Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

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Report Date:	2/2/2013
Expiration Date:	2/2/2016
Lab. Number:	7229
Project Number:	13-4411
Revision Number:	0

THERMAL PERFORMANCE TEST REPORT

Manufacture: Polymaster

Address: 10523 Lexington Dr.
Knoxville, Tennessee 37932

Specifications: *ASTM C1363-11* Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus

PRODUCT DESCRIPTION

Model Designation:	Insulated Concrete Block Wall
Overall Size:	4'-0" (48") by 4'-0" (48") high
Block Size:	8" x 16" and 8" x 8"
Block Type:	**Light Weight
Block Density:	** 93 pcf
Grout Type:	**Light Weight Grout
Insulation Type:	**Polymaster injected foam insulation
Sample #3	

***as per manufacture*

Measured Test Data

Heat Flows

1.	Total Measured Input into Metering Box (Qtotal)	361.35 Btu/hr
2.	Surround Panel Heat Flow (Qsp)	163.46 Btu/hr
3.	Surround Panel Thickness	8.0 inches
4.	Surround Panel Conductance	0.03 Btu/hr·ft²·F
5.	Metering Box Wall Heat Flow (Qmb) and Flanking Heat Flow (Qfl)	10.86 Btu/hr
6.	EMF vs Heat Flow Equation (equivalent information)	17.44x35.61
7.	Net Specimen Heat Loss (Qs)	195.36 Btu/hr

Areas

1.	Test Specimen Projected Area (As)	16.0 ft²
2.	Metering Box Opening Area (Amb)	103.78 ft²
3.	Metering Box Baffle Area (Ab1)	92.91 ft²
4.	Surround Panel Interior Exposed Area (Asp)	87.78 ft²

Test Conditions

1.	Average Metering Room Air Temperature	69.94 F
2.	Average Cold Side Air Temperature	-0.18 F
3.	Average Guard/Environmental Air Temperature	72.86 F
4.	Metering Room Average Relative Humidity	24.58 %
5.	Measured Cold Side Wind Velocity (Perpendicular Flow)	11.11 mph
6.	Measured Static Pressure Difference Across Test Specimen	0.0 psf

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Surface Temperature Data

1.	Warm side surround panel	66.80 F
2.	Cold side surround panel	0.30 F
3.	Exterior Wall	3.80 F
4.	Interior Wall	56.30 F

Results

1.	Thermal Transmittance of Test Specimen (Us)	0.17 Btu/hr·ft²·F
2.	Thermal Conductance	0.23 Btu/hr·ft²·F
3.	Thermal Resistance R	4.29 hr*ft^2*F/Btu
4.	Overall Thermal Resistance Ru	5.74 hr*ft^2*F/Btu
5.	Warm Side Surface Resistance Rh	1.11 hr*ft^2*F/Btu
6.	Cold Side Surface Resistance Rc	0.33 hr*ft^2*F/Btu
7.	Measured Warm Side Surface Conductance (hh)	0.90 Btu/hr·ft²·F
8.	Measured Cold Side Surface Conductance (hc)	3.07 Btu/hr·ft²·F

Test Duration

1. The environmental systems were started at 9:43 hours, on 1/23/2013.
2. The test parameters were considered stable for two consecutive four hours test periods from 22:43 hours, on 1/23/2013 to 6:43 hours, on 1/24/2013.
3. The thermal performance test results were derived from 2:43 hours, on 1/24/2013 to 6:43 hours, on 1/24/2013.

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Remarks
The calibration of Fenestration Testing Laboratory's "thermal test chamber" was conducted in September 2012. The test sample was installed in a vertical orientation; the exterior of the specimen was exposed to the cold side. The direction of heat was from the interior (warm side) to the exterior (cold side) of the specimen. Test results obtained represent the actual value of the tested specimens and do not constitute opinion, endorsement or certification by this laboratory. This test report is considered the exclusive property of the client named herein and is applicable to the sample tested. This report may not be reproduced without the approval of Fenestration Testing Laboratory, Inc and if so must be in full.

Revision History Table			
Revision	Description	Author	Effective Date
0	Initial Release	Jose Sanchez	2/2/2013

FENESTRATION TESTING LABORATORY, INC.

Jose Sanchez

Jose Sanchez
Test Performed by

Jose Sanchez Digitally signed by Jose Sanchez DN: cn=Jose Sanchez, o=Fenestration Testing Lab, ou, email=jose@fenlab.com, c=US Date: 2013.02.06 12:00:52 -05'00'

Jose Sanchez
Person - in- Responsible- Charge