LASCO

COMPOSITES LP

LASCOLITE® Translucent Panel Information

Lascolite® Panels Let Light In—Keep Weather, Corrosion Effect Away
Lascolite roofing and siding panels provide natural daylight…and much more. Made in over 500 shapes to nest with almost all metal sheeting, translucent Lascolite® Panels need no special tools or installation fittings.

CHOICE OF SURFACES

Lasco Panels can be supplied with various surface finishes. We offer a smooth finish for easy cleaning and a pebbled surface for glare reduction, weather resistance and a pleasing effect.

CHOICE OF PERFORMANCE

Lasco Panels are formed from specially designed raw materials in a continuous process that assures constant quality and predictable engineering properties. The polyester resins in Lasco panels are specially formulated to resist cracking, crazing and other effects of weather and environment. Properly installed and maintained, Lasco Panels will retain their clarity through years of service, backed by a 10 year commercial warranty.

Duralite Panels contain acrylic monomer and neo-pentyl glycol to enhance weatherability in applications involving extreme exposure to sunlight—assuring clarity. Duralite panels are available in all standard corrugations, widths and colors.

Lascoat Panels are made with a thick, flexible Gel Coating chemically bonded to the surface to protect the panels and increase their weather resistance and service life.

Lascolite-T Panels have the additional protection of Tedlar film chemically bonded to the surface increasing the resistance to ultraviolet radiation, surface erosion and environmental attack, providing ultimate protection. For detailed information about resistance in severe industrial environments request a chemical resistance guide for Lascolite Panels.

Stronglight Panels have over 800% greater tear resistance than ordinary translucent skylight panels. Stronglight Panels contain a woven cloth fiberglass reinforcement that protect tears from developing into a body-sized hole protecting the unwary worker from possible fall-through and injury. Available in both corrugated and flat panels. Complete test results appear in data sheet L02-SL.

ENGINEERING PROPERTIES

The high strength/weight ratio of Lasco Panels is reflected in the following table of test results, based on average values obtained in frequent testing. Although individual tests may produce higher values, the nature of small-scale testing leads Lasco to follow the dictates of prudent, responsible reporting.

Where thickness or formulation affects test data, test specimens are nominal eight oz./sq. ft. Specimens conditioned per ASTM D 618, procedure A. Values for specialized products appear in separate data sheets and brochures.

		NOMINAL VALUES	
PROPERTY	ASTM TEST METHOD	STANDARD (TRANSLUCENT)	FIREBLOCK (TRANSLUCENT)
Barcol Hardness	D 2583	50	35
Specific Gravity	D 792	1.4	1.5
*Impact Strength, IZOD	D 256	8 ft. lb/in.	9 ft lb/in.
Shear Strength	D 732	15,000 psi	9,000 psi
Bearing Strength	D 953A	20,000 psi	10,000 psi
Flexural Strength	D 790	30,000 psi	32,000 psi
Flexural Modulus	D 790	$1.2X10^{6}$ psi	$1.0X10^{6}$ psi
Tensile Strength	D 638	15,000 psi	18,000 psi
Compressive strength	D 695	30,000 psi	22,000 psi
Water Absorption	D 570	<.3%	<.5%
Linear Thermal Expansion Coefficient	D 696	$1.6X10^{-5}$ in/in/°F	
*Thermal Conductivity (K)	C 177	1.2 BTU/in/hr/ft²/°F	
Therman Transmittance (U)	C 236	.8 BTU.hr/ft²/F°	

*Values vary with thickness

COLOR AND LIGHT TRANSMISSION

Lasco Composites LP has the capability to custom match colors and translucency to satisfy your special needs.

Colors shown are the most widely used in translucent Lascolite applications	Clear, 5oz.	Skylight Green, 8oz.	Skylight Green, 6oz.	Frost, 8oz.	Green, 8 oz.	Orchid White, 4 oz.	Snowflake, 8 Oz.	Solar White,
Light Transmittance	90%	89%	90%	85%	74%	83%	64%	50%
Solar Energy Transmittance	81%	74%	76%	60%	64%	54%	24%	21%

Percentages of transmission shown are nominal values with a tolerance of + or –5%.
Methods of test: Light transmittance per ASTM-D—1494.
Solar energy transmittance per ASTM E—424.

STANDARDS

Lascolite, Duralite, Lascoat, Lascolite—T, Stronglight and Fireblock panels meet or exceed applicable requirements of the following standards:

- ASTM D 3841, Standard Specifications for Glass Fiber Reinforced Polyester Plastic Panels
- Research Report No. 1412, International Conference of Building Officials, Uniform Building Code.
- Fireblock Panels listed by Underwriter's Laboratories, Inc., File 3995.
- UL 90 (Recognized Component Manufacturer).
- Code requirements of most state, county and municipal building departments.

FIRE RESISTANT COMPARISONS

References to flamability of Lasco Panels reflect to labortary tests which compare burning characteristics of building products . These references do not imply that the panels will not burn. Flash temperatures as low as 650°F can ignite them. All fiberglass panels will burn under proper conditions and certainly in a full scale fire. Once ignited they may burn rapidly, releasing dense smoke. For appropriate precautions request "Fire Safety Guidelines for Use of FRP Panels," Society of the Plastics Industry.

