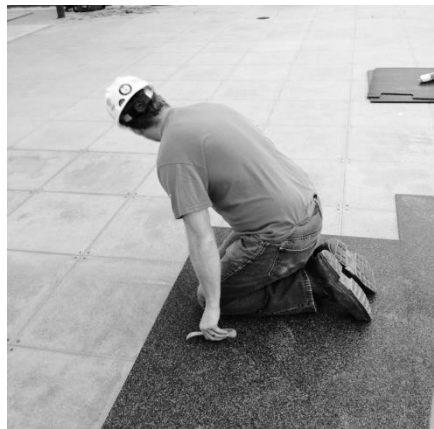




Square Cut Glue Down Installation



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 Siena Rubber Tile.

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SECTION I

MATERIAL STORAGE & HANDLING

General packaging information:

All Siena rubber tile 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 Siena 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.

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. Siena 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 Siena 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 Siena 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.

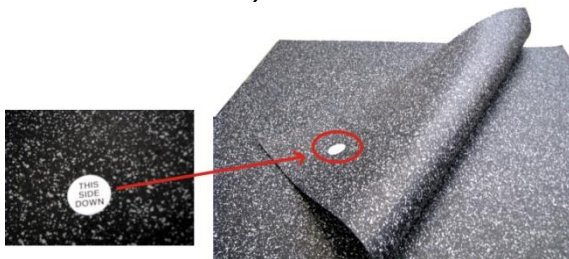
Long term storage should be considered as two weeks or longer.

F) It is important to keep a clean working surface at all times. Protect tiles from dust and dirt. Install only after all other trades are completed.

G) Keep Siena Rubber Tile 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 may be available on request.

I) Install rubber tile flooring same side up as received. Reversing tiles may result in visible shade differences in finished surface. Each tile is marked with a label stating: **THIS SIDE DOWN** DO NOT remove these labels until final glue down commences. Make sure that all tiles are laid down with the "label" pointing in the same direction. Framing or uneven distribution of color granules may appear in a tile. This may be improved by rotating the tile 90 degrees or installing it in a less visible area. Be sure to mix tiles from several different pallets to blend minor shade variations. Install tiles same side up as received, **DO NOT FLIP OVER**. (ie: sticker bottom left)



DO NOT REMOVE THESE STICKERS DURING THE ACCLIMATION PROCESS. THEY SHOULD NOT BE REMOVED UNTIL ACTUAL GLUING COMMENCES.

SECTION II

TOOLS & ACCESSORIES

A) Tools and safety equipment required:

- Siena Installation Guidelines
- Safety glasses
- Heavy duty utility knife - Suggested product: CH Hanson Speed Rocker SS, 3 position, fixed blade knife (www.chhanson.com)
- Measuring tape
- Transit level and Straight edge
- Caulking gun, if needed to adhere reducer strip
- Chalk snap-line
- Drill and mixer for adhesive
- V-notched trowel 1/16" (1.6 mm)
- Carpenter's square
- Rubber boots & gloves

B) Reducer strips

Sizes:

- 5/16" – 3/8" (8 mm – 10 mm)
- 1/2" (12 mm)

All are available in black solid core and 12ft lengths.



5/16" – 3/8" side view
(8mm – 10 mm)



1/2" side view
(12 mm)

Attach reducer strip to mats with compatible, non-solvent based adhesive or caulking.

C) 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**.

Siena recommended adhesive:

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

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

- One component polyurethane adhesive
- 858 ml gun grade: (29 oz tube)
- Approximate coverage:
 - 1/8" (3mm) bead = 260 lineal feet
 - 5/16" (8mm) bead = 30 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. Siena is not responsible for expired adhesive used at the time of installation.

D) Recycled Rubber Treatments

For most installations, it is not necessary to seal or coat Siena recycled rubber tiles. However, in certain installations, a treatment may be appropriate. Siena recommends DinoCoat to improve the visual effects of framing and uneven distribution of color granules (shade variation). Please contact your client service representative for application details.

SECTION III

BEFORE STARTING THE INSTALLATION

Ensure all other trades are completed work prior to installing Siena Rubber Tile 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.

