. No taping of joints is required.
- 5 When all construction and decoration work is complete and the building is weather tight, the deck should be cleaned down and peel-off film removed by pulling slowly but firmly from the short end.

Stick with simplicity itself.



Installation advice

Caberfloor and Caberdek

Tongued & Grooved panels

Tongued & Grooved panels should be laid in a staggered pattern with long edges across the joists and short edges falling on the centre of joists. Support between joists is not necessary. Should the short edges overhang then the overhang must be supported by a noggin.

Glueing T&G edges is recommended. It improves joint strength and accommodates a degree of joist variation. All joints must be glued with Caberfix T&G D3 moisture resistant adhesive. Otherwise, joist movement or variation may lead to movement and 'creaks'.

Boards can be fixed by nailing or screwing. If nailing, annular ring shank nails should be used for fastening all edges to the joists.

If screw fixing, use a suitable pilot hole followed by posidrive No. 8 particleboard screws, or equivalent. Fix the boards with four fixings to each short edge joint, two about 25mm from each end and two equidistant in between. All joints must be tightly butted. Length of fixings used should be 2.5 times the thickness of the board. Four equidistant fixings should be used on panel ends and three at intermediate joists.

Square Edged panels

Square Edged panels should be laid with the long edges falling on the joist centres and with the short edges supported by 38mm wide noggins with their ends secured to joists.

Nail the boards to all supports 200-300mm apart with annular ring shank nails round the edges of the board and at 300mm centres on intermediate joists. The nails used should be 2.5 times the thickness of the board. All joints must be tightly butted.

Note:

Care should be taken to ensure any joists treated with a water borne preservative have thoroughly dried out before installation. Joist moisture content should not exceed 20%. High moisture content in the timber could lead to distortion as they dry out leading, to 'creaks', particularly if the boards are not glued. Some contractors prefer to additionally bond the underside of the board to the top of the joist (using PVA adhesive).

Any access traps for underfloor services should be pre-planned and support provided for all sides of the traps.



Tongued & Grooved panels



Square Edged panels

Installation advice

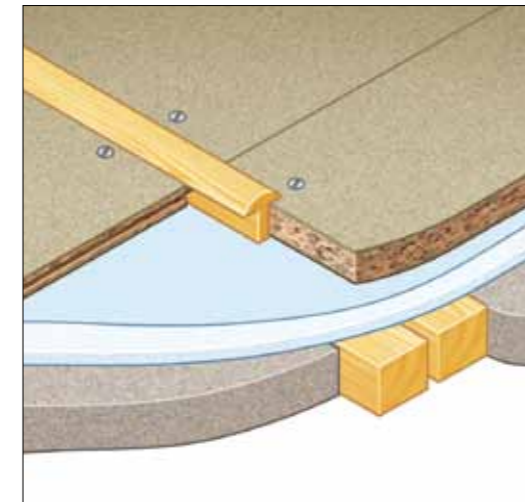
Expansion gaps

Perimeter expansion gap

Caberfloor, when laid in a new building, will tend to absorb moisture and expand in common with other wood-based materials. It is important to leave an expansion gap of 2mm per metre run of board between the edge of the floor and the perimeter wall or any solid abutment (minimum gap 10mm). For larger areas it is necessary to incorporate intermediate expansion gaps to provide the necessary allowance for possible movements, particularly in corridor applications. Attention must be paid to maintaining expansion gaps at all times during construction.

Expansion/contraction provision

It is well documented and strongly recommended that additional movement gaps are incorporated in large areas or long runs e.g. corridors. BS 8201: Code of Practice for corridors recommends an expansion provision of 2mm per metre run plus 1mm for every metre above 12m of the width and breadth of the floor. A simple movement provision can be made according to the diagram below and also proprietary systems are available to suit a wide range of applications.



