

Installation & Maintenance Guidelines

For



Square Cut Glue Down

 **SPORT MAT**

 NEXT STEP™ *Luxury*

 **EVOLUTION**
Commercial Flooring

 NEXT STEP™ Walk Soft

 **NATURE'S** Collection

 NEXT STEP™ **HIGH IMPACT**

 NEXT STEP™ **HIGH IMPACT**
EXTREME



Reg #SCS-FS-02144

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 cozy, and secured by nylon strapping.

Receipt of Merchandise:

- The product in front of you has gone through several quality assurance checks.
- It is recommended you double-check your order is correct.
- Inspect no damage occurred during transportation.
- Identify 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 because of defective product being installed.
- If adhesives were exposed to freezing temperatures, place indoors and bring to room temperature between 18°C (65°F) and 23°C (72°F) before using.
- Read Technical Data Sheet and SDS for adhesive.
- Check adhesive cans for damage that may have occurred during transit.
- DinoGrip adhesive has a 12-month shelf life.
- Chemrex 858 ml Caulking Tubes have a 12-month shelf life.
- Refer to batch number on adhesive and contact Dinoflex to determine if it has expired.
- Dinoflex is not responsible for expired adhesive used at the time of installation.

Storage:

- Store mats in a dry and clean area.
- Adhesive must be stored above 18°C (65°F) in a dry heated space.
- Before placing any Dinoflex product in storage remove the pallet strapping.
- Leave plastic cozy on during storage.

Section II

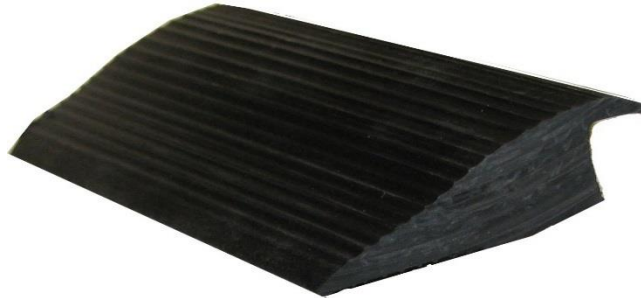
Tools & Accessories

Tools and Safety Equipment Required:

- Dinoflex Installation Guidelines – installation video available at <https://www.youtube.com/watch?v=VX6Aiz7vakc>
- A two-person installation is required for large areas (one to handle materials and one to handle adhesive)
- Safety glasses
- Rubber Gloves
- Heavy duty utility knife
- Markers to indicate cut measurements
- Measuring tape
- Transit level and straight edge
- Chalk snap-line

- Drill and mixer for adhesive
- V-notch trowel 1/16" (1.6mm)
- Carpenter's square
- Putty knife
- Flat-head screw driver
- Clean cloths
- 858 ml adhesive caulking gun, if needed to adhere reducer strip

Reducer Strips -



Sizes:

- 5/16" (8mm) x 12' length
- 3/8" (10mm) x 12' length
- 1/2" (12mm) x 12' length

Adhesive

- If adhesives other than the products listed below are being used, these installation guidelines do not apply and could void the warranty. Contact Dinoflex for verification.
- For detailed information and product use, refer to Technical Product Data Sheet, included with adhesive.

DinoGrip Adhesive (V.O.C. compliant)

- Single component polyurethane adhesive
- 4 US gallons: 57lbs (25.8kg)
- Approximate coverage: 400ft² (37.16m²)
- 1/16" V-notched trowel supplied

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

- Single component polyurethane adhesive
- 858 ml gun grade: (29 oz tube)
- Approximate coverage:
 - 1/8" (3mm) bead = 345 lineal feet
 - 3/16" (5mm) bead = 153 lineal feet
 - 1/4" (6mm) bead = 86 lineal feet
 - 5/16" (8mm) bead = 55 lineal feet
 - 3/8" (10mm) bead = 40 lineal feet

- It is not uncommon for a moisture cure urethane product to develop a slight skin on the top surface.
- The product is still good; simply remove the skin and mix adhesive well.

Treatments

- For most installations, it is not necessary to seal or coat Dinoflex Recycled Rubber Mats.
- In certain installations, a treatment may be appropriate.
- DinoCoat is recommended to improve the visual effects of framing and uneven distribution of color granules (shade variation).

