

Heartline Apartments - Pearl District
Architect: Mithun
Photo: © Kevin Scott

USG PIXELS® WALL MOUNTED

DESIGN AND INSTALLATION GUIDE



IT'S YOUR WORLD. BUILD IT.®

USG PIXELS® WALL MOUNTED

DESIGN AND INSTALLATION GUIDE

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FOR MORE INFORMATION

PRODUCT INFORMATION

For the most up-to-date product information, visit usg.com or cgcinc.com

CUSTOMER SERVICE

USG: 800 950-3839

CGC: 800 387-2690

TECHNICAL SERVICE

800 USG.4YOU (847-4968)

WEBSITES

usg.com

cgcinc.com

SYSTEM OVERVIEW

PIXELS® WALL-MOUNTED APPLICATIONS

FEATURES

Celebration™ Snap-In panels and Celebration™ Snap-In panels with Pixels® imagery can be mounted to the vertical surface in two ways: directly to the surface using wall mount backer board system, or away from the vertical surface leaving a “cavity” in which to mount light sources for back lighting the image. Here are examples of each application.

SURFACE MOUNTED

This backer board system is simple in both design and application while providing a hard surface directly behind the Celebration™ Snap-In panel thus improving durability.

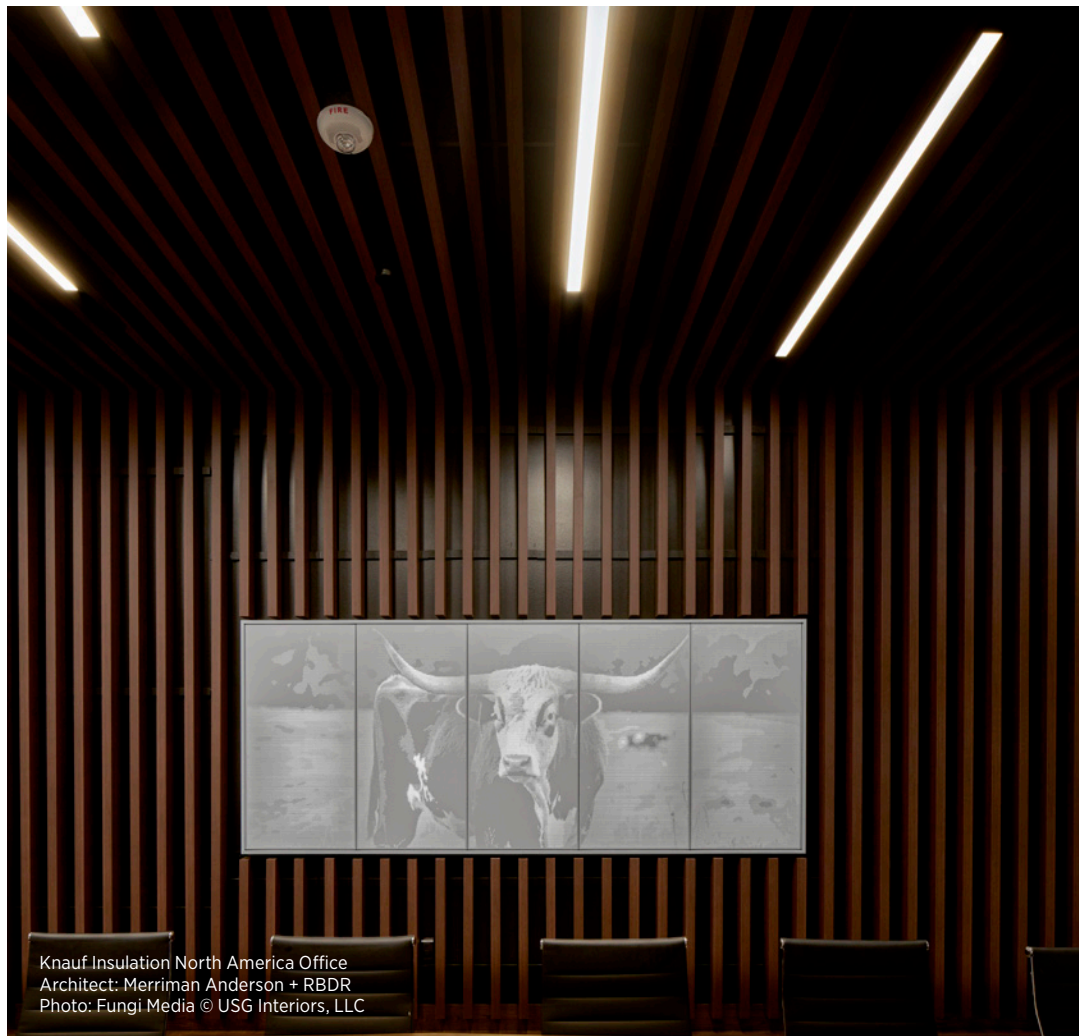


SYSTEM OVERVIEW

PIXELS® WALL-MOUNTED APPLICATIONS

FRAME MOUNTED

The backlit system is also simplified in that it uses standard Fineline® suspension – only mounted to the wall thus being quite familiar to contractors.



On the pages that follow, further explanation of the systems will clarify, in detail, how each can be used effectively depending on the design criteria and desired result.

An example of Pixels frame-mounted backlit installation is on display at Knauf Insulation North America Office (photo above)

SYSTEM OVERVIEW

DESIGN ELEMENTS

SHAPE

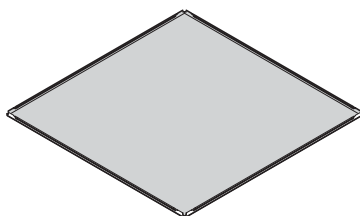
The overall shape of a wall-mounted system is determined by the size of the panels and their configuration and relationship to one another.

Available panel sizes are:

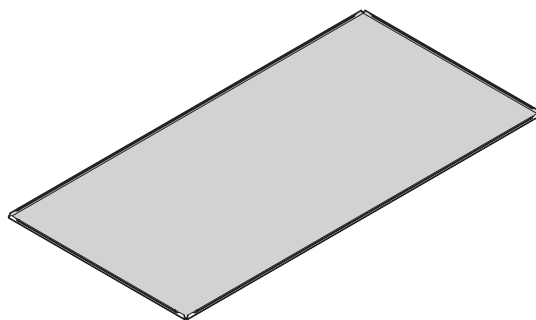
- 2' x 2'
- 2' x 4'
- 2' x 6'

PANELS

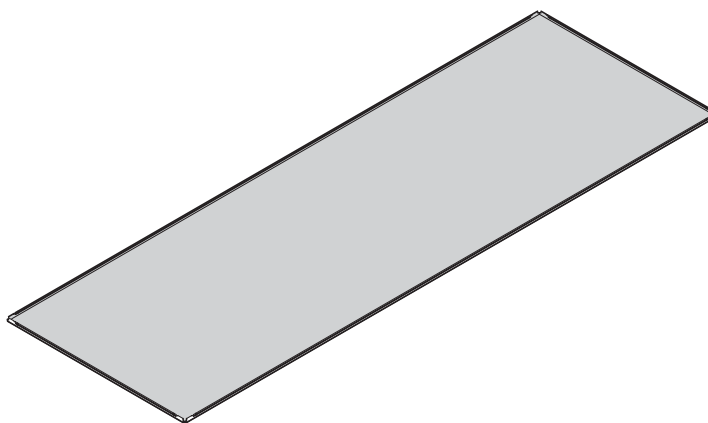
2' x 2' Pixels® Celebration™ Snap-In Panel



2' x 4' Pixels® Celebration™ Snap-In Panel



2' x 6' Pixels® Celebration™ Snap-In Panel



Note: The Pixels® image and design process itself is detailed in the Pixels® Design Guide, IC566. Through that process the panels are ordered separately from the wall mount system.

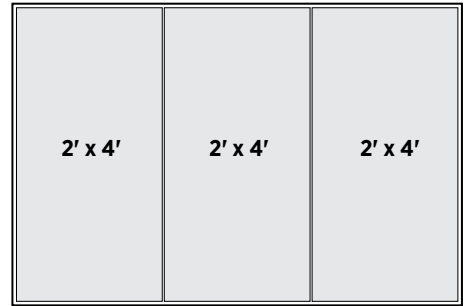
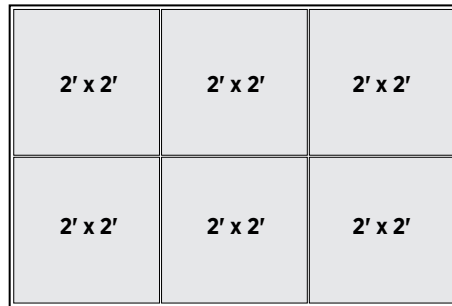
SYSTEM OVERVIEW

DESIGN ELEMENTS

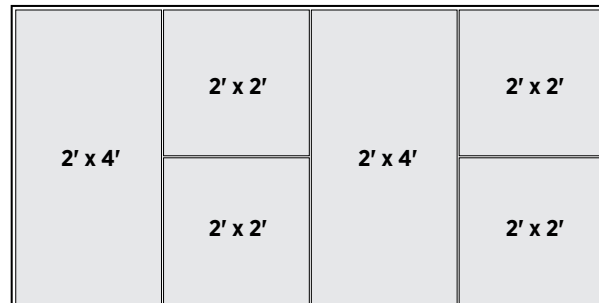
SAMPLE CONFIGURATIONS

The Pixels® panels can be arranged in any number of creative ways. As long as the 2' module dimension is honored, almost any configuration can be achieved including altering the shape of the frame itself.

