

# SPECIFICATION COMPLIANCE CHECKLIST

Section 07 42 13 - Metal Plate Wall Panels



Fire Resistant & Non-Combustible Cladding

## PART 1: GENERAL

### ASTM E330 Structural Performance

Perimeter Framing Deflection  $\leq L/175$

Panel Deflection  $\leq L/60$

Panel Deflection - Compliant

+100 psf / -90 psf, 20.0 psf water penetration per ASTM E330

		Deflection (in)		Permanent Set (in)	
		Measured	Allowed Per TAS 202 (L/333)	Measured	Allowed Per TAS 202 (L/720)
Design Pressure	+ 100.0/psf	0.10	0.36	0.02	0.17
	- 90.0/psf	0.20	0.36	< 0.01	0.17
Test Pressure	+ 150.0/psf	0.16	N/A	0.03	0.17
	- 135.0/psf	0.30	N/A	0.03	0.17

Perimeter Framing Deflection - Compliant

		Deflection (in)		Permanent Set (in)	
		Measured	Allowed Per TAS 202 (L/1707)	Measured	Allowed Per TAS 202 (L/3899)
Design Pressure	+ 100.0/psf	0.01	0.07	< 0.01	0.03
	- 90.0/psf	0.03	0.07	< 0.01	0.03
Test Pressure	+ 150.0/psf	0.01	N/A	0.01	0.03
	- 135.0/psf	0.03	N/A	0.01	0.03

### ASTM E283, Air Leakage

< 0.06 cfm per sf at 1.57 psf

0.02 cfm/ft <sup>2</sup> (0.10 L/s/m <sup>2</sup> ) at 1.57 psf (25 mph)	Compliant
0.04 cfm/ft <sup>2</sup> (0.20 L/s/m <sup>2</sup> ) at 6.27 psf (50 mph)	Compliant

### ASTM E331, Water Penetration

No water infiltration at 6.24 psf (0.299 kPa)

No water infiltration at 20 psf (0.96 kPa)	Compliant
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### Fire Performance

Compliant with regulatory fire code testing

ASTM E136: Standard Test Method for Behavior of Materials in a Vertical Tub Furnace at 750°C

CAN / ULC-S114-2018: Standard Method of Test for Determining Non-Combustibility in Building Materials

CAN / ULC-S135: Standard Test Method for the Determination of Combustibility Parameters of Building Materials

### Quality Assurance

Product Certifications & Test Report Compliance

Florida Product Approval HVHZ - FL Building Commission No. FL39304

FM 4473 "Modified" Impact Resistance Testing Results Pass

Aluminum Ingot Country of Origin Australia

Aluminum Ingot, Rolled Aluminum Coil, Coil Coated Plate

» ISO 14001 Environmental Management System

» ISO 9001 Quality Management System

### Warranty

Finish Warranty	20 Years
Perforated Product Finish Warranty	10 Years

## PART 2: PRODUCT

### Metal Plate Wall Panels

100% Solid Aluminum Plate Panels used for exterior wall cladding, parapets, fascia and soffits as the siding component of a rainscreen system that also includes a ventilated drainage plane and a vapor-permeable air barrier provided under separate sections and trade contracts.

### Aluminum Alloy

Alloy	3003-H14
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## PART 2: PRODUCT (con't)

### Panel Dimensions

Standard Widths	62in (1575mm)
	49.2in (1250mm)
Custom Width Range	31.5in (800mm) min - 62in (1575mm) max
Lengths	Made to order 48in min - 300in max

### Thicknesses

3mm	0.125inches nominal
2.5mm	0.100inches nominal
2mm	0.080inches nominal
1.5mm	0.063inches nominal

### Finishes

AAMA 2605 Compliant Coil Coated  
70% KYNAR® 500 based Polyvinylidene Fluoride (PVDF) finishes

PROPERTY	STANDARD	COIL COATED ALUMINUM
Color Uniformity	ASTM D2244	Max. 2 Delta E
Color Retention - Fade	ASTM D2244	≤ 5 Delta E units
Chalk Rating	ASTM D4214	≤ 8 units
Specular Gloss	ASTM D523	± 5 units
Dry Film Hardness	ASTM D3363	F - 2H
Dry Adhesion	ASTM D3359	No coating removal
Abrasion Resistance	ASTM D968	Abrasion Coefficient Value ≥ 40
Reverse Impact	ASTM D2794	No coating removal
Muriatic Acid Resistance (10% HCl, 15 min)	ASTM D1308	No blistering or visual change
Nitric Acid Resistance (HNO <sub>3</sub> , 30 min)	ASTM D1308	≤ 5 Delta E
Alkali Mortar Resistance (10%, 25% NaOH, 60 min)	ASTM D1308	No removal No loss of adhesion or visual change
Flexibility	ASTM D4145	2T - no pick off
Humidity Resistance	ASTM D714	4000 hour exposure
	ASTM D2247	Less than "few" blisters Size No. 8
Cyclic Corrosion	ASTM B117	2000 hour exposure Min rating of 7 scribe or cut edge
	AAMA 2605-13	Min. blister rating of 8

### Panel Weight

3mm	1.66 lb/ft <sup>2</sup> (8.10 kg/m <sup>2</sup> )
2.5mm	1.33 lb/ft <sup>2</sup> (6.75 kg/m <sup>2</sup> )
2mm	1.11 lb/ft <sup>2</sup> (5.40 kg/m <sup>2</sup> )
1.5mm	0.83 lb/ft <sup>2</sup> (4.05 kg/m <sup>2</sup> )

### Fire Performance

Intertek Certified Test	Results
ASTM E136	Pass - meets standard for non-combustibility
CAN/ULC S114-2018	Pass - meets the specified performance req.
CAN/ULC S135	Pass - no deviations to the ULC S135 standard

### Technical Properties Data Sheet

Alfrex Plate 3mm	<a href="#">View</a>
Alfrex Plate 2mm	<a href="#">View</a>

### Related Materials

*Matching trim and accessories formed from sheet metal to match MCM panel finish.*

Alfrex stocks 0.040" x 48" x 120" flat sheet in 32 colors that match Alfrex FR MCM standard colors.