Teknos Technical Library



Application guide

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Wood composite materials have become an alternative to the wooden glazing bars, decorative moulds, and cover strips used in timber window and door manufacturing. A wide variety of profiles can be produced by extruding a heated mixture of wood fibre and polymer through appropriately shaped dyes.

The resulting product is water and rot resistant, with dimensional profile stability. Once coated with an opaque finish, the composite component blends into the wood frame. Its general resistance to warping and distortion on exterior exposure minimises the risk of water ingress at traditionally weak points in a timber window construction, extending maintenance cycles and ultimate service life.

In using certain composite products, consideration needs to be given as radiant heat absorption can be exacerbated with dark colours. When exposed to elevated localised temperatures, linear expansion and contraction can in turn affect the performance of the composite product.

For certain composite material types, exposure to elevated, localised temperature in excess of 60°C for a prolonged duration will affect the stability of the product, although this expansion / contraction should be minimal. Any expansion / contraction is significantly reduced when the product is pinned, clipped or adhered to the window.

Teknos offers a solution for dark colours, specifically designed to reduce naturally occurring elevated coating temperatures.

The 'Cool technology' lowers coating surface temperatures by >15°C, thereby reducing the causes which affect product stability (as part of this system, all surfaces should be primed in white)



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COATING WOOD COMPOSITE

Wood composite components are coated for decorative reasons, to blend with the surrounding timber, and not generally for protection. Applying a decorative factory finish is usually straight forward. However, because of their resin rich surface, some extra care is necessary to achieve adequate adhesion of the paint film to the composite component.

In most cases the normal Teknos topcoat used in the manufacturing of the door or window will give a commercially acceptable result provided the following guidelines are followed.

Coating system selection can follow standard exterior joinery factory finished systems incorporating primer and topcoat.

- Lightly abrade the composite with a fine grade sanding pad to dull the surface, taking care not to scratch it, then dust off or additionally solvent wipe to remove oil and grease
- Apply the topcoat using the normal process steps
- Take care not to over apply the coatings.
 Water based paints take longer to through dry and cure on non absorbant surfaces, so excessive paint thickness will increase the time taken to develop full adhesion and water resistance
- Try to allow an extra day before external exposure, particularly if the weather is cold or wet
- Do not apply special adhesion promoting primers over standard opaque primers as this will cause cracking in the paint film





Always refer to the Technical Datasheet for full instructions on how to use Teknos products.

For further support, contact your local Teknos coating expert or visit **teknos.com**