

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

F&S US LLC 1209 Orange Street Wilmington, DE 19801

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ). This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Lexan® Polycarbonate Sheet Products

APPROVAL DOCUMENT: Drawing No.**23-64421**, titled "Lexan® Polycarbonate Sheet Products", sheets 1 and 4 of 4, dated 03/29/2022, with last revision dated 08/19/2024, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None.

LIMITATION: This approval does not include an evaluation of structural performance of this

component. Test reports and other required documents shall be submitted to Dade County Product Control; showing that the systems using this polycarbonate sheets will resist the loads according to Chapter 16 of the F.B.C., in order to issue an specific product approval for the system.

LABELING: Plastic sheets under this product approval shall be permanently marked in a corner of the sheet with the company's name or logo, "MDCA" standing for "Miami-Dade County Approved" and the location of the manufacturing plant in Mt. Vernon, IN or Long Sault, Ontario, Canada. The fabricator producing the polycarbonate sheets shall apply this mark.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA # 24-0117.13** and consists of this page, evidence pages E-1, E-2, E-3, and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



MIAMI-DADE COUNTY

11/19/24

NOA No 24-1023.03 Expiration Date: April 1, 2026 Approval Date: November 27, 2024 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

1. Evidence submitted under previous NOAs

A. DRAWING "Submitted under NOA # 15-0915.08"

1. Drawing No. 13-2444, titled "Lexan® Sheet Products", sheets 1 and 2 of 2, dated 08/08/2013, with last revision dated 05/27/2015, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TEST REPORTS "Submitted under NOA # 07-0212.01"

	Laboratory Report	Test	<u>Date</u>	<u>Signature</u>
1.	SGS 548643-01	ASTM D 635	03/01/06	J. Lomash
2.	SGS 548643-02	ASTM D 2843	03/01/06	J. Lomash
3.	SGS 548643-03	ASTM D 1929	03/01/06	J. Lomash
4.	SGS 494881-04	ASTM D 635	01/06/06	J. Lomash
5.	SGS 494881-05	ASTM D 635	01/06/06	J. Lomash
6.	SGS 548643-06	ASTM D 635	03/10/06	J. Lomash
7.	SGS 548643-07	ASTM D 1929	03/10/06	J. Lomash
8.	SGS 494881-07	ASTM D 2843	01/10/06	J. Lomash
9.	SGS 548643-09	ASTM D 2843	03/10/06	J. Lomash
10.	SGS 548643-10	ASTM D 1929	03/10/06	J. Lomash
11.	SGS 548643-11	ASTM D 2843	03/10/06	J. Lomash
12.	SGS 548643-12	ASTM D 2843	03/10/06	J. Lomash
13.	SGS 548643-13	ASTM D 635	03/10/06	J. Lomash
14.	SGS 548643-14	ASTM D 2843	03/10/06	J. Lomash
15.	ETL 3073590	ASTM D638, G26 & G155	11/04/05	C. Lawson

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS "Submitted under NOA # 15-0915.08"

1. Statement letters of code conformance to 5th edition (2014) FBC and of no financial interest issued by Engineering Express, both dated 05/27/2015 and signed and sealed by Frank L. Bennardo, P.E.

"Submitted under NOA # 07-0212.01"

- 2. Drawing No. 13-SIP-01 statement of code conformance to 2010 FBC issued by Engineering Express, dated 10/18/2013, signed and sealed by Frank L. Bennardo, P.E.
- **3.** Statement letter of no financial interest issued by Engineering Express, dated 09/09/2013, signed and sealed by Frank L. Bennardo, P.E.

F&S US LLC

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

2. Evidence submitted under NOA # 18-0207.07

A. DRAWING

1. Drawing No. 21-36332, titled "Lexan® Sheet Products", sheets 1 and 2 of 2, dated 08/08/2013, with last revision dated 01/29/2021, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TEST REPORTS

- 1. None.
- C. CALCULATIONS
 - 1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 1. Statement letters of code conformance to the 7th Edition (2020) of the FBC issued by Engineering Express, dated 01/29/2021, signed and sealed by Frank L. Bennardo, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 01/29/2021, signed and sealed by Frank L. Bennardo, P.E.
- **3.** Project Proposal Quote No. **Qu-01157771-0** to perform verification testing per ASTM D635 and ASTM D2843 issued by Intertek, dated 03/10/2021, prepared by Mohamad-Nawaf Taleb.
- 4. Project Proposal Quote No. **Qu-01157765-0** to perform verification testing per ASTM D635 and ASTM D2843 issued by Intertek, dated 03/10/2021, prepared by Mohamad-Nawaf Taleb.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