6' x 4' Systems



8' x 4' System

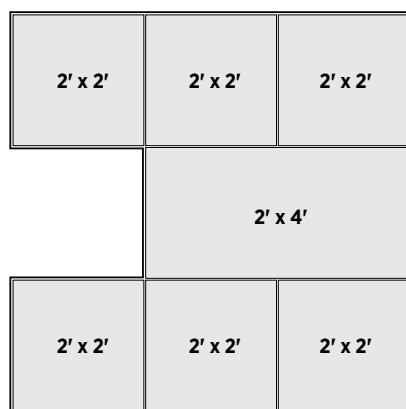
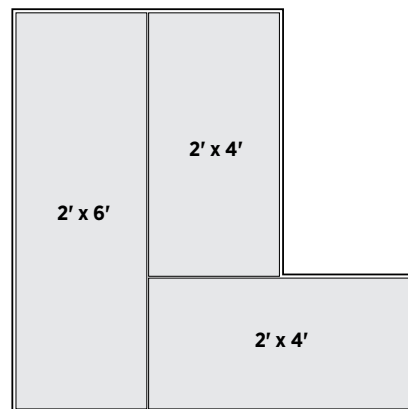
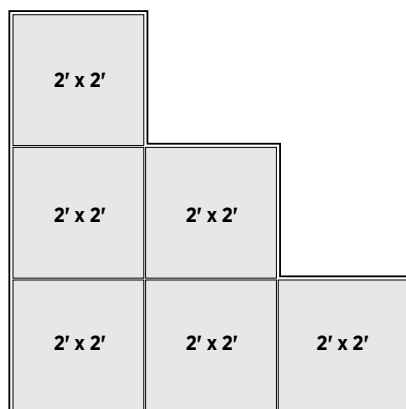


SYSTEM OVERVIEW

DESIGN ELEMENTS

SAMPLE CONFIGURATIONS

6' x 6' Systems



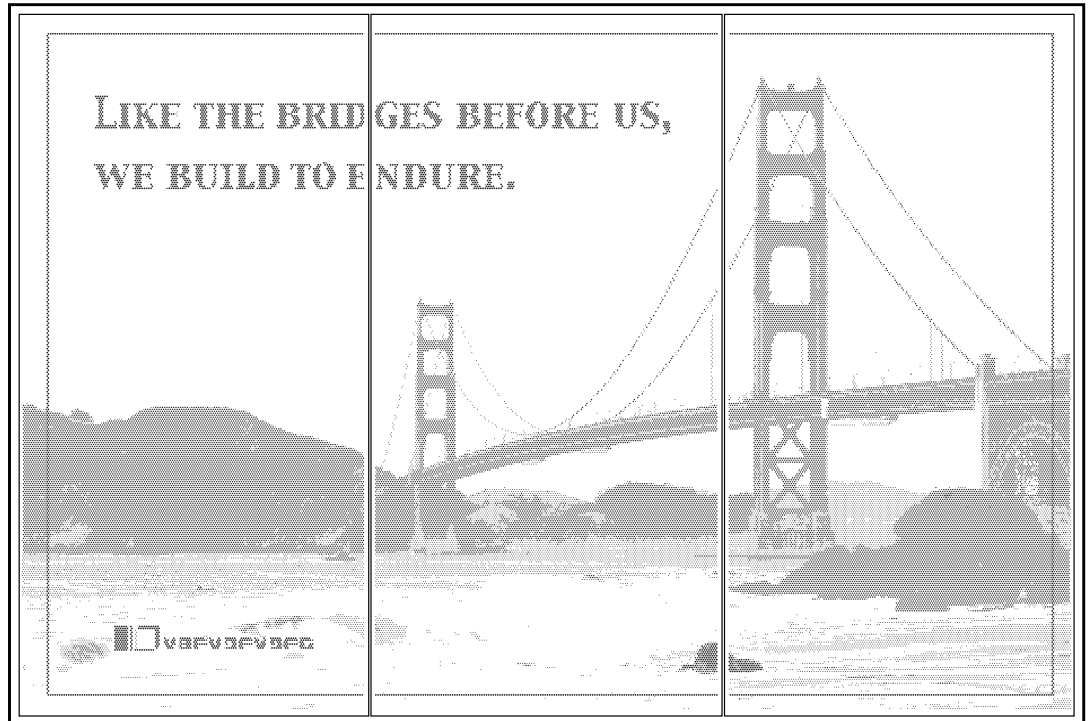
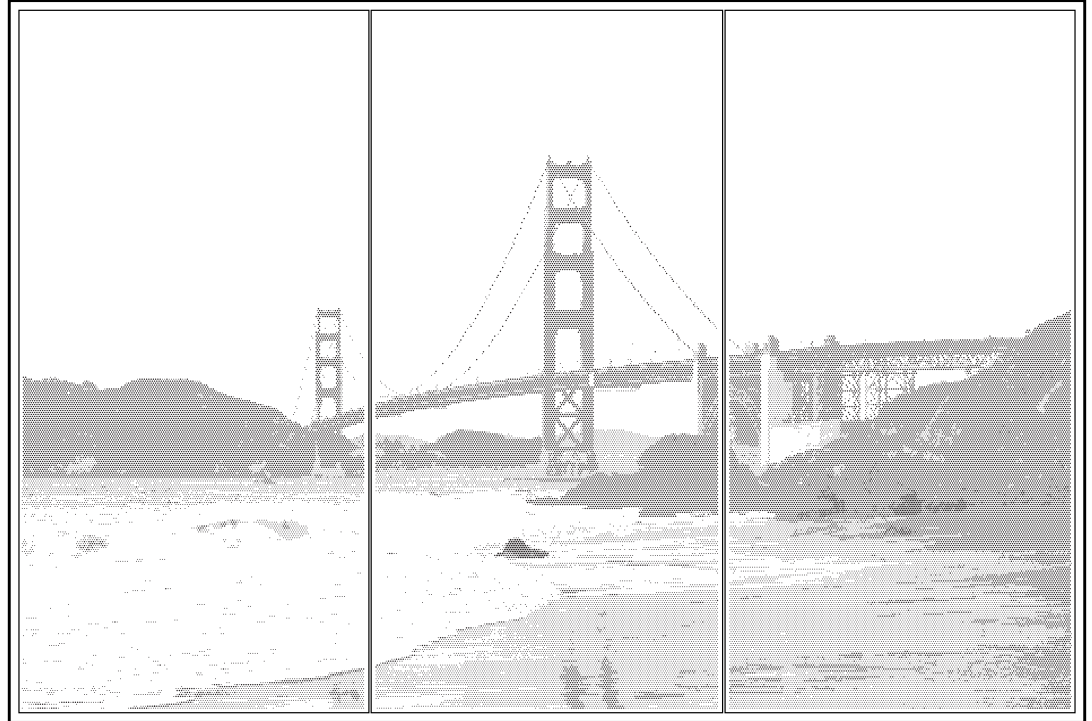
There is no limitation to the finished size of the system. The above examples are only to show the flexibility of panel layout and frame configuration.

SYSTEM OVERVIEW

DESIGN ELEMENTS

Photos can be used as is or combined with copy or graphics. Also see Pixels® Design Guide (IC566) for a further understanding of Pixels graphics capabilities.

2' X 4' CONFIGURATION



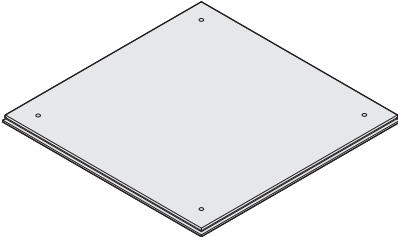
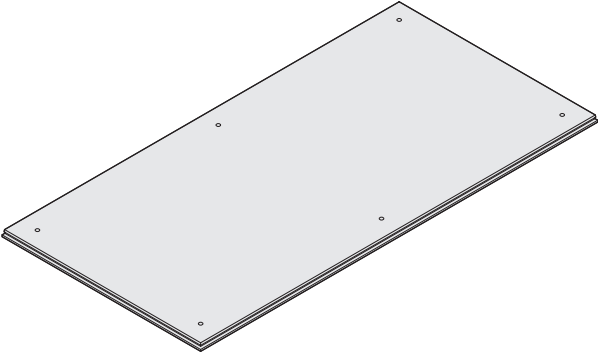
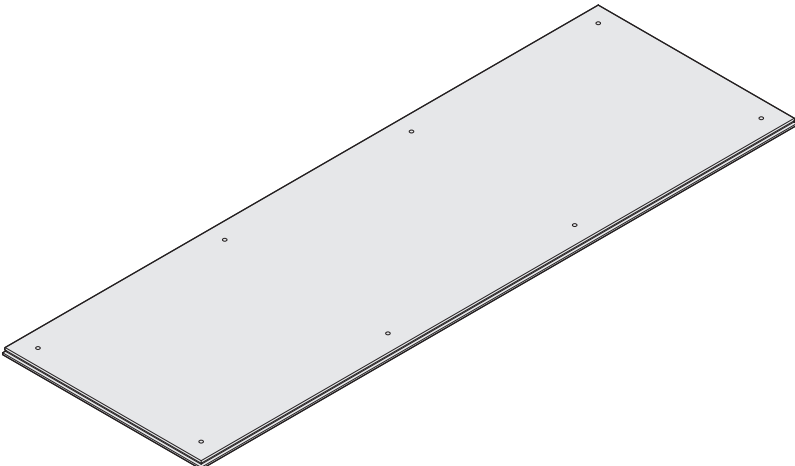
SURFACE-MOUNTED SYSTEM

COMPONENTS

SURFACE-MOUNTED BACKER BOARDS

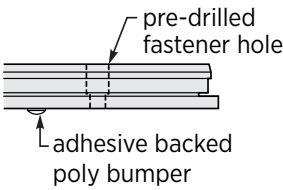
SURFACE-MOUNTED BACKER BOARDS

In addition to the Pixels® Celebration™ Snap-In panels (see page 4), the following components are unique to the surface-mounted system.

