

Volume 34 • Page 1 for the Commercial Floor Covering Industry TOTALLY GREEN PUBLICATION January 2011

We've had several calls and emails over the last two months regarding the use of solvents to remove old adhesive, particularly the black asphaltic cut back type, used for old vinyl asbestos tiles. These tiles are present in many older buildings, many of them schools. When asbestos abatement initiatives are undertaken in these buildings, one of the materials removed and abated are the vinyl asbestos tiles and the cut back adhesive used to install them. It is wise to always assume, and rightfully so, that the cut back itself contains asbestos. Unfortunately, the cut back adhesive is commonly removed with a solvent based agent. Though the solvent will work well to remove the asphaltic based cut back it creates another problem. To understand this you have to understand that the solvent leaves a residue, that you can never remove all of the cut back with solvent, that the cut back will in fact impregnate the concrete or wood underlayment and that eventually both the solvent and the cut back will work themselves out of the substrate. If moisture is present in the substrate, which it will always be to some degree and the new flooring material is non permeable, either hard surface flooring or carpet tiles with non-permeable backings, a reaction is most likely inevitable that will cause a failure in the installation.

This article was instigated by a flooring contractor friend of ours, Ray Cope of Cope Carpet Interiors in Allentown, Pennsylvania, who was faced with just such a condition. His story, written by Ray, is told here, with some editing and comments by me. It will be something you'll want to save and share so that you'll not get yourselves into trouble. At the end is a release Ray created.

Lew, Here is my study that all flooring contractors should see and pass on to general contractors and building owners. By doing this research and presenting it to the director of engineering of a major hospital, I've convinced them to never use solvents again. Ray The Use of Solvent to Remove Old Flooring Adhesive

All of the information in this article is yours to use as well as the release at the end of the article. The release can be modified as you see fit. The information contained will help you avoid financial hardship, whether you're the building owner, architect, general contractor or flooring contractor. Ray writes; An end user wants a new floor, but there is an existing floor presently installed. As the building owner, OSHA & EPA states, the floors must be tested for asbestos containing material (ACM). If the flooring or adhesive contains asbestos, special work practices must be employed by certified asbestos removal contractors. If there is no ACM present in the flooring material or the adhesive, a general demolition company can remove the floor and scrape away the bulk of the adhesive. Generally that's when a floor covering contractor comes in. He must get documentation from the building owner that the adhesive does not contain asbestos.

Many times, the owner decides to install new floor covering over existing intact flooring. If so, no special removal practices are required. Other times, they choose to remove the existing flooring and the old adhesive is exposed.

If the adhesive is latex based (Cream Color) the excessive adhesive is scraped away, the flooring is skim coated and new flooring is adhered to the newly patched floors.

Existing black adhesive is black asphaltic and must be tested

for ACM (asbestos containing material). If it is ACM, the adhesive <u>must</u> be removed <u>mechanically</u>. There is no provision to remove it with solvents. Even if the black

adhesive is not ACM, manufacturers won't warrant their product from staining or sticking to the black adhesive so it must be removed.





The proper way to remove the adhesive is detailed in the RFCI (Resilient Floor Covering Institute) "Recommended work practices for removal of resilient floor covering."

> The removal of latex based adhesives commonly used with vinyl sheet floors and some tiles can be accomplished by wetting the adhesive residue (which will soften the adhesive) and scraping. Do not use an excessive amount of water which can damage wood subfloors.

If the black adhesive is non ACM, it can be mechanically scrapped; shot blasted, or ground using OSHA & EPA standards. This being done, the floor can then be skim coated with a cementitious type material.

Very often, asbestos abatement contractors use a solvent to remove the black adhesive. This is <u>NOT</u>

acceptable as no floor patch companies will warrant their products if solvents are used. These selected verbatim warnings are from the respective manufacturers sub floor preparation requirements.

- •Ardex: Substrate preparation must be by mechanical means, such as shot blasting. Do not use acid etching, sweeping compounds, solvents or adhesive removers
- •Mapei: Do not use chemical solvents to remove cutback adhesive
- •CMP: Never use Acid, Chemical or Mastic removers on any surface to which CMP products will be applied.





