



**BUILDING CODE COMPLIANCE OFFICE**  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908

**CONTRACTOR LICENSING SECTION**  
(305) 375-2527 FAX (305) 375-2558

**CONTRACTOR ENFORCEMENT DIVISION**  
(305) 375-2966 FAX (305) 375-2908

**PRODUCT CONTROL DIVISION**  
(305) 375-2902 FAX (305) 372-6339

**PRODUCT CONTROL NOTICE OF ACCEPTANCE**

**Cardinal LG**  
**250 Griffin Street East**  
**Amery, WI 54001**

Your application for Notice of Acceptance (NOA) of:

**Cardinal Sea-Storm Type B**

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

**ACCEPTANCE NO.: 01-0206.22**  
**EXPIRES: 12/30/2002**

Raul Rodriguez  
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL  
CONDITIONS  
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.  
Director  
Miami-Dade County  
Building Code Compliance Office

**APPROVED: 04/05/2001**

**Cardinal DGP.**

**ACCEPTANCE NO: 01-0206.22**

**APPROVED: APR 05 2001**

**EXPIRES: 12/30/2002**

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1.0 SCOPE:**

1.1 This revises the Notice of Acceptance No. 99-0908.01 that was issue on 12/30/99. It approves a laminated glass as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, 1994 Edition for Miami-Dade County (S.F.B.C.) for the location where the requirements as determined by SFBC Chapter 35 are met.

**2.0 PRODUCT DESCRIPTION:**

2.1 The **Cardinal Sea-Storm Type B** shall comply with the properties of the following document: Drawing No. 1, sheet 1 of 1, prepared by Cardinal DGP, dated 10/15/99 with last revision on 01/10/01. It bears the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. This document shall hereinafter be referred to as the approved drawing.

**3.0 LIMITATIONS:**

3.1 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 laminated glass will resist the loads according to Chapter 23 of the S.F.B.C., in order to issue an specific product approval for the system.

**4.0 INSTALLATION:**

4.1 The laminated glass shall be fabricated in strict compliance with the manufacturer's instructions, the approved drawing and the applicable Section of the South Florida Building Code.

**5.0 LABELING:**

5.1 Each sheet shall bear a permanent label in the corner of the laminated sheet with "DCA. C. DGP" standing for "Dade County Approved Cardinal DGP".

**6.0 BUILDING PERMIT REQUIREMENTS:**

6.1 Application for Building Permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance (NOA) and the (NOA) of the system using this component.

6.1.2 Duplicate copies of the approved drawings as identified on section 2 of the NOAs.

6.1.3 Any other document required by the Building Official or the South Florida Building Code in order to properly evaluate the installation of the system



Candido Font, PE, Sr., Product Control Examiner  
Product Control Division

**Cardinal DGP.**

**ACCEPTANCE NO: 01-0206.22**

**APPROVED: APR 05 2001**

**EXPIRES: 12/30/2002**

**NOTICE OF ACCEPTANCE STANDARD CONDITIONS**

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test-supporting data, engineering documents, is no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
  - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
  - b) The product is no longer the same product (identical) as the one originally approved;
  - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
  - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
  - a) Unsatisfactory performance of this product or process.
  - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purpose.
6. The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer need not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

  
Candido Font, PE, Sr., Product Control Examiner  
Product Control Division

**END OF THIS ACCEPTANCE**

**Cardinal DGP.**

**ACCEPTANCE NO: 01-0206.22**

**APPROVED: APR 05 2001**

**EXPIRES: 12/30/2002**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**  
**(For File Only. Not Part of NOA.)**

**A DRAWING:**

1. Drawing No. 1 of sheet 1 of 1, prepared by Cardinal DGP, issued on 10/15/99 with last revision on 01/10/2001, signed and sealed by W. M. Meyers, PE.

**B TEST REPORTS:**

**Laboratory Report**

	<b>Test</b>	<b>Date</b>	<b>Signature</b>
1. ETL 567854	ASTM D 635	08/26/96	D. K. Tucker, PE
2. ETL 567850	ASTM E 84	08/26/96	D. K. Tucker, PE
3. ETC 567925	ASTM D 1929	08/26/96	D. K. Tucker, PE.
4. SGS 120046-R	ASTM D 638	01/31/97	D. H. Mangnall, PE.
5. SGS 509620-R	ASTM G26	01/30/97	D. H. Mangnall, PE.
6. ETL 567923	ASTM D 1929	08/26/96	D. K. Tucker, PE.
7. ETL 567852	ASTM D 635	08/26/96	D. K. Tucker, PE.

