

## DuroSpan Translucent FRP Roof & Wall Panels

### Structural Daylighting Panels for Commercial & Industrial Buildings

### Natural Light Transmission

- Better Work Conditions
- Lower Energy Cost

DuroSpan translucent panels from Enduro Composites offer natural lighting for buildings along with superior structural performance and appearance. End users love the improved workplace and reduced energy bills resulting from maintenance-free, FRP cladding panels.

### Superior Strength

- Leak Protection
- Less Fasteners
- Lower Cost Installation

DuroSpan glass fiber reinforced plastic panels are much stronger than polycarbonate or chopped strand materials. With high content of glass fiber reinforcements, 48% by weight, aligned for optimum performance, the panels have superior strength and stiffness. This results in leak protection, fewer fasteners, and low installation cost.

### UV Protection & Corrosion Resistance

- Better Appearance
- Lower Life Cycle Cost

DuroSpan materials do not corrode in coastal or tough industrial conditions. Its premium, UV stabilized polyester resin and exterior coating ensure extended retention of aesthetic and light transmitting properties. For exterior cladding, UV Coating Protection is standard with minimal added cost.

### Certifications & Product Options

- Profile, Color & Finish Options
- Lengths Cut to Order

Certifications for DuroSpan 12x1.25R-LC2 150 panels include UL Class 90 Wind Uplift and Florida Building Code Approval. The fiberglass roofing and siding panels are offered in a range of profiles and translucent colors that transmit soft, diffused natural lighting. Finish options include: 1) smooth on both sides; 2) embossed on exterior side with smooth finish on reverse side.



DuroSpan Material	Series					Glass Fiber Content
	450	300	210	150	050	
Weight, Oz/SF (nom.)	16	12	10	8	5	48% by Weight
Tensile Strength, ASTM D638, 43,500 psi	Building Code Class, CC2 (Note 2)					
Tensile Modulus, ASTM D638, 2.52 x 10 <sup>6</sup> psi	Burning Rate, ASTM D635, <2.5 in/min					
Flexural Strength, ASTM D790, 40,700 psi	Smoke Density, ASTM E84, 300					
Flexural Modulus, ASTM D790, 1.24 x 10 <sup>6</sup> psi	% Elongation, ASTM D638, 2.3%					
Translucent Colors: Clear, Opal, Smoke Gray, Mist Green, Daylight Blue, Frost, and others.						
Light Transmission, ASTM D1494: Translucent Clear: Up to 80% Translucent Opal: Up to 55% (Note 3)						

1) ASTM data is based on tests conducted on Series 150 (8 oz.) materials.

2) For CC1 Code Class or FM Approved materials, please contact Enduro Composites for Tuff Span™ FRP building panels.

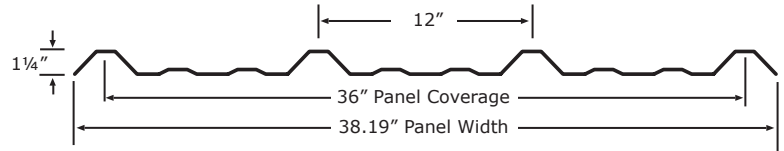
3) Light transmission % varies with color, profile, and thickness. Nominal % in this table is for Series 150 (8 oz.) material.

DuroSpan building panels are manufactured at our ISO 9001 certified, state of the art, facility in Houston, Texas. Please contact us for assistance.

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### Structural Daylighting Panels for Commercial & Industrial Buildings

### DuroSpan 12 x 1.25R



#### Metal Building Light Transmitting Panels

Load, PSF		20			30			40			50			180		
Span		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Roof	LC2-150	5.16	6.91	6.33	4.50	5.66	5.58	4.08	4.91	5.00	3.75	4.33	4.66	2.25	2.25	2.58
Wall	LC2-150	6.75	8.00	8.33	5.92	6.50	7.25	5.33	5.67	6.33	4.92	5.08	5.66	2.67	2.00	2.33

Spans for uniform loads are in lineal feet and based on 9 panel fasteners with 1.125" diam. washers at each support.

#### Roofing Positive Load

L/D = 45      Moment FOS = 2.5

Load, PSF		20			30			40			50			60		
Span		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
S E R I E S	LC2-450	6.75	9.08	8.41	5.91	7.83	7.33	5.41	6.75	6.66	5.00	6.00	6.16	4.66	5.50	5.83
	LC2-300	6.08	8.16	7.50	5.33	6.83	6.58	4.83	5.91	5.91	4.50	5.25	5.50	4.17	4.75	5.16
	LC2-210	5.58	7.41	6.91	4.91	6.00	6.08	4.41	5.25	5.50	4.17	4.66	5.08	3.92	4.25	4.75
	LC2-150	5.16	6.91	6.33	4.50	5.66	5.58	4.08	4.91	5.00	3.75	4.33	4.66	3.58	4.00	4.41

#### Roofing/Siding Wind Load

L/D = 20      Moment FOS = 1.88      Pullover FOS = 1.88

Load, PSF		20			30			40			50			60		
Span		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	LC2-450	8.92	11.00	11.00	7.75	9.00	9.58	7.08	7.75	8.66	6.58	6.92	7.75	6.17	6.33	7.08
	LC2-300	8.00	9.58	9.83	6.92	7.83	8.58	6.33	6.75	7.58	5.83	6.08	6.75	5.50	5.50	6.16
	LC2-210	7.33	8.50	9.08	6.42	7.00	7.83	5.83	6.00	6.75	5.42	5.42	6.00	4.92	4.92	5.50
	LC2-150	6.75	8.00	8.33	5.92	6.50	7.25	5.33	5.67	6.33	4.92	5.08	5.66	4.58	4.58	5.16
	LC2-050	4.50	6.00	5.50	4.17	5.58	5.16	3.92	5.25	4.83	3.67	5.00	4.08	3.50	4.75	4.41

#### Roofing/Siding Wind Load

L/D = 60      Moment FOS = 2.5      Pullover FOS = 1.88

Load, PSF		20			30			40			50			60		
Span		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
S E R I E S	LC2-450	6.17	8.25	7.66	5.42	7.25	6.66	4.92	6.58	6.08	4.50	6.00	5.58	4.25	5.50	5.25
	LC2-300	5.50	7.42	6.83	4.83	6.50	5.91	4.33	5.83	5.41	4.08	5.25	5.00	3.83	4.75	4.75
	LC2-210	5.08	6.83	6.33	4.42	6.00	5.50	4.00	5.25	5.00	3.75	4.67	4.66	3.50	4.25	4.33
	LC2-150	4.67	6.25	5.75	4.08	5.50	5.00	3.67	4.92	4.58	3.42	4.33	4.25	3.25	4.00	4.00

- Spans for uniform load are in lineal feet and based on 6 panel fasteners with .729" diameter washers at each support. Shaded spans for Series LC2-050 have fasteners with 1.125" diameter washers.
- Structural properties and maximum spans are based on large scale tests that consider: Bending Moment at failure; Flexural Stiffness; Pullover Force per fastener.
- Tables with deflection (L/D) criteria of L/45 and L/20 comply with ASTM D3841 Standard for Glass Fiber Reinforced Plastic Panels. Data with deflection criteria of L/60 is provided for specifications with IBC code requirements or more conservative limits.