



The Wood Component Company

### **Timber Cladding Maintenance**

With unfinished boards, shingles or shakes, little maintenance should be required although, depending on the level of pollution of the environment or proximity of foliage etc, the surface may require cleaning at some point. There are a number of commercial cleaning products available that will remove surface staining, and to some extent the bleached surface of the wood. They will also remove, within some limits, any iron staining that may have occurred in woods with a high tannin content. If the source of the staining or soiling, eg pollution from traffic, is likely to remain, it may be advisable to use one of the surface coatings recommended by the manufacturers of the cleaning solution after the cleaning process has been completed. These are colourless liquids and basically reduce the moisture absorption of the wood. However, because they are clear they have little resistance to ultraviolet light and may require re-application fairly frequently.

Some discolouration of wood may be entirely due to excessive moisture pick-up from localised wetting such as rainwater run-off. Such areas may also benefit from application of the clear penetrating liquids that reduce moisture pick-up. These should only be applied to dry surfaces after any staining has been cleaned off. Because they are clear they are not visible and might be applied to areas where, for instance regular splashback is occurring leading to excessive wetting. However, they should be tested in small areas before they are applied generally to ensure that they will not appear too different to any surface left untreated. They will also require re-application, possibly at 2–3 years frequency or less, on faces exposed to full sun.

All coated timber cladding will at some point require re-coating. The frequency will depend on a number of factors, such as the way the finish has been applied initially or to the degree of exposure on site. Factory-applied finishes applicable to various panel products, and to a lesser extent, on pre-finished board profiles, will probably outlast any site-applied coating, simply because the process is tightly controlled, including the moisture content of the wood, the limited exposure to ultraviolet light before application, the cleanliness of the environment, and the standard of workmanship.

These factory finishes will last many years without need for maintenance and may be guaranteed to achieve a particular life, but may require specialist treatment when they eventually need replacing, and the manufacturer of the component or coating should be consulted. Where coatings are applied on site the quality is less controlled and inevitably their life will be dependent on the variables involved.

With the rapid technical developments occurring in preservation and paint technology it is of prime importance prior to any maintenance that the materials used for various functions are compatible with each other. For instance, water-

based coating systems are now replacing spirit based, and chemical preservative use is also changing. The performance of flame retardant treatments may also be affected by any coatings applied.

For these reasons information on the types of treatment or coating system used initially must be supplied to those responsible for the maintenance of any building. This will allow them to check with manufacturers whether materials proposed for maintenance will be compatible with coatings or other treatments originally applied. It is particularly important for instance that film-forming surface coatings are not used over original vapour permeable coatings as this may compromise the breathability of the original finish.

Even if the original finishing system is to be re-applied, it is essential to know from the manufacturers what preparation may be necessary prior to re-coating. This level of preparation will depend largely on the level of deterioration of the original finish that has occurred. If, for instance, a stain finish has deteriorated to the extent that areas of bleached wood are visible, it will be necessary to take the surface back to clean wood before re-coating, whereas if the surface has merely faded or suffered some surface erosion, it may only be necessary to brush off loose particles before re-coating.

Wood cladding may have been designed to be left to bleach naturally without any finish, but at some stage the building owner may decide that he would prefer a coloured appearance. In this case the bleached surface of the wood must be removed back to clear wood before anything is applied, otherwise the coating will not obtain sufficient adhesion to the wood, and re-coating will be necessary at frequent intervals. Whether a coating is applied initially or added at a later date it is important that the client understands that the surface must not be allowed to deteriorate to the extent that a great deal of preparatory work would be required before a new coat can be applied.

If it is intended to add a coating to hardwood cladding that was originally left unfinished it is important that coating manufacturers should be consulted before any product is specified because hardwoods vary considerably in their suitability for coatings.

The client should understand that the life of any coating system will depend on the degree of exposure to sun and weather. However, a detailed survey of the elevations of a building prior to any maintenance programme could indicate that maintenance may only be necessary on the more exposed parts. In this case re-coating could be limited to those areas where deterioration was noted providing this did not result in an unacceptable discrepancy in colour. This might considerably reduce the cost of maintenance in materials, labour, and possibly the need for scaffolding.

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