**C CALCULATIONS:**

N/A

**D MATERIAL CERTIFICATION:**

1. NOA No. 96-0904.07, issued to E. I. DuPont DeNemours, approved on 04/24/97, expiring on 04/24/00.

**E STATEMENTS:**

1. Letter of Authorization by Dupont – Glass Laminating Products on 11/08/99, signed and sealed by C. A. Smith.
2. Letter of Code Compliance issued by R. E. Fisher & Associates, Inc. on 12/02/99/99, signed and sealed by R. E. Fisher, PE.

  
Candido Font, PE, Sr., Product Control Examiner  
Product Control Division

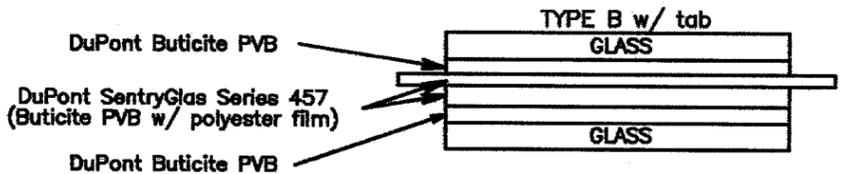
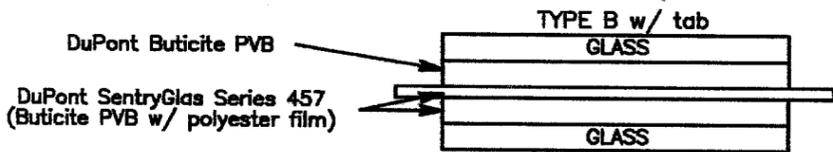
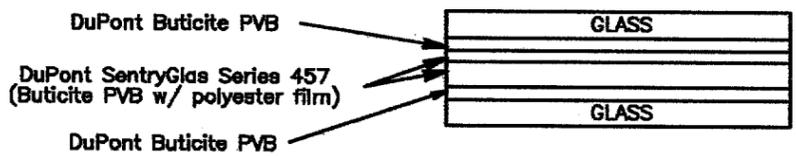
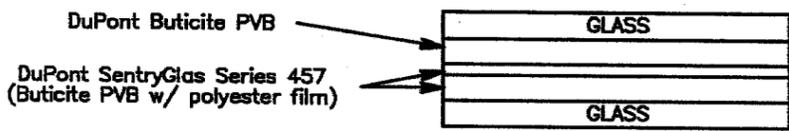
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# Cardinal Sea-Storm™ TYPE B

## DESCRIPTION

This product has a layer of PET film that is laminated between two pieces of glass using PVB interlayer material.

## SECTIONS



## MATERIAL CHARACTERISTICS

DuPont SentryGlas 457 Glass/Plastic Laminated Material

DuPont Butacite Polyvinyl Butryal

Designation	Test	Properties
Self Ignition Temperature	ASTM D1929	671 degrees F
Flash Ignition Temperature	ASTM D1929	698 dgrees F
Flame Spread Index	ASTM E84	95
Smoke Developed Index	ASTM E84	165
Average Burning Rate	ASTM D635	0.75 in/min
Average Extent of Burning	ASTM D635	2.95 inches
Average Time of Burning	ASTM D635	3.93 min.

Designation	Test	Properties				
Flash Ignition Temperature	ASTM D1929	698 degrees F				
Self Ignition Temperature	ASTM D1929	716 dgrees F				
Average Extent of Burning	ASTM D635	0.57 inches				
Average Time of Burning	ASTM D635	0.86 min.				
Ultimate Tensile Strength	ASTM D638	* Weathering				
*Weathering Per Section 3505.2 of the South Florida Building Code		<table border="1"> <tr> <td>Before</td> <td>After</td> </tr> <tr> <td>30,200 psi</td> <td>29,900 psi</td> </tr> </table>	Before	After	30,200 psi	29,900 psi
Before	After					
30,200 psi	29,900 psi					

### For Office Use

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE 04-05-2001  
BY [Signature]  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 01-0206.02

CARDINAL LG  
250 Griffin Street East  
Amery, WI 54001

Cardinal Sea-Storm™ TYPE B

Drawing Sheet Drawing Revision  
Number:1 Number:1 Date:10/15/99 Date: 1/10/01

[Signature]

FLA. 18755  
STRUCTURAL  
Date: 01/26/01

Engineer Discipline Registered P.E. #