

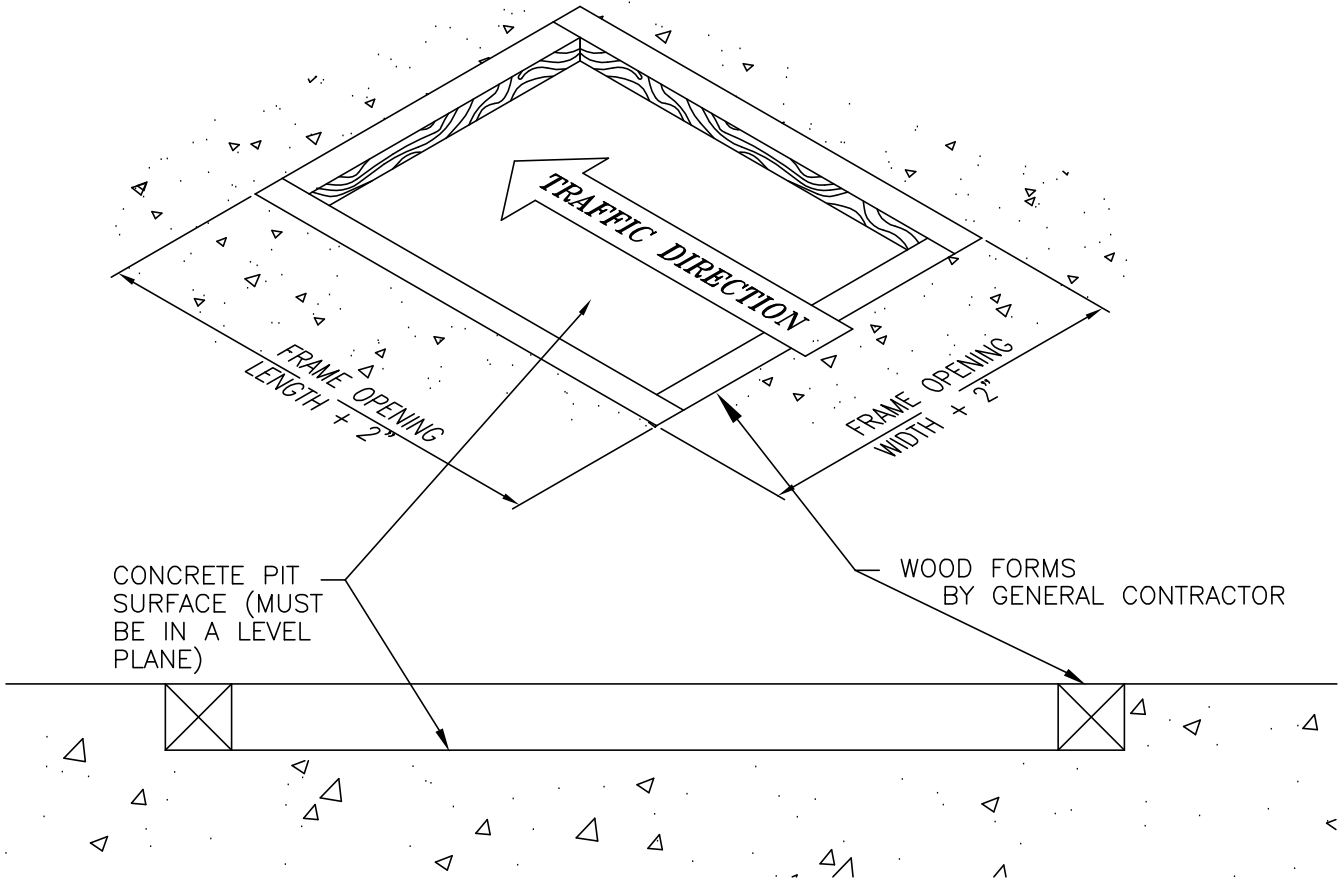
CS GROUP INSTALLATION INSTRUCTIONS

18H

HELIX™ Z1, HELIX™ Z2 & HELIX™ Z3 SERIES RM & SM

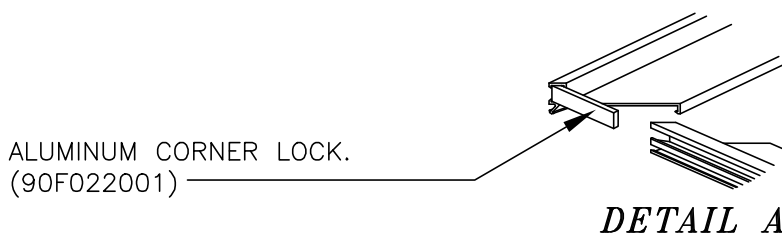
Congratulations, you have just purchased the highest quality entrance mat available. Proper installation is necessary to ensure that your warranty will be honored by Construction Specialties, Inc.

RECESSED MOUNTED MAT

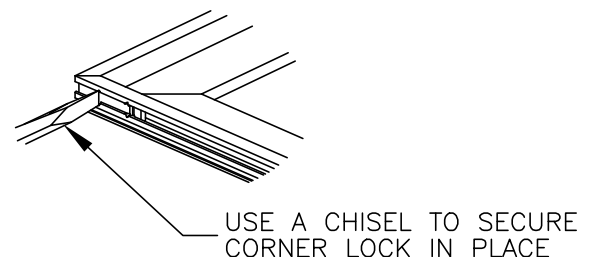


1. Before beginning installation, note that the orientation of the scraping surfaces on the mat assembly run perpendicular to the traffic direction.
2. Provide blockout in concrete 2" (50.8 mm) greater than the actual width and length of the framed mat unit. The frame depth is 3/4" (19.0 mm). Subtract finished floor depth from the frame depth and add 1/4" (6.4 mm); this dimension will be your total blockout depth.
 - The additional 1/4" (6.4 mm) allows for irregularities in the concrete base of the pit opening.
