

Performance of unfaced homogeneous ROCKWOOL Group insulation products when tested to AS 1530.1-1994

Assessment Report

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1 Introduction

This assessment confirms the fire performance of various ROCKWOOL Group insulation products when tested in accordance with AS 1530.1-1994.

This report is prepared for the purpose of complying with NCC 2019 amdt 1 Vol 1 and 2 Clause A5.2 (1) d) and NCC 2022 Vol 1 and 2 Clause A5G3 (d)

This report confirms the extent to which the referenced reaction to fire tests listed in Section 2 meets the requirements of the fire test standard listed in Section 4 of the report. The proposed variations to the tested construction presented in Section 3 are subject to an analysis in Appendix B and the conclusions are presented in Section 5 of this report subject to the validity and limitations in Sections 6 and 7.

2 Supporting Data

This assessment report refers to various test reports to support the analysis and conclusions of this report. They are listed below in Table 1.

Table 1 – Referenced Tests

Report Reference	Test Standard	Unfaced homogeneous ROCKWOOL Group insulation product tested
71912000636-MEC18/2-JV	BS EN ISO 1182: 2010	Rock Air RL
7191180319-MEC18/E2-JV		ProRox BL 938-SA
71912000636-MEC18/A2-JV		Rock Air SL
71911561-MEC17/D2-JV		Cool 'n' Comfort SL920
7191191180-MEC18/E2-JV		Cool 'n' Comfort SL950
7191174484-MEC17/2-JV		Safe 'n' Silent Pro 380
7191180319-MEC18/B2-JV		ProRox PS 970-SA
7191032142-MEC12/C2-LGJ		ThermalRock S140
7191180319-MEC18/C2-JV		ProRox SL 970-SA
7191191184-MEC18/2-JV		Conrock S10
7191191180-MEC18/F2-JV		Hardrock 60

The test reports listed above were undertaken by CSIRO and were sponsored by ROCKWOOL Malaysia Sdn Bhd. The test sponsor has given permission to CSIRO to reference the reports in this assessment.

3 Proposed Variations

The proposed products are as tested in Table 1 subject to the variations listed below

- The nominal density of the tested material may vary from 30 kg/m³ up to 175 kg/m³.
- The thickness of the tested material may vary from 25 mm to 200 mm based on the product.
- The thermal setting resin binder content of the tested material may vary from that tested.
- The types of tested rockwool may vary as a blanket, slab, slab lamella, and pipe section
- The products that are covered by the above-listed variations are summarised in Table 2 below.

Table 2 – Unfaced homogeneous ROCKWOOL Group Insulation products

Product name	Density (kg/m ³)	Thickness (mm)	Form of product
Cool 'n' Comfort RL920	40	50-100	Blanket
Cool 'n' Comfort RL930	50	40-100	Blanket
Cool 'n' Comfort RL940	60	40-100	Blanket
Cool 'n' Comfort RL950	80	25-100	Blanket
Cool 'n' Comfort RL960	100	25-100	Blanket
ProRox BL 938(40)-SA	40	50-100	Blanket
ProRox BL 938-SA	60	40-100	Blanket
ProRox BL 958-SA	80	25-100	Blanket
ProRox BL 960-SA	100	25-100	Blanket
Rock Air RL	30	50-100	Blanket
Rock Air RL.35	35	50-100	Blanket
Thermalrock B100	100	25-100	Blanket
Thermalrock B40	40	50-100	Blanket
Thermalrock B50	50	40-100	Blanket
Thermalrock B60	60	40-100	Blanket
Thermalrock B60.70	70	40-100	Blanket
Thermalrock B80	80	25-100	Blanket
Thermalrock B80.90	90	25-100	Blanket
ProRox PS 960-SA	120	100-150	Pipe Section
ProRox PS 970-SA	150	100-150	Pipe Section
Comfort Liner SSL920	40	25-150	Slab
Comfort Liner SSL940	60	25-150	Slab
Comfort Liner SSL950	80	25-150	Slab
Comfort Liner SSL960	100	25-150	Slab
Conlit 150	165	25-100	Slab
Conrock S10	100	25-123	Slab
Conrock S10.5	105	25-123	Slab
Conrock S11	110	25-123	Slab
Conrock S11.1	111	25-123	Slab
Conrock S11.5	115	25-123	Slab
Conrock S12	120	25-123	Slab
Conrock S12.3	123	25-123	Slab
Conrock S12.5	125	25-123	Slab
Conrock S13	130	25-123	Slab
Conrock S13.5	135	25-123	Slab

