POLYVANTIS

PRODUCT DATASHEET

LEXAN™ FRA 460 SHEET

DESCRIPTION

LEXAN™ FRA 460 sheet is a .460" monolithic, high impact resistant LEXAN polycarbonate sheet with a proprietary abrasion resistant surface. LEXAN FRA 460 sheet provides 70 times the impact resistance of laminated glass with no spalling. LEXAN FRA 460 sheet has been specifically developed for rail glazing applications. LEXAN FRA 460 sheet meets the UMTA glazing guidelines and the FRA (Federal Railway Administration) Type I & II ballistic and impact requirements.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
Physical			
Specific Gravity	ASTM D792	-	1.20
Light Transmission (Average), 1/8" Thick	ASTM D1003	%	85
Chemical Resistance	ANSI Z26.1	-	Passes#
Mechanical			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Flexural Strength	ASTM D790	psi	13,500
Flexural Endurance @ 1,800 Cycles/Min, 73°F,			
50% RH	ASTM D671	psi	1,000
Compressive Strength	ASTM D696	psi	12,500
Modulus of Elasticity	ASTM D638	psi	340,000
Drop Ball Impact Strength‡	POLYVANTIS Test	ft-lbs	
@ 73°F			>200
@ 32°F			>200
@ 0°F			>200
Thermal			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75×10^{-5}
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	260
Flammability			
Horizontal Burn (Flame Spread)	ASTM D635	in	
AEB			<1
Ignition Temperature	ASTM D1929	°F	
Flash			873
Self			1,076
UMTA Guidelines (Glazing)	-	-	Pass
Federal Railway Administration			
(FRA) Type I & II	-	-	Meets all

♦ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your Local POLYVANTIS representative.

‡ 5-lb steel ball dropped from a height of 40 feet

Gasoline and kerosene no tackiness, crazing or loss of transparency for a minimum of 48 hours.

UL File Number: E539157

POLYVANTIS

Polycarbonate products are sold globally under the trademark LEXAN™ Film & Sheet, owned by SABIC or its subsidiaries or affiliates.

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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

LEXAN is a trademark of SABIC