

EXTERNAL WALL SYSTEM DISCLOSURE STATEMENT (DESIGN)

EXTERNAL WALL COMPONENTS (TYPE A & B CONSTRUCTION)

This statement must be completed by a Registered Architect, Façade Engineer, suitably qualified Design Manager or other Professional as agreed.

Project Name	Western Sydney University, Bankstown City Development
Address	Horsley Rd and Bullecourt Ave, Milperra NSW 2214
Part of Building	External walls - Glazed façade elements
BCA referred to	BCA 2019

- I confirm that the table provided overleaf identifies all the proposed external wall systems and wall elements designed for the subject development, including the component elements of those systems, and any attachments thereto.
- I have undertaken reasonable investigations to ascertain that these systems and components comply with the non-combustibility requirements of Clause C1.9 of the BCA, such as reviewing product technical information, fire test reports, code mark certificates, fire-engineer's reports and external consultant advice.
- Supporting documents that demonstrate compliance for each wall type with the relevant sections of the BCA are provided and attached.
- I am a suitably qualified person and my qualifications and accreditations are listed below.
- The information contained in this statement is true and accurate to the best of my knowledge.

Relevant qualifications and accreditations: BE(Hons), MIEAust, CPEng, NER 753803

Name: Angus Johnson

Company: Yuanda Australia Pty Ltd

Address: Unit 503/447 Kent Street, Sydney NSW 2000

Phone No. +61 2 9285 0333

Signature

Date

EXTERNAL WALL ELEMENTS TABLE The table below must be completed for all wall types.

LINING / CLADDING MATERIAL (Note. Nominate every type of external cladding and/or wall material)

External/Cladding Material (Eg Fibre cement, Aluminium composite panel, masonry etc)	Elevation	Structural frame material	Manufacturer (Eg, Alucobond, Vitracore etc)	Product Name (Eg, Alucobond Plus, Vitracore G2 etc)	Test certificate, Codemark certificate or Fire Engineering Report (List all documents evidencing compliance)	Nominated or proprietary installation requirements
Aluminium extruded frame BCA C1.9	All	Aluminium Alloy	AAG (ZHAOQING ASIA ALUMINUM FACTORY CO., LTD.)	Alum. alloy 6063	AS1530.1-1994 BS 476: Part 6: 1989+A1: 2009 Deemed non-combustible	None
Aluminium extruded bracket	All		AAG (ZHAOQING ASIA ALUMINUM FACTORY CO., LTD.)	Alum. alloy 6061	AS1530.1-1994 Deemed non-combustible	None
Aluminium solid 3 mm sheeting BCA C1.9 (e) (v)	All	Aluminium Alloy	BLT (METALSPRAYNG COATINGS CO., LTD.)	Alum. alloy 3003	AS1530.1-1994 BS 476: Part 6: 1989+A1: 2009 Deemed non-combustible	None
Powder coating	All		Akzo Nobel	Akzo D2015	AS/NZS 1530.3-1999	None
Powder coating	All		Dulux	Duratec Eternity	AS/NZS 1530.3-1999	None
Glass BCA C1.9 (d) (v)	All	Aluminium Alloy	China Southern Glass		Non-combustible	None
Laminated Glass and Insulated Glass Units BCA C1.9 (d) (v)	All	Aluminium Alloy	China Southern Glass		Non-combustible	None
1.2 mm Galvanised sheet BCA C1.9	All				Non-combustible	None
EPDM gasket BCA C1.19(d)(i)	All	Aluminium Alloy			Permitted for use where non-combustible element is required per Clause C1.9(d) of BCA 2019	None
Structural silicone BCA C1.9(d)(iii)	All	Aluminium Alloy	Dow Corning	DC993 silicone	Permitted for use where non-combustible element is required per Clause C1.9(d) of BCA 2019	None
double sided tape	All	Aluminium Alloy				None
Thermal Breaks BCA C1.9(d)(iv)	All	Aluminium Alloy			Ancillary element	None
Glass reinforced cement	All				Report No: 487313-00.1 Deemed non-combustible	None

INSULATION *(list all types incorporated in the external wall systems)*

Material Rockwool etc	Elevation	Manufacture (Eg, CSR etc)	Product Name	Test certificate reference
Fire insulation BCA C1.9	All elevations	ABM ROCK WOOL DAFENG CO., LTD	100-120K ROCKWOOL	AS/NZS 1530.3-1999 / AS1530.1-1994 Report No: FNC116929, Deemed non-combustible
Thermal insulation BCA C1.9	All elevations	ABM ROCK WOOL DAFENG CO., LTD	75-60K ROCKWOOL	AS/NZS 1530.3-1999 / AS1530.1-1994 Report No: FNC116929, Deemed non-combustible

