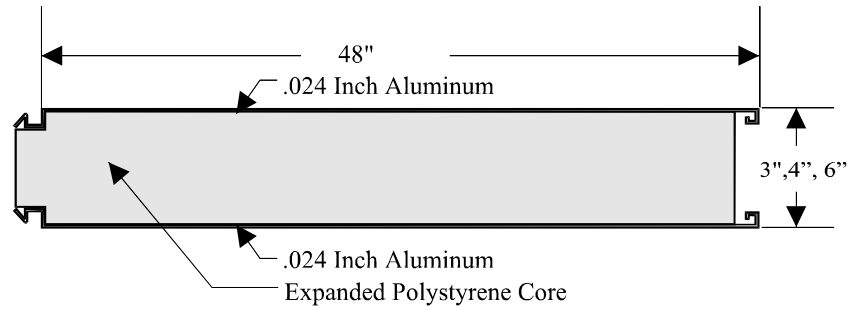


# Engineering Data

## Snaplock Panel Specifications

### Panel Weight

Thickness	lb. / lin. ft.
3	4.3
4	4.8
6	5.8



### Allowable Uniform Transverse Loads (psf)

2.5 Safety Factor / Limit governed by deflection (L/120)

Projection	3" Polycore Snaplock Panel	4" Polycore Snaplock Panel	6" Polycore Snaplock Panel
10'	31.3 PSF	41.9 PSF	63.1 PSF
11'	25.9 PSF	34.6 PSF	52.2 PSF
12'	21.7 PSF	29.1 PSF	43.8 PSF
13'	18.5 PSF	24.8 PSF	37.3 PSF
14'	16.0 PSF	21.4 PSF	32.2 PSF
15'	13.9 PSF	18.6 PSF	28.0 PSF
16'	12.2 PSF	16.4 PSF	24.6 PSF
17'	10.8 PSF	14.5 PSF	21.8PSF
18'	9.7 PSF	12.9 PSF	19.5 PSF

### Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

E = Modulus of Elasticity

G = Modulus of Rigidity

F = Allowable Stress

T = Tension

V = Shear

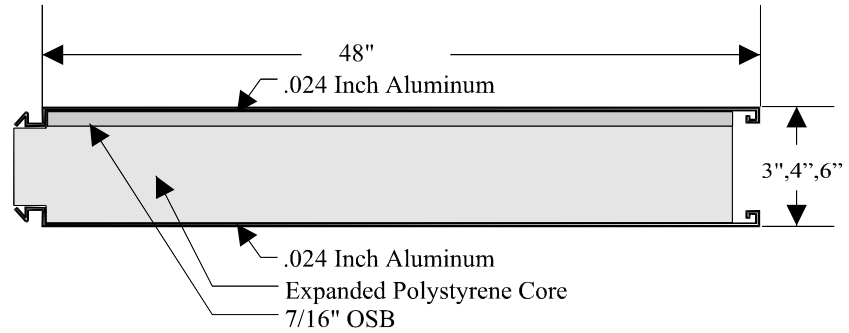
MR = Modulus of Rupture

	3"	4"	6"
R-Value	13.5	18	27

## Snaplock OSB Panel Specifications

### Panel Weight

Thickness	lb. / lin. ft.
3	11.8
4	12
6	12.2



### Allowable Uniform Transverse Loads (psf)

2.5 Safety Factor / Limit governed by deflection (L/120)

Projection	3" Snaplock OSB Panel	4" Snaplock OSB Panel	6" Snaplock OSB Panel
10'	60 PSF	66 PSF	75 PSF
11'	53.2 PSF	59 PSF	68 PSF
12'	48 PSF	53 PSF	61 PSF
13'	43 PSF	48.5 PSF	56 PSF
14'	38 PSF	45 PSF	53 PSF
15'	31 PSF	40 PSF	50 PSF
16'	24 PSF	35 PSF	46.4 PSF
17'	19.2 PSF	28.8 PSF	38 PSF
18'	15.36 PSF	23.6 PSF	31.2 PSF

### Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

E = Modulus of Elasticity

G = Modulus of Rigidity

F = Allowable Stress

T = Tension

V = Shear

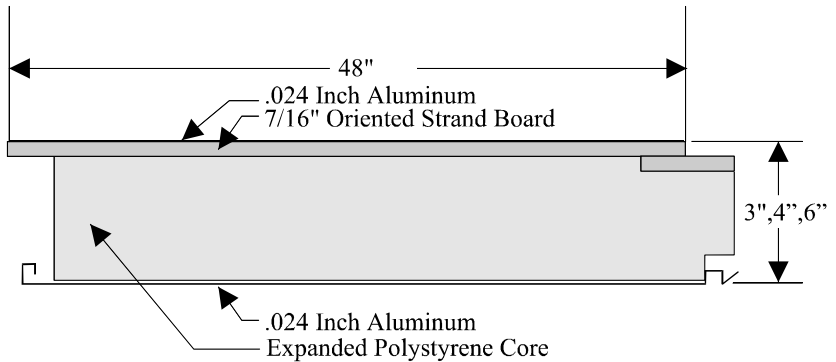
MR = Modulus of Rupture

	3"	4"	6"
R-Value	10.5	14.5	22.5

## 4-Ply OSB Overlap with Snaplock Bottom Panel Specifications

### Panel Weight

Thickness	lb. / lin. ft.
3	11.8
4	12
6	12.2



### Allowable Uniform Transverse Loads (psf)

2.5 Safety Factor / Limit governed by deflection (L/120)

Projection	3" Panel	4" Panel	6" Panel
10'	60 PSF	66 PSF	75 PSF
11'	53.2 PSF	59 PSF	68 PSF
12'	48 PSF	53 PSF	61 PSF
13'	43 PSF	48.5 PSF	56 PSF
14'	38 PSF	45 PSF	53 PSF
15'	31 PSF	40 PSF	50 PSF
16'	24 PSF	35 PSF	46.4 PSF
17'	19.2 PSF	28.8 PSF	38 PSF
18'	15.36 PSF	23.6 PSF	31.2 PSF

### Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

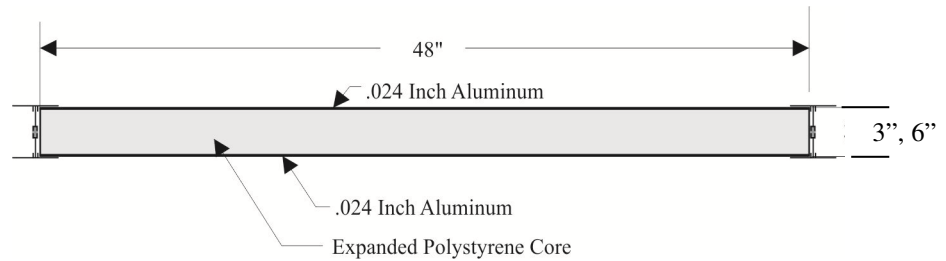
E = Modulus of Elasticity  
 G = Modulus of Rigidity  
 F = Allowable Stress  
 T = Tension  
 V = Shear  
 MR = Modulus of Rupture

	3"	4"	6"
R-Value	10.5	14.5	22.5

## ***Straight Edge Polycore Panel Specifications***

### Panel Weight

Thickness	lb. / lin. ft.
3	4.3



### Allowable Uniform Transverse Loads (psf)

2.5 Safety Factor / Limit governed by deflection (L/120)

Projection	3" with H-Bars	6" with H-Bars
10'	58 PSF	103.47
11'	48 PSF	85.61
12'	40 PSF	71.5
13'	35.2 PSF	62.55
14'	31.2 PSF	55.14
15'	26 PSF	46.28
16'	21.2 PSF	38.21
17'	17.4 PSF	31.79
18'	14.24 PSF	26.35

### Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	$10 \times 10^6$ PSI		320-360 PSI	$7.24 \times 10^5$ PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

