



matting / athletics / flooring

## CONSTELLATION TILE INSTALLATION

### SECTION I

#### MATERIAL STORAGE & HANDLING

##### General packaging information:

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

##### A) On receipt of merchandise:

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 Edgewood is not responsible for any installation costs that occur as a result of defective product being installed.

**Texture or shade variations may appear in a tile. This may be improved by rotating the tile 90 degrees or installing it in a less visible area.**

##### B) 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.

##### C) 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 3, to allow them to acclimate. A tile laid down in the morning hours at 0°C (32°F) would be a different size than a tile laid at 20°C (68°F) 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 18°C (65°F) and 23°C (72°F). Acclimation is complete when the products have reached a consistent dimension (Dimensions: 38" x 38": = 10.02 ft<sup>2</sup> with a thickness

tolerance of + 0.25 mm); if the material is installed in any other condition than specified Edgewood is not responsible. Installation should only occur when the sub-surface temperature is between 18°C (65°F) and 23°C (72°F). Short term storage should be considered as two weeks or less.

##### D) Installation after prolonged storage

Before placing any Edgewood 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 3 tiles. Acclimation should only begin once the subfloor 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 (Dimensions: 38" x 38": = 10.02 ft<sup>2</sup> with a thickness tolerance of + 0.25 mm). Installation should only occur when subfloor temperature is between 18°C (65°F) and 23°C (72°F).

**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.

**E)** 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.

**F)** Keep Constellation surfacing dry. Moisture will cause adhesion problems.

**G)** 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.

**H)** Install Constellation tile flooring same side up as received. Texture and shade variations may appear in a tile and are not considered a defect. 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.

## SECTION II

### TOOLS & ACCESSORIES

#### A) Tools and safety equipment required:

- Edgewood Installation Guidelines
- Safety glasses
- Heavy duty utility knife -
- Measuring tape
- Transit level and Straight edge
- Caulking gun, if needed to adhere reducer strip
- Chalk snap-line
- Drill and mixer for adhesive
- Square-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 at 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.

## SECTION III

### BEFORE STARTING THE INSTALLATION

Ensure all other trades are completed work prior to installing Constellation 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. Edgewood 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.

## **SECTION V**

### **A) INSTALLATION OF SQUARE CUT TILES**

**Important:** See SECTION I, (C) and (D) 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.

**Texture or shade variations is not considered to be a product defect. Certain lighting conditions**

**can accentuate differences in appearance of the tiles and should be considered during the dry lay.** 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.

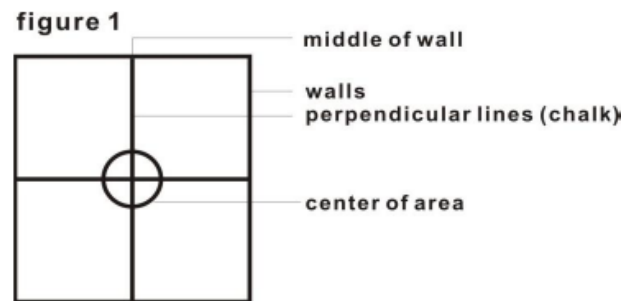
#### **1. ARRANGING THE TILES:**

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

**Texture or shade variations 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.**

Locate the midpoint of the room, and chalk a start line down the center. 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.

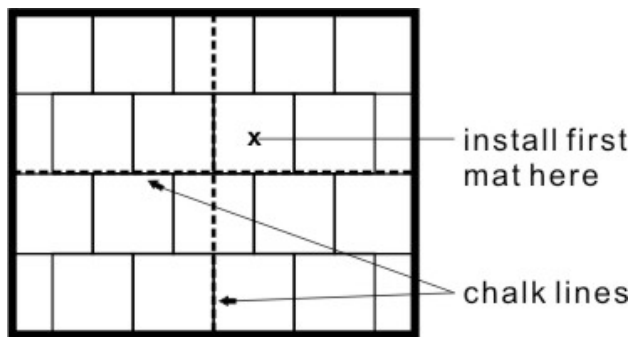
**(See figure 1 for chalk lines).**



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 for ashlar installation example).**

**IT IS VITAL THAT TILES ARE INSTALLED IN AN ASHLAR PATTERN, NOT CORNER TO CORNER. EDGEWOOD WILL NOT SUPPORT A CORNER TO CORNER INSTALLATION.**

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 Edgewood recommended adhesive is used, these installation guidelines may not apply. Contact adhesive manufacturer for specific guidelines for Recycled Rubber Flooring.

#### General

- Please read MF Bond IT Safety Data Sheet and Technical 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, and rubber gloves when applying adhesive.
- Room must be well ventilated.
- For first aid and safety instructions see labels on can, and Safety Data Sheet.

