



## on PAD INSTALLATION: GX11, GX12, GX13

This installation method is used to place the GratedeX® Outdoor Flooring System® on surface pads (Ped-Tite® connectors) over any bearing surface and supporting either gauged stone/tile or pavers with a ½” drainage/air space between the bottom of the GratedeX® underlayment and the bearing surface. THIS INSTALLATION CAN BE CONSTRUCTED SO THAT ALL GratedeX® UNDERLAYMENT PANELS are removable, SELECTED PANELS are removable or NONE are removable.

### 1. PLAN AND LAYOUT DECKING SHAPE

This installation method assumes the use of the Ped-Tite® pedestal connector. The GratedeX® underlayment panels (48”x48”x1”) can be installed as removable panels or bonded to each adjoining panel as a permanent surface using the Weld-Tite® adhesive. There are no size or shape limitations when using this product. If this is a new application although, plan the surface layout based on the GratedeX® underlayment panel size, the finished stone/tile size and joint spacing to minimize cutting and waste. Recommended stone/tile spacing is 1/8”. Minimum spacing is 1/16”. If the GratedeX® panels are removable, the stone/tile will need to be laid out to fit the 48”x48” GratedeX® panel dimension. If the panels are glued together, there are no stone/tile placement restrictions.

>>>>**NOTE FOR PAVERS:** When using pavers, no spacing is recommended. Panels can be removable without limiting paver layout.

### 2. DETERMINE EDGE AND TRIM DETAIL

If placed on an elevated waterproofed surface, a curb, parapet wall or fascia edge will be required to retain the finished underlayment and surface since it will not be fastened to the bearing surface. No edge trim is usually required except for possible exposed scupper openings. (See EDGE DETAIL information.)

### 3. BUILD BEARING SURFACE

Construct a suitable bearing surface to support the GratedeX® system and load transfers from the underlayment to the Ped-Tite® connectors spaced at 24” O.C. and with a 6” footprint. The bearing surface could be a waterproofed terrace, an old concrete surface or prepared site soils. When using gauged stone/tile, the GratedeX® decking system weighs 8-10 lbs. per square foot. The GratedeX® system can be placed directly on the bearing surface. There is NO interconnection between any waterproofing and the GratedeX® system so waterproofing requirements are NOT defined or controlled by the GratedeX® system. (See the Affiliate Tab on the web site for products.)

>>>>**NOTE FOR PAVERS:** ALL PAVER APPLICATIONS WILL REQUIRE LARGER FRAMING MEMBERS if the bearing surface is a waterproofed terrace.. *Consult with a licensed structural engineer for specific site considerations.*

### 4. PLACE Ped-Tite® PADS

Ped-Tite® pads will be placed every 24” O.C.; 9 Ped-Tite® per 48”x48” GratedeX® panel. NOTE: The number of Ped-Tite® parts supplied with each panel is less than 9 since adjoining panels will use the same pad. One is placed in the center and eight on the perimeter. Determine pad placement by preparing a layout grid on the waterproofing with 48 1/8” O.C. squares. *The 1/8” is for a gap between each 48”x48” GratedeX® panel if the panels will be removable.* Select the starting panel from which other panels will be aligned and leveled. Locate pad placement at each intersecting corner, at 24” O.C. along each side and in the center. If the bearing surface is waterproofing and if

necessary, place an additional protective layer over the waterproofing at each pad location. This could be an additional layer of the same waterproofing material. Determine the correct orientation of the Ped-Tite® for proper interlock with the GratedeX® underlayment panel. If desired, secure the center Ped-Tite® to the waterproofing surface with an adhesive that is compatible with the waterproofing membrane. (Check with the manufacturer). This will make it easier to remove the panel at a later date without having to reposition this pad. Alternatively, the center Ped-Tite® could be glued to the GratedeX® panel. Bond other pads as necessary. The first GratedeX® underlayment panel can be set.

