

## Innovative Design. Contractor Approved

Powered by Arch-Fab.

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## Panel System

#### PANEL COMPONENTS

Standard Panel & Trim Lengths: 24'
Panel Widths: 3", 4", 6", 8"
Endcaps: 3", 4", 6", 8"
J-Trim
Corner Trim

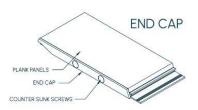
#### PHYSICAL DATA

6063-T6 Extruded Aluminum Alloy 100% Recyclable Nominal Wall Thickness: .063" 3" Extruded Panel Weight: .516 lb\* 4" Extruded P Weight: .590 lb\* 6" Extruded Panel Weight: .743 lb\* 8" Extruded Panel Weight: .890 lb\* ASTM E84 Class A Fire Rating

\*Per Linear Foot

#### **RESOURCES**

Specifications CAD Files Connection Details Installation Guides Warranty Information Cleaning and Care





#### **ATTACHMENT**

Panels & Trim: #10 Screw Appropriate for Wall Type Screws to be Fastened for Panel Trim Every 30" Optional End Caps: Blind Pop Rivets or #10 Countersunk Screw Fastener Package Available Upon Request

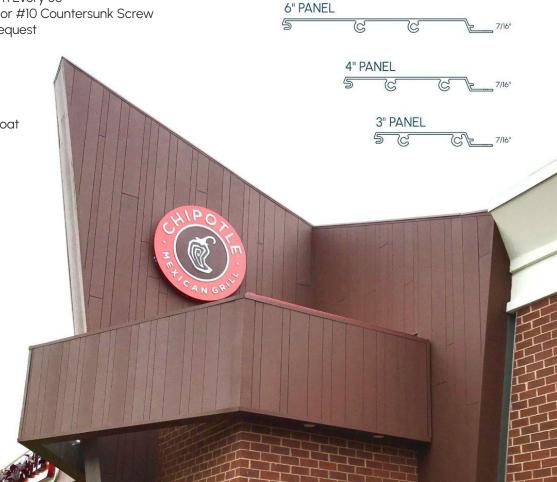
#### **FINISHES**

AAMA 2604 & 2605 Powder Coat Wood Grain & Solid Color Powder Coat

#### WARRANTY

Material: 50 Years AAMA 2604 Finish: 15 Years AAMA 2605 Finish: 20 Years





8" PANEL

# Class A Fire Rating

#### FLAME-SPREAD RATINGS

When evaluating building materials for fire safety, factors like ignition temperature, smoke toxicity, and flame-spread need to be taken into consideration. Flame-spread is the rate at which flames spread across the surface of a material, and is tested using the American Society for Testing and Materials (ASTM) Test Method E-84, also referred to as the tunnel test. In this test, a 20 inch wide and 25 foot long sample of the material is installed at the ceiling of a test chamber and then exposed to a gas flame at one end.

The resulting Flame-Spread Rating (FSR) can be measured on a continuous scale, with inorganic reinforced cement board having a 0 rating and red oak earning 100. This scale is divided into three classes: Class I/A (0-25 FSR), Class II/B (26-75 FSR), and Class III/C (76-200 FSR). Generally speaking, materials like brick or tile are considered Class I, while whole wood products are usually Class II, and reconstituted woods such as plywood, particle board, or hardboard are Class III.

#### FLAME-SPREAD CLASSIFICATION FLAME-SPREAD RATING OR INDEX

Class I (or A) 0 - 25 Class II (or B) 26 - 75 Class III (or C) 76 - 200

The most widely accepted flame-spread classification system appears in the National Fire Protection Association Life Safety Code, NFPA No. 101. This Code groups the following classes in accordance with their flame-spread and smoke development:

Class A – Flame-spread 0-25, smoke developed 0-450.

Class B – Flame-spread 26-75, smoke developed 0-450.

