

# Pedigrid®



Model **Pedigrid G1**

Stop dirt at the door with durable Pedigrid flooring systems. Ideal for high-traffic areas, these aluminum recessed grids with scraping capabilities enhance traction and trap large amounts of dirt, mud, slush and snow. With many aesthetic choices, Pedigrid looks as good as it performs.

## Advantages

- Capable of trapping large amounts of snow and debris
- Easy to clean
- Multiple insert options
- Available with or without drain pans
- Aluminum tread rails and key lock bar
- Completely customizable

## Applications

- Vestibules
- Interior & exterior entries
- New construction or renovation

## Building Segments

- Aviation & Transportation
- Education
- Healthcare
- Office & Mixed Use
- Retail & Hospitality
- Senior Living
- Sports & Entertainment

# Pedigrid®

## Product Details

MODEL	GRID DEPTH	PRODUCT WEIGHT	ROLLING LOAD	TREAD SPACING	MULTIPLE INSERT OPTIONS
G1	1 1/16" (42.9mm)	3.14 lbs/sq ft	400 lbs/wheel	1 1/2" (38.1mm) on center	Yes
G8	1 1/16" (42.9mm)	3.14 lbs/sq ft	400 lbs/wheel	1 1/2" (38.1mm) on center	Aluminum Serrated Tread Only

## Certifications/Testing

- Static Coefficient of Friction Test
- Pedigrid ASTM E-648 Test
- CDPH Standard Method v1.1 VOC Emission Testing

## Mounting & Frame Options

FRAME TYPE	G1	G8
Recessed Level Base	•	•
Recessed Deep Pit w/ Optional Drain Pan	•	•
Recessed Level Base w/ Optional Drain Pan	•	•
Recessed Slope Deep Frame w/ Optional Drain Pan	•	•

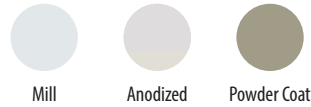
## Model Options



Pedigrid G1

Pedigrid G8

## Rail/Frame Finish Options



Mill

Anodized

Powder Coat

## Insert Options



Heavy-duty Carpet

Exterior Carpet

Rubber

Logo

Abrasive

Recycled Rubber

Poured Abrasive

See all frame & finish options online at [c-sgroup.com](http://c-sgroup.com).

## Warranty

- Two-Year Limited Warranty



Learn More →

#### | Suggested Specifications | Section 124813 CS Entrance Floor Mats and Frames: **Pedigrid® G1**

Note: After downloading this spec, the Specifier must choose the correct finish, insert and frame options and delete all other options to produce an accurate specification.

#### Part 1 - General

##### 1.01 Summary

- A. This section includes the following types of entrance flooring systems:
  - 1. Floor Grids & Frame Assemblies
- B. Related Sections: The following sections contain requirements related to this section:
  - 1. Grouting frames into recess; refer to sections 03300 "Cast-In-Place Concrete" and section 03600 "Grout"
  - 2. Special requirements of various flooring types; refer to section 09400 "Terrazzo"

##### 1.02 References

- A. American Society for Testing and Materials (ASTM)
- B. The Aluminum Association
- C. The Carpet and Rug Institute (CRI)
- D. The National Floor Safety Institute (NFSI)
- E. International Organization for Standardization (ISO)

##### 1.03 Submittals

- A. General: Submit the following in accordance with conditions of contract and Division 1 specification section 01300.
- B. Product data for each type of floor grid and frame specified, including manufacturer's specifications and installation instructions.
- C. Shop drawings in sufficient detail showing layout of grid and frame specified including details indicating construction relative to materials, direction of traffic, spline locations, profiles, anchors and accessories.
- D. Samples for verification purposes: Submit an assembled section of floor grid and frame members with selected tread insert showing each type of color for exposed floor grid, frame and accessories required.
  - 1. PediGrid® G1 13" x6" standard size sample Mill Finish with Midnight Carpet
- E. Maintenance data in the form of manufacturer's printed instructions for cleaning and maintaining floor grids.

