

VITEWALL DIY Drywall Alternative

STRUCTURAL PERFORMANCE TEST
NCTL-210-3068-1

Missile C Wind Zones 1 & 2

NATIONAL CERTIFIED TESTING LABORATORIES



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1464 GEMINI BOULEVARD • ORLANDO, FLORIDA 32837 PHONE (407) 240-1356 • FAX (407) 240-8882

ASTM E1996 COMPLIANCE STATEMENT

On October 8, 2004, VITEWALL DIY Drywall Alternative completed impact testing at National Certified Testing Laboratories in Orlando, FL. All tests were performed in full accordance with ASTM E1886 and ASTM E 1996 with no deviations.

Manufacturer:

VITEWALL DIY Drywall Alternative

Product Series:

1/2" White Polypropylene Panel

Product Configuration Tested:

Fixed Panel

Tested Size:

48" x 96" overall

Glazing Configuration:

N/A

Level of Protection:

Basic Protection

Wind Zone:

Wind Zone 2 - 120 mph <basic wind speed < 130 mph

at greater than one mile from the coastline measured from the mean high water mark.

Assembly Height Above Ground:

Less than or equal to 30 feet

Impact Missile Used:

Missile C

Positive Design Pressure:

N/A

Negative Design Pressure:

See NCTL Report 210-3068-1 for complete specimen description and test results

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Technician

Chris Bennett

Division Manager

101/27/06

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IMPACT PERFORMANCE TEST REPORT

Report No: NCTL-210-3068-1

Test Date:

10/08/04

Report Date: Revision Date: 12/02/04 04/07/05

01/27/14

Client: VITEWALL DIY Drywall Alternative P.O. Box 547565 Orlando, FL 32854

Test Specimen: VITEWALL's DIY Drywall Alternative 1/2" Plastic Panel (48 x 96")

Test Standards: ASTM E1996-03 "Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in

Hurricanes." (Impact Only)

TEST SPECIMEN DESCRIPTION

General: The test specimen was a 48 x 96" corrugated plastic sheet. The 1/2" thick corrugated plastic is made of twin wall (12 mil) high-impact polypropylene copolymer resin.

Installation: The test specimen was fastened to the test buck with eighteen (18) white low profile 2 inch composite screws. There were three (3) across the top and bottom, four (4) across the left and right sides and four (4) top to bottom on the two interior studs. Spacing was twenty-four (24) inches apart. (see fastener diagram for installation details).

Interior & Exterior Surface Finish: White

TEST PARAMETERS

The appropriate missile to be used for impact tests was selected in accordance with section 6 of ASTM E1996 based on the following criteria:

Level of Protection:

Basic Protection

Wind Zone:

Wind Zone 2 - 120 mph <basic wind speed < 130 mph at greater than one mile from the coastline measured

from the mean high water mark.

Assembly Height Above Ground:

Less than or equal to 30 feet

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IMPACT TEST RESULTS

Large missile impact tests were conducted using a #2 Southern Yellow Pine 2 x 4 measuring 48" in length and weighing 4.50 lbs (Missile C) as shown in Table 2 of ASTM E 1996. Missile speeds and locations were in accordance with sectin 5.3 and Table 2 ASTM E1996. For pass/fail criteria, no penetration is defined as no tear longer than 5 inches in length and 1/16" wide or no opening through which a 3" diameter solid sphere can freely pass per section 7 of ASTM E 1996. All specimens were conditioned at 70 F +- 15 F prior to testing. Missile orientation at impact complies with section 11.2.2 of ASTM E1886.

Specimen A Panel

| Impact No. | Impact Location | Missile Speed | Results |
|------------|-----------------------------|---------------------------------|----------------|
| 1 | Center of Panel | 50 feet/sec | No Penetration |
| 2 | Top Right Corner of Panel | 34 mph 50 feet/sec 34 mph | No Penetration |
| | Specimen B | Panel | |
| Impact No. | Impact Location | Missile Speed | Results |
| 1 | Bottom Left Corner of Panel | 50 feet/sec | No Penetration |

| | Bottom Left Corner of Panel | 50 feet/sec | No Penetration |
|--|-----------------------------|-------------|----------------|
| | | 34 mph | |
| | Center of Panel | 50 feet/sec | No Penetration |
| | | 34 mph | |
| | | | |

Specimen C Panel

| Impact No. | Impact Location | Missile Speed | $\underline{Results}$ |
|------------|---------------------------|---------------------------------|-----------------------|
| 1 | Top Right Corner of Panel | 50 feet/sec | No Penetration |
| 2 | Center of Panel | 34 mph 50 feet/sec 34 mph | No Penetration |

TESTS COMPLETED 10/08/04

Testing Observed by: Daniel Ocasio (NCTL)

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Brian Guertin (NCTL) John D. Smith (VITEWALL)

The listed results were secured by using the ASTM E1886 test method and indicate compliance with the performance requirements of ASTM E1996 for the listed test parameters. (Impact only)

Detailed drawings were available for laboratory records and compared to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by NCTL for a period of four (4) years. The results obtained apply only to the specimen tested and do not imply the quality of similar products manufactured or installed identical to the tested product. This report does not constitute certification or approval of the product, which may only be granted by a certification program validator or recognized approval entity. All tests were conducted in compliance with the referenced ASTM specifications. This report may not be reproduced, except in full, without the written consent of NCTL.

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