



Client: Telling Architectural Ltd
10 Worthington Road
Suite K
Cranston
RI 02920
p. 401/632-4577
c. 401/787-8551

Job Number: 11-0045D
Test Date(s): 6/30-7/1/11
Report Date: 7/22/11

Test Procedures:

AAMA 501.1 Standard Test Method for Water Penetration of Windows, Curtain Walls, and Doors Using Dynamic Pressure

AAMA 501.5 Test Method for Thermal Cycling of Exterior Walls

ASTM E283-04 Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

ASTM E331-00(2009) Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference

ASTM E330-02(2010) Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

Test Specimen Description:

Stud wall:

A freestanding test buck in 12" wide steel 'C' channel was prepared by MT Group, 10'-0" in height and 10'-0" wide. A load bearing panel was constructed with 6" deep x 16 gauge studs fitted in to a tracks at the top and base of the panel. The tracks were fastened to the buck with 3/32" thick x 3/4" long stainless steel hex head screws 12" centers. Studs were fixed to the tracks at 16" centers. 5/8" plywood sheathing boards was screwed to the vertical studs at 12" centers with 1 5/8" board screws. A priming agent EXOAIR 5 agent was applied to the plywood and EXOAIR 110 air/vapor barrier was applied.

Rainscreen System: **Corium Brick System**

(7) 9 gauge vertical aluminum 2" deep 'Z' sections were fixed 6" from edge and at 16" through the sheathing to the stud behind using 1/4" x 2" stainless steel hexagon head coarse thread. (39) proprietary HPS200 Colorcoat steel brick trays were fastened in to the vertical 'Z's using 3/16" x 1" stainless steel hexagon head coarse thread screws. The trays interlock. The brick slips are inserted into trays using spacers to maintain 3/8" vertical joints between the brick slips. The slips are built stagger bond or stacked. The mortar joints were pointed manually with an Eastpointe Historic natural hydraulic lime mortar.

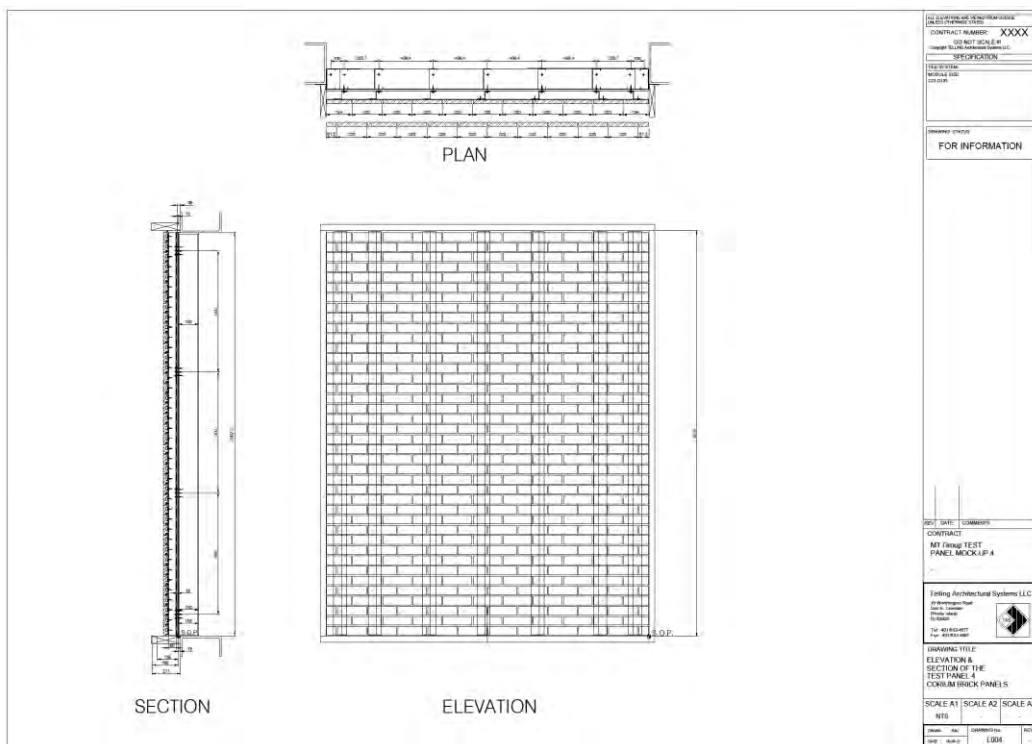
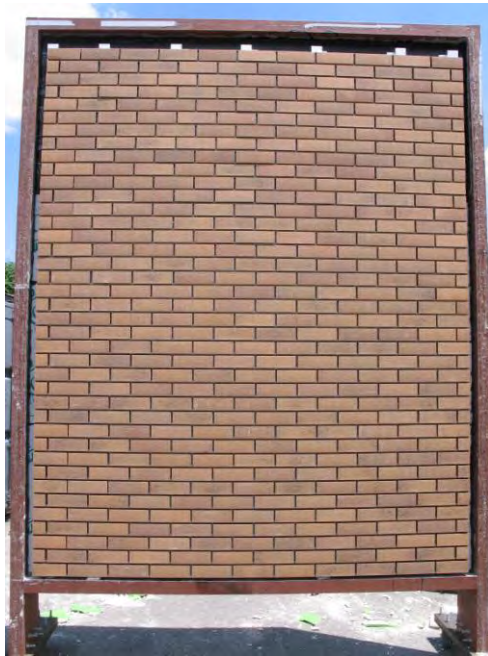
145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



