

TECHNICAL BULLETIN

Issue Date : June 25, 2020

No. 02-415-20

Air and Water Infiltration FW

On June 22, 2020, McElroy Metal, Inc. tested its FW Panel for air leakage and water penetration.

TEST METHODS:

Air Leakage: 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”

Water Penetration: ASTM E331-00, “Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference”

TEST SPECIMEN:

McElroy Metal, Inc. 24 Ga. 12 in. wide FW Panel. Two spans of panels at 5’-0” on center were attached to purlins using #10-16 x 1” pancake head fasteners. A 1/8” bead of SikaLastomer-511 non-skinning butyl sealant was applied to the female leg prior to panel engagement.

TEST RESULTS:

Specimen	Air Infiltration			Water Penetration			
	Static Pressure Differential (psf)	Air Infiltration rate (cfm/lf)	Air Infiltration rate (cfm/sf)	Static Pressure Differential (psf)	Rate (gal./hr/sf)	Test Duration (min)	Water Infiltration
FW 12 in. 24* Ga.	1.57	0.007	0.006	20.00	5	15	None
FW 12 in. 24* Ga.	6.24	0.068	0.056				
FW 12 in. 24* Ga.	20.0	0.071	0.059				

Test Report No. : 90-0071T-20A

Dated : June 1, 2020

*Test results are valid for heavier gauges or thicknesses.

MANUFACTURING LOCATIONS

ADELANTO, CA ASHBURN, GA BOSSIER CITY, LA CLINTON, IL DIAMOND, MO HOUSTON, TX LEWISPORT, KY
 MARSHALL, MI MAUSTON, WI MERKEL, TX PEACHTREE CITY, GA SUNNYVALE, TX WINCHESTER, VA