# Allied Products, LLC

Distinctive Flooring & Athletic Surfaces

# **RUBBER MAT INSTALLATION INSTRUCTIONS**

# **UPON DELIVERY OF PRODUCT**

- 1. **VERIFY** packing slip matches with product and order.
- 2. **INSPECT** delivered product thoroughly. Report any discrepancies of original order, product defects, etc. No reimbursement/warranty claim will be given for labor on material installed with visual defects. Any defects size, color, or otherwise must be reported to the place of purchase prior to installation.
- 3. STORE product and adhesives in clean, dry, environment with temperatures between 70° and 95°F.
- 4. **READ** product and sub-floor preparation, instructions, warranty and other disclaimers carefully and completely before beginning any installations.

# Warning:

**DO NOT** use recycled rubber products in conjunction with any petroleum-based products. This includes solvents, adhesives or sealants. All substrates (especially new concrete) must be fully cured for 45 to 60 days prior to installing rubber products.

**INTRODUCTORY NOTE**: This installation guide is intended to provide the necessary information for the proper installation of rubber mats. These instructions are believed to be based on accepted industry standards and are provided for informational use only. ALLIED PRODUCTS, LLC DOES NOT WARRANT ANY INSTALLATION PERFORMED PURSUANT TO THESE INSTRUCTIONS OR OTHERWISE AND SPECIFICALLY DISCLAIMS LIABILITY FOR ANY DIRECT OR INDIRECT PERSONAL INJURY, PROPERTY DAMAGE OR OTHER COSTS OR LOSSES RESULTING FROM INSTALLATION.

Allied Products, LLC rubber mats should be installed by qualified and experienced personnel.

# **RECOMMENDED TOOLS**

- Measuring tape or ruler
- Metal straight edge
- Knife or non-retractable utility knife w/extra blades
- White marker or chalk
- Chalkline
- 2x4 wood block
- Cellophane, masking or packaging tape
- Mallet
- Commercial grade caulking gun

# **ADHESIVE**

Protect unopened containers from heat and direct sunshine. In cool weather store containers at temperatures of 70° to 95°F for at least 24 hours before using. Adhesive CX-941 has a shelf life of one year when stored at this temperature range. Apply CX-941 in temperatures above 40°F.

- Wear gloves during application; CX-941 is difficult to remove from skin and clothing; if adhesive gets on skin, immediately wipe it off with a dry cloth.
- Do not apply on frozen surfaces or standing water.
- Avoid contact with water or alcohol before use and before complete cure.
- Do not use in areas subject to hydrostatic head pressure.
- Do not use on wet, contaminated, or friable substrates.
- It is the user's responsibility to check the adhesion of the cured adhesive on typical test areas at the project BEFORE application.

# **OPTIONAL SEAM SEALING**

Allied Products offers SikaFlex Sealant/Adhesive for creating the performance of a one-piece floor. Both act as a bonding agent that will waterproof flooring seams, and will be as flexible as the rubber it bonds.

SikaFlex is available in a 10 oz gun-grade form. To bond the rubber together, leave a gap between the mats sufficient for the tip of the caulking gun to fit within. To seal seams for waterproofing, sealant should be applied post-installation and applied thinly only to the seams. The application must be allowed to cure for 48 hours prior to use.

To assure a strong bond, it is strongly recommended to thoroughly clean the edges of the mats by steam cleaning with a mild dish detergent or wiping with a denatured alcohol. Allow the mats to completely dry prior to applying sealant.

When sealing colored rubber, use SikaFlex 221 for best bond.

#### **PREPARATION**

#### Product

Rubber mats should reach ambient room temperature to ensure a secure, tight installation with minimal size fluctuations. Each piece should be allowed to set for a full 24 hours prior to beginning installation. This allows the product to relax and to size-stabilize at the typical room temperature. Inspect the product prior to installation for measurable defects or variations.

#### Sub-Surface

For best installation, any sub-surface should be reasonably flat and free of holes or variances of more than 1/8" (3.17mm).

