Pixels™
Wall Mounted

USG

Design and Installation Guide

December 2012

On the cover: PIXELS mural shown with GE Tetra® Power Grid during installation.
For more information go to gelightingsolutions.com

Design and Installation Guide

Pixels™ wall-mounted Celebration™ panels from USG offer a turnkey system for displaying the unique perforated imagery art that Pixels makes possible.

System Overview

Pixels Wall-Mounted Applications

Features

CELEBRATION™ panels and CELEBRATION 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 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 with GE Tetra® PowerGrid is on display at GE Lighting & Electrical Institute at historic Nela Park, Cleveland, OH (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

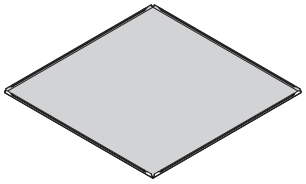
– 2′ x 2′

– 2′ x 4′

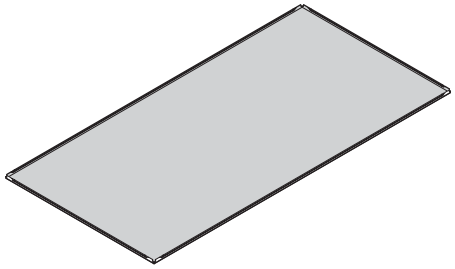
– 2′ x 6′

Panels

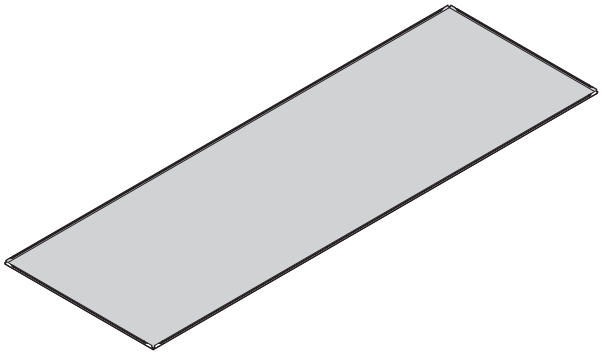
2′ x 2′ Pixels Celebration Panel



2′ x 4′ Pixels Celebration Panel



2′ x 6′ Pixels Celebration Panel



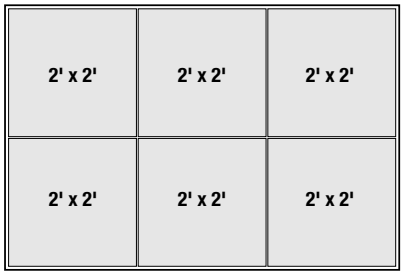
Note: The Pixels image and design process itself is detailed in the Pixels Design Guide, IC566. Through that process the panels are ordered separately from the wall mount system.

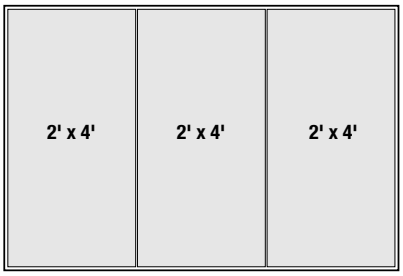
Design Elements

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.

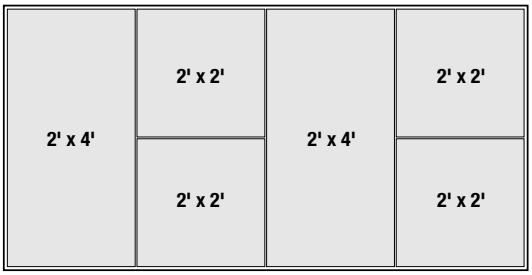
Sample Configurations

6′ x 4′ System





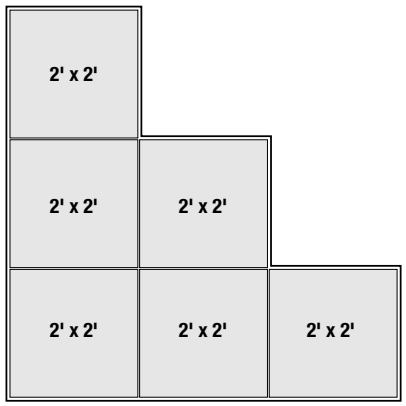
8′ x 4′ System

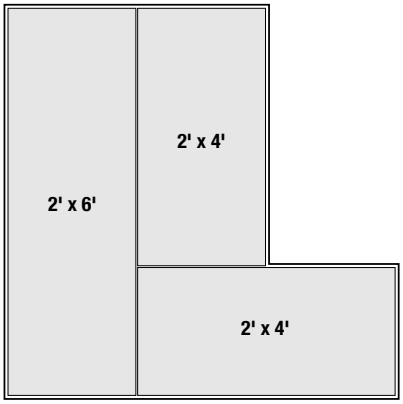


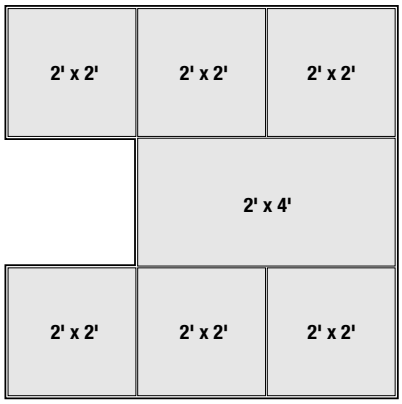
Design Elements

Sample Configurations

6′ x 6′ Systems





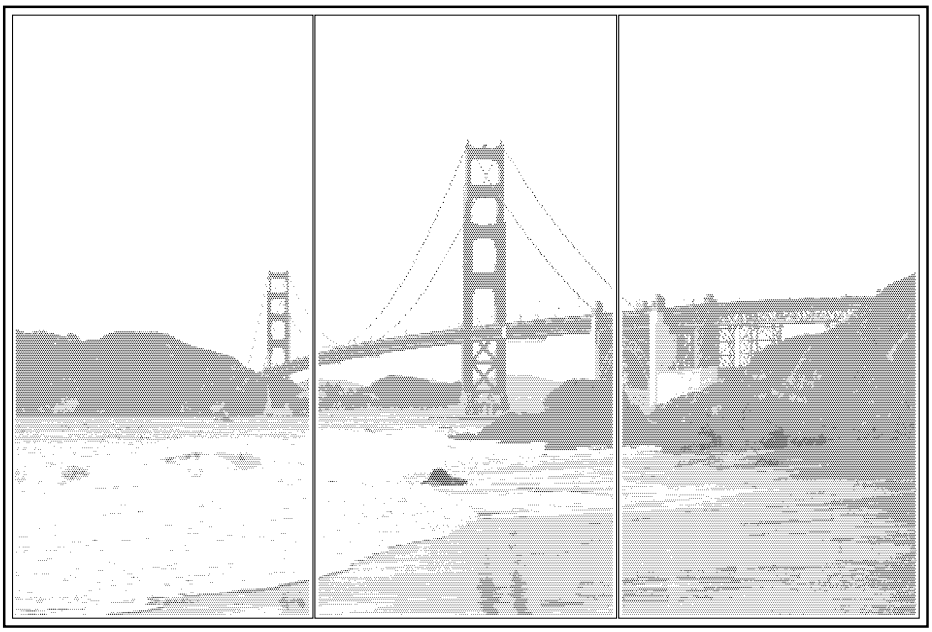


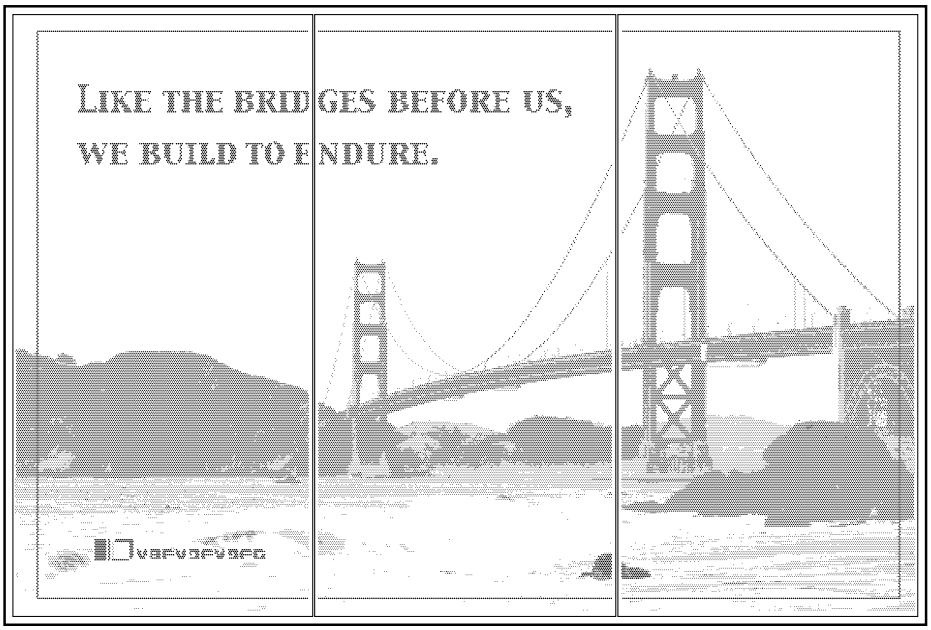
There is no limitation to the finished size of the system. The above examples are only to show the flexibility of panel layout and frame configuration.

