AWTA PRODUCT TESTING

P.O. Box 240, North Melbourne, Victoria 3051

Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

LIENT : ALUCOIL S.2 POL.IND DE 09200 MIRAN (BURGOS) SPAIN	BAYAS.C/-IRCIO.PARC:R72-R77	TEST NUMB ISSUE DAT PRINT DAT	E : 15/03/2013
C C P P	Clients Ref: "Larcore" Composite sandwich panel Colour: Silver pproximate Thickness: 14mm pproximate Mass: 4.7 kg/m2 nd Use: Architectural Claddin	a	
	ESULTS MUST BE CONSIDERED IN THE COMMENTS ON THE FOLLOWING	The second	
	ion provided by client: n: Aluminium, Magnesium, Mang	anese, Aluminium 30	03
AS/NZS 1530.3 - 1999	Simultaneous determination o Propagation, Heat Release and		ne
RESULTS:	Face tested: Face		
	Date tested: 14/3/2013 Ignition time Flame propagation time Heat release integral Smoke release, log d Optical density, d	Mean Standa: Nil min Ni Nil s Ni Nil kJ/m2 Ni -1.6573 0.0 0.0220 /m	
	Number of specimens ignited:	0	
REGULATORY INDICES:	Number of specimens tested: Ignitability Index Spread of Flame Index Heat Evolved Index Smoke Developed Index	0 Ran 0 Ran	ge 0-20 ge 0-10 ge 0-10 ge 0-10
Comments:			
The results of this but it should be rec	pply to the specimen mounted, fire test may be used to dire ognized that a single test me azard under all fire condition	ctly assess fire ha thod will not provi	zard,

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TEST REPORT

CLIENT : ALUCOIL S.A POL.IND DE BA 09200 MIRANDA (BURGOS) SPAIN	AYAS.C/-IRCIO.PARC:R72-R77 A DE EBRO		: 7-589763-CO : 15/03/2013 : 15/03/2013	
but does not touch the	by a pilot flame that is he specimen. A material that dard test may ignite if cont ing the test.	does not		
Each test specimen was	s clamped along all sides.			
199174 1	(END OF REPORT)	PAGE 2	
© Australian Wool Testing Authority Ltd Copyright - All Rights Reserved	This Laboratory is accredited by the -chemical Testing of Textiles & Rel- -Mechanical Testing of Textiles & Rel- -Mechanical Testing of Textiles & Rel- -Heat & Temperature Measurement This document is issued in accordance with N identifying descriptions have been provided by the warranty, implied or otherwise, as to the source of the sample or samples tested. This document shall not ammended or altered. This document, the names advertising providing the content and format of the Managing Director of AWTA Ltd.	elated Products : Accreditatio ACCREDITATION ACCREDITATION ACCREDITATION ATA's accreditation requirements. Samp he client unless otherwise stated. AWTA he tested samples. The above test results re to be reproduced except in full and shall be re a AWTA Product Testing and AWTA Ltd m	on No. 983 on No. 985 n No. 1356 les, and their Ltd makes no late only to the endered void if may be used in	
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TEST REPORT

ALUCOIL S.A POL.IND DE BAYAS.C/-IRCIO.PARC:R72-R77 : 7-589850-CO CLIENT : TEST NUMBER : 20/03/2013 ISSUE DATE 09200 MIRANDA DE EBRO PRINT DATE : 20/03/2013 (BURGOS) SPAIN SAMPLE DESCRIPTION Clients Ref: "Larcore" Composite sandwich panel Nominal Composition: Aluminium, Magnesium, Manganese, Aluminium 3003 End Use: Architectural Cladding AS/NZS 3837:1998 Method of Test for Heat and Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter Results: -Specimen 1 2 3 Mean Average Heat Release 15.8 17.1 16.5 16.7 kW/m2 Rate Average Specific extinction area 391.6 197.0 248.6 279.1 m2/kg (according to Specification C1.10 of the Building Code of Australia) Test orientation: Horizontal Specimen 1 3 2 Mean 50 50 Irradiance 50 50 kW/m2Exhaust flow rate 24 24 24 24 1/s Time to sustained flaming 173 158 145 159 S Test duration 380 344 364 363 S Heat release rate curve on the 9 attached sheets which form part of this report Peak heat release after ignition 74.1 71.9 56.5 67.5 kW/m2 Average heat at 60s 40.9 38.6 32.7 37.4 kW/m2 Release rate at 180s 17.9 17.4 19.9 18.4 kW/m2 After ignition at 300s N/A N/A N/A N/A kW/m2 Total heat released 3.3 3.2 3.6 3.4 MJ/m2 Average effective heat of combustion 18.1 17.0 22.1 19.0 MJ/kg 199175 PAGE 1 1 CONTINUED NEXT PAGE © Australian Wool Testing Authority Ltd Copyright - All Rights Reserved