Siena 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 90 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.

SECTION V

INSTALLATION OF SQUARE CUT TILES

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

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. Framing or uneven distribution of color granules (shade variation) is not considered to be a product defect. Siena 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 defect. Glue down installation is required for all square edge tiles. This installation method and tile 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.

1. ARRANGING THE TILES:

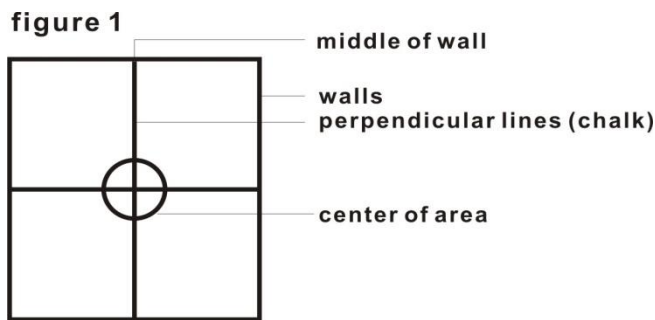
The installer should have all relevant information about the tile arrangement from the owner.

Note: If installing a logo, see SECTION VII now.

Each tile is marked with a label stating: **THIS SIDE DOWN** DO NOT remove these labels until final glue down commences. Make sure that all tiles are laid down with the "label" pointing in the same direction. Framing or uneven distribution of color granules may appear in a tile. This may be improved by rotating the tile 90 degrees or installing it in a less visible area. Be sure to mix tiles from several different pallets to blend minor shade variations. Install tiles same side up as received, **DO NOT FLIP OVER.** (ie: sticker bottom left)

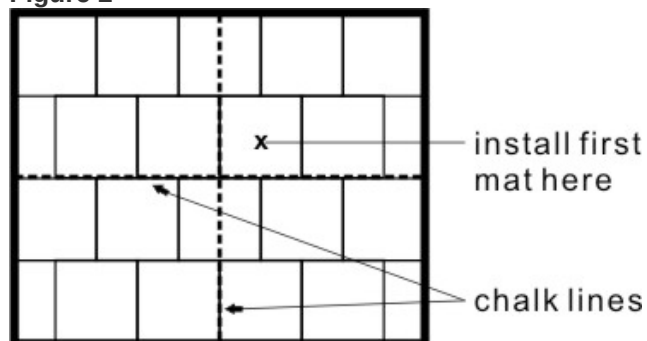
Locate the midpoint of the room, and chalk a start line down the centre. Chalk another similar start line 90 degrees to the first one. Begin mat installation from the point where the two chalk lines intersect. Work outwards in both directions.

(See figure 1).



Start second row on either side of the center line towards the chalk line. Make sure that second row is installed by staggering the tiles. This will avoid any four corners from meeting at one spot (**See figure 2**).

Figure 2



2. 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, etc. a cardboard template is suggested. Join water cut edges together. **Hand cut edges should be used against perimeter walls only.**

3. ADHESIVE:

IMPORTANT: If adhesive other than Siena recommended adhesive is used, these installation guidelines may not apply. Contact adhesive manufacturer for specific guidelines for Recycled Rubber Flooring.

A) General

- Please read DinoGrip Safety Data Sheet supplied for adhesive thoroughly before starting with the installation.
- Moisture is the single greatest cause of bonding failure. Ensure levels are at or below those accepted by adhesive manufacturer.

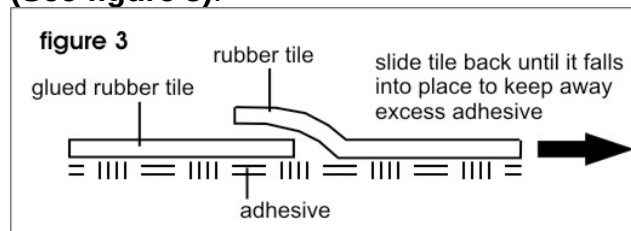
- Higher temperatures and humidity cause the adhesive to cure faster.
- Use safety glasses, rubber boots, and rubber gloves when applying adhesive.
- Room must be well ventilated.
- For first aid and safety instructions see labels on can, Safety Data Sheet, and MSDS.

