



# Entrance Flooring

## Helix Z1 Installation Instructions

Congratulations! You have just purchased a high-quality, industry proven entrance flooring system. Proper installation is necessary to ensure that your warranty will be honored by Construction Specialties.

### Important Information

Prior to the commencement of Installation, all materials MUST be inspected for damage. Any damage must be reported to Construction Specialties as soon as possible, so that replacement materials may be furnished without delay.

All work must be completed as per Architect's Approved "Shop Drawings", and in accordance with these Installation Instructions. When installation is complete, all materials must be protected from damage until the Architect's FINAL INSPECTION.

All materials should be arranged in the order that they are to be installed. All hardware required for each portion of the work should be placed with the appropriate materials.

Please review all Approved Shop Drawings and this Document to familiarize yourself with all the details and components of this assembly.

**Important:** Read through all instructions prior to starting installation.

### Do's and Don'ts

#### Do's

1. Do read and follow all Installation Instructions thoroughly prior to beginning Installation.
2. Do clean the Substrate to remove all dirt, oily films, and debris.
3. Do surround Helix with aluminum framing that is permanently fixed to substrate.
4. Do install all metal framing before laying the Helix.
5. Do make sure all male and female connectors are completely engaged. Helix may be turned upside down to engage connectors.
6. Do use a straight edge and utility knife to trim Helix.
7. Do trim perimeter tiles snug with the interior edge of framing.
8. Do trim any exposed female connectors.
9. Do install clips or metal U-channels to divide up space for units larger than 10'0" x 8'0".

#### Don'ts

10. Don't install Helix prior to the substantial completion of interior construction and significant reduction in Construction Traffic.
11. Don't install Helix on any surface nor in any recess before removing dirt, oily films and debris.
12. Don't place under rolling loads of greater than 600 lbs./wheel.
13. Don't install Helix in any area with inadequate door clearance, i.e., < 1/2" clearance where applicable.
14. Don't, in recessed applications, use base-leveling screeds that are not recommended by the Manufacturer.



To download details, specs & photos visit [www.c-sgroup.com/efs](http://www.c-sgroup.com/efs)  
For technical and design assistance call 800.233.8493

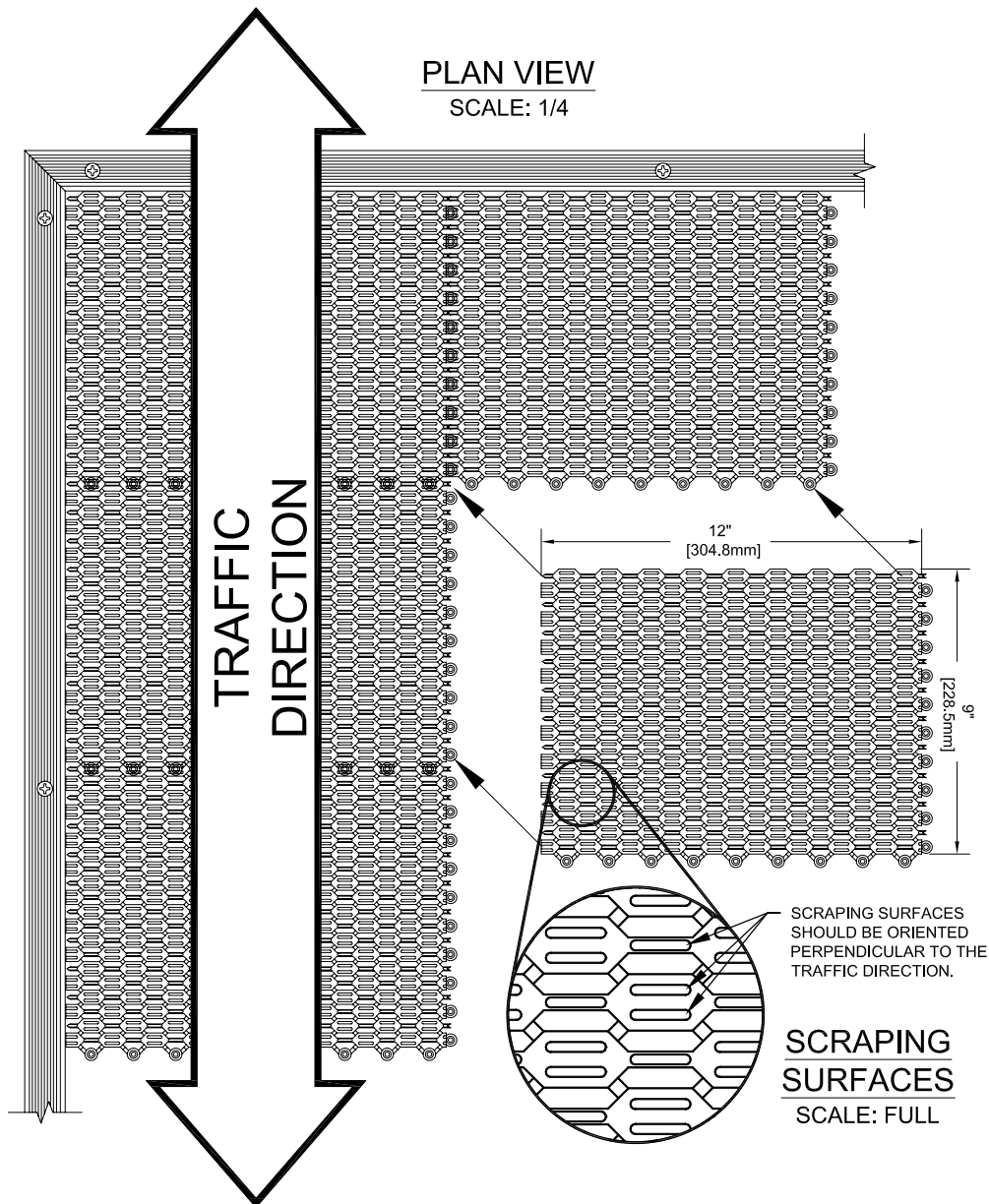
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15. Don't install Helix without the proper framing for the specified application, i.e., Tapered, Tapered Angle or Pipe Stem frames.
16. Don't leave an exposed edge of more than 1/8" in height (tripping hazard).
17. Don't install Helix tiles in less than a 3" width in any given direction.
18. Don't glue Helix down to any substrate.
19. Don't mechanically fasten Helix to any substrate.
20. Don't mechanically fasten plan-ons (handrail, fixtures, etc.) on top of Helix Z1 or Z2 mat surface.



