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ALABAMA METAL INDUSTRIES CORPORATION
TEST REPORT

SCOPE OF WORK
TESTING OF AMICO HYDRODRY SYSTEM PER ASTM E2273-18

REPORT NUMBER
103720461MID-004R0

TEST DATE(S)
12/20/19 - 12/23/19

ISSUE DATE
01/21/20

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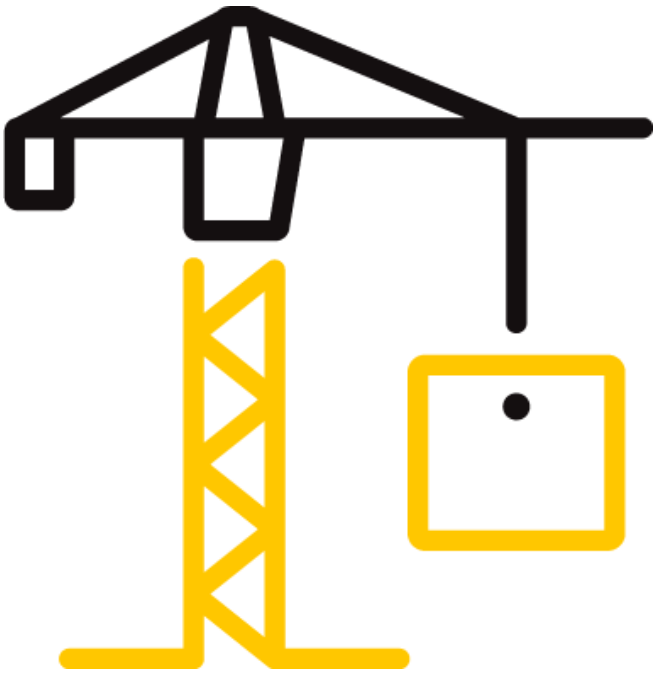

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TEST REPORT FOR ALABAMA METAL INDUSTRIES CORPORATION

Report No.: 103720461MID-004R0
Revision 1: 12/3/18

REPORT ISSUED TO

ALABAMA METAL INDUSTRIES CORPORATION
3245 Fayette Avenue
Birmingham, AL 35208

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Alabama Metal Industries Corp. to evaluate their HydroDry system in accordance with ASTM E2273-18, *Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies*. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in Middleton, WI.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

SAMPLE #	DRAINAGE EFFICIENCY
1	83.6%
2	79.7%

For INTERTEK B&C:

COMPLETED BY:	Patrick Kenealy	**REVIEWED BY:**	Andrew Holstein, Ph.D.
TITLE:	Technical Team Lead Intertek B&C	**TITLE:**	Senior Project Engineer Intertek B&C
SIGNATURE:		**SIGNATURE:**	
DATE:	01/21/20	**DATE:**	01/21/20

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SECTION 3
TEST METHOD

The specimens were evaluated in accordance with the following:

> **ASTM E2273-18**, *Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies*

SECTION 4
MATERIAL SOURCE

The Drainscreed and EZ Vent material was independently selected for testing by Intertek personnel Randy Alexander on August 2nd, 2019 at the Engineered Profiles facility in Columbus, OH. The material was received at the Intertek Middleton facility on Aug 6th, 2019 and labeled as MID1908061118-001. The Hydrodry Rainscreen material was independently selected for testing by Intertek personnel Andrew C. Christakos on September 4th, 2019 at the Low & Bonar facility in Candler, NC. The material was supplied from batch number 19363. The material was received at the Intertek Middleton facility on September 5th, 2019 and labeled as MID1909051124-001.

SECTION 5
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Russ Burt	Intertek B&C
Patrick Kenealy	Intertek B&C
Andrew Holstein	Intertek B&C

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SECTION 6
TEST SPECIMEN DESCRIPTION

The sample under evaluation consisted of nominal 2- by 4-inch wood studs placed 16 inches on-center. The framing was sheathed with nominal 0.5-inch CDX plywood secured to the framing with 1.25-inch screws spaced 16 inches on-center. The Drainscreed PVC profile was installed first over the sheathing with nails spaced 16 inches on-center. Kimberly-Clark building wrap was installed next with staples located 16 inches on-center overlapping the Drainscreed. The building wrap did not contain seams. The wrap was sealed to the edge of the wall panel with Kimberly-Clark tape. The Hydrodry Rainscreen was installed with two horizontal and one vertical seam. The vertical seam was butted together and not sealed. The horizontal seams were overlapped 3 inches by the rain screen skirt. The EZVent PVC profile was installed at the top of the assembly. Metal lath was then installed with 2-inch metal lath screws spaced 16 inches on-center with care not to compress the Rainscreen. A slot fault was cut into the metal lath. A 1/2-inch coat of stone mortar mix was then applied to the lath. To simulate a brick adhered veneer wall, nominal 0.25-inch cement board was applied over the mortar and secured with 2.5-inch cement board screws along the vertical perimeter of the assembly. The vertical perimeter of test assembly was sealed with tape to prevent lateral water leakage. For further detail, refer to the photographs and sketches in Section 10 and Section 11 of this report, respectively.