3. Evidence submitted under NOA # 21-1109.01

A. DRAWING

1. Drawing No.21-36332, titled "Lexan® Sheet Products", sheets 1 and 4 of 4, dated 08/08/2013, with last revision dated 03/29/2022, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TEST REPORTS

LIDI				
	<u>Test Report</u>	<u>Standard</u>	<u>Date</u>	Seal and Signature
1.	104629547-001A R1	ASTM D635-18	05/20/2021	Vinu J. Abraham, P.E.
2.	104629547-0018 R1	ASTM D635-18	05/20/2021	Vinu J. Abraham, P.E.
3.	104629547-001C R1	ASTM D635-18	05/20/2021	Vinu J. Abraham, P.E.
4.	104629547-001D R1	ASTM D635-18	05/20/2021	Vinu J. Abraham, P.E.
5.	104629547-001E R1	ASTM D635-18	05/20/2021	Vinu J. Abraham, P.E.
6.	104629426COQ-001 R0	ASTM D635-18	05/31/2021	Vinu J. Abraham, P.E.
7.	104973052COQ-001 R0	ASTM D635-18	02/28/2022	Vinu J. Abraham, P.E.
8.	104210251COQ-001A R0	ASTM D1929-16	02/26/2020	Vinu J. Abraham, P.E.
9.	104210251 COQ-001B R0	ASTM D1929-16	02/26/2020	Vinu J. Abraham, P.E.
10.	104210251 COQ-001C R0	ASTM D1929-16	02/26/2020	Vinu J. Abraham, P.E.
11.	104210251COQ-001D R0	ASTM D1929-16	04/07/2020	Vinu J. Abraham, P.E.
12.	104210251COQ-001E R0	ASTM D1929-16	04/09/2020	Vinu J. Abraham, P.E.
13.	104631983MID-001	ASTM D2843-19	05/06/2021	Vinu J. Abraham, P.E.
14.	104632129MID-001A	ASTM D2843-19	05/06/2021	Vinu J. Abraham, P.E.
15.	104632129MID-001B	ASTM D2843-19	05/06/2021	Vinu J. Abraham, P.E.
16.	104632129MID-001C	ASTM D2843-19	05/06/2021	Vinu J. Abraham, P.E.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 1. Statement letters of code conformance to the 7th Edition (2020) of the FBC, issued by Engineering Express, dated 11/11/2021, signed and sealed by Frank L. Bennardo, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 11/11/2021, signed and sealed by Frank L. Bennardo, P.E.
- **3.** Distributor agreement dated 01/13/2022.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

4. Evidence submitted under NOA # 24-0117.13 and new

A. DRAWING

Drawing No.**23-64421**, titled "Lexan® Polycarbonate Sheet Products", sheets 1 and 4 of 4, dated 03/29/2022, with last revision dated 08/19/2024, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TEST

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 1. Letter from F&S US LLC, stating that they have legally purchased all assets and requesting that a new NOA be issued under their name, dated 08/20/2024, signed by Tim Riley.
- 2. Letter from Sabic Innovative Plastics, US LLC, requesting that the existing NOA under their name be rescinded, stating that they no longer manufacturer the products approved under the referenced NOA, giving up all rights over the existing NOA, and stating the all necessary machinery, equipment, and know-how use in the fabrication of the products used for the tests, which were the basis for obtaining the NOA, are being sold to F&S US LLC.
- **3.** Asset transfer agreement between F&S US LLC and SABIC Innovative Plastics, US LLC, dated 05/01/2024, signed by Sandeep Dhawan and Christopher Witte respectively.

"Submitted under NOA # 24-0117.13"

4. Statement letters of code conformance to the 8th Edition (2023) of the FBC, issued by Engineering Express, dated 12/20/2023, signed and sealed by Frank L. Bennardo, P.E.