##### 1.04 Quality Assurance

*[Specifier note: To maximize the life cycle of the entrance flooring and its appearance, the following items are critical: i) Most C/S grids are designed for traffic crossing perpendicular to the rail. ii) When designing an entranceway it is preferable to minimize the need for turning on the grid. iii) We recommend that splices in wider units (above 12') not be positioned in the middle of a door opening wherever possible.]*

- A. Flammability in accordance with ASTM E648, Class 1, Critical Radiant Flux, minimum 0.45 watts/m<sup>2</sup>.
- B. Slip resistance in accordance with ASTM D-2047-96, Coefficient of Friction, minimum 0.60 for accessible routes. *[Specifier note: Slip and fall accidents are a major concern in commercial entranceways. We recommend that approved systems be certified by the manufacturer as meeting a minimum coefficient of friction of 0.60, when tested in wet conditions.]*
- C. Standard rolling load performance is 400 lb./wheel with larger loading requirements as specified (load applied to a solid 5" x 2" wide polyurethane wheel, 1000 passes without damage). *[Specifier note: For entranceways in businesses such as retail outlets, airports, banks, and casinos, rolling load performance is*

*a critical factor. We recommend that units with the highest practical loading capability be specified for such entrances.]*

- D. Single Source Responsibility: Obtain floor grids and frames from one source of a single manufacturer.
- E. Utilize superior structural aluminum alloys 6105-T5 & 6016-T6 for rail components.
- F. Utilize a manufacturer that is ISO 9001 & 14001 certified.

#### 1.05 Delivery, Storage and Handling

- A. Deliver materials to the project site ready for use and fabricated in as large sections and assemblies as practical, in unopened original factory packaging clearly labeled to identify manufacturer.

#### 1.06 Project Condition

- A. Field measurements: Check actual openings for grids by accurate field measurements before fabrication. Record actual measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of work.
- B. Recessed Conditions: IMPORTANT: Coordination with Division 03 00 00 Concrete specifications is required. For proper installation, the concrete recess must be flat and smooth throughout. If the recess is formed by a concrete contractor, the pour dimensions may require leveling grout to achieve the proper depth and a smooth finish. The final recess depth will match the specified product and must be field verified. For proper frame installation, the side walls of the concrete recess must also be straight and smooth. Inconsistencies with the recess and side walls must be remediated prior to product installation.

### Part 2 - Products

#### 2.01 Manufacturer

- A. Construction Specialties, 3 Werner Way, Lebanon, NJ 08833 USA 800-233-8493; email [cet@c-sgroup.com](mailto:cet@c-sgroup.com)
- B. Drawings and specifications are based on manufacturer's literature from Construction Specialties, Inc. unless otherwise indicated. Other manufacturers must be approved equal by Architect/Owner:

#### 2.02 Materials

- A. Aluminum - ASTM B 221, alloy 6105-T5 for rail extrusions and 6061-T6 for key lock bars.
- B. Tread insert options - refer to section 2.05.

#### 2.03 Floor Grids

- A. **Model and Description - G1 Pedigrid-** Shall be extruded 6105-T5 aluminum alloy tread rails joined mechanically by extruded 6106-T6 aluminum alloy key lock bars. (welding or bolting shall not be permitted.) Rail finish to be mill (standard) or one of other optional colors as offered by manufacturer. (Call factory from custom colors.) Choose from anodized or heavy-duty powder coat finish.

#### 2.04 Grid Frames

*(Specifier to select one below and delete others)*

- A. **LB - Level Base Frame** *[Specifier note: Draining the well of entrance grids is often beneficial especially in areas of higher than average rainfall. Adding a deep drain pan adds cost and complexity to both the fabrication and performance of the unit. We recommend the use of a trench drain set in a level base frame wherever practical.]* Shall be 6063-T5 aluminum alloy with 1/2" (12.7mm) exposed surface and a depth of 1-13/16" (46.0mm). These assemblies receive 1/4" (6.4mm) thick heavy gauge TPE support cushions 1" (25.4mm) long mounted to each continuous foot at 20" (0.51m) on center. Frame color shall be supplied in mill (standard) or one of other optional colors as offered by manufacturer. (Call factory for custom colors.) Choose from anodized or heavy-duty powder coat finish.
- B. **NP - Deep Pit Series No Pan Frame** shall be 4-3/16" (106.4mm) deep with 1/2" (12.7mm) exposed

