RAPID HARDWARE GROUP PTY LTD
TEST REPORT

SCOPE OF WORK
AS 1530.8.1:2018+A1:2024 TESTING ON FIBERGLASS DOOR AND STEEL FRAME, MODEL P00-01

REPORT NUMBER
251202023SHF-001

TEST DATE
2025-12-12

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2025-12-26

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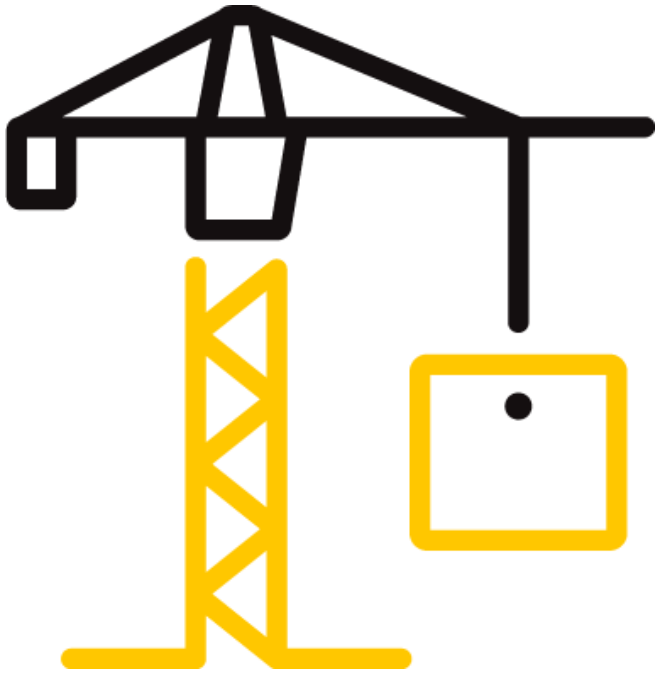

Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch
Plant 5, No. 6958 Daye Road, Fengxian District,
Shanghai, China
Tel: +86 21-61136116 Fax: 021-61189921
Website: www.intertek.com

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REPORT ISSUED TO

RAPID HARDWARE GROUP PTY LTD
222 HAMMOND ROAD, DANDENONG SOUTH, VICTORIA, 3175

SECTION 1

SCOPE

Intertek has conducted an evaluation for RAPID HARDWARE GROUP PTY LTD to determine the simulated bushfire attack characteristics of the Fiberglass Door and Steel frame, model P00-01. This evaluation began on December 2, 2025 and was completed on December 26, 2025. The test was conducted on December 12, 2025

The test was conducted in accordance with AS 1530.8.1:2018+A1:2024 Methods for fire tests on building materials, components and structures, Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack-Radiant heat and small flaming sources, Section 19 SPECIFIC PROCEDURES FOR DOORS.

Intertek B&C will service this report for the entire test record retention period. The test record retention period ends six years after the test date. Test records, such as detailed drawings, datasheets, or other pertinent project documentation, will be retained for the entire test record retention period.

For INTERTEK B&C:

COMPLETED BY:	Joke Que	**REVIEWED BY:**	Jason Xu
TITLE:	Engineer–Building & Construction	**TITLE:**	Operation Supervisor – Building & Construction
SIGNATURE:	Joke Que	**SIGNATURE:**	Jason Xu
DATE:	2025-12-26	**DATE:**	2025-12-26

INTERTEK TESTING SERVICES SHENZHEN LTD. SHANGHAI FENGXIAN BRANCH 检验检测专用章 (1)

Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch
Plant 5, No. 6958 Daye Road, Fengxian District,
Shanghai, China
Tel: +86 21-61136116 Fax: 021-61189921
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SECTION 2
SUMMARY OF TEST RESULTS

Product Name: Fiberglass Door and Steel frame, model P00-01

The test assembly satisfied the performance requirements for the following bushfire attack level:

PERFORMANCE CRITERIA	RESULTS
Bushfire attack level	**BAL: AA12.5**

The test was discontinued after a period of 60 minutes according to the test method.

This report details methods of construction, the test conditions and the results obtained when the specific element of construction described herein was tested in accordance with test method of AS 1530.8.1.

SECTION 3
TEST METHODS

The specimen was evaluated in accordance with the following:

AS 1530.8.1:2018+A1:2024, *Methods for fire tests on building materials, components and structures, Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack-Radiant heat and small flaming sources, Section 19 SPECIFIC PROCEDURES FOR DOORS*

AS 1530.4:2014(R2025), *Methods for fire tests on building materials, components and structures, Part 4: Fire-resistance test for elements of construction*

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SECTION 4
MATERIAL SOURCE/INSTALLATION

Test specimen was provided to Intertek directly by the client and was not independently selected for testing. Test specimen was received at the Evaluation Center on December 1, 2025.

Manufacturer Name: JIANGXI FANGDA TECH CO., LTD
Manufacturer Address: CHIHU INDUSTRIAL PARK, JIUJIANG, JIANGXI PR. CHINA

A description of the test assembly is given in the table below. The description of the specimen is declared by the sponsor of the test. All values quoted below are nominal, unless tolerances are given.