- 1. All sub-surfaces should be structurally sound and fully cured for 45 to 60 days. Test floor for vapor drive in accordance with anhydrous calcium chloride test. Vapor drive should not exceed the industry standard of <3.0 lbs per 1,000 square feet (1.36kg/100sg m) in 24 hours.
- 2. Repair concrete and install joint sealants and fillers as necessary.
- 3. Mechanical surface profiling is the preferred floor preparation method. It is the only acceptable preparation method where warranties are issued. Acid etching is not recommended. Mechanically profile the floor to medium-grit sandpaper texture. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.

#### Concrete

New concrete must be allowed to cure thoroughly prior to installation (45 to 60 days). If sealants are used, **DO NOT USE ONE WITH A PETROLEUM BASE**. Old concrete must be repaired and have joint sealants and fillers installed as necessary. All cracks or flaws should be filled in or repaired prior to covering with rubber products. Use patching materials as appropriate. Surface must be thoroughly cleaned of dirt, dust, grease, or other foreign matter by shot blasting or other mechanical means with a commercial degreaser and allowed to dry completely before beginning installation.

#### Wood Base

Wood surfaces should be completely cleaned of dirt, dust, grease or other foreign matter and be completely dry prior to installation. Trapped moisture may rot the wood or interfere with installation adhesives. Nails or other protrusions should be pounded down or removed, holes repaired and surface variances repaired within the 1/8" (3.17mm) acceptable variance level.

#### **Asphal**t

Asphalt requires the same preparation as concrete. However, due to variations in asphalt substrates, it is the user's responsibility to check the adhesion of the cured adhesive on typical test areas at the project BEFORE application.

#### **Over Rock Base**

Begin preparing the surface 2-3" (50-76mm) below the level of the finished floor. Fill prepared area with <sup>3</sup>/<sub>4</sub>" (19mm) minus crushed gravel, decomposed granite or limestone product. Tamp fill down to 2-3" (50-76mm) thickness, so that it is near level with the area of installation, minus the thickness of the rubber surfacing.

A border should be installed to further house the surfacing once installed. This can be a concrete curb, wood or other permanent or semi-permanent board product. If a border is not an option, sealing/bonding the seams together is recommended with the SikaFlex adhesive using the instructions listed.

#### **CLEANING**

Indoors: Sweep, sponge mop or vacuum rubber flooring for everyday maintenance. Outdoors: Use of a water hose, leaf blower or broom is usually sufficient. Use a mild detergent with a sponge mop and water for more extensive cleaning. Please contact Allied Products, LLC for recommended cleaning agents. **DO NOT USE petroleum-based products to clean rubber.** 

### **INSTALLATION**

#### INDOORS

- 1. Assume that the walls, and/or curbs the mats abut are not perfectly straight or square. Begin by determining the absolute center of the area to be installed. Determine the horizontal center. Snap a chalk line. Determine the vertical center. Snap a chalk line. This will become the starting point.
  - a. If Adhesives are Needed:

Apply CX-941 Adhesive<sup>1</sup> prior to laying each mat and apply only within the area of the mat to be laid down. The adhesive should be applied thinly and evenly with a 3/16" x 1/4" x 1/4" "V" trowel. (CX-941 adhesive will cover 50 to 60 square feet per gallon.) *Do not apply more adhesive than can be utilized within a 30 minute window. In ideal temperatures there is approximately 30 minutes of open time to apply the adhesive and maneuver the rubber mat onto the adhesive and position prior to curing onset.* Wipe off excess adhesive on hands or equipment with mineral spirits. Gloves are strongly suggested during application, as the CX-941 adhesive is aggressive on skin. DO NOT allow mineral spirits to come in contact with the rubber mats.

2. Place the first mat in the joint of the two chalk lines (Figure 1). Maneuver the rubber mat to lay precisely aligned within the two chalk lines by tapping with a mallet and wood block.