2' x 2' (WMBB24)	2' x 4' (WMBB48)
	
2' x 6' (WMBB72)	
	

CONSTRUCTION DETAIL

Backer Board Edge Profile

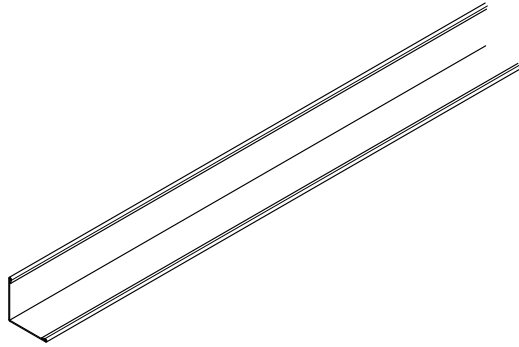


SURFACE-MOUNTED SYSTEM

COMPONENTS

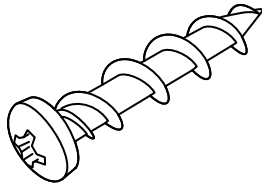
EDGE TRIM

M7 Wall Angle Molding



FASTENER

Wall-Dog™ Fastener

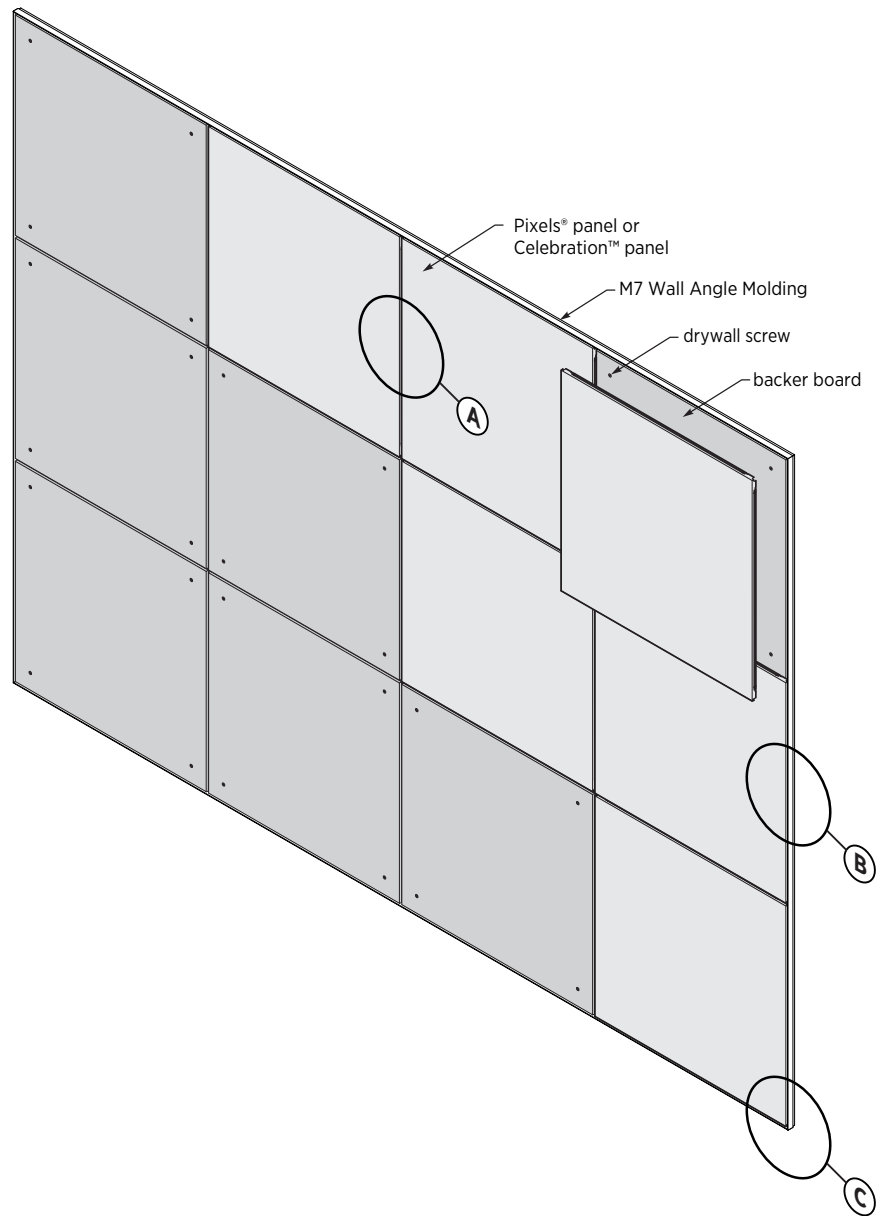


Note: Wall-Dog is a trademark of Powers Fasteners, Inc. For more information please visit www.powers.com

SURFACE-MOUNTED SYSTEM

CONSTRUCTION

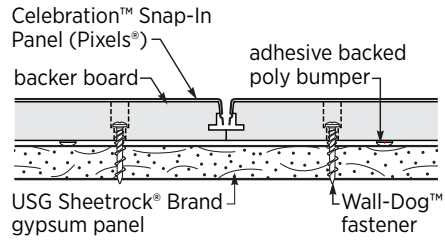
The surface-mounted system consists of backer panels that are installed edge-to-edge directly to the wall surface.



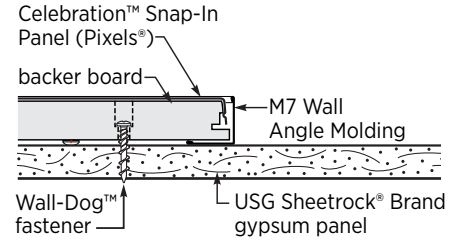
SURFACE-MOUNTED SYSTEM CONSTRUCTION

CONSTRUCTION DETAILS

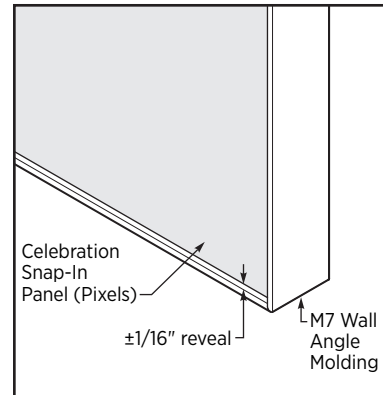
A. Panel Intersection



B. Perimeter Edge



C. Corner



SURFACE-MOUNTED SYSTEM

INSTALLATION

Note: These installation instructions cover the basic rectangular design using 2' x 2' panels. There will be more complex designs that require a different or more complex grid layout.

STEP 1

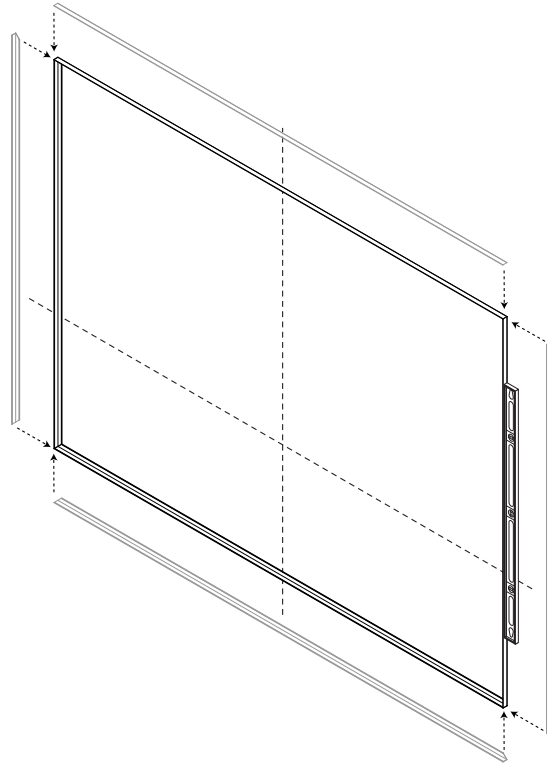
Establish a vertical and horizontal control line with a laser or chalk line that is at the intersection of 4 panels.

Using the previously established vertical and horizontal control lines as reference points, accurately measure and define the outer perimeter of the mural area.

Ensure the outline is level and precise as this will determine the placement of the M7 wall angle molding.

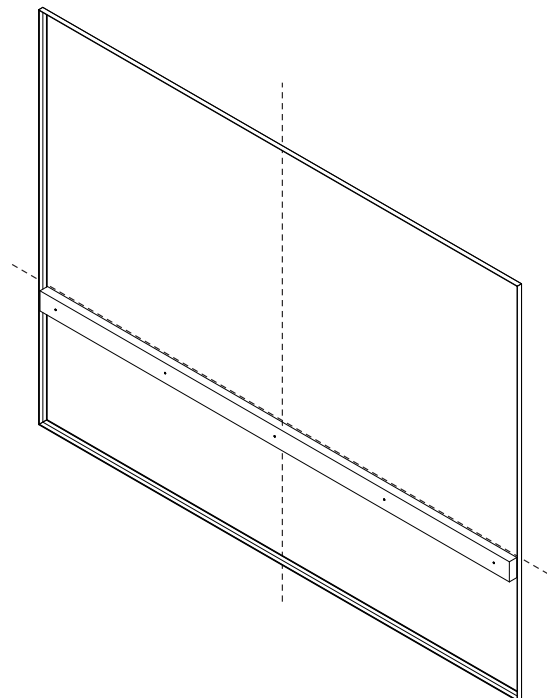
Mark the level perimeter with an allowance of approximately 1/16" for reveal.

Once the outline is confirmed, securely fasten the M7 wall angle molding to the wall using the required fasteners.



STEP 2

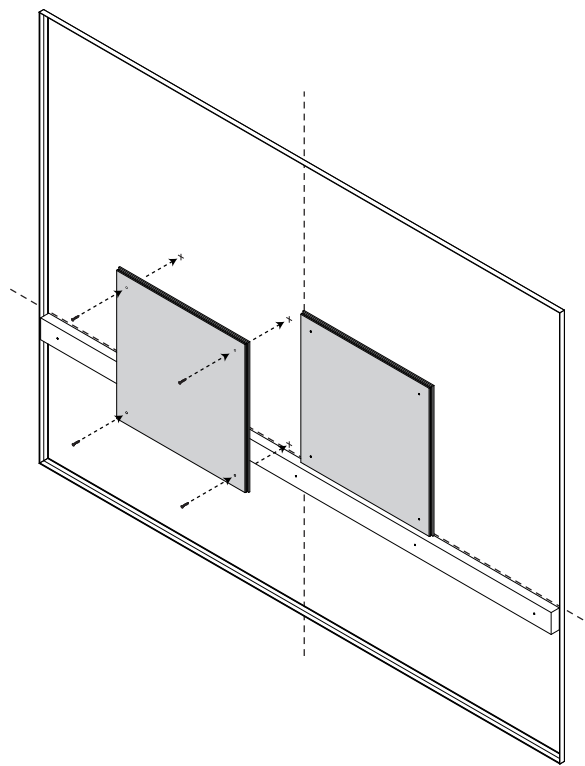
In order to assure proper horizontal alignment, it is recommended that a temporary ledger board be installed on the horizontal control line the entire length of the finished wall installation.



