

USG
Ceiling
Solutions



USG PIXELS®
DESIGN GUIDE

USG  **CGC**

IT'S YOUR WORLD. BUILD IT.™

USG PIXELS®

ABOUT THE SYSTEM

Pixels® turns USG's proven metal ceilings and wall-mounted systems into a canvas upon which you can display images, designs or graphics that can transform an ordinary surface into an exciting interactive visual. Pixels®, enabled by IntelliPerf Technology, turns photos or graphics into varied-size perforations in metal panels, looking very "op-art" close-up and resolving into a clear image at a distance. Because the image is created by perforations, acoustical properties exist.

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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

METAL PANELS

- Aluminum
 - HRC (High Recycled Content) up to 90%
 - Panz®
 - Celebration™ Snap-In
 - Curvatura™
-

MATERIALS

- Aluminum panels
 - Acoustical backer
-

SUSPENSION SYSTEM

- Fineline® (for Celebration™ Snap-In and FL edge Panz panels)
 - Centricitee™ (for FL Panz lay-in)
 - Wall-mounted (for Celebration™ Snap-In panels)
-

LIGHTING

- Metal panels can be backlit or up-lit
 - Backer material can be black or white
 - Image can be a positive or negative, negative for backlighting
 - Open area of perforations typically do not exceed 15% (not for general illumination)
-

DESIGN PROCESS

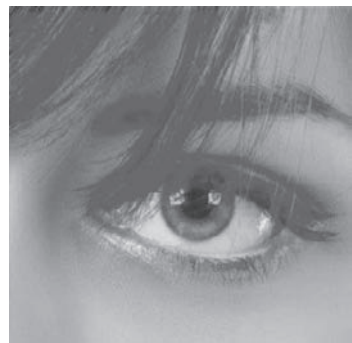
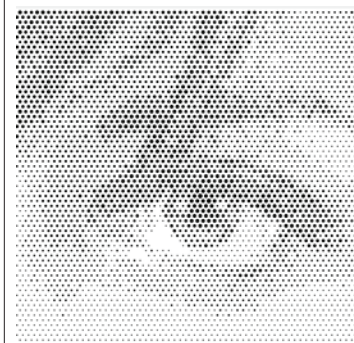
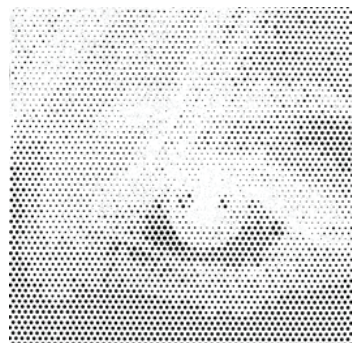
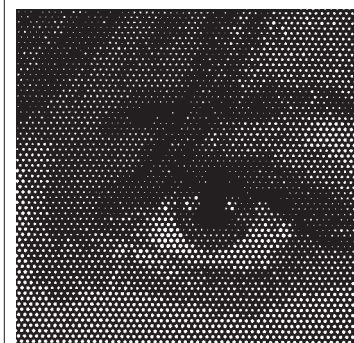
- Determine application
 - Select image
 - Select application system (wall, ceiling, curved)
 - Submit graphic to pixels@usg.com
 - Complete and submit project details on check sheet
 - Scaled images will be returned via email to its originator for approval
-

DESIGN GUIDE

STEP 1: SELECT IMAGE

USG's Ceilings Solutions Group will help you qualify your image or art during the design process. It starts with your selection of a photo, logo, or black and white art of your design.

- Typically, a higher contrast image will produce better results, but not always. See examples that follow.
- Select a photo from istockphotos.com or provide your own image (logos, artwork, graphic) (300dpi minimum) (TIF, JPG and PDFs are acceptable).
- For custom images (not from istockphotos.com), an image release statement must be completed.
- The selected image will be transformed into a perf pattern (areas of photograph are sampled for contrast and assigned a perforation diameter).
- Negative or positive. USG can provide a negative or positive of the selected image. A negative image is where the light part of image is perforated. This is typically used for backlighting where the image will become positive. (See images below).