TESTED ASSEMBLY DESCRIPTION		
Door	Type	Single Leaf Single Action Swing Fiberglass Composite Door
	Nominal Size	920 mm wide by 2040 mm high by 35 mm thick
	Facing	2.0 mm (±0.2mm) thick Fire-resistant Sheet Molding Compound skin
	Door core	31 mm thick PU foam
	Rail & Stile	Bottom Rail: 31 x 29 mm Engineered wood bonded with 31 x 18 mm PVC Top Rail & Stile: 31 x 29 mm Engineered wood bonded with 31 x 11 mm PVC
Frame	Nominal Size	1027 mm wide by 2110 mm high by 135 mm deep
	Material	1.2 mm thick cold-rolled steel sheet
	Installation	Hollow frame and fixed to wood framed wall by two self-tapping screws at each vertical jamb
Threshold	Nominal Size	924 mm wide by 135 mm deep
	Material	1.2 mm thick cold-roll steel sheet, Hollow threshold
Hardware	Lock	Cylindrical latchset Backset: 60 mm; Latch throw length: 12 mm Latch bolt: engaged
	Hinge	Stainless Steel Hinge Size: 100 x 75 x 2.2 mm, Quantity: 3 pcs
Intumescent seal		Size: 15 x 2 mm
		Location: One strip surface mounted along the frame stop and threshold stop

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The sample ID number assigned by the test lab is S251202023SHF.001.

The drawings of the Fiberglass Door and Steel frame, model P00-01 and test wall construction can be found in Section 7 and 8 respectively.

The test was conducted in accordance with AS 1530.8.1:2018+A1:2024 Methods for fire tests on building materials, components and structures, Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack-Radiant heat and small flaming sources, Section 19 SPECIFIC PROCEDURES FOR DOORS.

The test door was mounted so as to open away from the Radiant heat condition at the request of the sponsor.

The wall system met the minimum deemed to satisfy requirements of AS 3959: 2018 (Incorporating Amendment Nos 1 and 2) for the prescribed exposure level and consisted of a wood framed wall system of 90 mm × 45 mm studs clad with one layer of 12 mm thick standard plaster board & one layer of 6 mm cement board to the exposed side and two layers of 12 mm thick standard plaster board to the unexposed side.

Prior to commencement of the test, the furnace and radiant panel were preheated to steady state conditions with the specimen shielded from the radiant heat. A calibration run was undertaken to establish the position and radiometer reading that corresponds to the required radiant heat flux at the surface of the specimen. Radiation distributions are adjusted so that the average of the four heat flux measurements at the quarter points were 0.75 + 25-15% of the value measured at the central position.

After the preheating and calibration run, positioning the test assembly in front of the furnace and radiant panel, and then one Class AA burning crib was placed at assigned corner. The timer started. Temperatures within the wall and eaves, and on unexposed surface of the wall and the door were monitored using thermocouples and the data was recorded. Radiant heat flux was monitored using an offset radiometer and the data was recorded. Periodic observations were made of the fire exposed face and the non-fire exposed face of the test assembly during the simulated bushfire test.

Position for the measurement of internal maximum temperature, unexposed surface temperature and radiant heat flux were presented in the drawing of Section 9.

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SECTION 5
TEST RESULTS

Performance criteria		Time to failure (min)	Position of failure
A gap from the fire exposed face to the non-fire exposed face greater than 3 mm		No failure	—
Sustained flaming for 10 s on the non-fire side		No failure	—
Flaming on the fire-exposed side at the end of the 60 min test period		No failure	—
Radiant heat flux 365 mm from the non-fire side exceeding 15 kW/m^2		Not applicable	—
Mean and maximum temperature rises greater than 140 K and 180 K		No failure	—
Radiant heat flux 250 mm from the specimen, greater than 3 kW/m^2 between 20 min and 60 min		No failure	—
Mean and maximum temperature of internal faces exceeding 250°C and 300°C respectively between 20 min and 60 min after commencement of test		No failure	—
Crib class	AA	Peak heat flux	12.5 kW/m^2

The test specimen therefore satisfied the applicable performance criteria of **BAL: AA12.5.**

A full set of test data is included in Section 10, and photographs have been presented in Section 11.

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SECTION 6

APPLICATION OF TEST RESULTS

6.1 Test limitations

The results of these fire tests may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions.

These results only relate to the behavior of the specimen of the element of construction under the particular conditions of the test. They are not intended to be the sole criteria for assessing the potential fire performance of the element in use, and they do not necessarily reflect the actual behavior in fires.

6.2 Permissible variations to the tested specimen

(a) Door leaf variations - Variations to the door leaf may be made as follows:
- (i) Adding decorative laminates and timber veneers, up to 1.5 mm thick, to the faces (but not edges) of hinged doors. For all products tested with decorative laminate faces the only variations shall be within similar types and thickness of material (e.g. colour, pattern, and manufacturer).
- (ii) Increasing door leaf thickness.
- (iii) Decreasing height or width.
- (iv) Increasing height or width, provided the area of the door leaf is not increased.