SURFACE-MOUNTED SYSTEM INSTALLATION

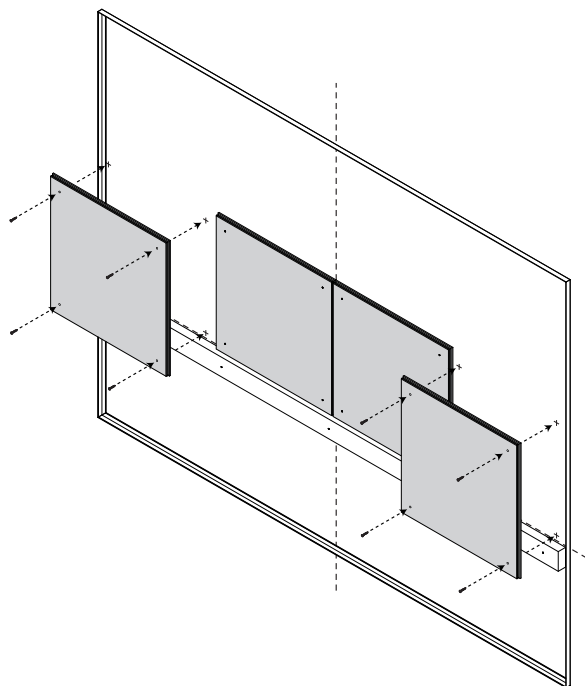
STEP 3

Begin the installation of the backer panels at the intersection of the vertical control line and the ledger board. Fasten to wall through the predrilled holes using appropriate anchor fasteners.



STEP 4

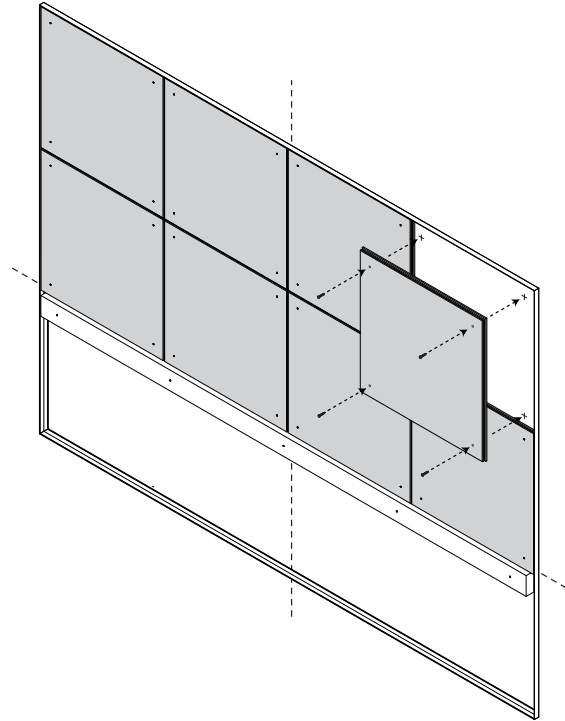
Each consecutive panel will contact the previous panel along the entire length of the vertical leg. With the contact area free of debris, continue the installation in both directions working from the control line out.



SURFACE-MOUNTED SYSTEM INSTALLATION

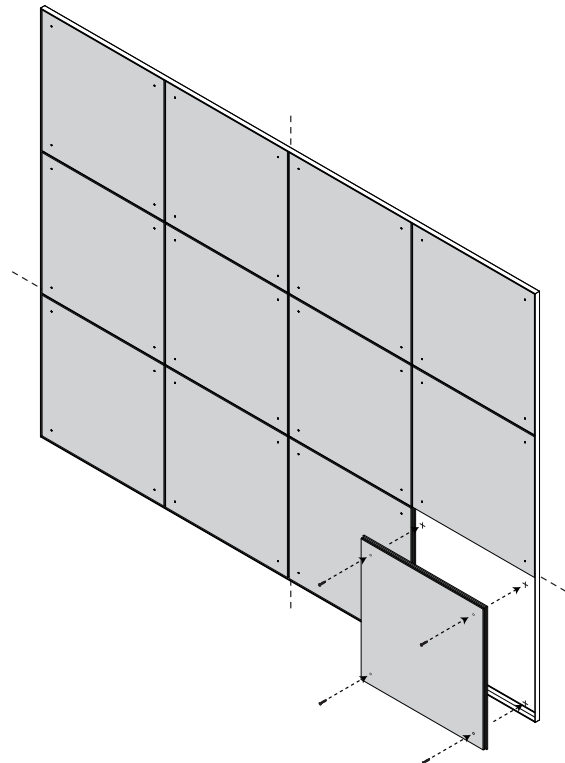
STEP 5

Using a straight edge on the vertical edge of the previously installed backer panel, align the second roll of backer panels with the first.



STEP 6

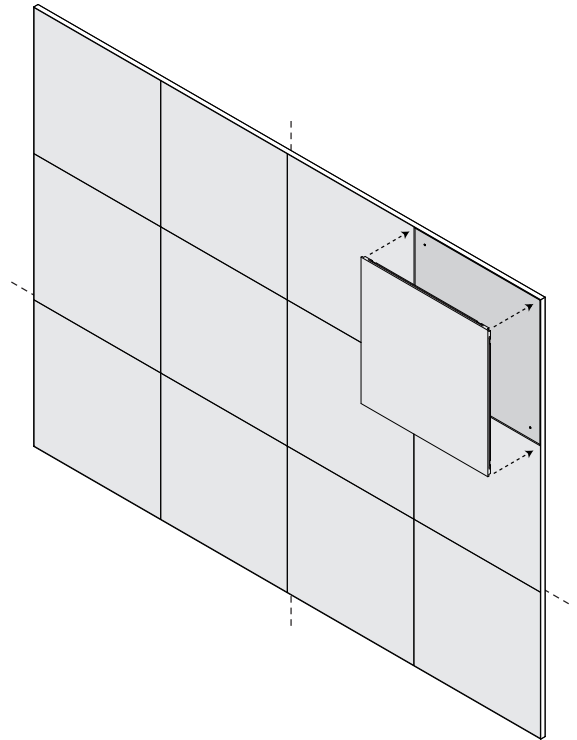
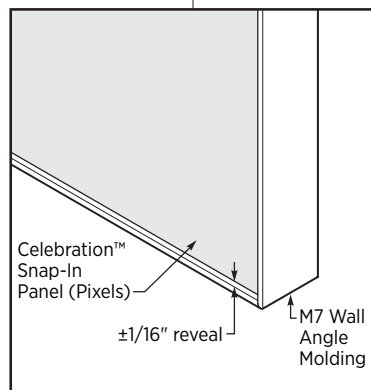
Once the upper panels are all installed, remove the ledger board and install the bottom row of panels aligning them vertically as described in the previous step.



SURFACE-MOUNTED SYSTEM INSTALLATION

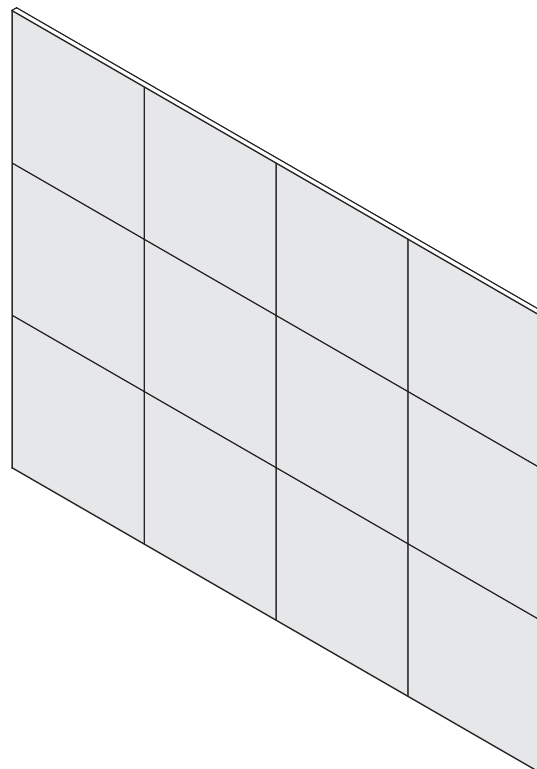
STEP 7

Gently pre-fit Pixels® panels in any order onto the backer panels. Using the heel of your hand, seat the Pixels panel starting from top left uppermost corner to the right uppermost corner. Work down from both corners to the bottom until all edges are seated.



STEP 8

The finished system.



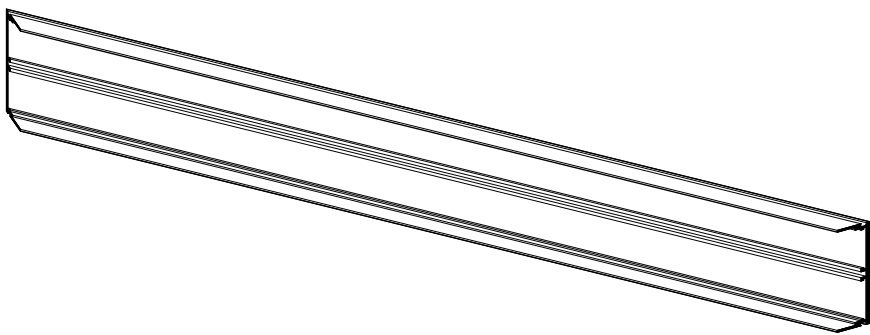
FRAME-MOUNTED BACKLIT SYSTEM

COMPONENTS

In addition to the Pixels® Celebration™ panels (see page 4), the following components are unique to the frame-mounted backlit system.

