

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 ² (0.10 L/s/m ²) at 1.57 psf (25 mph)	Compliant
0.04 cfm/ft ² (0.20 L/s/m ²) 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 ₃ , 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 ² (8.10 kg/m ²)
2.5mm	1.33 lb/ft ² (6.75 kg/m ²)
2mm	1.11 lb/ft ² (5.40 kg/m ²)
1.5mm	0.83 lb/ft ² (4.05 kg/m ²)

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	View
Alfrex Plate 2mm	View

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.