Product name	Density (kg/m ³)	Thickness (mm)	Form of product
Conrock S13.9	139	25-123	Slab
Conrock S14	140	25-123	Slab
Conrock S15	150	25-100	Slab
Conrock S15.5	155	25-100	Slab
Conrock S16.7	167	25-100	Slab
Conrock S9	90	25-123	Slab
Cool 'n' Comfort SL920	40	25-150	Slab
Cool 'n' Comfort SL930	50	25-150	Slab
Cool 'n' Comfort SL940	60	25-150	Slab
Cool 'n' Comfort SL950	80	25-150	Slab
Cool 'n' Comfort SL960	100	25-150	Slab
Curtainrock 40	75	25-150	Slab
Curtainrock 80	105	25-150	Slab
Curtainrock 80(128)	128	25-125	Slab
Facaderock 10	155	25-100	Slab
Hardrock 60	160	25-125	Slab
Hardrock 80	175	25-100	Slab
Pipe block 232.110.100	110	100-150	Slab
Pipeblock 232.090.100	90	100-150	Slab
ProRox SL 540(150)-SA	150	25-100	Slab
ProRox SL 930(40)-SA	40	100-150	Slab
ProRox SL 930-SA	60	100-150	Slab
ProRox SL 950-SA	80	100-150	Slab
ProRox SL 960(110)-SA	110	100-150	Slab
ProRox SL 960-5A	100	100-150	Slab
ProRox SL 970(120)-SA	120	25-125	Slab
ProRox SL 978-SA	110	100-150	Slab
ProRox SL970-SA	128	25-125	Slab
Rock Air SL	30	40-150	Slab
Rock Air SL.35	35	40-150	Slab
Rocksafe	80	25-125	Slab
Rocksafe Plus	128	25-125	Slab
RockTech 5450	80	25-150	Slab
RockTech 5650	100	25-150	Slab
RockTech S350	60	25-150	Slab
Roofrock 30	120	25-125	Slab
SAFE	75	25-150	Slab
Safe 'n' Silent Pro330	40	25-150	Slab
Safe 'n' Silent Pro331	50	25-150	Slab
Safe 'n' Silent Pro350	60	25-150	Slab
Safe 'n' Silent Pro370	80	25-150	Slab
Safe 'n' Silent Pro380	100	25-150	Slab
Thermalrock S100	100	25-150	Slab
Thermalrock S100.110	110	25-150	Slab
Thermalrock S120	120	25-125	Slab
Thermalrock S120.128	128	25-125	Slab
Thermalrock S120.130	130	25-125	Slab
Thermalrock S140	140	25-125	Slab