Section III

Preparation of the Sub-surface

- The sub-surface must be level, clean and dry and all debris must be removed.
- Remove all old adhesive.
- Debris left under mats will cause height variations.
- A rough or uneven sub-surface will result in an uneven installation.
- If the sub-surface has been previously sealed or finished the surface may need to be stripped to ensure an adequate bond.
- 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 may be available on request.
- Contact Dinoflex for verification.

Concrete Sub-surfaces

- New concrete sub-floors must be thoroughly cured and free from hydrostatic pressure (a minimum of 30 days after pour).
- Consult adhesive specifications for allowable moisture tolerance.
- Concrete substrates should not exceed 85% RH and/or 5lbs x 24-hours x 1000 sq. ft.
- Moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869 must be completed.
- 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.
- 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.

Wooden Sub-surfaces

- Wood sub-surface must be a minimum of 1" thickness, and free from any flex movement. (5/8" on joists with a 3/8" overlay is acceptable)
- 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 and screws 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.

Section IV

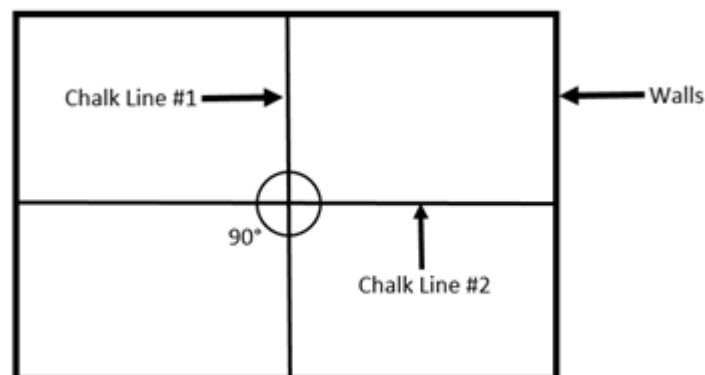
Before Starting the Installation

General Information

- Ensure all other trades are completed work prior to installing Dinoflex Recycled Rubber Flooring.
- 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 ambient temperature:
 - All HVAC systems must be fully operational 24-hours prior to beginning the acclimation process.
 - Rubber flooring must be installed between 18°C (65°F) and 23°C (72°F). Any fluctuations in temperature or humidity will cause expansion or contraction of the mats; a 3°C fluctuations in temperature can cause dimension or instability of the product.
 - Minimum temperature range for adhesive use is 18°C (65°F)
 - 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.

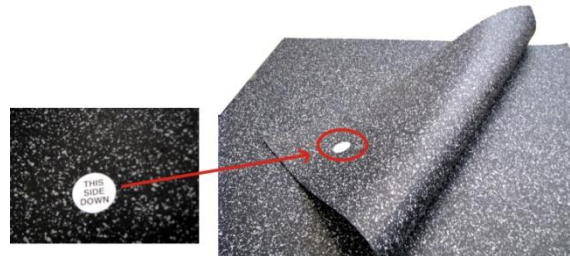
Chalk Lines

- Locate the midpoint of the room, chalk a start line down the center. Chalk another similar start line 90° to the first one. (figure 1)



Acclimation

- At least 48 – 72 hours before starting the installation lay out all mats on the sub-surface, in piles of two or less, to allow them to acclimate.
 - Storage longer than 2 weeks may require a longer acclimation period.
 - Mats in the lower portion of the stack will compress to a greater degree than those in the upper portion.
- A mat laid down in the morning hours at 0°C (32°F) would be a different size than a mat laid at 20°C (68°F) later in the day.
- Acclimation should only begin once the sub-surface has reached a temperature between 18°C (65°F) and 23°C (72°F).
- Acclimation is complete when the products have reached a consistent dimension and remain consistent after a 24-hour period (factory dimensions: 38" x 38" = 10.02ft² with a thickness tolerance of ± 0.5mm).
- Product is completely acclimated when consistent dimensions are achieved. Some products under certain conditions have shown reduction in size of up to 1/8" (3.2mm).
- If the material is installed in any other condition than specified Dinoflex is not responsible.
- **Do not install** the mats if they are not square and the appropriate thickness has not been reached.
- Each mat is marked with a label stating:
 - **This Side Down** do not remove these labels until final glue down commences.
 - Laminated Next Step mats are not marked with this sticker; dry lay is important in avoiding shade variance.
 - Make sure that all mats are laid down with the "label" pointing in the same direction. (I.e. Bottom left corner)
 - Be sure to mix mats from several different pallets to blend minor shade variations.
 - Install mats same side up as received, **Do Not Flip Over** (I.e. sticker bottom left)