Test Results:

Air infiltration

ASTM E 283

@ 1.57 psf (25 MPH)	>.01 cfm/ft ²
@ 6.24 psf (50 MPH)	> .01 cfm/ft ²
@ 25 psf (100 MPH)	.01 cfm/ft ²

Water Penetration

ASTM E547 (Four (4) five minute cycles)
@ 25 psf

No leakage or visible water

ASTM E331 (15 minute continuous)
@25 psf

No leakage or visible water

AAMA 501.1 Dynamic
@ 25psf (100 MPH)

No leakage or visible water

Uniform Load Structural

The pressure differential across the test specimen at the time of testing for deflection measurements was 60.0 psf, first applied in a negative, then positive load. The pressure differential across the test specimen for permanent deformation measurement was 90.0 psf, first applied in a negative, then positive load. ASTM E330. The deflection was taken from the longest unsupported span using a straight edge and dial calipers.

ASTM E330

Design Pressure

+60 psf (21” Span between anchors)	0.005”
-60 psf (21” Span between anchors)	0.005”

Overload

+90 psf (21” Span between anchors)	0.005”
-90 psf (21” Span between anchors)	0.005”

145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



Thermal Cycling

AAMA 501.5 (Three (3) cycles -40°F – +140°F)

Phase 1: During the first hour, the temperature was increased on the weather side condition to the specified high temperature conditions of 140°F. These conditions were maintained for two hours.

Phase 2: Weather side temperature decreased to 75°F in one hour.

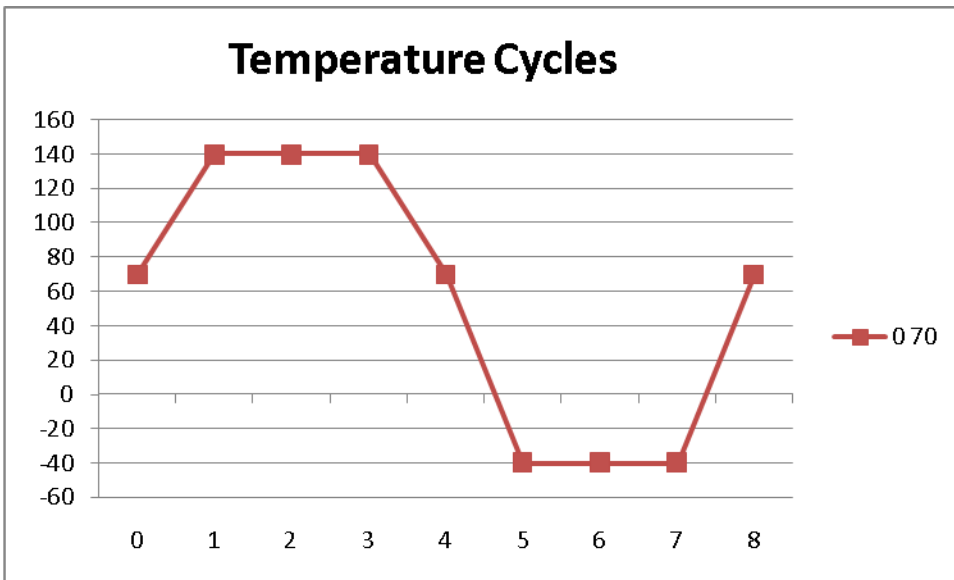
Phase 3: Weather side conditions were lowered to specified low temperature conditions -40°F over the next hour. These conditions were maintained for two hours.

Phase 4: Weather side temperature increased to 75°F in one hour.

(The temperatures were average readings based on thermocouples placed six (6) inches from the top, center and six (6) inches from the bottom.)

Cycle 1
Cycle 2
Cycle 3

No permanent damage due to expansion and contraction
No permanent damage due to expansion and contraction
No permanent damage due to expansion and contraction



145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901



Test Witnesses (All or partial):

Davy Adams	Telling Architectural LTD
Wayne Breighner	MT Group
Michael Wood	Telling Architectural LTD
Mike Hendrick	MT Group
Ed Armellio	MT Group
Wayne Breighner Jr.	MT Group

The system tested performed as indicated in this report using components advised as being standard for the Corium system mounted on a backing wall built to withstand the forces that were to be tested. This report is prepared for the convenience of our customers and endeavors to provide accurate and timely project information. It contains a summary of observation made by a qualified representative of Materials Testing Lab, Inc. This report is intended to help in your Quality Assurance Program, but it does not represent a continuous nor exhaustive evaluation. The statements made herein do not constitute approval, disapproval, certification or acceptance of performance or materials.

*A copy of this report will be retained by Materials Testing Lab, Inc, for a period of seven years.
This report is the exclusive property of the client so named herein.*

MT Group

A rectangular box containing a handwritten signature in black ink, which appears to be "Wayne Breighner Jr.".

VP- Window/Curtain Wall Division

145 Sherwood Ave • Farmingdale, NY 11735 • Tel: 631-815-1900 • Fax: 631-815-1901