Construction Specialties

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A full box (60 pieces at 12" x 9") of Helix Z1 will cover 5 square yards or 45 square feet. Factory pre-assembled modules are available to speed the site installation time. Each tile/module is 7/16" high. The Helix products are made from 100% recyclable PVC/NBR materials and are available in black, gray or brown frame colors.

Inspect and confirm:

- Substrate is level and in good condition
- Location is dry and free of debris
- Center point of mat area
- The scraping surface if the mat runs perpendicular to the traffic direction (see page 3)

### Step 1:

- Begin all assembly work in upper left corner of mat area.
- Orient the tile/module with the hidden connecting pin edges placed along the left and the top frame inside edges.
- The visible connecting pin lugs face to the right and downward.



### Step 2:

- Piece the next assembly on the right.
- Use a water mistine bottle to lubricate the visible lugs.
- Place hidden connection pins over the visible lugs and secure by using a rubber mallet to lock together.



### Step 3:

- Repeat step 2B and 2C working left to right.



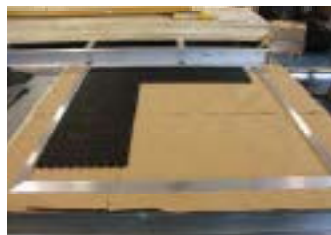
### Step 4:

- Repeat step 2B and 2C working downward.



### Step 5:

- Repeat step 2B and 2C working downward.



### Step 6:

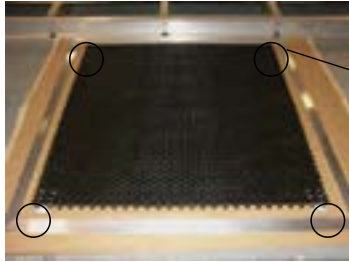
- Repeat step 2B and 2C working to the right and downward until the largest rectangle that will fit all frames is created.





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### Step 7:

- A. Center mat assembly within the frames.
- B. Attach the anchor clips using supplied masonry anchors to the pit at all four corners (see details above).
- C. For a Helix system of any size, use the sizes below as a guideline when installing anchor clips.
  - 16 ft<sup>2</sup> = 4 clips
  - 32 ft<sup>2</sup> = 6 clips
  - 48 ft<sup>2</sup> = 8 clips

### Attention:

If end pieces are less than 3" add tile to assembly width, recenter and trim ends. This will ensure that the end pieces will be greater than 3".

