

covering **installation**

Correct installation strategies prevent problems

Adhesive residue

By Christopher Capobianco

An increasing number of floor-covering failures are being traced to installation over existing adhesive residue. Too often on renovation projects, an old floor is removed and the new floor is installed either directly over the old adhesive residue or the floor is skim-coated with a patching compound and then the new floor is installed. However, many installers do not deal properly with adhesive residue before skim-coating a floor.

If the residue is not black, such as with old carpet adhesive or vinyl composition tile (VCT) adhesive, that usually indicates a water-based adhesive. I have seen installers tear out old carpet or VCT and skim-coat right over the old residue. The problem with this is two-fold: the water in the patch can soften the old adhesive, compromising the bond of the patching compound to the substrate. This can lead to loose tiles, or bubbles in the case of roll goods. The other concern, if the existing adhesive does not soften, is that the adhesive layer beneath the patching compound becomes a cushion layer between the patching compound and the concrete. If even a small amount of weight is placed on top of the new floor, the patching compound may crack or the floor covering may show indentations. For these reasons, old adhesive residue needs to be completely removed before patching the floor.

Black adhesive residue indicates a "cutback" type adhesive, the black asphalt based adhesive used to install vinyl asbestos tile (VAT), asphalt tile (AT) or

(VCT). If one of these floors is removed, installing a new floor with cutback adhesive is usually not a problem, assuming the cutback residue is treated according to the manufacturer's guidelines.

Most adhesives, including carpet and resilient flooring adhesives, are not compatible with cutback adhesives because cutback is an oil-based product. Just skim-coating over these old adhesive layers may lead to some of the same issues as with a "cushion" layer of adhesive beneath the patching compound mentioned above. Another, larger problem is that the residue of cutback can bleed through standard patching or leveling compounds and react with the adhesive and/or discolour some resilient flooring materials. The new adhesive may turn to mush on certain types of floor coverings, and some flooring types, such as sheet



**We've just made
tile and stone
installation
even easier ...**

**Introducing Proma's
all new website
PROMA.ca**

**Detailed info
just a click away.**

Adhesifs
PROMA
Adhesives Inc.

www.proma.ca ♦ 866.51.PROMA

covering **installation**

vinyl, may discolour from the chemical reaction. As such, it is necessary to remove or encapsulate cutback residue before installing floor coverings.

Care is essential when removing these residues, because older cutback adhesive contained asbestos fibres, so the flooring and adhesive often must be removed or encapsulated completely, regardless of the new material being installed. If the existing floor was installed before 1990 or so, it is wise to have the old tile and adhesive tested before you start to remove it. Since asbestos in floor coverings and adhesives is not easily identified, laboratory testing of flooring and adhesive is necessary to determine asbestos content so the installer and the building occupants are not exposed to a known health hazard. If such testing is not done, it must be assumed that the flooring and adhesive contain asbestos.

WOOD SUBFLOORS

If the installation is over a wood subfloor, the easiest way to deal with any type of adhesive residue is to leave the existing floor covering in place, cover the entire floor with a panel underlayment such as plywood and install the new floor covering on top of the new plywood. This encapsulates the old adhesive and provides a smooth substrate for all floor covering installations.

Today, the three most common panel underlayments are plywood, lauan, and fibre-reinforced panels. It should be noted, however, that most resilient flooring manufacturers are no longer recommending lauan as an underlayment because of problems with discolouration, delamination and adhesion failures. Other panel underlayments are avail-

able that are much higher quality than lauan. These include underlayment-grade plywood that is composed of layers of wood throughout, so there are no voids. These products, sold under a variety of brand names, perform extremely well even under heavy-traffic conditions. Fibre-reinforced panel underlayment panels are common in the stone and ceramic industry, and are starting to gain popularity for resilient flooring as well. They look like drywall, both in appearance and in their score-and-snap method of cutting, but they are designed to be underlayments so they carry the performance characteristics and warranties for use under resilient flooring. Check with the manufacturer of the new flooring to see if they have a specific recommendation for underlayments.

One thing to keep in mind if you are going over asbestos-containing flooring or adhesive is that the asbestos is still in the building. If the goal is to completely remove the asbestos-containing materials from the building, then the flooring and the wood substrate beneath it must be removed, and a new plywood underlayment installed.

