



中国认可
国际互认
检测
TESTING
CNAS L14889

Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 1 of 16

Applicant : BRD NEW MATERIALS CO., LTD

The following sample(s) was / were submitted and identified by client, BITFR, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client, results apply to the sample as received.

Name of Sample(s) : ROCK WOOL SANDWICH PANEL

Date Sample(s) Received : Nov. 29, 2024

Date Tested : Nov. 29, 2024 TO Dec. 3, 2024

Test Requested : UL 263-2020 Fire Tests of Building Construction and Materials, clause 7: Nonbearing walls and partitions test

Test Results : According to the test results, the submitted sample fire resistance performance as follows:
Fire resistance time: \geq 120 min.

Conclusion : According to the test results, the submitted sample **meets** the requirement of **2.0 h** fire resistance test.

Prepared by: Cynthia Luo

Checked by: Kevin Chen

BITFR (Henan) Company Limited



Approved by: Eric Hao

Inspection & Testing Service

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbzr@bitfr.ha.cn Homepage: www.hnbzr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage

I. Test Conducted

This test was conducted in accordance with UL 263-2020 Fire Tests of Building Construction and Materials, clause 7: Nonbearing walls and partitions test.

II. Sample Details

Sample description	ROCK WOOL SANDWICH PANEL
Separating elements	Vertical
Exposed surface	Any surface

III. Examination of specimen and Installation

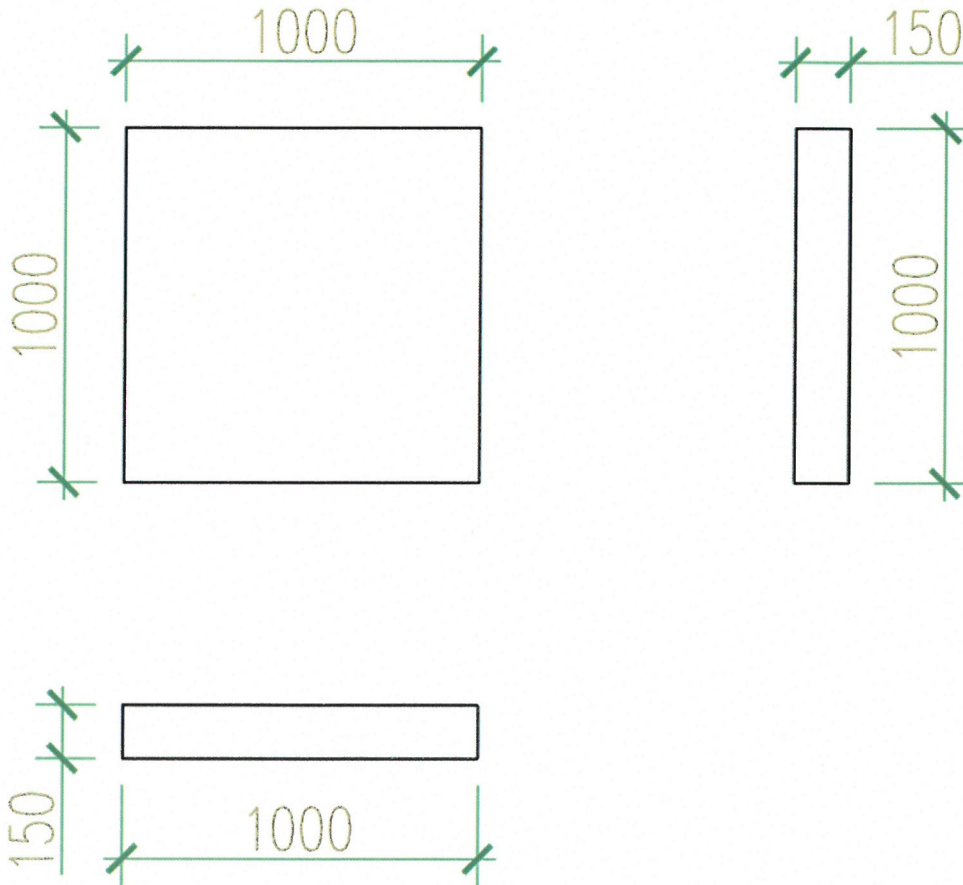


Figure 1-Sample size(mm)

To be continued...



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 3 of 16

IV. Test Results

Clause	Conditions of acceptance	Result
UL 263-2020 7.3.1	During the tests, the construction shall have complied with the following conditions: a) The wall or partition shall have sustained the fire endurance test without passage of flame or passage of gases hot enough to ignite cotton waste during the classification period.	120 min, the cotton pad was not ignited.
	b) The wall or partition shall have sustained the hose stream test without development of an opening that would permit a projection of water from the hose stream beyond the unexposed surface.	No passage of water to other side.
	c) Transmission of heat through the wall or partition during the classification period shall not have raised the temperature on its unexposed surface to more than 250° F (139 °C) above its initial temperature.	120 min, the average
UL 263-2020 3.3.8	Where the conditions of acceptance place a limitation on the rise of temperature of the unexposed surface, the temperature end point of the fire-resistance period shall be determined by the average of the measurements taken at individual points; except that if a temperature rise 30% in excess of the specified limit occurs at any one of these points, the remainder shall be ignored and the fire-resistance period judged as ended.	temperature rise was 109 °C, the top of temperature rise was 115 °C.

