



# 1. PRODUCT NAME

Alply Insulated Panels LLC

## 2. MANUFACTURER

Alply, LLC 1401 Eilerman Avenue Litchfield, IL 62056 Phone: (217) 324-6700

## 3. PRODUCT DESCRIPTION

The Alply wall panel has a foam core from 1" to 6" thick with an exterior and interior metal sheet laminated to the core. Edge and joint configurations vary with the design concept by employing either the back fastening system or the front fastening system with concealed fasteners. Panel joints and edge conditions may utilize either the conventional rod and caulk wet seal or the exclusive Alply Snug Seam extruded silicone gasket.

Basic Use: Alply insulated panels are primarily used as exterior wall cladding and may be adapted for use as roofs, interior walls (non-bearing) and soffit/ceiling, including new construction and retrofit.

Composition and Materials: Alply panels are custom fabricated in the factory using flat metal interior and exterior sheets laminated to an aged and cured insulating core of either polyisocyanurate or polystyrene.

The panel can be formed flat, curved, or a variety of custom three dimensional shapes to a maximum size of 5' x 18'. The exterior metal sheet can be painted 0.040 aluminum, anodized 0.040 aluminum, 22 gauge or 18 gauge Stainless steel, and 36oz. or 24oz. natural copper. The interior metal sheet is 0.040 mill finish aluminum, 0.040 primer coated aluminum, 0.040 painted aluminum, or 22 gauge galvanized steel.

Limitations: Alply panels are not designed to be used as load bearing walls or to provide diaphragm bracing for any loads other than panel dead load.

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### 4. TECHNICAL DATA

#### Material and Finishes:

Exterior Wall Faces:

- Aluminum 3004 H14 .040" with Kynar<sup>®</sup> metallic finish. This finish is a 2 or 3 coat PVF2 coating with a nominal finish thickness of 21/4 mils.
- Aluminum 3004 H14 .040" with Kynar<sup>®</sup> solid finish. Coating consists of minimum 0.2 to 0.4 mil Universal primer with 0.8 to 1.0 mil 70% Kynar<sup>®</sup> 500 resin content, for a total of 1 mil nominal thickness.
- Aluminum 5005 H14 .040 with Architectural Class 1, 0.7 mil Anodized Finish.
- Stainless Steel in 22 gauge material for widths to 48" and 18 gauge for widths to 60" in 304 with a 4B finish. 36 oz. and 24 oz. natural copper.

Interior Wall Faces:

- Aluminum 3004 H14 0.040 with DURANAR® finish.
- Aluminum 3004 H34 .032 or .040 in mill finish.
- Aluminum 3004 H34 .040 with .5 mil epoxy primer.
- 22 gauge galvanized steel ASTM A653 G90.

# Wall Insulation Core:

Formed Isocyanurate. Density of 2.0 to 2.3 pounds per cubic foot with minimum tensile strength of 27 PSI, flame spread of 25 or less per ASTM E84 and smoke development of 400.

Cellular Polystyrene; Density of 1.5 to 2.5 pounds per cubic foot with a minimum tensile strength of 40 PSI.

#### Thickness and Heat Transmission Values.

Panel Thicknes	U Values	U Values
Inches	Polystyrene	Isocyanurate
1	.213	.133
2	.113	.071
3	.078	.048
4	.059	.036
5	.048	.029
6	.040	.025
7	.038	.021
8	.030	.018

("U" values BTU/hr/sq.ft./oF-assume nonreflective surfaces. Still air inside, and 15 mph wind outside Thermal conductivity. K= .15 for Isocyanurate.)

#### **Panel Assemblies:**

Panels with 0.040 aluminum or 22 gauge steel sheet each side and polyisocyanurate core may be used as non-bearing exterior wall where non-combustible construction is required. The Alply panel wall system meets the acceptance criteria of UBC17-6 Multi-Story Fire Evaluation of an exterior, non-load-bearing, foam-plastic insulated wall system.

#### 5. INSTALLATION

Alply panels are shipped to the jobsite completely prefabricated to mate with the structural support / anchorage system is connected to the structure in such a manner as to allow for adjustment or shimming to a deviation of not more than ±1/16" from a flat plane. Structure must be in accordance with AISC minimum.

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