Original Image	Positive Image, Not Backlit
	
Negative Image, Not Backlit	Negative Image, Backlit
	

DESIGN GUIDE

STEP 2: DETERMINE CANVAS SIZE AND PANEL SIZE

- Images can be displayed on a single panel or as a mural across multiple panels.
- See examples below of how the image can be spread across multiple panels.
- Individual panel size options (2'x 2', 2'x 4', 2'x 6').

Panel Configuration:

Ceiling

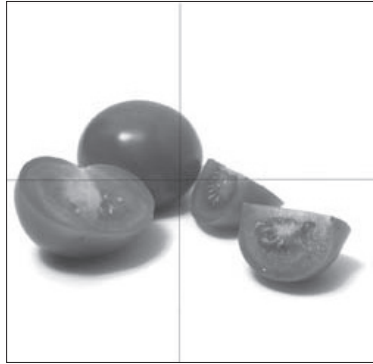
- Celebration™ Snap-In
- Panz® (FL or SL)
- Curvatura™

Walls

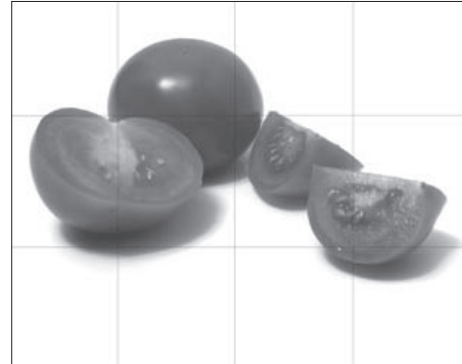
- Celebration™ Snap-In

EXAMPLES

4'x4' canvas (2'x2' panels)



6'x2' canvas (2'x2' panels)



EXTERIOR INSTALLATION

Pixels® can be used on protected exterior soffits with Celebration™ Snap-In panels and DXFEV Fineline suspension system (refer to Exterior Guide SC2561 for required layout and recommended components). Panel sizes can be 2'x2', 2'x4' or 2'x6'. Acoustical backer is not recommended for exterior use.

DESIGN GUIDE

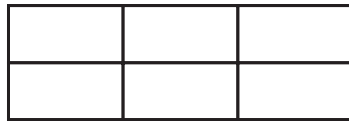
STEP 3: DETERMINE PANEL LAYOUT

Layouts represent patterns only. Final canvas and total ceiling/wall size is up to the designer.
No limit to image or canvas size.

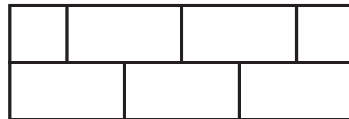
2' X 2' SQUARES



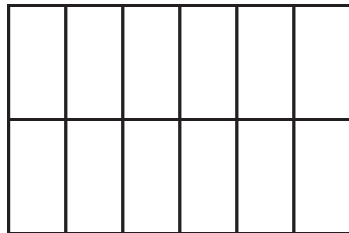
2'X4' HORIZONTAL*



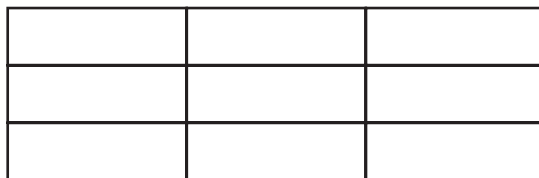
2'X4' ASHLAR*



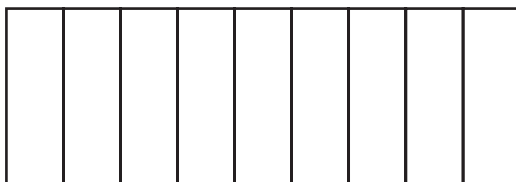
2'X4' VERTICAL*



2'X6' HORIZONTAL



2'X6' VERTICAL



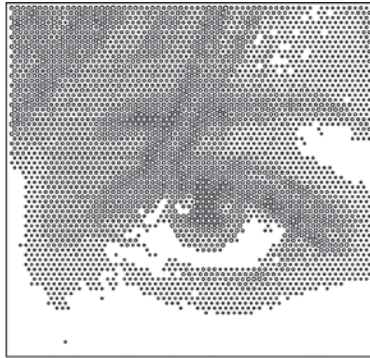
*Note: 2'x4' not available for Curvatura