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TEST REPORT

ALUCOIL S.A POL.IND DE BAYAS.C/-IRCIO.PARC:R72-R77 : 7-589850-CO CLIENT : TEST NUMBER : 20/03/2013 ISSUE DATE 09200 MIRANDA DE EBRO PRINT DATE : 20/03/2013 (BURGOS) SPAIN Initial thickness 14.0 14.0 14.0 14.0 mm Initial mass 47.8 47.6 48.1 47.8 q Mass remaining 46.0 46.2 46.0 45.8 q Mass percentage 4.0 00 pyrolysed 4.2 3.4 3.8 Mass loss 2.0 1.6 1.9 1.8 q Average rate of mass 0.8 1.0 0.8 0.9 loss q/m2.s The formulae given in the Building Code of Austalia have been shown to give inaccuracies in determination of Group Number for certain materials. Due to this AWTA Product Testing no longer reports Group Numbers. The formulae for calculation of Group Number is available from the website of the Australian Building Codes Board. Group Number calculation based on the results described in this report can be undertaken at the clients discretion Tests were conducted with a wire grid placed over the sample during testing. This was done to contain intumescing sample within the sample holder. These test results relate only to the behaviour of the product under the conditions of the test, they are not intended to be the sole criterion for the assessment of performance under real fire conditions 199175 PAGE 2 1 END OF REPORT) (

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TEST REPORT

: 7-590201-CO : 16/04/2013 ALUCOIL S.A POL.IND DE BAYAS.C/-IRCIO.PARC:R72-R77 CLIENT : TEST NUMBER ISSUE DATE : 16/04/2013 09200 MIRANDA DE EBRO PRINT DATE (BURGOS) SPAIN SAMPLE DESCRIPTION Clients Ref: "Aluminium honeycomb Core" Nominal Composition: Aluminium 3003 End Use: Architectural Cladding AS/NZS 3837:1998 Method of Test for Heat and Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter Results: -Specimen 1 3 Mean 2 Average Heat Release FTI FTI FTI FTI kW/m2 Rate Average Specific 0.0 m2/kg extinction area 0.0 0.0 0 (according to Specification C1.10 of the Building Code of Australia) Test orientation: Horizontal Specimen 3 1 2 Mean 50 50 50 Irradiance 50 kW/m224 24 Exhaust flow rate 24 24 1/sTime to sustained flaming FTI FTI FTI FTI s Test duration 600 600 600 600 s 13.0 Initial thickness 13.0 13.0 13.0 mm 314.5 Initial mass 315.1 313.6 314.4 g Mass remaining 314.5 315.1 313.6 314.4 g Mass percentage pyrolysed 0.0 0.0 0.0 0.0 % 0.0 Mass loss 0.0 0.0 0.0 g Average rate of mass loss 0.0 0.0 0.0 0.0 g/m2.s 199178 PAGE 1 1 CONTINUED NEXT PAGE

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TEST REPORT

POL.IND DE BAYA 09200 MIRANDA 1 (BURGOS) SPAIN	AS.C/-IRCIO.PARC:R72-R77 DE EBRO	TEST NUMBER : 7-590201-CO ISSUE DATE : 16/04/2013 PRINT DATE : 16/04/2013	
FTI = Failed to Ignite			
specimens tested failed as per Section 2.5.2(i	d to ignite within 10 minutes	and testing was ceased	的推荐
The test specimen was	cested in the unexpanded form		ESSERIES.
inaccuracies in determin this AWTA Product Testin calculation of Group Nur Building Codes Board. Gr	ne Building Code of Austalia I nation of Group Number for ce ng no longer reports Group Nu mber is available from the we roup Number calculation based t can be undertaken at the cl	rtain materials. Due to mbers. The formulae for osite of the Australian on the results	
conditions of the test,	te only to the behaviour of the they are not intended to be comance under real fire condit.	the sole criterion for	
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