

DESIGN & INSTALLATION

FACTORY FINISHED JOINERY

Modern joinery coatings provide a water repellent, flexible and durable decorative finish which, on well designed and properly installed joinery, will give many years of service. To ensure the coating can perform as designed, it is important the following design and installation practices are specified.

Timber Quality

Timber grade used in manufacturing must be selected to take into account its natural durability and use classification for the proposed exposure conditions. See: BS EN 350; BS EN 335

Preservation Treatment

Where natural durability of the timber does not meet the class requirements as determined by BS EN 335-2, it must be treated with a preservative in conformance with BS EN 599-1.

If the timber is preservative treated using double vacuum impregnation, particularly with solvent based material, the manufacturer's recommended drying times must be followed before coating. Typically, under good ventilation conditions, these can vary from 2 to 14 days.

If a water based, surface applied preservative, such as TEKNOL AQUA 1410, is used as part of the coating finishing process, joinery must be factory coated to a minimum dry film thickness of 80µ before site exposure in compliance with BS EN 599-1 (BRE independent testing - BRE 225-386)

Timber Design

Cills and non vertical surfaces must show efficient water shedding characteristics, with a slope angle of no less than 9°. Increasing the angle will improve water shedding performance.

Surface tension causes wet paint to flow away from sharp edges leaving them relatively unprotected.

A minimum external radius of no less than 3mm is required to avoid thinning of the coating system in accordance with British Standard 644.

Interior edges should be rounded to at least 1.5mm radius and the design must preclude obvious water traps. Any gaps or recesses in the joinery should be sufficiently wide to prevent capillary draw of water into holding areas - we typically recommend a 3mm gap.



Fixing pins, particularly on horizontal glazing beads, must not allow the ingress of water. If pins are punched below the surface, filling must be carried out to ensure a water collecting hollow is not produced. Secondary filling may be necessary to allow for shrinkage (NB: TEKNOFILL 5001 is not recommended for filling fixing pin holes). Stainless steel fixing pins are recommended for externally beaded joinery.

As a minimum, the construction guidelines set out in BS 644 should be followed at all times.

Coating Application

Moisture content of standard species at the time of coating should be between 12% - 16%. End grain and construction joints must be sealed. The natural movement of timber usually means that components dry butted together, however fixed, will move over a period of time. If a gap opens, the end grain is exposed, and unprotected end grain can absorb moisture at a rate many times faster than other surfaces of a timber component. Externally exposed end grain should be sealed with TEKNOSEAL 4000, or equivalent. Construction joints and where appropriate, mitred cill joints can be 'V' cut and neatly filled with V JOINT SEALER. This allows for a small amount of movement before the joint is exposed. After the application of the coating system, the thickness of the dry film on exposed surfaces will be a minimum of 120µm. For built-in edges of frames, a minimum dry film of 50µm is acceptable.

Glazing System

The glazing system is to be drained and vented in accordance with BS 8000: Part 7. Glazing systems should be designed to prevent penetration of moisture into the rebates of the supporting frame. Water which becomes entrapped will eventually penetrate any joinery finish over a period of time.

Other Areas

Rainwater goods must be in place and working efficiently.

Building design and quality of site installation and fitting work is crucial in determining the long-term durability of the coating system and the ultimate service life of the joinery. We provide support and training to all our customers to ensure Teknos coatings deliver optimum performance. Further explanation of the features described in this sheet can be obtained from our technical sales team.



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

For further support, contact your local Teknos representative or visit **tekno.com**