

# COMBINATION TILES RECYCLED RUBBER SURFACING INSTALLATION / MAINTENANCE GUIDELINES

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#### **SECTION I**

#### MATERIAL STORAGE & HANDLING

#### General packaging information

All products are packaged on wooden pallets, covered with a plastic hood, and secured by steel strapping.

#### On receipt of merchandise:

- A) The product in front of you has gone through several quality assurance checks. However, we recommend that you double-check that your order is correct, that no damage occurred during transport, and for any other possible shortcomings. For your own protection, ensure that defective product is identified prior to the start of the installation. Please note that we are not responsible for any installation costs that occur as a result of defective product being installed.
- **B)** If adhesives were exposed to freezing temperatures, place indoors and bring to room temperature before using. Read technical data sheets and material safety data sheets for adhesive. Check adhesive for damage that may have occurred during transit.
- **C) Storage:** Store tiles in a dry and clean area. Temperature and humidity changes will cause the rubber to expand or contract.
- D) Installation after short term storage: At least 24 hours before starting the installation lay out all tiles on the sub-surface to allow them to acclimate to ambient temperature. Acclimation is complete when the products have reached their specified dimensions. Refer to the Weights and Measures chart at the back of these guidelines. Short term storage should be considered as two weeks or less.

- E) Installation after prolonged storage: During prolonged storage, the tiles in the lower portion of the stack will compress to a greater degree than those in the upper portion. This will show as thickness variations in the products taken from the top of the pallet as compared to those on the bottom. Product dimensions (length and width) may also be affected. A longer acclimation time will be required for product that has had a longer storage time. Exactly how long is very difficult to predict but can take upwards of 48 – 72 hours. The product should be taken off the pallet and distributed throughout the installation area. Acclimation is complete when the products have reached their specified dimensions; check length, width, and thickness periodically until the right dimensions have been reached (see the Weights & Measures chart at the back of these guidelines). Do not install the tiles if they are not square and the appropriate thickness has not been reached.
- **F)** Measure the site and confirm you have adequate material to complete your installation.
- **G)** Ensure all sheet rock work, sanding, painting and all overhead work has been completed.
- **H)** It is important to keep a clean working surface at all times. Protect tiles from dust and dirt.
- I) Some slight color variation may occur from tile to tile. Placing these tiles in less visible locations can minimize the visual effects of such minor variations.
- **J)** Keep rubber surfacing dry prior to installation.
- **K)** Petroleum distillates (e.g. solvents) as well as liquid animal fats may cause the surface bonding to fail. Test results for other harmful chemicals and compounds are available on request.

#### **SECTION II**

# **Tools & Accessories**

## A) Tools and safety equipment required:

- Installation Guidelines
- Safety glasses
- Heavy duty utility knife
- Band saw, jigsaw or reciprocating saw (Suggested blade size – approx. 12-14 teeth/inch or rubber cutting blade)
- Steel mallet
- Measuring tape
- Transit level and Straight edge
- Caulking gun
- Chalk snap-line
- Heavy duty white chalk sharpened to wedge for marking cuts
- Trowel (if adhesive is required)
  - For fine finish concrete surface 1/8" (3.2mm) V-notch
  - For rough finish concrete 1/8" (3.2mm) Square-notch
  - Disposable plastic spatula for spot gluing
- Carpenter's square
- Perimeter border if required

## B) Finishing kits

The Finishing Kit consists of 4kg rubber granules and 800g polyurethane binder. It is convenient to have on site at the end of the project to make installations look professional and clean. Use the finishing kit to fill in cuts around posts if necessary.



#### C) Adhesive (if required)

Recommended adhesive:

#### 1) Chemrex Urethane 941 (v.o.c. compliant)

- One component polyurethane adhesive
- 2 gallon pail: 26 lbs (12 kg)
- Approximate coverage: 150 sq.ft. (14 m²) per pail

#### 2) Chemrex Urethane 941 (V.O.C. compliant)

- One component polyurethane adhesive
- 5 gallon pail: 57 lbs (26 kg)
- Approximate coverage: 375 sq.ft. (35 m²) per pail

#### 3) Chemrex Urethane 948 (V.O.C. compliant)

- One component polyurethane adhesive
- 313 ml gun grade: 2 lbs (10 oz tube)
- Approximate coverage:
  - 1/8" (3mm) bead = 90 lineal feet
  - 5/16" (8mm) bead = 11 lineal feet



# As per BASF Technical Support:

It is not uncommon for a moisture cured urethane product, such as Chemrex CX941, to develop a slight skin on the top surface of the product. The slight skinning can be the result of product getting older, or in the case of newer product, perhaps a poor seal in the lid. Regardless, the product is still good; simply trim the skin and discard. In the case of older product, a thicker skin may have developed, and the viscosity of the overall product may have thickened, also making the application a bit more difficult, but in most cases will still perform.