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Chalk Line	
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Figure 1

- 3. Place the next mat at one end of the original mat. (When butting one mat up to the next, adjacent to or end-toend, overlap the joist by about 1/4". Then "walk" or "work" the joint back with your hands to eliminate the overlap and to avoid adhesive (if used) being shoved into seam areas. This will help ensure tight joints without gapping. If gapping does begin to occur during installation, use masking, cellophane or packing tape to hold the mats together until the adhesive cures. Do not use duct tape as it may leave residue on the surface when removed.)
- 4. Continue this method to the wall or stopping point in that direction. Resume laying floor on the opposite side of the original mat and continue installation to the wall or stopping point in that direction (Figure 2). If the rubber exceeds the floor space, use a straight edge and non-retractable utility knife to trim the excess length (see cutting tips).

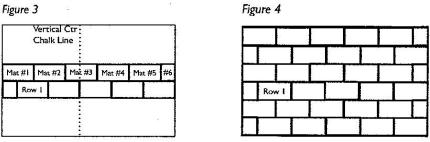
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	Mat #4	Mat #1	Mat #2	Mat #3
	Mat #4	Mat #1	Mat #2	Mat #3
in the second	Mat #4	Mat#I	Mat #2	Mat #3

#### NOTE: If using adhesive or tape:

After the first 60 minutes have passed, and the adhesive has begun to set, thoroughly roll the first row of matting with a 50-100 lb carpet roller to assure bonding of the rubber to the adhesive. Be careful to shift the roll outside of the chalk lines while rolling. Rolling should be done again at 75 and 90 minutes after the initial placement of the mat onto the adhesive. Rolling should be done both widthwise and lengthwise. This will ensure maximum contact and ultimate bond.

<sup>1</sup>The instructions provided are based on using CX-941 Polyurethane Adhesive or SikaFlex. If another adhesive product is used, be cautious as to the manufacturer's instructions, curing times, and bonding window.

5. Begin laying the next row at one end of the room (Figure 3) adjacent to the first row by applying adhesive first and then placing the mats, and fine tuning placement with a 2x4 and mallet. To achieve the recommended "brick" (Figure 4) laying pattern, it may be necessary to cut the first and last mats (see cutting tips).



**ADHESIVE CLEAN UP TIPS:** Before troweling with CX-941, cover the unused portions of the trowel with duct tape. After troweling, tear off the tape before the material cures. Clean all tools and excess CX-941 immediately after use with mineral spirits. Use proper precautions when handling solvents. Cured adhesive can be removed by cutting with a mechanical tool. **DO NOT** allow mineral spirits to come in contact with the rubber mats.

#### OUTDOORS

- Outdoor installations <u>may require complete adhesion</u> for maximum floor strength. Use the same procedures as in the indoor installation, using the CX-941 adhesive process. Using SikaFlex sealant will also add strength and immobility to the floor (if using a seam sealant, leave ¼" gap between mats). Take note of the outdoor temperature when using adhesive, as it will affect the curing time. In some areas, evening or night installations are best due to extreme heat.
- Colored product installed outdoors will be subject to harsh UV rays, and as such may discolor.

#### **CUTTING TIPS**

Tips on cutting rubber mats follow: This procedure works best when using a non-retractable utility knife. When using a utility knife, be sure to keep the blades sharp to aid in the cut, and help reduce the possibility of injury due to dull blades.

- 1. Mark the mats you will need to cut with chalk or a chalk line.
- 2. Put your straight edge on the corresponding marks you have placed on the mats.
- 3. Holding the straight edge firmly in place, score the mats two or three times. \*
- 4. Grab the mat close to the score line, lift and bend the mat toward you. The score line will "break open."
- 5. Make several more passes with the knife, working down the established cut, until the cut is complete.

This process may be made easier by cutting the mat on a raised surface such as the 2x4 wood block used during installation. Gravity will depress the cut edge down and away from the cut, and will be less likely to catch the knife blade.