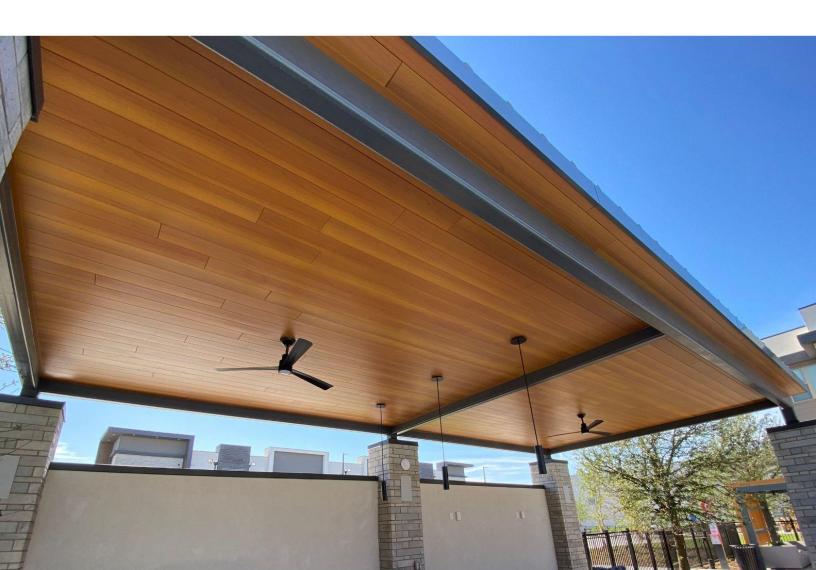
Class C – Flame-spread 76-200, smoke developed 0-450.



## Panel System

## Installation Guide

Please review all instructions prior to installation.



## Panel Components



3" Extruded Panel



J-Trim (Male)



4" Extruded Panel



J-Trim (Female)

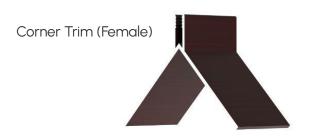


6" Extruded Panel





8" Extruded Panel



## Tools List

Saw Rivet Gun (Optional)

Mallet #10 Phillips Screws Appropriate for Wall Type

Screw Gun

Optional End Caps: Blind Pop Rivets or #10 Phillips Countersunk Screws Fastener Packages Available Upon Request

# Tools Commonly Used



### **CUTTING**

Always be sure to wear appropriate PPE: eye and hearing protection.

Cut Planks using a Miter Saw and Circular Saw and always allowing for expansion and contraction. Trim the taped / drilled ends of all stock length material by at least  $\frac{1}{2}$ " (12mm) from each end and discard.

DO NOT install Planks without first trimming the ends.

## Installation Steps

#### IMPORTANT NOTES

Carefully unwrap the materials and handle with care.



#### 1. INSTALL CORNER TRIM

Attach corner trim to inside or outside 90° corners.

90° outside corner - fasten the female corner trim first.

90° inside corner - fasten the male corner trim first.

Do not attach corner trim cap until after panels are installed.

If there is no corner trim on the project, move to step 2.



#### 2. INSTALL J-TRIM BASE

Measure and cut base j-trim pieces to fit the perimeter area.

For a base that is longer than the j-trim lengths, butt the joints together to fit the desired length.

Use a 1/8" shim spacer when installing the first row of plank to ensure that the female j-trim will attach properly.

Attach each trim piece with screws spaced every 30".

Install all base j-trim before starting plank.



#### 3. INSTALL FIRST PLANK

Install the first plank horizontally or vertically, leaving a minimum 1/8" gap between the base j-trim.



#### 4. LEVEL & PLUMB

Check to ensure that the plank is level and plumb.

Fasten in the #10 Phillips screws appropriate for the specific wall type every 30" on the flat lip of the plank.



#### 5. CONTINUING PLANK

Once the first level of plank has been installed across the entire length, continue installing the horizontal or vertical planks.

The short curved end slips in and clips into the long flat end of the prior plank.

Make sure each plank is plumb and level, then tighten the fasteners (spaced 30" apart.)



#### 6. VARY BUTT JOINT LOCATIONS

When starting the second row of plank, cut the plank to a different length so that the butt joint occurs at a different location from the first plank, creating a staggered pattern.



#### 7. HORIZONTAL PLANKS

If the plank is not long enough to fit the width of the space, but joint the planks together, staggering as necessary.

\*If using end caps, reference page seven.



#### 7. VERTICAL PLANKS

If the plank is not tall enough to fit the height of the space, butt joint the planks together.

\*If using end caps, reference page seven.