SARKING *(list all types incorporated in the external wall systems)*

Manufacture (Eg, CSR etc)	Elevation	Product Name	Test certificate reference
None			

External/Cladding Material	Testing Standard	Test Certificate, Codemark Certificate, Fire Engineering Report	Comments	BCA Deemed to Satisfy)DtS	BCA ref
Mill finished Aluminium Extrusion	N/A	non combustible	Deemed non-combustible	DtS	C1.9
Mill finish 3mm solid aluminium sheet	N/A	non combustible	Deemed non-combustible	Dts	C1.9 (e) (v)
Powder Coated Aluminium Extrusion	BS 476: Part 6: 1989+A1: 2009	Refer to Fire Test Report for Interpon D Powder Coating			
Powder Coated 3mm solid aluminium sheet	BS 476: Part 6: 1989+A1: 2010	Refer to Fire Test Report for Interpon D Powder Coating			
Glass	N/A	Non combustible	Deemed non-combustible	Dts	C1.9, (d) (v)
Laminated Glass and Insulated Glass Unit	N/A	Non combustible	Deemed non-combustible	Dts	C1.9, (d) (v)
1.2mm Galvanised sheet	N/A	Non combustible	Deemed non-combustible	Dts	C2.6,
Rockwool insulation	AS1530.1	Report No: FNC116929	Deemed non-combustible	Dts	C1.14
EPDM gasket	N/A	Ancillary element	Ancillary element	Ancillary element	C1.15
DC993 silicone	N/A	Ancillary element	Ancillary element	Ancillary element	C1.16
10x6 double sided tape	N/A	Ancillary element	Ancillary element	Ancillary element	C1.17
Thermal Break -	N/A	Ancillary element	Ancillary element	Ancillary element	
GRC	AS1530.1	Report No: 487313-00.1	Deemed non-combustible	Dts	C1.9
Material	Discussion				
Aluminium Extrusion/3mm Aluminium solid sheet	Aluminium alloys. i.e extrusion and sheet are non-combustible. when aluminium is exposed to fire/intense heat it will begin to melt ONLY when the temperature has reached the metal's melting point rather than burn. Most aluminium alloys have a melting point between 600 and 660 degrees Celsius.				
Aluminium Powdercoated extrusion and 3mm solid sheet	Whilst the base material aluminium is non-combustible, it is clearly essential that any finish applied also fully meets the requirements set out in the current building regulations. Refer to the UK fire test document result dated May 2019				
Glass	Monolithic glass is not flammable.				
Laminated glass and IGU glass	The laminate is encapsulated in the glass under high pressure and the bottom and top edges are wholly contained within the framework. It is only the 1.5mm thick edges that are exposed on the sides of the panels, and chances of the laminate igniting and fire spreading on this small area is extremely low. PVB laminated glass does not have any fire-resistant properties and it must not be used in fire-resistant applications				
Terracotta	All clay and concrete products are non- combustible and pass AS1530.1				
GRC					
1.2 GI sheet	Metal is considered a non-combustible material. This does not exempt metal buildings from all fire protection requirements, but it does recognize the advantages of using non-combustible materials for building construction				



CLASS 9b: An assembly building in which people may gather for social, theatrical, political, religious or civil purposes, including schools, universities, childcare centres, pre-schools, sports facilities, night clubs or public transport buildings.

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N 43 006 014 106

1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

Client : Akzo Nobel Pty Ltd
51 McIntyre Road
Sunshine VIC 3020

Test Number : 16-005953
Issue Date : 02/12/2016
Print Date : 27/01/2017

Sample Description Clients Ref : "D2015"
Powder coating applied to aluminium street
Colour : White
End Use : Architectural Aluminium Coating
Nominal Composition : Polyester resin powder coating
Nominal Mass per Unit Area/Density : 1.2-1.7 g/m²
Nominal Thickness : 60-80um

AS/NZS 1530.3-1999

Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release

Face tested:	Face		
Date tested:	02/12/2016		
	Standard Error	Mean	
Ignition time	0.10	7.98	min
Flame propagation time	Nil	Nil	sec
Heat release integral	2.0	16.9	kJ/m ²
Smoke release, log d	0.0170	-1.4856	
Optical density, d		0.0328	/ metre

Number of specimens ignited: 6
Number of specimens tested: 6

Regulatory Indices:

Ignitability Index	12	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Developed Index	3	Range 0-10

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MANAGING DIRECTOR

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TEST REPORT

Client : Akzo Nobel Pty Ltd
51 McIntyre Road
Sunshine VIC 3020

Test Number : 16-005953
Issue Date : 02/12/2016
Print Date : 27/01/2017

These results only apply to the specimen mounted, as described in this report. The result of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Specimens tended to flash before ignition. Ignition was based on the occurrence of a single flash of flame which lasted longer than 10 seconds.

