

TECHNICAL BULLETIN

APPLICATION OF DUNLOP TIMBER FLOOR LEVELLER AND DUNLOP ARDIT SELF SMOOTHING CEMENT OVER LIGHTWEIGHT AUTOCLAVE CONCRETE

INTRODUCTION & SCOPE

Light weight construction methods have seen the application of aerated autoclaved concrete panels (i.e. Hebel) in flooring applications. The primary features of this type of material that are of concern to flooring installers are their very high porosity, and relatively low compressive strength compared to concrete.

Installation of DUNLOP self smoothing cements is an effective method of providing a smooth flat surface over this substrate for the installation of carpet, vinyl or strip timber flooring in dry internal applications.

SURFACE PREPARATION

The surface of aerated concrete is usually quite dusty and so needs to be cleared of any loose material, dirt, dust, contaminants etc, and then thoroughly vacuumed.

If the subfloor is wet it must be allowed to dry completely prior to the application of any toppings.

If the surface is contaminated or has a pre-existing covering, the use of mechanical preparation methods needs to be done with a high degree of care as deep gouging of the surface is a distinction possibility. The preferred method would be sanding.

PRIMING

The high porosity of autoclaved concrete means that two coats of priming will be required prior to the application of the floor levelling cement. In particular the porosity will result in

'ant holing' of the smoothing cement if priming is insufficient.

The primer shall be either DUNLOP PRIMER & ADDITIVE or DUNLOP MULTIPURPOSE PRIMER.

DUNLOP PRIMER AND ADDITIVE (DPA)
—The first coat shall be diluted with water in the ratio of 1 part of DPA and 1 parts of clean water. The diluted primer is applied to the surface with a broom and worked well into the pores. Allow 1-3 hours drying.

When the first coat of primer is dry apply a second coat of DPA is used undiluted. This second coat is also applied with a broom and allowed to dry for a minimum of 30 minutes.

DUNLOP MULTIPURPOSE PRIMER is applied as two coats neat and undiluted.

Note that the nominal coverage rates on the datasheet may not apply due to the porosity and surface texture of the AAC material.

Priming is critical to prevent the development of ant holing in the surface of the smoothing cement because of the highly porous nature of the AAC material.

PATCHING

It may be necessary to patch or fill the floor joints and other holes in the floor and DUNLOP ARDIT RAPIDSET REPAIR MORTAR or DUNLOP FLOOR REPAIRER RAPID PATCH are recommended for this application. Due to the high porosity of the aerated concrete, patching should be done over a

primed surface.

When the patch mortar has cured it shall be re-primed prior to the application of the topping cement. The surface is primed without primer dilution.

APPLICATION OF SMOOTHING CEMENT

The self smoothing cement can be applied over the primed surface and the recommended minimum thickness is 3-4mm. Refer to the product datasheets for details of mixing and drying times.

Note in the case of ARDIT Floor Leveller some hairline cracking may appear along poorly prepared floor panel joints, but this does not effect overall performance.

PATCH MORTARS

It is also feasible to apply thin coats of the patch mortar over Hebel, and also to repair damage such as broken off pieces or divots. The surface of AAC can be smoothed with DUNLOP ARDIT RAPIDSET REPAIR MORTAR or DUNLOP FLOOR REPAIRER RAPID PATCH.

PRECAUTIONS

The application of these DUNLOP products only applies to internal installations and NOT to external AAC applications such as decks or verandahs.

The compressive strength of the aerated concrete is approximately 4.5MPa, whilst the smoothing cements achieve around 30MPa after

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28 days. The load capacity of the system will be limited by that of the subfloor rather than the toppings. Therefore it is recommended that specifiers should determine the floor loadings expected and confirm that the floor coverings are able to resist these loadings to avoid indentations or damage to the subfloor.

Always install an adequate number of properly located test areas including the flooring finish to determine the

suitability of the product for the intended use.

NOTES

Always refer to the product data sheets for specific usage details.

The information contained herein 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 the product application.

Users are asked to check that the litera-

ture in their possession is the latest issue.

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