#### 8. FINAL PLANK

Once a plank reaches to the trim opposite of where the first plank was installed, measure how much overlap occurs if the side of the plank does not meet up to the trim base.

Use a saw to rip the final plank to the appropriate width. Then, clip the final panel into the prior panel and fasten the sheared edge (every 30").

The ripped / final flat edge lays on top of the flat base of the trim.



#### 9. CORNER TRIM COVERS

Clip on the corner trim covers (if using).

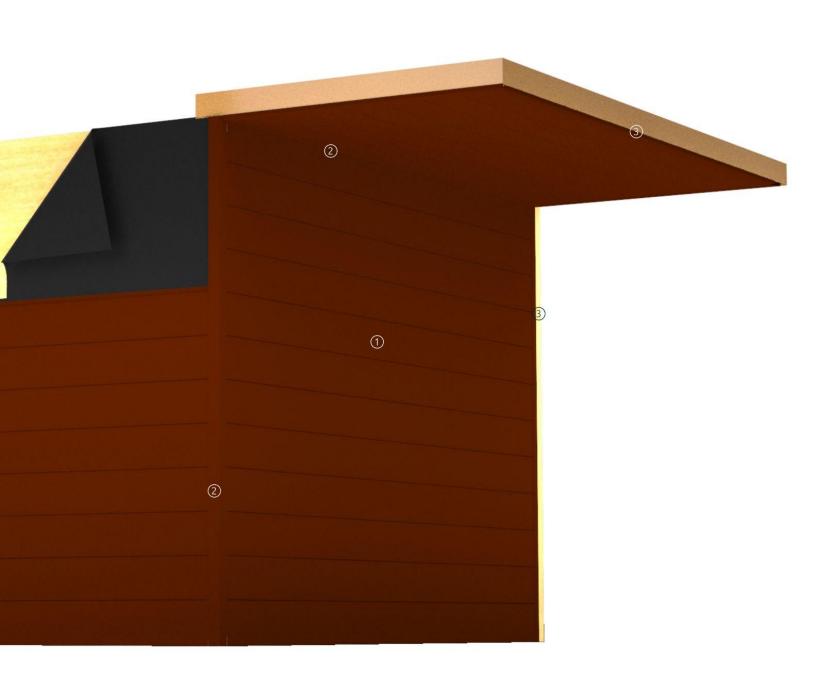
90° outside corner - clip the male corner trim into the female corner trim.

90° inside corner - clip the female corner trim into the male corner trim.



#### 10. J-TRIM COVERS

Once all planks have been installed, clip on the trim covers. Use the female j-trim and press to snap into the male j-trim.



