



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

MIAMI-DADE COUNTY
 PRODUCT CONTROL SECTION
 11805 SW 26 Street, Room 208
 Miami, Florida 33175-2474
 T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

Bayer MaterialScience LLC (MA)
 119 Salisbury Road
 Sheffield, MA 01257

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: Makrolon Polycarbonate Sheets

APPROVAL DOCUMENT: Drawing No. **G08-01**, titled "Polycarbonate Sheets ", sheet 1 of 1, dated 09/12/2008, with revision B dated 05/11/2012, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, 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

LABELING: Each sheet shall bear a permanent label with the manufacturer's name or logo, city, state, model/series and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

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 and renews** NOA # **10-0329.03** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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



Handwritten signature and date: 11/21/2012

NOA No. 12-0605.05
 Expiration Date: August 27, 2017
 Approval Date: December 6, 2012
 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **G08-01**, titled "Polycarbonate Sheets", sheet 1 of 1, dated 09/12/2008, with revision B dated 05/11/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

	<u>Report No.</u>	<u>Test</u>	<u>Date</u>	<u>Seal & Signature</u>
1.	B2577.01-106.31	ASTM D1929/2843/635/638 ASTM D2565	04/27/12	G. T. Hartman, P.E.
	<i>"Submitted under NOA # 08-0926.15"</i>			
2.	72305.01-106-18	ASTM D1929/2843/635/638 ASTM G155	08/06/08	Joseph A. Reed, P.E.
3.	72305.02-106-18	ASTM D1929/2843/635	08/19/08	Joseph A. Reed, P.E.
4.	72305.03-106-18	ASTM D1929/2843/635	08/21/08	Joseph A. Reed, P.E.
5.	72305.04-106-18	ASTM D1929/2843/635	08/21/08	Joseph A. Reed, P.E.
6.	72305.05-106-18	ASTM D1929/2843/635	08/22/08	Joseph A. Reed, P.E.
8.	72305.06-106-18	ASTM D1929/2843/635	08/26/08	Joseph A. Reed, P.E.
9.	72305.07-106-18	ASTM D1929/2843/635	08/26/08	Joseph A. Reed, P.E.
10.	72305.08-106-18	ASTM D1929/2843/635	08/26/08	Joseph A. Reed, P.E.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

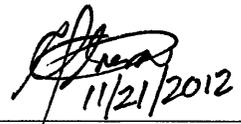
1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to 2010 FBC and no financial interest issued by Al-Farooq Corporation, dated 05/18/2012, signed and sealed by Javad Ahmad, P.E.
2. Certificate of merger of Sheffield Plastics Inc, and Bayer MaterialScience LLC, dated 03/31/2009.



11/21/2012

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 12-0605.05

Expiration Date: August 27, 2017
Approval Date: December 6, 2012

PRODUCT PROPERTIES

TEST DESCRIPTION	TEST METHOD	TEST RESULTS MAKROLON® POLYCARBONATE SHEET				
		GP 1/32" THICKNESS	GP 1/16" TO 1/2" THICKNESS	SL UV 1/8" TO 1/2" THICKNESS	AR 1/8" TO 1/2" THICKNESS	15 EX 1/8" TO 1/2" THICKNESS
SELF IGNITION TEMP.	ASTM D1929	1022°F	1040°F	1022°F	1040°F	1058°F
FLASH IGNITION TEMP.	ASTM D1929	824°F	824°F	824°F	806°F	842°F
SMOKE DENSITY RATING (MAX.)	ASTM 2843	43.7%	69.4%	57.7%	50.9%	51.5%
AVERAGE RATE OF BURNING	ASTM D635	--	--	--	--	--
BURNING RATE CLASS	ASTM D635	CC2	CC1	CC1	CC1	CC1
TENSILE STRENGTH (MEAN)	ASTM D638		8986 PSI	9071 PSI		
			* BEFORE AFTER			

GP- GENERAL PURPOSE
 SL- ENHANCED UV PROTECTION
 AR- ABRASION AND UV RESISTANT
 15- LONG TERM WEATHERABLE
 POLYCARBONATE SHEETS CAN BE CLEAR OR COLORED WITH POLISHED, MATTE OR TEXTURED SURFACES.

