

## Architectural Perforated Metal Solutions

Transform your space by combining the unique look and feel of metal with almost unlimited possibilities for shapes, patterns, and even detailed images. Velaria Systems has partnered with Astyl, a manufacturer of architectural metal solutions focused on the needs of architects to offer an alternative to typical finishes.

### Description

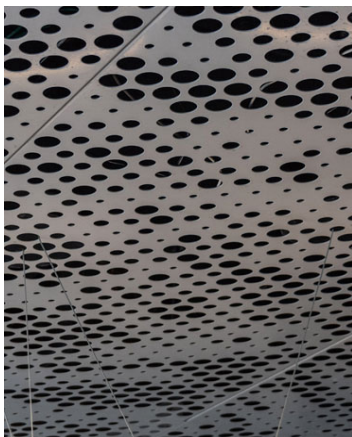
Perforated metal ceiling panels are designed to integrate into standard T-bar grid ceilings that offer the option of selecting one of the standard available patterns or creating something completely unique.

Panels are available in a wide range of powercoat finishes with the option to add acoustic felt for additional color and noise reduction.



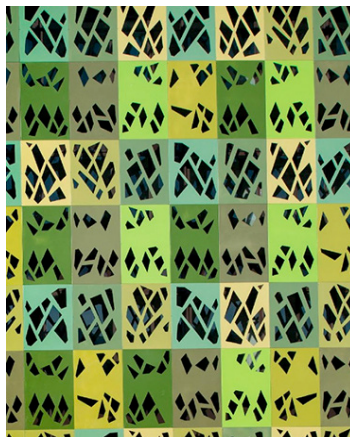
## A Variety of Perforation Options

From simple symmetrically repeating geometric patterns to complete images recreated with perforations, there is a solution that's perfect for your design. Combined with your favorite finish and an option to add acoustic felt in a variety of colors you can play with aesthetics, texture, and color to make your space unforgettable.



**Puncto**

Symmetrical and abstract modern patterns and textures created from common geometric perforation shapes



**Lasion**

Laser cut allows free form perforation, enhancing organic shapes and unique geometries in pattern designs



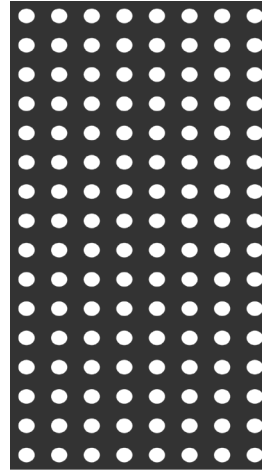
**Picto**

An advanced image transfer technology that translates any image into a geometric perforation pattern design

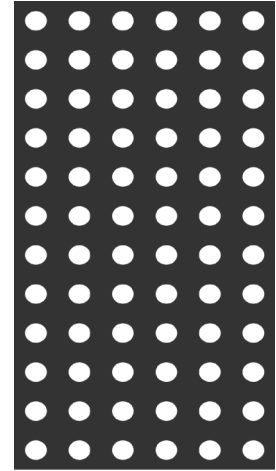
# Perforated Metal / CEILINGS

## Puncto – Standard Patterns

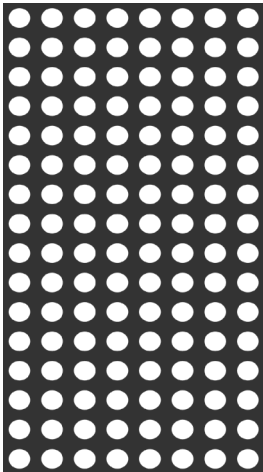
Select from 9 simple symmetrically repeating geometric patterns based on circles, rectangles, or squares.



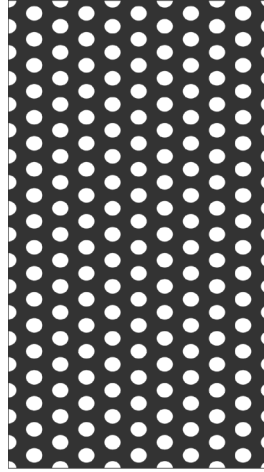
Pattern: SCO1  
Open area 26%  
Perforation Ø 1"



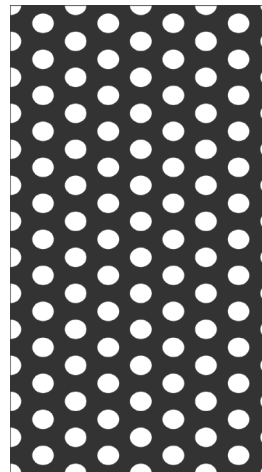
Pattern: SCO2  
Open area 19%  
Perforation Ø 2"



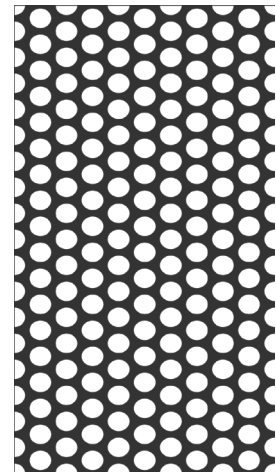
Pattern: SCO3  
Open area 34%  
Perforation Ø 2"



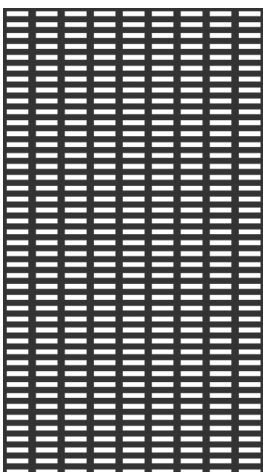
Pattern: SCO4  
Open area 27%  
Perforation Ø 1.5"



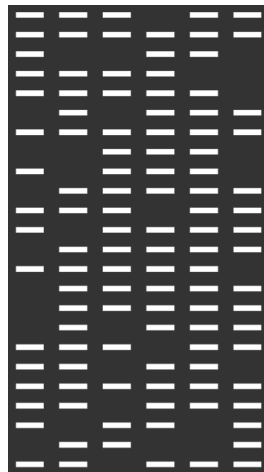
Pattern: SCO5  
Open area 28%  
Perforation Ø 2"