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





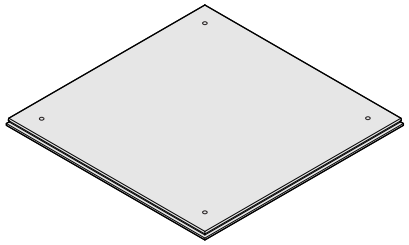
Surface-Mounted System

Components

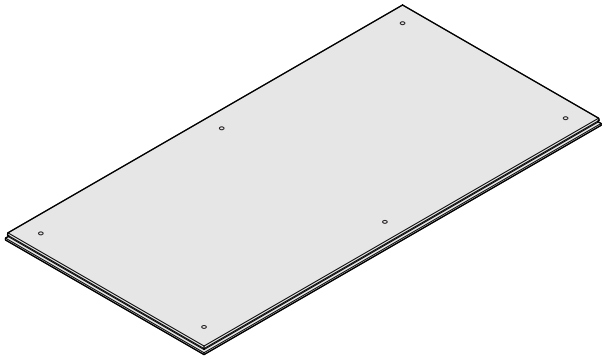
In addition to the PIXELS CELEBRATION panels (see page 4), the following components are unique to the surface-mounted system.

Surface-Mounted Backer Boards

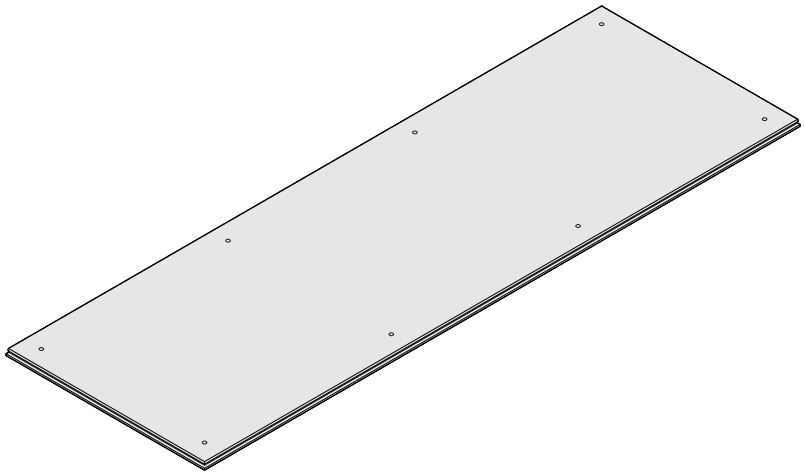
2′ x 2′ (WMBB24)



2′ x 4′ (WMBB48)

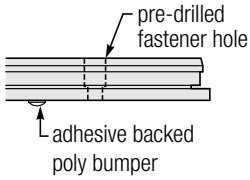


2′ x 6′ (WMBB72)



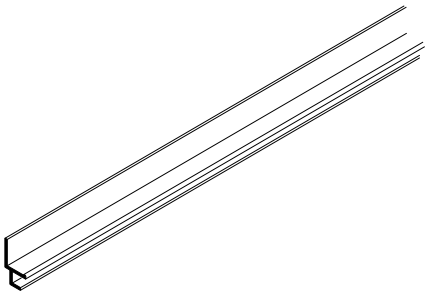
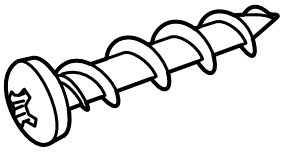
Construction Detail

Backer Board Edge Prfile



Surface-Mounted System

Components

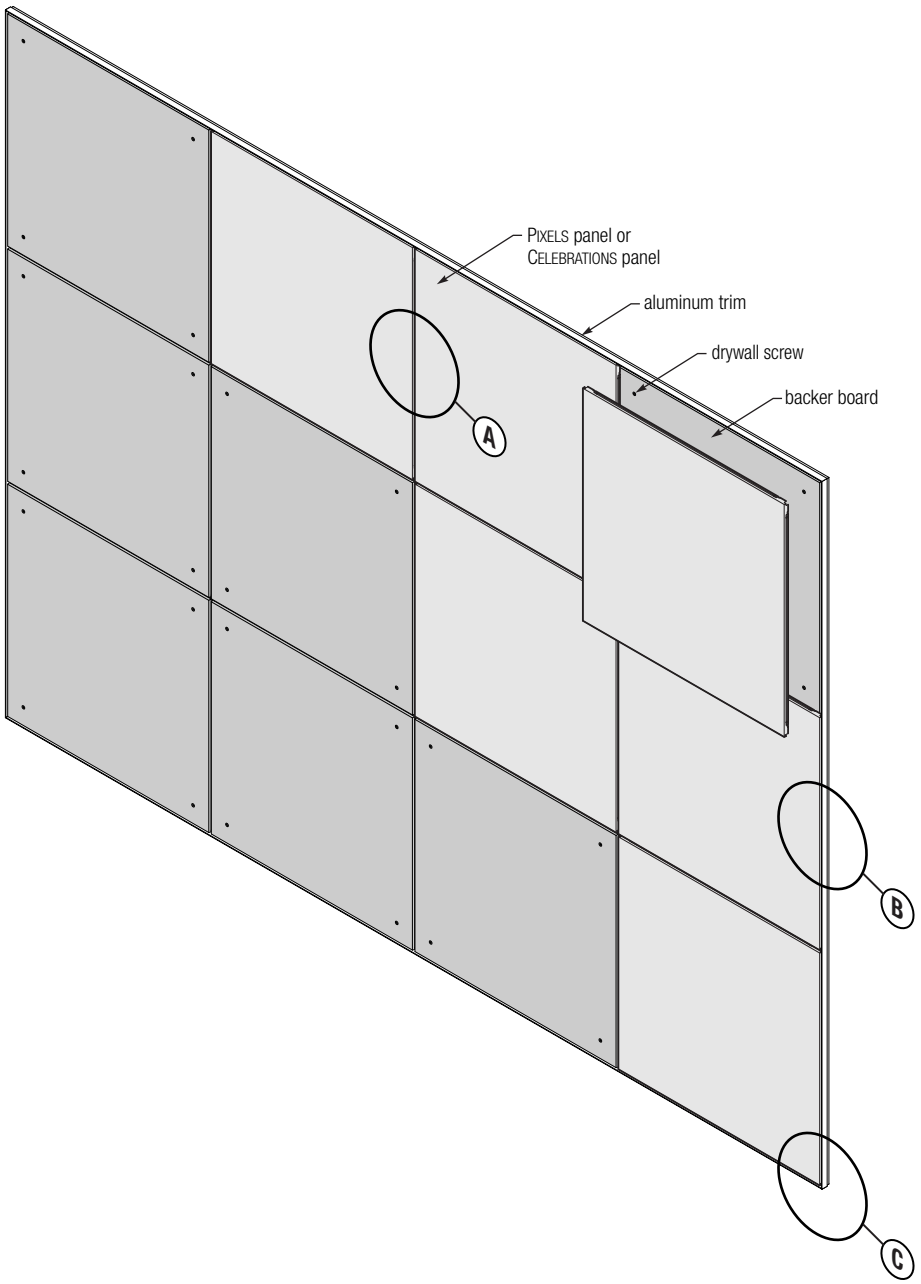
Edge Trim	**Backer Board Aluminum Trim** 
Fastener	**Wall-Dog™Fastener** 

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.

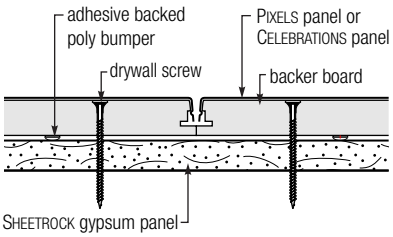


Surface-Mounted System

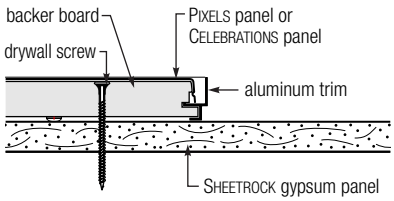
Construction

Construction Details

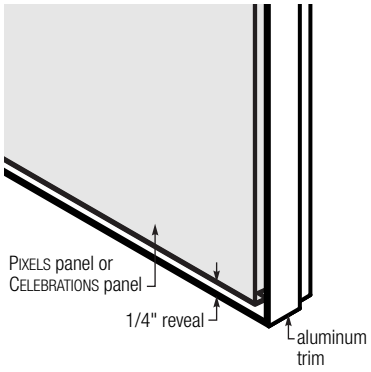
A. Panel Intersection



B. Perimeter Edge



C. Corner



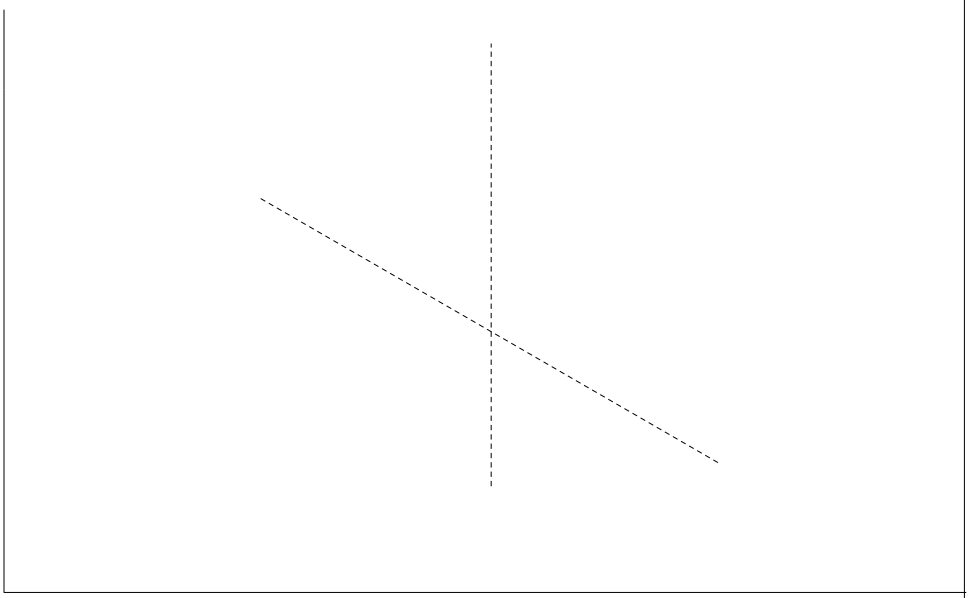
Surface-Mounted System

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.