For detailed information and product use, refer to BASF Product Data Guide.

#### **D) Transition Pieces**

Wedges are used around the perimeter of an area to create a transition. They can be adhered to the edge of the rubber tile and/or glued to the sub-surface. Corner pieces compliment the wedges. There are inside and outside wedge corners, designed for use on all 90° angles.



#### F) Half tiles

Half Tiles were designed so that full tiles can be installed in a staggered layout. Tiles may also be cut on site – see Section VI – Measuring & Cutting.

#### H) Interlocking tubes

The interlocking tubes are made from black polyethylene. Each tile requires four (4) interlocking tubes which are included in every order at no charge.



# **SECTION III**

#### **BEFORE STARTING THE INSTALLATION**

The sub-surface must be smooth, clean, and dry.

**A)** During storage, rubber tiles must be kept dry and adhesive must be stored above 50°F (10°C) in a dry, heated space.

**B)** Check the ambient temperature:

- Temperature range for adhesive use: between 50 °F (10 °C) and 104 °F (40 °C).
- If indoors, in-floor radiant heat should be shut off.
- In all situations, working at the extreme ends of the temperature range will affect curing times, viscosity and pot life of adhesive, possibly resulting in adhesion problems. For detailed information

and product use, refer to BASF Product Data Guide.

## **SECTION IV**

#### PREPARATION OF THE SUB-SURFACE

Combination Tiles should not be installed on top of carpet as the tiles may shift apart.

The sub-surface must be level, clean, and dry.

# A) Concrete sub-surfaces New concrete sub-floors must be

thoroughly cured and free from hydrostatic pressure before rubber tiles are installed (a minimum of 28 days after pour). If existing concrete is too rough, it can be leveled by sanding or applying a cement based leveling compound (patch), allowing a curing time as recommended by the patch manufacturer. Follow manufacturer's installation guidelines.

#### B) Wooden sub-surfaces

- New plywood should be acclimatized for a 48-hour period prior to installation of the rubber flooring.
- CDX exterior smooth one side suggested for new wood substrates.
- Secure all nails to prevent future protrusion.
- Any cracks, holes, and rough or uneven areas should be patched with good quality cement based leveling compound.

# **SECTION V**

#### INSTALLATION OF COMBINATION TILES

Combination Tiles are primarily installed without adhesive, using interlocking tubes for stability. However some installations may benefit from adhering edges of the tiles together. Where installations are not contained on all sides, perimeter tiles should be adhered to the sub surface. Alternately transition wedges can be used as containment by adhering them to the sub floor.

Important: See Section I, (D) and (E) regarding acclimation of tiles.

#### LAYOUT

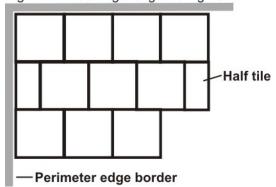
It may be to your advantage to insert four (4) interlocking pegs into each tile prior to removing from the pallet. Be sure to leave enough tiles without pegs to do your first row of tiles.

Make sure the sub-surface is properly prepared (see Section IV – Preparation of the Sub-surface). Determine the area for best layout. For irregular site configurations, a good starting point is often the center. Other installations are best started in the corner along a straight edge. See Section VI for measuring and cutting tiles to fit.

#### A) Installing Along Existing Wall

Place the first tile at your designated starting point, either against a wall or existing border. Align first row of tiles along a straight edge. Make sure that all interlocking holes are facing toward unfinished area. (Do not put any pegs in first row of tiles.) (See diagram below).

Figure A - Installing along existing wall



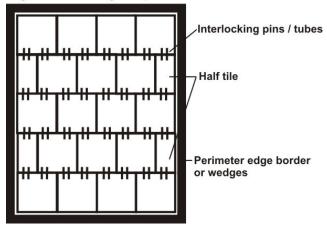
Start second row with a "half tile", which is simply a full tile cut in half (see Section VI – Measuring & Cutting). As you are installing each tile, tilt slightly to ease pegs into existing tile. Tap with mallet to ensure tight fit. Continue installation in a staggered method. Repeat first and second row until installation is completed.