DESIGN GUIDE

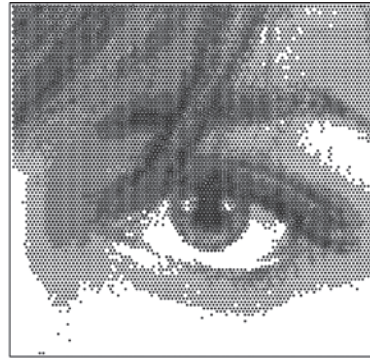
STEP 4: DETERMINE RESOLUTION

- The dynamic effect of the eye and brain creating the image at different distances with different hole sizes and hole densities.
- Three choices for perforation fidelity.

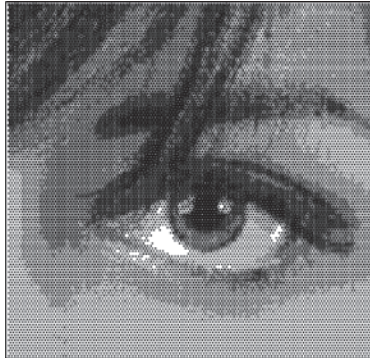
Low Resolution



Medium Resolution

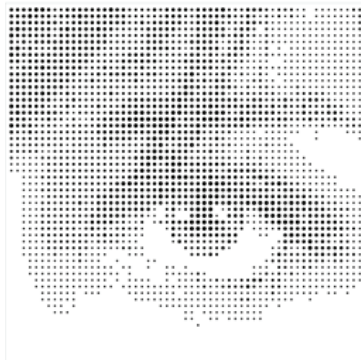


High Resolution

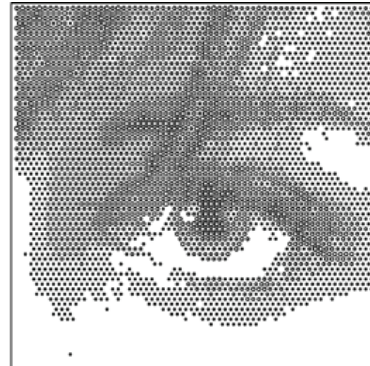


PERFORATION PATTERN ORIENTATION

Square:
Centerline of holes run 90° to panel sides



Oblique:
Centerline of holes run 60° to panel sides

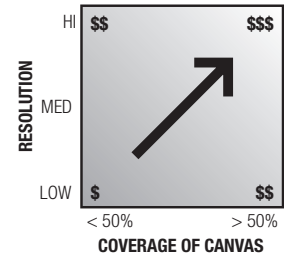


See usg.com/pixels for full-size downloadable and printable images.

DESIGN GUIDE

DESIGN CONSIDERATIONS, AESTHETICS AND BUDGET

Pixels® gives you the opportunity to design and choose between higher resolution images and lower resolution images either for artistic considerations or to reduce cost. As resolution is increased, more perforations are required to create the image. Thus, higher resolution costs more than lower resolution. As well, if an image only takes up part of the canvas, the entire surface has a smaller percentage of perforations — also reducing costs. Below are examples of budgetary costs per square foot based on these considerations.

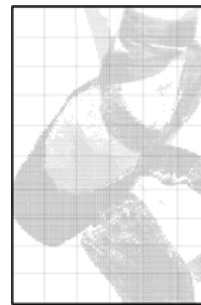


Low Resolution

Less than 50% coverage:
Estimated \$15 per square foot for entire canvas.