(b) Variations to wall systems - Variations to the wall system in which the doorset is mounted may be made as follows:
- (i) Increasing the BAL of the wall system.
- (ii) For doorsets built into framed walls the results may be applied to the following wall variations:
  - (A) Increasing timber density.
  - (B) Increasing cross-sectional dimensions of the framing element(s).
  - (C) Decreasing in sheet or panel sizes.
  - (D) Decreasing in stud spacing.
  - (E) Decreasing in fixing centres of wall sheet materials.
  - (F) Increasing in the external facing thickness.
  - (G) Doorsets mounted in masonry and concrete walls.

(c) Variations to the doorframe - Variations to the doorframe may be made as follows:
- (i) Interchanging single-rebated and double-rebated doorframes.
- (ii) Increasing the doorstop depth and width.
- (iii) Increasing or decreasing the metal thickness by ±15%.
- (iv) Fixing in accordance with AS 1905.1.

(v) Where the paint finish is not expected to contribute to the performance of the door, alternative paint or surface finish to the door leaves or frame provided the thickness does not exceed 0.5 mm.

(vi) Increasing the number of fixings used to attach fire-resisting doorsets to supporting constructions and reducing the distance between fixings.
NOTE: The dimensions of steel wraparound frames may be increased to accommodate increased supporting construction thickness.

(d) Variations to hardware - Variations to hardware may be made as follows:

(i) Substitution of locksets, provided there is no decrease in the dimensions of critical latching components, no increase in the cut-out required in the doorset, no reduction in the sizes of cover plates, no reduction in the melting point of the materials used and no increase in the volume or exposure of any combustible materials.

(ii) The addition/substitution of non-latching hardware, provided it is non-combustible and does not require any increase in cut-outs.

(iii) Varying the location of the latchset or lockset up to 80 mm vertically up or 80 mm vertically down.
NOTE: It is recommended that the latch handle be located between 900 mm and 1100 mm above the finished floor.

(iv) Varying the backset of a cylindrical lockset or latchset, provided no additional encroachment is made on any structural framework of the door leaf and the fixing method remains identical.

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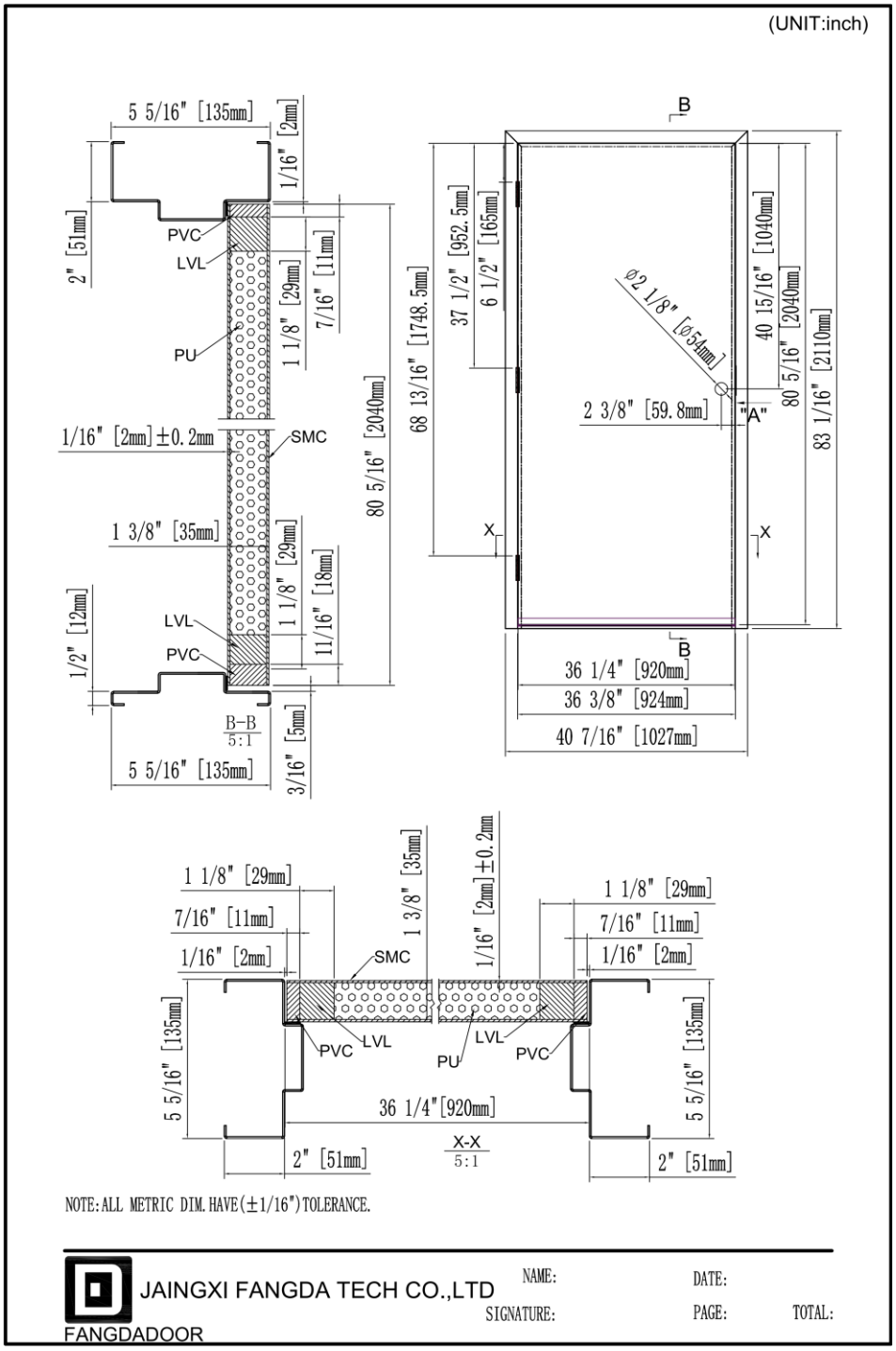
SECTION 7