FRAME

Pre-Mitered Frame Segment



OPTIONS

4" Frame Profile	6" Frame Profile

ACCESSORIES

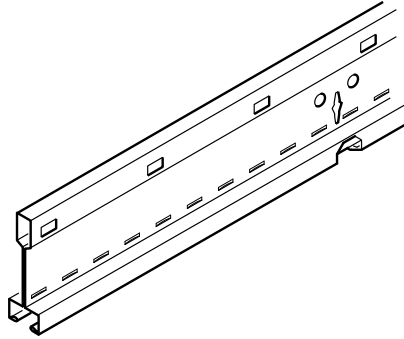
Elite Splice Plate	Perimeter Frame Attachment Clip (WMPFAC)

FRAME-MOUNTED BACKLIT SYSTEM

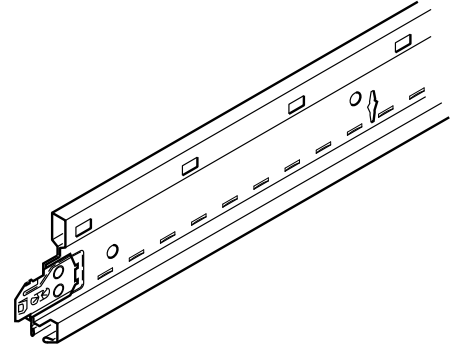
COMPONENTS

GRID

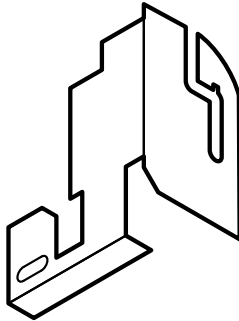
Fineline® DXF™ Main Tee, Pre-Cut



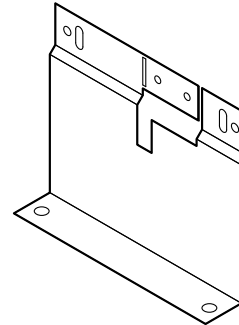
Fineline® DXF™ Cross Tee



Grid Attachment Clip (WMGAC)



Grid Support Bracket (WMGSB)

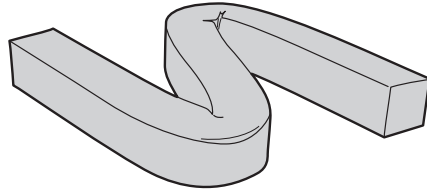


FRAME-MOUNTED BACKLIT SYSTEM

COMPONENTS

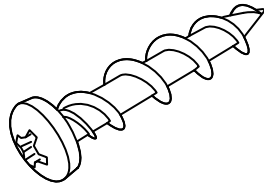
BACKLIT OPTION

Foam Gasket



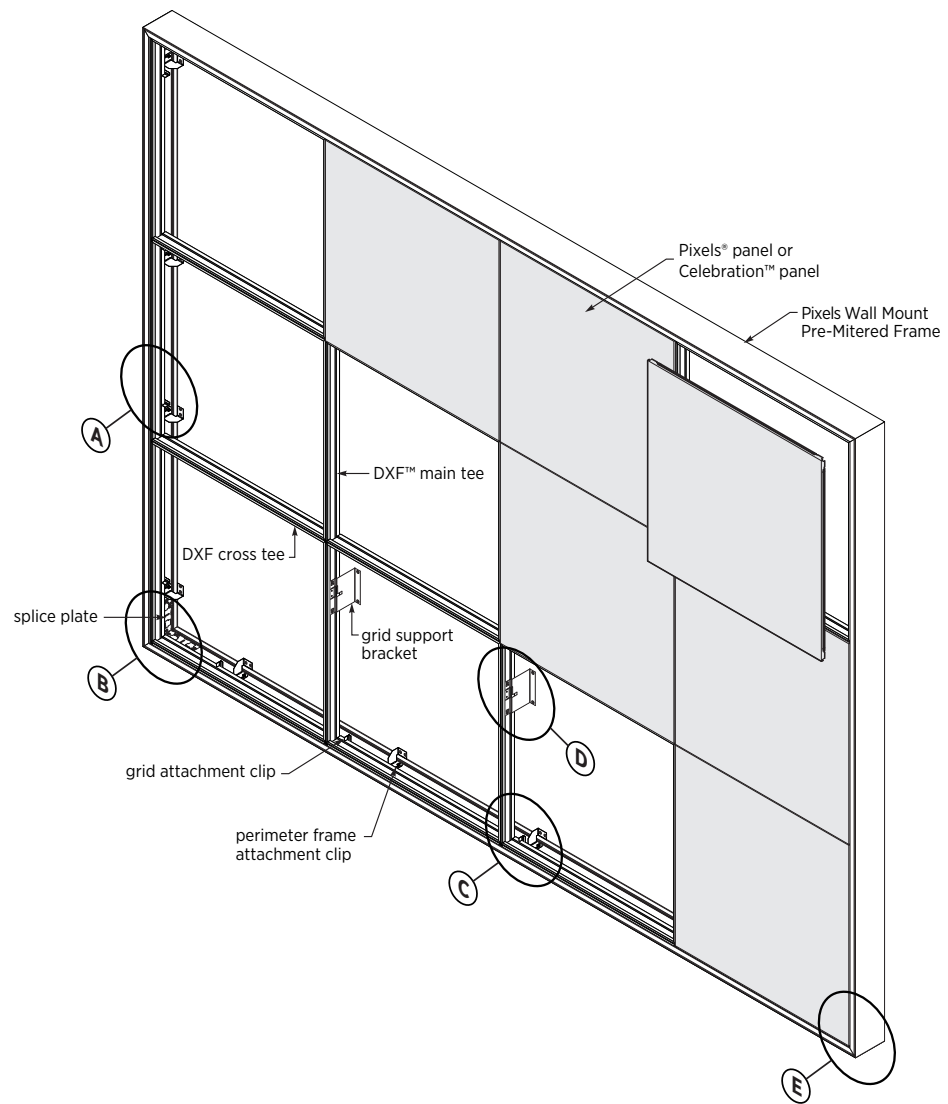
FASTENER

Wall-Dog™ Fastener



Note: Wall-Dog is a trademark of Powers Fasteners, Inc. For more information please visit www.powers.com

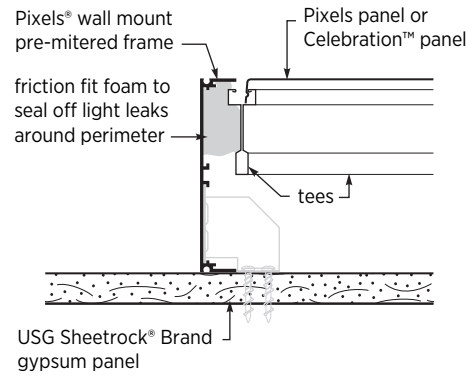
FRAME-MOUNTED BACKLIT SYSTEM CONSTRUCTION



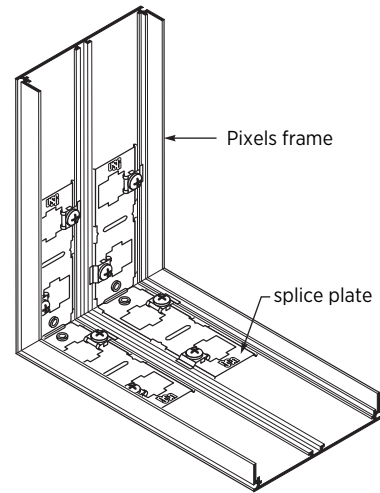
FRAME-MOUNTED BACKLIT SYSTEM CONSTRUCTION

CONSTRUCTION DETAILS

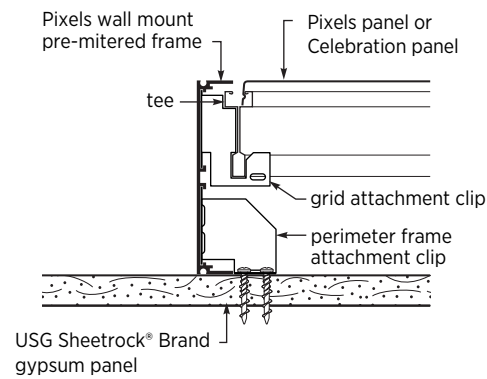
A. Typical Perimeter Edge



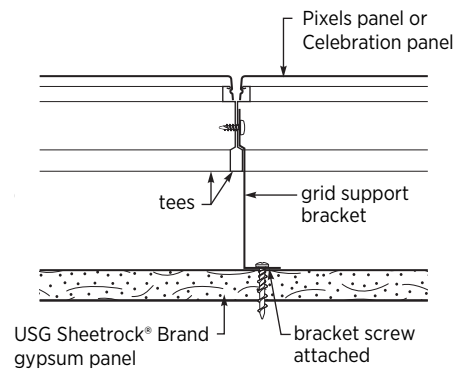
B. Corner Splice



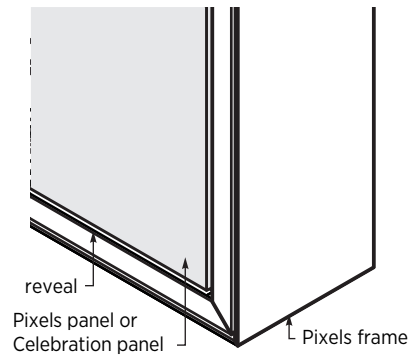
C. Perimeter Attachment Clips



D. Grid Support Panel Intersection



E. Corner



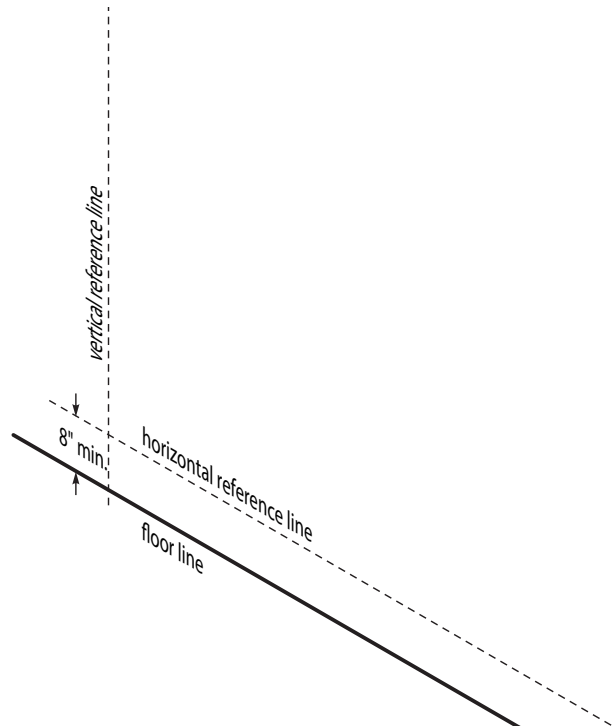
FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION – PERIMETER FRAME

Note: These installation instructions cover the basic rectangular design using 2' x 2' panels. There will be more complex designs that require a different or more complex grid layout.