 - Irregularities beyond 1/4" (6.4 mm) will not permit the exposed frame surface and the horizontal plane of the mat surface to align properly.
3. After concrete has cured, remove wood frames.

ALUMINUM FRAME ASSEMBLY



ASSEMBLED FRAME

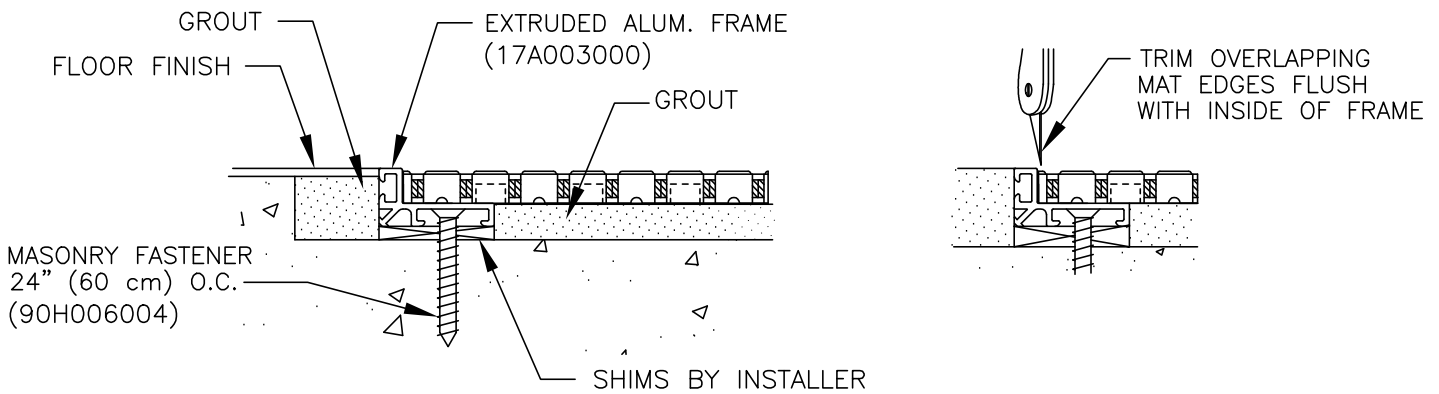


4. Assemble the pieces of the mat frame using aluminum corner locks provided.
 - * The ends of the frame pieces have been mitered to permit easy assembly. (See Detail A)
5. Center the frame assembly in the formed blockout.
 - * Note the frame assembly requires shimming to locate exposed frame surface flush with the finished floor surface.
 - * Confirm that the frame depth will accommodate the thickness of the adjacent floor finish.
6. Once the unit has been shimmed, anchor the unit in place.
7. Clean concrete blockout to remove all dirt, oily films, and debris.
8. Grout the concrete pit surface using a waterproof self-leveling grout.

