



# TEST REPORT

(This Report is issued subject to the terms & conditions set out below)

**Setesco Services Pte Ltd**  
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Business Reg. No. 196900269D

**Your Ref: P785834**  
**Dated 26/10/2020**

**Our Ref: CT-8500129331/SS/1**

**Date: 29/01/2021**

**Page 1 of 4**

**Subject** : Testing of "RLA Fire Pro FR Grey" water based fire rated acrylic sealant submitted by RLA Polymers Pty Ltd on 20/10/2020.


**Tested For** : **RLA POLYMERS PTY LTD**  
363 Wentworth Avenue  
Pende Hill NSW 2145  
Australia 2145  
**Attn: Ms. Veera Elangovan**

**Method of Test** : 1) Adhesion/Cohesion under Cyclic Movement : ASTM C 719 : 2014  
2) Adhesion in Peel : ASTM C 794 : 15  
3) Sealant exposed to continuous immersion in water. : ASTM C 719 : 2014

**Description of Samples** : 6 nos. of 600mL sausages of "RLA Fire Pro FR Grey" water based fire rated acrylic sealant were received.

**Results** : Refer to Summary Results on Page 2 and Detailed Results on Page 3 to 4.

  
**Norhidayah Elias**  
Testing Officer

  
**Salim Suwignjo**  
Principal Engineer (CMTD)  
Construction Technology Division

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**Summary Results of "RLA Fire Pro FR Grey" water based fire rated acrylic sealant.**

Test	Test Result	
Adhesion / Cohesion under cyclic movement	No bond loss	
Adhesion in Peel	Concrete: 32.37N 0% adhesive bond	Plaster board: 18.68N 0% adhesive bond
Sealant exposed to continuous immersion in water.	No bond loss	

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**Results:**

**(1) Adhesion/Cohesion under Cyclic Movement**

Sample Reference	RLA Fire Pro FR Grey		
Specimen Reference	1	2	3
Date of Test	30/11/2020		
Test Conditions	23°C / 55% R.H.		
Type of Substrate	Concrete		
Observations	No loss of bond		

**(2) Adhesion in Peel**

Sample Reference	RLA Fire Pro FR Grey	
Date of Test	23/11/2020	
Test Conditions	23°C / 55% R.H.	
Type of Sealant	Type III - Multi Component Flowable/Self Leveling	
Test Substrates	Concrete	Plaster board
Peel Force (N)	22.76	20.39
	36.56	18.70
	29.86	15.48
	40.28	20.15
Average Peel Force (N)	32.37	18.68
Adhesive Bond Loss (%)	0	0

*deya*

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**Results:**

**(3) Sealants Exposed to Continuous Immersion**

Sample Reference	RLA Fire Pro FR Grey
Conditioning Period @ 23±2°C , 50±5%R.H	01/11/2020 – 02/11/2020
Curing Period	02/11/2020 – 30/11/2020
Immersion Period @ 50°C	30/11/2020 – 12/01/2021
Date of Test	12/01/2021
Immersion Duration	6 weeks
Substrate	Concrete
Observation	No loss of bond



**Photograph 1: RLA Fire Pro FR Grey as received.**

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**Your Ref: P785834**  
**Dated 26/10/2020**

**Our Ref: CT-8500129331/SS/2**

**Date: 22/02/2021**

**Page 1 of 2**

**Subject** : Testing of "RLA Fire Pro FR Grey" water based fire rated acrylic sealant submitted by RLA Polymers Pty Ltd on 20/10/2020.

**Tested For** : **RLA POLYMERS PTY LTD**  
363 Wentworth Avenue  
Pende Hill NSW 2145  
Australia 2145  
**Attn: Ms. Veera Elangovan**

**Method of Test** : Volume shrinkage during cure : ASTM C 1241 : 14

**Description of Samples** : 6 nos. of 600mL sausages of "RLA Fire Pro FR Grey" water based fire rated acrylic sealant were received.

**Results** : Refer to results on Page 2.



Norhidayah Elias  
Testing Officer



Salim Suwignjo  
Principal Engineer (CMTD)  
Construction Technology Division

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**Results:**

**(1) Volume shrinkage during cure**

Sample Reference	RLA Fire Pro FR Grey		
Specimen Reference	1	2	3
Date of Test Commencement	22/01/2021		
Date of Test Completion	19/02/2021		
Curing duration	28 days		
Sealant density (g/ml)	1.5067		
Weight of plastic sheet (g)	0.2073	0.2073	0.2095
Weight of fresh sealant (g)	1.0786	1.1897	1.1845
Weight of sealant after cured (g)	0.9368	1.0322	1.0278
Weight loss (%)	13.15	13.24	13.23
Average Weight loss (%)	13.21		
Volume shrinkage (%)	19.95		



**Photograph 1: RLA Fire Pro FR Grey as received.**

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