LEXAN® POLYCARBONATE SHEET PRODUCTS

MATERIAL PROPERTIES

TABLE 1:

1A: LEXAN® 9030, 9034 BURNING CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	LEXAN® 9030, 9034						
	STANDARD	0.030 in (MIN.)	0.060 in (MIN.)	0.080 in (MIN.)	0.500 in (MIN.)			
SELF-IGNITION	ASTM D-1929	1020° F	1016° F	1007° F	1113° F			
FLASH-IGNITION	ASTM D-1929	880° F	885° F	865° F	919° F			
AVG. BURNING TIME	ASTM D-635***		//////					
AVG. EXTENT OF BURNING	ASTM D-635***		///////////////////////////////////////					
BURNING RATE	ASTM D-635***	0 mm/min	0 mm/min	0 mm/min				
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC1	CC1			

TABLE 1:

1B: LEXAN® MR10 BURNING CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	MR10						
	STANDARD	0.060 in (MIN.)	0.080 in (MIN.)	0.125 in (MIN.)	0.500 in (MIN.)			
SELF-IGNITION	ASTM D-1929	1014° F*	1014° F*	980° F	1004° F			
FLASH-IGNITION	ASTM D-1929	784° F*	784° F*	780° F	808° F			
AVG. BURNING TIME	ASTM D-635***		//////	25 sec	50 sec			
AVG. EXTENT OF BURNING	ASTM D-635***			10.0 mm	20.0 mm			
BURNING RATE	ASTM D-635***		0 mm/min					
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC1	CC1			

TABLE 1 NOTES:

1. INDICATES VALUES THAT ARE NOT REPORTED AS PART OF THIS CERTIFICATION.

2. *ASTM D-1929 TEST IS BASED ON FORM OF MATERIAL AND MASS. THEREFORE, ONLY ONE TEST IS REQUIRED FOR A GROUP OF SIMILAR MATERIALS.

3. ***ASTM D-635: UNLESS REPORTED OTHERWISE BY ADDITIONAL TESTING, ALL GAUGES BETWEEN MINIMUM & MAXIMUM THICKNESSES WILL BE APPROVED FOR THE SAME BURNING RATE CLASS OF THE THINNER PRODUCT.

GENERAL NOTES

- 1. THIS LEXAN® POLYCARBONATE MATERIA CODE EIGHTH EDITION (2023) AND IS IN THE HIGH VELOCITY HURRICANE ZONE.
- 2. THIS DOCUMENT IS INTENDED FOR MATE SPECIFIC USE OF THE MATERIALS, SPECIF COMPONENT SHALL REQUIRE A SPECIFIC USE.
- THIS DOCUMENT IS INTENDED FOR USE B 3. DESIGN PROFESSIONAL OF WHOM SHALL 4. ACCELERATED WEATHERING TESTING CO
- AND LEXAN® THERMOCLEAR WITH STAND
- 5. LEXAN® 9034 REPRESENTS THE UNCOATE FOR USE IN EXTERIOR APPLICATIONS WIT
- 5.1. LEXAN® 9034 SHEETS SHALL QUALIF 5.1.1. LEXAN® 9030, BOTH SURFACES /
- 5.1.2. LEXAN® 90318, PEBBLE FLINT-SH
- LEXAN® 90316, PRISMATIC SURF 5.1.3.
- LEXAN® 90317, PRISMATIC SURF 5.1.4. LEXAN® 90311, HAIRCELL/COB G
- 5.1.5. 5.1.6. LEXAN® 90314 HIGH GLOSS MAT
- 5.1.7. LEXAN® 90355 VELVET/F-SHOT L
- 6. MR10 SHEETS UTILIZE LEXAN® 9034 AS A EXTERIOR USE.
- 7. XL102UV SHEETS UTILIZE LEXAN® 9034 / EXTERIOR USE. 7.1. LEXAN® XL102UV SHEET SHALL QUAL 7.1.1. LEXAN® SGC100, SMOOTH SURFA 7.1.2. LEXAN® SGC308, MATTE SURFAC
- 7.1.1. 7.1.2.
- LEXAN® SGC404, MISCELLANEOU 7.1.3.
 - LEXAN® SGC410
- 7.1.4. 7.1.5. 7.1.6. LEXAN® SGC510 LEXAN® SGC510D
- LEXAN® EXTRITE-1 SHEETS UTILIZE LEXA 8. APPROVED FOR EXTERIOR USE.
- LEXAN® THERMOCLEAR SHEETS ARE MUL 9. LEXAN® RESIN MANUFACTURED BY SABIO
- 10. FOR EXTERNAL APPLICATIONS, MINIMUM AND 6mm FOR MULTI-WALLED APPLICATI
- 11. ENGINEER SEAL AFFIXED HERE TO VALIDA THIS SPECIFICATION BY MANUFACTURERS THIS ENGINEER FOR ALL COST & DAMAGE **RESULTING FROM MATERIAL FABRICATION** PRACTICES BEYOND THAT WHICH IS CALL & FROM DEVIATIONS OF THIS PLAN.
- 12. EXCEPT AS EXPRESSLY PROVIDED HEREIN AFFIRMATIONS ARE INTENDED.
- 13. ALTERATIONS OR OTHER MARKINGS TO T INVALIDATE THIS CERTIFICATION.