surfaces in 6063-T5 aluminum alloy. These assemblies shall rest upon a continuous TPE cushion with additional support members 32" (0.81m) on center maximum. At every 24" (0.61m) along the support member, staggered side to side, is a 6063-T5 aluminum alloy adjustable support leg. The base of the framed enclosure shall be formed through the blocking out of the concrete at the time the frames are set. The drains, traps and drain connections shall be furnished under the plumbing contract. Frame color shall be supplied in mill (standard) or one of other optional colors as offered by manufacturer. (Call factory for custom colors.) Choose from anodized or heavy-duty powder coat finish. **Note:** Mill finish frames in contact with wet concrete to be primer coated. Rolling load capacity for this application is 300 lb./wheel.

- C. **DP – Deep Pit Series w/ Drain Pan Frame** shall be 4-3/16" (106.4mm) deep with 1/2" (12.7mm) exposed surfaces in 6063-T5 aluminum alloy. These assemblies shall rest upon a continuous TPE cushion with additional support members 32" (0.81m) on center maximum. At every 24" (0.61m) along the support member, staggered side to side, is a 6063-T5 aluminum alloy adjustable support leg. A 16 gauge aluminum pan complete with a 2" (50.8mm) I.P.S. drain and stainless steel strainer to be provided by manufacturer. A 2" (50.8mm) pipe and drain trap shall be furnished under the plumbing contract. Frame color shall be supplied in mill (standard) or one of other optional colors as offered by manufacturer. (Call factory for custom colors.) Choose from anodized or heavy-duty powder coat finish. **Note:** Mill finish frames in contact with wet concrete to be primer coated. Rolling load capacity for this application is 300 lb./wheel.
- D. **LBDP - Level Base Frame with Drain Pan** shall be 6063-T5 aluminum alloy with 1/2" (12.7mm) exposed surface and a depth of 1-13/16" (46.0mm). These assemblies receive 1/4" (6.4mm) thick heavy gauge TPE support cushions 1" (25.4mm) long mounted to each continuous foot at 24"(0.61m) on center. These assemblies shall also include a 2" (50.8mm) I.P.S. PVC drain, stainless steel strainer and a 16-gauge aluminum pan provided by manufacturer. Frame color shall be supplied in mill (standard) or one of other optional colors as offered by manufacturer. (Call factory for custom colors.) Choose from anodized or heavy-duty powder coat finish.
- E. **ZF- Z Edge Frame** shall be 6105-T5 aluminum alloy with 1 1/16"(27.1mm) exposed surface and an overall depth of 1 7/8" (47.6mm). These assemblies receive 1/4"(6.4mm) thick heavy gauge TPE support cushions 1" (25.4mm) long mounted to each continuous foot at 20" (0.51m) on center. Frame color shall be supplied in mill.
- F. **ZFDP- Z Edge Frame with Drain Pan** shall be 6105-T5 aluminum alloy with 1 1/16"(27.1mm) exposed surface and an overall depth of 1 7/8" (47.6mm). These assemblies receive 1/4"(6.4mm) thick heavy gauge TPE support cushions 1" (25.4mm) long mounted to each continuous foot at 20" (0.51m) on center. These assemblies shall also include a 2" (50.8mm) I.P.S. PVC drain, stainless steel strainer and a 16-gauge aluminum pan provided by manufacturer. Frame color shall be supplied in mill.

2.05 Tread Insert Options (*Specifier to select one below and delete others*)

- A. **HD – MonoTuft HD™ Carpet** shall meet CRI standard for good indoor air quality. Fibers shall include a minimum of 100, 12 mil monofilament fibers per square inch. Available in standard colors as offered by manufacturer. Each carpet fiber and monofilament shall be fusion-bonded to a rigid two-ply backing to prevent fraying and supplied in continuous splice-free lengths. Anti-static carpet fibers shall contain antimicrobial additive and be treated with Scotchgard® to reduce soiling. Carpet weight shall be 33-oz./yd<sup>2</sup>.
- B. **EC - Exterior Carpet** shall be solution dyed polypropylene fibers with 50/50 blend of 600/12-denier multi filament and 595/D1 monofilament, available in standard colors as offered by manufacturer. The texturized fibers have ultraviolet blockers and color as an integral part of the filament. Each carpet fiber and monofilament shall be fusion-bonded to a rigid two-ply backing to prevent fraying and supplied in continuous splice-free lengths. Waterproof fibers do not get soggy, rot, fade or stain. Carpet weight shall be 32-oz./yd<sup>2</sup>.
- C. **VA - Abrasive Insert** shall include a flexible abrasive grit tape, bonded to a rigid aluminum tread insert.