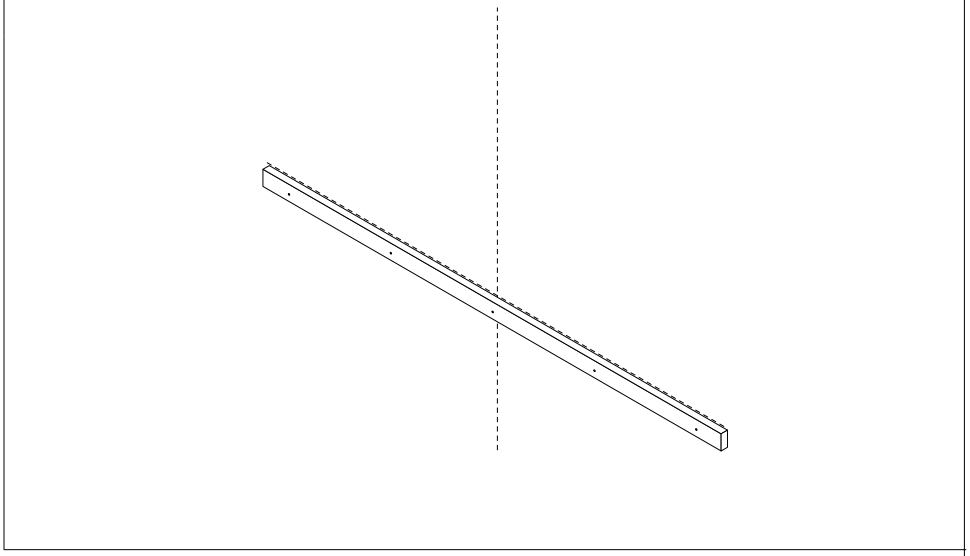
Step 1

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



Step 2

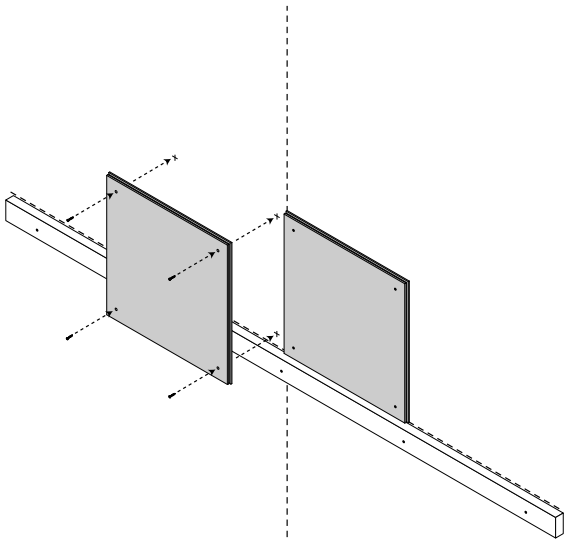
In order to assure proper horizontal alignment, it is recommended that a temporary ledger board be installed on the horizontal control line the entire length of the finished wall installation.



Installation

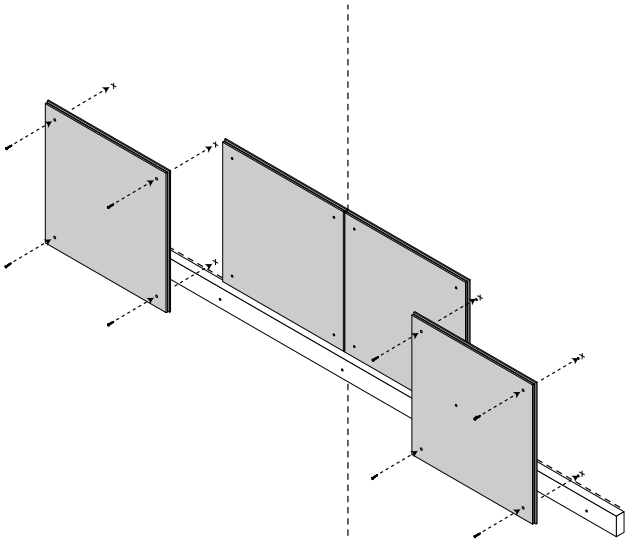
Step 3

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.

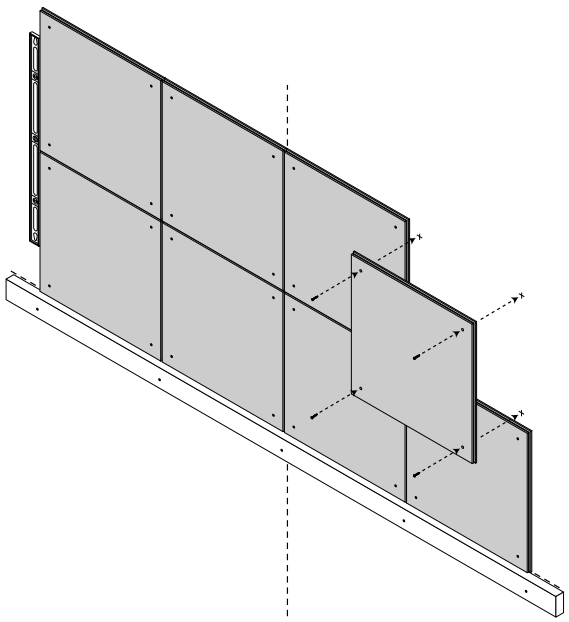


Surface-Mounted System

Installation

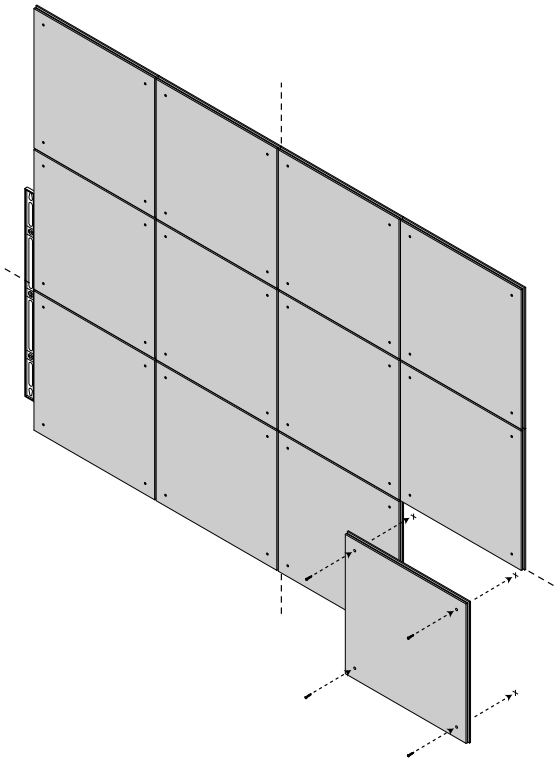
Step 5

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.

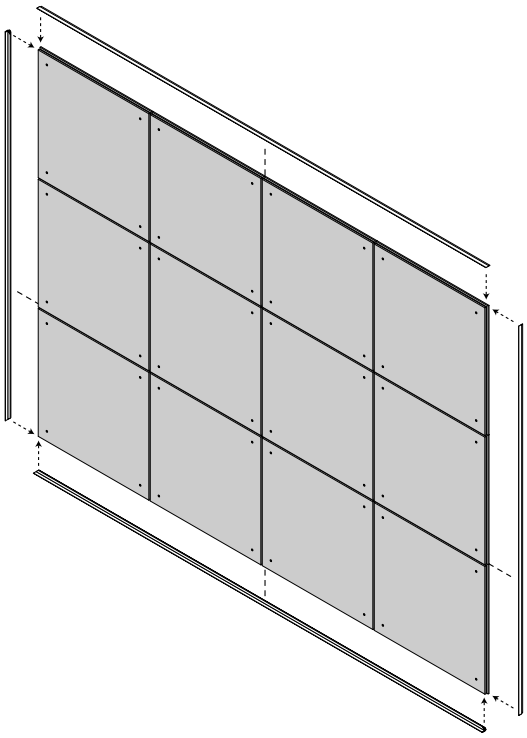


Surface-Mounted System

Installation

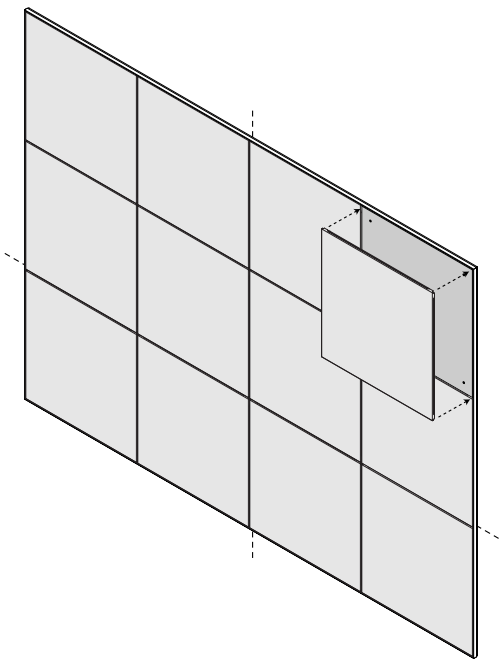
Step 7

Install the pre-mitered friction-fit trim into the panel kerf on all four sides. Screws may be loosened on backer panel perimeter to fit bottom leg of trim behind panel. Once all the trim is in place, re-tighten the perimeter screws.