FRANK BENNARDO, P.E. PE# 0046549 CA# 9885	AUGUST 19, 2024
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Y A LICENSED ENGINEER, ARCHITECT OR	POSTA PIRTH F CCA RA VEERI
DETERMINE THE APPROPRIATE APPLICATION. NDUCTED PER ASTM G-26 ON LEXAN® 9034 OARD LIGHT TRANSMISSION INDEXES. D POLYCARBONATE SHEET AND IS APPROVED HOUT THE UV PROTECTIVE COATING. Y THE FOLLOWING:	POSTAL ADDRESS POSTAL ADDRESS 2234 NORTH FEDERAL HWY #76 BOCA RATON, FL 33431 ENGINEERINGEXPRESS.COM
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IFY THE FOLLOWING SIGN GRADES:	LC 198(33 83 HEET HEET HEET
E TEXTURE S COLORS	F&S US LLC 1209 ORANGE STREET WILMINGTON, DE 19801 (518) 313-9883 POLYCARBONATE SHEET PRODUCTS LDING CODE EIGHTH EDITION (2023) COUNTY NOTICE OF ACCEPTANCE (NOA)
N® 9034 AS A BASE PRODUCT AND ARE	&S 9 OR/ 11NGT 518) 518) 518) CARBC CARBC CARBC
TI-WALL POLYCARBONATE PLASTIC SHEETS OF INNOVATIVE PLASTICS. HICKNESS SHALL BE 0.033 IN FOR SHEETS	
DNS. TES MATERIAL COMPLIANCE ONLY. USE OF , et. al. INDEMNIFIES & SAVES HARMLESS S INCLUDING LEGAL FEES & APPELLATE FEES , SYSTEM ERECTION, & CONSTRUCTION ED FOR BY LOCAL, STATE, & FEDERAL CODES	F&S US LLC 1209 ORANGE STREET WILMINGTON, DE 19801 (518) 313-9883 LEXAN® POLYCARBONATE SHEET PRODUCTS FLORIDA BUILDING CODE EIGHTH EDITION (2023) MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NO
, NO ADDITIONAL CERTIFICATIONS OR	
HIS DOCUMENT ARE NOT PERMITTED AND	DATE 03/29/22 12/20/23 08/19/24 -
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PRODUCT REVISED as complying with the Florida	REMARKS PREV. SUBMITTAL (21-3633 2023 FBC UPDATE 2023 FBC UPDATE UPDATE COMPANY NAME
Building Čode NOA–No. 24–1023.03	COPYRIGHT ENGINEERING EXPRESS®
Expiration Date 04/01/2026	23-64421
By Miami-Dade Product Control	SCALE: NTS UNLESS NOTED
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TABLE 2:

LEXAN® 9034, XL102UV, MR10 SMOKE DENSITY

DESCRIPTION	TESTING		LEXAN® 9034		XL10)2UV		MR10	
	STANDARD	0.118 in	0.125 in	0.225 in	0.093 in	0.500 in	0.118 in	0.125 in	0
SMOKE DENSITY	ASTM D-2843	63.4%	64.5%	69.1%	73.2%	68.7%	62.1%	67.0%	
	ASTM E-84							//////	\times

TABLE 2 NOTES:

1. INDICATES VALUES THAT ARE NOT REPORTED AS PART OF THIS CERTIFICATION.

TABLE 3:

LEXAN® XL102UV BURNING CHARACTERISTICS

	TESTING	XL102UV						
DESCRIPTION	STANDARD	0.080 in (MIN.)	0.093 in (MIN.)	0.118 in (MIN.)	0.177 in (MIN.)	0.236 in (MIN.)		
SELF-IGNITION	ASTM D-1929	1182° F* (3 g)	1042° F* (3 g)					
FLASH-IGNITION	ASTM D-1929	962° F* (3 g)	844° F* (3 g)					
AVG. BURNING TIME	ASTM D-635***							
AVG. EXTENT OF BURNING	ASTM D-635***							
BURNING RATE	ASTM D-635***		0 mm/min					
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC1	CC1	CC1		
SMOKE DENSITY	ASTM D-2843	0.25 in	0.25 in	0.118	0.25 in	0.25 in		
SMOKE DENSIT	ASTM D-2043	60.5%**	60.5%**	63.9%	60.5%**	60.5%**		