Product name	Density (kg/m ³)	Thickness (mm)	Form of product
Thermalrock S140.150	150	25-100	Slab
Thermalrock S40	40	25-150	Slab
Thermalrock S50	50	25-150	Slab
Thermalrock S60	60	25-150	Slab
Thermalrock S60.70	70	25-150	Slab
Thermalrock S80	80	25-150	Slab
Thermalrock S80.90	90	25-150	Slab
Conrock L10	100	25-200	Slab Lamella
Conrock L10.5	105	25-200	Slab Lamella
Conrock L11	110	25-200	Slab Lamella
Conrock L11.1	111	25-200	Slab Lamella
Conrock L11.1.CC.G(AIS)	111	25-200	Slab Lamella
Conrock L11.5	115	25-200	Slab Lamella
Conrock L12	120	25-200	Slab Lamella
Conrock L12.3	123	25-200	Slab Lamella
Conrock L12.5	125	25-200	Slab Lamella
Conrock L13	130	25-200	Slab Lamella
Conrock L13.5	135	25-200	Slab Lamella
Conrock L13.9	139	25-200	Slab Lamella
Conrock L14	140	25-200	Slab Lamella
Conrock L15	150	25-200	Slab Lamella
Conrock L16.7	167	25-200	Slab Lamella
Lamrock 10	100	25-200	Slab Lamella
Lamrock 10.5	105	25-200	Slab Lamella
Lamrock 11	110	25-200	Slab Lamella
Lamrock 11.1	111	25-200	Slab Lamella
Lamrock 11.1.CC.G(AIS)	111	25-200	Slab Lamella
Lamrock 11.5	115	25-200	Slab Lamella
Lamrock 12	120	25-200	Slab Lamella
Lamrock 12.3	123	25-200	Slab Lamella
Lamrock 12.5	125	25-200	Slab Lamella
Lamrock 13	130	25-200	Slab Lamella
Lamrock 13.5	135	25-200	Slab Lamella
Lamrock 13.9	139	25-200	Slab Lamella
Lamrock 14	140	25-200	Slab Lamella
Lamrock 15	150	25-200	Slab Lamella
Lamrock 16.7	167	25-200	Slab Lamella
Rainscreen SL940	60	25-150	Slab
Rainscreen SL950	80	25-150	Slab
Rainscreen SL960	100	25-150	Slab
Conrock S10.DG(KS)	100	25-200	Slab
Conrock S13.5.DG(KS)	135	25-200	Slab

4 Referenced Standard

Standard:

AS 1530.1-1994 Methods for fire tests on building materials, components and structures, part 1: Combustibility test for materials, 1994.

5 Conclusion

Based on the analysis presented in this report, it is the opinion of this Accredited Testing Laboratory that the tested prototypes described in Section 2 when varied as described in Section 3 will achieve the performance stated below when submitted to a standard fire test in accordance with the test method referenced in Section 4 and subject to the term of validity and limitations of Section 6 and 7.

Products	Assessed performance			AS 1530.1-1994 Clause 3.4 criteria
	Mean furnace thermocouple temperature rise	Mean specimen surface thermocouple temperature rise	Duration of sustained flaming (s)	
Rockwool Group Insulation products are listed in Table 2	< 50°C	< 50°C	0	Not combustible

6 Term of Validity

This assessment report will lapse on 31st August 2027. Should you wish us to re-examine this report with a view to the possible extension of its term of validity, would you please apply to us three to four months before the date of expiry. This Division reserves the right at any time to amend or withdraw this assessment in the light of new knowledge.

7 Limitations

The conclusions of this assessment report may be used to directly assess the fire performance under such conditions, but it should be recognised that a single test method will not provide a full assessment of the fire hazard under all fire conditions.

This assessment report does not provide an endorsement by CSIRO of the actual products supplied to the industry. This assessment can therefore only relate to the actual prototype test specimens, testing conditions and methodology described in the supporting data, and does not imply any performance abilities of construction of subsequent manufacture.

This assessment is based on information and experience available at the time of preparation. The published procedures for the conduct of tests and the assessment of test results are the subject of constant review and improvement and it is recommended that this report is reviewed on or, before, the stated expiry date.

The information contained in this assessment report shall not be used for the assessment of variations other than those stated in the conclusions above. The assessment is valid provided no modifications are made to the systems detailed in this report. All details of construction should be consistent with the requirements stated in the relevant test reports and all referenced documents.

This assessment is based on information and experience available at the time of preparation. The published procedures for the conduct of tests and the assessment of test results are the subject of constant review and improvement and it is recommended that this report is reviewed on or, before the stated expiry date.



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