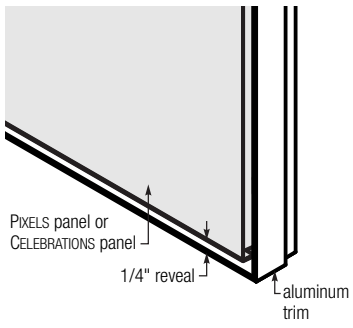


Step 8

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.



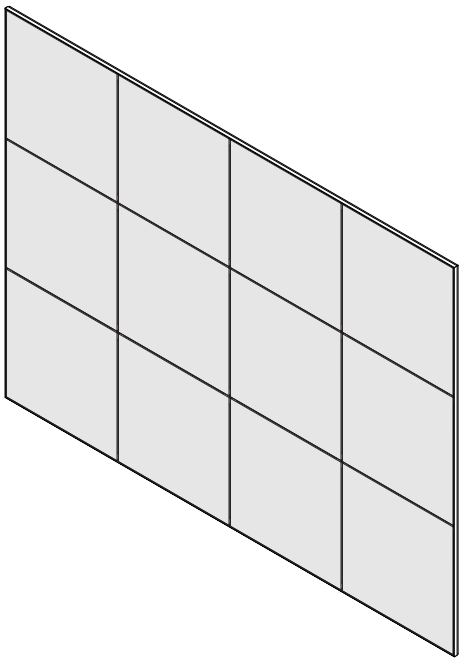
Installation Detail



Installation

Step 9

The finished system.



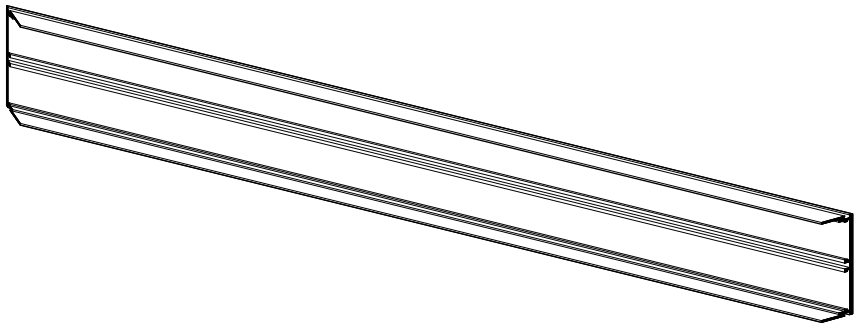
Frame-Mounted Backlit System

Components

In addition to the PIXELS CELEBRATION panels (see page 4), the following components are unique to the frame-mounted backlit system.

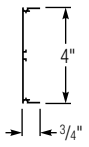
Frame

Pre-Mitered Frame Segment

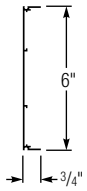


Options

4″ Frame Profile

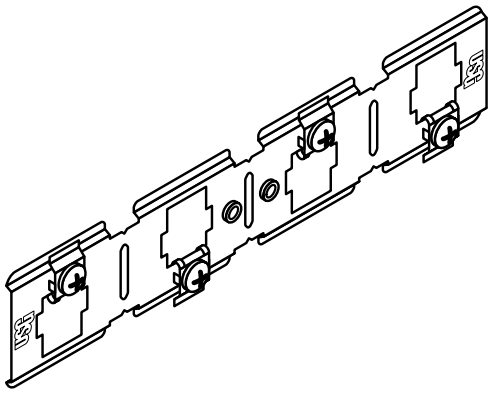


6″ Frame Profile

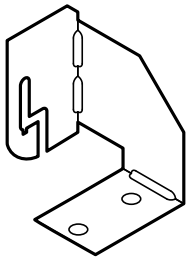


Accessories

Elite Splice Plate

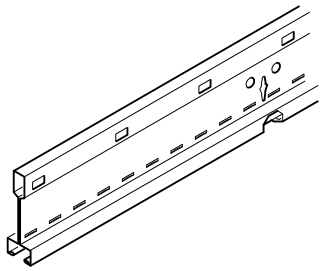
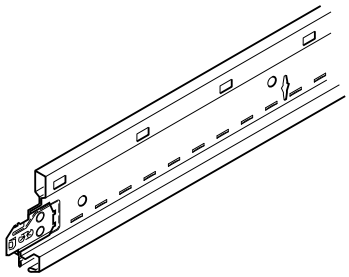
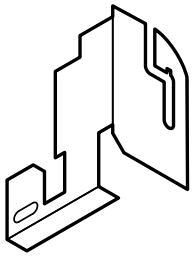
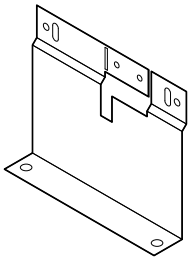


Perimeter Frame Attachment Clip (WMPFAC)



Components

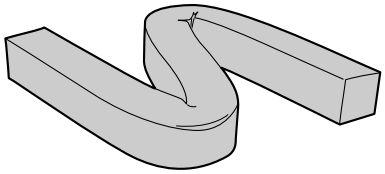
Grid

FINELINE® DXF™ Main Tee, Pre-Cut	**FINELINE® DXF Cross Tee**
	
Grid Attachment Clip (WMGAC)	**Grid Support Bracket (**WMGSB)
	