TABLE 3 NOTES:

1. INDICATES VALUES THAT ARE NOT REPORTED AS PART OF THIS CERTIFICATION.

- 2. *ASTM D-1929 TEST IS BASED ON FORM OF MATERIAL AND MASS. THEREFORE, ONLY ONE TEST IS REQUIRED FOR GROUP OF SIMILAR MATERIALS.
- **ASTM D-2843 TEST IS APPROXIMATELY 1" x 1" x 1/4" THICKNESS. THEREFORE, UNLESS REPORTED OTHERWISE BY ADDITIONAL TESTING, ONE TEST QUALIFIES ALL THICKNESSES OF A GROUP OF SIMILAR PRODUCTS.
- 4. ***ASTM D-635 ALL GAUGES BETWEEN MINIMUM & MAXIMUM THICKNESSES WILL BE APPROVED FOR THE SAME BURNING RATE CLASS OF THE THINNER PRODUCT.



LEXAN® 9034 / COGC08 CORRUGATED, LEXAN® MULTI-WALL TENSILE PROPERTIES

DESCRIPTION	TESTING	LEXAN® COGC08 CC	LEXAN® MULTI-WALL		
	STANDARD	0.03	33 in		
	MD		CD	6 mm	
TENSILE STRENGTH BEFORE WEATHERING	ASTM D-638	8940 psi	8730 psi	9326 psi	
TENSILE STRENGTH AFTER WEATHERING	ASTM D-638	8880 psi	8920 psi	8618 psi	
PERCENT DIFFERENCE	ASTM D-635	-0.7%	2.1%	-7.6%	

TABLE 4 NOTES:

- 1. *LEXAN® MULTI-WALL SHEET PRODUCTS ENCOMPASS MANY CONFIGURATIONS (FROM TWIN WALL TO 9X WALL) AND THICKNESSES (FROM 6 mm TO 50 mm). GRADE NAMES AND DESCRIPTIONS INCLUDED IN THIS CERTIFICATION FOR MULTI-WALL SHEET PRODUCTS INCLUDE:
- 1.1. LEXAN® THERMOCLEAR™ AND VEROLITE™ (THICKNESS RANGE: 6 mm 50 mm)
- 1.2. LEXAN® LEXAPANEL™: A 20 mm THICK THERMOCLEAR™ GRADE WITH WITH A STANDING SEAM EDGE PROFILE.
- LEXAN® THERMOCLICK™: A 40 mm & 50 mm THICK THERMOCLEAR™ GRADE WITH A CLICK EDGE PROFILE. 1.3.
- 2. FURTHER GRADE NAMES AND MODEL NUMBERS ARE ALSO APPLICABLE SO LONG AS THEY COMPLY WITH THE DESCRIPTIONS AND SPECIFICATIONS PROVIDED HEREIN.

TABLE 5:

LEXAN® EXTRITE-1 BURNING & SMOKE DENSITY CHARACTERISTICS

DESCRIPTION	TESTING STANDARD	LEXAN® EXTRITE-1					
	STANDARD	3 mm	4 mm	5 mm	6 mm		
SELF-IGNITION	ASTM D-1929	1027° F	1024° F	1002° F	1006° F		
FLASH-IGNITION	ASTM D-1929	855° F	817° F	826° F	829° F		
AVG. BURNING TIME	ASTM D-635***		///////				
AVG. EXTENT OF BURNING	ASTM D-635***						
BURNING RATE	ASTM D-635***	0 mm/min					
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC1	CC1		
SMOKE DENSITY	ASTM D-2843	62.8%**	62.8%**	62.8%**	62.8%**		
SMOKE DENSIT	ASTM E-84			//////			

- **TABLE 5 NOTES:**
- 1.
- **ASTM D-2843 TEST IS APPROXIMATELY 25 mm x 25 mm x 3 mm THICKNESS. THEREFORE, ONE TEST QUALIFIES ALL THICKNESSES OF A GROUP OF SIMILAR PRODUCTS. 2.
- ***ASTM D-635 ALL GAUGES BETWEEN MINIMUM & MAXIMUM THICKNESSES WILL BE APPROVED 3. FOR THE SAME BURNING RATE CLASS OF THE THINNER PRODUCT.