Recommended brands of grout:

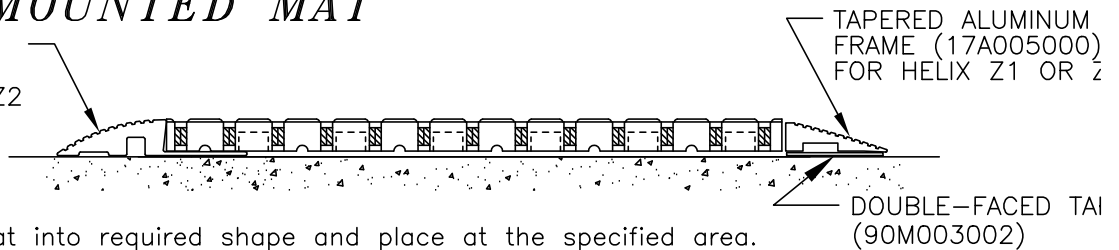
- * Quikrete #1585 mixed with #8610 acrylic fortifier
For technical assistance call Quikrete @ 404-634-9100
- * VinylCrete with acrylic fortifier
For technical assistance call F.H. Leinweber Co. @ 773-568-7722
- * Pour and level the grout using the legs within the framed opening as screed points.

9. Complete frame assembly installation by applying the grout between the frame and the concrete. Pour the grout flush with the surrounding concrete.
 - * Allow the grout material sufficient time to cure properly before installing the mat within the framed opening.



