

Stora Enso ThermoWood®

- ✓ Improved biological durability - no chemicals used
- ✓ Excellent dimensional stability
- ✓ Consistent treatment throughout the whole cross-section
- ✓ Totally integrated production and quality control
- ✓ Raw material sourced from certified forests



Material for demanding end uses

Great for products affected by changing climatic conditions such as exterior claddings, fascia boards, windows and garden products. For the interior, the attractive appearance, stability and removal of resin makes the product a good choice for use in saunas, interior panels, furniture and flooring.

ThermoWood characteristics

As a result of the ThermoWood process, the typical characteristics of softwoods are improved to levels often found in tropical hardwoods: high biological durability and excellent stability. The properties are consistent throughout the entire cross section, unlike envelope treatments.

	Thermo-S	Thermo-D
Treatment level	190°C/374°F	212°C/414°F
Durability improvement	+	++
Stability improvement	+	++
Compression strength	+	+
Bending strength	+/-	-
Colour (darkness)	+	++

ThermoWood treatment classes and the effects on technical performance

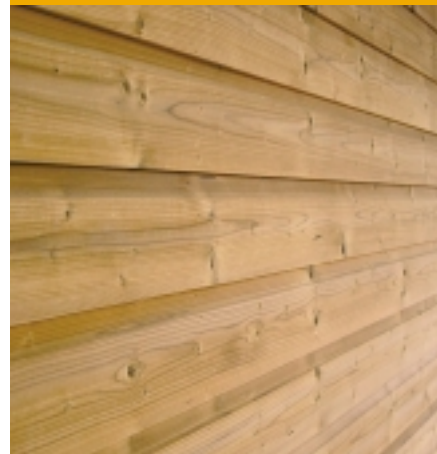


Quality and the Environment

Stora Enso ThermoWood® is not just a result of heat treatment, but a totally integrated process in which careful quality control is applied throughout. All our ThermoWood comes from PEFC certified forests and no chemicals are used in the process.



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Where to use Stora Enso ThermoWood®

Due to significant improvements in dimensional stability and biological durability, ThermoWood provides an opportunity to specify the use of wider sections; for example, in claddings and fascia boards widths up to 250mm (10") are possible. Examples of end use areas for our product include:

External (Hazard class 3)	Internal (Hazard class 1-2)
Cladding/siding	Flooring
Fascia boards	Sauna fittings
Garden structures/decking	Wall and ceiling panels
Wooden conservatories	Internal doors



Stability and Durability ranking

	Stability	Equilibrium Moisture Content		Durability (EN113 test)
		65% RH	85% RH	
Thermo-S Spruce	Very good	6-8 %	13-14 %	Moderately durable (3)
Thermo-S Pine	Good	6-8 %	14-16 %	Moderately durable (3)
Thermo-D Spruce	Excellent	6-7 %	11-12 %	Durable (2)*
Thermo-D Pine	Good	6-7 %	12-13 %	Durable (2)*

General service situations and hazard classes given in EN335-1: 1. Above ground, covered (dry); 2. Above ground, covered (risk of wetting); 3. Above ground, not covered. *If Thermo-D is used in direct contact with ground, risk of attack by fungi *Poria Placenta* is higher and the durability may vary from durable (2) to moderately durable (3), depending on the situation.

Working with Stora Enso ThermoWood®

The material has similar working properties as wood species such as Western Red Cedar and some hardwoods. It is essential that tools are sharp for sawing and planing. To slow the weathering effect, it is recommended when planing to profile the weather-exposed surface to the outer face of the board.

Fixing ThermoWood

- ✓ Nailing - hand or compressed air nail gun, use **rust-free nails**.
- ✓ Screwing - hand or electric driver, pre-drill when close to ends. Use **rust-free screws**.
- ✓ Gluing - use two pack glues for quicker drying.

Painting ThermoWood

- ✓ Low abrasion surfaces - claddings, joinery. Medium to high build coatings are recommended.
- ✓ High abrasion surfaces - deckings. Low build coatings are recommended. Solvent-borne high solids coatings are also effective when used as a one coat application.
- ✓ On flooring and other interior surfaces where high abrasion resistance is critical, hard wearing lacquers or varnishes should be used.

Recommended service life of Stora Enso ThermoWood®

Service life of any material depends on the design and maintenance level of the product in final end use. BS 8417 ranks the natural durability of wood species in accordance with EN350-2; non-chemically treated wood used in external joinery hazard class 3 (EN335-1) should have a natural durability of at least 3 to obtain a desired service life of 30 years.

**For more information contact
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