E = Modulus of Elasticity

G = Modulus of Rigidity

F = Allowable Stress

T = Tension

V = Shear

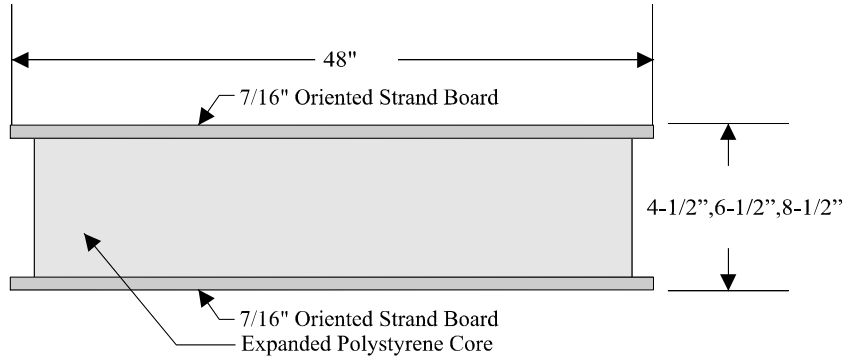
MR = Modulus of Rupture

R-Value: 13.5

# Polydeck Panel Specifications

## Panel Weight

Thickness	lb. / lin. ft.
2x4	16.8
2x6	17.8
2x8	18.8



## Deflection Data

	Beam Span	L / 180	L / 240	L / 360	6' Max Post Spacing
2x4 System	4	128 PSF	96 PSF	64 PSF	Using 2x6 Beams
	6	70 PSF	52 PSF	35 PSF	
	8	68 PSF	51 PSF	34 PSF	
	10	45 PSF	33 PSF	22 PSF	
	12	30 PSF	23 PSF	15 PSF	
2x6 System	4	206 PSF	154 PSF	103 PSF	Using 2x8 Beams
	6	119 PSF	89 PSF	60 PSF	
	8	82 PSF	82 PSF	56 PSF	
	10	63 PSF	57 PSF	38 PSF	
	12	51 PSF	40 PSF	27 PSF	
2x8 System	4	275 PSF	206 PSF	138 PSF	Using 2x10 Beams
	6	163 PSF	122 PSF	82 PSF	
	8	90 PSF	90 PSF	78 PSF	
	10	68 PSF	68 PSF	54 PSF	
	12	55 PSF	55 PSF	39 PSF	

## Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

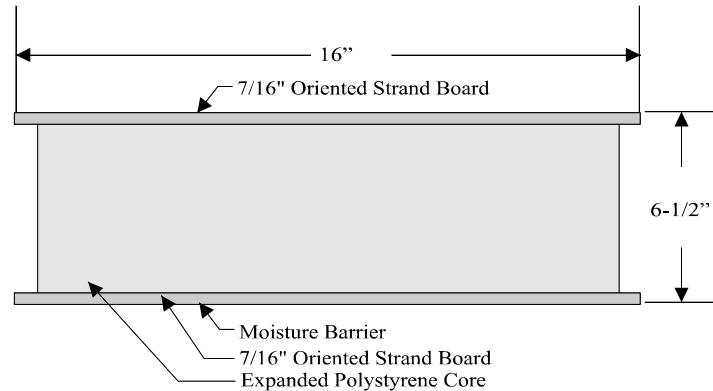
E = Modulus of Elasticity  
 G = Modulus of Rigidity  
 F = Allowable Stress  
 T = Tension  
 V = Shear  
 MR = Modulus of Rupture

	2x4	2x6	2x8
R-Value	15	23	31

## ***Polydeck 16 Panel Specifications***

### Weight

Thickness	lb. / lin. ft.
2x6	4.6
2x6 Beam	3



### Deflection Data

Projection	L / 360	6' Maximum Post Spacing
10	86 PSF	Using Reinforced Beams
11	83 PSF	Using Reinforced Beams
12	80 PSF	Using Reinforced Beams
13	74 PSF	Using Reinforced Beams
14	68 PSF	Using Reinforced Beams
15*	62 PSF	Using Reinforced Beams
16*	56 PSF	Using Reinforced Beams
17*	50 PSF	Using Reinforced Beams
18*	44 PSF	Using Reinforced Beams

\* Span not recommended without center support.

### Mechanical Properties of Materials Used

	Aluminum Skin	Aluminum Extrusion	Expanded Polystyrene	Oriented Strand Board
<b>Alloy</b>	.024 Alloy 3003 H14	6061 - T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