SECTION 7
TEST PROCEDURE

Water spray, calibrated to an application rate of 3.7 lbs per 15-minute period, was directed into the slot fault for a period of 75-minutes and the weight of the water collected at the bottom of the wall was recorded at 15-minute intervals. After the termination of the water application, the samples drained for an additional 60-minutes and a final collected water weight was recorded. The total mass of the water collected over the 135-minute test period was divided by the total mass of the water applied to the slot fault during the 75-minute application period to determine the drainage efficiency. The mass of collected water was measured with a scale (ICN# 1276) and elapsed time was measured with a digital timer (ICN# 908).

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SECTION 8
TEST RESULTS

SAMPLE #1

ELAPSED TEST TIME (minutes)	WATER APPLIED (grams)	WATER COLLECTED (grams)
15	3.697	2.093
30	3.697	3.183
45	3.697	3.269
60	3.697	3.340
75	3.697	3.344
135	NA	0.224
Total	**18.483**	**15.453**
Drainage Efficiency		**83.6%**

Note: No significant water build-up was observed in the spray box nor was any leakage detected through the back of the specimen.

SAMPLE #2

ELAPSED TEST TIME (minutes)	WATER APPLIED (grams)	WATER COLLECTED (grams)
15	3.697	1.888
30	3.697	2.977
45	3.697	3.201
60	3.697	3.206
75	3.697	3.209
135	NA	0.241
Total	**18.483**	**14.722**
Drainage Efficiency		**79.7%**

Note: No significant water build-up was observed in the spray box nor was any leakage detected through the back of the specimen.

SECTION 9
CONCLUSION

When tested in accordance with ASTM E2273-18, the samples described in this report exhibited drainage efficiency values of 83.6% and 79.7%.

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SECTION 10
PHOTOGRAPHS

Photo No. 1
Installation of WRB Layer

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Photo No. 2
Installation of Hydrodry Rainscreen Layer

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Photo No. 3
Installation of Metal Lath Layer

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Photo No. 4
Installation of Mortar and Cement Board Layer

Photo No. 5
Assembled Specimen

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Photo No. 6
Final Test Setup

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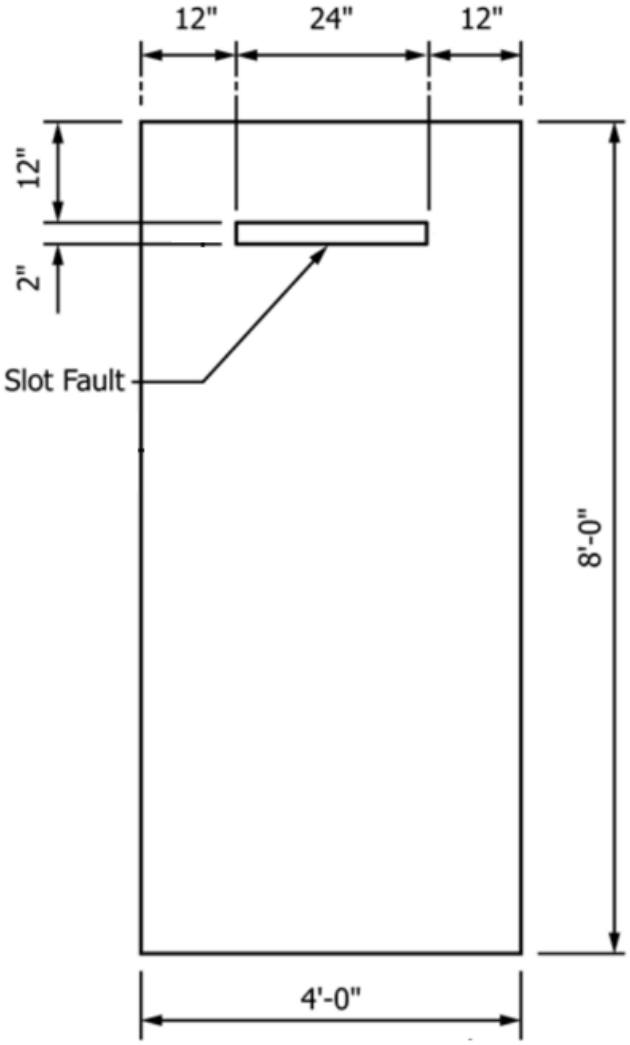
SECTION 11
SKETCHES



Sketch No. 1
Test Assembly Dimensions

SECTION 12
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	01/21/20	N/A	Original Report Issue