Components

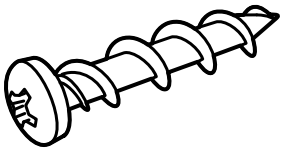
Backlit Option

Foam Gasket



Fasteners

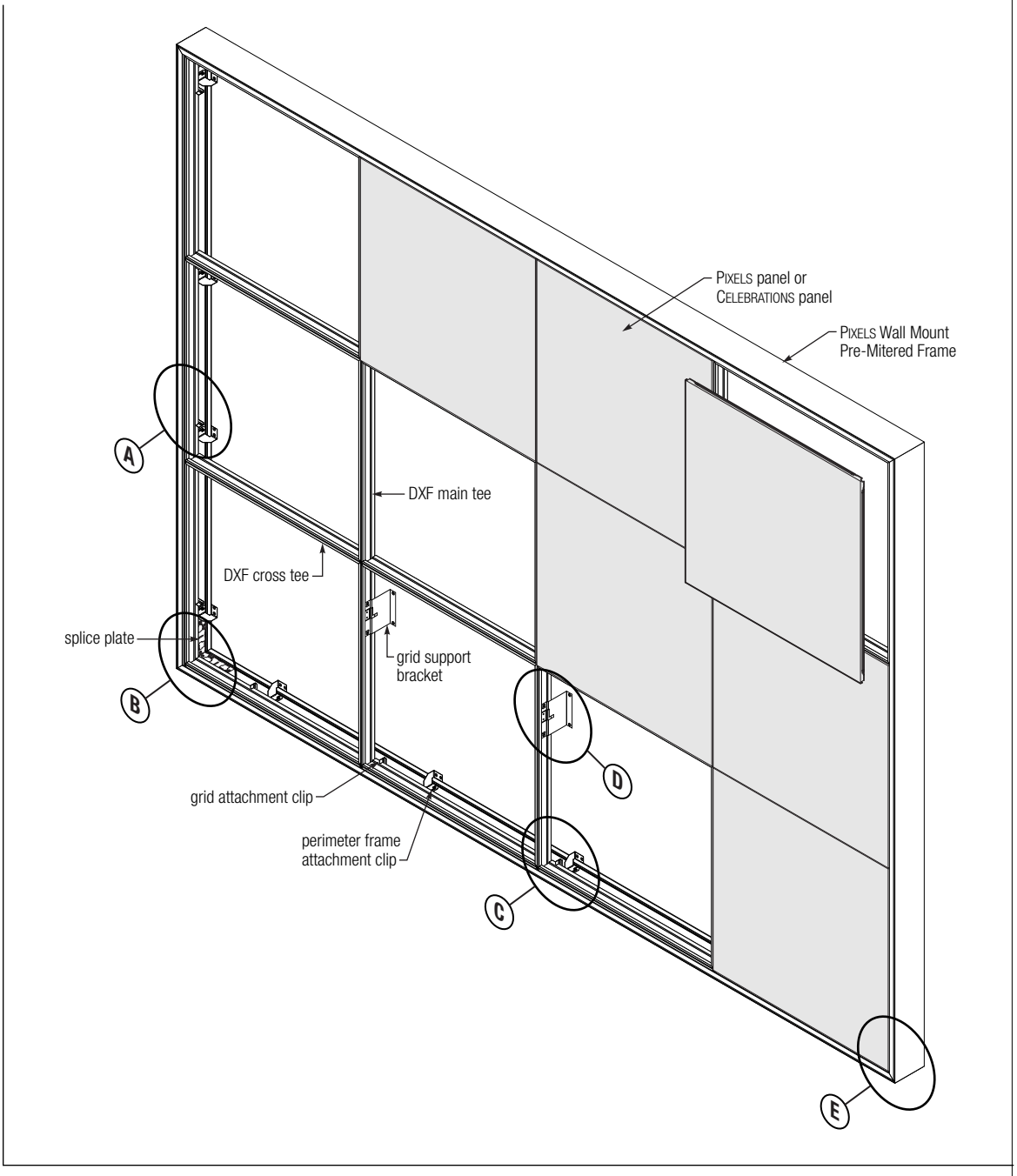
Wall-Dog™Fastener



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

Frame-Mounted Backlit System

Construction

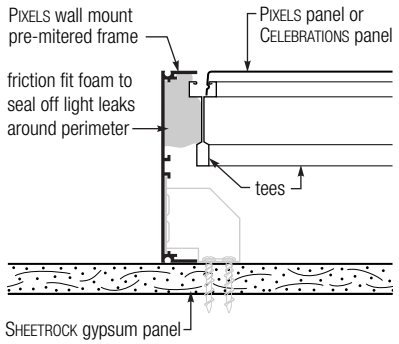


Frame-Mounted Backlit System

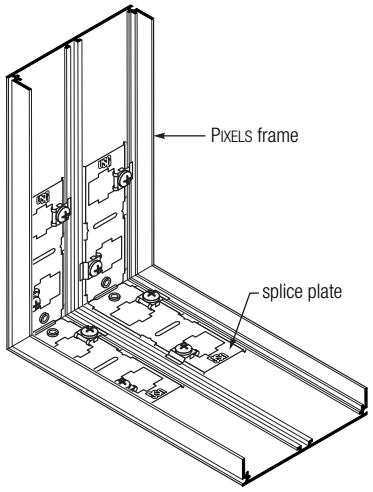
Construction

Construction Details

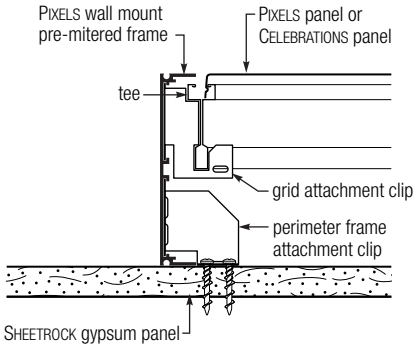
A. Typical Perimeter Edge



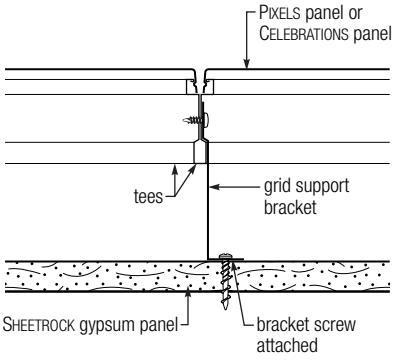
B. Corner Splice



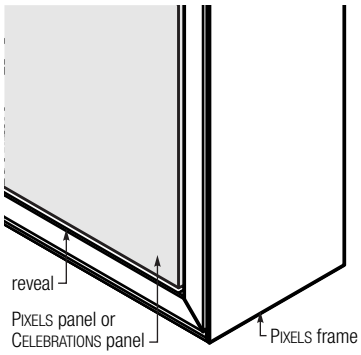
C. Perimeter Attachment Clips



D. Grid Support Panel Intersection



E. Corner

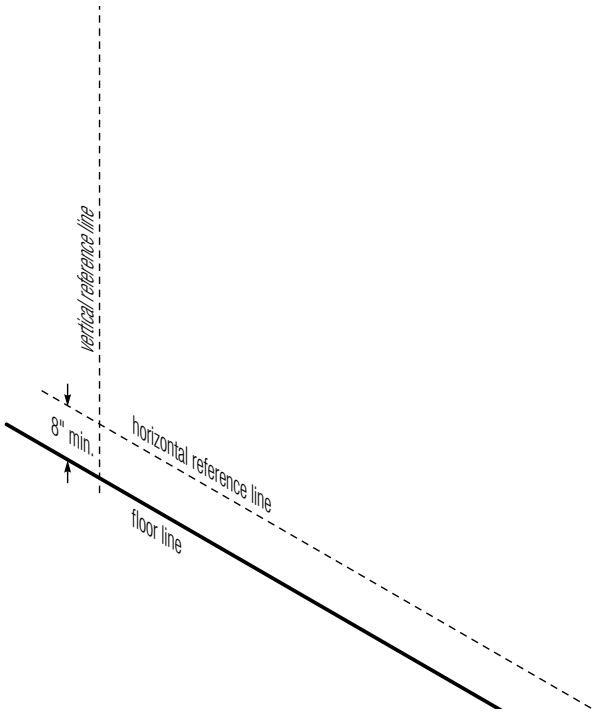


Installation – Perimeter Frame

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

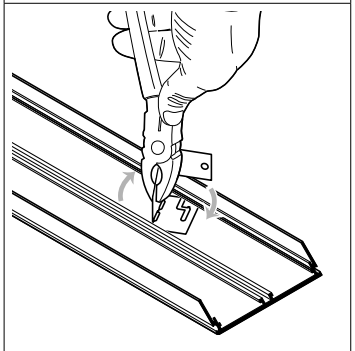
Establish the bottom corner of the installation to be at least 8 inches off the floor and use a cross laser to determine both vertical and horizontal control lines.

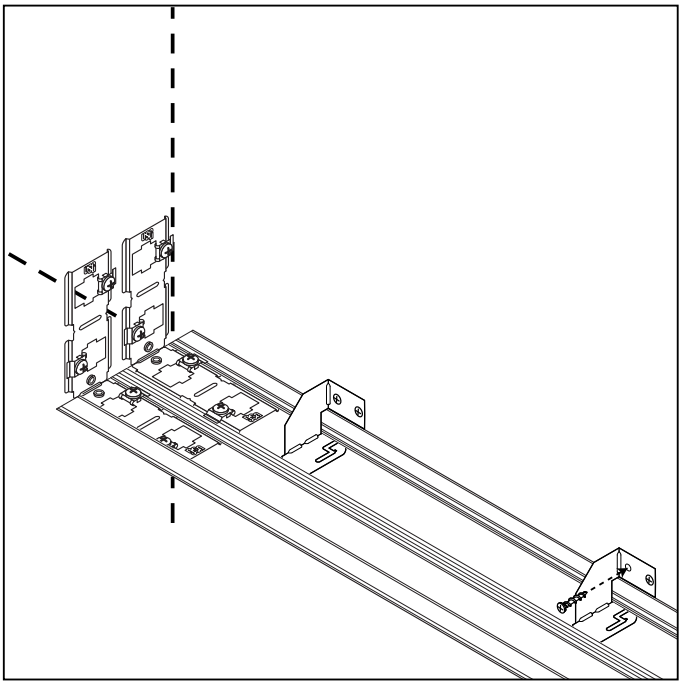


Step 2

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.