### Step 8:

A. Cut tile pieces equal distances from lug/pin to the alum. frame. Make sure that the appropriate side of the tile is being cut. Male/female connectors must align.



### Attention:

Do not leave exposed female connectors at any time.



### Step 9:

A. Repeat step 2B & 2C and start installing the cut tiles.  
B. Cut pieces of the tile to fit into the corners edges.



### Attention:

We recommend using a U-channel frame to separate the entrance flooring into smaller sections no greater than 8 feet in length. This make care & maintenance more manageable. U-channel frame is pre-drilled and can be installed with metal sleeve anchors.



### Step 10:

A. Finish Helix Z1 mat.

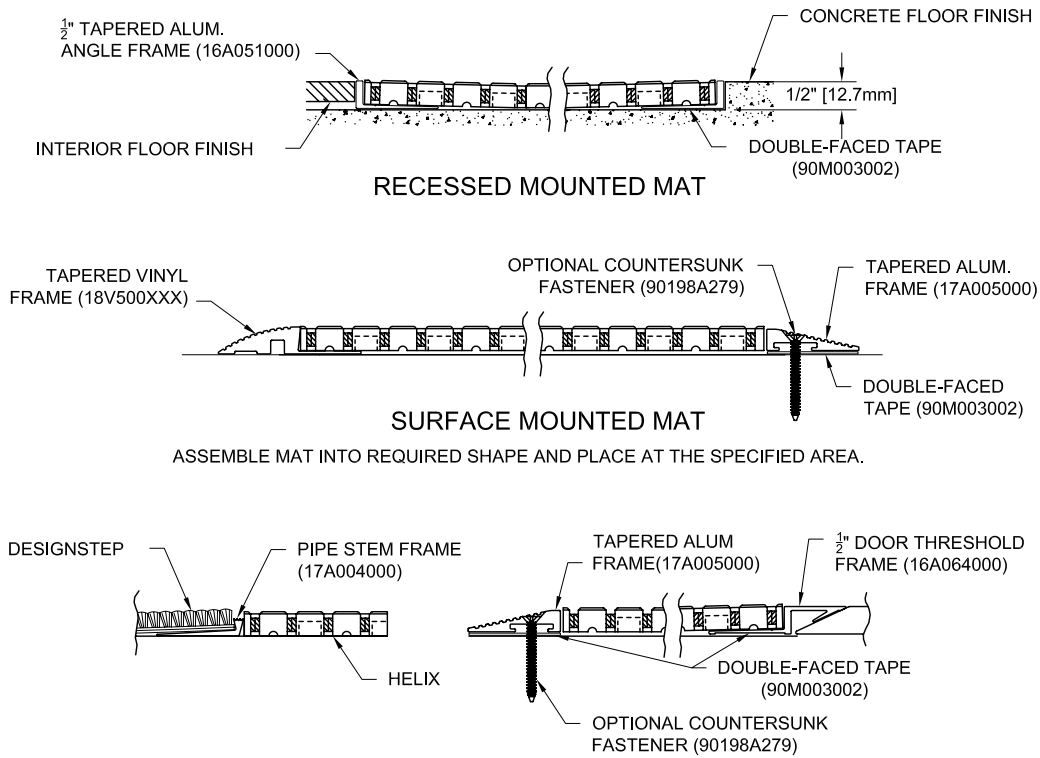




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### Framing Options



### Alternative Transitional Frames

Specified Component	Item #	Specified Component	Item #
Helix Z1 (tile)	MOUV18I001XXX	Helix Anchor Clip	18I007XXX
Tapered Vinyl Frame	FABRI18V50XXXX	#8 S/S Screw (1-1/2" L)	90198A279
Tapered Alum. Frame (Taped)	CSMFALTAM	#8 Poly. Screw Anchor (9/16" L)	97065A220
Pipe Stem Frame (Taped)	CSMFALPSM	Installation Instruction	18H
1/2" Door Threshold Frame (Taped)	CSMFALTHM		

### Care and Maintenance

- Daily mopping as required
- Periodic removal of the grid to clean recess as required
- Periodic high pressure wash of grid system as required
- If tiles are damaged, replace damaged tiles with new components. Replacement components can be purchased to renew the look and function of your grid system for a fraction of the cost of replacing the entire unit.