* WEATHERING PER SECTION 2612 OF FLORIDA BLDG. CODE 2010.

PRODUCT PROPERTIES

TEST DESCRIPTION	TEST METHOD	TEST RESULTS MAKROLON HYGARD® SHEET						
		CG 375 .390" OVERALL THICKNESS	CG 500 EX 500 .530" OVERALL THICKNESS	CG 750 .780" OVERALL THICKNESS	BR 1000 EX 1000 1.05" OVERALL THICKNESS	BR 1250 EX 1250 1.30" OVERALL THICKNESS	BR 750 .775" OVERALL THICKNESS	MS 1250 EX 1300 1.30" OVERALL THICKNESS
SELF IGNITION TEMP.	ASTM D1929	914°F		896°F		896°F	878°F	896°F
FLASH IGNITION TEMP.	ASTM D1929	734°F		806°F		824°F	680°F	698°F
SMOKE DENSITY RATING (MAX.)	ASTM 2843	69.6%		50.6%		45%	50.6%	45.3%
AVERAGE RATE OF BURNING	ASTM D635	--		--		--	.405 IN./MIN.	.370 IN./MIN.
BURNING RATE CLASS	ASTM D635	CC1		CC1		CC1	CC2	CC2

PRODUCT DESCRIPTION:

POLYCARBONATE SHEETS ARE EXTRUDED FROM POLYCARBONATE RESINS WITH PRIMARY USE AS GLAZING FOR WINDOWS, SKYLIGHTS AND LIGHT TRANSMITTING SYSTEMS. STANDARD SIZES ARE UPTO 120" LONG AND 96" WIDE. CUSTOM SIZES ARE ALSO AVAILABLE.

MAKROLON POLYCARBONATE MATERIAL COMPLIES WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

MAKROLON GP REPRESENTS THE UNCOATED POLYCARBONATE SHEET AND IS APPROVED FOR USE IN EXTERIOR APPLICATIONS WITHOUT THE UV PROTECTIVE COATING. MAKROLON GP ALSO INCLUDES: OP, GP MATTE, GP PEBBLE, GP PRISMATIC AND GP SATIN.

MAKROLON HYGARD® CG 375

3/16" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 3/16" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® CG 500

MAKROLON HYGARD® EX 500

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/4" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® CG 750

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® BR 1000

MAKROLON HYGARD® EX 1000

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 3/8" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 3/8" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® BR 1250

MAKROLON HYGARD® EX 1250

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" MAKROLON POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® BR 750

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" ACRYLIC SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

MAKROLON HYGARD® MS 1250

MAKROLON HYGARD® EX 1300

1/8" MAKROLON AR-1 POLYCARBONATE SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" MAKROLON OP SHEET
 .025" POLYURETHANE INTERLAYER
 1/2" ACRYLIC SHEET
 .025" POLYURETHANE INTERLAYER
 1/8" MAKROLON AR-1 POLYCARBONATE SHEET

NOTE:

THIS IS A COMPONENT APPROVAL AND DOES NOT INCLUDE AN EVALUATION OF STRUCTURAL PERFORMANCE OF THIS COMPONENT. SYSTEMS INCORPORATING THESE COMPONENTS SHALL APPLY FOR A NOA TO THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION AND SHALL SUBMIT TEST REPORTS AND OTHER REQUIRED DOCUMENTS SHOWING THAT THE SYSTEM USING THESE COMPONENTS WILL RESIST THE LOADS ACCORDING TO CHAPTER 16 OF THE FBC 2010.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 12-0605.05
 Expiration Date 08/27/2017
 By *[Signature]*
 Miami Dade Product Control

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538

 MAY 18 2012

afC
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 GLAZING\G08-01

POLYCARBONATE SHEETS
BAYER MATERIALSCIENCE, LLC.
 119 SALISBURY ROAD
 SHEFFIELD, MA. 01257
 TEL. (413) 528-7847 FAX. (413) 229-4047

no	date	description
A	04.22.10	PRODUCT DESIGNATIONS ADDED
B	05.11.12	UPDATED TO 2010 FBC

revisions:
 date: 09-12-08
 scale: -
 dr. by: HAMID
 chk. by:
 drawing no.
G08-01
 sheet 1 of 1