#### **B) Installing With Perimeter Border**

If installing a new perimeter edge border, it is best if you only install two edges (i.e. L shape). This will reduce movement of the tiles while inserting the interlocking tubes. After tiles are laid, install the last two remaining perimeter borders, making sure they are as tight as possible against the tiles. A mallet is helpful in this process.

The unique interlocking system allows the tiles to be securely fastened to one another.

Figure B - Installing with perimeter border



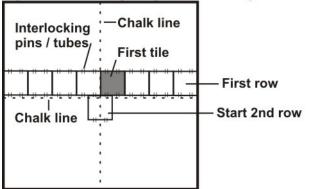
The correct installation of Combination Tiles is a staggered pattern to ensure proper alignment and a tighter fit.

C) Installing Irregular Site Configurations
As reference for installation, measure the
designated area and snap chalk lines both
length & width at the center of the
installation area. These reference lines will
serve as a guide for laying the first row of
tiles.

Place the first tile aligned with the perpendicular center of the chalk lines. Align first row of tiles along this chalk line making sure the interlocking holes are facing toward unfinished areas. Secure this first row of tiles by either gluing to sub-surface or creating a temporary border along one edge to hold the tiles in place.

Start second row at center of chalk line lining up with middle of tile above (see diagram below). Continue installation in a staggered method.

Figure C - Installing irregular site configurations



Refer to Section VI – Measuring & Cutting for outside cuts and cutting irregular shapes.

# SECTION VI MEASURING & CUTTING

Lay tile on a flat surface, hold the metal straight edge on the cut line, and cut with sharp utility knife. Keep scoring the cut until separated. Change or snap off blades frequently to ensure clean cuts. For odd angles, circular patterns, and to cut around structure mounts, a cardboard template is suggested. If a large amount of cutting is required, installers may consider using a jigsaw or reciprocating saw. If so, suggested blade is 12-14 teeth per inch, or a rubber cutting blade. Depending on thickness and length of cut, inserting a small wedge into start of cut will help to minimize any binding on the blade.

As rubber as the ability to compress, it is best to cut your tile slightly larger than required. This will result in a tight fit. Cutting edges inward approximately 15 degrees will make placement along a solid edge easier.

# **SECTION VII**

# ADHESIVE – FOR TRANSITION PIECES A) General

 Please read BASF Product Data Guide thoroughly before starting with the installation.

- Moisture is the single greatest cause of bonding failure.
- Higher temperatures and humidity cause the adhesive to cure faster.
- Use safety glasses and rubber gloves when applying adhesive.
- For first aid and safety instructions refer to BASF Product Data Guide.

#### **B) Applying Adhesive**

Combination Tiles do not require a full glue down installation, however adhering perimeter tiles or transition wedges to create a perimeter containment may be required in some applications.

Wear gloves at all times when applying adhesive. Do not allow adhesive to cure on your hands.

All substrates must be structurally sound, smooth, clean, dry, and free from dust, loose material, grease, oil, wax, sealers, curing agents, and other foreign materials. Apply adhesive with trowel when spreading on sub-surface. Adhesive may also be applied directly to back of tile using a plastic spatula. (See Section II – Tools and Accessories) If gun grade adhesive is used, run 1/8" to 1/4" bead across bottom of wedge/corner piece to ensure good bond with sub surface.

When applying adhesive, glue must be spread evenly on sub-surface or on back of each piece to avoid differences in height. Allow 48 hours setting time. Avoid heavy traffic during curing time.

# DO NOT GET ADHESIVE ON THE SURFACE OF THE TILES AS IT IS VIRTUALLY IMPOSSIBLE TO REMOVE.

Using mineral spirits or similar products to remove adhesive residue may alter the surface appearance of the tiles. If you choose to use this type of product to remove adhesive, test product for color fastness first using a small amount of mineral spirits applied with a clean, dry cloth. Do not scrub! Any damage to the tiles as a result of

adhesive removal is solely the responsibility of the installer.