#### Applying Adhesive

**DO NOT GET ADHESIVE ON THE TOP SURFACE OF THE CONSTELLATION FLOORING AS IT IS VIRTUALLY IMPOSSIBLE TO REMOVE.**

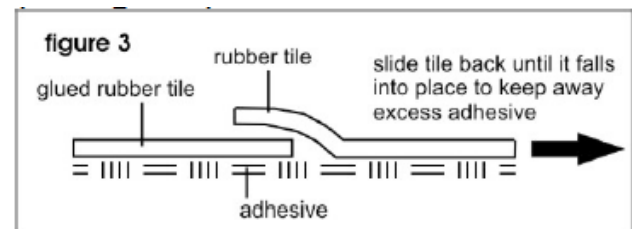
**Edgewood does not warranty product where an attempt to remove adhesive has been made. Contact**

**your Edgewood supplier immediately for suggested cleaning methods if this happens.**

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 recommended trowel (available from Edgewood). Using a larger trowel will result in excess adhesive coming up between seams. There may be a slight thickness variation in the overall thickness of the tile; floating the tiles with the adhesive will aid in creating a level surface when rolled. **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).

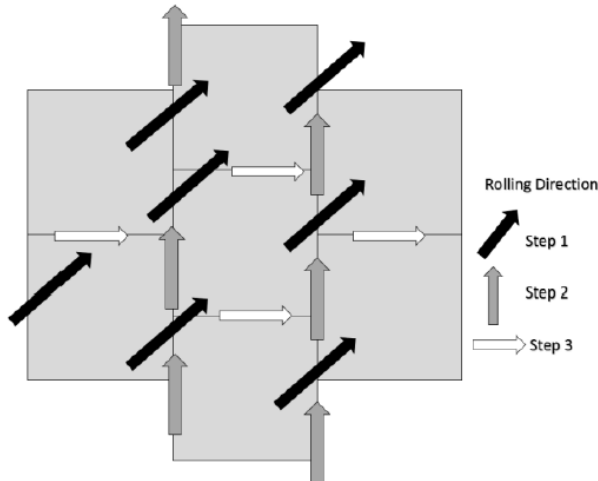


Allow 72 hours setting time before post install cleaning. Avoid heavy traffic or rolling loads during curing to prevent indentation or movement of tiles.

**Use seam holding tape to pull and hold seams together tightly until the glue cures! Remove within 24 hours after being applied.**

#### Rolling

Roll each row as completed or within 25 minutes and roll the entire floor when project is completed. Work in all three directions. Note that adhesive is slippery when first spread and tiles will shift position even if only disturbed slightly. (pulling and secure seams with tape will help mitigate movement) No foot traffic of any kind should be allowed for the next 48 hours, allow 72 hours for maximum strength. A 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 Constellation flooring can eventually lead to gaps between the tiles.



**Guideline:**

5/16" (8 mm) thick floor – use a 70 lb. roller  
 3/8" (10mm) thick floor - use a 70 lb. roller  
 1/2" (12mm) thick floor – use a 70 lb. roller

**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: Any damage to the tiles as a result of adhesive removal is solely the responsibility of the installer.**

**B) INSTALLATION OF INTERLOCK TILES**

**Important: See SECTION I, (C) and (D) 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.

**Texture or shade variations is not considered to be a product defect. Certain lighting conditions can accentuate differences in appearance of the tiles and should be considered during the dry lay.**

**Loose Lay, No Glue Installation**

This installation method is for indoor, completely dry areas only. Interlocking tile installations should be retained on all perimeters. Glued in place transitions or double-faced tape must be applied to un-retained edges.

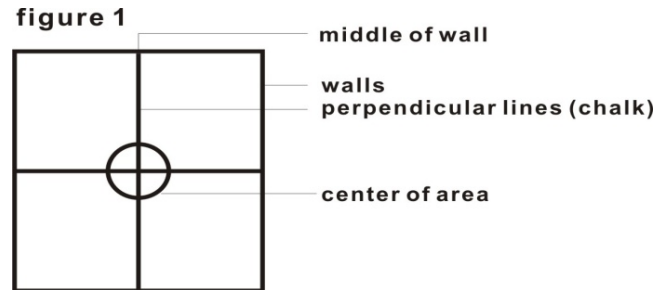
**MEASURING & CUTTING:**

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.**

**Method 1) Center room start**

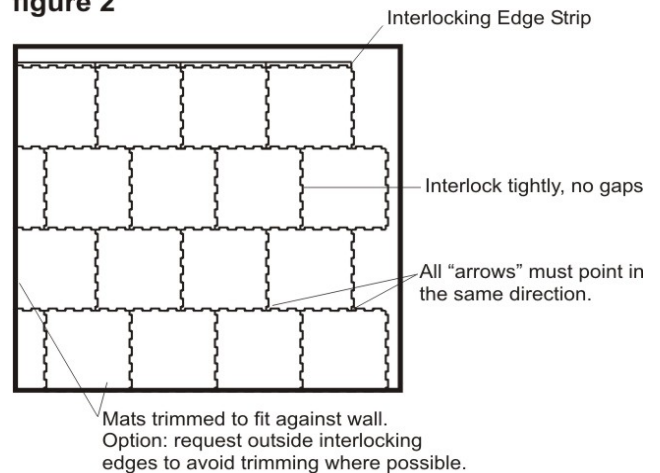
Locate the midpoint of the room, and chalk a start line down the center. Chalk another similar start line 90 degrees to the first one. Begin mat installation from the point where the two chalk lines intersect. Work outwards in both directions. (See figure 1)



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 for ashlar installation example).