## **5. PLACE GratedeX® UNDERLAYMENT PANELS**

The GratedeX® underlayment panel measures 48"x48". The panels must be placed with the correct side up. Product label on panel edge has an arrow, "THIS SIDE UP". Confirm by checking the thickness of the bars; the narrow bar thickness should be to the top side. Any creative shape can be constructed, but designing around the 48"x48" dimension will reduce waste. The GratedeX® underlayment panel can be cut with a segmented wet/dry diamond blade on a skill saw or a carbide-grit jigsaw blade. Cutting channels are provided to cut the panel at 24" and 16", leaving a solid edge on all pieces. If rough edges remain, sand smooth with a sanding disc mounted to a grinder. Wear eye, nose and mouth protection during these operations. The panel can be cut in any shape without reducing structural integrity. Seal exposed cut pieces with a 2-part resin or spray sealer (see Affiliate Links on the web site).

Set the first panel onto the Ped-Tite® pad connections. Continue the process for setting all adjoining panels. Use the Ped-Tite® EPDM spacer if leaving a 1/8" space between panels for future removal.

**>>>NOTE IF GLUING WITH Weld-Tite® ADHESIVE:** If the GratedeX® underlayment panels will be glued together so as to not be removable, do not place the rubber spacer between panels but instead, apply a bead of Weld-Tite® adhesive and slide panel edges together. Panel edges may not fully contact. Adhesive will bridge a 1/8" gap.

## **6. PLACE METAL TRIM**

*Skip this step if there are no visibly exposed edges or if cut edges have been sealed as described in STEP 5.*

All visibly exposed and cut edges of the GratedeX® underlayment panels should be flashed with metal trim. Use any stock "L" flashing that measures a minimum 1-1/2"x1"; available from most building centers in black, brown, gray, white, galvanized. Cut to length and dry fit in position. Overlap metal trim joints a minimum of 1/2". If the metal has an oil residue, clean the gluing surface with a dry rag or denatured alcohol. Apply a bead of Hold-Tite® adhesive to the metal trim. This material can be dispensed using a 20 oz. sausage gun. Apply one fat bead along the inside angle of the trim and set in position with a firm squeeze to ensure proper contact and uniform alignment. **UNCUT EDGES DO NOT NEED TO BE COVERED.** Cover only for aesthetic reasons.

**>>>NOTE IF USING Hold-Tite® CS ADHESIVE SHEETS:** If trimming with metal, cut the extra CS adhesive sheet into 3/4" wide strips. Place several pieces along the inside of the metal that will contact the face of the GratedeX® underlayment panel. Material bonds on contact so be sure of placement.

## **7. PLACE GratedeX® SURFACE MATERIAL**

Based on tile size and pattern, determine the best layout and starting point. Tiles can be laid in any pattern orientation or across panel joints. Predetermine where cut edges will be located. The best visual presentation is achieved with full tiles on the perimeter edges unless there is a planned border pattern. Minimum recommended cut size is 4"x4" or 16 sq". Maintain visually straight joint lines using the GratedeX® panel grid as a guide, a metal straight edge, or tile spacers. The back of the tiles and the GratedeX® panel surface must be clean and dry. Remove any loose material or debris with a brush or damp rag. Apply the adhesive (see specific adhesive instructions below). Continue the setting process until the tiled surface is complete. Maintain uniform joint spacing throughout. Standard spacing between tiles is 1/8". Spacing should not be less than 1/16" or greater than 1/4". Wet cut pieces should be towel dried and then air-dried for 2-5 minutes before applying adhesive. All joints are left open to allow

moisture to drain off of the finished surface. If sealing the surface, wait 7-10 days to ensure a full cure of the Hold-Tite® TA adhesive. No waiting required for the Hold-Tite® CS adhesive. **NOTE:** If the GratedeX® panels are glued together, the stone/tile can be placed in any orientation or pattern. If the panel(s) is to be removable, the stone/tile must be installed to the panel edge, leaving a 1/8" gap between the stone/tile on adjoining panels.