10mm minimum expansion gap

Floor preparation

Soft and resilient floor coverings

The Codes of Practice - BS 8203, WPIF floating flooring installation code of practice and BS 5325 recommends that for all overlays the subfloor must be clean, rigid and flat. When thin or shiny floor surface materials are laid over Caberfloor these materials may allow board joints to show through, particularly after trafficking. Prior to laying such materials, the Caberfloor joints should be checked for level. It is permissible to sand off any raised areas not exceeding 1mm. For raised areas greater than 1mm, additional levelling materials are required. Thin plain coloured carpets or vinyls or those with a high sheen - tend to show small irregularities to a greater degree. For thin vinyls and tiling, it is recommended that a plywood overlay (4mm) is fixed in position, staggering joints so as not to coincide with Caberfloor joints. The plywood should be fixed every 100mm using appropriate nails or screws around perimeter and 150mm apart elsewhere, ensuring they do not protrude above the surface. Adhesive manufacturer advice should be followed for priming of new surfaces. Usually, this involves a coat of dilute PVA emulsion, e.g. Uni-bond.

Ceramic tiling

Guidance as to construction of bases in respect to considerations and timber bases is given in BS 5385: Part 3: 1989. Tiling onto Caberfloor should be undertaken only in joisted / fixed floor constructions. Noggins should be used between the joists at 300mm centres and the surface provided for tiling should be 15mm exterior grade plywood screwed to joists and noggins at 300mm centres. Existing boards can therefore be overlaid with 15mm exterior grade plywood to provide the necessary rigidity for a tiled surface. Length of fixings should be 2.5 times overall board thickness. A tile adhesive is the recommended bond material -cement/sand mortars are not recommended.

Floating and Suspended Timber Floors

Continuously supported floating floor

It is essential that a continuous damp proof membrane - not less than 1000 gauge polythene - is used. This must be laid in accordance with CP102: 1973. A continuous layer of insulation is used above the structure of pre-cast concrete beam and block.

The insulation may be incorporated in the screed. Most commonly, when used in conjunction with Caberfloor P5 as the floating floor overlay, the insulation is immediately below the flooring and laid onto the slab or beam and block, with vapour control layer between flooring and insulation. Any unevenness, localised or general, may transmit through the Caberfloor layer, therefore subfloor flatness is important. The insulation material should be rigid and suitable for the loading requirements.

Battened floating floors

Use additional support battens where extra floor loading is anticipated and the exact position is known, e.g. beneath kitchen equipment and sanitary fittings. When required, use a levelling screed to ensure that the battens of a timber battened system are true and level. Do not attempt to fix the flooring to the battens through resilient insulation material, as this will create an uneven floor. If necessary lightly sand and clean floors to make the surface suitable for further overlays, e.g. thin plywood, vinyl etc. Do not wash or scrub with water.

Advice on door thresholds

At all door openings, support the edges of the panels on preservative treated timber battens. Ensure that battens are on a firm and level base and fix a strip of flooring to the battens as a threshold. Allow a gap on each side of the threshold for movement in the flooring panels.

Acoustic performance

Caberfloor P5 can be used effectively on acoustic battened floor systems.

These systems are often used in flatted developments to achieve 'Part E' requirements of UK Building Regulations.

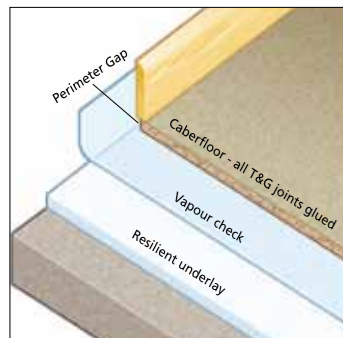
Advice on Moisture Protection

Caberfloor P5 is a highly durable product. Similar to other wood-based panels it is affected by moisture. Good practice on installation and protection against moisture in construction is advised. We recommend, with or without battens in the floating floor construction, that 1000 gauge polythene should be used as a continuous Vapour Control Layer (VCL) between the Caberfloor and the insulation material.