- 1. Extruded Planks
- 2. Outside Corner Trim
- 3. J-Trim

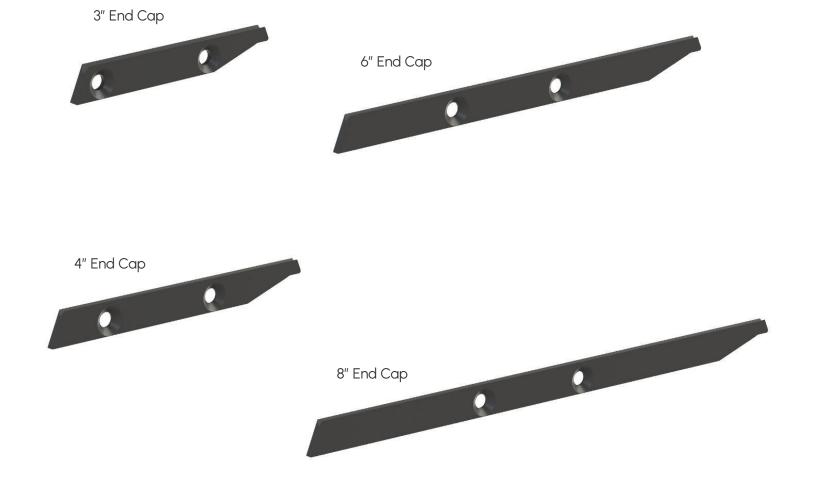
## Optional End Caps



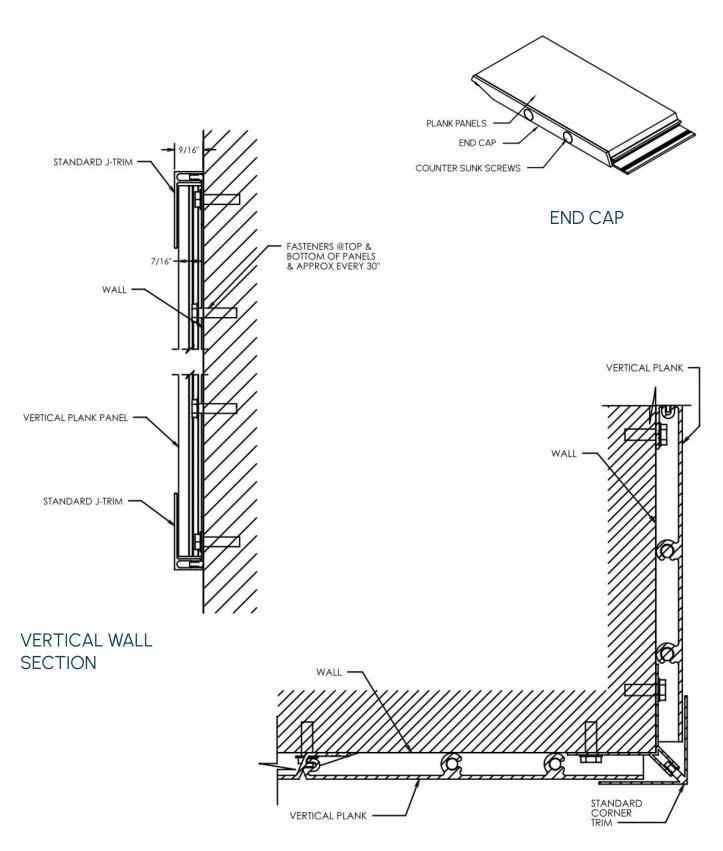
#### **END CAP JOINT**

Install the end cap to the plank prior to the plank unit being installed onto the wall. Each end cap separates two planks.

Arrange the end cap so that the holes line up with the embosses of the plank. The fasteners are to be attached on the side of the end cap that has the countersunk holes.



## Connection Details



# Framing Requirements

Always consult your local building authority and follow local building code requirements. See Typical dimensions for sizes and weights of the Plank System.

#### **WOOD FRAMING**

- Size: 2"x4" Minimum
- Spacing 16" (406mm) O.C.

#### METAL FRAMING

- Gauge: 18 ga. Minimum
- Spacing: 16" (406mm) O.C.

### **CONCRETE / CMU**

Wood or metal furring recommended over concrete and CMU.

#### **WOOD FURRING**

- Size: 1"x2" Minimum
- Type: Pressure Treated Lumber
- Spacing: 16" (406mm) O.C.

#### METAL FURRING

- Size: 18 g.a. Minimum
- Type: Hat Channel, C-Stud, or Z-Furring
- Spacing: 16" (406mm) O.C.

Can be connected straight to CMU with tapcom if it is waterproofed.

# Material Specifications

#### **FINISHES**

- Alumination products are available in a wide range of woodgrains and solid colors
- Custom solid colors are available upon request

All Alumination products are produced 1" (25mm) oversized, as one end is drifted for the coating process and both ends have  $\frac{1}{2}$ " (12mm) of masking tape (woodgrains only) which must be cut off for the best results.

### MATERIAL ORDERING & DELIVERY

#### **PACKAGING**

- Panels come in 24' lengths & are sold in widths of 2", 4", 6", & 8"
- End Caps are sold by the box: 20 caps/box

#### SHIPPING

Lead time is 60 business days + shipping, delivered on 24' (7.3m) long skids weighing up to 6000 lbs. A mechanical lift with forks is required on site to receive the order.

#### QC

Always inspect the delivery for damage and contact Alumination ASAP if there are any issues: info@alumination-ap.com or 817.678.4440 and include your PO# and any pictures if possible. Mark the delivery receipt as "damaged" and accept the delivery as-is. Alumination is not responsible for the installation of blemished or damaged material

### STORAGE & HANDLING

Be sure to store the material flat, keep it dry, and remain in unopened cartons until ready to be installed.