**IT IS VITAL THAT TILES ARE INSTALLED IN AN ASHLAR PATTERN, NOT CORNER TO CORNER. EDGEWOOD WILL NOT SUPPORT A CORNER TO CORNER INSTALLATION.**

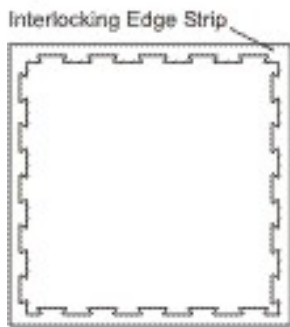
**figure 2**



In order to create a finished straight edge be sure to trim off the interlocking tabs.

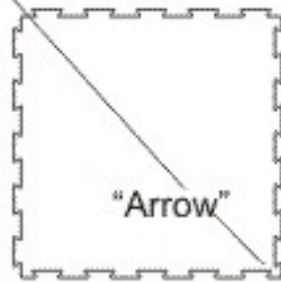
Make sure that all tiles are laid down with the “arrow” pointing in the same direction (**See figure 2b**).

**figure 2A**



**figure 2B**

All “arrows” must point in the same direction.



### **Method 2) Corner of room start**

This method may be used for smaller projects: Start in one corner with a mat, trimming the interlocking edge tabs off on the two adjoining sides that will be against the corner walls. Continue laying one row of full mats across the room, trimming the interlocking tabs on the side along the wall. Trim the last mat to fit. Using the trimmed piece, go back to the starting point and start the next row. This will minimize cutting waste. If the final row of mats needs to be cut to fit, the trim pieces will be waste. NOTE: Trimmed pieces can only be used in their original orientation; they cannot be flipped to fit in another direction.

**DO NOT LEAVE AN EDGE UN-RETAINED. IF AN INSTALLATION IS BEING DONE IN STAGES, USE DOUBLE SIDED TAPE TO HOLD THE UN-RETAINED EDGE UNTIL INSTALLATION CAN RESUME.**

## **SECTION VI**

### **CLEANING & MAINTENANCE**

#### **A) INITIAL CLEANING POST INSTALLATION**

When flooring installation is complete, dust mop floor to remove any debris. Damp mop with RF HD Cleaner (Profi) diluted with warm water; use a microfiber mop. 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, Constellation Flooring requires less maintenance than other types of flooring. Dust mop the

floor then damp mop with warm water. A commercial microfiber mop is recommended, RF HD Cleaner (Profi) changing the water frequently. Products containing solvents and acids will attack the composite structure of the Constellation flooring and cause deterioration. Sealants, waxes, etc. can alter the surface characteristics and appearance. Edgewood does not assume any responsibility for damages caused by chemical additives.

### **DILUTION RATES:**

#### **Solution for Auto Scrubbers:**

Regular soils = 1-2 oz. / gallon  
Heavy soils = 3-4 oz. / gallon

#### **Solution for Damp Mopping Floors:**

Regular soils = 1-2 oz. / gallon  
Heavy Soils = 3-4 oz. / gallon

#### **1. Daily/Weekly Cleaning:**

- Dust mop floor daily.
- Damp mop using a microfiber mop. Use RF HD Cleaner (Profi) 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 RF HD Cleaner (Profi) 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 RF HD Cleaner (Profi) 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.
- 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.

## SECTION VII

### WEIGHTS & MEASURES

#### GENERAL PACKAGING INFORMATION

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

#### Product Information – Constellation Flooring

##### Tiles:

**Thickness tolerance of  $\pm 0.5$  mm**

**Square tile Dimensions:** 38" x 38" = 10.02 ft<sup>2</sup>

(96.5 cm x 96.5 cm = 0.93 m<sup>2</sup>)

**Interlock tile Dimensions:** 36" x 36" = 9 ft<sup>2</sup>

(91.4 cm x 91.4 cm = 0.84 m<sup>2</sup>)

Thickness	lbs (kg)	#'s Skid
5/16" 8 mm	21 (9.5)	110
3/8" 10 mm	25 (11.3)	100
1/2" 12 mm	29 (13.2)	80

**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" .**