TEST SAMPLE DRAWINGS



Assembly drawing of the Fiberglass Door and Steel frame, model P00-01

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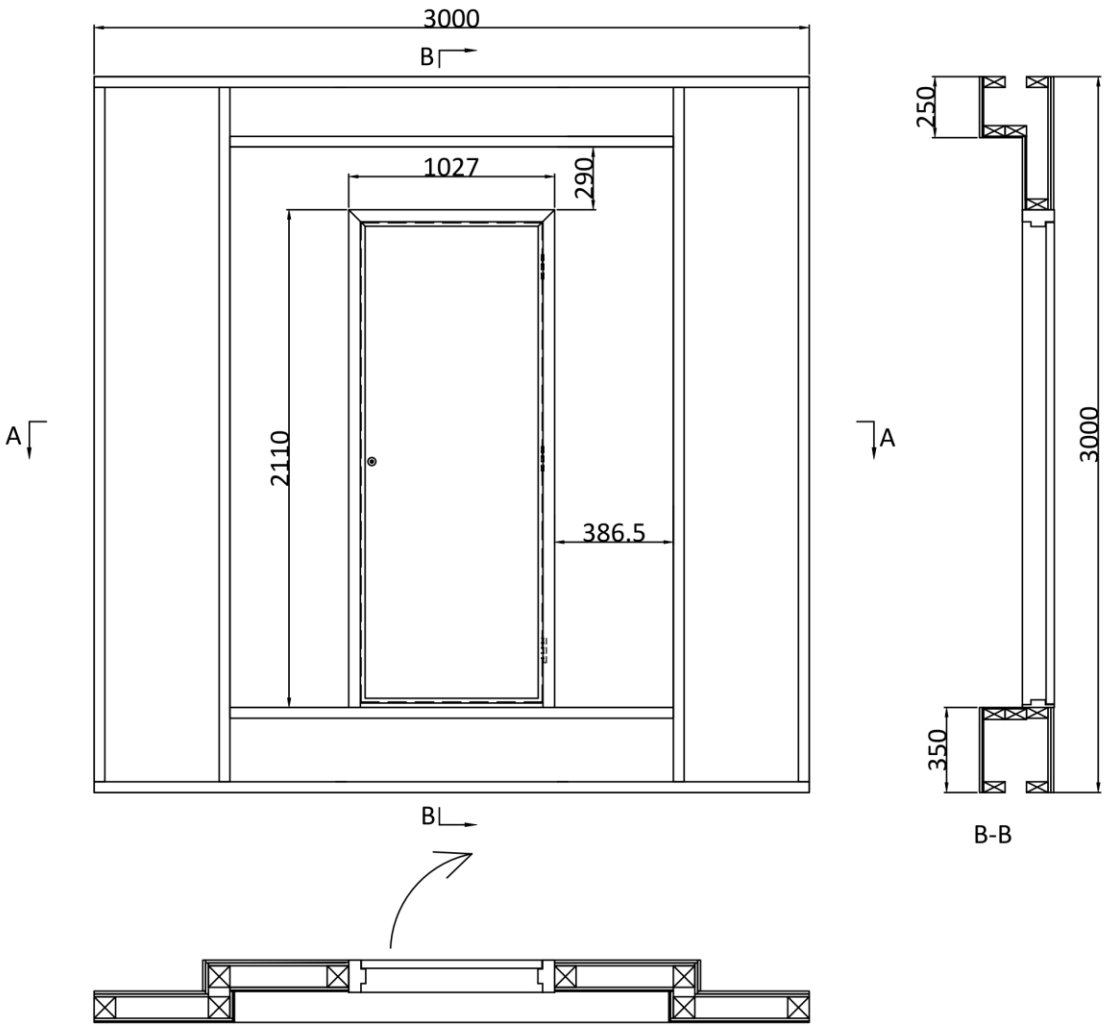
SECTION 8

