

Substrate and construction

Coating durability depends not only on the application of the correct coating system but also on the following factors:

1. Quality of the timber substrate.
2. Construction and design of the joinery items being coated.

1. Quality of timber substrate

The types of timber used for the production of window frames must be of suitable dimensional stability for stable end use items. Any cracks, shakes or other defects that are present prior to coating application, and any subsequent appearance of such defects due to incorrect moisture content, grain orientation, or as a result of the timber not being fit for purpose will make the substrate unsuitable for the coating system.

As a general rule the moisture content of the wood must be 14% +/- 2% during production and application. The wood needs to be free of microorganisms, such as insects, fungi, blue stain, mould or bacteria.

Timbers used must comply with the requirements of EN 942. Further guidelines on timber can be found in this standard document.

2. Construction and design of timber items being coated

Window construction must be compliant with the requirements of BS 644. End grains must be smoothly finished and protected with Induline SW-910. All edges of the elements must have a radius of at least 2mm and preferably 3 mm. All the products to which the Remmers coating system is applied must be glazed to a suitably high standard. We recommend the use of internal beads where possible. We recommend that glazing systems should be drained and vented. Failure of glazing systems resulting in moisture ingress on these sections will compromise the coating system by allowing uncontrolled levels of moisture into the joinery item. Glazing must be done using a sealant or gasket that forms a water tight contact with the glass and timber and has a sufficient angle to shed water away from glazing lines. Cill extensions must have a maximum protrusion of 75mm and machined at such an angle that water sheds from them readily. All joints to be glued using an adhesive conforming to the minimum D4 specification as described in BS EN 204. This adhesive specification is not mandatory provided the joinery company can demonstrate that the adhesive has sufficient water tightness for purpose. Adhesive must be applied to all parts of the joint and there must be no gap at the joint where moisture ingress can occur. It is essential the adhesive has good gap filling qualities and is sufficiently flexible to cope with the natural movement characteristics of the timber. A suitable adhesive would be the Frencken 0819 MS polymer adhesive. The coating system will be compromised if moisture ingress occurs as a result of failed joints. Any small capillary gaps where moisture can become trapped must be avoided and if present may result in critical amounts of moisture ingress which will cause potential problems with wood rot and with coatings performance. Where v-joints are present these must be filled with AF 920 v-joint filler.

Site Care

Storing and transportation of joinery

Failure to comply with the following storing and transportation conditions for window frames and doors may lead to problems with the factory applied finish and the subsequent protection it provides.

- Windows and doors (or other joinery items) must be stored in a dry place.
- The coated surfaces of the joinery must not be in direct contact with each other.
- Joinery must not be tightly wrapped in stretch wrapping or other impervious plastic wrapping materials. It is important that there is sufficient ventilation and that condensation within the wrapping does not occur.
- Joinery must be stored indoors for at least 3 days after the final coating application, before it is exposed to external weather conditions at the joinery installation site.

Site conditions

Joinery stored on site must not be left in ground contact. Any water must drain off the surfaces and the joinery must not be left in puddles or other such similar under water conditions. Special masking tapes should be used and removed immediately after the completion of the work. Failing to remove the tape from the joinery may result in damage of the coated substrate. Consistent air humidity above 70% in the room will result in timber swelling and may result in joinery damage. During the construction phase moisture resulting from wet plaster and concrete has to be removed using intensive ventilation.

Repair of damaged coatings care and maintenance

Refer to the Remmers document “Remmers Care and Maintenance Advice for Windows and Doors” for advice on remedial work and general maintenance.

This has been prepared based on Remmers' current knowledge and experience of current best practice in the fields of coating application, timber technology and joinery and building design. Such best practice advice is always subject to change. Remmers cannot be responsible for the application of the coating and the extent to which our customers adhere to this best practice. In case of changes in the parameters of the application, such as changes in substrates, or in case of a different application, consult Remmers' Technical Team prior to using Remmers products. Any quantities shown are for guidance only and the user must allow for variations in temperature, surface profile, absorbency and wastage. The user of the product must test the product's suitability for the intended application and purpose. Except as expressly stated in writing Remmers' warranty is governed exclusively by our current Standard Terms and Conditions of Sale. In particular, Remmers does not warrant the correct application of its products.