THE COMMERCIAL FLOORING REPORT Lew Migliore - President and Owner LGM Enterprises, LLC - 519 Oxford Street. Dalton, GA 30720 P-(706) 370-5888- F-(706) 270-0482 - Email: Imtcs@optilink.us Click this link for archives of CFR articles LGMANDASSOCIATES.COM January 2011

HAPPY NEW YEAR 2011 Please welcome the new addition to the LGM Family – JAKE









# floor covering **news**



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Resilient Floor Covering Institute

Mechanical Scraper

Floor covering companies will not warrant their products or adhesives if solvents were used.

- •Armstrong: Armstrong does not recommend the use of solvents to remove paints or old adhesive residues because the solvents can remain in the concrete and negatively affect the new installation.
- •Mannington: The Resilient Floor Covering Institute (RFCI) document "Recommended Work Practices for Removal of Resilient Floor Coverings" should be consulted for a defined set of instructions addressed to the task of removing all resilient floor covering structures.
- Forbo: Warning Regarding Complete Adhesive Removal: Some solvent based Asphaltic "Cut-Back" adhesive may contain asbestos fibers that are not readily identifiable. Do not use power devises which create asbestos dust in removing these adhesives. The inhalation of asbestos dust may cause asbestosis or other serious bodily harm.
  - ✓ Never use solvents or adhesive removers to remove old adhesive residue. Any residue left within the substrate may affect the new adhesive and new floor covering. Conducting PH tests and adhesive bond tests prior to the installation will help in identifying the possible use of these materials.
  - Where existing asphaltic (cut-back) or other type of adhesive is present, it must be dealt with in one of three ways:
    - >It may be mechanically removed by grinding, bead blasting, scarifying, etc.
    - >The adhesive residue\* may be encapsulated with a suitable self-leveling underlayment. Follow the self-leveling manufacturer's recommendations for intended use and application.
    - >The adhesive residue may be encapsulated with Forbo Moisture Limitor. Refer to Moisture Limitor guidelines for complete instructions.
  - ✓ Residue is defined as residual staining that is left after all adhesive has been scraped away down to the concrete surface.





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#### Why aren't solvents allowed? RFCI states

There are commercial adhesives removal products containing solvents that are effective in removing cutback or emulsion adhesives and comply with OSHA requirements (e.g. flashpoint greater than 140 degrees Fahrenheit). These products may be used for adhesive removals; however, they may leave a solvent residue within the subfloor that can adversely affect the new adhesive or floor covering. Thus, the warranties provided by the manufacturers of new floor covering materials will not cover instances where subfloor conditions damage their products or affect their installation.

Residual Asphaltic "Cutback" Adhesive				
	CONCRETE SUBFLOOR		WOOD UNDERLAYMENT SUBFLOOR	
New Material to Be Installed	Removal of Residual Adhesive	Alternative to Removal	Removal of Residual Adhesive	Alternative to Removal
Resilient floor tile to be installed using cutback adhesive.	Residual adhesive must be wet- scraped so that no ridges or puddles are evident and what remains is a thin, smooth film. See wet-scraping of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.	The use of a cutback adhesive over wood underlayment subfloor is not recommended.	The use of a cutback adhesive over wood underlayment subfloor is not recommended
Resilient floor tile to be installed using an adhesive other than cutback adhesive.	Residual adhesive must be wet- scraped so that no ridges or puddles are evident and what remains is a thin, smooth film. See wet-scraping of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile.	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment. <sup>2</sup> When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.
Any vinyl- backed sheet flooring	100% of the residual adhesive must be removed from the area to be covered. See removal of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment. <sup>2</sup> When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.
Felt-backed sheet flooring.	Enough of the residual adhesive must be removed so that 80% to 100% of the original substrate of the overall area is exposed. <sup>1</sup> See removal of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment. <sup>2</sup> When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.

If solvents have been used, installation of new flooring is severely compromised. Many asbestos abatement contractors use solvents because they are inexpensive, they work fast, and minimize Infection Control Risk Assessment (ICRA), and they have not experienced problems in the past. Today with more new "Green" products being developed, the residual solvent will readily affect them. I'll add that there may have been failures in the past that weren't recognized as being caused by the use of solvent based adhesive removers that got blamed on someone or something else. There is nothing easy about this process. As Ray states and we thank him for his contribution and research, anyone involved in a situation like is faced with several issues all of which can compromise the installation and the flooring material. Ray also created the following release for solvent situations you can use.