TEST WALL CONSTRUCTION DRAWING



A-A
Exposed side

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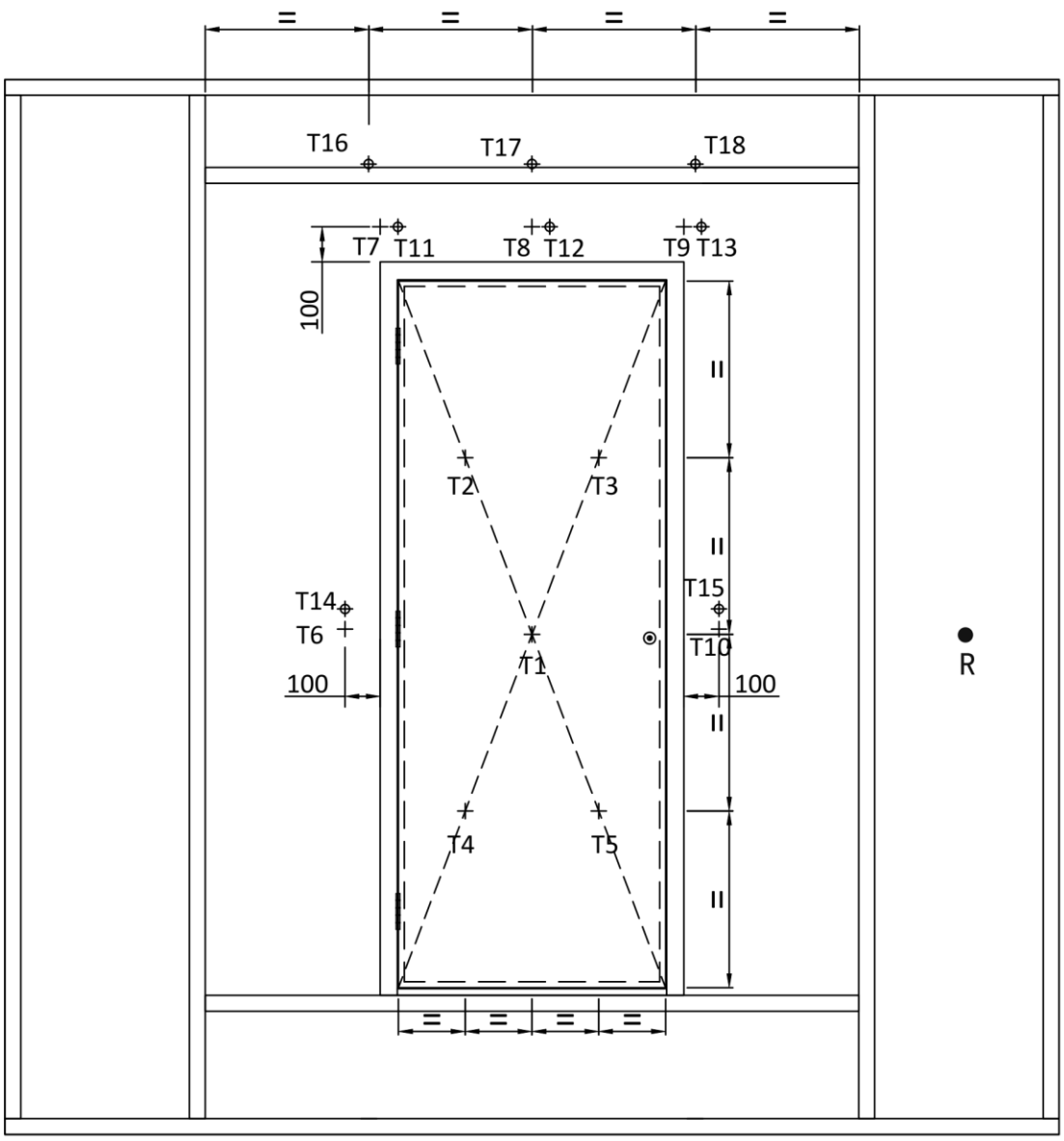
SECTION 9

TEST MEANSUREMENT DATA



Legend:

- ⌖ = Position for internal temperature within the wall and eaves
- ┼ = Position for surface temperature on unexposed surface of the wall and the door
- ● = Position for offset radiometer to enable the calculation of the required heat flux at the center of the door

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SECTION 10
TEST DATA

Standards: AS 1530.8.1:2018+A1:2024 Methods for fire tests on building materials, components and structures, Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack-Radiant heat and small flaming sources

Procedure: Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack- Radiant heat and small flaming sources

Conditioning: According to AS 1530.8.1, Section 12

Equipment:

ITEM	ID
Vertical furnace	SH1097
Test Clock	SH1042
Ambient temperature gauge	SH1097-11
Internal and unexposed thermocouples	SH1097-12
Heat flux meter	SH1093