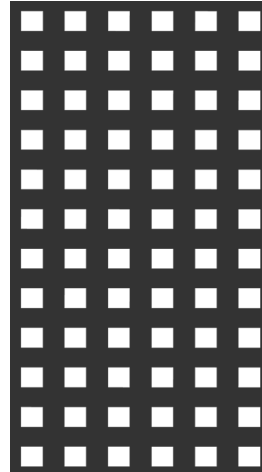
Pattern: SCO6  
Open area 50%  
Perforation Ø 2"



Pattern: SRO1  
Open area 28%  
Perforation 0.5" X 2.0"



Pattern: APO1  
Open area 28%



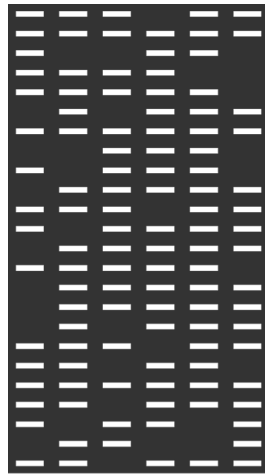
Pattern: APO1  
Open area 28%  
Perforation 2.0" X 2.0"



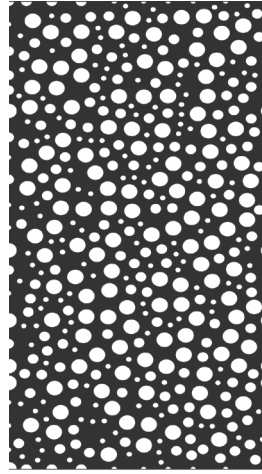
# Perforated Metal / CEILINGS

## Puncto – Abstract Patterns

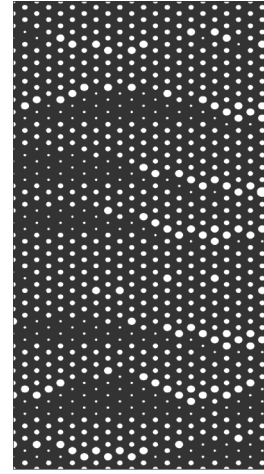
Select from 14 abstract patterns based on common geometric shapes arranged in unique arrangements to create unforgettable ceilings.