E = Modulus of Elasticity

G = Modulus of Rigidity

F = Allowable Stress

T = Tension

V = Shear

MR = Modulus of Rupture

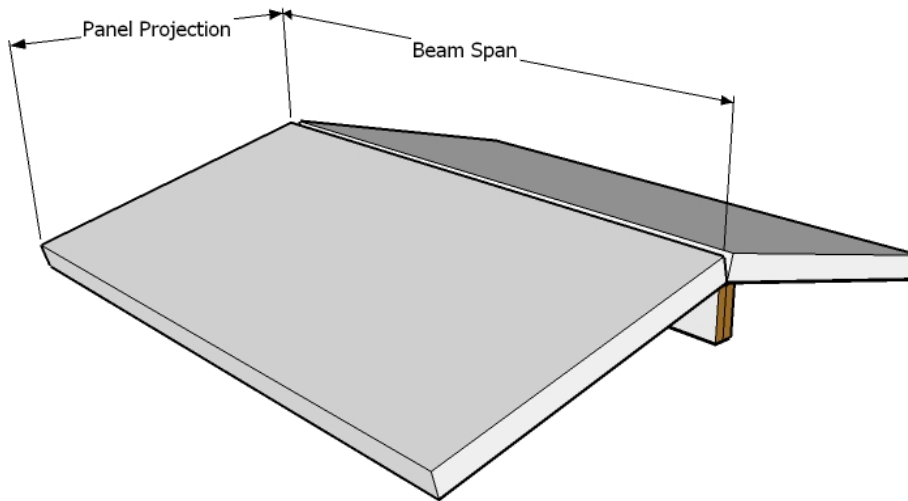
R Value = 23

## ***Maximum Beam Spans***

### **Cathedral Style Roof**

<b>Panel Projection per Side</b>	<b>12 feet</b>			<b>14 feet</b>			<b>17 feet</b>		
<b>Live Loads (PSF)</b>	<b>25</b>	<b>30</b>	<b>40</b>	<b>25</b>	<b>30</b>	<b>40</b>	<b>20</b>	<b>30</b>	<b>40</b>
10" Beam Span				22'	18'-6"	14'	20'	16'	12'
12" Beam Span			24'			24'			24'

***Minimum Pitch Requirement: 3/12***





## ***Maximum Beam Spans***

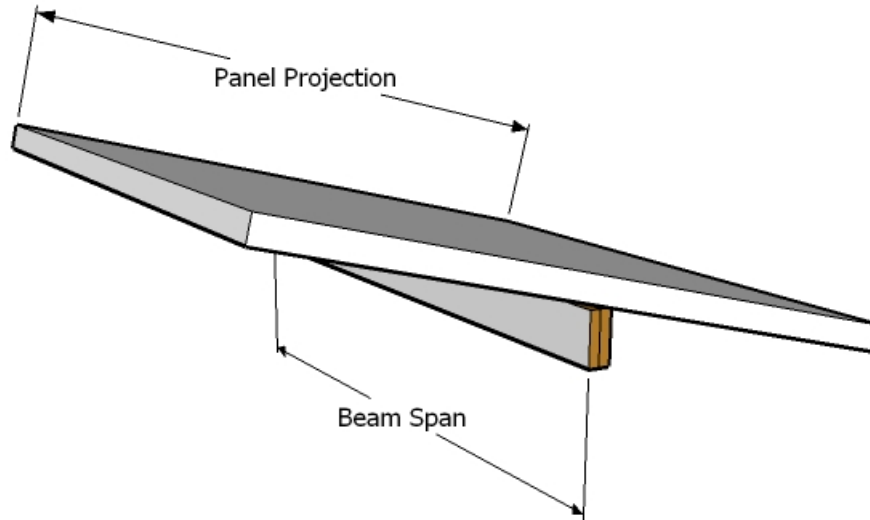
### **Studio Style Roof**

<b>Panel Projection</b>	<b>12 feet</b>			<b>16 feet</b>			<b>18 feet</b>		
<b>Live Loads (PSF)</b>	<b>25</b>	<b>30</b>	<b>40</b>	<b>25</b>	<b>30</b>	<b>40</b>	<b>25</b>	<b>30</b>	<b>40</b>
10" Beam Span								24'	21'-6"

<b>Panel Projection</b>	<b>20 feet</b>			<b>24 feet</b>		
<b>Live Loads (PSF)</b>	<b>25</b>	<b>30</b>	<b>40</b>	<b>25</b>	<b>30</b>	<b>40</b>
10" Beam Span	24'	22'-6"	20'	24'	20'	16'
12" Beam Span			24'			24'

***Minimum Pitch Requirement: 3/12***

***Beam must be placed at mid point in roof projection.***



# UL Rating on EPS



ONLINE CERTIFICATIONS DIRECTORY

## BRYX.R16529 Foamed Plastic

[Page Bottom](#)

### Foamed Plastic

[See General Information for Foamed Plastic](#)

**ATLAS EPS, DIV OF ATLAS ROOFING CORP**  
8240 BYRON CENTER RD  
BYRON CENTER, MI 49315 USA

R16529

Foamed plastic in the form of blocks and boards.

#### "Falcon Foam", "Atlas EPS" or "ThermalStar"

	6 In. Max +
Flame spread	20#
Smoke developed	400#

+Installed in a thickness or stored in an effective thickness, as indicated, for a density of 0.75 to 2.00 pcf.