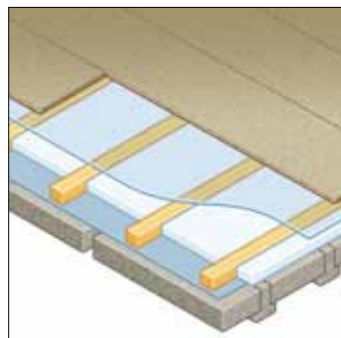
Joisted/Suspended Timber Floors

Joisted or suspended timber floors have an advantage in that they can accommodate the required thickness of insulation within the structure. The insulation materials may be mineral wool supported on boards (or netting) or rigid foam insulation simply supported on timber battens.

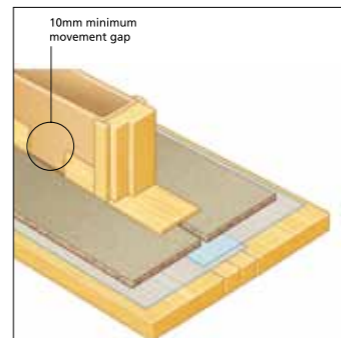
The board may be mechanically fixed to the joists and the underside of the board glued to the top of the joist for additional strength. Independent tests have shown a 10% strength increase by glueing as above. Maintain adequate cross ventilation of the subfloor space, taking care not to obstruct ventilators by insulation material or timber struts in the subfloor. Use herringbone struts in preference to solid strutting e.g. above sleeper walls.



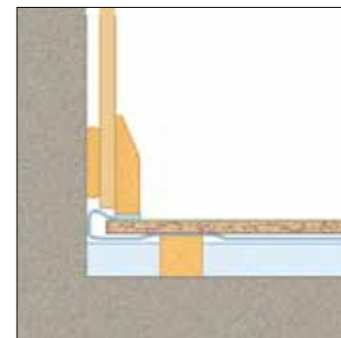
Continuously supported floating floors



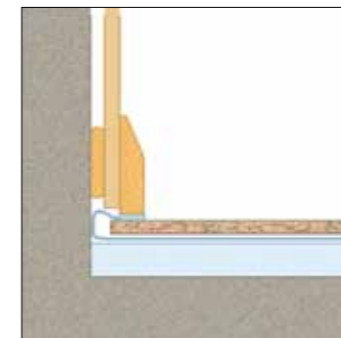
Caberfloor on battened floating floor



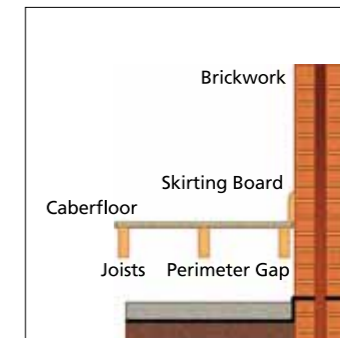
Doorway thresholds



Vapour control layer with battened floor



Vapour control layer with Caberfloor



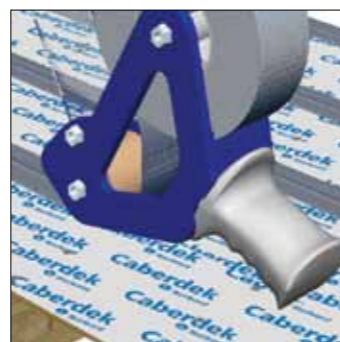
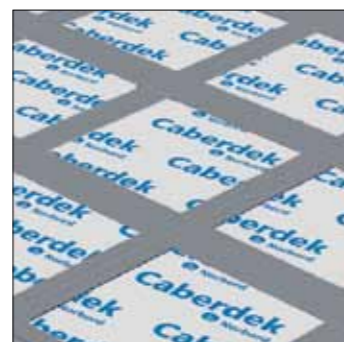
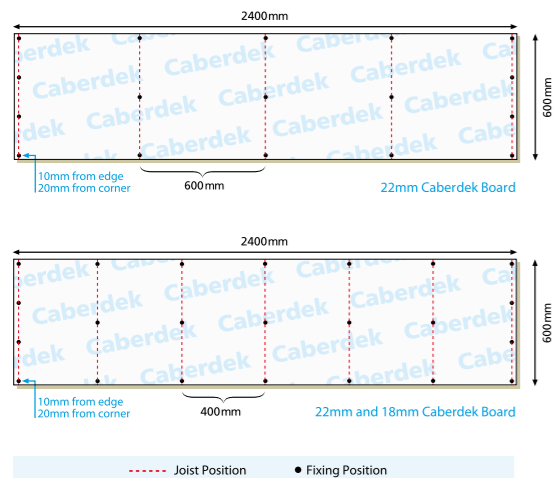
Joisted floor

