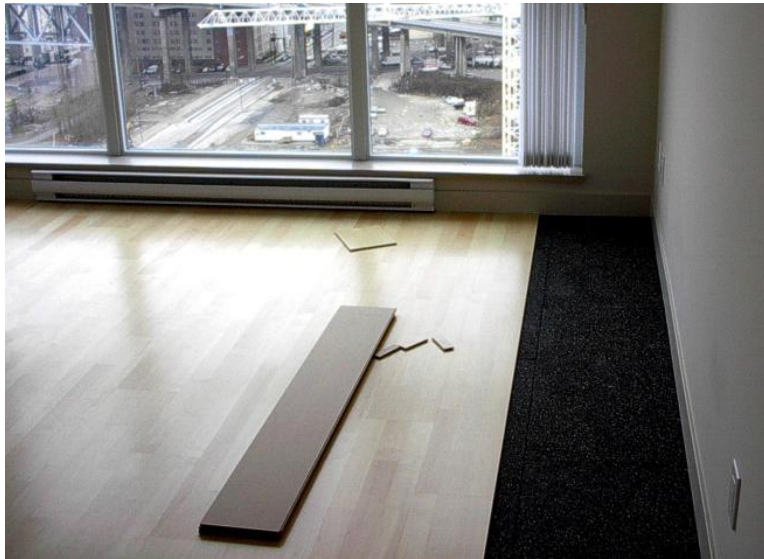




INSTALLATION / MAINTENANCE GUIDELINES **COMFORT CUSHION ACOUSTIC UNDERLAY**



This product has been certified by SCS to meet the rigorous indoor air quality requirements of the FloorScore® certification program.

The following pages are guidelines only... please read this manual thoroughly before installing Dinoflex Recycled Rubber Surfacing products.

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SECTION I

MATERIAL STORAGE & HANDLING

General packaging information:

All Dinoflex 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, it is recommended 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 Dinoflex is 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 between 65°F (18°C) and 72°F (23°C) before using. Read Technical Data Sheets and MSDS Sheets for adhesive. Check adhesive cans for damage that may have occurred during transit.

Dinoflex DinoGrip adhesive has a 12 month shelf life. If shipment has been stored for an extended time, see Batch label on can and refer to decoding instructions included with data sheet to confirm adhesive has not exceeded its shelf life. Dinoflex is not responsible for expired adhesive used at the time of installation.

C) Storage

Store tiles in a dry and clean area. Temperature and humidity changes will cause the rubber to expand or contract. During storage, rubber tiles must be kept dry and adhesive must be stored above 50°F (10°C) in a dry heated space.

D) Installation after short term storage

At least 48 hours before starting the installation lay out all tiles on the sub-surface, in piles of two or less, to allow them to

acclimate. A tile laid down in the morning hours at 32°F (0°C) would be a different size than a tile laid at 68°F (20°C) later in the day. All HVAC systems should be fully operational 24 hours before the acclimation process begins.

Acclimation should only begin once the sub-surface has reached a temperature between 65°F (18°C) and 72°F (23°C). Acclimation is complete when the products have reached a consistent dimension after a 24 hour period (Dimensions: 38" x 38": = 10.02 ft² with a thickness tolerance of ± 0.5 mm); if the material is installed in any other condition than specified Dinoflex is not responsible. Installation should only occur when the sub-surface temperature is between 65°F (18°C) and 72°F (23°C). Short term storage should be considered as two weeks or less.

E) Installation after prolonged storage

Before placing any Dinoflex product in prolonged storage remove the pallet banding, leaving the other packaging on until acclimation begins. 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 and may take up to 72 hours. All HVAC systems should be fully operational 24 hours before the acclimation process begins. The product should be taken off the pallet and distributed throughout the installation area in small piles consisting of two or less tiles. Acclimation should only begin once the subfloor has reached a temperature between 65°F (18°C) and 72°F (23°C). Acclimation is complete when the products have reached a consistent dimension after a 24 hour period (Dimensions: 38" x 38": = 10.02 ft² with a thickness tolerance of ± 0.5 mm). Installation should only occur when subfloor temperature is between 65°F (18°C) and 72°F (23°C).

Do not install the tiles if they are not square and the appropriate thickness has not been reached. Long term storage should be considered as two weeks or longer.

F) It is important to keep a clean working surface at all times. Protect tiles from dust and dirt.

G) Keep Dinoflex rubber surfacing dry. Moisture will cause adhesion problems.

