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Hail Impact Resistance Testing of Alfrex Solid 3mm Fluoropolymer Pre-Finished Aluminium (3003-H14)

Summary:

Test Name:	ANSI/FM 4473 (2011), Specification Test Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls. American National Standard, FM Approvals (January 2011).
Test Date:	April 27 th – 28 th , 2020
Test Report Issue Date:	20 th May 2020
Report No.:	K8433.01-109-44
Intertek Test Centre:	130 Derry Court, York, Pennsylvania, 17406, United States of America
Background to Intertek:	<ul style="list-style-type: none"> - Website: www.intertek.com - Intertek is an industry leader in the testing and certification of building products and construction materials. - Originally established in London (UK), Intertek now has 1000 locations across 100 countries, employing 46,000 people.
Test Overseen By:	<ol style="list-style-type: none"> 1) Richard E. Hartmann III – Technician (Product Testing) 2) Timothy J. McGill – Manager (Product Testing) 3) Andrew P. Mehalick (Official Observer) 4) Vicki L. McElwain (Official Observer)
Product:	3mm PRE-FINISHED ALUMINIUM (ALFREX SOLID)
Colour:	Monument (AS-1004)
Panel Size:	900mm x 900mm

Equipment:

Item	Specification
Cannon	Constructed from steel piping using compressed air to propel missile (hail).
Timing Device:	Radar Gun
Missile (hail):	Class 1 = 31.8mm Class 2 = 38.1mm Class 3 = 44.5mm Class 4 = 50.8mm

Results Summary:

Impact Class	Missile			Impact Area	Results
	Speed (m/s)	Weight (g)	Diameter (mm)		
1-1	26.9	14.0	31.75	TOP LEFT	PASS
1-2	26.9	14.0	31.75	MIDDLE	PASS
1-3	26.8	14.0	31.75	TOP	PASS
2-1	29.5	26.5	37.1	TOP RIGHT	PASS
2-2	29.5	26.5	37.3	MIDDLE	PASS
2-3	29.0	26.5	37.3	RIGHT EDGE	PASS
3-1	30.4	42.1	44.5	MIDDLE	PASS
3-2	30.4	42.1	44.5	BOTTOM EDGE	PASS
3-3	30.8	42.1	44.5	BOTTOM RIGHT	PASS
4-1	34.9	62.9	50.6	LEFT EDGE	PASS
4-2	34.4	62.9	50.0	MIDDLE	PASS
4-3	35.4	62.9	50.0	BOTTOM LEFT	PASS

[End].