Dry lay Process

- Mats must be laid out as a dry lay before final installation starts.
- This will allow for any uneven color distribution to be seen and mats can be adjusted before final installation.
- Framing or uneven distribution of color granules may appear in a mat. This may be improved by rotating the mat 90° or installing it in a less visible area.
- 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.
- Framing or uneven distribution of color granules (shade variation) is not considered to be a product defect.
- Dinoflex recommends DinoCoat to improve the visual effects of framing and uneven distribution of color granules (shade variation).
- Scythe marks are inherent in the manufacturing of recycled rubber flooring products and are considered normal.
- Certain lighting conditions can accentuate these marks and as such is not considered a product of defect.

Cutting

- Lay mat 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, etc. a cardboard template is suggested.
- Join factory cut edges together. Hand cut edges should be used against perimeter walls only.

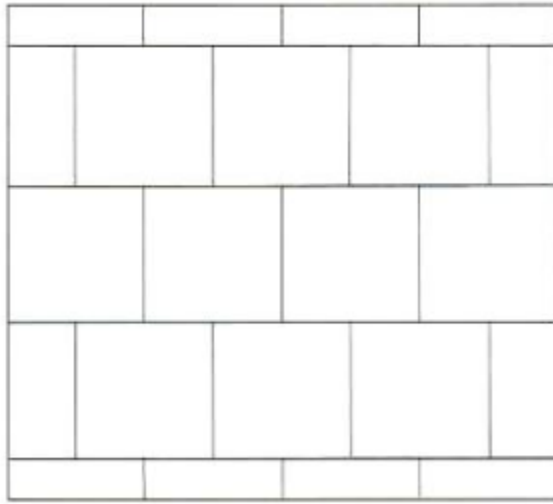
Arranging the Mats

- The installer should have all relevant information about the mat arrangement from the owner.
- If installing a logo, please go to Logo information.
- If no logo, please go to Mat Layout.

Mat layout

- Following the above instruction for the directional stickers ensure each mat is facing the same direction.
- Begin mat layout from the point where the two chalk lines intersect.
- Work outwards in both directions.
- Start second row on either side of the center line towards the chalk line.
- Make sure that second row is installed by staggering the mats. This will avoid any four corners from meeting at one spot. **(see figure 2)**
- Attach reducer strip to mats with compatible, non-solvent based adhesive or caulking.

Figure 2



Section V **Installation**

General Installation Information

- Glue down installation is required for all square edge mats.
- This installation method and mat format is a must for areas of extreme temperature and humidity change, or where surface moisture may be present after installation, i.e. ice arenas, locker rooms and entry ways.
- Higher temperatures and humidity can cause the adhesive to cure faster.
- Use safety glasses, rubber boots, and rubber gloves when applying adhesive. Do not allow adhesive to cure on your hands.
- Room must be well ventilated.
- For first aid and safety instructions see labels on can and the Safety Data Sheet.
- All substrates must be structurally sound, smooth, clean, dry, free from dust, loose material, grease, oil, wax, sealers, curing agents and other foreign materials.
- Refer to adhesive label for working time.
- Ensure to work in small areas so the adhesive does not set before laying the mat.
- Apply adhesive with 1/16" (1.6mm) V-notch trowel (available from Dinoflex).
- When applying adhesive, glue must be spread evenly on the sub-surface to avoid differences in mat height.
- Remove excess glue with putty knife so it does not cure; dried adhesive on an adjacent row will cause height variations.
- Using a larger trowel will result in excess adhesive coming up between seams.
- Tape is not required for square cut mats as it will leave a residue and cannot be removed from the top surface. Low tack painters can however be used but needs to be removed immediately after install.

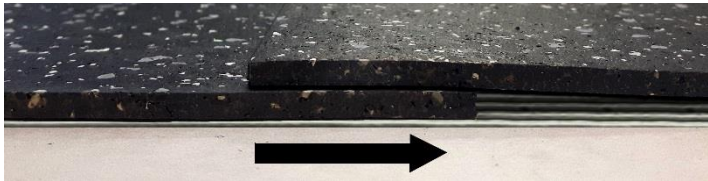
Clean Up Adhesive

- Do not get adhesive on the top surface of the rubber flooring as it is virtually impossible to remove.
- Dinoflex does not warranty product where the attempt to remove adhesive has been made. Any damage to the mat because of adhesive removal is solely that responsibility of the installer.
- Contact your Dinoflex supplier immediately for suggested cleaning methods if this happens.
- Caution; the use of mineral spirits can cause the area to appear darker as can intense rubbing action from your hands.

