

McNICHOLS APPLICATION PROFILE



Tampa Museum of Art Tampa, FL

The idea for the exterior “metal skin” for the Tampa Museum of Art came from the architect who wanted to apply a material with reflective and patterned qualities that could capture the movement of the skies, clouds and rippling waters of the adjacent Hillsborough River.

McNICHOLS® Perforated Aluminum panels were applied as a double-layered facade around the upper exterior levels of the museum. They were purposefully installed slightly offset from one another to create a moiré pattern that has a look of motion. The metal skin is structurally stable but visually appears to be constantly moving, like the nature around it.

To add further artistry, a special LED lighting system was installed between the layers creating a phenomenal mural for displaying electronic light shows at night.

Hole Products Used

Perforated Metal used for

- Aesthetics and design attributes
- Visual properties - "moiré" patterns
- Strength and durability
- Ventilation of air and light
- Sunshading attributes
- Insulating properties
- Low maintenance
- Fabrication ease
- Lightweight
- Corrosion resistance

Product Specifications:

- Perforated Metal
- 3" round holes,
- 1" straight row pattern
- .125 gauge
- Aluminum 3003H14
- Clear anodized



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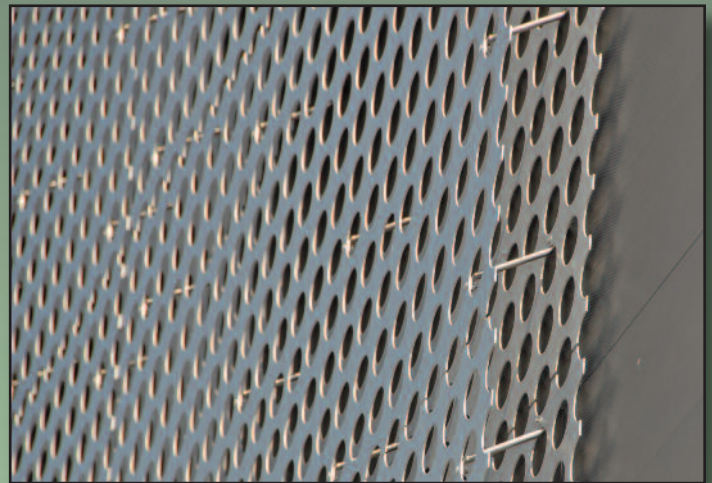


Tampa Museum continued

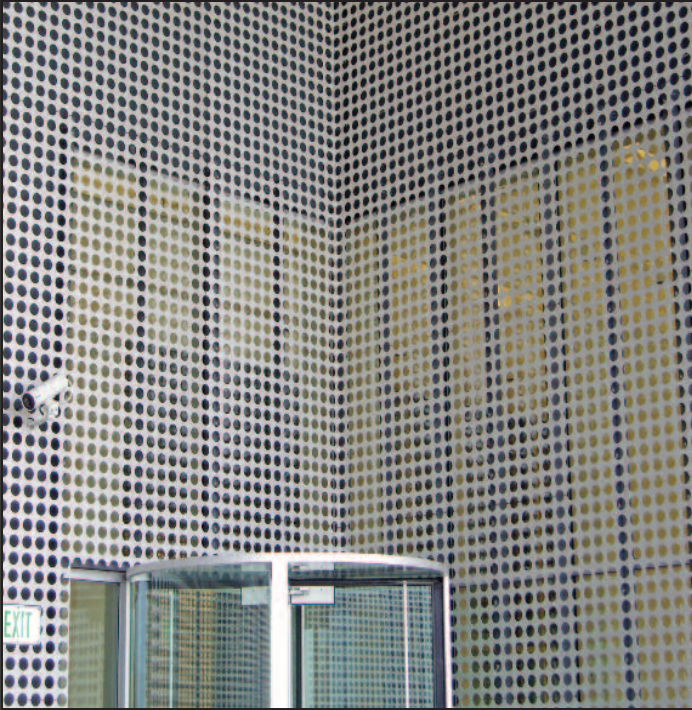
The project called for over 3,798 panels of varying sizes with three-inch diameter holes configured in a straight row pattern, one inch apart. This created a facade of over 900,000 holes. The low maintenance, corrosion-free panels were then anodized with a clear coating for a satin polished effect.

The application of the panels required near perfect installation in order for the holes in the entire facade to line up both horizontally and vertically. The double layer added an additional challenge for the installers who used over 85,000 stainless mounting pins (see closeup) to offset the top panel from the bottom. Panels were mounted to the building with flattened rod clips. The project took very close coordination from the designers, contractors, fabricators and installation team.

The smart looking metal skin affected every detail about the building's construction.



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Tampa Museum continued

Use of the perforated panels offered unique advantages for the museum's design, appearance and finish by optimizing natural lighting, enhancing energy management and supporting the contemporary design. The metal also has sustainable and recyclable properties, plus other environmentally-friendly green design attributes.

The metal skin wraps as a single layer into two square-shaped recessed areas, as well as into sections of the building's interior atrium. Like the outside panels, the cladded walls are lined up with the same precision so the holes line up to match the exterior holes. The interior walls were covered from ceiling to floor including doors. Notice how the door appears to disappear, an effect created by the precise alignment of the panels. (top right).

From various spots within the museum a visitor may enjoy a myriad of amazing and amusing visual effects created by the shadows and play of light on and through the metal perforations.