Installation Detail

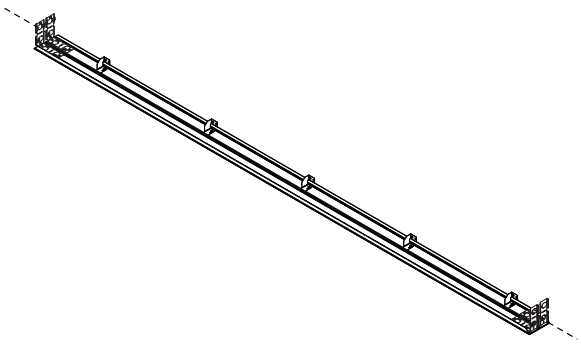




Installation – Perimeter Frame

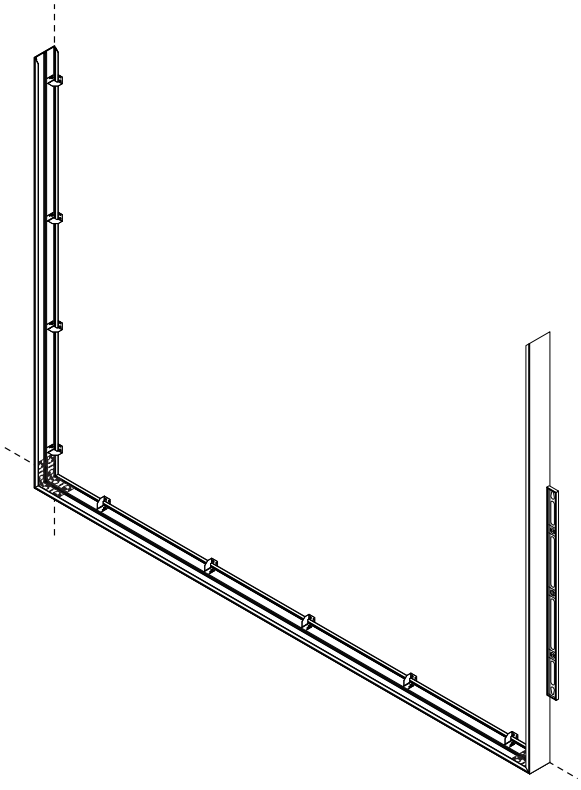
Step 3

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

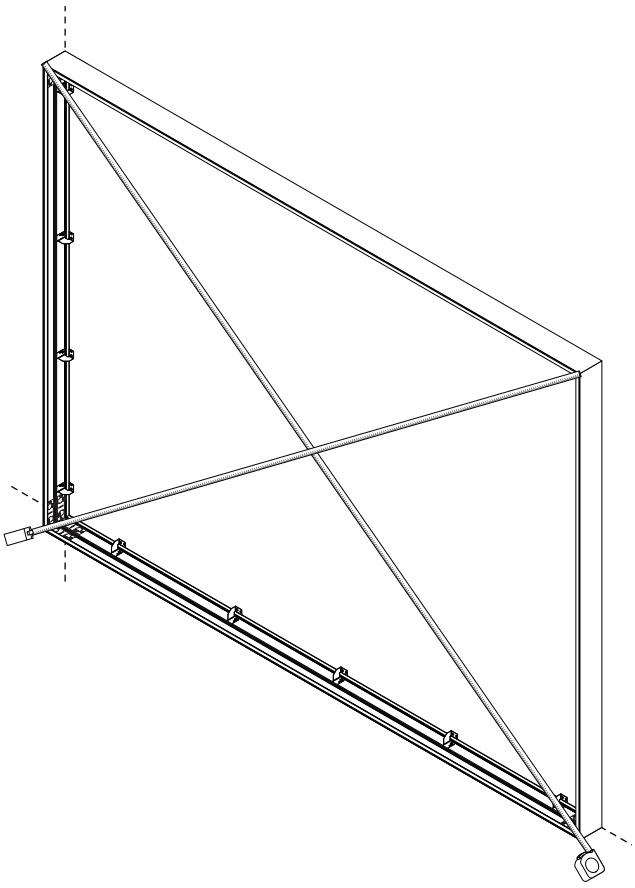
Install adjacent vertical trim into the corner splice and attach to wall aligning with vertical laser line.



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

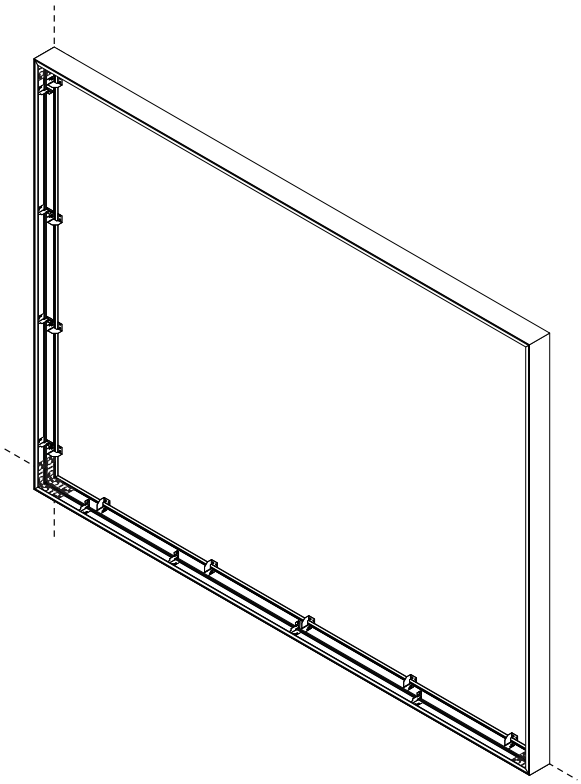
Once the perimeter trim frame is in place, lighting shall be installed per local codes and supplied shop drawings. The GE Tetra® PowerGrid system is an excellent choice for PIXELS backlit systems. See USG/GE Designed Together to Work Together program on page 32 for more information.

Designed Together to Work Together

Installation – Fineline® Grid

Step 1

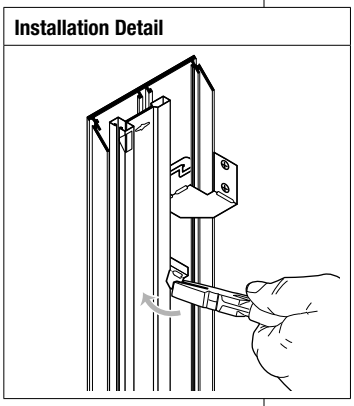
Install grid attachment clip (WMGAC) into perimeter trim per shop drawings supplied.

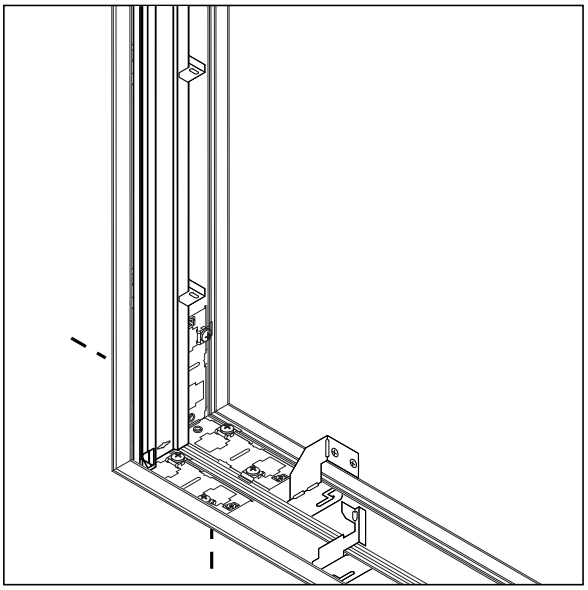


Step 2

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

Installation Detail

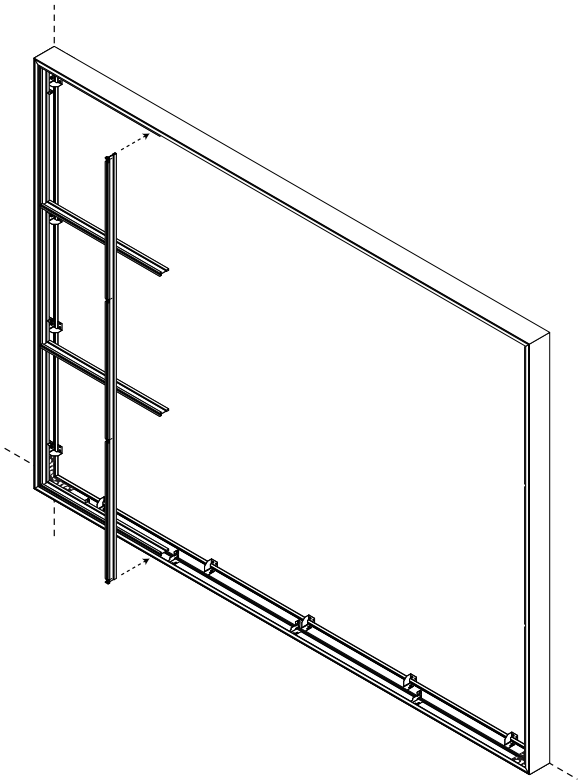




Installation – Fineline® Grid

Step 3

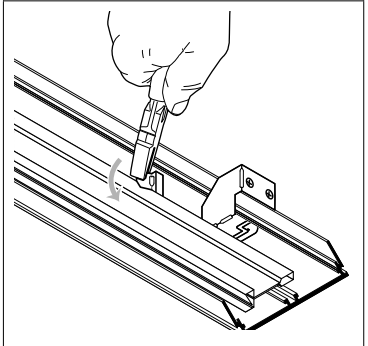
Attach cross tees per the shop drawing and locate the next main tee section.

