TECHNICAL BULLETIN – TB200

APPLICATION OF ARDEX ARDITEX NA OVER OLD ADHESIVE RESIDUES

Date, Tuesday, 15 May 2012

INTRODUCTION & SCOPE

A relatively common situation is a subfloor that's contaminated with old adhesive residues from flooring systems such as vinyl or carpet. The normal and preferred method of dealing with this contamination is to mechanically prepare the subfloor. Removing these residues and achieving an open pored surface increases the number of possible smoothing cements, and related product choices that can be installed over the substrate. This process also complies with AS1884-2012 which states;

> ***3.1.1.5*** *Surface preparation*
>
> *Before laying operations begin, materials such as grease, oil, paint, existing floor coverings and their adhesives, curing or parting agents, or any surface treatment, particularly oxides, mark out paints, wax crayons which could adversely affect adhesion, discolouration or any other detrimental affect shall be removed from the subfloor via mechanical means.*

However, in some situations such a course of action may not be possible and a lesser solution has to be found. In these cases it is possible install a liquid polymer modified smoothing cement which has lower induced strain over the residues. Historically, Ardex Arditex has been used in this way, and its successor Ardex Arditex NA can also be applied for the same purpose.

IMPORTANT INSTALLATION CONSIDERATIONS

Before applying Arditex NA over old residues the following things MUST be considered:

a) The amount of residue on the floor shall not exceed 50% of the floor area to be covered.

b) The thickness of the adhesive residue must not exceed 1mm.

c) The adhesive residue must be well bonded to the substrate, i.e. it cannot be chipped off the subfloor.

d) The adhesive residue must not be water soluble nor composed of polyurethane materials.

e) The adhesive residue must be not alkali sensitive.

f) An Arditex NA coat or scratch coat is **not** an acceptable method of 'priming' the residues before the installation of a stiffer stronger smoothing cement (i.e. Ardex K11, K15, K12, A55, K250 or K301).

THINGS THAT CAN OCCUR

When the installation has been done, the following things have been observed to occur and need to be recognised as possible issues.

g) Since the residues are not primed, any areas of exposed concrete or porous substrate are highly likely to develop ant-holing.

h) Cracking in the smoothing cement can occur, which then needs to be patched. Such cracks may take several days to a few weeks to develop as the smoothing cement cures. This tends to occur where the residue coverage exceeds 50% of the substrate, but no de-bonding of the Arditex was observed.

i) Bubbles and blisters have been seen to develop in the smoothing cement.

j) High thickness of smoothing cement may result in any weakly bonded residues de-bonding from the substrate.

k) Thin layers of Arditex NA are porous, and solvent based adhesive applied over the top can penetrate through and soften or decompose the underlying residues. In particular, this application must not be done with solvent based polyurethanes or contact adhesives.

DEALING WITH CRACKS

The appearance of minor cracking is a significant possibility with this application and has to be accepted by the customer as part of the risk factor. Installers need to recognise this fact themselves, but also make sure it is clear to the end customer as well.

It is not desirable for the cracks to appear after the floor covering is laid, so the longer the underlayment surface can be left open before installing the floor coverings the better. A recommended starting point would be around seven days, and then cracks that do appear can be smoothed off by the use of Ardex Feather Finish or Feather Finish/Ardex P82 'embossing leveller' mix.

ASSESSING THE RISK

Finally, when making a decision to use this process rather than complete subfloor preparation, it is really necessary to perform a risk assessment for the longer term consequences of the installation usage.

For example, where the final floor covering is going to be carpets, the risk is lower because carpet provides a cushioning to loads, but also is less sensitive to smoothness. By contrast resilient floor coverings are a far higher risk due to the load bearing directly through and also show through. Hard ceramic tiles are intermediate in risk as the tile takes loads, but larger format tiles require a stiffer substrate, and the combination of old glue and flexible smoothing cement may not suffice.

The other consideration is usage. This type of practice would be questionable in commercial situations or large areas with high traffic since the loading applied is far higher, and the areas at risk much larger.

As noted above, the risk involved in using Arditex NA as a 'residues primer' in this type of application for other stronger smoothing cements is unacceptable. Ardex has observed a number of field applications where this has been attempted with materials such as K11 and K15 over Arditex, and the final result has been far from successful.

REASON FOR REVISION - ISSUER
24 month review. Addition of reference to AS1884-2012.

DOCUMENT REVIEW REQUIRED
24 months from date of issue.

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