# Thermal Expansion Chart

### IMPERIAL TABLE

#### AVERAGE TEMPERATURE AT THE TIME OF CUTTING & INSTALLATION

°C	-50	-40	-30	-20	-10	0	10	20	30	40	50
°F	-58	-48	-22	-4	14	32	50	68	86	104	122

ا نہ	00	oг
2	°C	°F
TEMP	-50	-58
8	-40	-40
E	-30	-22
2	-20	-4
CONSTRUCTION	-10	14
8	0	32
MIN/MAX POST	10	50
8	20	68
IAX	30	86
≥ I	40	104
Z	50	122

7	00	10		- 1/	1.1	02	00		00	10 1	122
]				EXPANSI	ON OR CC	NTRACTIO	ON (INCH/I	FOOT)			
	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024	-0.027
	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024
	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022
	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019
	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016
	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014
	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011
	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008
	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005
	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003
	0.027	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000

### METRIC TABLE

#### AVERAGE TEMPERATURE AT THE TIME OF CUTTING & INSTALLATION

		°F	┚	-58	-48	-22	-4	14	32	50	68	86	104	122
MP	°C	°F					EXPANSI	ON OR CC	NTRACTION	M/MM) NC	ETER)			
TEMP	-50	-58		0.000	-0.230	-0.460	-0.690	-1.150	-1.150	-1.380	-1.610	-1.840	-2.070	-2.000
TION	-40	-40		0.230	0.000	-0.230	-0.460	-0.690	-1.150	-1.150	-1.380	-1.610	-1.840	-2.070
CT	-30	-22		0.460	0.230	0.000	-0.230	-0.460	-0.690	-1.150	-1.150	-1.380	-1.610	-1.840
ONSTRUC	-20	-4		0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-1.150	-1.150	-1.380	-1.610
NS	-10	14		0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-1.150	-1.150	-1.380
00	0	32		1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-1.150	-1.150
ST	10	50		1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-1.150
POS	20	68		1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690
١AX	30	86		1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460
MIN/W	40	104		2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230
<b>\leq</b>	50	122		2.300	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000

# Stress Limit Span Chart

### 3" STRESS LIMIT SPAN CHART

3"	
	16"
ALLOWABLE SPAN	24"
	32"

	PSF ( FACTORED ULTIMATE)												
30	40	50	60	70	80	90	100	110	120				

### 4" STRESS LIMIT SPAN CHART

4"	
	16"
ALLOWABLE SPAN	24"
	32"

	PSF ( FACTORED ULTIMATE)											
30	40	50	60	70	80	90	100	110	120			

### 6" STRESS LIMIT SPAN CHART

6"	
	16"
ALLOWABLE SPAN	24"
330.00	32"

,	PSF ( FACTORED ULTIMATE)												
30	40	50	60	70	80	90	100	110	120				
						i i							
						l e							

### 8" STRESS LIMIT SPAN CHART

8"	
	16"
ALLOWABLE SPAN	24"
	32"

	PSF ( FACTORED ULTIMATE)											
30	40	50	60	70	80	90	100	110	120			

## Deflection Limit Span Chart

### 3" DEFLECTION LIMIT L/180 SPAN CHART

3"	
	16"
ALLOWABLE SPAN	24"
	32"

PSF ( FACTORED ULTIMATE)										
30	40	50	60	70	80	90	100	110	120	
						Î Î				

### 4" DEFLECTION LIMIT L/180 SPAN CHART

4"	
ALLOWABLE SPAN	16"
	24"
	32"

PSF ( FACTORED ULTIMATE)										
30	40	50	60	70	80	90	100	110	120	

### 6" DEFLECTION LIMIT L/180 SPAN CHART

6"	
	16"
ALLOWABLE SPAN	24"
30000	32"