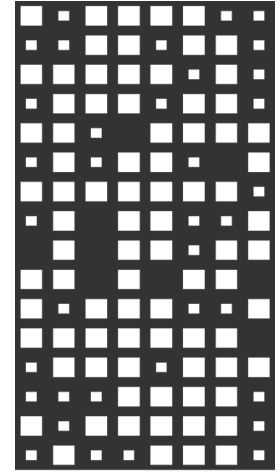
Pattern: APO1  
Open area 28%



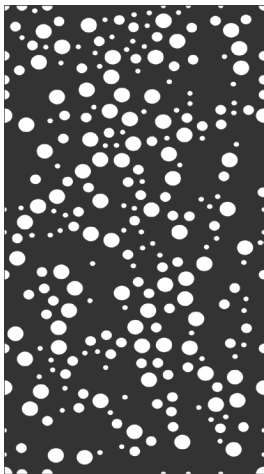
Pattern: APO2  
Open area 32%



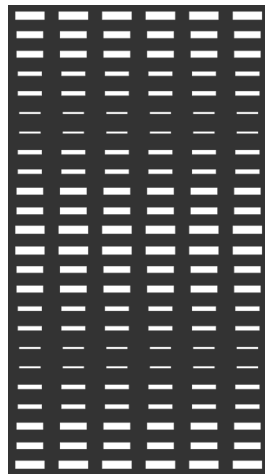
Pattern: APO3  
Open area 13%



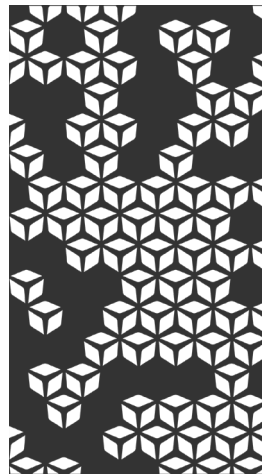
Pattern: APO4  
Open area 31%



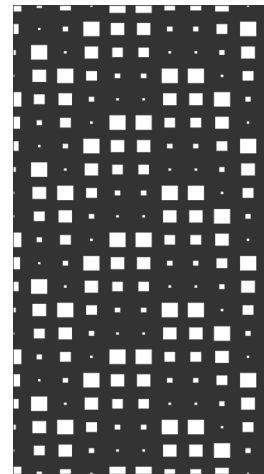
Pattern: APO5  
Open area 17%



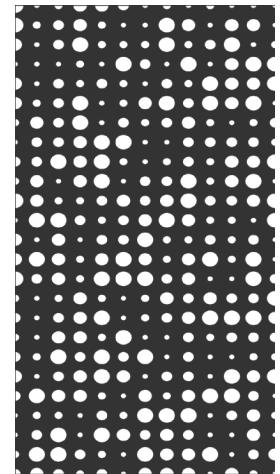
Pattern: API1  
Open area 53%



Pattern: API2  
Open area 33%



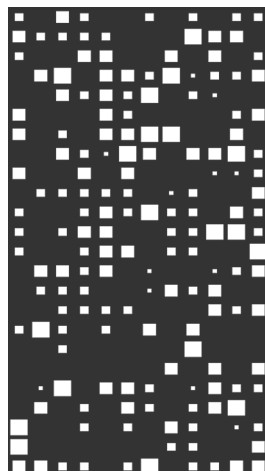
Pattern: API3  
Open area 17%



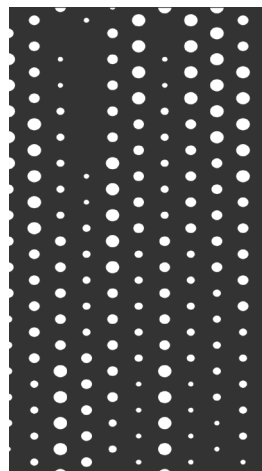
Pattern: API4  
Open area 21%



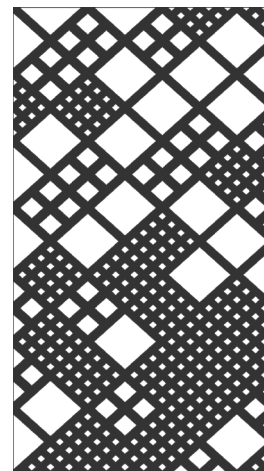
Pattern: API5  
Open area 10%



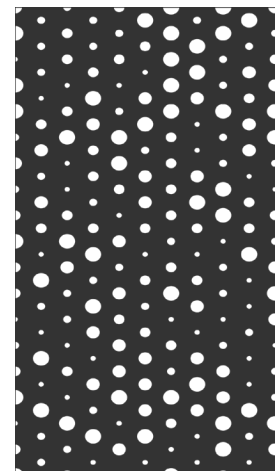
Pattern: API6  
Open area 16%



Pattern: API7  
Open area 08%



Pattern: API8  
Open area 34%



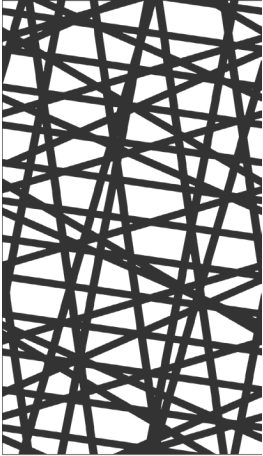
Pattern: API9  
Open area 13%



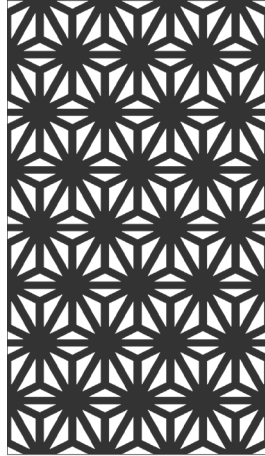
# Perforated Metal / CEILINGS

## Lasion

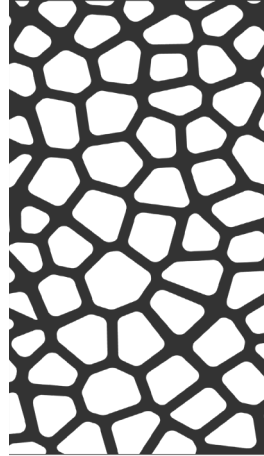
Select from 15 laser cut patterns incorporating free form perforations to generate one-of-a-kind designs.