Mat Installation

- Please see above General Installation Information for first steps.
- Please see Mat Layout for starting point.
- Put the mat that you are installing on top of the mat already glued down and pull towards the area you want to fill until the mat falls into place, then firmly press the mat up to edge of existing mat.
- This will keep excess adhesive from protruding between the seams. **(see figure 3)**

Figure 3



- Allow 72-hours setting time before post install cleaning.
- Avoid heavy traffic or rolling loads during curing to prevent indentation or movement of mats.

Logo Installation

Logo Arrangement Information

- All logos are assembled at the factory prior to being shipped to ensure a precise fit has been achieved.
- Logos do not ship completely assembled.
- Logo pieces are labelled and supplied with reference graphic for installation.
- Use care when handling logo pieces to protect them from damage or loss.
- Logos are packaged depending on logo size
 - One mat logos are usually packaged in a separate box
 - Larger logos are packaged on top of the pallet
 - Smaller pieces are always packaged separately in either a plastic bag or small box

Logo Layout

- Confirm required logo location from site drawings or by confirming with building owner.
- Dry lay logo complete with background mat in desired location.

- Confirm edges of background mat are squared to ensure a tight fit of all pieces.
- Acclimate as per guidelines previously mentioned in this guide.
- Mark Location on all sides to ensure correct placement during glue down.
- Carefully remove logo and place to the side (low tack painters' tape may be used to hold pieces in place during this step, but tape must be removed immediately after logo is installed).
- Each logo is supplied with a reference image for installation.
- Spread adhesive in area of logo placement as per the logo layout as directed above.
- Be extremely careful not to use too much adhesive, as it could seep through small pieces onto surface of the logo mat. Do not get glue on the top side of any logo pieces.
- If adhesive does get on the top side of the logo immediately wipe with a clean damp cloth.
- Carefully place background mat and logo pieces into place, starting with larger pieces.
- Gently adjust pieces to ensure a good fit.
- Extreme care should be taken when rolling logo mats. Roll carefully and use a roller weight that is suitable for mat thickness.
- 6mm mats should be rolled with caution using a 50lb roller.
- Continue to install surrounding floor, being careful to protect logo from all traffic. Cover with clean drop cloth if possible until the remainder of the installation is complete.

Rolling

- Roll each row as completed or within 25 minutes and roll the entire floor when project is completed.
- Work in both directions. Note that adhesive is slippery when first spread and mats will shift position even if only disturbed slightly.
- No foot traffic of any kind should be allowed for the 48-hours, allow 72-hours for maximum strength.
- Too much rolling or too heavy of a roller could cause the mats to buckle and adhesive to move upwards through the seams.
- Furthermore, stretching of the rubber flooring can eventually lead to gaps between the mats.
- Do not pivot the roller as it will stretch the mats.
- Do not twist or pivot feet when rolling; roll in long straight lines.

Roller Guideline

5/32" - 1/4" (4mm - 6mm) mat thickness – use a 50lb roller –

5/16" - 3/8" (8mm- 10mm) mat thickness – use a 70lb roller

1/2" (12mm) thick floor – use a 70lb roller

(14mm) thick floor – use a 70lb roller

(16mm) thick floor – use a 70lb roller

(18mm) thick floor – use a 70lb roller

(20mm) thick floor – use a 70lb roller

(22mm) thick floor – use a 70lb roller

All Next Step Walk Soft mats use a 50lb roller

Recycled Rubber Treatments:

- Please note that treating recycled rubber is not required for all applications.
- Mats with a predominance of light-colored EPDM will be easier to clean and maintain if treatment is applied.
- Mats with cork infused into the EPDM must be coated with DinoCoat.
- Contact your Dinoflex Supplier for the correct choice in your application.