January 2011

COPE FLOORING RELEASE:

Project: Address: Location:

Concrete floors which have been treated with a solvent to remove old adhesive may still have residual adhesive present.

Even though shot blasting may be performed to remove the residual solvent, the porosity of and inconsistency of the concrete may still contain the solvent.

The residual solvent may migrate to the new patch, adhesive or floor covering and dissolve the materials, causing a failure.

The building representative is demanding that a new floor covering be installed even thought he cannot confirm that all the solvent has been removed.

Cope is in no way liable or responsible for a bond failure or floor discoloration of the flooring system (patch, adhesive or floor covering).

Cope will be paid time and material to install the new flooring

Date: Building Representative

Signature:

Print name:

Date: Cope Flooring Representative

Don't get stuck in a situation that involves a scenario like this. It can compromise all the initial work, effort and expense only to be undermined by an inappropriate activity that will cost exponentially more to correct; something no one wants to be faced with. If we can help, let us know, that's what we're here for.



Always feel free to forward or share this publication with others





The new Velcro Brand Carpet Protector is ready to go. This product takes the place of clear plastic coverings with pressure sensitive adhesive that have created a host of problems for the industry. The new Velcro Brand

Carpet Protector is made for use on loop and cut and loop carpet; the vast majority of commercial carpet. Bentley Prince Street is the first carpet manufacturer to offer this unique product.



Systems like EnviroSTIX for hard surface and hard backed flooring materials and FreeLay for carpet are systems that will help prevent the failure of flooring installations. There is more technology coming, most of which we are involved with.

We'll keep you informed to help you. In the meantime understand that temperature and humidity have a profound effect on flooring materials and the integrity of their installation. If you control the temperature and humidity in the space it will maintain the integrity of the floor covering and the installation. If you're attending *Surfaces 2011* in Las Vegas at Mandalay Bay be sure and register for the *Floor Covering Inspector Symposium* on January 24 and 25, 2011.

This two day symposium, hosted by Larry Cooper of Textile Consultants and Lew Migliore of LGM and Associates, was developed for professional Floor Covering Inspectors, Retailers, Distributors, Manufacturers, Installers, Specifiers, Architects, Designers and related floor covering interests. The presentations will be in both lecture and hands-on format. The goal of the Symposium is to advance the knowledge and professionalism of those whose business is impacted and influenced by all aspects of the floor covering industry, including both hard and soft surfaces.

The presentations at the symposium have been developed to benefit the attendees with an increase in expertise and to help increase profits while reducing losses related to floor covering problems, concerns and complaints. Attendees will benefit from the advanced level of training by participating in the symposium. You don't have to be an inspector to attend as this program was designed with everyone in mind. You'll see and hear the latest information on floorcovering not available anywhere else.

Don't delay registering for this important event, as space is limited. See the registration link for pricing and hotel accommodations.

<u>http://www.surfaces.com/attendee/education-program/floor-covering-inspectors-symposium.asp</u> Call today for more information, 303-469-0306 x104 or go to our website and see the full program, <u>www.floorcoveringinspectorssymposium.com</u> The full program is also attached to this issue of the Commercial Flooring Report.

#### Floor Covering Inspectors Symposium (FCIS) – At Surfaces Inspections 2011 - Carpet and Hard Surface Flooring Industry

January 24 and 25, 2011

Register now for this two day symposium designed to give anyone involved in the floor covering and inspection service industry an opportunity to update their skills, learn some of the new techniques and hear the latest information available on soft and hard surface flooring. Our instructors are experts in the industry, known to bring excellence to the floor covering trade, through education and sharing of information.

Symposium attendees will qualify for two IICRC CEC credits. The symposium is being held at the Mandalay Bay Hotel in conjunction with Surfaces and begins prior to the opening of Surfaces, the floor covering industries premier floor covering event.