Each test specimen was clamped in four places.

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MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

RAPPORT DE CLASSEMENT EUROPEEN DE REACTION AU FEU REACTION TO FIRE EUROPEAN CLASSIFICATION REPORT

N° RA18-0083

Selon l'Arrêté du 21 novembre 2002 modifié relatif à la Réaction au Feu
des produits de construction et d'aménagement

Laboratoire pilote agréé par le ministère de l'intérieur (Arrêté du 5 février 1959 modifié)
According to the modified Ordinance dated November 21st, 2002 as regards the Reaction to Fire performance
of construction and installation products
Pilot laboratory approved by the Ministry of the Interior (Ordinance of February 5th, 1959 modified)

Valable 5 ans à compter du 16 février 2018
Valid 5 years from February 16th, 2018

A la demande de :
Owner:

AKZO NOBEL POWDER COATINGS SNC
Zone Industrielle de la Gaudrée
91410 DOURDAN
FRANCE

Marque(s) commerciale(s) :
Commercial brand(s):

INTERPON POLYESTER Coatings

Description sommaire :
Brief description:

Peinture appliquée sur support tôle d'aluminium
Paint applied on aluminium sheet substrate

Date du rapport :
Date of issue:

19 avril 2018
April 19th, 2018

Ce rapport de classement atteste uniquement des caractéristiques de l'objet soumis aux essais et ne préjuge pas des caractéristiques de produits similaires. Il ne constitue pas une certification de produits au sens du code de la consommation. Seul le rapport électronique signé avec un certificat numérique valide fait foi en cas de litige. Ce rapport électronique est conservé au CSTB pendant une durée minimale de 10 ans. La reproduction de ce rapport électronique n'est autorisée que sous sa forme intégrale. Seule la version française fait foi. Il comporte 5 pages.

This classification report certifies only the characteristics of the object submitted for testing but does not prejudice the characteristics of similar products. So it does not constitute a product certification in the sense of the Consumer Code. Only the electronic report signed with a valid digital certificate is taken in the event of litigation. The electronic report is kept at CSTB for a minimum period of 10 years. The reproduction of this electronic report is only authorized in its integral form. Only the French version is authentic. It comprises 5 pages.

Rapport de classement / Classification report n° RA18-0083

1. Introduction / Introduction

Ce rapport de classement définit le classement attribué au(x) produit(s) précité(s) conformément aux procédures données dans la norme NF EN 13501-1+A1:2013.

This classification report defines the classification assigned to the above-mentioned product(s) in accordance with the procedures given in the NF EN 13501-1+A1:2013 standard.

2. Description du produit / Product description

Peinture en poudre thermodurcissable à base de résine polyester et de charges minérales, essayée appliquée sur support tôle en aluminium classée A1 d'épaisseur 0,8 mm.

Thermosetting powder paint made of polyester resin and mineral fillers, tested applied on A1 class aluminium sheet substrate with a thickness of 0,8 mm.

Densité sèche nominale <i>Nominal dry density</i>	1200 à 1700 kg/m ³ (selon le coloris) <i>From 1200 to 1700 kg/m³ (according to the colour)</i>
Epaisseur nominale <i>Nominal thickness</i>	60 à 90 µm <i>From 60 to 90 µm</i>
Extrait sec nominal <i>Nominal dry extract</i>	100 %
Coloris / colours	Divers / Various

Rapport de classement / Classification report n° RA18-0083

3. Rapports d'essais et résultats d'essais en appui du classement Test reports and test results in support of classification

3.1 Rapports d'essais / Test reports

Nom du laboratoire <i>Name of laboratory</i>	Nom du demandeur <i>Name of sponsor</i>	Identification de l'essai <i>Test identification</i>	N° du rapport d'essai <i>Test report No.</i>	Méthode d'essai <i>Test method</i>
CSTB	AKZO NOBEL POWDER COATINGS SNC Zone Industrielle de la Gaudrée 91410 DOURDAN FRANCE	ES541170363	RA18-0083	NF EN 13823+A1:2015 NF EN ISO 1716:2013

3.2 Résultats d'essais / Test results

Méthode d'essai <i>Test method</i>	Produit <i>Product</i>	Nombre d'épreuves <i>Number of tests</i>	Paramètres <i>Parameters</i>	Résultats / <i>Results</i>	
				Paramètres continus Moyennes <i>Continuous parameters Mean values</i>	Paramètres conformité <i>Compliance parameters</i>
NF EN 13823+A1	INTERPON POLYESTER Coatings	3	FIGRA _{0,2MJ} (W/s) FIGRA _{0,4MJ} (W/s) LFS THR _{600s} (MJ)	76,3 30,2 - 0,9	- - Non atteint Not reached -
			SMOGRA(m ² /s ²) TSP _{600s} (m ²)	3,5 26,5	- -
			Gouttelettes ou particules enflammées <i>Flaming droplets or debris</i>	-	Aucune None
NF EN ISO 1716	Produit dans son intégralité <i>Product on its whole</i>	3	Q _{PCS} (MJ/m ²)	3,1	-

Le (-) signifie : non applicable / (-) means: not applicable

Rapport de classement / Classification report n° RA18-0083

4. Classement et domaine d'application / Classification and direct field of application

4.1 Référence du classement / Reference of the classification

Le classement est prononcé suivant la norme NF EN 13501-1+A1:2013.