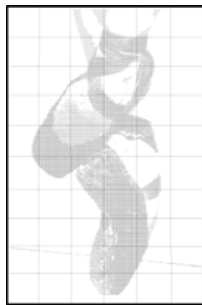


Greater than 50% coverage:
Estimated \$20 per square foot for entire canvas.

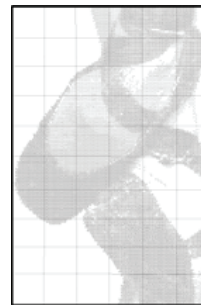


Medium Resolution

Less than 50% coverage:
Estimated \$25 per square foot for entire canvas.



Greater than 50% coverage:
Estimated \$30 per square foot for entire canvas.

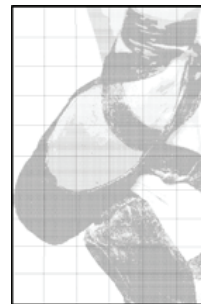


High Resolution

Less than 50% coverage:
Estimated \$35 per square foot for entire canvas.



Greater than 50% coverage:
Estimated \$45 per square foot for entire canvas.



Note: Estimated costs are what contractors can expect to pay for the Pixels panels. Prices and total installation costs will vary by market. Does not include installation cost and hardware.


DESIGN GUIDE

STEP 5: DETERMINE IMAGE EVALUATION


Submit Check Sheet
for Image Evaluation

Image evaluation check sheet – located at usg.com/pixels.

Check Sheet



Customer Service Fax 800 219.0551
Customer Service 800 950.3839
Technical Service 800 USG.4YOU
Website usg.com



Please check appropriate boxes

Complete the following check sheet and send RTQ for pricing to Ceilings Solutions Group through Customer Service. See Pixels® Design Guide for assistance.

Contact Information

Name _____

Company or firm name _____

Phone _____

Contact email _____

Project name _____

Image or Artwork Information

Photograph file / Graphic file

- File name _____
- Attach image to e-mail _____
- Attach Image Release Statement _____

iStockphotos.com Image Number _____

Application

Ceiling

Wall

Curved (Curvatura® applications)

Size

Canvas size (total area the image will reside) _____ ft x _____ ft

Relative image size within the canvas size _____ ft x _____ ft (or provide sketch)

Product Type

Celebration® Snap-In

Panz® FL

Panz® SL

Curvatura™

Panel Size

2'x2'

2'x4' *

2'x6'

Custom - Send RTQ

Panel Layouts

2'x2' Squares

2'x4' Ashlar (alternating) rectangles*

2'x6' Horizontal rectangles

2'x6' Vertical rectangles

2'x4' Horizontal rectangles*

2'x4' Vertical rectangles*

2'x6' Ashlar (alternating) rectangles

Custom - Send RTQ

Perforation rendering

Resolution

Low

Med

High

Image Type

Negative

Positive

Orientation

Square (90°)

Oblique (60°)

Backer Option

Black Acoustibond™ backer

White Acoustibond™ backer

No backer

White Diffuser Film

Panel Color

Flat White

Silver Satin

Custom _____

Design Review Process After the Pixels check sheet has been processed, the following will be emailed back to its originator:

- A 36"x42" print that shows the image broken down into its panel sizes. This is suitable for printing on a full-sized plotter.
- A full scale section for a highlighted area to show perf resolution and pattern. This is also suitable for printing on a full-sized plotter.
- The USG Ceilings Solutions Group will retain these files by job name for reference and approval at the time of an order.

Special Instructions


NOTE: USG Corporation reserves the right to refuse a Pixels® order request should USG deem an image to be inappropriate.

* Not available in Curvatura.

