

PERFORMANCE TEST REPORT

Rendered to:

A. J. MANUFACTURING

Series/Model: CPZ-17 Thermally Broken Access Door

Report No: B6463.01-201-44
Test Date: 01/18/12
Report Date: 01/18/12
Expiration Date: 01/18/16



Architectural Testing

PERFORMANCE TEST REPORT

Rendered to:

A. J. MANUFACTURING
1217 Oak Street
Bloomer, Wisconsin 54724

Report No: B6463.01-201-44
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Scope: Architectural Testing, Inc. was contracted by A. J. Manufacturing to perform air infiltration and water penetration testing on one A.J. Manufacturing CPZ-17 Thermally Broken Access Door.

Test Procedure: Air infiltration testing was conducted with positive pressures on the outswing door. Water penetration testing was conducted with negative pressures on the outswing door.

Test Methods:

ASTM E 283-91(99), *Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.*

ASTM E 331-00, *Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.*

Test Specimen Description:

Series/Model: CPZ-17 Thermally Broken Access door

Overall Size: 2' 0" wide by 6' 0" high

Door Panel Size: 1' 10-3/8" wide by 4' 10-1/2" high by 1-3/4" thick

Overall Area: 9.09 ft²

Frame Construction: The door frame was comprised of extruded aluminum, with the corners straight cut and butted joints. The frame extrusion was thermally broken with high density polyurethane in the "poured and debridged" method. The interior of the corners were sealed with small joint sealant.



Test Specimen Description: (Continued)

Door Leaf Construction: The door leaf was "cake pan" style, comprised of 24 gauge galvanized steel skin, interior and exterior, with formed corners and was thermally broken with a PVC extrusion. The interior of the door consisted of pressure-injected polyurethane foam.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Continuous EPDM self-adhered gasket (hollow)	1 Row	Frame perimeter

Hardware:

Hinges, 6" piano style	2	Hinge jamb, 4.5" from each end
Allegis adjustable roller cam lock	2	Door leaf lock, 6" from each end

Test Results:

Air Infiltration: Air infiltration testing was conducted with negative pressure on the outswing door, and with latches installed.

<u>Inches H₂O</u>	<u>psf</u>	<u>Total Air Flow</u> <u>cfm</u>	<u>cfm/ft²</u>	<u>Rate</u> <u>cfm/ln ft</u>
1.0	5.20	0.24	0.03	0.02
2.0	10.4	0.36	0.04	0.03
3.0	15.6	0.39	0.04	0.03
4.0	20.8	0.45	0.05	0.03
5.0	26.0	0.49	0.05	0.04
6.0	31.3	0.15	0.02	0.01
7.0	36.5	0.20	0.02	0.01
8.0	41.7	0.30	0.03	0.02
9.0	46.9	0.25	0.03	0.02
10.0	52.1	0.25	0.03	0.02
11.0	57.3	0.30	0.03	0.02
12.0	62.5	0.30	0.03	0.02



Test Results: (Continued)

Air Exfiltration: Air exfiltration testing was conducted with positive pressure on the outswing door, and latches installed.

<u>Inches H₂O</u>	<u>psf</u>	<u>Total Air Flow</u> <u>cfm</u>	<u>cfm/ft²</u>	<u>Rate</u> <u>cfm/ln ft</u>
1.0	5.20	0.03	<0.01	<0.01
2.0	10.4	0.02	<0.01	<0.01
3.0	15.6	<0.01	<0.01	<0.01
4.0	20.8	0.03	<0.01	<0.01
5.0	26.0	<0.01	<0.01	<0.01
6.0	31.3	0.20	0.02	0.01
7.0	36.5	0.30	0.03	0.02
8.0	41.7	0.20	0.02	0.01
9.0	46.9	0.30	0.03	0.02
10.0	52.1	0.25	0.03	0.02
11.0	57.3	0.20	0.20	0.01
12.0	62.5	0.60	0.60	0.04

Water Penetration: Water penetration testing was conducted with negative pressure on the outswing door. Prior to testing the lock handles were sealed on the exterior with duct tape.

<u>Inches H₂O</u>	<u>psf</u>	<u>Results</u>
2.0	10.4	No leakage
8.0	41.7	No leakage
14.0	72.8	No leakage
20.0	104.1	No leakage*

*After 240 continuous minutes of spray, otherwise tested in accordance with ASTM E331



Data sheets, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

ARCHITECTURAL TESTING, INC.