Exposure Conditions:	According to AS 1530.8.1, Section 3.2, 14.2, 14.3
Test apparatus:	According to AS 1530.4 and 1530.8.1, Section 11
Conditioning:	According to 1530.8.1, Section 12
Test Specimen:	According to AS 1530.8.1, Section 15 through 22
Installation of test specimen:	According to AS 1530.8.1, Section 15 through 22
Heat flux meter:	According to AS 1530.8.1, Clause 11. (c)
Specimen Thermocouples:	According to AS 1530.4 and 1530.8.1, Clause 11. (g)
Test Procedure:	According to AS 1530.8.1, Section 14

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Test Observations:

Time		All observations are from the unexposed face unless noted otherwise.
Mins	**Secs**	
00	00	One Class AA burning timber crib was placed at the bottom of the leading edge above the threshold. The burning crib test started. The test assembly was to be moved to the assigned position with radiation 12.5kw/m² in front of furnace and radiant panel and lasted 120s, the radiant heat exposure test started.
01	07	The pilot ignition source was applied to the position of smoke emission of the specimen with 10s and it was not ignited.
02	20	The test assembly moved to second assigned position with radiation 10kw/m² and exposed for 40s.
03	00	The test assembly moved to third assigned position with radiation 8kw/m² and exposed for 60s.
03	02	This burning timber crib extinguished. Flame was still observed at the exposed surface of the door leaf adjacent to the position of the timber crib.
03	15	Heavy smoke issued from the lower of leading edge of unexposed surface of the door leaf.
04	00	The test assembly moved to fourth assigned position with radiation 6kw/m² and exposed for 60s.
05	00	The test assembly moved to fifth assigned position with radiation 5kw/m² and exposed for 60s.
06	00	The test assembly moved to sixth assigned position with radiation 4kw/m² and exposed for 60s.
06	17	The burning of the door facing extinguished at exposed surface of the door leaf adjacent to the position of the timber crib.
07	00	The test assembly moved to seventh assigned position with radiation 3kw/m² and exposed for 180s.
10	00	The test of radiant heat exposure was discontinued. Neither flaming nor through gap was observed on unexposed side of test assembly.
20	00	A radiant heat flux was positioned at a distance 250mm from the fire-exposed face of the center point of the door leaf.
50	00	No significant change on exposed side and unexposed side of test assembly.
60	00	Observation of 50 min period was discontinued.

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Heat flux data:

Calculation of required heat flux together with heat flux profiles specified in the standard

Time/ Secs	Specified Heat Flux/ kW/m^2	Calculation of Required Heat Flux / kW/m^2
0	0	0.0
20	12.5	13.2
40	12.5	13.4
60	12.5	13.5
80	12.5	13.6
100	12.5	13.7
120	12.5	13.8
140	12.5	13.0
160	10	10.1
180	10	10.0
200	8	8.3
220	8	8.6
240	8	8.5
260	6	7.2
280	6	7.3
300	6	7.4
320	5	6.0
340	5	5.8
360	5	5.9
380	4	4.6
400	4	4.7
420	4	4.8
440	3	3.8
460	3	3.7
480	3	3.8
500	3	3.6
520	3	3.6
540	3	3.8
560	3	3.9
580	3	3.7
600	3	3.9