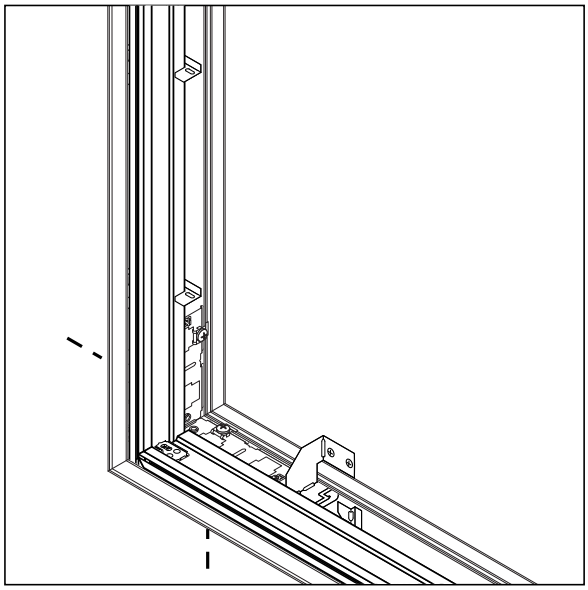


Step 4

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

Installation Detail

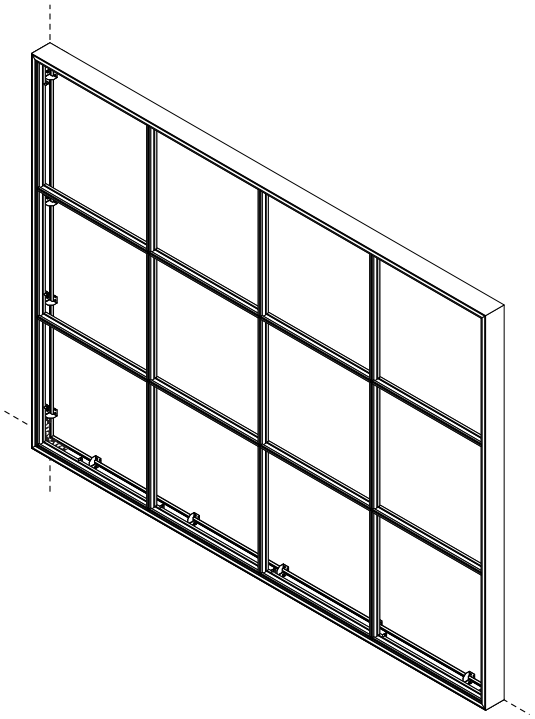




Installation – Fineline® Grid

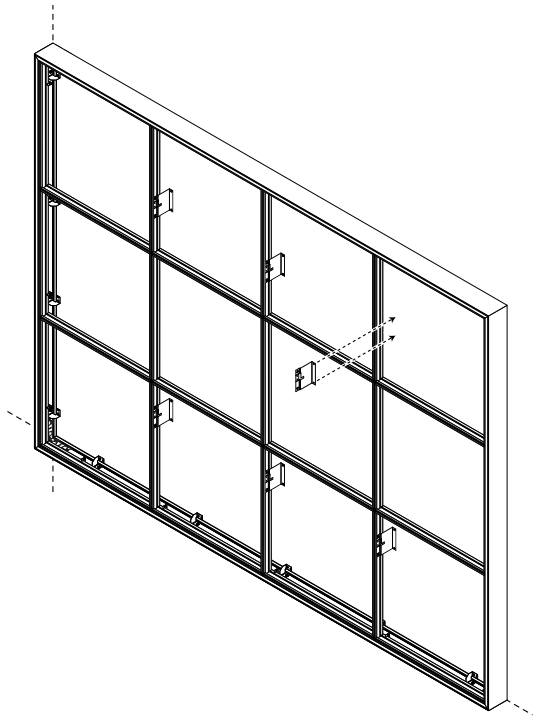
Step 5

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



Step 6

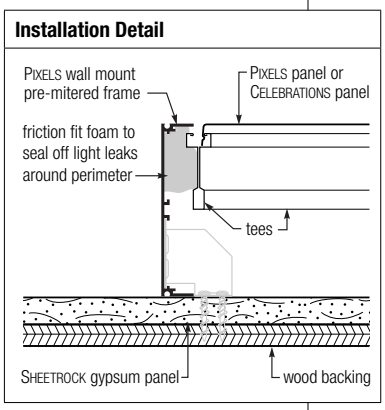
Install wall mount grid support brackets (WMGSB) on main tees per shop drawings.

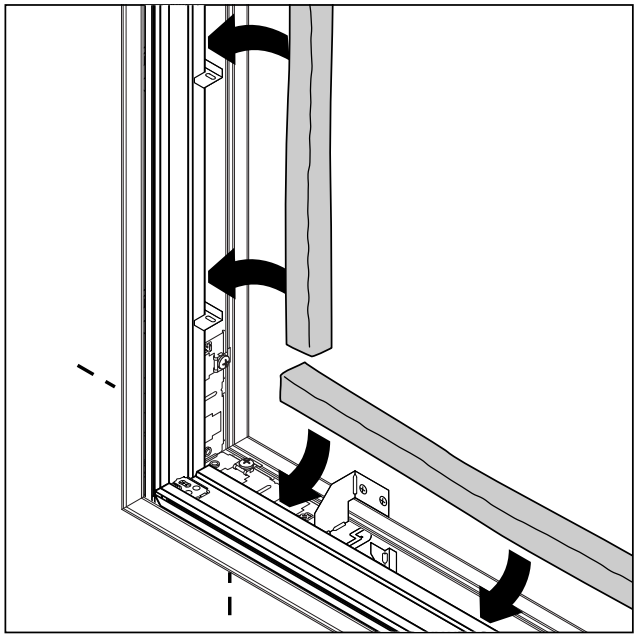


Installation – Fineline® Grid

Step 7

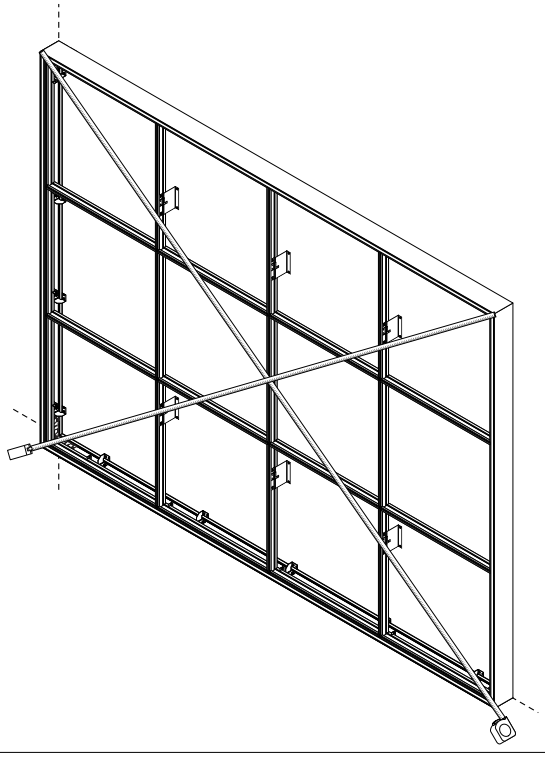
Tuck foam into space between grid and trim to block light leaks. Be sure to push foam all the way to the face of the trim.





Step 8

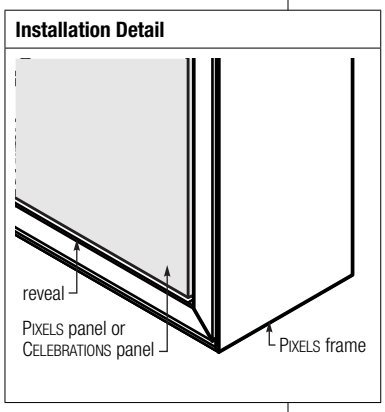
Assure the system is square.

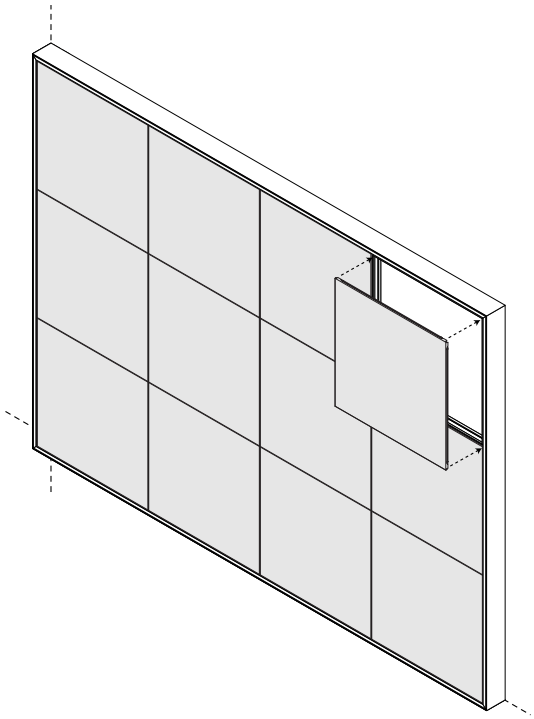


Installation – Pixels Panels

Step 9

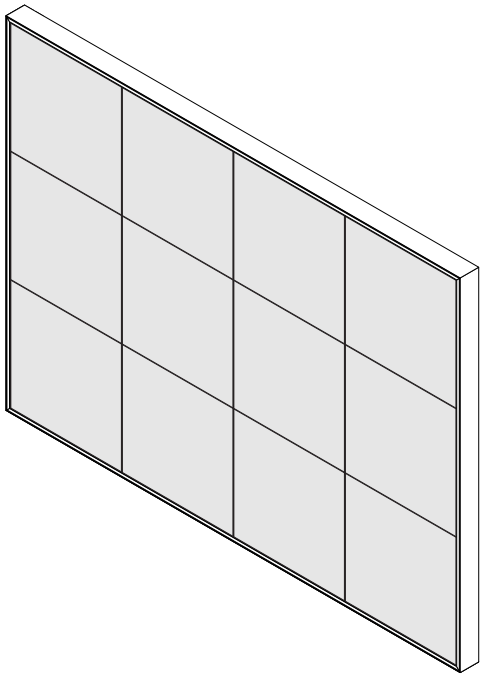
Install CELEBRATION or PIXEL panels per shop drawings.





Step 10

The finished system.