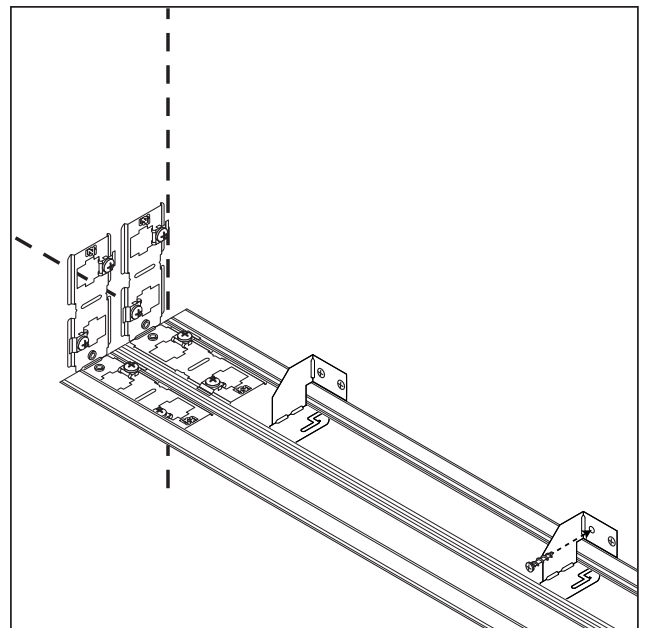
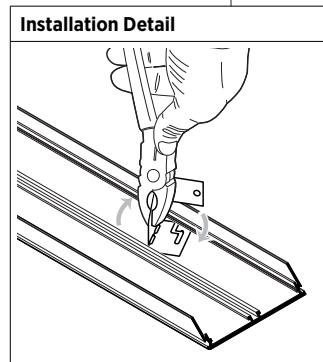
STEP 1

Establish the bottom corner of the installation to be at least 8 inches off the floor and use a cross laser to determine both vertical and horizontal control lines.



STEP 2

Install perimeter frame attachment clips (WMPFAC) inside of the trim per shop drawing supplied. Pre-assemble the corner splice into the bottom horizontal trim piece.

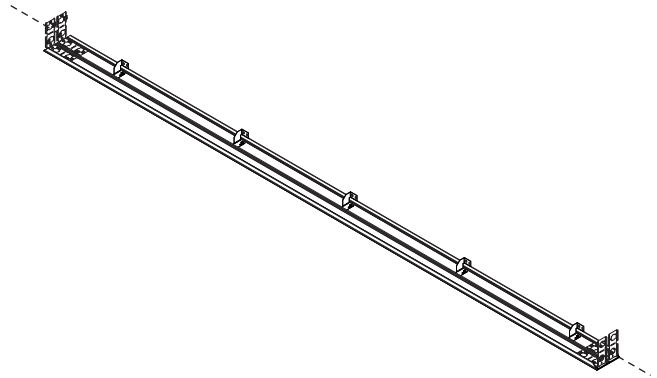


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION – PERIMETER FRAME

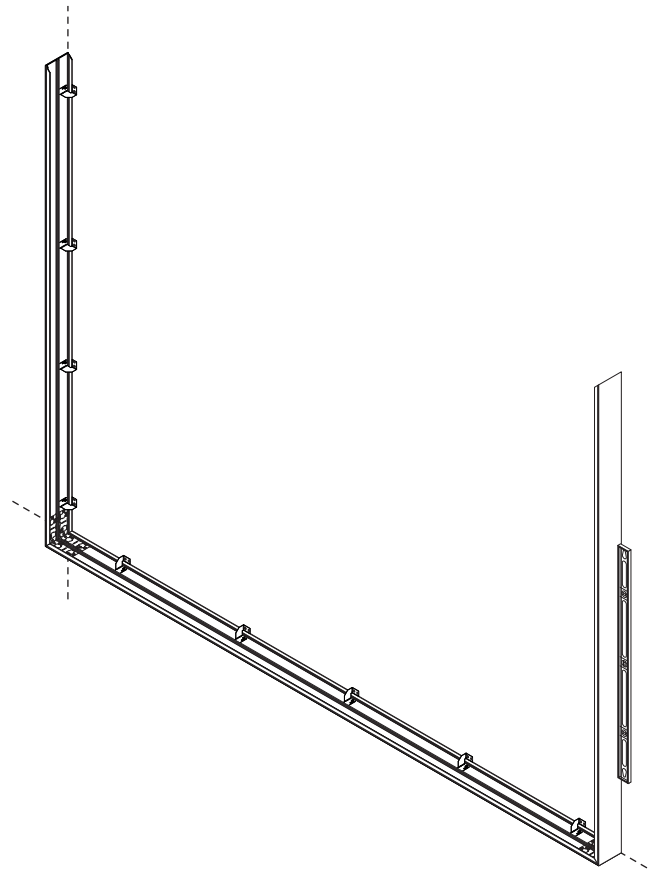
STEP 3

Align lower edge of trim with reference control line and screw attach to wall using appropriate fasteners and anchors as necessary. (Wall-Dog™ fasteners work well)



STEP 4

Install adjacent vertical trim into the corner splice and attach to wall aligning with vertical laser line

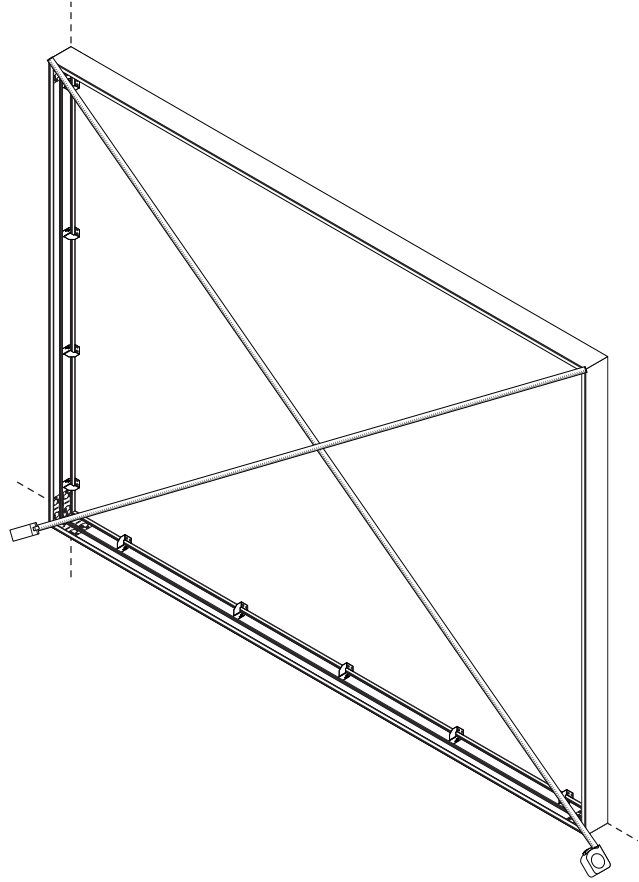


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION – PERIMETER FRAME

STEP 5

Continue building perimeter trim frame per shop drawings. Verify that the frame is square by measuring diagonally corner to corner. If not square, adjust accordingly. FRAME MUST BE SQUARE!



LIGHTING

Once the perimeter trim frame is in place, lighting shall be installed per local codes and supplied shop drawings. The GE Tetra® PowerGrid system is an excellent choice for Pixels® backlit systems. See USG/GE Designed Together to Work Together program on page 32 for more information.



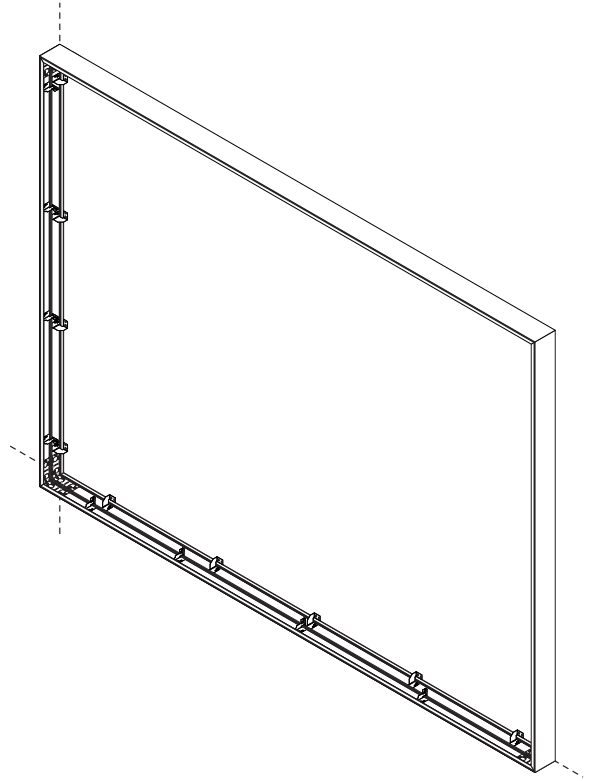
Designed Together to Work Together

FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION — FINELINE® GRID

STEP 1

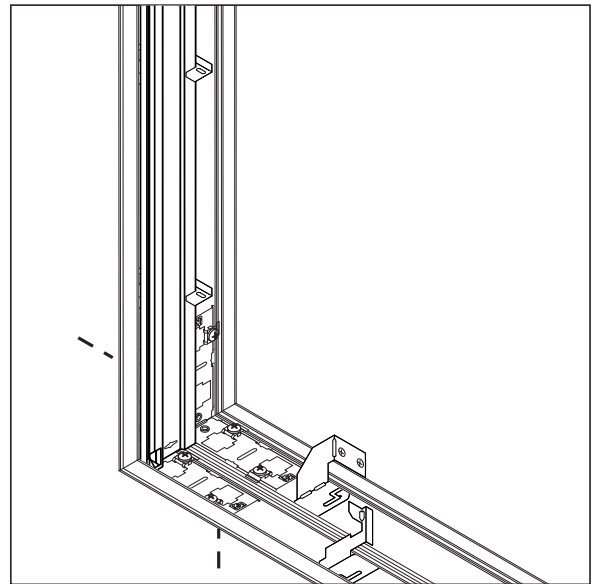
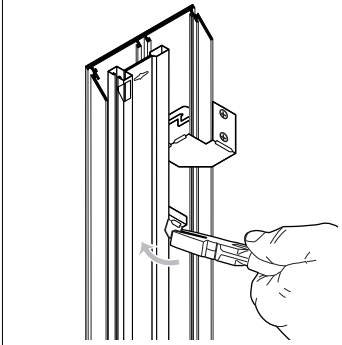
Install grid attachment clip (WMGAC) into perimeter trim per shop drawings supplied.