### SPECIFICATION GUIDE

Choose from standard mill or optional clear, bronze or black anodized finish complete with available abrasive colors as offered by manufacturer

- D. **PA - Poured Abrasive** shall include a water based, factory-bonded, two-part acrylic with quartz aggregate. Choose from available standard colors or CS can custom match any color. \* Note: This tread option is not available with powder coated rail finish
- E. **RR- Recycled Rubber** - High slip resistant rubber (SC of 90) insert manufactured with recycled rubber and EPDM (26%-90% dependent on color chosen from available options as offered by manufacturer).
- F. **R - Rubber** shall include a flexible TPE tread insert in color Black.
- G. **L - Logo Option** (Designstep carpet inserts only) Each entrance grid specifically detailed shall include a logo or trademark.

1. Identify type signature or logo required [i.e., letterhead].
2. Specify number of colors within logo.

#### Part 3 - Execution

##### 3.01 Examination

- A. Verification of conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
  1. Do not proceed until unsatisfactory conditions have been corrected.

##### 3.02 Preparation

- A. Manufacturer shall offer assistance and guidance to provide a template of irregular shaped grid assemblies to ensure a proper installation.

##### 3.03 Installation

- A. Install the work of this section in strict accordance with the manufacturer's recommendations.
- B. Set grid at height recommended by manufacturer for most effective cleaning action.
- C. Coordinate top of grid surfaces with bottom of doors that swing across to provide ample clearance between door and grid.

##### 3.04 Cleaning

- A. It is important to the life cycle of the entrance mat that a maintenance schedule be developed which includes regular vacuuming and extraction that correctly matches the amount of traffic the flooring system incurs.

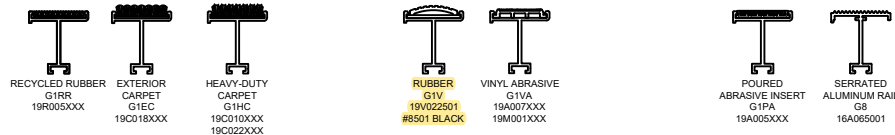
##### 3.05 Protection

- A. After completing required frame installation and concrete work, provide temporary filler of plywood or fiberboard in recess, and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and project is near time of substantial completion.
- B. Defer installation of flooring systems until time of substantial completion of project.

