

TECHNICAL BULLETIN – TB123

SURFACE PREPARATION FOR COMPRESSED FIBRE CEMENT SHEET (NON-ASBESTOS AND NON SCYON TYPES)

Date, Thursday, 14th May 2020

INTRODUCTION & SCOPE

Compressed Fibre-Cement Sheet is a common and durable flooring material used for decks, verandahs and internal floors. It is particularly effective when used in wet-area floors such as bathrooms and showers. In this bulletin we will look at the surface preparation required to obtain a good bond for ceramic tile adhesives and membranes.

BACKGROUND INFORMATION

Compressed Fibre-Cement sheet (CFC) is, or has been available in thicknesses ranging from 6 to 24mm. In flooring applications the minimum thickness is 15mm, with the thinner 6-12mm versions used for facades and fascia panels which are rarely tiled.

In Australia this product was originally manufactured with asbestos reinforcing fibres, but from the early 1980s was converted to asbestos free. Sheets laid between 1966 and approximately 1982 will contain asbestos as the reinforcing fibre, and the instructions described in this bulletin DO NOT apply to Compressed Asbestos Cement Sheet. When in doubt about the sheet's age or composition, do not sand, and look for the asbestos warning sticker on sheets manufactured after the mid 70's.

Compressed Fibre-Cement Sheet is manufactured to comply with AS2908.2 from laminations of uncured fibre-cement that are placed in a press and compressed by 20% between steel plates. This results in a 30% increase in density and surface hardness, with a corresponding decrease in surface porosity compared to 'medium density' fibre-cement used for walls (i.e. Villaboard™, Duraliner™ or Wallboard). The steel plates also produce a smooth and sometimes slightly shiny surface, and a mould release oil may have been used in the pressing process. The finished sheets often have a slightly dusty surface which creates a bond breaking layer.

While common practice is to prime this surface prior to application of paint finishes, heavier loadings applied by decorative finishes such as tiles require physical bonding into the CFC surface.

The nature of Compressed Fibre-Cement is such that the surface may require some preparation to achieve a satisfactory bond as in a few cases de-bonding of adhesives has occurred.

SURFACE PREPARATION

The following general surface preparation is suggested –

- Lightly sand the surface to produce a roughened and porous finish.
Note : Use appropriate personal protective equipment (respirator or dust mask) and vacuum dust extraction on the sander.
- Vacuum the surface to remove any dust residues
- Prime the surface with one of the following;
 - ARDEX MULTIPRIME
 - ARDEX WPM265 WATER BASED PRIMER,
 - ARDEX WPM270 SOLVENT BASED PRIMER,
 - ARDEX P9,
 - ARDEX P82 (dry internal only),
 - ARDEX WPM300 ± Broadcast sand (normally for external applications).
- Apply the appropriate flexible tile adhesive &/or membrane.

The application of Ardex flooring cements onto Compressed Fibre-Cement is covered separately in other bulletins. Refer to Ardex Technical Services for these bulletins if required.

CONCLUSION

Tiling or waterproofing on Compressed Fibre Cement Sheet is a simple application, and some surface preparation will make sure the installation has a long service life.

Where there are any doubts about the sheet composition, do not sand, drill or grind the sheets, and contact the manufacturer for advice on handling renovations or other building changes.

IMPORTANT

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the products described. Since each project potentially differs in exposure/condition specific recommendations may vary from the information contained herein. For recommendations for specific applications/installations contact your nearest Ardex Australia or Ardex New Zealand Office.

DISCLAIMER

The information presented in this Technical Bulletin is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of a product for a particular application. Users are asked to check that the literature in their possession is the latest issue.

REASON FOR REVISION –

PERIODIC UPDATE

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