STEP 2

Beginning at the left side, attach main tee section to the grid attachment clip (WMGAC) and bend tabs to lock in place.

Installation Detail

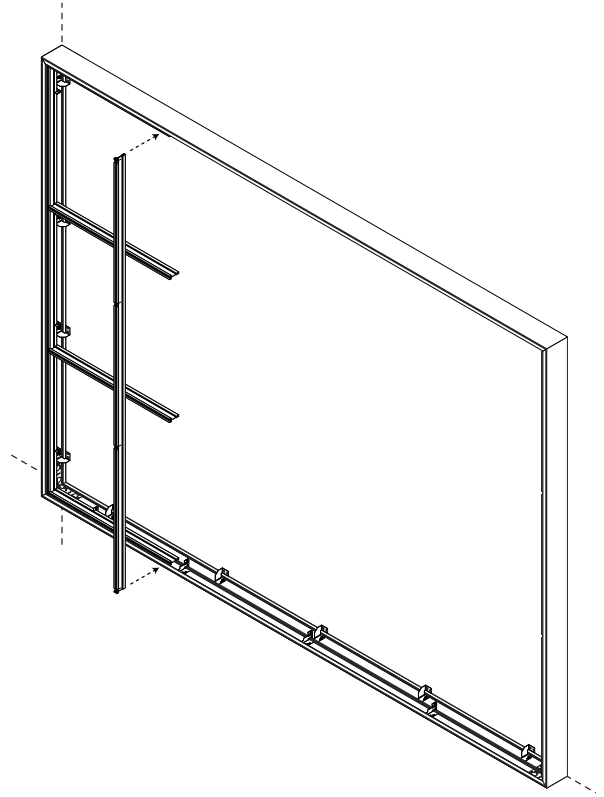


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION — FINELINE® GRID

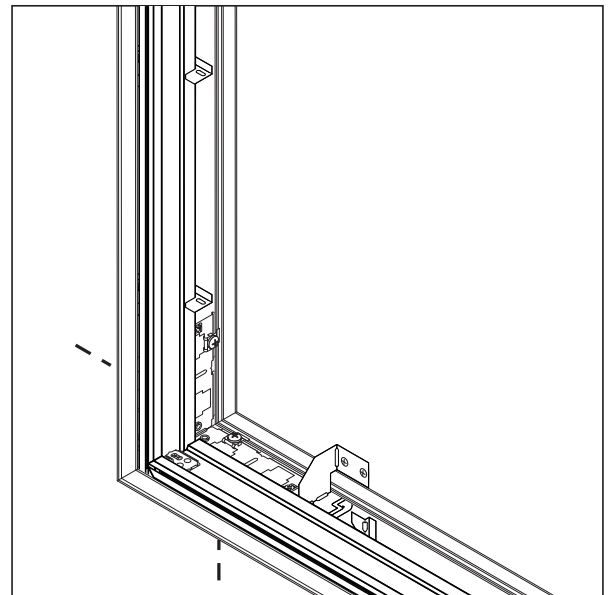
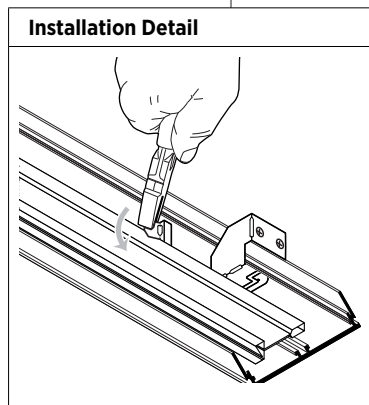
STEP 3

Attach cross tees per the shop drawing and locate the next main tee section.



STEP 4

Attach cross tees to the top and bottom trim using WMGAC1.

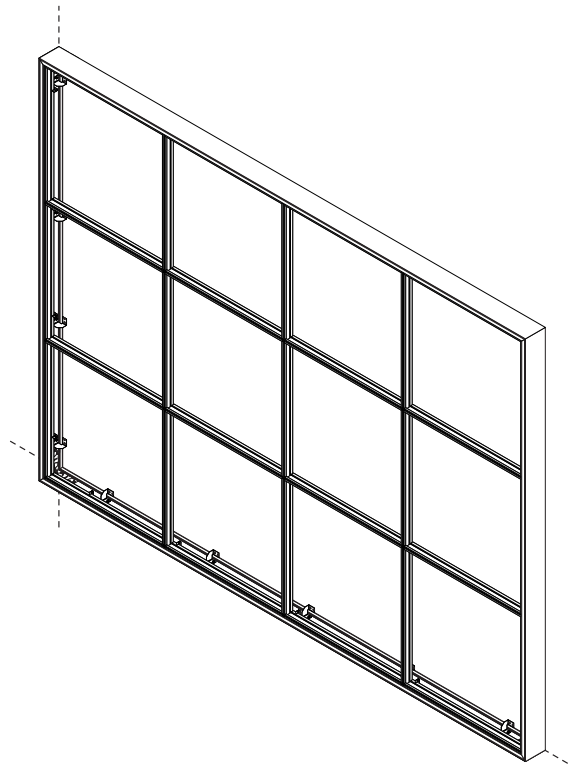


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION — FINELINE® GRID

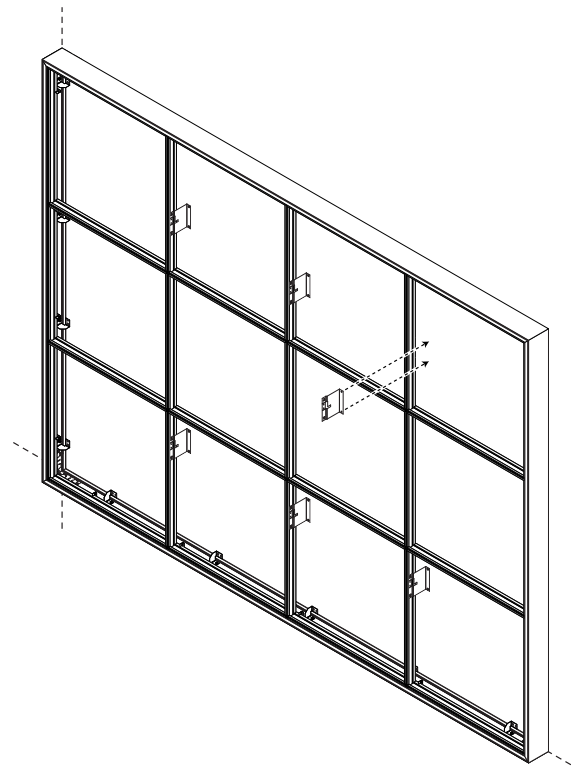
STEP 5

Continue this procedure from left to right until reaching the trim on the right side.



STEP 6

Install wall mount grid support brackets (WMGSB) on main tees per shop drawings.

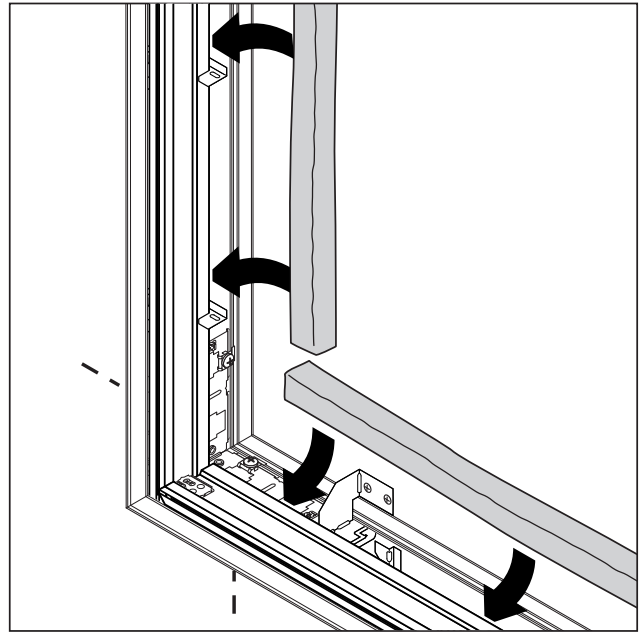
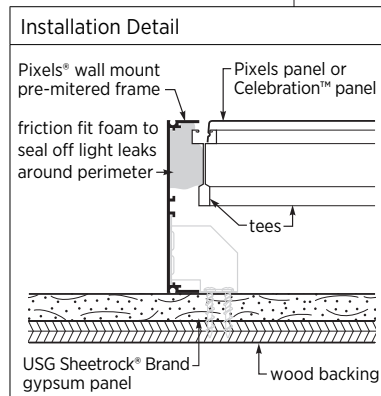


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION — FINELINE® GRID

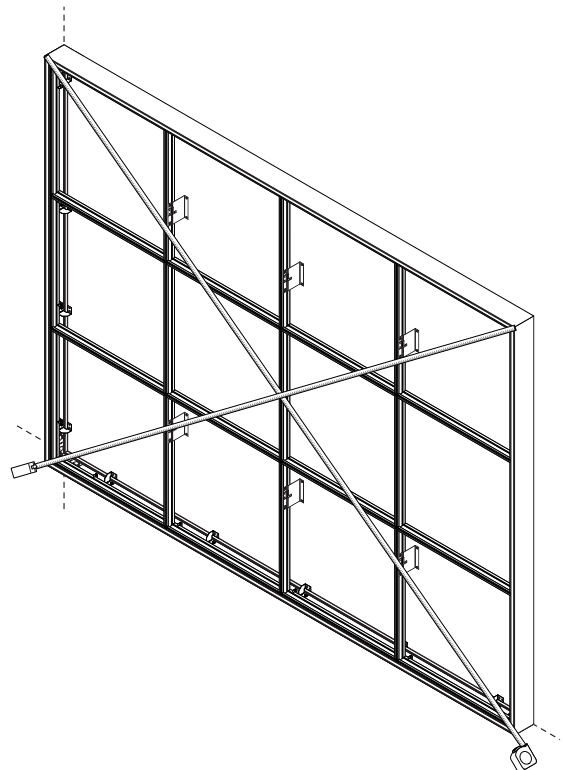
STEP 7

Tuck foam into space between grid and trim to block light leaks. Be sure to push foam all the way to the face of the trim.



STEP 8

Assure the system is square.