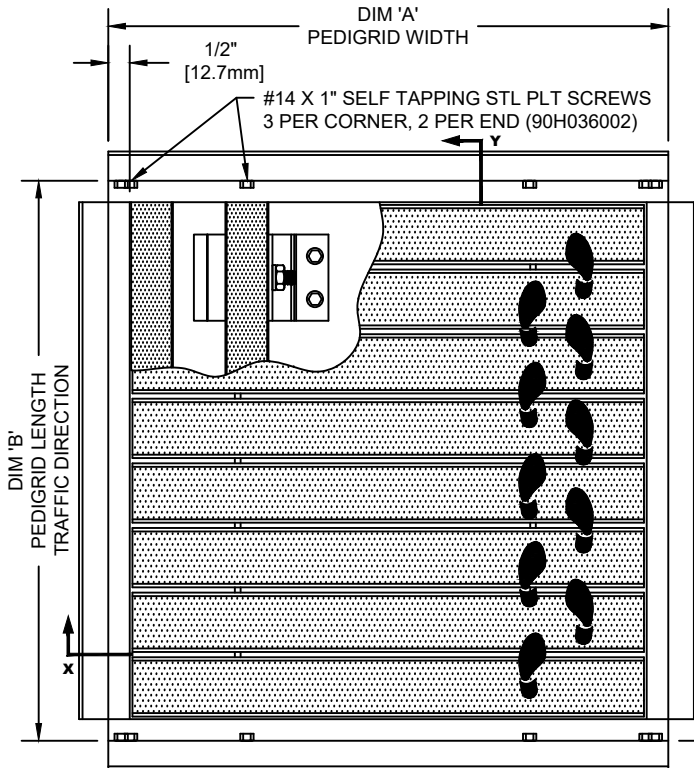
PEDIGRID WITH RECESSED DEEP PIT FRAME

INSERT STYLE:      INSERT COLOR: PLEASE ADVISE      CATALOG NUMBER: G1      PART NUMBER:

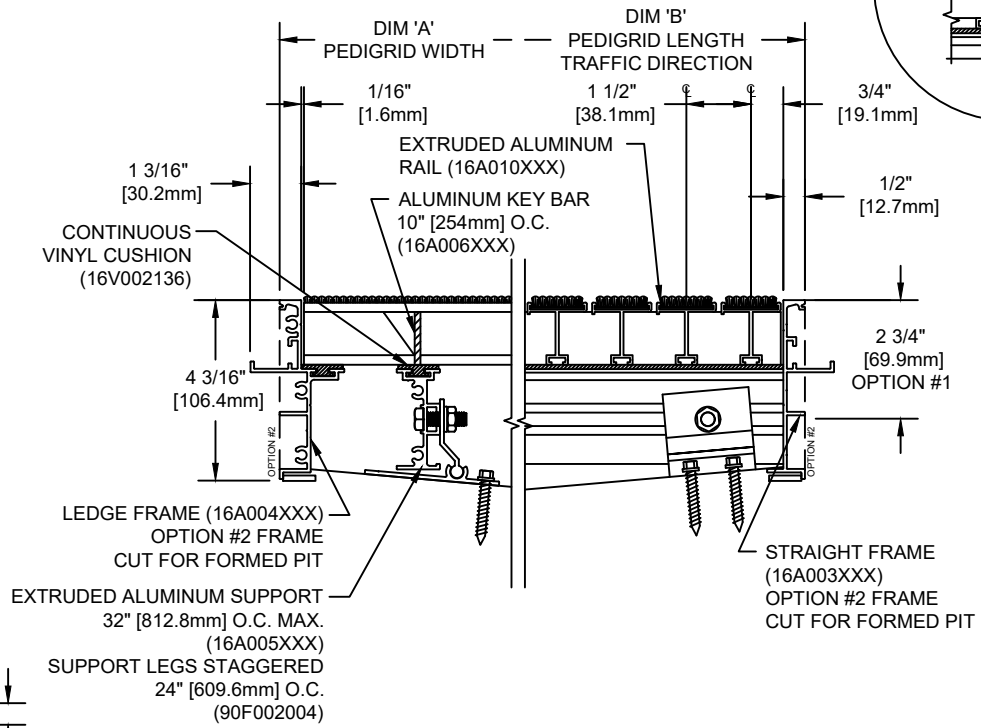
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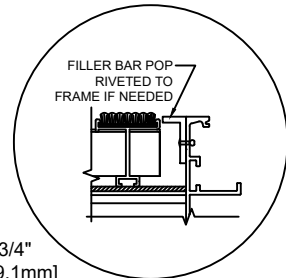
PEDIGRID INSERT STYLES



TYPICAL PLAN VIEW



SECTION X-Y



NOTES:

- \*GRIDS OVER STRUCTURES @ 32" O.C. TO SUPPORT A MAX LOAD OF 300 LBS PER SQ. FT. ALL GRIDS WITH LEVEL BASE FRAME TO SUPPORT A 400 LB. ROLLING LOAD. LARGER LOADING MAY BE ACCOMMODATED. CONTACT C/S SALES WITH SPECIFIC LOADING REQUIREMENTS.
- \*PLEASE VERIFY TRAFFIC DIRECTION.
- \*MAXIMUM MODULE SIZE OF GRID NOT TO EXCEED 12'-0" [3.6M] IN WIDTH (DIM "A") & 3'-0" [91M] IN LENGTH T.D. (DIM "B").
- \*ALL SURFACES IN CONTACT WITH MASONRY ARE TO RECEIVE A COAT OF ZINC CHROMATE PRIMER.
- \*MITERED FRAME CORNERS ARE NOT AVAILABLE.
- \*WITH OPTION #2, THE ANCHOR LEG IS CUT OFF TO ALLOW FOR FLUSH MOUNTING IN A FORMED PIT.
- \*DUE TO 1 1/2" MODULE OF PEDIGRID, INSIDE OF FRAME DIMENSION SHOULD BE CHANGED ONLY IN INCREMENTS OF 1 1/2" [38.1mm] TO AVOID THE USE OF FILLER BARS.
- \*ADDITIONAL SPECIFICATIONS ARE CONTAINED IN THE LATEST C/S CATALOG OR AT C-SGROUP.COM AND ARE CONSIDERED PART OF THIS TRANSMITTAL.

**CS Construction Specialties**  
 6696 Route 405 Highway, Muncy PA 17756  
 (800) 233-8493 • Fax (570) 546-4692 • www.c-sgroup.com

PLEASE VERIFY ALL	QTY	MARK #	LOCATION	MODEL	DIM 'A' WIDTH	DIM 'B' LENGTH	FINISH	REMARKS

PROJECT:		
LOCATION:		
CONTRACTOR:		
AGENT:		SHT:
DRG. BY:	DATE:	JOB NO.:

## General Information

Open the pack list on the crate's exterior. Locate the shop drawings and installation instruction inside the box. Review contents and make sure all parts are present. For a rectangular installation, the pack list will include the number of modules and frame pieces. For odd-shaped installations, a drawing will be supplied identifying the module layout in numbered sequence.

If you discover that material is missing or defective, contact our customer service department immediately:  
**800.233.8493**

## Important Notes - Do Not Overlook

Prior to installation, ensure that the material is stored indoors and has acclimated to the environment's temperature for 24 hours.

Assess the site condition prior to installation ensuring the recess is:

- Free of debris and moisture
- The correct depth throughout
- Smooth and flat

High spots should be ground down. Low spots should be filled with a self-leveling grout. The side walls of the recess should also be checked for plumb and defects as this could affect the frame installation (if applicable). If these conditions have been met, you can begin the installation.

## Tools Required

You will need a tape measure, drill, impact driver, 5/32" drill bit and fastener, 1/2" wrenches/sockets, lift key tool, caulk gun (for drain pan installation only) and a Phillips fastener.

## Installation Instructions



**1** Dry fit all frame pieces within the area and use a tape measure to ensure a proper fit. For odd-shaped layouts, match frame tags to the drawing on the pack list.



**2** Using a straight edge, ensure the top frame edge is flush with the surrounding floor surface. Shim frame every 24" if necessary to achieve required height.



**3** Begin by assembling the perimeter frame and internal support framing members. Rectangular unit frame pieces are marked with dimensional lengths and are installed per the shop drawings. Odd-shaped frame pieces are numbered. Their locations align with the numbered sides on the shop drawings.



## Installation Instructions (continued)



**4** The perimeter ledge frame has three hole locations at each frame end. The adjacent frame pieces line up with the holes and can be fastened together using the supplied hardware and a socket wrench system.



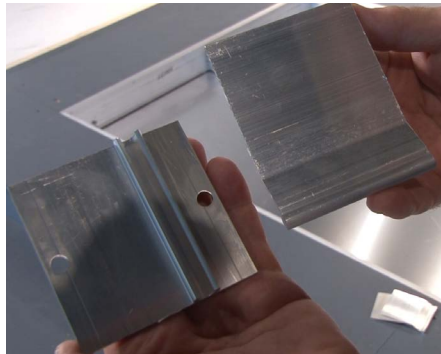
**5** Repeat this process at all perimeter frame corners.