#Flame spread and smoke developed recorded while material remained in original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread of 140 and smoke developed of over 500.

#### "Falcon Foam", "Atlas EPS" or "ThermalStar"

	1 In. Max +	2 In. Max +	4 In. Max +
Flame spread	5#	5##	10###
Smoke developed	55-90#	55-90##	55-90###

+Installed in a thickness or stored in an effective thickness, as indicated, for a density of 1.0 pcf.

#Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 10 and smoke developed classification of 200.

##Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 40 and smoke developed classification of 450.

###Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 80 and smoke developed classification of 450-over 500.

#### ThermalStar Recycleboard (0.70 lb/ft<sup>3</sup>), ThermalStar Underlayment Insulation (1.00, 1.25, 1.50, 2.00 lb/ft<sup>3</sup>)

	3/8 - 1 in. Thick+
Flame spread	20#
Smoke developed	10-300#

+Installed in a thickness, or stored in an effective thickness, as indicated, for a density of 0.70 to 2.00 lb/ft<sup>3</sup>.

#Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread index of 180 and smoke developed index of over 500.

[Last Updated](#) on 2010-03-05

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2012 UL LLC

When the UL Leaf Mark is on the product, or when the word "Environment" is included in the UL Mark, please search the [UL Environment database](#) for additional information regarding this product's certification.

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

## ***Wind Load Wall Evaluations Overhang Uplift***

### **Maximum Axial Compressive Load**

<b>Solid Accent 8' Height</b>	<b>Framed (Windows / Doors) 8' Height</b>
1205 lbs / ft	1010 lbs / ft

(Calculated at 135 m.p.h. winds)

### **Maximum Racking Load**

<b>Solid Accent 8' Height</b>	<b>Framed (Windows / Doors) 8' Height</b>
79 lbs / ft	71 lbs / ft

(Calculated at 135 m.p.h. winds)

### **Mechanical Properties of Materials Used**

	<b>Aluminum Skin</b>	<b>Aluminum Extrusion</b>	<b>Expanded Polystyrene</b>	<b>Oriented Strand Board</b>
<b>Alloy</b>	.024 Alloy 3003 H14	6061 – T6		
<b>D</b>	165 PSF		1.5 PCF	
<b>E</b>	10 x 10 <sup>6</sup> PSI		320-360 PSI	7.24 x 10 <sup>5</sup> PSI
<b>F<sub>T</sub></b>	20.3 KSI Ultimate 16.7 KSI Yield		40-50 PSI	
<b>F<sub>V</sub></b>	13.8 KSI		18-22 PSI	
<b>G</b>			460-500 PSI	
<b>T</b>		42 KSI		
<b>MR</b>				644 PSI

E = Modulus of Elasticity  
 G = Modulus of Rigidity  
 F = Allowable Stress  
 T = Tension  
 V = Shear  
 MR = Modulus of Rupture

## ***Aluminum Color Match***

Urban Industries purchases millions of pounds of aluminum coil from mills for manufacturing aluminum panels. The mill converts aluminum into coil stock to meet the specifications of Urban's purchase order regarding the alloy, tensile strength, thickness, width, color, embossing, and coil weight. As with any manufacturing process there is a certain amount of commercially accepted tolerance expressed by a mill in the production of their product.

### **Paint**

There is the potential for a small color variation from one production run to another, from one painting cycle to another, from beginning of a coil to the end of the coil. Normally this variation is too small to be visually perceived, however when two pieces of coil are found to be at the opposite extremes of the allowable tolerance, there is a potential for the differences to be seen.

### **Embossing Pattern**

Urban uses a stucco embossing pattern in our coil stock because it gives the panel a non-directional pattern, allowing it to be used vertically or horizontally while minimizing the visual perception of any surface irregularity. Embossing is pressed into the surface of the coil. The depth of the embossing can vary from one coil to another and this too affects the visual perception of color on a panel.

### **Varying Coil Stock**

Urban Industries uses care to assure that orders are made from the same coil to reduce color variation. However, when 4' wide panels are mixed with 2' wide panels, the potential for the appearance of color variation is greater because the panels are not made from the same coil stock. Also, whenever replacement panels are used there is always a chance that the color of the replacement panels may not be the same color as the original panels.

The appearance of color variations for the above mentioned reasons is considered normal commercial tolerances by the mills from which Urban Industries purchases its coil stock. Urban Industries is forced to pass along these tolerances since it is not in the power of Urban Industries to eliminate such variances.