Technical data

Caberfloor and Caberdek

	Unit	Caberfloor P4		Caberfloor P5	
		18mm	18mm	18mm	22mm
Panel Weight	kg/m ²	12	12	15	
Panel Weight (2400x600mm)	kg	17.3	17.3	21.6	
Density	kg/m ³	660 ± 30	660 ± 30	660 ± 30	
Internal Bond (IB)	MPa	0.35	0.45	0.40	
Modulus of Rupture (MoR)	MPa	15	16	14	
Modulus of Elasticity (MoE)	MPa	2300	2400	2150	
Impact Strength	mm	550	650	700	
Moisture Content	%	8.5	9.5	9.5	
Thickness Swelling (24hr)	%	15	10	10	
After Cyclic Test (swell)	%	N/A	12	11	
V313	MPa	N/A	0.35	0.25	
V100	MPa	N/A	0.25	0.20	
Standard Deviation of Thickness					
within boards	mm	±0.2	±0.2	±0.2	
between boards	mm	±0.5	±0.5	±0.5	
Dimensional Stability					
Length/Width	%	0.25	0.25	0.25	
Thickness	%	7.0	7.0	7.0	
Thermal conductivity 'K' value	W/m.K	0.14	0.14	0.14	
Low Emission Grade E1 (Formaldehyde EN120)	mg/100mg	≤8.0	≤8.0	≤8.0	
Reaction to fire (EN 13501-1)		Class D	Class D	Class D	

These values are typical mean values when the products are tested in accordance with European Standards test methods for Particle Boards BS EN 312.



Additional Technical Data for Caberdek removable film

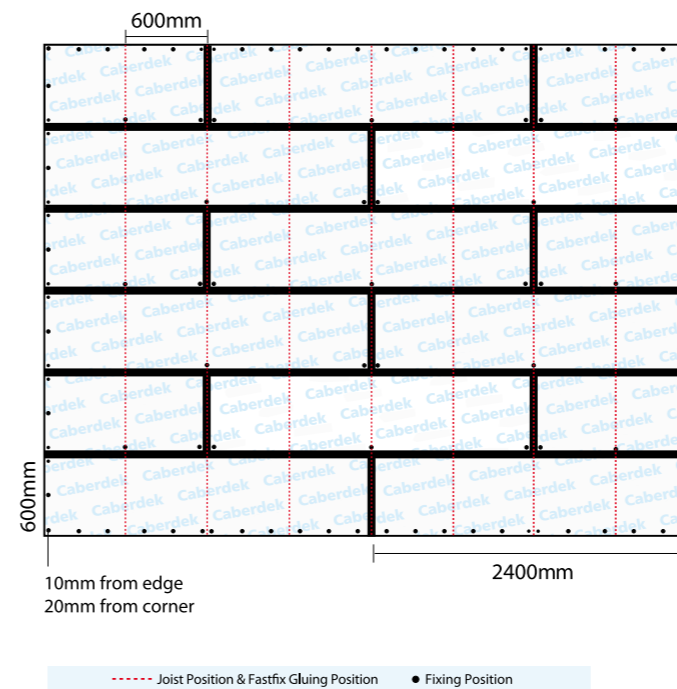
	Test method	Unit	Value
Weight of Film		g/m ²	90
Impact	VLT107	Nm	6.5
Tear Resistance / Puncture			
Propagation Tear	ASTM 02582	N	80
Ultimate Tensile Load	DIN 53455	kN/m	5.5
Elongation	DIN 53455	%	450
Temperature Extremes			-40/+80
Water Vapour Transmission	Lissy	g/m ² /24hrs	0.7

Alternative film available:

See section 5&10 of Technical Specification within BBA Certificate 02/3934: CABERDEK (www.bbacerts.co.uk)

Boards Per Pack

Thickness (mm)	Tongued and Grooved Caberfloor P4, P5 and Caberdek	Square Edged Caberfloor P4, P5		
	2400 x 600mm 2440 x 600mm	3050 x 1220mm		
18	80	50	42	28
22	66	33	-	-





Advice on storage

On delivery, boards should be stacked on equidistantly spaced battens in a dry covered area with outside storage adopted only as a last resort. If storage outside is unavoidable stack on dry level ground and protect the boards by covering with a polythene or waterproof sheet. Ensure that the board edges are covered and secured to avoid lifting by the wind.

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

Conditioning

Wood particleboards expand on taking moisture from surrounding air (plus effects of wet trades, site conditions etc.) and shrink on losing it.

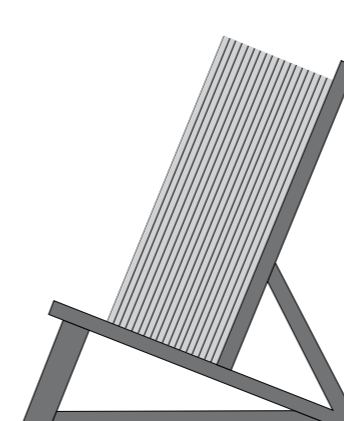
As a guide, a small increase in moisture of 1% increases length and width by 0.25mm per metre. A decrease in moisture of 1% will have a corresponding shrinkage effect. It is clearly desirable to minimise these changes, which can be applied pro-rata, by taking a few simple precautions. Boards should be 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 laying. It is recommended that boards are loose stacked, on a minimum of 3 equi-spaced bearers, with spacers between each board to allow free air movement.

Moisture Content

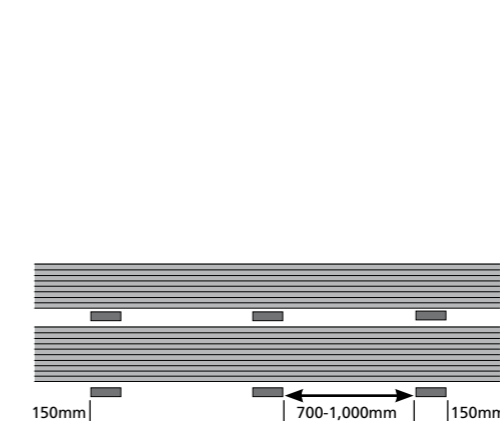
All wood is hygroscopic. Its moisture content, therefore depends on its environment. The moisture content which wood and wood-based products will attain in service (equilibrium moisture content) depends primarily on the atmospheric humidity.

Relative humidity	Approximate equilibrium at 20°C moisture content
%	%
30	7
65	11
85	15

Floors should be laid at a moisture content within the range likely to be encountered in service. They should also be laid after the initial drying out period is complete. It should be noted that sometimes extreme site conditions can lead to shrinkage when the building is finally occupied/heating commissioned etc. Caberfloor products are made at relatively high ex-works moisture contents compared to industry norms. Whilst no product containing around 80% wood in its composition can be unaffected by moisture - Caberfloor P5 at ex-works (around 9% moisture content) is close to the natural equilibrium moisture content of particleboards (see table) and is consequently an excellent choice.



Correct method of edge stacking



Correct method of storage on battens

Environmental credentials

Forest Stewardship Council

Norbord is committed to sourcing all of its timber from responsibly managed forests and therefore all of our European manufactured particleboard products are 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.

At Norbord, all of our facilities are regularly visited by a team of environmental auditors, so there is always something better to strive for and a new standard to set. This combines with our open approach to business. Norbord is a name you can trust to deliver, and to keep its promises.

