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The Advantages of ThermoWoods in the UK climate

The process uses heat to modify the woods' internal structure. The timber is heated at temperatures that usually exceed 180 degrees centigrade. Oxygen is removed from the process to stop the wood from burning. This thermal modification process is non-toxic and completely natural.

The thermal-modification process removes the resins, sugars, and natural impurities making the timber more stable and enhances its durability. It also enables minimal moisture absorption leaving insects and fungi, known to cause timber damage with nothing to feed on. This also means that the timber doesn't warp or lose shape as much as natural timber and will retain its shape for many years to ensure optimum performance. Also due to the low moisture content of 7% held in ThermoWoods, the boards are more lightweight.

To understand the main advantages that ThermoWoods offer, it is vital to understand the process that timbers go through when they are thermally modified, and what this means.

ThermoWoods

- Has all resins and sugars removed
- More fire resistant- achieves a Class B certification
- Less prone to distortion
- Very low moisture content of 7%

Non-ThermoWoods

- Still has resins and sugars which encourages fungus growth and insect attacks
- Less fire resistant
- Shorter life span
- Higher moisture content of 12-18%

This ThermoWood process is also great for the environment since the timber is not treated using chemicals that are usually present in unmodified timbers which are typically disposed of in landfill sites alongside composite and plastic products. With ThermoWoods, this doesn't occur, since it is a healthy and safe, environmentally friendly alternative that offers Class 1 durability and does not involve the use of Amazonian timber species.

Key Takeaways

The thermal-modification process will make timber:

1. Dimensionally stable
2. More durable, offering a Class 1 rating
3. 100% recyclable
4. A uniform colour
5. Increasingly able to offer heat and sound insulation
6. More fire-resistant