H) 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:

- Dinoflex Installation Guidelines
- Safety glasses
- Heavy duty utility knife - Suggested product: CH Hanson Speed Rocker SS, 3 position, fixed blade knife (www.chhanson.com)
- Drill and mixer for adhesive
- Duct Tape (optional)
- Measuring tape
- Transit level and Straight edge
- Chalk snap-line
- V-notched trowel 1/8" (3.175 mm)
- Carpenter's square
- Rubber boots & gloves

B) Adhesive

IMPORTANT: If adhesive other than the products noted below is used, these installation guidelines may not apply. Contact adhesive manufacturer for specific guidelines for Recycled Rubber Flooring.

DINOFLEX recommended adhesives:

Dinoflex DinoGrip Adhesive (v.o.c. compliant)

- One component polyurethane adhesive
- 4 US gallons: 55 lbs (25 kg)
- Approximate coverage: 320 sq. ft. (29.7 m²) per pail

Roberts RB40 Adhesive (v.o.c. compliant)

- Copolymer rubber adhesive
- 825 ml gun grade: 1.74 lbs (27.9 oz tube)

- Approximate coverage:
 - 1/4" (6 mm) bead = 90 lineal feet
 - 3/8" (10 mm) bead = 40 lineal feet

It is not uncommon for a moisture cured urethane product 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; making the application a bit more difficult, in most cases it will still perform.

Note: Dinoflex DinoGrip has a 12 month shelf life. See Batch label on can and refer to decoding instructions included with data sheet. Dinoflex is not responsible for expired adhesive used at the time of installation.

SECTION III

BEFORE STARTING THE INSTALLATION

Ensure all other trades are completed work prior to installing Dinoflex Recycled Rubber Flooring. In cases where other trades may access the installation area, the use of masonite board or plywood should be used to protect the rubber flooring from damage and debris. Dinoflex is not responsible for any product failure if proper floor preparation and/or installation procedures are not followed.

- Check the ambient temperature:
- Minimum temperature range for adhesive use is 65°F (18°C)
- All HVAC systems must be fully operational 24 hours prior to beginning the acclimation process. Rubber flooring must be installed between 65°F (18°C) and 72°F (23°C). Any fluctuations in temperature or humidity will cause expansion or contraction of the tiles; a 3°C fluctuation in temperature can cause dimension instability of the product.
- **In-floor radiant heat should be shut off for 24 hours.**
- 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 Technical Product Data Sheet, included with adhesive.

SECTION IV

PREPARATION OF THE SUB-SURFACE

The sub-surface must be level, clean, and dry. Remove all old adhesive. A rough or uneven sub-surface will result in an uneven installation. If the sub-surface has been previously sealed or finished the surface must be stripped to ensure an adequate bond.

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 30 days after pour). Consult adhesive specifications for allowable moisture tolerance. Concrete substrates should not exceed 65 percent RH and/or 3 lbs X 24 hrs X 1000 s.f. Moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869. Sub-floor must be smooth and level to a tolerance not exceeding 1/8" in 10 lineal feet. If existing concrete is too rough, or does not meet the above criteria, apply a portland cement based leveling compound to smooth and level the surface. Follow all leveling compound manufacturer's instructions.

It is vital that a moisture test and an alkalinity test be completed and records kept prior to floor installation, and that sub-floors are cured and dry to acceptable levels.

Moisture is the single most significant factor that causes bonding failure to the sub floor. Warranty is not applicable if specified moisture ranges are not adhered to.

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.
- ***It is vital that a moisture test be completed and records kept prior to floor installation, and that sub floors are cured and dry to acceptable levels.*** Moisture is the single most significant factor that causes bonding failure to the sub-floor. Warranty is not applicable if specified moisture ranges are not adhered to.
- Wood sub-surface must be a minimum of 1" thickness, and free from any flex movement

If required by flooring manufacturer, a plywood subfloor can be installed over Comfort Cushion Acoustic Underlay. Using either glue down or taped installation method described below, install underlay over concrete surface. Follow manufacturer's instructions for subfloor installation then install Hardwood flooring as per manufacturer's guidelines.

SECTION V

GLUE DOWN INSTALLATION - HARDWOOD

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

Installer assumes all responsibility for final inspection of product quality. Visually inspect all mats for visible defects. Ensure that defective product is identified prior to the start of the installation, set these aside and notify dealer immediately with information of any defects found.

Glue down installation is recommended for non-floating floor systems. (i.e. hardwood flooring)

1. ARRANGING THE TILES

Loosely place Comfort Cushion tiles in place, trim to size as necessary using contractor grade utility knife. Overlap seams and double cut seams if rough edges do not fit cleanly. Leave 1/4" gap along room walls and any protrusions. For odd angles, circular patterns, etc. a cardboard template is suggested.