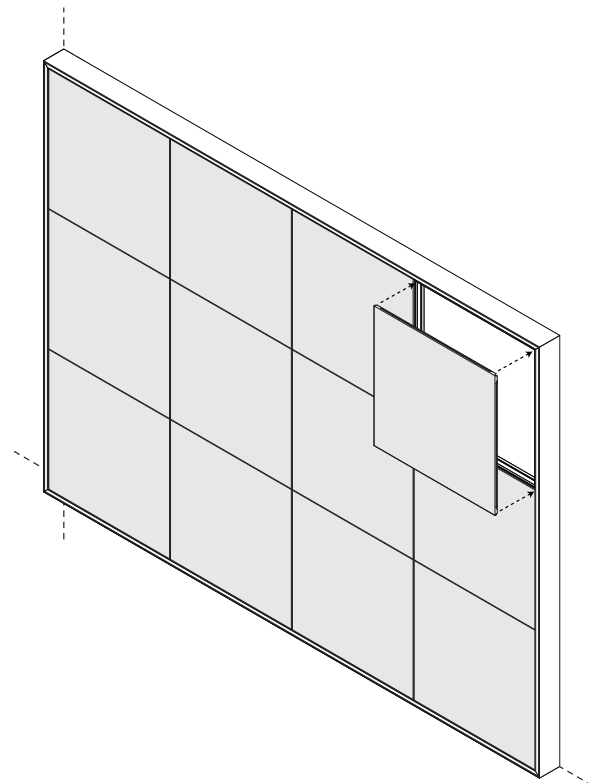
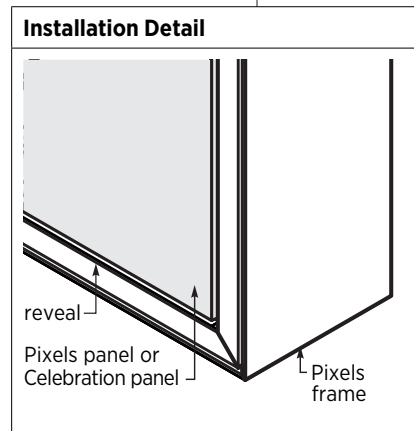


FRAME-MOUNTED BACKLIT SYSTEM

INSTALLATION — PIXELS® PANELS

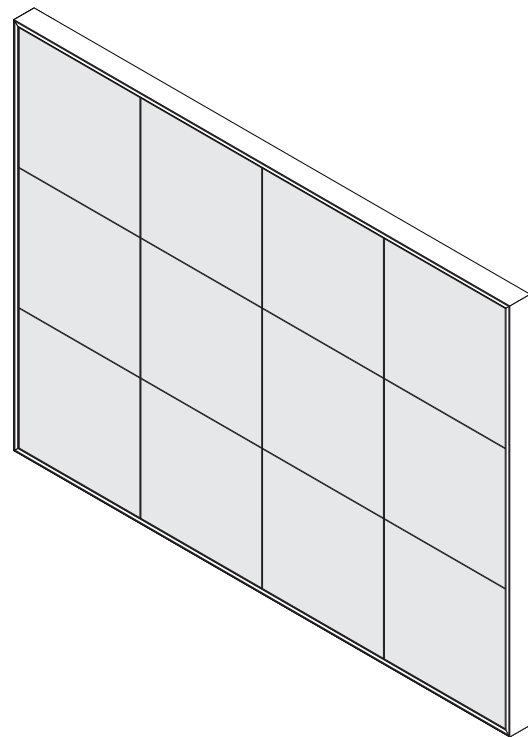
STEP 9

Install Celebration™ or Pixels® panels per shop drawings.



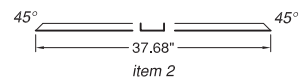
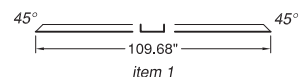
STEP 10

The finished system.



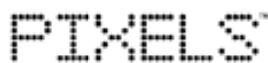
BILL OF MATERIALS

straight	curve	corners
25	0	0




BILL OF MATERIAL - Celebration Pixel Panels						
PART NO		DESCRIPTION	FINISH	QTY	OVG	TOTAL
P1 - P3		36" x 36" Celebration Pixels Panel	silver satin	3	0	3

GE - Nela Park

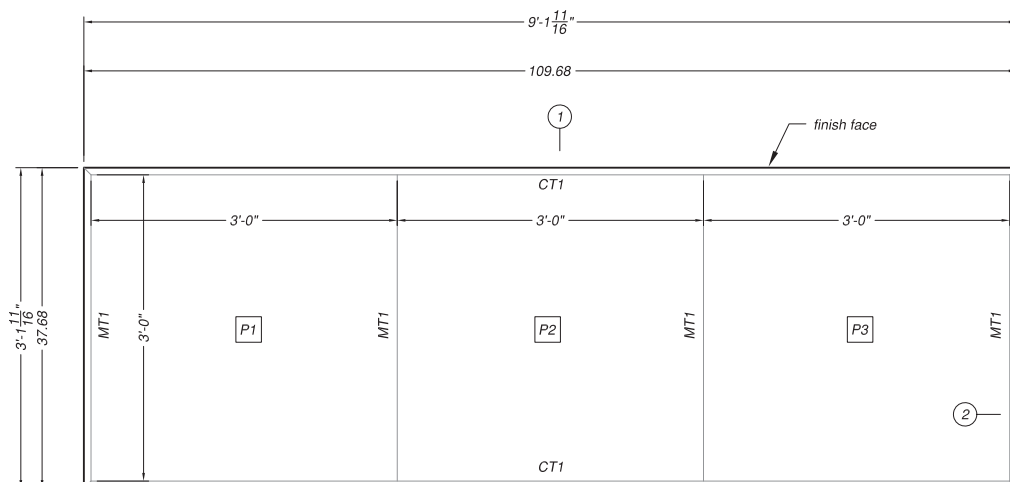


silver satin face paint
DXF grid w/ Celebration

 USG Building Systems <i>Ceilings Solutions Group</i> 1000 Crocker Road Westlake, Ohio 44145-1089 tel 440 892 7363 fax 440 892 7173	ORDER NO.	
	238903	
	DRAWN BY	DATE
	S.M.P.	8-16-12
	CKD. BY	
	SHEET	OF
	1	4

PIXELS™

4" Compasso Elite
silver satin face paint
DXF grid w/ Celebration



Compasso Grid Elevation

scale 1" = 1'-0"



USG Building Systems
Ceilings Solutions Group
Westlake, Ohio

GE - Nela Park 238903
8-16-12 sheet 2 of 4

LIGHTING



APPENDIX

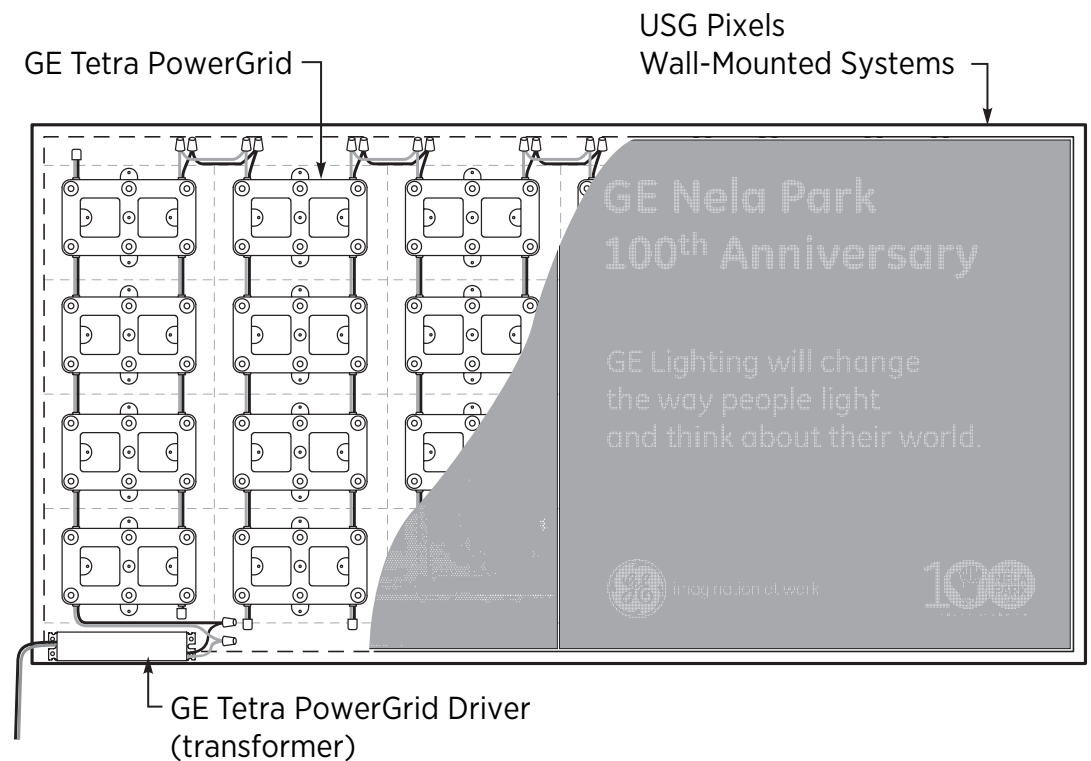
USG | GE

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CGC: Contact Local
Sales Rep**IC606/6-25**

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Manufactured by
USG Interiors, LLC
550 West Adams Street
Chicago, IL 60661

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation of all products and systems. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation. Be cautious with exposed sharp edges when handling ceiling system components.

PRODUCT INFORMATION

For the most up-to-date technical information, visit usgdesignstudio.com or cgcdesignstudio.com

INSTALLATION

Prior to installation, make sure your project complies with any seismic and non-seismic requirements. Must be installed in compliance with ASTM C636, ASTM E580, utilizing standard industry practices and adopting applicable code requirements. Alternative assemblies and installation methods may be utilized when approved by the authority having jurisdiction. USG recommends checking with the authority having jurisdiction prior to designing and installing a suspended ceiling system.

**ICC EVALUATION SERVICE, INC.,
REPORT COMPLIANCE**

Suspension systems manufactured by USG Interiors, Inc., have been reviewed and are approved by listing in ICC-ES Evaluation Report 1222. Evaluation Reports are subject to reexamination, revision and possible cancellation. Please refer to usg.com for current reports.

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