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Chicago, IL 60661

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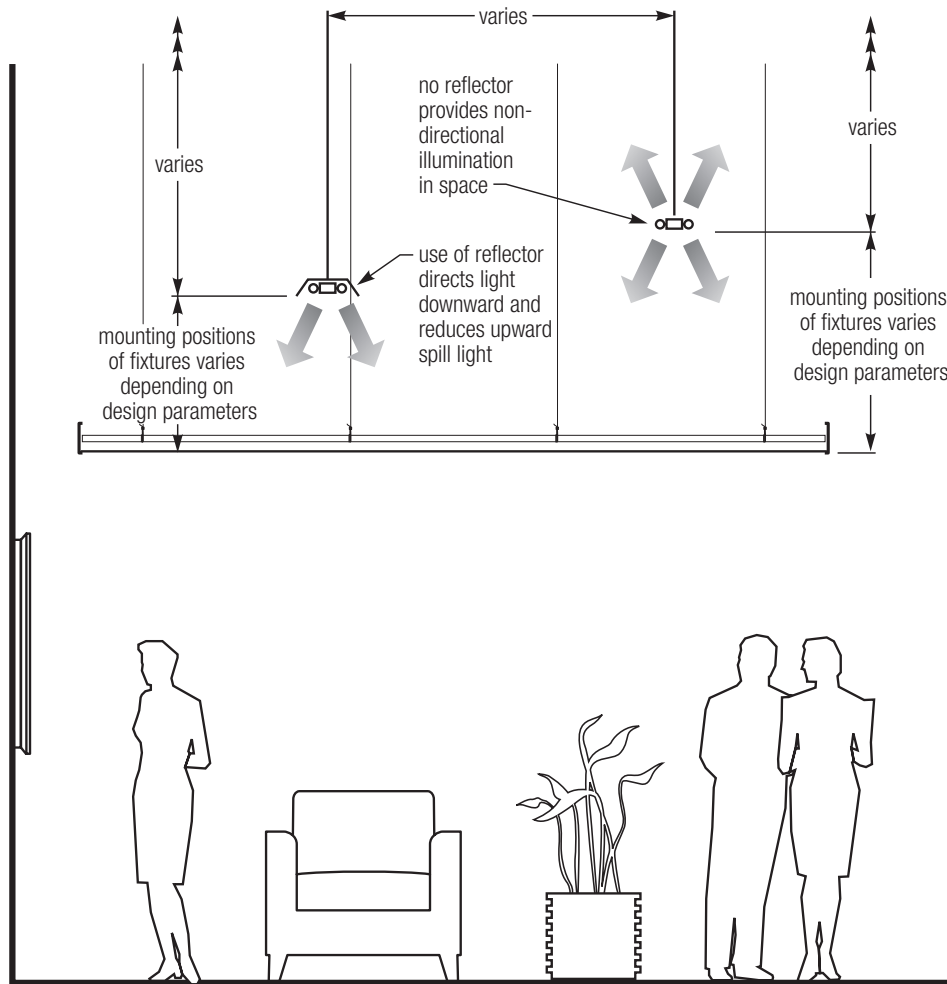
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DESIGN GUIDE

LIGHTING

Fluorescent Strip Fixtures

Fluorescent fixtures with no reflector provide non-directional illumination in space. Use of fixtures with a reflector directs light downward and reduces upward spill light.