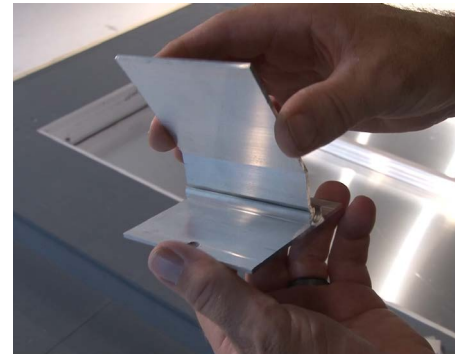
**6** Install the intermediary supports, located inside the perimeter support assembly. These frames are fastened to the perimeter ledge frame using the three pre-drilled hole locations.



**7** Use the same hardware as the perimeter frame. Use socket/wrench tools to secure the fasteners.



**8** Shown: support clips



**9** Support clips come in two pieces - one for vertical fastening to the support and one for horizontal fastening to the floor. Assemble these male and female pieces as shown.



**10** To keep intermediary supports from rocking, start at the supports edge and install support clips every 24" along the support, alternating the clip location on each side of the support.



**11** Place one support clip side on the floor and the other directly against the support. Use a marker to trace the support's top edge onto the clip.



**12** Use a jigsaw to cut along the transferred marker line to achieve the correct support clip height.

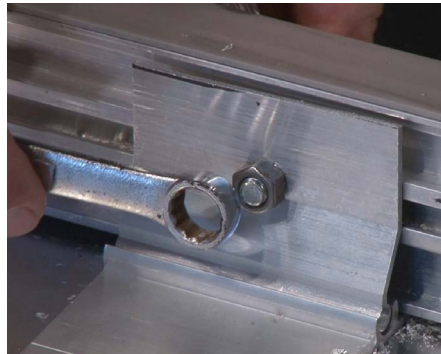
To view details, specs and product info visit [www.c-sgroup.com/efs](http://www.c-sgroup.com/efs).

For technical and design assistance call 800.233.8493

## Installation Instructions (continued)



**13** Use a drill to create a hole in the vertical portion of the support and the support bar behind it.



**14** Use the supplied bolt, washer and nut hardware with a socket/wrench tool to fasten the vertical portion of the support clip to the support bar.



**15** Using a 5/32" drill, locate the pre-drilled hole on the horizontal portion of the support clip and drill into the floor.



**16** Use a driver to install the fastening hardware and secure the support clip to the floor. Clips should be installed alternating on each side of the support.



**17** Repeat these steps at each clip location every 24" along the support frame.



**18** Complete the perimeter frame installation. Use a drill to create a hole on the vertical side of the perimeter frame. These holes should be created every 24".



**19** Fasten the perimeter frame to the perimeter concrete using the supplied hardware and a driver.



**20** Grid modules can now be installed. Each grid module is labeled per the shop drawings to identify location.



**21** Modules will have spacer clips attached to one side. Spacer clips should face toward adjacent modules.

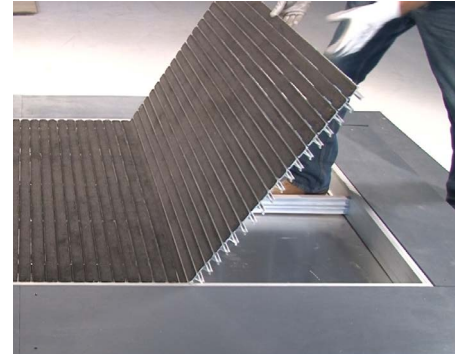
## Installation Instructions (continued)



**22** Place modules in the correct locations per the shop drawings.



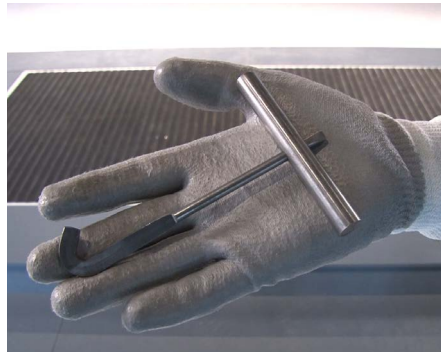
**23** Make sure the attached locator clip is seated below the corresponding Pedigrīd panel.



**24** Complete installing all Pedigrīd panels and make final adjustments for rail alignment.



**25** Clean the unit with a vacuum. If construction is to continue in the building, cover the unit with plywood sheathing.



**26** Shown: lift key tool



**27** Use the lift key tool to remove the panels for access to clean beneath the system.