#### C) Clean Up Adhesive

Excess adhesive on sub surface or tools should be cleaned immediately as per adhesive manufacturer's instructions. Cured adhesive bonds tightly and is very difficult to remove. **Do not use solvents** on tile surface as they cause deterioration of the bonding compound between the rubber granules.

# **SECTION VIII**

#### FINISHING KITS – FILLING IN CUTS

After all tiles are in place and secured, spaces around posts can be filled. A black, single component, polyurethane caulking can be used for small repairs (e.g. ½" voids). For voids exceeding ½" in diameter around, the **Finishing Kit** should be used.

- Contents of Finishing Kit:
- 1 can (800g) polyurethane binder 107
- 1 bag (4kg) rubber granules (color to match tiles)
- 1 MSDS for polyurethane binder

## A) Mixing

Do not mix the ingredients until installation of tiles is completed. Read MSDS before starting.

# If only part of the kit is needed, use this quide:

5 parts by weight of granules to 1 part by weight of binder, e.g. 5 ounces granules to 1 ounce binder.

Take full amount of rubber granules and pour into clean plastic pail, gradually pour binder into mixture, stir while pouring. The curing time for this product is approximately 20 to 40 minutes depending on ambient temperature and humidity. Mix only what will be used in this time frame. Higher ambient temperatures and humidity will result in a faster curing rate.

### B) Clean up (finishing kit)

Use a solvent to clean tools. Clean up any polyurethane immediately using a clean, dry cloth, as it will leave visible traces on tile surface if allowed to cure. Do all mixing away from tile surface to protect tiles from damage.

#### **SECTION IX**

GENERAL CLEANING & MAINTENANCE ROUTINE MAINTENANCE EXTENDS LIFE AND ENHANCES APPEARANCE.

#### A) Initial cleaning after installation

Clean tiles thoroughly with a high cfm vacuum to remove residual dirt or debris left from installation. The tiles are coated with water-based release agent, a result of the manufacturing process. This will initially cause slight slipperiness. For fast removal, clean with a solution of water and mild household cleaner, then damp mop with water.

#### **B)** General Maintenance

Regular dry vacuuming is recommended with occasional damp mopping using a solution of water and a neutral pH or mild household cleaner.

## C) Deep Cleaning

In areas of high traffic, a more aggressive cleaning may occasionally be required because of a build up of dirt. A steam vacuum is ideal for deep cleaning. If required, a neutral pH cleaner such as Taski Profi can be used with this equipment. It is important to use equipment that removes all liquids during the process. If necessary, tiles may be removed and cleaned thoroughly. Be sure that tiles are completely dry and free of foreign material before re-installing. (Contact our trained product specialists for additional information on suggested equipment-1-800-MATS-INC or email info@matsinc.com)

Mats Inc. does not assume any responsibility for damages caused by chemical cleaners.



# WEIGHTS & MEASURES

#### GENERAL PACKAGING INFORMATION

All products are packaged on wooden pallets, covered with a plastic hood, and secured by steel strapping.

# Product Information - Rubber Tiles:

Thickness tolerance of ± 2.0 mm

24" x 24" = 4 ft<sup>2</sup> per tile (61 cm x 61 cm = 0.37 m<sup>2</sup> per tile)

 Thickness:
 Tiles per pallet:
 Weight per tile:
 Pallet:

 1½" (38mm)
 96
 25 lbs (11.3 kg)
 48" x 48"

Wedges

Dimensions: Weight per piece:

1½" x 19½" long x 6" wide (38mm x 49.5cm long x 15.2cm wide) 3 lbs (1.3 kg)

Corners (inside/outside)

Dimensions: Weight per piece:

1½" x 9¾" long (inside edge) x 6" wide (38mm x 24.8cm x 15.2cm) 8 lbs (3.6 kg) 1½" x 9¾" long (outside edge) x 6" wide (38mm x 24.8cm x 15.2cm) 8 lbs (3.6 kg)

Weights and measures may change without notice. All measurements are nominal and subject to variation.

#### DISCLAIMER

The installation guidelines in this manual represent typical installation work procedures. Every site is different and MATS INC. does not claim to have covered all possible circumstances.

MATS INC. Group Limited Partnership does not warrant installation work and specifically disclaims liability for any direct or indirect personal injury, property damage, and other costs or losses resulting from installations or applications by third parties. Please, see the MATS INC. Limited Warranty for the particulars of warranty coverage relating to MATS INC.'s products