	PSF ( FACTORED ULTIMATE)										
30	40	50	60	70	80	90	100	110	120		
						†					

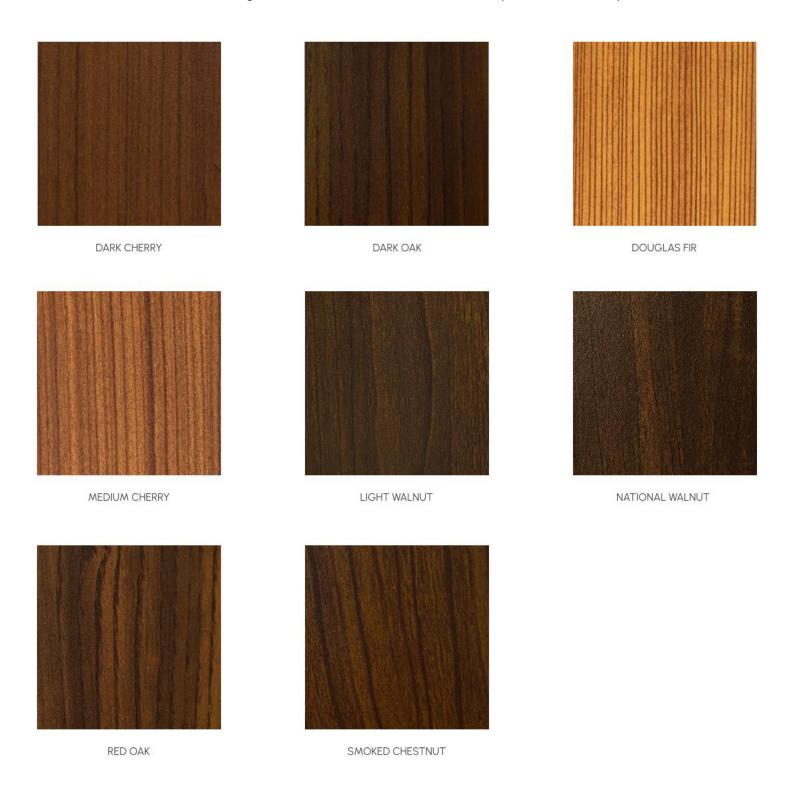
### 8" DEFLECTION LIMIT L/180 SPAN CHART

8"	
ALLOWABLE SPAN	16"
	24"
	32"

	PSF ( FACTORED ULTIMATE)										
30	40	50	60	70	80	90	100	110	120		

## Standard Wood Grain Powder Coat Colors

The colors below are our most popular standard wood grain color options. If these do not meet your project's needs, we have a broader selection of wood grain available. Contact us and it will be our pleasure to find the perfect color match.



Finishes displayed on monitors and printed on paper provide examples of the wide variety of options we offer but do not accurately convey the richness of color, texture, and gloss level of the finished product. We recommend that you request a physical sample before making a final selection.

## Non-Standard Wood Grain Powder Coat Colors

The colors below are our most popular standard wood grain color options. If these do not meet your project's needs, we have a broader selection of wood grain available. Contact us and it will be our pleasure to find the perfect color match.



Finishes displayed on monitors and printed on paper provide examples of the wide variety of options we offer but do not accurately convey the richness of color, texture, and gloss level of the finished product. We recommend that you request a physical sample before making a final selection.

### Standard Powder Coat Colors

The colors below are our most popular standard solid color options. If these do not meet your project's needs, we have a broader selection of colors available. Contact us and it will be our pleasure to find the perfect color match.



Finishes displayed on monitors and printed on paper provide examples of the wide variety of options we offer but do not accurately convey the richness of color, texture, and gloss level of the finished product. We recommend that you request a physical sample before making a final selection.

## Cleaning & Care Instructions

Alumination Architectural Products do not require any maintenance to preserve the powder coat finish; however, regular cleaning is recommended to ensure optimal longevity. Exposure to weathering can cause gloss loss, chalking, and slight color change over time and routine cleaning can help reduce the effects of exposure to the elements and eliminate dirt and debris.

#### CONSIDERATIONS

- · It's important to note if they are used in non-exposed surfaces like soffits. These areas often have more condensation and less access to rainwater for cleaning.
- · In metropolitan areas with higher levels of air pollutants, more frequent cleaning may be necessary.
- · Conversely, areas with higher rain frequency require less maintenance due to natural cleaning by rainfall.
- · Avoid cleaning during freezing weather or in direct sunlight for best results.