Section VI

Cleaning & Maintenance

Initial Cleaning Post Installation

- When installation is complete, and adhesive is fully cured (at least 72-hours),
 - Sweep floor to remove any debris, then dust mop thoroughly to remove all surface dust and dirt using a dust mop or microfiber mop.
 - Use a Neutral PH Cleaner or DinoClean (see dilution rates on label).
 - Do not use any oil base cleaners as they will deteriorate the mats.
 - Damp mop with DinoClean Concentrated Recycled Rubber Floor Cleaner diluted with warm water; use a microfiber mop.
 - Use a two-bucket system and change the water frequently.
 - If floor has an excessive amount of dirt or dust present, additional cleaning with a light weight auto scrubber may be required.
 - An RPM of 185 and brush pressure between 35 and 85lbs are recommended. See Deep Cleaning below for details.
 - If disc type equipment is used, be sure to use a soft nylon brush, not a pad.
 - Do not flood the floor.
 - Allow to dry thoroughly (6-8 hours).
 - Apply treatment of DinoCoat according to instructions provided by Dinoflex if desired.

General Maintenance Information

- Use a commercial microfiber mop. Do not use a string mop.
- Products containing solvents and acids will attack the composite structure of the rubber flooring and cause deterioration.
- Sealants, waxes, etc. can alter the surface characteristics and appearance.
- Dinoflex **does not** assume any responsibility for damages caused by chemical additives.

Daily/Weekly Cleaning:

- Dust mop floor thoroughly.
- Damp mop using a microfiber mop. Use a two-bucket system with DinoClean Concentrated Recycled Rubber Floor Cleaner or a Neutral PH Cleaner and change water frequently.
- For high traffic locations, an auto scrubber may be required.
 - See above for scrubber specifications
- When cleaning equipment/furnishings with disinfectant or other strong cleaners, be careful that overspray or excess cleaner does not drip onto the rubber flooring.

- Strong chemicals may cause the surface to deteriorate.

Deep Cleaning

- Follow steps above for weekly cleaning; ensure to pre-treat the floor using DinoClean Concentrated Recycled Rubber Floor Cleaner diluted with water.
- Clean the floor using a low RPM (185) auto scrubber with soft nylon brush.
 - Recommended brush pressure is between 35 and 80lbs.
 - If a single disc rotary machine is used, these steps should be taken:
 - Mix DinoClean Concentrated Recycled Rubber Floor Cleaner with water in a bucket.
 - Use a microfiber mop to liberally dampen floor.
 - Let solution act for approximately 5 minutes.
 - Use scrubber machine with soft nylon brush.
 - Pick up slurry with a clean mop.
 - Use clear water to rinse; change rinse water frequently.
 - Remove excess water for quicker drying.

Dilution Rates

DinoClean Dilution Rates		
Solution Damp Mopping Floors		
	Cleaner	Water
Regular Soils	1 Part	160 Parts of Water
Heavy Soils	1 Part	80 Parts of Water

Solution for Auto Scrubber		
	Cleaner	Water
Regular Soils	1 Part	160 Parts of Water
Heavy Soils	1 Part	80 Parts of Water

Section VII

Weights & Measures

Pallet (Net Weight) 65lbs (29.5 kg)

Thickness	0-29% Color		30-50% Color		51-70% Color		71-99% Color		100% Color	
	lbs each	# per pallet	lbs (kg) each	# per pallet	lbs (kg) each	# per pallet	lbs (kg) each	# per pallet	lbs (kg) each	# per pallet
5/32" (4mm)	10	200	10.5	200	11	200	13.5	175	15	165
3/16" (5mm)	13	180	13.5	180	14	170	16	150	19	125
1/4" (6mm)	16	150	16.5	150	17	140	18	130	22.5	110
9/32" (7mm)	18	130	19	125	19.5	120	21	110	25	100
5/16" (8mm)	20	120	21	110	22	110	24	100	28	90
11/32" (9mm)	21.5	110	23	100	24.5	98	27	90	32.5	74
3/8" (10mm)	23	100	25	100	27	90	30	80	37	65
1/2" (12mm)	27	80	29	80	32	75	36	65	46	55
9/16" (14mm)	36.5	64	37	63	37.5	62	40	58	41.5	56
5/8" (16mm)	42	56	42.5	55	43	54	45.5	51	47	50
11/16" (18mm)	47	50	47.5	49	48	49	50.5	46	52	45
3/4" (20mm)	53	44	53.5	44	54	43	56	42	59.5	39
7/8" (22mm)	58.5	40	59	40	59.5	39	62	38	65	36

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

Product Information – Rubber Flooring Mats:

Thickness Tolerance of $\pm 0.5\text{mm}$

Dimensions: 38" x 38" = 10.02ft² (96.5cm x 96.5cm = 0.93m²)

Dinoflex Recycled Rubber Innovators

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