		IGNITION D 1929			RATINGS PER E 84		CLASSIFICATION PER STANDARDS	
PRODUCT	**NOMINAL WT.**	**FLASH**	**SELF**	**FLAME D 635**	**FLAME SPREAD**	**SMOKE**	**UBC**	**D 3841**
TRANSLUCENT LASCOLITE								
General Purpose, Duralite	4—5 oz./ft²	>650°F	>900°F	<2.5 in./min.	-	<450	CC2	Type I
LasCoat, Lascolite-T	6—12 oz./ft²	>650°F	>900°F	<2.0 in/min.	-	<450	CC2	Type I
Fireblock CCI	8 oz./ft²	>650°F	>900°F	AEB< 1in.	-	<75 (D2843)	CCI	Type II
Fireblock 25	6—12 oz./ft²	>650°F	>900°F	ATB < 5 sec. AEB < 0.5 in.	25 (listed by U.L.)	<450	CCI	Type II

ATB-AVERAGE TIME OF BURNING ;AEB-AVERAGE EXTENT OF BURNING

Fireblock 25 is a fire rated formula that contains specially modified resins and other additives to reduce the spread and intensity of flames by a factor of nearly ten-to-one. See fire resistance comparison chart. Due to the nature of the formulation, the fire-rated panel will tend to weather and change color more rapidly than a non fire-rated panel.

STORAGE/MAINTENANCE

Store panels properly: While a single panel easily withstands exposure to sunlight and the elements, a stack of panels will trap heat and moisture, causing internal clouding in the panels. To avoid this irreversible effect, panels must be stored in a dry, shaded, well ventilated area. Preferably, store on end or on edge. Skids should be elevated at one end by wood spacers. Failure to comply with recommended storage procedures affect the warranty on the panels.

To preserve appearance of weather exposed panels, hose down periodically to remove accumulated, corrosive dust and dirt. At first signs of surface dullness, rinse panels clean, allow to dry and apply a surface refinisher. Neglected panels showing exposed fibers and embedded dirt may be substantially restored by cleaning with a stiff bristle brush or fine steel wool and water. After thorough drying, reseal panels with tow coats of clear refinisher. (Request technical bulletins on maintenance, P2-99 and P3-99).

SAFETY

Do Not Walk On Panels. Lascolite panels are not intended to support the undistributed weight of workers. Roofing ladders or 1" X 12" planks must be used during installation, repairs or any work on roofs.

Observe Fire Safety. Lascolite panels are similar in combustibility to wood of equal thickness and can be flash-ignited at approximately 650°F. Proper precautions must be used during storage, construction and after installation.

LASCO
COMPOSITES LP
Technology & Systems for the 21st Century.
Since 1950

1-800-626-1220

CORPORATE OFFICE AND PLANT
8015 DIXON DRIVE, FLORENCE, KY 41042
(606)371-7720 • FAX (606) 371-8466

— 10 YEAR—
Limited Commercial Warranty
On Lascolite Panels

SPAN AND LOADING RECOMMENDATIONS

Below are recommended allowable roof spans for uniformly distributed loads when panels are fastened as recommended. *For vertical applications, many buildings codes allow a 20% increase in the span. **Under no conditions should a panel be allowed to support a persons undistributed weight.**

The recommendations are based on panel installation over two or more continuous spans (three or more purlins). The data was derived in some cases by actual load tests, including a 2.5 safety factor. In other cases, spans were calculated using $M=WL^2/8$ for bending and $\Delta = WL^4/185\ EI$ deflection. Computations use $E = 1.3 \times 10^6$ psi. Flexural stresses in calculated spans do not exceed 7,500 psi.

To avoid possible premature elastic failure, all proposed spans should be verified by actual load test.

Design loads are governed by local building codes. Consult appropriate authorities for specific load and stress requirements.

- See "Recommended Installation Practice…,"SPI, available on request.

The information below is provided as preliminary data for designers. It should be checked and verified and its use determined by a duly licensed engineer or architect.

SHAPE	NOMINAL WEIGHT oz. Per. sq. ft.	MAXIMUM RECOMMENDED ROOF SPANS 15 p.s.f.	20 p.s.f.	30 p.s.f	40 p.s.f.
21/2" Corr. (#10)	4 oz.	48"	42"	36"	32"
	5 oz.	54"	48"	42"	36"
	6 oz.	60"	54"	48"	42"
	8 oz.	65"	60"	52"	48"
2.67" Corr. (#9)	5 oz.	58"	54"	48"	42"
	6 oz.	63"	60"	54"	48"
	8 oz.	70"	65"	58"	54"
4.2" Corr. (#8)	6 oz.	65"	62"	56"	50"
	8 oz.	72"	67"	60"	56"
11/4" Corr. (#5)	5 oz.	36"	31"	25"	22"
	6 oz.	40"	34"	28"	25"
2.67 Rib (#72)	5 oz.	54"	48"	42"	36"
	6 oz.	60"	54"	48"	42"
V Beam (#41) Reynolds 5.33	6 oz.	76"	72"	66"	60"
	8 oz.	84"	80"	72"	66"
SR (#162)	8 oz.	72"	67"	60"	56"

NOTE: Above spans apply to non-fire rated panels only. Fireblock Panels may require shorter spans. For data on other profiles and/ or conditions, contact Lasco's technical department.