#### DO NOT USE THE FOLLOWING PRODUCTS

To maintain the (15) year warranty and avoid a chemical reaction on the finish, refrain from using the following products:

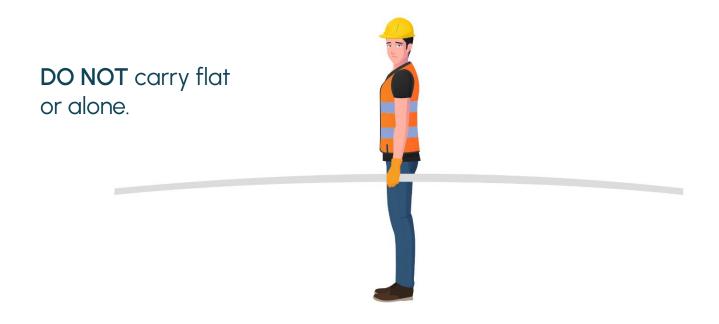
- · Thinners, solvent-based or abrasive cleaners
- · Solutions containing hydrocarbons, ester, ketones
- · Cleaners containing Trisodium Phosphate, Phosphoric Acid, Hydrochloric Acid, Hydrofluoric Acid, Fluorides, and/or Alcohol
- · Acids or Alkaline Cleaners
- · Other compounds or abrasive cleaners that may cause a metal reaction.

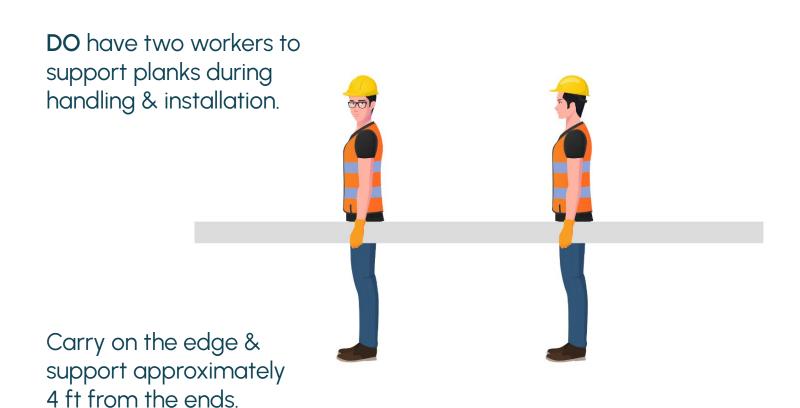
#### CLEANING TIPS FOR POWDER COATED PRODUCTS

- 1. Start by gently rinsing the surface with a hose to remove any loose dirt or debris.
- 2. Mix a solution of mild detergent and warm water. Do not use any cleaners that contain the prohibited compounds mentioned earlier.
- 3. Apply the cleaning solution to the surface using a soft-bristled brush or sponge. Work in small sections, starting at the top and working your way down.
- 4. Rinse each section thoroughly with clean water before moving on to the next.
- 5. Once you have cleaned the entire surface, rinse it thoroughly with clean water again to ensure all soap residue is removed.
- 6. Dry the surface with a clean, soft cloth or allow it to air dry.

Remember to avoid cleaning powder-coated surfaces in direct sunlight or freezing weather, and to take into account location conditions when deciding on the frequency of cleaning. By following these guidelines, you can help maintain the warranty and keep your powder-coated products looking their best.

# Material Handling





## Expansion & Contraction

Panel components expand and contract  $\frac{1}{4}$ " (6mm) over 24' (7.3m) along the length, measured over a 30°C (54°F) temperature range.

Due to this range of movement, Panels should be installed with staggered butt-joints, leaving a  $\frac{1}{4}$ " (6mm) minimum gap, every 24' (7.3m) minimum.

Alternately, staggered lap-joints are an option for a continuous appearance, however  $\frac{1}{4}$ " (6mm) gaps should be left at each joint to allow for thermal movement.

Be sure to lap joints by 2" (610mm) minimum over the back "L".

Add additional expansion/contraction calculations per foot/meter of material?

## Limited Warranty for Plank & Batten Systems

Subject to compliance with the installation instructions and maintenance requirements set forth, Alumination Architectural Products (Alumination) extends the following warranties for its extruded aluminum plank and batten products (Products): Materials and Workmanship 50 (fifty) years, Finish 15 (fifteen) years for decorative finishes and 10 (ten) years for solid finishes, commencing from the date of shipment.

