Domination™ Installation

Conditions & Storage

Conditions

Areas must be enclosed weather tight and properly conditioned at a constant (± 5°F) service temperature that is between 65°F and 80°F with ambient relative humidity between 35% - 65%. In addition, the substrate surface must be at least 5°F above dew point for 72 hours prior to, during, and for 24 hours after the installation.

Note: Dew point calculators are available on the web. Windows etc. must also be covered for 2 hours prior, during, and for 24 hours after installation.

Storage

Do not stack pallets and store in dry conditions between 65°F and 80°F.

Adhesive & Coverage	Duo-Bond Adhesive, coverage is ~ 100 square foot / gallon
Apply using a 1/16 inch x 1/16 inch x 1/\16 inch V-notched trowel (ACT)	
Concrete Moisture Limits	80% RH and the surface must not exceed 9 pH and have an effective vapor retarder when using adhesive.

For interlocking tiles, the surface must be porous and have an effective vapor retarder.

Note: It may not be the flooring contractor's responsibility to conduct moisture testing. It is, however, the floor contractor's responsibility to make sure these tests have been conducted and that the results are acceptable prior to installation.

Test following the protocol of ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes, the results must not exceed the published limits.

All on or below grade concrete subfloors must have a confirmed effective vapor retarder pre-installed underneath that meets the requirements of ASTM E1745 Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs. If not, then use a moisture mitigation system that conforms to ASTM F3010 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings. This system must be applied following the manufacturer's written instructions.

Note: All ASTM documents are available from astm.org.

Preparation

Warnings

All Safety Data Sheets (SDS) and Warranty requirements must be read, understood and followed. The Occupational Safety and Health Administration (OSHA) has exposure limits for people exposed to respirable crystalline silica; these limits must be followed. All local, state and federal regulations must be followed, this includes but is not limited to the removal of in-place asbestos containing material.

Wooden Subfloors

Unless stated otherwise all wooden subfloors must be prepared in accordance with ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring. The substrate must be clean (without contaminates), dry (≤ 8% moisture content) and structurally sound and smooth enough for the project.

Wood floors must be double layer construction with a minimum total thickness of 1 inch. The subfloor must be rigid, free from movement, and have at least 18 inches of well-ventilated air space below. Sleepers must not be directly in contact with concrete or earth, and the ground beneath the subfloor must be covered by a suitable vapor retarder. Do not install directly over Masonite™, Lauan, fire retardant products, particle or chipboard. Then proceed to “Smooth & Flat”.

Note: Joints in plywood may show (mirror) through to the finished flooring as wood will expand and contract with changes in ambient humidity levels.

Gypsum Subfloors

Unless stated otherwise all Gypsum subfloors must be prepared in accordance with ASTM F2678 Standard Practice for Preparing Panel Underlayments, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayments, and Concrete Subfloors with Underlayment Patching Compounds to Receive Resilient Flooring. Then proceed to “Smooth & Flat”.

Concrete Moisture

Vapor Retarder & Mitigation

All on and below grade concrete slabs must have a confirmed and effective vapor retarder installed directly underneath the slab that meets the requirements of ASTM E1745 Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs. If this cannot be confirmed then use a moisture mitigation system that conforms to ASTM F3010 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings. This system must be applied following the manufacturer's written instructions.

Moisture Limit

Testing must be performed in accordance with the current ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes. The results must not exceed the limits of the adhesive being used.

Concrete Porosity

For interlocking tiles, the concrete subfloor must be porous. Test for porosity according to ASTM F3191 - Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring.

Note: The water droplet must be absorbed within 5 minutes to be considered porous. Diamond grinding (or similar) the concrete surface open to make it porous is acceptable.

Concrete Subfloors

Unless stated otherwise, all concrete subfloors must be prepared in accordance with ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. The substrate must be clean (without contaminates), structurally sound and smooth enough for the flooring and end user. When required, use only commercial grade leveling or patching compounds with ≥ 3000 psi that also meet the moisture requirements of the subfloor. If the subfloor has standing water, hydrostatic pressure, ASR, or if chemical adhesive removers have been used, do not install; contact the Matter Surfaces Technical Department.