B) Applying Adhesive

DO NOT GET ADHESIVE ON THE TOP SURFACE OF THE RUBBER FLOORING AS IT IS VIRTUALLY IMPOSSIBLE TO REMOVE. Siena does not warranty product where an attempt to remove adhesive has been made. Contact your Siena immediately for suggested cleaning methods if this happens. CAUTION; the use of mineral spirits can cause the seams to appear darker as can intense rubbing action from 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 1/16" (1.6 mm) V-notch trowel. Using a larger 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.**

Put the tile that you are installing on top of the tile already glued down and pull towards the area you want to fill until the tile falls into place, then firmly press the tile up to edge of existing tile. This will keep excess adhesive from protruding between the seams (**See figure 3**).



DO NOT use tape of any kind during installation. Tape residue cannot be removed from the top surface.

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

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

C) 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 tiles will shift position even if only disturbed slightly. No foot traffic of any kind should be allowed for the next 48 hours, allow 72 hours for maximum strength. 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. Furthermore, stretching of the rubber flooring can eventually lead to gaps between the tiles.

Guideline:

5/32" (4mm) thick floor - use a 50 lb. roller
1/4" (6mm) thick floor - use a 50 lb. roller
5/16" (8 mm) thick floor – use a 70 lb. roller
3/8" (10mm) thick floor - use a 70 lb. roller

D) Clean Up Adhesive

Do not allow excess adhesive to come in contact with top surface of rubber flooring as it is virtually impossible to remove.

CAUTION: The use of mineral spirits or similar products to remove adhesive will alter the surface appearance of the tiles. Any damage to the tiles as a result of adhesive removal is solely the responsibility of the installer.

4. RECYCLED RUBBER TREATMENTS:
Please note that treating recycled rubber is not required for all applications. However products with a predominance of light colored EPDM will be easier to clean and maintain if treatment is applied. Contact your Siena Representative for the correct choice in your application.

A) Post Construction Cleaning

When installation is complete and adhesive is fully cured (at least 72 hours), sweep floor to remove any debris, then dry vacuum thoroughly to remove all surface dust and dirt using a high CFM vacuum. Using DinoClean, according to label instructions, scrub the floor with a cylindrical brush auto scrubber. If disc type equipment is used, be sure to use 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 Siena if desired.

SECTION VI

CLEANING & MAINTENANCE

A) INITIAL CLEANING POST INSTALLATION

When flooring installation is complete, sweep floor to remove any debris, then dry vacuum thoroughly to remove all surface dust and dirt using a high CFM vacuum. 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 been unprotected during construction and an excessive amount of dirt or dust is present, additional cleaning with a light weight auto scrubber equipped with a soft nylon brush may be required. An rpm of 185 and brush pressure between 35 and 85 lbs are recommended. See Periodic Cleaning below for details.

B) GENERAL MAINTENANCE

Typically, Siena Rubber Tile Flooring requires less maintenance than other types of flooring. Vacuuming then damp mopping with warm water is the preferred method. A commercial microfiber mop is recommended. Do not use a string mop. Use a two bucket system with DinoClean Concentrated Recycled Rubber Floor Cleaner and change the rinse water frequently. 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. Siena **does not** assume any responsibility for

damages caused by chemical additives.

DILUTION RATES:

Solution for Auto Scrubbers:

Regular soils = 1 part to 500 parts water.

Heavy soils = 1 part to 160 parts water.

Solution for Damp Mopping Floors:

Regular soils = 1 part to 160 parts water.

Heavy Soils = 1 part to 80 parts water.

1. Non-Sealed Floors

Daily/Weekly Cleaning:

- Dry vacuum floor thoroughly.
- Damp mop using a microfiber mop. Use a two bucket system with DinoClean Concentrated Recycled Rubber Floor Cleaner and change water frequently.
- For high traffic locations, a low rpm (185) auto-scrubber with soft nylon brush may be required. Brush pressure between 35 and 85 lbs is recommended.
- 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.

Periodic 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 80 lbs.

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 microfiber mop to liberally dampen floor.
- Let solution act for approximately 5 minutes.
- Use scrubber machine with soft nylon brush.