#### CLAUSE 1: WARRANTY COVERAGE

- 1.1 Alumination Architectural Products (Alumination) provides a clear warranty, expressly confirming that its aluminum products are free of manufacturing defects in material or workmanship. When installed in accordance with Alumination specifications and adequately maintained, the product is warranted against the following:
- 1.1.1 Buckling: The product itself will remain free from any buckling unrelated to the substrate and/or structure to which the Alumination system is affixed. For the purposes of this warranty, buckling is defined as warping of the product(s) exceeding one sixteenth of an inch out of plane per linear foot.
- **1.1.2** Corrosion: When applied and properly maintained, the product is additionally guaranteed against rusting and corroding, subject to the limitations outlined in Clause 3.
- 1.2 Warranty Coverage Details
- **1.2.1** During the Limited Warranty Period, if the product is found to be defective in material or workmanship as specified in this Clause 1, Alumination, at its sole discretion, will replace the defective portion of the product. This replacement will employ standard materials, methods, and workmanship necessary to fulfill the original guarantee.
- **1.2.2** Alumination's replacement of the defective product under this Limited Warranty stands as the exclusive remedy for any defect in materials or workmanship.
- **1.2.3** Alumination explicitly states that it will not refund or cover any costs associated with labor or accessory materials in connection with the warranty.

#### CLAUSE 2: ALUMINUM POWDER COAT FINISH WARRANTY

During the specified warranty period, the following conditions apply to the Alumination Finish:

- 2.1 Cracking: No visible cracking of the Alumination Finish shall be apparent.
- 2.2 Chalking Resistance: The Alumination Finish shall exhibit no chalking exceeding a No. 6 rating based on ASTM D4214.
- **2.3** Color Retention: The Alumination Finish shall experience no color change exceeding 5 (five) CIE Lab AE units, as calculated in accordance with ASTM 2244 Section 6.3. Measurements will be taken on the exposed paint surface, cleaned of contaminants, with corresponding values measured on the original retained batch panel.
- **2.4** Gloss Retention: The coated surface must retain a minimum of 30% of the original gloss. Measurements will be taken on the exposed paint surface, cleaned of contaminants, with corresponding values measured on the original retained batch panel.
- **2.5** Adhesion: Initial application of the Alumination Finish on test panels, measured according to AAMA 2604-02 Clause 7.4.1.1, must show no removal of the film.
- **2.6** Alumination's Obligations: Alumination's exclusive liability under this warranty is limited to refinishing, repairing, and/or replacing, at Alumination's sole discretion, the defective portion of the product. Replacement of the defective product is the exclusive remedy, and Alumination will not refund or cover any costs related to labor or accessory materials.

## Limited Warranty for Plank & Batten Systems

#### **CLAUSE 3: WARRANTY TERMS & CONDITIONS**

- **3.1** Warranty Period: The "Warranty Period" for Clause 1 warranties is fifty (50) years for as long as the owner/purchaser lives and owns the property. For Clause 2, the Warranty Period is fifteen (15) years from the date of shipment.
- **3.2** Registration Requirement: Product registration is mandatory for warranty activation. The warranty is valid for the original purchaser and one additional owner of the structure where the product is installed.
- **3.3** One-Time Transfer: The original purchaser can transfer the warranty to a new owner within 90 days of the property transfer, subject to registration. After transfer, the warranty is prorated based on the installation date.
- **3.4** Commercially Impractical Situations: If repair, refinish, or replacement is not commercially practical, Alumination may refund an amount up to the owner's original purchase price.
- **3.5** Warranty Exclusions: The warranty does not cover damages sustained during transit from factory to specified contract location. Damages sustained to the finish caused by scratching or abrasions after installation or as a result of standing water. The warranty will not be applicable to damage or failure, which is caused by acts of God including, but not limited to accident, supernatural event, explosion, civil commotion, or other such events.
- **3.6** Required Maintenance: Annual maintenance with a soft sponge, water, and mild detergent is required. Pressure washing and harsh chemicals are not recommended.
- **3.7** Workmanship Exclusion: The warranty does not cover installer workmanship. No liability is imposed on Alumination for unsatisfactory performance due to faulty installation.
- **3.8** Exclusion of Warranties: This warranty constitutes the entire agreement, and Alumination disclaims any implied warranties. Alumination's liability is limited, and no one is authorized to make representations beyond what is expressly stated. The warranty duration is subject to applicable local law, and it provides specific legal rights.

These limited warranties outline Alumination's responsibilities and exclude liability for incidental or consequential damages.



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