SURFACE MOUNTED MAT

TAPERED VINYL FRAME (18V500XXX) FOR HELIX Z1 OR Z2



1. Assemble mat into required shape and place at the specified area.

ALTERNATE 2-1/2" TAPERED ALUMINUM FRAME

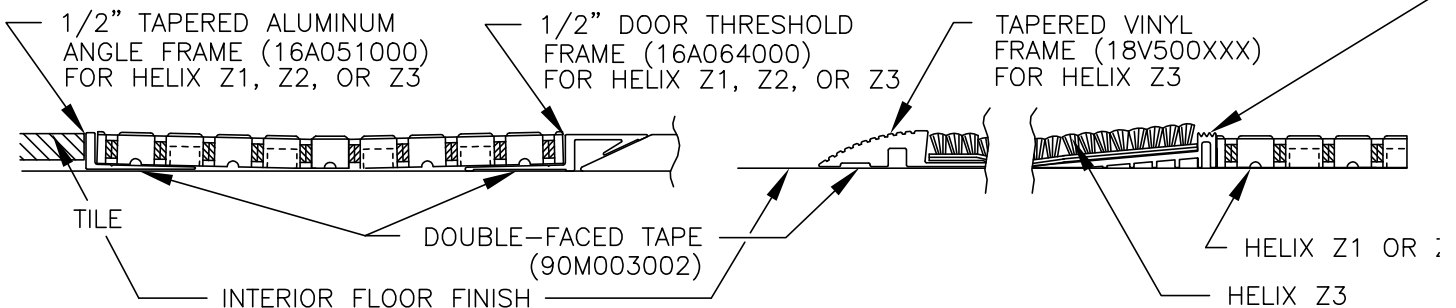
1/2" TAPERED ALUMINUM FRAME (16A046000) FOR HELIX Z1 OR Z2

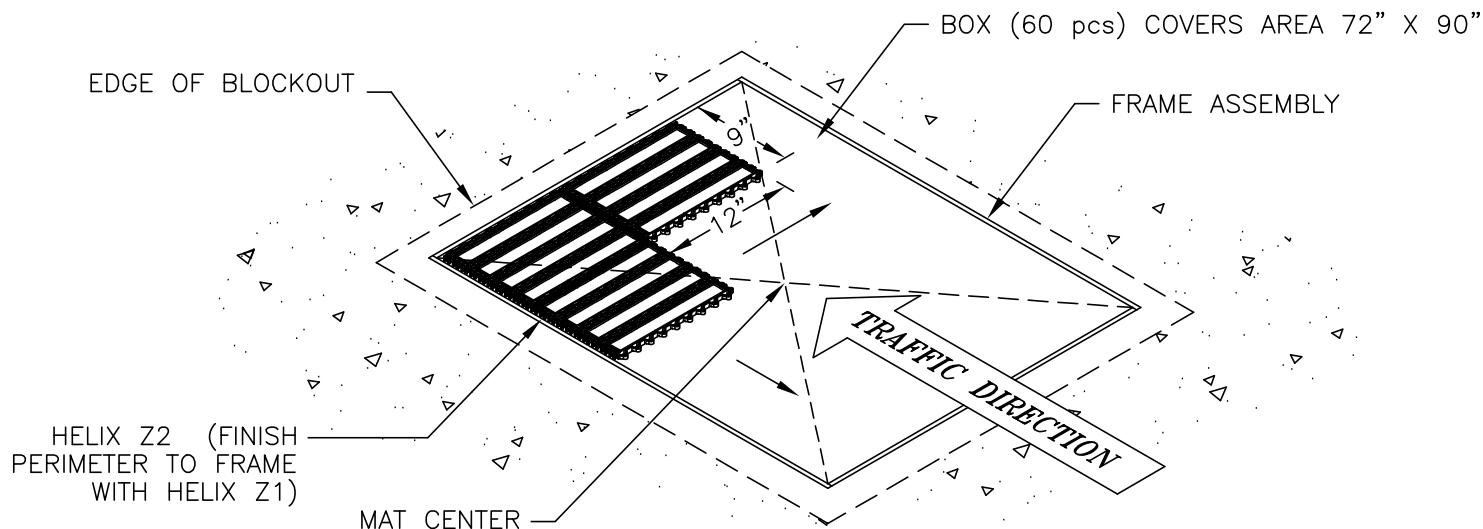
DOUBLE-FACED TAPE (90M003002)