CONCRETE FLOORS AND CHEMICAL ADHESIVE REMOVERS

Removal of asbestos-containing floor coverings and adhesives is usually done by an asbestos abatement process. Over concrete floors, this process often involves the use of a chemical adhesive remover. Unfortunately, any residue of the adhesive remover on the floor or in the cracks of the concrete may also dissolve the new adhesive or discolour floor coverings. For this reason, floor-covering manufacturers and the Resilient Floor Covering Institute (RFCI) have



Model Hardwood

UNIQUE COLLECTIONS OF HARDWOOD FLOORING

Looking for something unique?

Choose from a wide choice of vibrant colours and an infinite range of possibilities to create a unique environment. Our superior quality Model Extreme™ finish offers the very best protection and a 10-year warranty for commercial use.

Environmentally conscious Model is FSC accredited. For more information, visit our website at www.pgmodel.com.

You are unique, and so we are.

Model
extreme™
We guarantee it

specific warnings against the use of solvents and adhesive removers. Flooring failures due to contamination from such chemicals are not covered by adhesive or floor-covering manufacturers' warranties. In these cases, it is advisable to clean the surface of the concrete mechanically after the adhesive remover has dried, and then apply a patching compound or self-leveling underlayment to provide a smooth base for the new floor covering

MECHANICAL REMOVAL OF CUTBACK RESIDUE

Whenever possible, it is advisable to remove cutback residue mechanically rather than with a chemical adhesive remover. Use the wet-scraping method as outlined in the RFCI "Recommended Work Practices for the Removal of Resilient Floor Coverings." Do not sand, grind or blast this residue, since the airborne dust may contain asbestos. Wet-scrape the floor according to RFCI guidelines until the cutback residue is nothing more than a thin, transparent layer, much like a stain on the concrete. All trowel ridges and other built up areas of adhesive must be completely removed. After this scraping procedure is completed and adequate time is allowed for the concrete surface to dry, an approved underlayment or patching compound designed for use over cutback can be applied. Be sure the product is approved for use over cutback residue. Many products will adhere to cutback residue but not all such products will prevent bleed-through. Follow mixing and application instructions carefully, including the use of primers and/or liquid additives. In the case of trowel-applied patching compounds, two coats are usually necessary to assure the complete coating of the floor.

It is often said that the new floor is only as good as what you are covering and that is certainly the case when dealing with old flooring and the adhesive residue they leave behind. Thorough treatment of these residues can prevent failures of the new floor covering.

For further information, consult with the Resilient Floor Covering Institute, a North American trade association of resilient floor covering manufacturers at www.rfci.com. You can also consult manufacturers of patching and leveling compounds for exact specifications for dealing with adhesive residue. ●

Christopher Capobianco is owner of Christopher Collaborative Inc. Cappobianco volunteers with FCICA, ASTM Committee F.06 on Resilient Flooring and II CRC (Institute of Inspection, Cleaning and Restoration Certification).

Johnsonite IQ Flooring

iQ Construction means no wax or polish for the lifetime of the floor. It's that simple. A minimum amount of damp cleaning. Some dry buffing. None of the waxes, polishes, strippers and other chemicals that add needless maintenance and needless expense. How do we know it's true? Over 240 million square yards of iQ constructed product has been installed by customers all over the world. iQ Construction can only be found in the homogeneous products within The Tarkett Collection from Johnsonite. This includes such well designed products such as Optima and Granit.



Johnsonite®
Flooring Solutions to Integrate Design & Life-Safety

800-899-8916
www.johnsonite.com



CANTREX, THE LARGEST NETWORK OF INDEPENDENT RETAILERS IN CANADA, WILL HELP YOUR BUSINESS GROW!

aeroplan Join Cantrex today and receive 50,000 Aeroplan miles
Certain restrictions will apply

Jason Walker Business Development Manager, Floor Covering
Tel.: 416-525-6939 • email: jason.walker@cantrex.com • www.cantrex.com

CANTREX
The Power to Succeed

Sears®
Floor Covering Centre

UNITED FLOORS

AFFILIATES