SECTION VII

- Pick up slurry with a wet vac or clean mop.
- Use clear water to rinse; change rinse water frequently.
- Remove excess water for quicker drying.

2. Sealed Floors

Daily/Weekly Cleaning

- Dry vacuum or dust mop floor thoroughly.
- Damp mop using a microfiber mop. Use a two bucket system with DinoClean Concentrated Recycled Rubber Floor Cleaner and change water frequently.
- For high traffic locations, a low rpm (185) auto scrubber with soft nylon brush may be required. Brush pressure between 35 and 85 lbs is recommended.
- 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.

Periodic cleaning:

- Dry vacuum or dust mop floor thoroughly.
- Wet scrub floor with DinoClean Concentrated Recycled Rubber Floor Cleaner. This application is done with an auto scrubber or single disc rotary machine (use red pad or lighter) and wet vacuums.
- Let solution act for approximately 5 minutes and then scrub.
- If using a single disc rotary machine pick up slurry with a wet vac or clean mop.
- Use clear water to rinse; change rinse water frequently.
- Remove excess water for quicker drying.
- Apply 1-2 thin coats of DinoCoat using microfiber mop, if desired.
- In certain environments, the floor may become scuffed due to heavy foot traffic and may require more frequent spray buffing with a red or white pad. When spray buffing use DinoCoat diluted 50/50 with water.

LOGO INFORMATION

All logos are assembled at the factory prior to being shipped to insure a precise fit has been achieved. Use care when handling logo pieces to protect from damage or loss.

- Custom logos are packaged depending on logo size.
 - a) One mat logos are usually packaged in a separate box
 - b) Larger logos are packaged on top of the pallet
 - c) Smaller pieces are always packaged separately in either a plastic bag or small box
- Use care when opening the packaging of small logo pieces as they may fall out.
- Refer to Section I, Material Storage & Handling.

LOGO INSTALLATION

1. Confirm required logo location from site drawings or by confirming with building owner.
2. 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.
3. Mark location on all sides to ensure correct placement during glue down.
4. 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).
5. Spread adhesive in area of logo placement following installation instructions. Be extremely careful not to use too much adhesive, as it could seep through small pieces onto surface of the logo tile. **DO NOT GET GLUE ON THE TOP SIDE OF ANY LOGO PIECES.**
6. Carefully place background mat and logo pieces into place, starting with larger pieces.
7. Gently adjust pieces if necessary to ensure a good fit.
8. Extreme care should be taken when rolling logo tiles. Roll carefully and use a roller weight that is suitable for tile thickness. **6mm tiles should be rolled with caution using a 50 lbs roller.**
9. Continue to install surrounding floor, being careful to protect logo from all traffic. Cover with clean drop cloth if possible until installation is complete.

These steps are given as a guideline only. Installations with multiple logos may require alternate methods. Please consult your Siena representative if additional information is required.



One Mat Logo



Two Mat Logo

SECTION VIII

WEIGHTS & MEASURES

GENERAL PACKAGING INFORMATION

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

Product Information – Rubber Flooring Tiles:

Thickness tolerance of ± 0.5 mm

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

	0-29% Color		30-50% Color		51-70% Color		71-99% Color		100% Color	
Thickness	lbs (kg) 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 (4 mm)	10 (4.5)	200	10.5 (4.8)	200	11 (5)	200	13.5 (6.1)	200	15 (6.8)	200
1/4" (6mm)	16 (7.3)	150	16.5 (7.5)	150	17 (17.7)	140	18 (8.2)	130	22.5 (10.2)	110
5/16" (8mm)	20 (9)	120	21 (9.5)	110	22 (10)	110	24 (10.9)	100	28 (12.7)	90
3/8" (10mm)	23 (10.5)	100	25 (11.3)	100	27 (12)	90	30 (13.6)	80	37 (16.8)	65
1/2" (12mm)	27 (12.3)	80	29 (13.2)	80	32 (14.6)	75	36 (16.4)	65	46 (20.9)	55

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.

Product is completely acclimated when consistent dimensions are achieved. Some products under certain conditions have shown reduction in size of up to 1/4" .