# IN RUSSWOOD

# Thermopine® Cladding

Thermopine<sup>®</sup> is a timber with enhanced stability and durability, produced by thermally modifying Scandinavian grown Scots Pine using only heat, steam and pressure.

#### Appearance

Thermopine<sup>®</sup> is suitable for use on a wide-range of projects. In its sawn state, Thermopine<sup>®</sup> has a uniform chocolate-brown colour tone which will quickly weather to grey if left uncoated. Due to the superior coating performance, boards are most commonly supplied pre-treated. The appearance after factory coating is largely determined by which surface is opted for. An opaque Teknos<sup>®</sup> RAL coating means the knots and figuring will be less visable. Boards display attractive, tight grain figuring with an abundance of live (structurally sound) round and splay knots, some of which may display cracks and chipped-off edges after machining, an occasional dead knot cannot be ruled out.

## Durability

A major advantage of thermal treatment is its effect on the durability of the timber. Following the treatment process, Pine becomes a Durability Class 2 timber as per BS EN 350-2 - this is the same durability class as Oak. During the thermal process every cell of the timber is modified, as the treatment penetrates throughout the entire board, ensuring consistently durable material.

# Stability

For use as timber cladding, the main advantage of the thermal treatment is the resulting dimensional stability. Thermopine<sup>®</sup> is significantly more resistant to moisture absorption than unmodified timber, therefore shrinkage and swelling are decreased substantially. The reduction in dimensional movement can be up to 40-50%, which is of particular benefit to coatings. When Thermopine<sup>®</sup> is coated the resulting reduced movement levels mean the coating will last significantly longer, as it is not being forced to move with the normally experienced expansion and contraction of the timber.

# **Coating Suitability**

Due to it's outstanding dimensional stability, Thermopine<sup>®</sup> is eminently suitable for factory coating in your choice of colour from Russwood's Teknos<sup>®</sup> paint range. When coating thermally modified timber using translucent paint or stain systems, some lightening of the colour tone is to be expected over time, particulary when lighter shades are selected. This is to do with the natural weathering of the timber rather than the coating degradation.

## Fixings

How timber is fixed is fundamental to it's long term performance in terms of both appearance and durability. We offer a range of fixings and systems to make cladding look better and last longer. These systems can be written into the NBS H21 specification.

#### **Surface Finishes**

**Wire brushing** - To create this effect, wire brushes are used to pull out the softer spring wood, exposing the harder summer wood, thus accentuating the grain and creating a beautifully textured surface.

**Planed** - Boards are run through our planing mill to create a smooth, dressed finish.

**Microtex**<sup>®</sup> - A fibrous surface finish designed to provide optimal performance of SiOO:X coatings.

#### Density

The heat treatment reduces the density by approximately 10% to 420kg/m3, making it relatively light in weight and easy to work.

## **RUSSWOOD THERMOPINE® SPECIFICATION**

- Enhanced paint performance due to outstanding dimensional stability
- Resinous substances removed during the heat treatent resin exudation on the board face is eliminated
- Durability equal to that of Oak as per BS EN 350-2
- Lengths up to 5.7m
- Excellent price/performance ratio
- No chemicals are used in the heat treatment process
- No poisonous or hazardous waste at the end of life
- Prominent figuring as a result of frequent knots

#### **Recommended Profiles**

Please note we have only listed the most popular profiles for Thermopine<sup>®</sup>.

<u>RW014</u>

<u>RW119</u>

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