The symposium features the top presenters and leaders in the floor covering industry. Our hosts include *Larry Cooper*, *Textile Consultants (TCI)*, an inspector with 30 years experience, the producer and organizer of the Connections Events and IICRC Standards Consultant and *Lew Migliore LGM and Associates*, with over 39 years experience solving problems related to floor covering manufacturing, specification, installation, performance, use and maintenance. Lew *is the publisher of "The Commercial Flooring Report" distributed to over 300,000 readers worldwide and author of "The Claims File," in Floor Covering News.* 

Our Instructors include: Lew Migliore, LGM, Carey Mitchell, Shaw Industries, Peter Craig, Concrete Constructives, Dave Horan, ProFloor Services, Sim Crisler, LGM, , Barry Costa, Aspire Educational Institute, and Vice Chairman of the IICRC S600 Carpet Installation Standard, Larry Cooper TCI, Dane Gregory, Interlink Supply and Robert Varden, Seam Master Industries. There will also be presentations from Dave Gobis, Ceramic Tile Expert, Mark Berndt, Interface America, Blaire Townsend, Velcro America, Devin Schlisner, Base King, Christopher Capobianco, Chairman FCICA, Jim Gould, President, Floor Covering Institute, Fred Gamble and More.

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<u>symposium.aspx</u> Call us today for more information, 303-469-0306 x104 or go to our website and see the full program, <u>www.floorcoveringinspectorssymposium.com</u>

## Day 1 - January 24, 2011

#### Carpet Inspection Related Topics:

8:30 am Welcome and Inspection Industry Update, Larry Cooper, Textile Consultants, The New ANSI/IICRC S800 Standard and Reference Guide for Professional Carpet Inspection

## Lew Migliore, LGM and Associates, What's New in Carpet Manufacturing?

- New tufting technology
- Lighter weight products
- New backings see, feel and touch
- New fibers Triexta
- Carpet Tile What's new in carpet tile?

#### 10:00 am Break

10:15 am New adhesive free installation technologies with demonstrations:

- Velcro, Blaire Townsend, Velcro America, Director Construction Strategic Business Unit
- FreeLay, Mark Berndt, Interface America, Director of Technical Services
- EnviroSTIX, Devin Schlisner, Base King, LLC, Director of Technical Services/Installation
- New Seam Sealing Technology -
  - Glue 2 Seam Sealing Systems, Sim Crisler, Vice President, LGM & Associates
  - Kool Glide, Seam Master Industries, Robert Varden, Technical Services

12:00 pm Lunch – Lunch 75 minutes – on your own...

1:15 pm An Update on the Progress of the New (ANSI) IICRC S600 Standard and Reference Guide for Professional Carpet Installation – Barry Costa, S600 Vice Chairman, Aspire Educational Institute, including a discussion regarding issues on Pattern Match and Carpet Acclimation.

# 2:15 pm Field and Laboratory Testing: Carey Mitchell, Shaw Industries, Director of Technical

Service, The Top Five Laboratory Tests for Carpet Inspectors

- How to order Lab Testing
- ADA requirements
- Tuft Bind Loop and Cut Pile
- Filament Slippage
- Bundle Encapsulation
- Velcro Roller Testing
- Benzoyl Peroxide Testing

## 3:00 pm Break (15 minutes) Continuing program with hands on demonstrations

# 3:15 pm Hands on Repairs – Barry Costa, Aspire Educational Institute

**4:00 pm Larry Cooper, Textile Consultants, Inspection Procedures – The tools and reporting** Discussion about report writing – what does the manufacturer really want or need?

# Day 2 – January 25, 2010

# Hard Surface Flooring Related Topics:

8:30 am Welcome and Update on Daily Events, Lew Migliore, LGM & Associates

Lew will offer tips for strategic marketing initiatives for your business.

# What's New in Hard Surface Flooring?

**9:00 am Dave Horan, ProFloor Services,** What's new with Laminates and Wood Floors and claims related topics?

#### 9:50 am Break

10:05 am Christopher Capobianco, Chairman FCICA, "What's New in Resilient Flooring?"

10:50 am Dave Gobis, Ceramic Tile Consultant, Ceramic Tile installation, performance and problems

11:40 am Dane Gregory, Interlink Systems, Stone, Tile and Grout – Stone products, sealing and cleaning

#### 12:30 pm Lunch

1:40 pm Peter Craig, Concrete Constructives, ICRI, Substrates, Concrete and Moisture Issues

**2:30 pm Jim Gould, President, Floor Covering Institute, World Floor Covering Market – Globalization and Sourcing** 

#### 3:20 pm Break

# 3:35 Fred Gamble, Inspection Procedures – The tools and reporting

Time: 8:30 am – 4:30 pm

# 2 Breaks Each Day, Lunch on own

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