Appendix

Sample Shop Drawings

Bill of Materials

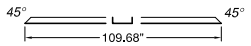
BILL OF MATERIAL - 4" TRIM						w.o. 81433
PART NO		DESCRIPTION	FINISH	QTY	OVG	TOTAL
	1	109.68" straight w/ dbl 45° miter	silver satin	2		2
	2	37.68" straight w/ dbl 45° miter	"	2		2
67832		Celebration trim clip	mill	8	1	9
67830		splice plate	"	8	1	9

BILL OF MATERIAL - Fineline Grid						
PART NO		DESCRIPTION	FINISH	QTY	OVG	TOTAL
	MT1	36.56" Fineline main tee cut to match	wht/blk	4	1	5
	CT1	36.00" Fineline cross tee	"	6	1	3
218659		Pixels wall mount clips	galv.	14	0	14

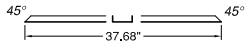
BILL OF MATERIAL - Celebration Pixel Panels						
PART NO		DESCRIPTION	FINISH	QTY	OVG	TOTAL
P1 - P3		36" x 36" Celebration Pixels Panel	silver satin	3	0	3

4" Compasso Elite

straight	curve	corners
25	0	0



item 1



item 2

PIXELS™

silver satin face paint
DXF grid w/ Celebration

GE - Nela Park

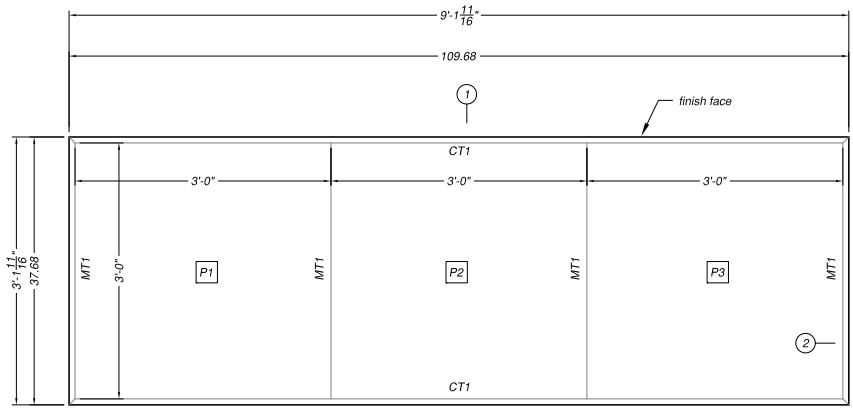
USG Building Systems
Ceilings Solutions Group
1000 Crocker Road
Westlake, Ohio 44145–1089
tel 440 892 7363
fax 440 892 7173

ORDER NO. 238903
DRWN BY S.M.P. | DATE 8-16-12
CKD. BY
SHEET 1 OF 4

Grid and Panels

PIXELS™

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



Compasso Grid Elevation
scale 1" = 1'-0"

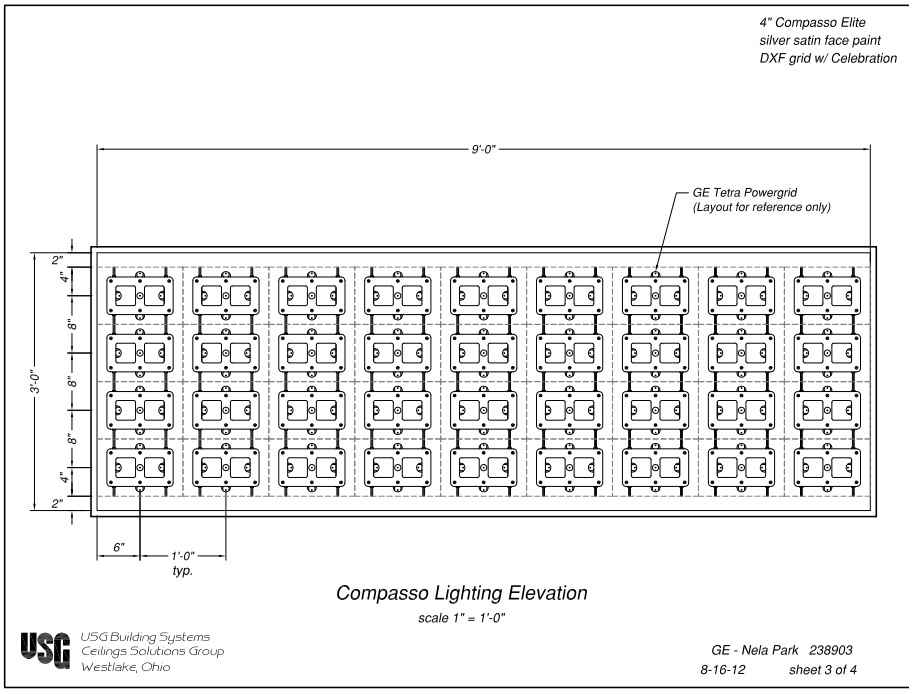
USG Building Systems
Ceilings Solutions Group
Westlake, Ohio

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

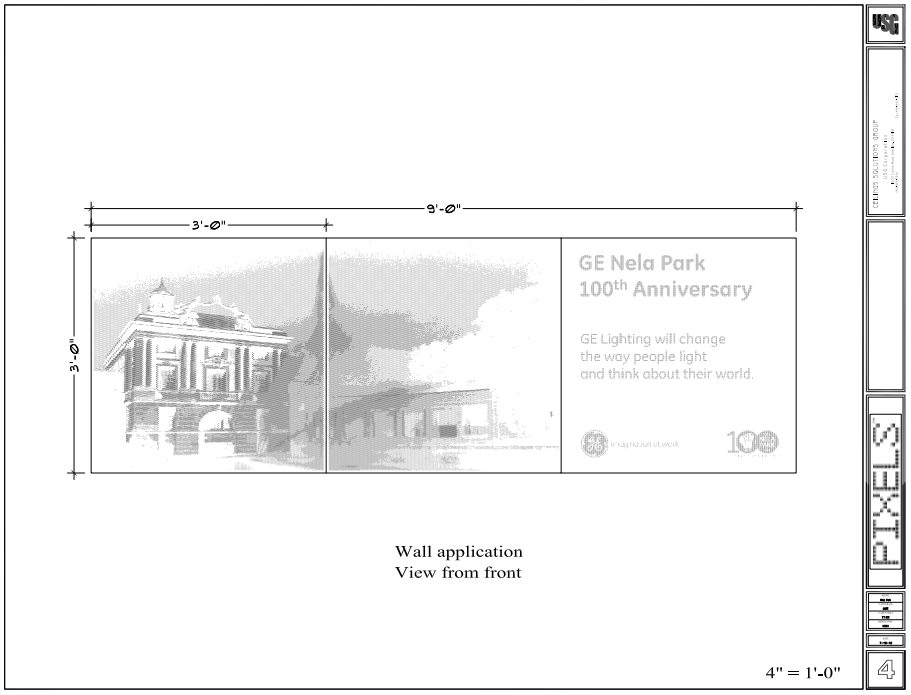
Appendix

Sample Shop Drawings

Lighting



View From Front

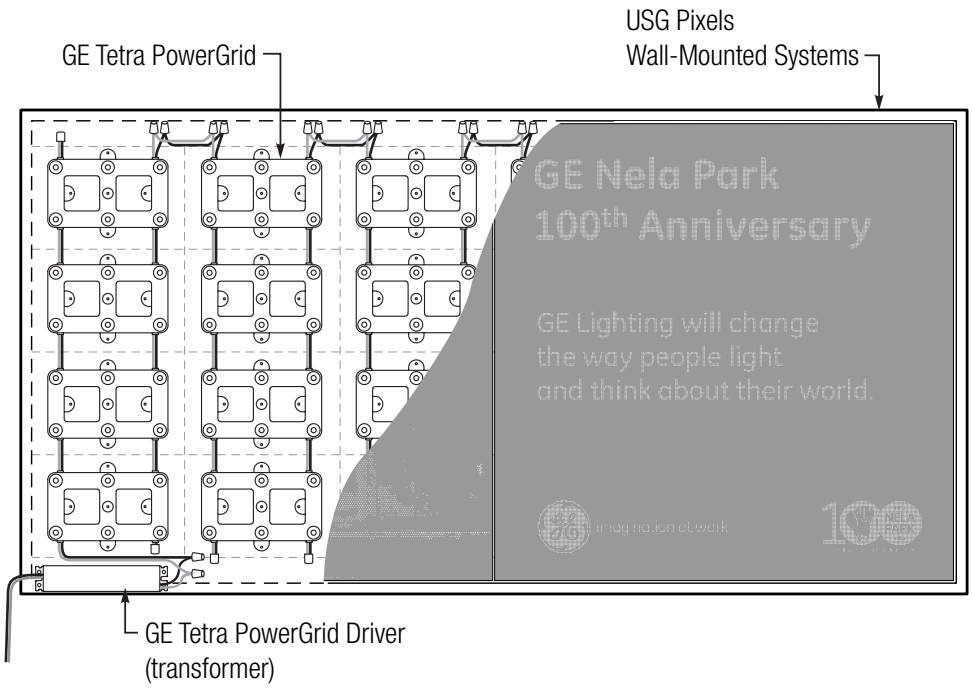


Appendix

USG | GE
Designed Together to Work Together

USG Pixels™ Wall-Mounted Systems with GE Tetra® PowerGrid

Designed Together to Work Together



GE Tetra PowerGrid
www.gelightingsolutions.com
1-888-694-3533

USG Pixels Wall-Mounted Systems
www.usg.com
1-800-950-3839

Prouct Literature
Data sheet: IC605
Design guide: IC566
Check sheet: IC607

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Safety First!
Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

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