Underfloor Heating

This is suitable providing the adhesive line does not exceed 85°F, and the system is not used for 72 after the installation. When it is used, the temperature must not be increased more than 5°F per day, or thermal shock may cause bond failure.

Joints & Cracks

No expansion joint or moving joint should be covered over or filled as subfloor movement may cause installation failure. Use a suitable industry standard expansion joint assembly system as required.

Leveling & Patching Compounds

If required, meet the “Smooth & Flat” requirements (below), using a commercial grade (≥ 3000 psi) suitable leveling underlayment or suitable patching compound, following the manufacturers written instructions and limitations. These must also meet the given moisture level and allow to cure fully/dry before proceeding.

Other Subfloors

Do not install over any rubber floor; for all other subfloor/substrates contact Matter Surfaces Technical Department. Matter Surfaces accepts no liability for any failure due

to other manufacturers flooring products or the possible breakdown of that flooring bond from the subfloor for any reason.

Smooth & Flat

All substrates must be both smooth (ridge-free) and with a minimum flatness and a gradient tolerance of ≤ 3/16” over 10 feet.

Installation Instructions

Acclimatization

Do not stack pallets and store in dry conditions between 65°F and 80°F.

For the project, the tiles must be stacked no more than ten tiles high on a flat, parallel and level floor on site for at least 72 hours to acclimate, if the material is distorted or otherwise damaged during storage or transportation, do not install it.

Note: Do not turn over any tiles during the re-stacking process as this can lead to a shade variation in color.

Measure the length, width, and thickness of the tile at the top of the stack and tiles at the bottom of each stack. If they do not match then do not proceed with any adhesive or cutting until they do. This can be a result of remaining stacked for two weeks or more and could take up to 72 hours longer to acclimate, dry laying them helps reduce the time required.

Tools

Personal protective equipment (PPE) – tape measure – straight edge – pencil – string line – utility knife with blades – scribing tool – thermo-hygrometer – 100-lb. three section roller – Infrared thermometer – adhesive trowel handle with FCA blades– camera phone.

Layout

Follow the detailed layout drawings provided, or agreed upon by the designer, architect or end user. Calculate and mark out your start lines using a string line, straight edge, and pencil.

Both Domination™ square cut and interlocking tiles must be installed using the ashlar (brick bond) method.

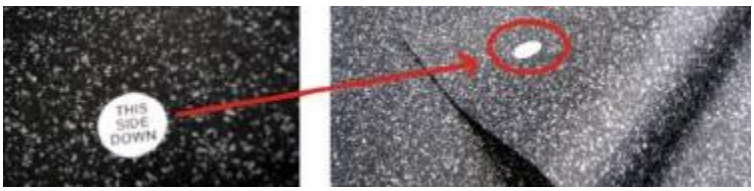
Square Edge Tile Installation (with adhesive)

Recommendation*:* Perform a simple adhesive test to determine the amount of open time with your given site conditions, in an area away from your start lines. Apply ~ one square foot of Duo-Bond adhesive using the correct notched trowel on the prepared substrate and record the “working time”. Every ten minutes use a finger-tip with a light

touch to see when there is no longer adhesive transfer to your finger. This must be regarded as the end of the “working time”. Remove the adhesive test. When installing it is the flooring contractor’s responsibility to take into consideration the working time of the adhesive and make adjustments for areas that will dry faster or slower due to air movement etc.

Each tile is marked with a sticker stating: “THIS SIDE DOWN” (as shown below) do not remove these labels until the 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 the same side up as received, do not flip over.

Note: Install rubber tile flooring same side up as received. Reversing tiles may result in visible shade differences in the finished surface.



HEPA filtered vacuum. Using your start line dry lay the tiles from the center outwards (north/south). Make sure that tiles do not run off from your lines. Butt each tile to the prior tile(s), do not pressure fit them. If the first few tiles are not installed correctly, it will adversely affect the entire installation. Install the second row (perpendicular) starting at the center and lay all the tiles into position using the pyramid method following the design and cut all the perimeter tiles to fit last.