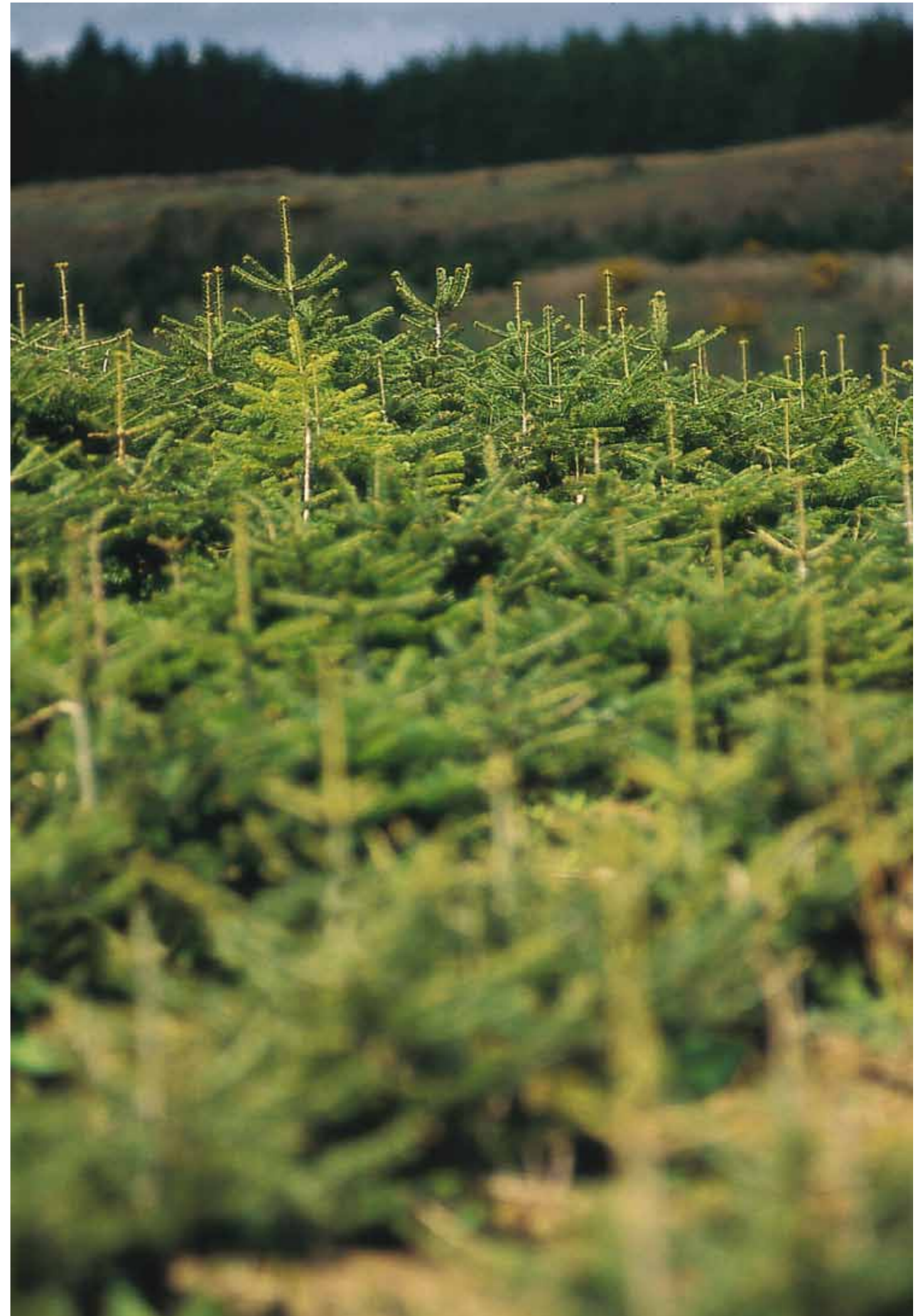
Investing in the environment

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 ■

Particleboard Plants ■

MDF Plant ■

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



CE Marking

The CE mark (from the French, 'Conformité Européen') 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

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.





Norbord®

make it better

 **Caberboard®**

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At Norbord, we realise the environment is fundamental to our future. This brochure has been printed on paper stock that is FSC (Forest Stewardship Council) certified.



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