Pattern: ALO1  
Open area 45%



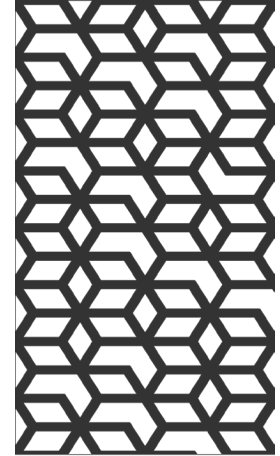
Pattern: ALO2  
Open area 32%



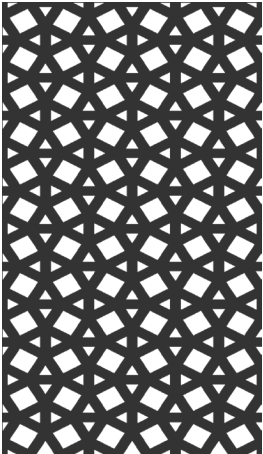
Pattern: ALO4  
Open area 60%



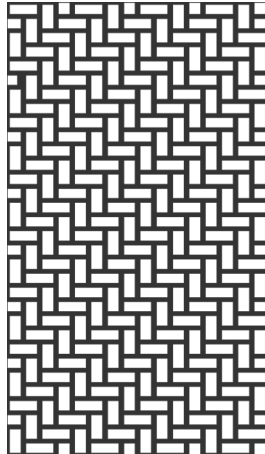
Pattern: AL12  
Open area 48%



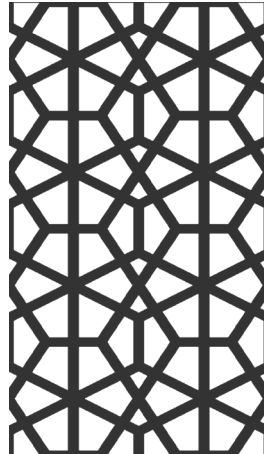
Pattern: ALO5  
Open area 61%



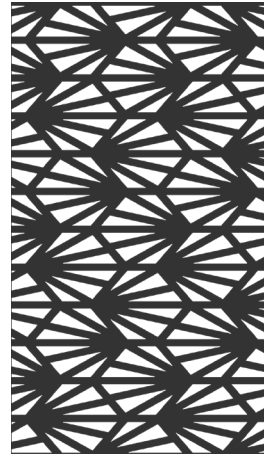
Pattern: ALO6  
Open area 31%



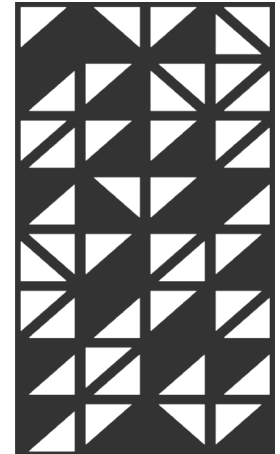
Pattern: ALO7  
Open area 55%



Pattern: ALO8  
Open area 53%



Pattern: ALO9  
Open area 34%



Pattern: AL10  
Open area 33%



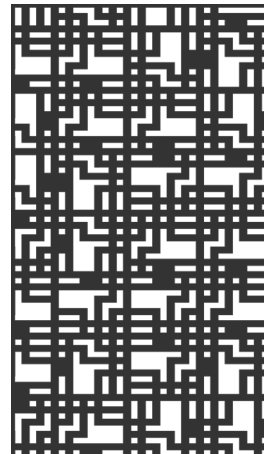
Pattern: AL11  
Open area 45%



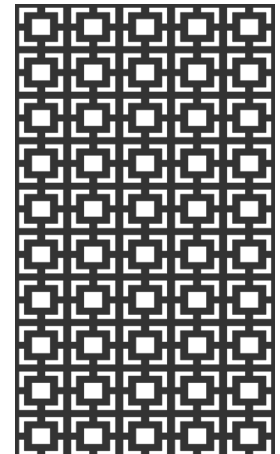
Pattern: AL12  
Open area 48%



Pattern: AU01  
Open area 48%



Pattern: AU02  
Open area 25%



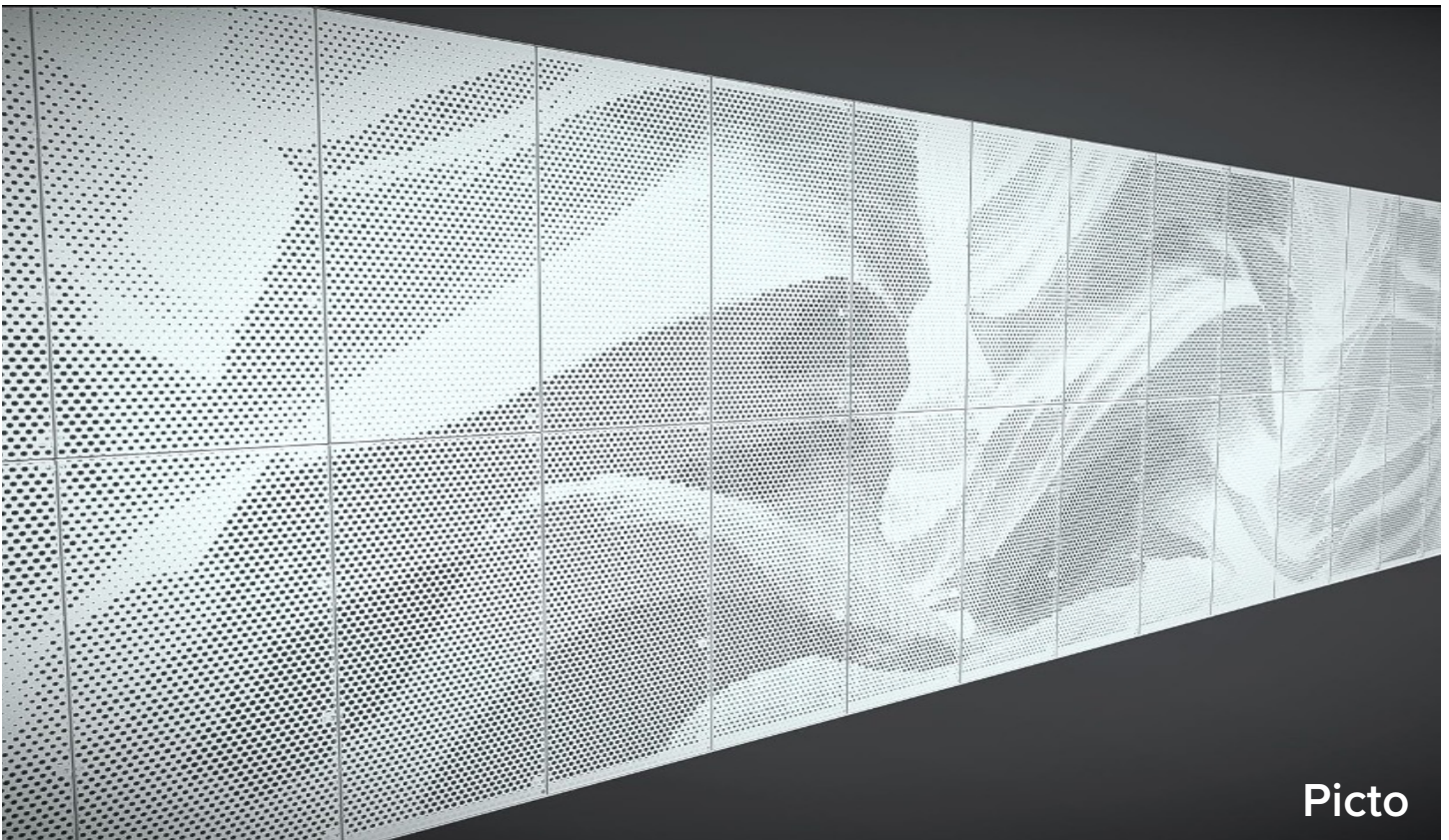
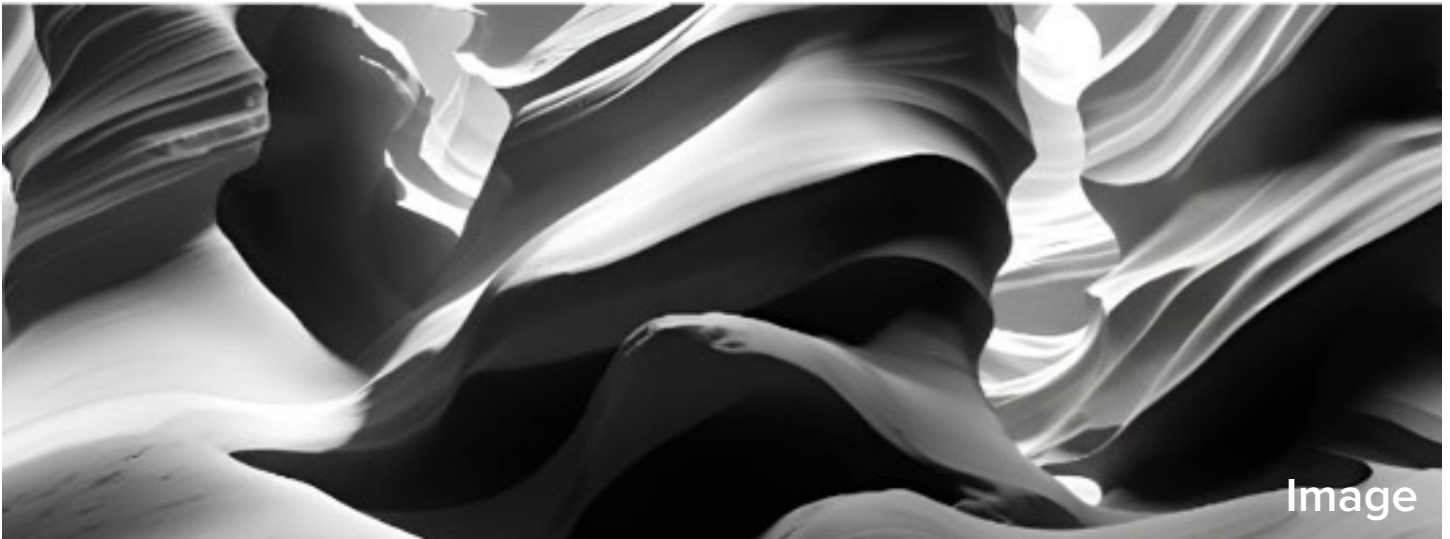
Pattern: AU03  
Open area 35%