Once completed, remove a workable section not too large as the flooring must be installed within the working time of the adhesive (wet-set) resulting in full transfer to the back of the flooring. Neatly stack the tiles (in order) and again clean the substrate.

Adhesive Application

Do not spread more adhesive than can be covered with a floor covering within the working time. The flooring must be installed into the adhesive while it is still tacky (prior to curing). Periodically lift the material to confirm proper adhesive transfer to the backing. The floor temperature directly affects the setting time. The warmer it gets, the faster the adhesive sets; the cooler it gets, the slower the adhesive sets.

Apply Duo-Bond adhesive with a 1/16 inch x 1/16 inch x 1/16 inch V-notched trowel (ACT) evenly without the formation of puddles or voids. Do not make any sharp turns with the adhesive trowel as this practice can result in uneven, adhesive, drying and bond failure. Never force dry adhesives or patching compounds by using fans. Do not get adhesive on the surface as it is very difficult to remove. If the adhesive has become too dry, then remove and replace it.

***Note**:* Do not apply fresh adhesive over drying adhesive (remove it) as this may result in lippage. Replace worn trowels to ensure the proper spread rate and do not re-notch them.

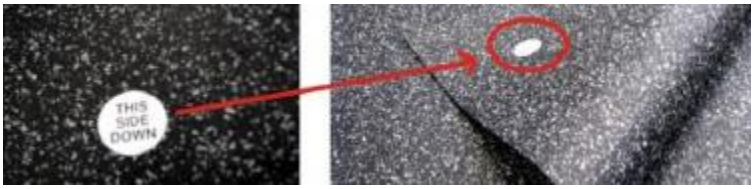
Keeping within the “working time”, remove the sticker and replace the stacked tiles back into the correct position in the adhesive bed. Immediately after placement into the adhesive bed, slowly roll in both directions using a heavy roller (minimum 100 lbs.) and repeat the rolling process after 1 hour. Only if required, place weights on any lifting edges or corners to ensure proper bonding. Repeat this procedure for the remainder of the project. Do not allow any foot traffic for 12 hours, ice skate blades and cleats for 48 hours or heavy rolling loads for 72 hours.

Interlocking Tile Installation

First, ensure the area is clean using a HEPA filtered vacuum.

Note: Install rubber tile flooring same side up as received. Reversing tiles may result in visible shade differences in the finished surface.

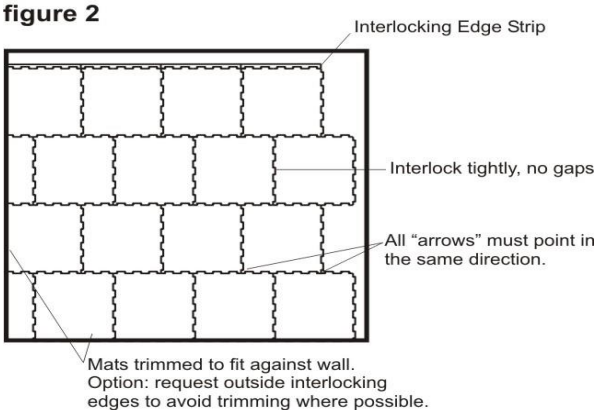
Each tile is marked with a sticker stating: “THIS SIDE DOWN” (as shown below) do not remove these labels until the final glue down commences. Make sure that all tiles are laid down with the “label” pointing in the same direction. Framing or uneven distribution of color granules may appear in a tile. 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 the same side up as received, do not flip over.



Start from the center of the room ensuring that the tile is laid exactly along the pencil lines. Work outward from the first tile in both directions, assure a tight fit by tapping the interlocking edges together using a rubber mallet while making sure that tiles do not run off the guidelines. Start the second row etc. (brick-bond) also at the center of the area and continue to complete it per the design.

Note: Cut the perimeter tiles to fit last.

figure 2


Interlocking Edge Strip
Interlock tightly, no gaps
All “arrows” must point in the same direction.
Mats trimmed to fit against wall.
Option: request outside interlocking edges to avoid trimming where possible.