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Tony D. Gavin
Technician

Daniel A. Johnson
Director - Regional Operations

TDG/jb

Attachments:
Appendix A: Drawing (1)

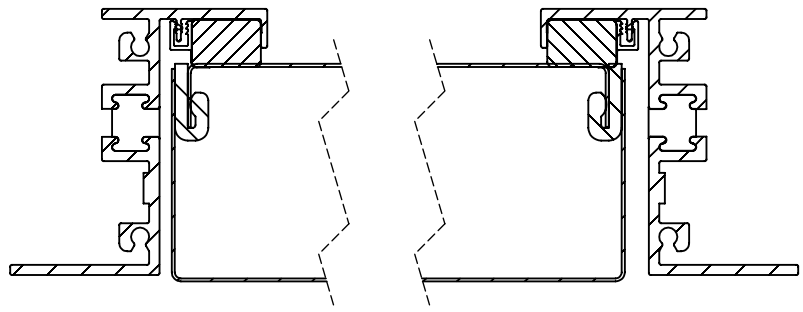
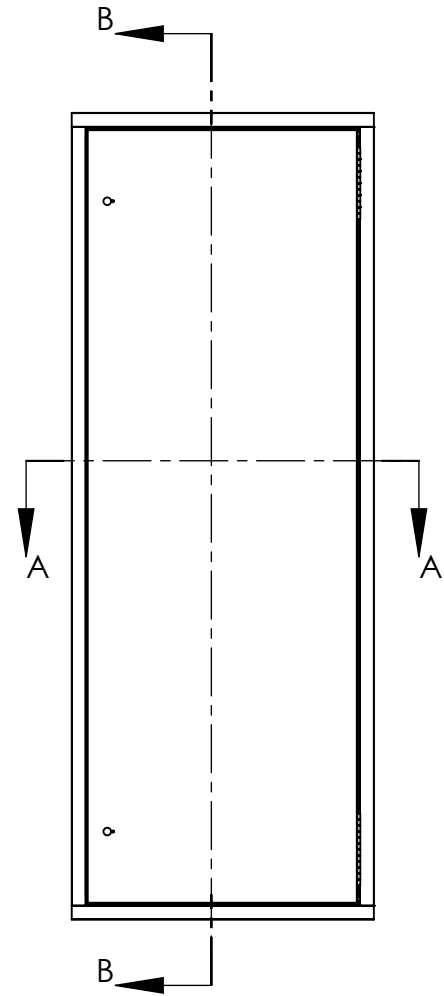
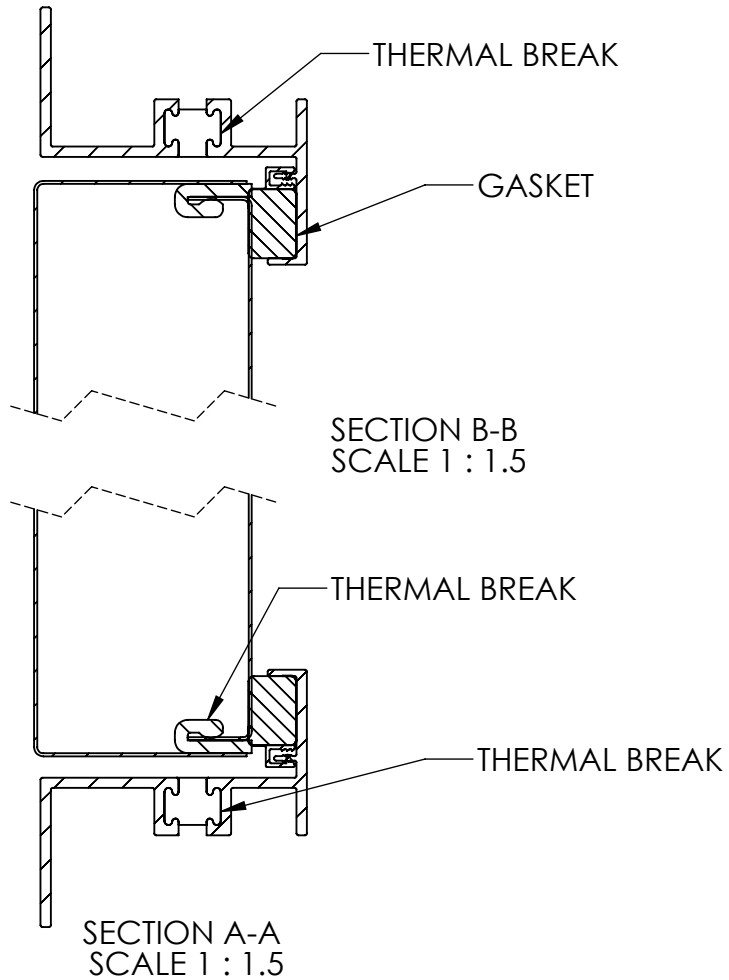



Architectural Testing

B6463.01-201-44

Appendix A

Drawing



DRAWN: 10/12/10 DATE: 10/12/10	 AJ Manufacturing, Inc Bloomer, WI
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: FOLDED ± 1/2° 2 PLACE DECIMAL ± .010 IN 3 PLACE DECIMAL ± .005 IN	TITLE: CPZ-17 THERMAL GENERAL CROSS-SECTION
DO NOT SCALE	DWG. # 00256 PART #. Rev. -

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