0118 968 0817 | RG40 3NT | www.QTDgroup.com | Sales@qtdgroup.com

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What Is ThermoChar®

For centuries the Japanese perfected the art of charring/burning wood to make the wood resistant to fire, rot, insects and the UV effects from the sun. The process of charring/burning the outer surface brings out the richness of the different wood species grain structure. Also varying the intensity of the burning process produces different finishes.

Since **coming across a burnt-out barn** while on a family holiday in the **West Country in 2012 we liked the charred effect** and so we then spent **many years of experimenting and testing** this process using **15 different species of wood. We left them to age and weather over several seasons to see how they would perform in our UK Climate.** We subsequently took the lessons we had learnt and introduced into the market our unique **Charred ThermoWood Cladding Collection.** This labour intensive and dangerous process takes **previously Thermally Modified hardwoods and softwoods produced at our factory and then charring/burning the outer surface in a variety of ways.** This process makes the boards far more fire resistant than other natural timbers.

With natural timbers such as Larch, Cedar and Oak they still retain their resins, tanins and sugars. Charring / Burning the surface adds a degree of protection however should this surface become chipped or damaged then the natural timber beneath becomes exposed to the elements and potential breakdown and decay may occur over time.

There are 3 good reasons why we do not char other natural timbers, that have not been Thermally Modified:

1. The moisture content is generally high between 15% - 20%

When you then apply a high degree of heat to one surface rapidly, the board surface will crack and the board will cup accross its width.

Moisture content in ThermoWood is only 7% therefore no distortion will occur during the charring, leaving you with a flat and stable board.

2. Due to the presence of the natural Tanin, Resin, Sugars and impurities, the intense heat bubbles these to the surface causing disruption to the surface finish.

None of these are present in ThermoWood having already been removed during the ThermoWood process. Therefore the surface being charred remains intact.

3. The action of charring the surface of timber, naturally makes that surface become brittle and therefore more delicate.

However, applying this charred surface to a timber that is still prone to expansion and contraction like Larch and Oak, Kebony and Cedar etc. Means that the brittle charred surface will crack under the movement of the timber and over time deterioration of the surface will be inevitable.

Why choose 'Thermally Modified Timber' for the UK climate?

30Yrs + Durability

100% Natural

High Stability

Highly Fire Resistant

Why is this beneficial for the charring/burning process?

The Timber is already highly resistant to decay so Charring / Burning the surface not only provides and aditional layer of improved performance such as:

- UV Resistance to fading
- Minimal Timber Expansion & Contraction
- Unique Surface Finishes
- Little to no ongoing maintenance

(See our website for client feedback)

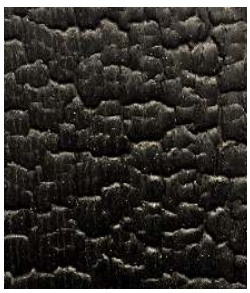
The benefit of ***Thermally Modified wood (ThermoWood)*** is that all the resins, sugars and tannin's that are normally present in timbers like larch and cedar have been removed so by applying the additional process of charring/burning the surface, the result is a much improved charred surface, eliminating the risks of the timber igniting when exposed to sparks or flames. ***Only Heavy charring becomes UV resistant to fading.*** If the surface is chipped or damaged it does not expose the natural parts of the timber that may lead to surface peel or potential decay and minimal on going maintenance is required.
These days the primary use is for aesthetics and improved performance in exterior applications.

Please note: that the charring/burning process is not an exact science and there will be slight surface burn variations throughout the board length which adds to the unique charring/burning characteristics of each board and species. ThermoWood is 30% more fire resistant than regular wood.

The Charred Cladding Collection:

'Crazy-Crackle'
ThermoWood Pine Heavy
Charred Cladding

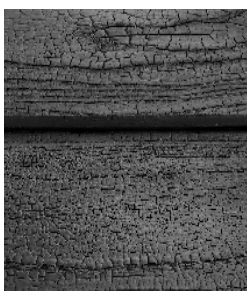
'Rustic'
ThermoWood Pine Heavy
Charred Cladding



'Tiger-Lite'
ThermoWood Ash Light
Charred Cladding

'Ebony'
ThermoWood Ash Medium
Charred Cladding

'Snake-Skin'
ThermoWood Ash Heavy
Charred Cladding



ThermoWood Tulipwood
Medium Brushed
Charred Cladding