>>>>**STONE/TILE with Hold-Tite® TA Trowelable Adhesive:** Prepare to apply the Hold-Tite® adhesive using a 20 sausage gun. Apply adhesive in a continuous ribbon to the back of the stone/tile. Hold the adhesive back 1/8" from the finished edge of the tile. Once applied, set the dispenser aside. Using a 3/16" v-notched metal trowel, spread the adhesive to cover the entire back of the tile to form a continuous web of material. **The 4-20 oz. sausages provided for each GratedeX® panel will cover the 48"x48"/16sq' area.** The adhesive will skin over within 30 minutes. If this occurs it will result in a faulty bond. Replace with fresh material before setting. Place the tile onto the fiberglass panel in a single vertical motion, lowering the tile into its position. **DO NOT PLACE THE TILE AND THEN SLIDE IT HORIZONTALLY.** This method will remove all of the adhesive. Once placed in position, apply "light" hand pressure to ensure full contact with the GratedeX® underlayment panel. Too much pressure will displace the adhesive and weaken the bond. **IMPORTANT:** Some natural stones will have uneven back surfaces. Material should not be used that is out of spec or additional adhesive may be required and a faulty installation may occur. Tiles that do not sit flat or rock when dry set on a flat surface will have the same condition when fully set. Tiles with this condition should not be used. The adhesive is not intended to be a leveling material. If the tile is placed incorrectly, it can be removed with minimal difficulty for up to 1 hour. After this point, prying could cause the tile to crack or displace and break the bond of adjoining tiles. The finished surface can handle light traffic after 24 hours. The product is fully cured in 7-10 days. Warmer temperatures accelerate the curing process. Any Hold-Tite® TA adhesive that comes in contact with any finished surface can be cleaned with Mineral Spirits while wet or sometimes rubbed off when cured.

>>>>**STONE/TILE with Hold-Tite® CS Contact Sheet:** This material is pre-cut to fit a standard 16"x16" gauged stone or manufactured tile (actual size: 15 3/4" x 15 3/4"). If using small stone/tile, pre-cut the adhesive sheet with scissors or a utility knife before removing the backing. Peel the backing half way on one side of the adhesive sheet. Place the Hold-Tite® CS (15 1/2" x 15 1/2") onto the back of the stone/tile holding it back 1/8" from the edge. Maintain a square alignment with the stone/tile edge and roll out smoothly peeling the backing sheet while pressing with a roller or raze to ensure full contact with the stone/tile. Be sure there are no bubbles or ridges in the adhesive. Remove the backing from the second side of the Hold-Tite® CS adhesive sheet. Be sure of the exact position of the stone/tile to be placed. This material bonds on contact and cannot be removed and reused. Place the stone/tile and press firmly to ensure full contact. This material can be walked on immediately. No cure time is required.

>>>>**PAVERS Dry-Laid:** *NOTE: Curb pavers do not have to be glued in position on a pad installation if there is another structural curb retaining the paver edge.* Begin by placing perimeter pavers to form a curb. Use the Hold-Tite® TA to bond pavers in place. **NOTE: THIS IS NOT INCLUDED WITH THE PACKAGE AND MUST BE PURCHASED SEPARATELY.** Apply adhesive to the bottom of the paver and trowel with a 3/16" v-notch trowel. Place onto the GratedeX® underlayment. Apply light pressure to ensure bond. Continue the same steps to complete the edge curb placing a small dab of adhesive to the adjoining but ends of the curb pavers. Follow all other instructions for using the Hold-Tite® TA adhesive above. Once the paver curb is complete, place all inside pavers. Place a 6 oz. construction fabric over the entire surface of the GratedeX® underlayment. This is an optional sound deadening technique. Continue to place all pavers. No sand fill is required.

## **TOOLS NEEDED**

- A segmented wet/dry diamond blade and a skill saw if cutting the GratedeX® underlayment
- A 20 oz. sausage gun if using the Hold-Tite® TA adhesive; one if using the Hold-Tite® CS adhesive
- A 10.3 oz caulking gun if using the Weld-Tite® adhesive
- Atlas style tight fitting, tight grip rubber gloves and cleaning rags
- Tools to cut stone or tile