

THERMOWOOD REDWOOD

Type: Softwood

Source: Scandinavia

Thermowood has a high resistance to moisture and decay which makes it a good option for exterior cladding. Thermowood is a straight grained softwood which offers a more consistent finish. Thermowood density is in-between Cedar and Larch and is darker in colour. Thermowood is thermally modified which increases stability and provides resistance against shrinkage, swelling and distortion. Thermowood is heat treated to a temperature of 180 degrees.



Embodied Carbon (kgCO₂e / m²)* = 0 (8.64 Offset)

Ecova Clad Themowood Redwood Durability Classification

Common name	Natural Durability Class BSEN350:2:1994	Sapwood Treatability	Movement	Strength
Thermowood European	2	Resistant	Small	High

Durability Classifications

Natural durability class	Need for treatment/modification	Desired service life (years)	
		Occasionally wet	Frequently wet
1 (Very durable)	Suitable without treatment	>60	60
2 (Durable)	Suitable without treatment	60	30
3 (Moderately durable)	Suitable without treatment except for tall or exposed buildings	30	15 (untreated)
4 (Slightly durable)	Treatment required	15-30 years treated	15-30 years treated
5 (Not durable)	Treatment required	15-30 years treated	15-30 years treated

Treatments and Finishing

- Doesn't necessarily need a surface treatment applied to it, however you can choose to add a finish, stain or paint to their timber to enrich its colour, but if it's left untreated, the wood will naturally change to a silvery grey (similar to that of cedar or larch)

Moisture Movement

Small

Wood's moisture content will change relative to its surroundings. Different species have different degrees of movement and this must be accounted for in cladding design.

Good design and installation practice will help minimize the effects of moisture:

- Use eaves and overhangs to deflect rain - or flashing to protect the board tops
- Finish cladding at least 200mm from the ground or a horizontal surface. Where possible use a surface that diffuses rain, such as gravel
- Board widths should generally be 4 to 6 times board thickness (typically less than 150mm)
- Design detailing must include measures that minimise water penetration

Profiles

Wide choice of standard profiles (see Ecova Clad profiles guide)

Density (mean, Kg/m³):

350 - 480kg per m³ @ 6% moisture content

Recommended Fixings/Flashings

60mm stainless steel annular ring shank nails – flat head grade 304. Use marine grade 316 for exposed areas such as tall buildings or coastal locations. Screw holding strength is about 20% less due to the altered state of the cell wall during the heating process.

Colour(s)

Warm dark brown

Fire compliance

Exterior cladding - Timber cladding is suitable for buildings of 18m or lower. No combustible materials are permitted for cladding on residential buildings over 18m high.

Environmental

The softwood used to produce Thermowood originates from well-managed, PEFC-certified forests, and as no chemicals or foreign substances are involved during its production, Thermowood is an environmentally friendly material produced by using only natural methods.

*The embodied carbon calculation does not account for final delivery to site