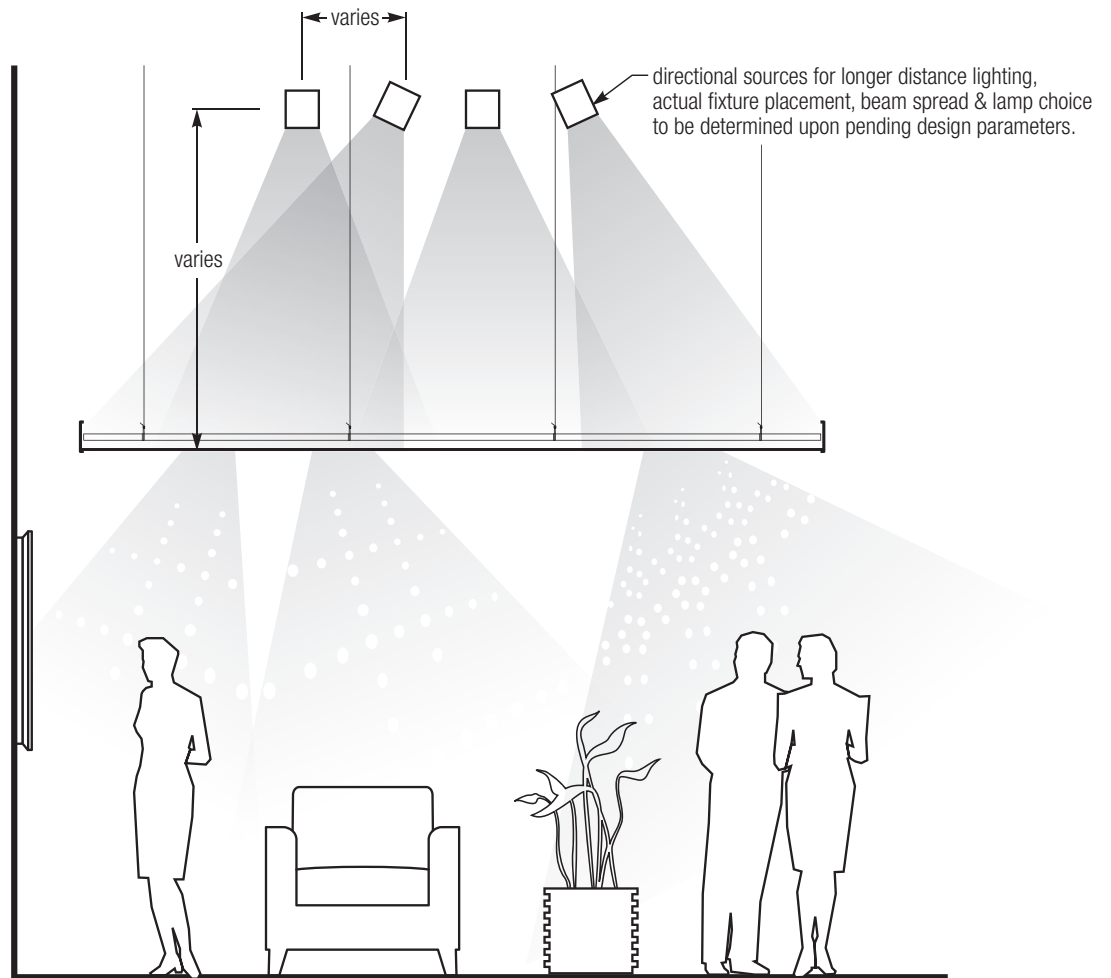


DESIGN GUIDE

LIGHTING

Point Source Incandescent or Halogen Fixtures

Where Acoustibond backer is not selected, the perforation pattern can be projected on walls and floors of the space. White Acoustibond backer will diffuse light to create an even glow.