# Perforated Metal / CEILINGS

## Picto

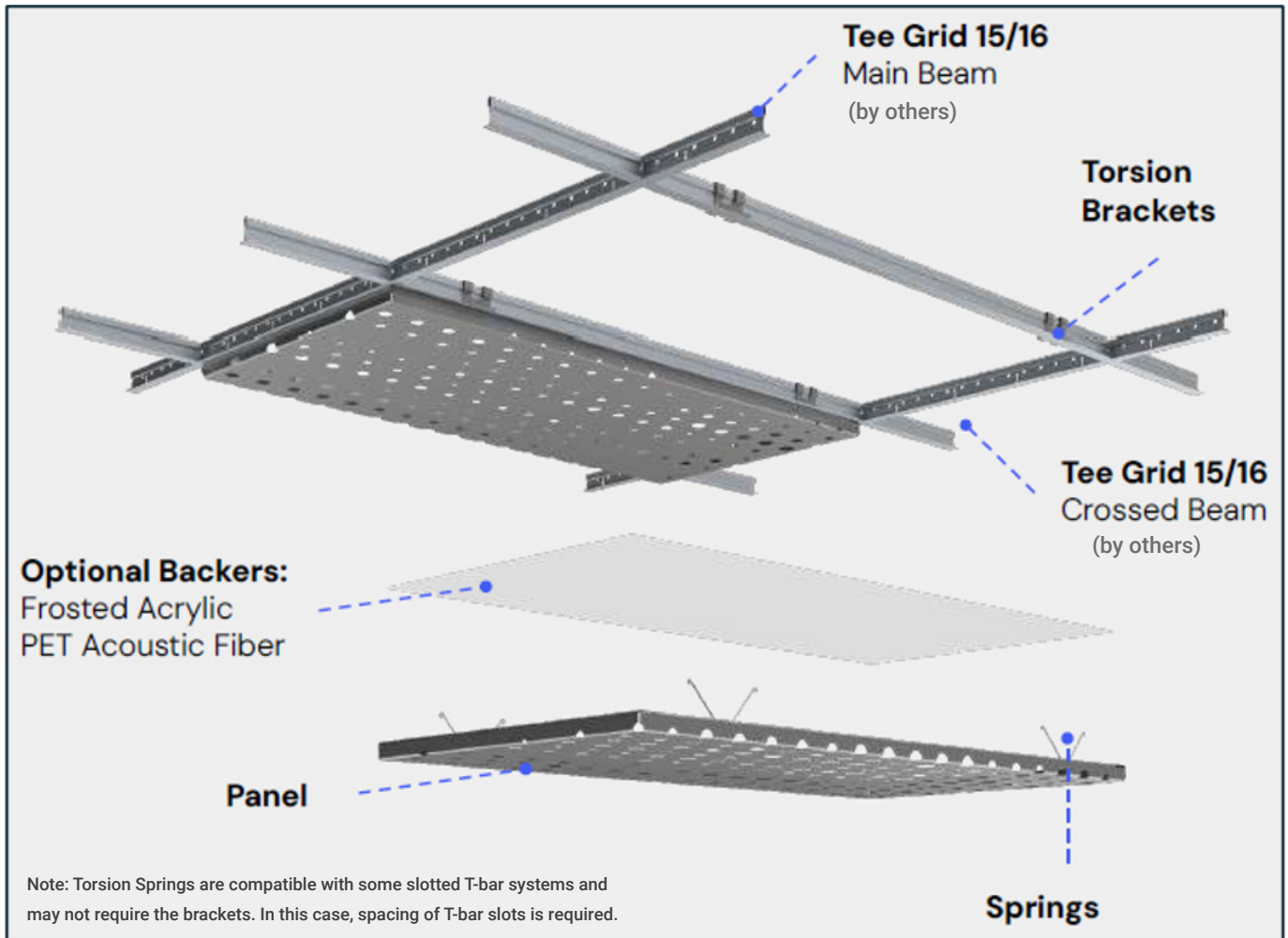
Create your own unique design by incorporating an image that comes to life in perforations using Astyl's advanced manufacturing techniques



# Perforated Metal / CEILINGS

## Panel Details

Ceiling panels are designed to easily integrate into standard 15/16" T-Bar grid ceilings. Available in 5 sizes, the panels are made from lightweight aluminum and utilize a simple torsion spring mounting system with the option to add sound absorbing materials or an acrylic cover (*contact Velaria Systems for available acrylic panel options*)