This classification has been carried out in accordance with the NF EN 13501-1+A1:2013 standard.

4.2 Classement / Classification

Comportement au feu <i>Fire behaviour</i>		Production de fumées <i>Smoke production</i>		Gouttes ou particules enflammées <i>Flaming droplets or debris</i>
A2	-	s1	,	d0

Classement / Classification : A2 - s1, d0

4.3 Domaine d'application / Field of application

Le classement est valable pour les paramètres produits suivants :

This classification is valid for the following product parameters:

Densité sèche nominale <i>Nominal dry density</i>	1200 à 1700 kg/m ³ (selon le coloris) <i>From 1200 to 1700 kg/m³ (according to the colour)</i>
Epaisseur nominale <i>Nominal thickness</i>	60 à 90 µm <i>From 60 to 90 µm</i>
Extrait sec nominal <i>Nominal dry extract</i>	100 %
Coloris / <i>colours</i>	Divers / <i>Various</i>

Le classement est valable pour les conditions d'utilisation finales suivantes :

This classification is valid for the following end use conditions:

Support / <i>Substrate</i>	Le produit appliqué sur tout substrat métallique classé A1 de masse volumique ≥ 2025 kg/m ³ et d'épaisseur ≥ 0,8 mm <i>The product applied on any A1 class metal substrate with a density ≥ 2025 kg/m³ and with a thickness ≥ 0.8 mm.</i>
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Rapport de classement / Classification report n° RA18-0083

5. Limitations / Limitations

Le présent document de classement n'est pas une approbation ni une certification de type du produit.
The present document does not represent type approval or certification of the product.

Fait à Champs-sur-Marne, le 19 avril 2018
Prepared at Champs-sur-Marne, April 19th, 2018

**Le Responsable de l'activité
Réaction au Feu
*The Head of Reaction to Fire Activity***

Martial BONHOMME

Fin de rapport / *End of the report*

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TEST REPORT

Client : Dulux Powder and Industrial Coatings
1 - 15 Pound Road West
Dandenong South VIC 3175

Test Number : 20-006657
Issue Date : 12/01/2021
Print Date : 12/01/2021
Order Number : 4201305206

Sample Description Clients Ref : "Duratec Eternity"
Rigid panel
Colour : Black
End Use : Commercial architectural project and residential
Nominal Composition : Super durable polyester powder coating
Nominal Mass per Unit Area/Density : 1.3-1.7g/m²
Nominal Thickness : 60-100 micron

AS/NZS 1530.3-1999

Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release

Face tested:	Face	
Date tested:	12-01-2021	
	Standard Error	Mean
Ignition time	0.34	3.84 min
Flame propagation time	Nil	Nil sec
Heat release integral	4.6	30.1 kJ/m ²
Smoke release, log d	0.0305	-1.6559
Optical density, d		0.0224 / metre
Number of specimens ignited:		6
Number of specimens tested:		6
Regulatory Indices:		
Ignitability Index		16 Range 0-20
Spread of Flame Index		0 Range 0-10
Heat Evolved Index		1 Range 0-10
Smoke Developed Index		2 Range 0-10

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P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400

TEST REPORT

Client : Dulux Powder and Industrial Coatings
1 - 15 Pound Road West
Dandenong South VIC 3175

Test Number : 20-006657
Issue Date : 12/01/2021
Print Date : 12/01/2021
Order Number : 4201305206

These results only apply to the specimen mounted, as described in this report. The result of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

The reaction of thin unsupported flexible materials to flame impingement can be assessed in accordance with AS 1530.2. Where materials of thickness less than 2mm that are sufficiently flexible to be bent by hand around a mandrel of 2mm diameter or less are subjected to the test described herein, they should also be subjected to the test in AS 1530.2.

Each test specimen had an unattached backing of 4.5mm thick fibre reinforced cement board.

Each test specimen was restrained on the exposed face by a layer of galvanised welded square mesh made from wire of nominal diameter 0.8mm and nominal spacing 12mm in both directions and the assembly clamped in four places.

Specimens tended to flash before ignition. Ignition was based on the occurrence of a single flash of flame which lasted longer than 10 seconds.

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A blue ink signature of the Approved Signatory.

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MANAGING DIRECTOR