TABLE 6 NOTES:

- 1. INDICATES VALUES THAT ARE NOT REPORTED AS PART OF THIS CERTIFICATION.
- 2. *ASTM D-1929 TEST IS BASED ON FORM OF MATERIAL AND MASS. THEREFORE, ONLY ONE TEST IS REQUIRED FOR A GROUP OF SIMILAR MATERIALS.
- 3. **ASTM D-2843: ONE TEST QUALIFIES ALL THICKNESSES OF A GROUP OF SIMILAR PRODUCTS.
- 4. ***ASTM D-635 ALL GAUGES BETWEEN MINIMUM & MAXIMUM THICKNESSES WILL BE APPROVED FOR THE SAME BURNING RATE CLASS OF THE THINNER PRODUCT.
- 5. *LEXAN® MULTI-WALL SHEET PRODUCTS ENCOMPASS MANY CONFIGURATIONS (FROM TWIN WALL TO 9X WALL) AND THICKNESSES (FROM 6 mm TO 32 mm). GRADE NAMES AND DESCRIPTIONS INCLUDED IN THIS CERTIFICATION FOR MULTI-WALL SHEET PRODUCTS INCLUDE:
- 5.1. LEXAN® THERMOCLEAR[™] AND VEROLITE[™] (THICKNESS RANGE: 6 mm 32 mm)
- 5.2. LEXAN® LEXAPANEL™: A 20 mm THICK THERMOCLEAR™ GRADE WITH A STANDING SEAM EDGE PROFILE.
- 6. FURTHER GRADE NAMES AND MODEL NUMBERS ARE ALSO APPLICABLE SO LONG AS THEY COMPLY WITH THE DESCRIPTIONS AND SPECIFICATIONS PROVIDED HEREIN.

TABLE 6: 6A: LEXAN® MULTI-WALL SHEET BURNING & SMOKE DENSITY CHARACTERISTICS

DESCRIPTION	TESTING	LEXAN® MULTI-WALL SHEET PRODUCTS*							
	STANDARD	4.5 mm		6 mm		8 mm		1	
SELF-IGNITION	ASTM D-1929*	1110	0° F	1110° F		1110° F		11	
FLASH-IGNITION	ASTM D-1929*	940)° F	940)° F	94(940° F		
ACROSS OR ALONG RIB?		ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	
AVG. BURNING TIME	ASTM D-635***	10 sec	60 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	< 5 sec	
AVG. EXTENT OF BURNING	ASTM D-635***	5 mm	35 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	< 5 mm	
BURNING RATE	ASTM D-635***		//////					/////	
BURNING RATE CLASS	ASTM D-635***	CC1	CC2	CC1	CC1	CC1	CC1	CC1	
	ASTM D-2843**	73.	6%	73.	6%	73.	6%	7	
SMOKE DENSITY	ASTM E-84	3	5	7	0	7	0		
FLAME SPREAD	ASTM E-84	5	5	Į.	5		5		
				A					

TABLE 6: 6B: LEXAN® MULTI-WALL SHEET BURNING & SMOKE DENSITY CHARACTERISTICS, CONTINUED

DESCRIPTION	TESTING	LEXAN® MULTI-WALL SHEET PRODUCTS*							
	STANDARD	16 mm		20	20 mm		25 mm		
SELF-IGNITION	ASTM D-1929*	111	0° F	111	1110° F		1110° F		
FLASH-IGNITION	ASTM D-1929*	940)° F	940	D° F	94(D° F	940° F	
ACROSS OR ALONG RIB?		ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB	ACROSS RIB	ALONG RIB		
AVG. BURNING TIME	ASTM D-635***	< 5 sec	< 15 sec	85 sec	95 sec	110 sec	125 sec	60 sec	
AVG. EXTENT OF BURNING	ASTM D-635***	< 5 mm	< 5 mm	///////		45 mm	55 mm	10 mm	
BURNING RATE	ASTM D-635***		//////	53.80 mm/min	47.90 mm/min	39.40 mm/min			
BURNING RATE CLASS	ASTM D-635***	CC1	CC1	CC2	CC2	CC2	CC2		
SMOKE DENSITY	ASTM D-2843**	73.	6%	73.	6%	73.	.6%	73.6%	
SMOKE DENSIT	ASTM E-84	<4	<450				275		
FLAME SPREAD	ASTM E-84	5	5			120		90	