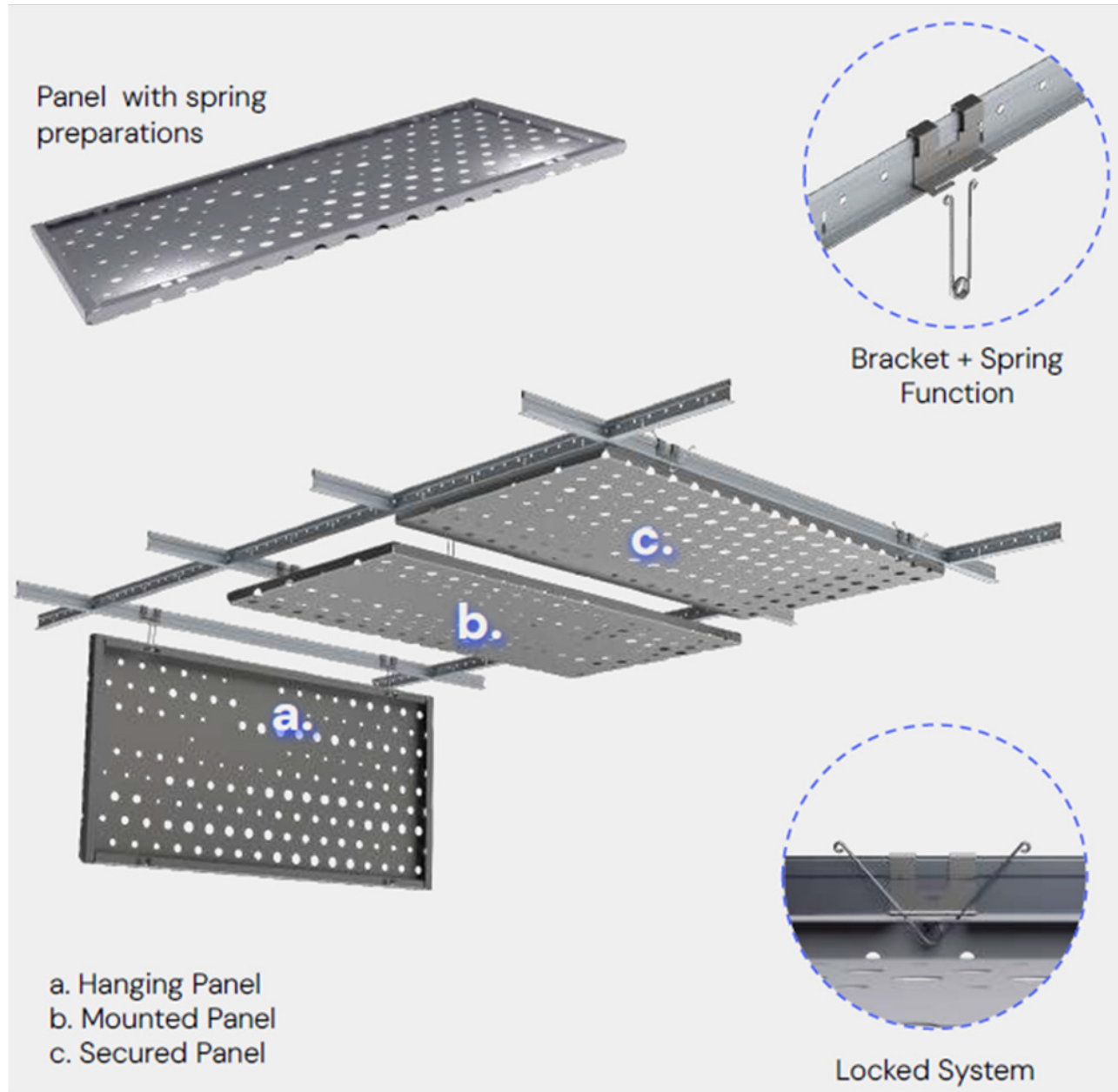
Material	Aluminum (0.80" thickness)
Panel Sizes (ft)	Nominal 2x2, 2.5x2.5, 2x4, 2x6, 2x8
Max. Weight (lb/sqft)*	1.12
Finishes	Powdercoat Paint: Standard RAL or Special
Fire Rating	Aluminum is a "non-combustible material" (ASTM E 136)

\*Weight of panel prior to perforation

# Perforated Metal / CEILINGS

## Torsion Spring Mounting

A simple 3-step procedure enables quick and accurate panel installation.



