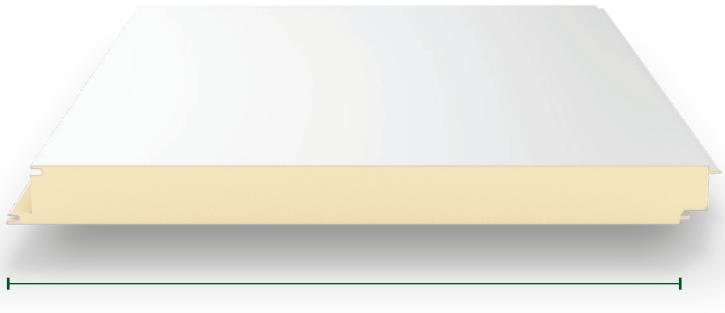


# Flat Insulated Metal Panels

When you're trying to create a high-profile architectural appearance and want a sleek profile, then Flat panels are the way to go. The soft stucco embossing works with many design styles. Flat is the preferred wall panel where style and energy efficiency are paramount.

Flat panels are ideal for temperature-controlled industrial and commercial buildings, including:

- Distribution
- Manufacturing
- Automotive
- Aviation
- Offices
- Schools



## Features & Benefits

- We've taken what we've learned over the years and simplified the insulated metal panel. This means more consistent quality and reduced lead times.
- Our temperature-controlled production facility allows panels to complete the curing process indoors, a critical step in reaching the highest levels of quality control.
- The double tongue & groove joint is self-aligning and weathertight, while the concealed fasteners provide a clean and aesthetically appealing appearance.
- Panels arrive on-site in one piece, requiring a simple one-step installation, reducing construction time and costs.
- Panels are available in 2", 2.5", 3" or 4" thicknesses. Standard width is 40"; lengths are 8'-0" to 32'-0".



## Panel Specifications

Thickness	2", 2.5", 3", 4"
R-Values*	R-8 per inch of thickness (nominal)
Width	40"
Length	8'0" to 32'0" standard <i>Contact us for information &amp; pricing on longer lengths.</i>
Coatings	Exterior: PVDF Interior: Igloo White (polyester)
Interior Texture	Stucco Embossing
Exterior Texture	Stucco Embossing
Insulation	Foamed-in-place Class 1 rated Polyisocyanurate
Metal Facings	Exterior: 22ga AZ50 aluminum coated steel Interior: 26, 24, 22ga AZ50 aluminum coated steel
Joint	Double Tongue & Groove for concealed fastening

\*Based on ASTM C518, ASTM C1363 & thermal modeling, 75°F & 40°F core mean temp.  
For project-specific values, contact your sales representative.

## Testing & Approvals

Our panels have been extensively tested to ensure compliance with various building codes and industry standards.

### FIRE

ASTM E84: Flame Spread

### STRUCTURAL

ASTM E72: Strength

ASTM E1592: Wind Uplift

### INFILTRATION

ASTM E283: Air Infiltration

ASTM E331: Water Infiltration

### THERMAL

ASTM C518: Thermal Conductivity

ASTM C1363: Thermal Performance

### FOAM CORE

ASTM C273: Shear Properties

ASTM D1621: Compression Properties

ASTM D1622: Density

ASTM D1623: Tensile Strength

ASTM D6226: Porosity

# Flat Insulated Metal Panels



## Our Polyvinylidene Fluoride (PVDF) paints are more than just color.

They are vivid and fade-resistant cool coatings with incredible durability.

Our environmentally friendly cool technology offers the highest quality materials to help you meet your unique requirements while maximizing the life of your building and saving on energy costs. PVDF is a revolutionary coating system that consists of PVDF resin, acrylic resin and ceramic pigments — giving your panels more vibrant, fade-resistant durability. Its photo-chemical resistance to ultraviolet light helps prevent breakdown from the sun's rays, reducing heat generation and increasing energy-efficient coolness.



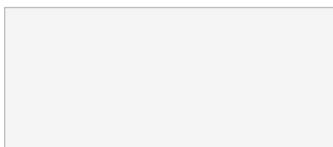
### WARRANTIES

At Nucor, we proudly stand behind every product we make. That's why we offer a 35-year warranty on our TrueCore PVDF insulated metal panels. It offers protection against:

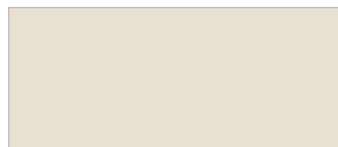
Fading | Chipping | Peeling | And more

### Exterior Colors

*IR: Initial Reflectance SRI: Solar Reflectance Index*



Regal White IR .73 SRI 89



Warm White IR .65 SRI 78



Surrey Beige IR .51 SRI 59



Pearl Gray IR .51 SRI 59

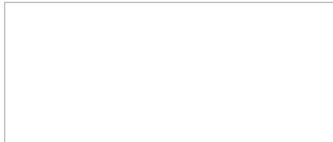


Royal Blue IR .30 SRI 30



Slate Gray IR .39 SRI 43

### Interior Colors



Igloo White (Polyester)

### Solar Reflectance, Thermal Emittance and Solar Reflectance Index (SRI)

#### Solar Reflectance

To be considered "cool," products must have a Solar Reflectance of at least 0.25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

#### Thermal Emittance

Thermal Emittance is the measure of a panel's ability to release heat that it has absorbed.

#### Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and, consequently, the heat gain into the building. Metal roofs coated with pigmented PVDF resin achieve an SRI of 30–89, depending on the color. Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically greater than 0.85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30–50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

PVDF Cool Color	Initial Solar Reflectance (IR)	Initial Thermal Emittance	Solar Reflectance Index (SRI)
Regal White	.73	0.85	89
Warm White	.65	0.87	78
Surrey Beige	.51	0.87	59
Pearl Gray	.51	0.87	59
Royal Blue	.30	0.86	30
Slate Gray	.39	0.87	43

**NOTE:** When using field applied coatings always order Igloo White Polyester for the exterior coating. Colors shown closely approximate actual coating colors.