CURING TIMES INDOORS: CX-941 Adhesive Standard S	Set:	OUTDOORS: Normal Traffic	24 hours	
Firm Set	1-2 hours			
Light Traffic	8-10 hours			
Normal Traffic	24 hours			
Double Sided Carpet Tape:				
Foot Traffic	Immediate			
Non-Adhesive:				
Normal Traffic	24 hours			
	24 hours			

#### PRODUCT WARRANTY

1.0 Allied Products, LLC ¾" and ½" thick rubber mat products are guaranteed to be free of manufacturing defects in material and workmanship for 15 years. (Special stipulations apply for use in equine facilities. Contact manufacturer for these specifications.) If there are defects in material and workmanship Allied Products, LLC will replace the mats and credit the customer the following amounts based on current prices at the time of replacement: One to Three years – 100%; Four Years – 90%; Five Years – 80%; Six Years – 70%; Seven Years – 60%; Eight Years – 50%; Nine Years – 40%; Ten Years – 30%; Eleven Years – 20%; Twelve Years – 10%; Thirteen Years – 10%; Fourteen Years – 10%.

If there are defects in material and workmanship during the Warranty Period Allied Products, LLC will replace or repair the mats as described herein, at no cost to the owner/end-user. Should defects in material or workmanship be found, it is the owner's responsibility to contact Allied Products, LLC through the point of purchase or directly as described below. This warranty does not cover dissatisfaction or problems or other damage to the materials due to or as a result of:

- a) Improper installations and/or improper maintenance;
- b) Fading due to sunlight (outdoor exposure, abrasions, and ultra-violet rays may cause normal change in the surface color and is not considered a defect under this warranty);
- c) Shading (color variation) of individual pieces due to natural rubber variations;
- d) Use of harsh and acidic chemicals, acidic foods and abrasive chemicals;
- e) Water spotting, petroleum adhesives or floor sealants or abuse;
- f) Color variation between samples and/or printed illustrations and actual product;
- g) Wear or product degradation expected from the use or environment of installation;
- h) Chewing, clawing or other animal destruction;
- i) Exposure to chlorine, solvents, acids, or other harmful chemicals; or
- j) Acts of negligence, misuse, or willful or accidental external influences including but not limited to, vandalism, riot, or acts of war.

#### \*\*\*Proof of Purchase is Required\*\*\*

- 1.1 The warranty is limited to the repair or replacement of products of Allied Products, LLC that are shown to be defective. The owner/end-user agrees not to advance any claim for any other measure of damage or loss. Allied Products, LLC shall not be liable for installation, disassembly, removal, disposal, return shipping, or other similar costs.
- 1.2 Allied Products, LLC shall not be liable for any damage, loss or claim whatsoever unless:
  - 1.2.1 Allied Products, LLC is notified in writing within fifteen (15) days of any occurrence which might give rise to a claim;
  - 1.2.2 The owner/end-user has obtained written authorization from Allied Products, LLC prior to making any repairs or alterations on or through the surface which may affect the integrity of the materials;
  - 1.2.3 Allied Products, LLC is first permitted to inspect the allegedly defective product or cause of the alleged loss, damage or claim;
  - 1.2.4 The material is installed according to the written instructions provided by Allied Products, LLC and used only as intended by Allied Products, LLC.
- 1.3 If, after inspection, Allied Products, LLC determines that there has been a material defect in the product within the Warranty Period described in Paragraph 1.0, the liability of Allied Products, LLC and the remedy of the owner/end-user shall be limited, at the sole option of Allied Products, LLC to either: (a) delivery of repair or replacement material for the impacted area or (b) credit to be applied towards the purchase of new material. The value of either remedy shall be pro-rated upon the remaining months of unexpired warranty as determined by Allied Products, LLC. The maximum pro-rated value of either remedy shall in no case exceed the original purchase price.

#### Limitation of Warranty:

- 1. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.
- 2. ALLIED PRODUCTS, LLC SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES.
- 3. THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR ANY CLAIM OR DAMAGES.
- 4. NO AGENT OR REPRESENTATIVE OF ALLIED PRODUCTS, LLC HAS ANY EXPRESS OR IMPLIED AUTHORITY TO MAKE ANY REPRESENTATION, PROMISE OR GUARANTEE NOT STATED HEREIN.

#### Disclaimer:

- Recycled rubber, as with any recycled product, can vary. Tolerances in thickness and width have been made as stringent as is possible, but some variance is to be expected. Rubber's nature is to expand and contract with changes in temperature and humidity.
- Allied Products, LLC rubber mats are not to be used in any manner or for any purpose not expressly identified by Allied Products, LLC.

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