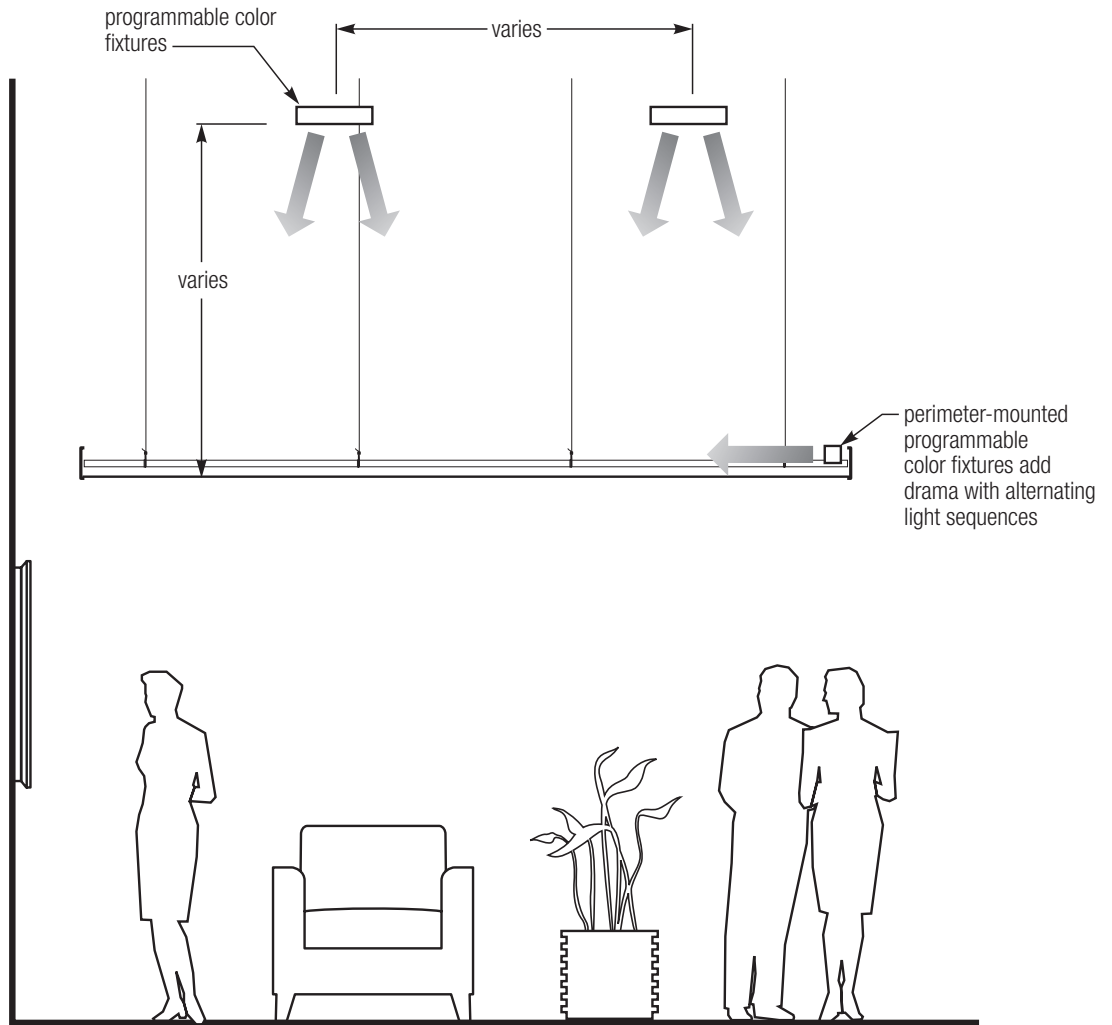


DESIGN GUIDE

LIGHTING

LED Light Sources — Single or Programmable

Programmable LEDs add an additional level of interest by allowing the opportunity to project the perforation pattern with changing colors.



Consult a lighting consultant for specific recommendations.

DESIGN GUIDE

SPECIFICATION

For Pixels® specification refer to the particular system application.

Ceiling

- Celebration™ Snap-In
- Panz® (FL or SL)
- Curvatura™

Walls

- Celebration™ Snap-In
-

SHIPMENT AND INSTALLATION

Prior to manufacturing, your Pixels® ceiling or wall will be presented to the contractor for final approval. The entire canvas with specified imagery will be shipped with pre-numbered panels and accompanying shop drawings for proper and easy installation.

PRODUCT INFORMATION

See usg.com for the most up-to-date product information.

CUSTOMER SERVICE

800 950-3839

TECHNICAL SERVICE

800 USG.4YOU (874-4968)

usg.com

PRODUCT LITERATURE

USG Pixels® Metal Ceiling Panels Data Sheet IC563
USG Pixels® Wall Mounted Panels Data Sheet IC605

LIMITATIONS

Interior applications only

NOTICE

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

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