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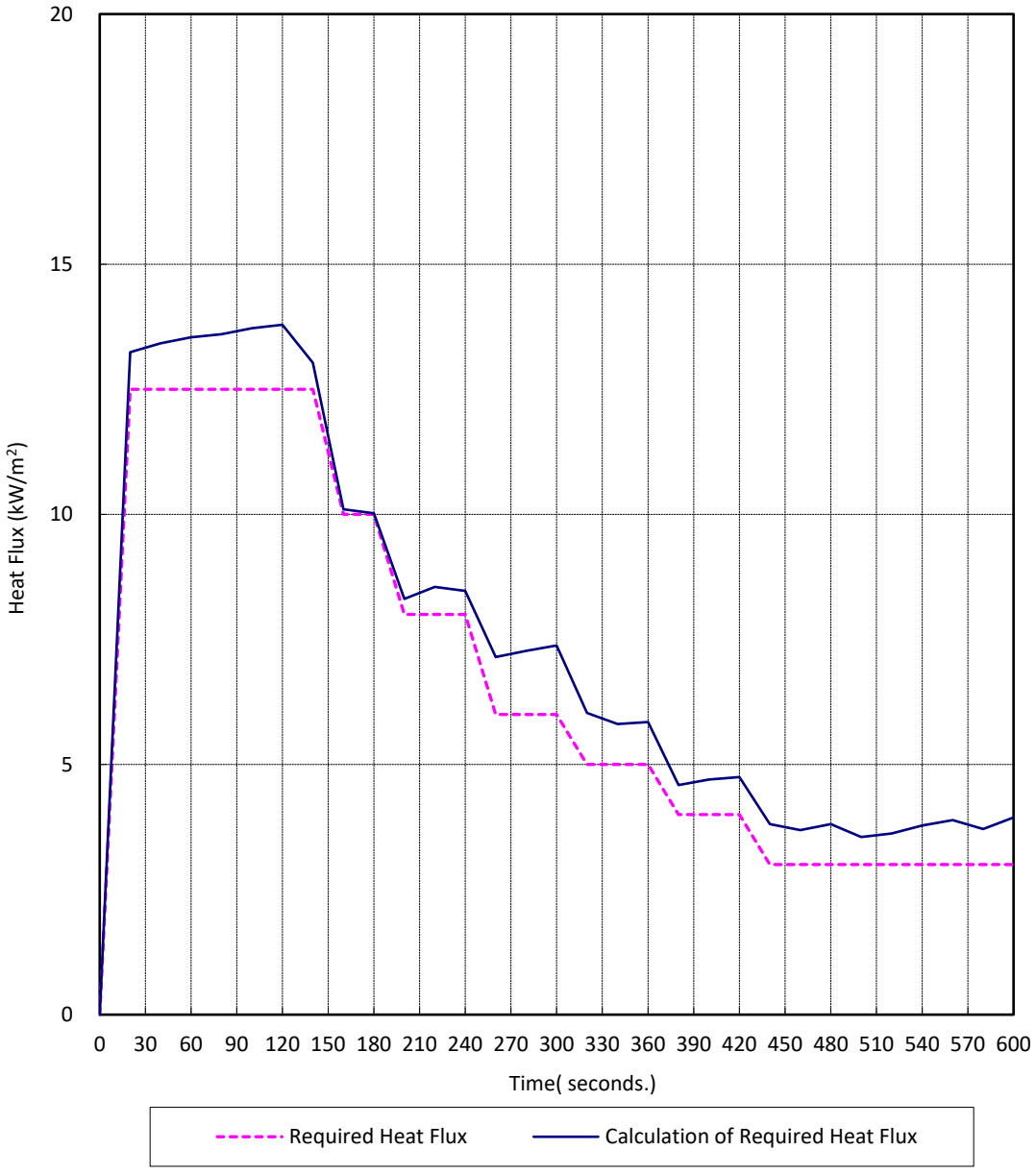
Graph for calculation of required heat flux and heat flux profiles specified in the standard



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Radiant heat flux:

R1 - At a distance of 250mm from the centre of exposed side of the specimen.

Time Mins	R1 (kW/m²)
0	/
2	/
4	/
6	/
8	/
10	/
12	/
14	/
16	/
18	/
20	0.25
22	0.17
24	0.12
26	0.07
28	0.05
30	0.04
32	0.04
34	0.01
36	0.03
38	0.00
40	0.00
42	0.00
44	0.00
46	0.00
48	0.00
50	0.00
52	0.00
54	0.00
56	0.00
58	0.00
60	0.00

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Unexposed surface temperatures on the door

Time Mins	T1 (°C)	T2 (°C)	T3 (°C)	T4 (°C)	T5 (°C)	Mean Temperature (°C)
0	23	22	23	21	20	22
2	24	23	23	21	21	22
4	25	24	25	22	22	24
6	27	27	27	24	24	26
8	30	30	30	27	27	29
10	33	34	33	29	30	32
12	35	36	35	31	32	34
14	37	37	37	33	33	35
16	37	38	37	33	34	36
18	37	37	37	33	33	36
20	36	36	36	33	33	35
22	34	35	34	32	32	33
24	33	33	33	31	30	32
26	32	32	31	29	29	31
28	30	30	30	28	28	29
30	30	29	28	27	27	28
32	28	27	27	26	25	27
34	27	26	26	25	24	26
36	26	25	25	24	23	25
38	25	24	23	23	22	24
40	24	23	23	22	22	23
42	23	22	22	21	21	22
44	23	22	21	21	20	21
46	22	21	20	20	20	21
48	21	20	20	19	19	20
50	21	20	19	19	19	20
52	21	20	19	19	18	19
54	20	19	19	18	18	19
56	20	19	19	18	18	19
58	20	19	18	18	18	18
60	20	18	18	18	17	18

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Unexposed surface temperatures on the wall

Time Mins	T6 (°C)	T7 (°C)	T8 (°C)	T9 (°C)	T10 (°C)
0	18	18	20	19	18
2	18	18	20	19	18
4	18	19	20	20	19
6	19	19	21	20	20
8	20	20	22	21	21
10	22	21	23	22	23
12	23	22	24	23	25
14	24	22	25	24	26
16	25	23	26	25	27
18	25	23	27	25	28
20	25	24	27	26	28
22	25	24	27	26	28
24	25	24	27	26	28
26	25	24	27	26	28
28	25	24	27	26	28
30	25	24	27	26	28
32	25	24	27	26	27
34	24	24	27	26	27
36	24	24	26	26	26
38	24	24	26	25	26
40	23	24	26	25	26
42	23	23	25	25	25
44	23	23	25	25	25
46	23	23	25	24	25
48	22	23	24	24	24
50	22	23	24	24	24
52	22	22	24	24	24
54	22	22	24	24	24
56	21	22	23	23	23
58	21	22	23	23	23
60	21	22	23	23	23