2. ADHESIVE

IMPORTANT: If adhesive other than Dinoflex recommended adhesive is used, these installation guidelines may not apply. Contact

adhesive manufacturer for specific guidelines for Recycled Rubber products.

A) General

- Please read Section C Adhesive thoroughly before starting the installation.
- Moisture is the single greatest cause of bonding failure. Ensure levels are at or below those accepted by adhesive manufacturer.
- Higher temperatures and humidity cause the adhesive to cure faster.
- Use safety glasses, rubber boots, and rubber gloves when applying adhesive.
- Room must be well ventilated.
- For first aid and safety instructions see labels on can, technical data sheets, and MSDS.

B) Applying Adhesive

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 1/8" V-notch trowel. Using too large a trowel will result in excess adhesive coming up between seams. **Wear gloves at all times when applying adhesive. Do not allow adhesive to cure on your hands.**

While the glue is wet, start with one edge of the Comfort Cushion tile placed into the adhesive. Lay the rest of the tile down into the spread adhesive. Firmly press up to edge of existing tile. This will keep excess adhesive from protruding between the seams. Do not overlap seams. Leave a 1/4" gap along room walls or fixtures.



When applying adhesive, glue must be spread evenly on the sub-surface to avoid differences in tile height.

C) Rolling

Roll each row as completed. Roll the entire floor when project is completed. Work in both directions. Note that adhesive is slippery when first spread and tiles will shift position even if only disturbed slightly.

A 50 to 70 pound roller should be used to ensure the underside tile surface is fully bonded to the glue and sub-floor. Too much rolling or too heavy a roller could cause the tiles to buckle and adhesive to move upwards through the seams.

Protect the installation from foot traffic for a minimum of 24 hours.

The wood floor top surface can now be installed. Follow the flooring manufacturer's installation instructions to determine correct trowel size. Apply the adhesive directly onto the Comfort Cushion Underlay. Lay the wood flooring into the adhesive, position correctly and press down firmly.

D) Clean Up Adhesive

Follow adhesive manufacturer's instructions for cleanup of tools.

SECTION VI

LOOSE LAY INSTALLATION – FLOATING SYSTEMS

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

Installer assumes all responsibility for final inspection of product quality. Visually inspect all mats for visible defects. Ensure that defective product is identified prior to the start of the installation, set these aside and notify dealer immediately with information of any defects found.

Loose lay, tape down installation is recommended for floating floor systems. (i.e. laminate and engineered wood systems.)

1. ARRANGING THE TILES

Loosely place Comfort Cushion tiles in place, trim to size as necessary using contractor grade utility knife. Overlap and double cut seams if rough edges do not fit cleanly. Leave ¼" gap along room walls and any protrusions. For odd angles, circular patterns, etc. a cardboard template is suggested.

2. TAPED INSTALLATION

Tape all seams together using standard duct tape or high quality carpet tape. Do not overlap seams. If moisture is a concern, tape seams using a vapor-proof tape.

3. FINAL SURFACE APPLICATION

Once the subfloor is covered with Comfort Cushion Underlay, the finished floor can be installed directly over top. Refer to the flooring manufacturer's installation instructions.

Note: As the main component in this product is recycled tire rubber, an initial rubber odor will be present before the finished floor layer is installed. Once covered with your final flooring product, no odor will be detected. Comfort Cushion Acoustic Underlay is FloorScore certified and meets stringent air quality standards.

SECTION VIII

WEIGHTS & MEASURES

GENERAL PACKAGING INFORMATION

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

Product Information – Comfort Cushion Acoustic Underlay Tiles:

Dimensions: 39.5" x 39.5" = 10.76 ft² (100 cm x 100 cm = 1.0 m²)

Tolerance: all product is subject to nominal size variation.

Thickness	lbs (kg) each	# per pallet
1/8" (3mm)	7 (3.2)	300
5/32" (4mm)	10 (4.5)	200
3/16" (5mm)	10 (4.5)	180
1/4" (6mm)	16 (7.3)	150

Pallet (net weight) **65 lbs (29.5 kg)**

Conversion Chart:

1 in	=	2.54 cm
1ft	=	30.5 cm
39.4 in	=	1.00 m
2.2 lbs	=	1.0 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 Dinoflex does not claim to have covered all possible circumstances.

Dinoflex Group LP 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 Dinoflex Limited Warranty for the particulars of warranty coverage relating to Dinoflex's product.

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