1/2" PIPE STEM FRAME (16A048000) HELIX Z1 OR Z2 TO Z3 OR TYPICAL BUTT JOINT -

ALTERNATE TRANSITIONAL FRAMES



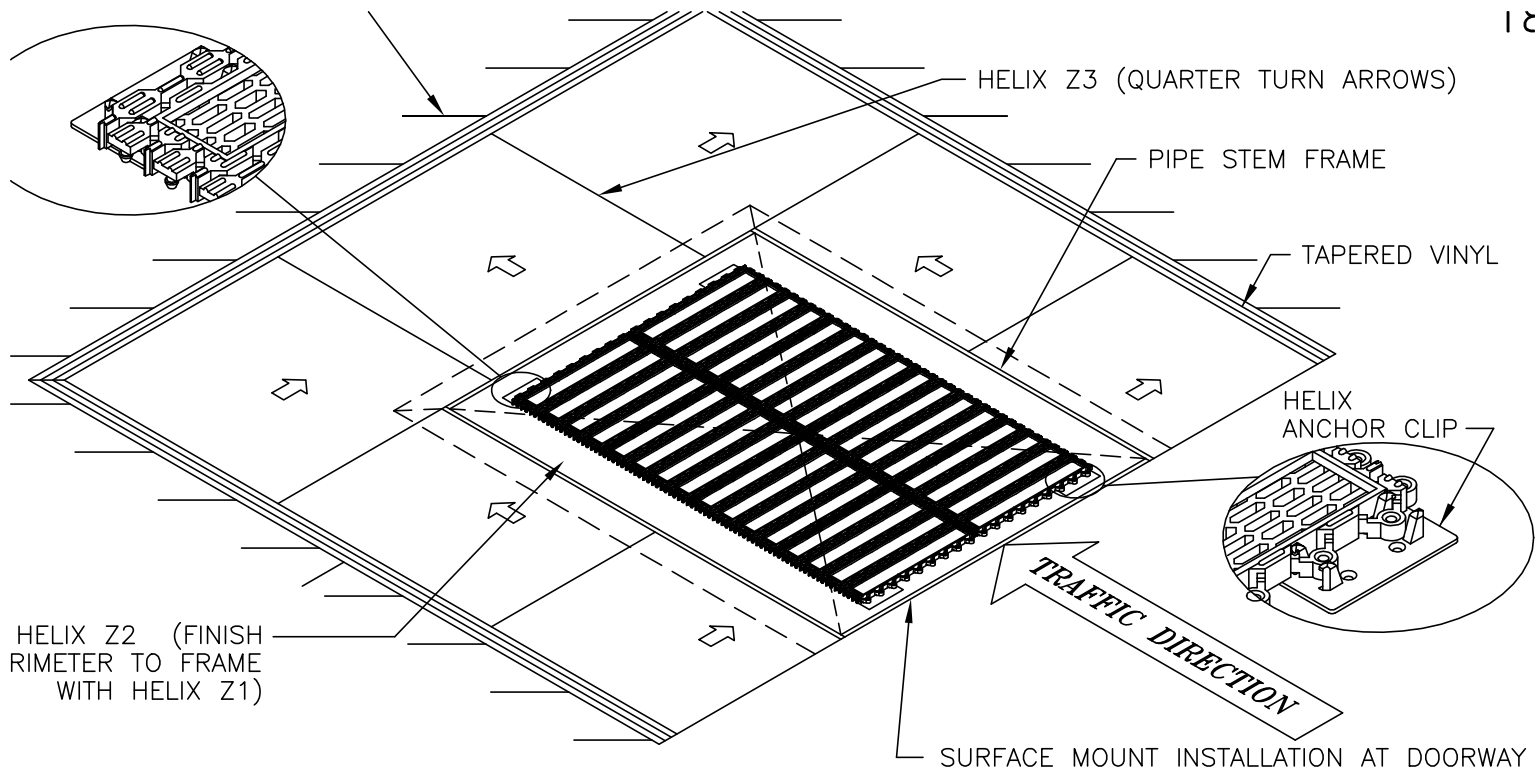


HELIX™ Z1 AND HELIX™ Z2 ASSEMBLY TECHNIQUES

- ① Each box (60 pieces @ 12" x 9") of Helix Z1 or Z2 will cover 5 sq. yds. or 45 sq. ft.. Factory pre-assembled modules of 3' x 3' or 4' x 3' are available to speed the site installation time. Height of each tile/module is 7/16". The Helix Z2 height with the 4 carpet tread inserts per tile/module is 9/16". Both Helix products are PVC/NBR materials (100% recyclable) available in black, dark gray or brown colors. Note: It is recommended that the Helix Z2 module orientation run such that the carpet strip length is perpendicular to the mat traffic direction. (see above)
- ② Inspect mat location to confirm:
 - Substrate is level and in good condition. (repair if necessary)
 - Location is dry and free of debris. (clean properly)
 - Center point of mat area. (Use diagonals from mat corners to establish)
- ③ Begin all assembly work in the upper left corner of the mat area. Orient the tile/module with the hidden connecting pin edges placed along the left and the top frame inside edges, while the visible connecting pin lugs face to the right and downward. Use a water misting bottle to lubricate the visible lugs. Piece the next assembly on the right, placing hidden connecting pins over the visible lugs. Secure the connecting pins by using a rubber mallet to lock together. Repeat the above procedure working left to right and then downward from initial assembly to the right until forming the largest rectangle that will fit within all the frames. Reposition the assembly within the frames such that the gaps on each opposing side are equal. Attach the anchor clips (double faced tape) to the pit.
- ④ For recess mat installations, complete by trimming all the perimeter tile/modules flush with the inside of the perimeter aluminum frame. It is suggested to border the perimeter of all Helix Z2 installations with the Helix Z1 product. Aesthetically, this provides a better symmetrical appearance, and the Helix Z1 tile/modules are much easier to trim.
- ⑤ For surface mounted mat installations, virtually any finished mat size is achievable. The tile/module requirements mandate deducting the frame member exposed surfaces from the unit width and length overall dimensions for custom sized mats. Divide the unit width (inches) by 12 for the # of tiles. Divide the unit length (TD inches) by 9 for the # of tiles. Multiply width and length #'s above for the total # of tiles.