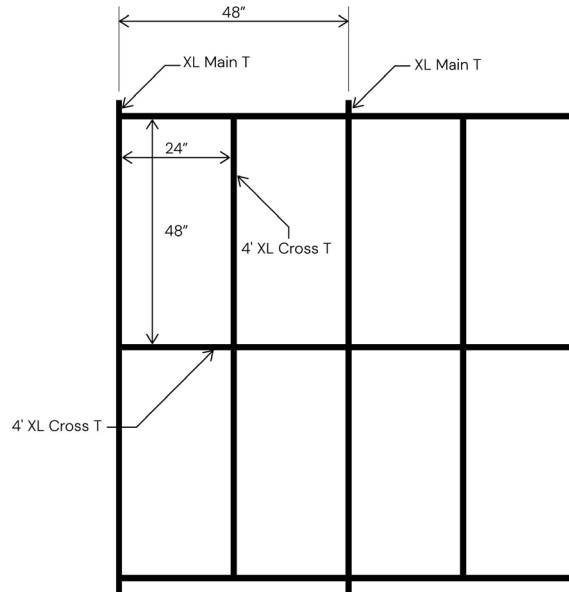
### Simple 3-Step Installation

1. Clip Spring Bracket to T-Bar
2. Attach Spring to one side of the panel
3. Rotate up and attach 2nd side of the panel

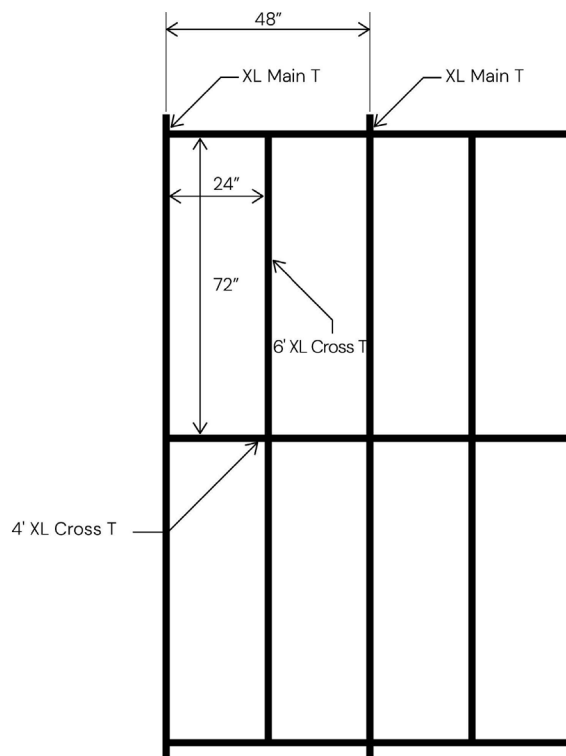
# Perforated Metal / CEILINGS

## Layout Details

For 2' x 2' and 2' x 4' ceilings, the main T-grids are installed at 48" centers, as shown below.



For 2'x6' ceilings, the main tees are installed 48" apart center to center. Then, the secondary tees of 48" should cross the main tees at a 90° angle every 72" as shown below.

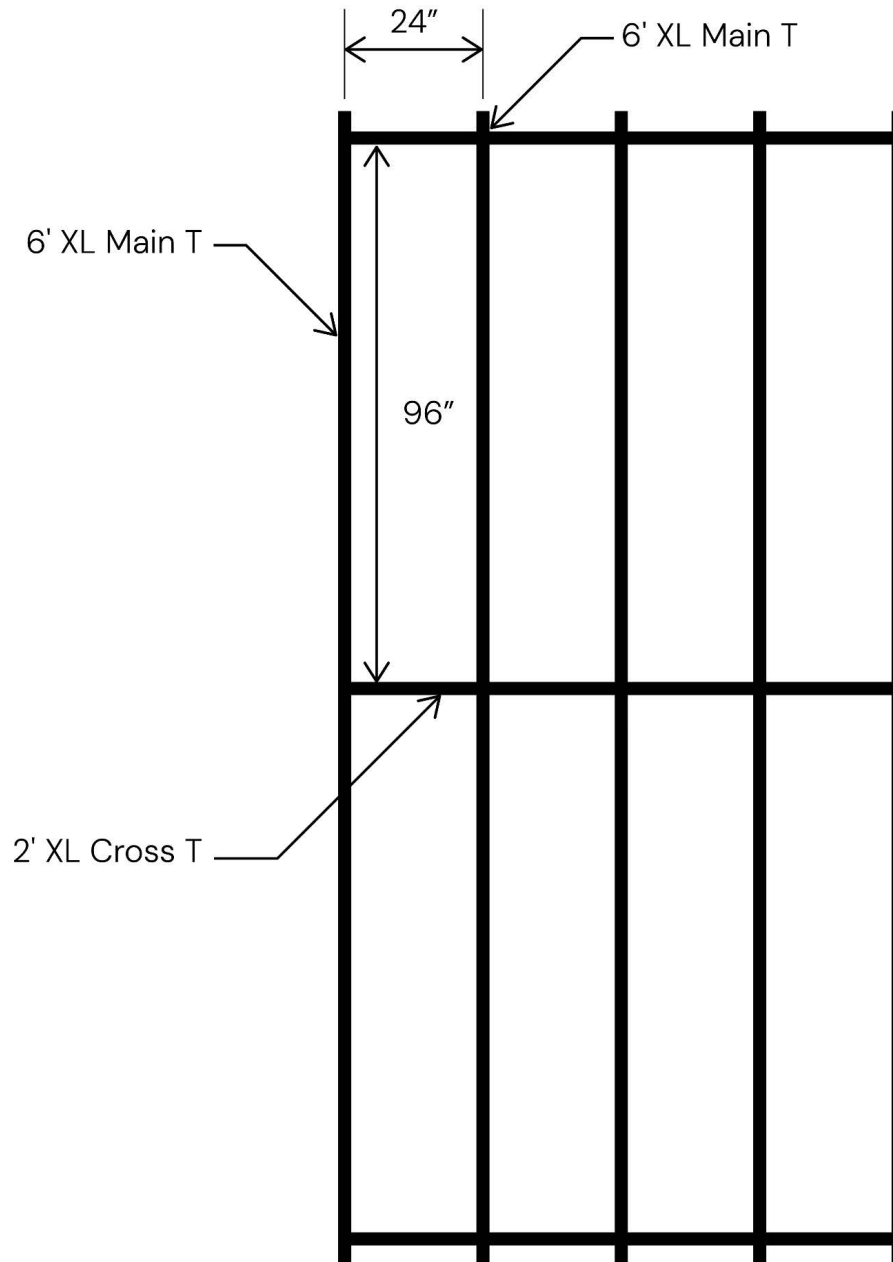




# Perforated Metal / CEILINGS

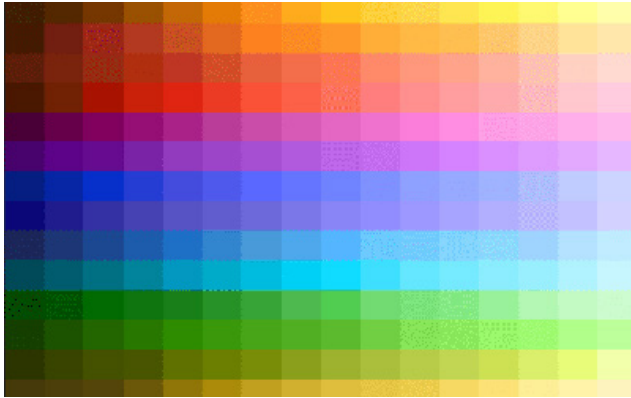
## Layout Details

For 2'x8' ceilings, the main tees are installed 24" apart center to center. Then, the secondary tees of 24" should cross the main tees at a 90° angle every 96" as shown below



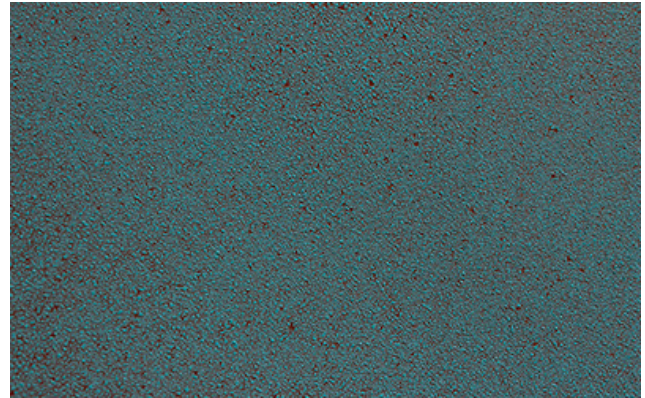
# Perforated Metal / CEILINGS

## Finishes



**RAL Powdercoat**

A highly durable finish available in a virtual rainbow of standard colors.