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Internal temperatures

Time Mins	T11 (°C)	T12 (°C)	T13 (°C)	T14 (°C)	T15 (°C)	T16 (°C)	T17 (°C)	T18 (°C)
0	33	34	32	23	27	24	23	24
2	46	45	41	34	39	20	26	30
4	64	61	56	60	65	43	35	41
6	69	67	64	74	76	28	45	51
8	70	70	66	75	77	28	52	56
10	71	72	68	76	78	49	56	59
12	71	73	67	74	78	28	57	59
14	70	71	66	71	77	23	57	58
16	69	68	65	68	74	27	56	57
18	67	65	63	65	72	26	55	55
20	64	62	61	62	69	26	53	53
22	61	59	58	59	66	25	52	52
24	59	57	56	56	63	24	50	50
26	56	54	54	53	60	23	49	48
28	53	52	52	50	58	24	47	47
30	51	50	50	48	55	24	46	45
32	49	48	48	46	52	23	45	44
34	47	46	47	44	50	23	43	43
36	45	44	45	42	48	22	42	41
38	44	43	43	40	46	22	41	40
40	42	41	42	39	44	22	40	39
42	41	40	41	37	42	21	39	38
44	40	39	39	36	40	22	38	37
46	39	38	38	35	39	21	37	36
48	38	37	37	34	38	21	36	35
50	37	36	37	33	36	21	36	35
52	36	35	36	32	36	21	35	34
54	36	35	36	31	35	20	34	33
56	35	35	35	31	34	20	34	33
58	35	34	35	30	33	20	33	32
60	34	33	34	29	33	20	33	32

SECTION 11
PHOTOGRAPHS

Fig. 1 Exposed Side before the Radiant heat test

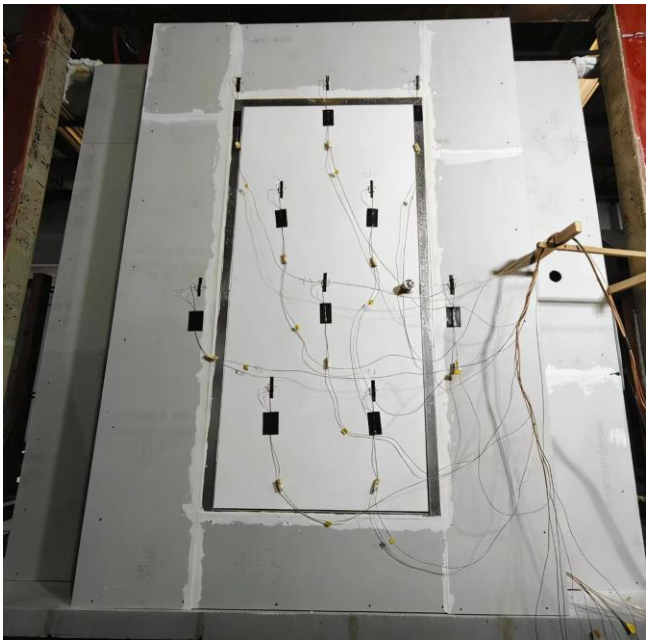

Fig. 2 Unexposed Side before the Radiant heat test

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Fig. 3 Exposed Side after 60 minutes

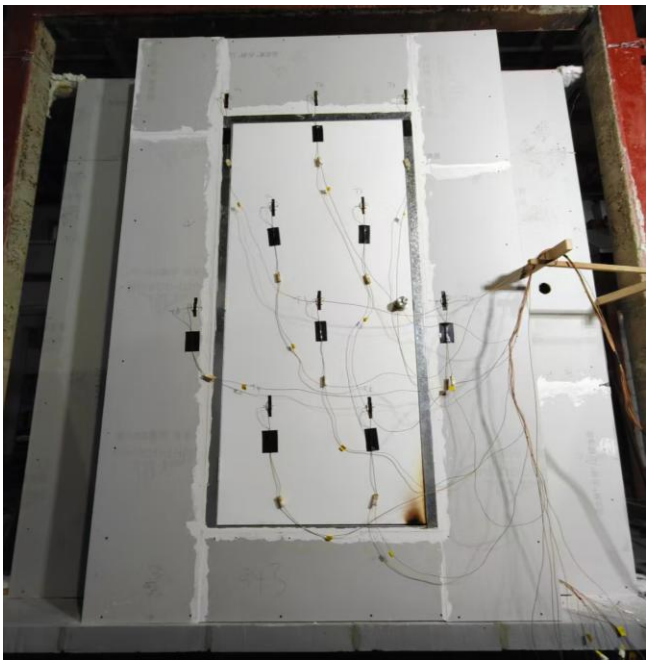

Fig. 4 Unexposed Side after 60 minutes

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SECTION 12
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	2025-12-26	N/A	Original Report Issue