Custom mat size installations require sizing perimeter modules like recess installation and factoring in the following frame choice deductions:

- Tapered Vinyl Frame – deduct 1-1/2" per mat side usage
- Tapered Aluminum Frame – deduct 1-5/8" per mat side usage
- 1/2" Tapered Aluminum Frame – deduct 2-1/2" per mat side usage
- 1/2" Aluminum Angle Frame – deduct 1/8" per mat side usage
- 1/2" Pipe Stem Frame – deduct 1/4" per mat side usage
- 1/2" Door Threshold Frame – deduct 1-1/8" per mat side usage



HELIX™ Z3 ASSEMBLY TECHNIQUES

- Each case of Helix Z3 will cover 3.58 sq. yds. or 32.30 sq. ft. A case contains 12 tiles each 19-11/16" square with PVC free hard backing. Height of each tile is 3/8". Quarter-turn directional arrows on rigid backing during installation. Use releasable adhesive provided with each case to install tiles. (Reference 18I) The rear of each shipping carton suggests recommended procedures to follow to prep location, adhesive application, and manner to apply tiles at field site. Above installation transitions from door threshold to interior floor finish.

CARE AND MAINTENANCE INSTRUCTIONS

- CLEAN OUT THE RECESS WEEKLY AND VACUUM THE CARPET DAILY. Regular cleaning schedule will extend the life and look of your mats. Use only manufacturer's recommended carpet cleaner. See 18J
- REPLACEMENT INSERT STYLES ARE AVAILABLE. Replacement insert styles can be purchased to renew the look and function of your mats for a fraction of the cost of replacing the entire units. Simply call us at (570)546-5941 (Muncy) and our sales group will assist you with pricing, color selection and installation instructions.

SPECIFIED C/S COMPONENT	C/S PART NUMBER	SPECIFIED C/S COMPONENT	C/S PART NUMBER	SPECIFIED C/S COMPONENT	C/S PART NUMBER
HELIX Z1 (FULL BOX - 60 pcs)	18I001XXX	TAPERED ALUMINUM FRAME	17A005000	MASONRY PLUG FASTENER(#6x3/4")	90H51300:
HELIX Z1 (3' x 3' - 12 pcs)	18I002XXX	PIPESTEM FRAME	17A004000	HELIX Z3 PP (CASE TILES-12 PCS)	19C229XX:
HELIX Z1 (4' x 4' - 16 pcs)	18I003XXX	1/2" TAPERED ALUMINUM FRAME	16A046000	HELIX Z3 DU (CASE TILES-12 PCS)	19C230XX:
HELIX Z2 (FULL BOX - 60 pcs)	18I004XXX	1/2" PIPE STEM FRAME	16A048000	HELIX Z3 IN (CASE TILES-12 PCS)	19C231XX:
HELIX Z2 (3' x 3' - 12 pcs)	18I005XXX	1/2" TAPERED ALUM. ANGLE FRAME	16A051000	HELIX Z3 INSTALLATION ADHESIVE	90M10000
HELIX Z2 (4' x 4' - 16 pcs)	18I006XXX	1/2" DOOR THRESHOLD FRAME	16A064000	CARPET CLEANER	90M02800
HELIX ANCHOR CLIP	18I007XXX	SPRING CLIP CORNER LOCK	16F004001	INSTALLATION INSTRUCTIONS	18H
RECESSED ALUMINUM FRAME	17A003000	DOUBLE FACED TAPE	90M003002	ADHESIVE INSTRUCTIONS - Z3	18I
CORNER LOCK	90F022001	MASONRY ANCHOR	90H006004	CARE&MAINTENANCE INSTRUCTIONS	18J
TAPERED VINYL FRAME	18V500XXX	MASONRY BANTOM PLUG (#6x3/4")	90H126004	REPLACEMENT PARTS	CONTACT SALES

HELIX Z1, Z2, OR Z3 ACCOMMODATE 600 lb ROLLING LOADS.

9/2002

CONSTRUCTION SPECIALTIES, INC.

AND/OR

DecoGard Products, Inc.

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CS GROUP
of companies

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FOR FURTHER ASSISTANCE CALL 1-888-834-4455 OR FAX 570-546-5169
OR IN CANADA CALL 1-888-895-8955 OR FAX 905-274-6241