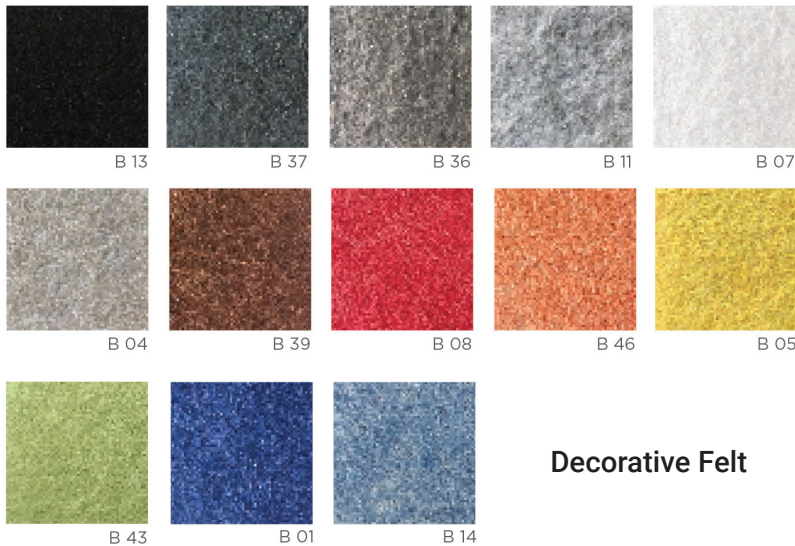


**Special Powdercoat Finishes**

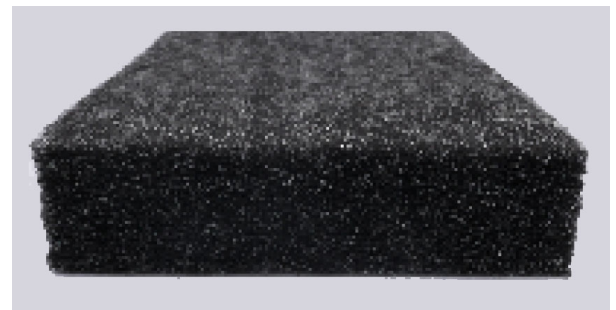
This range of finishes offers textured, patina, anodized and metallic appearances.

## Acoustic PET Felt

To ensure a high degree of noise reduction at the ceiling you can choose to add thick felt sound absorption behind the perforated metal panels or where acoustic performance is less critical but you want more aesthetic choice, you can select from a range of felt colors that make a significant contribution to reducing noise in the space.



**Decorative Felt**



**High Performance Felt**

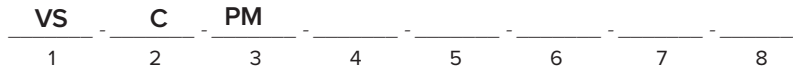
	Decorative Felt	High Performance Felt
Thickness	0.35"	2"
Colors	13 choices (Bxx)	Black/Dark Grey
Acoustic Rating (NRC)	0.25-0.80 (dependent on setback from metal surface)	0.85
Fire Rating (ASTM E84)	Class A	Class A

# Perforated Metal / CEILINGS



## Specification Codes

**NOTE:** Specification Codes are provided for use as simple references to Velaria Systems Perforated Metal products in specifications and/or construction documents and do not include all details required to define the system. Specification Codes are NOT ordering codes. In order to receive quotations or purchase these products from Velaria Systems, finish colors, and in the case of Picto, image details are required. Velaria Systems may also request additional information before issuing a quotation or accepting a purchase order.



<b>1 SUPPLIER</b> VS = Velaria Systems	<b>2 TYPE</b> C = Ceiling	<b>3 PRODUCT</b> PM = Perforated Metal	<b>4 PATTERN TYPE</b> SPU = Standard Puncto APU = Abstract Puncto LAS = Lasion PIC = Picto CUS = Custom	<b>5 PATTERN #</b> Choose from list provided	<b>6 PANEL SIZE</b> 22 = 2x2 24 = 2x4 26 = 2x6 28 = 2x8 25S = 2.5x2.5 Square	<b>7 FINISH</b> RAL = RAL selection SPF = Special Finish	<b>8 BACKING</b> N = None DFBxx = Decorative Acooustic Felt Bxx color HPF = High Performance Felt ACR = Frosted Acrylic
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## Environmental

A quote from our partner:

“At Astyl, we are not only dedicated to creating cutting-edge metal solutions for exceptional architectural projects, but we are also proud to do so in a way that respects and protects our environment. Sustainability and green practices are core values that drive every aspect of our business.”

## Warranty



5 Year warranty on materials.

## About Astyl Architectural Solutions in Metal



At ASTYL® we are a leading company specializing in the design, engineering and manufacturing of architectural metal panels. With more than 30 years of experience in the manufacturing of metal products, we have a design, engineering and project control center made up of architects, engineers and designers.

All of our products are manufactured in our state-of-the-art production plant based in the city of Monterrey, Mexico, with the highest quality standards and in compliance with ISO standards for quality, environment, health and safety.

At ASTYL® we are a creative, innovative, durable, lightweight, low-maintenance solution with a unique character.