V. Test behavior:

Fire-resistance test observations

Time(mm:ss)	Test behavior
00:00	Test started.
120:24	Sample kept fire resistance, ended of testing(Meet customer mandate time).

Hose stream test

Time(mm:ss)	Test behavior
00:00	Hose-stream test started.
00:17	No passage of water to other side. Ended of testing.

To be continued...

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbizr@bitfr.ha.cn Homepage: www.hnbizr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



VI. Conclusion

The specimen satisfied the performance requirements for the following period:

Fire resistance time: ≥ 120 min

Hose stream test: Pass

VII. Statement

The test report shall provide detailed structural data of the specimen, test conditions and experimental results obtained from the test of the specimen according to the method specified in this Part UL 263-2020. The test results are invalid if the specimen has large deviations in terms of size, detailed structural data, load, stress, constraint or boundary conditions.

VIII. Test result curve:

The following data were collected during the test:

- a) The standard and actual furnace temperature / time curve, as shown in Figure 2.
- b) The temperature / time curve of unexposed surface, as shown in Figure 3.
- c) Unexposed surface temperature, as shown in Table 1.
- d) Temperature in the furnace, as shown in Table 2.

To be continued...

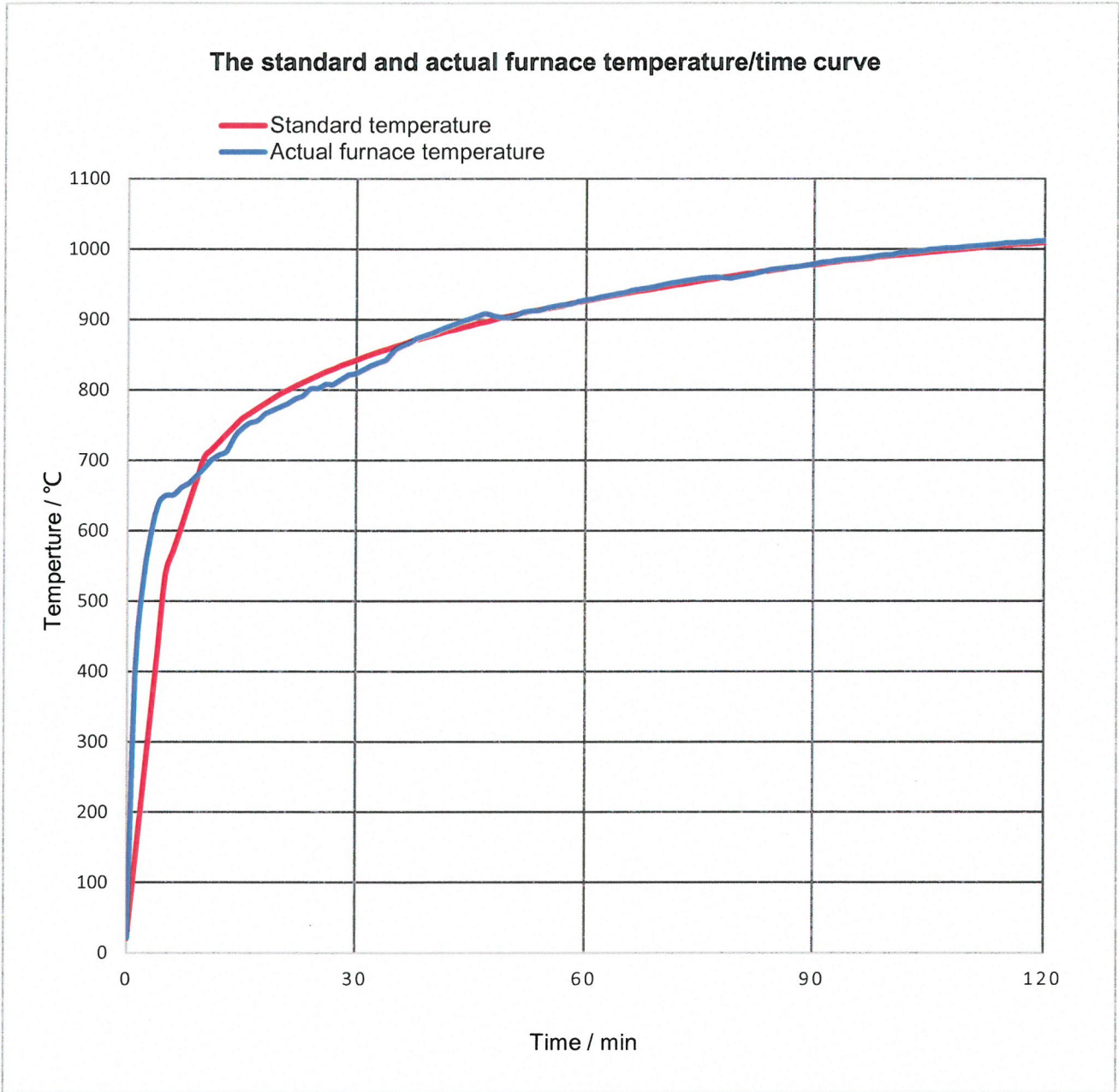


Figure 2 - The standard and actual furnace temperature / time curve

To be continued...

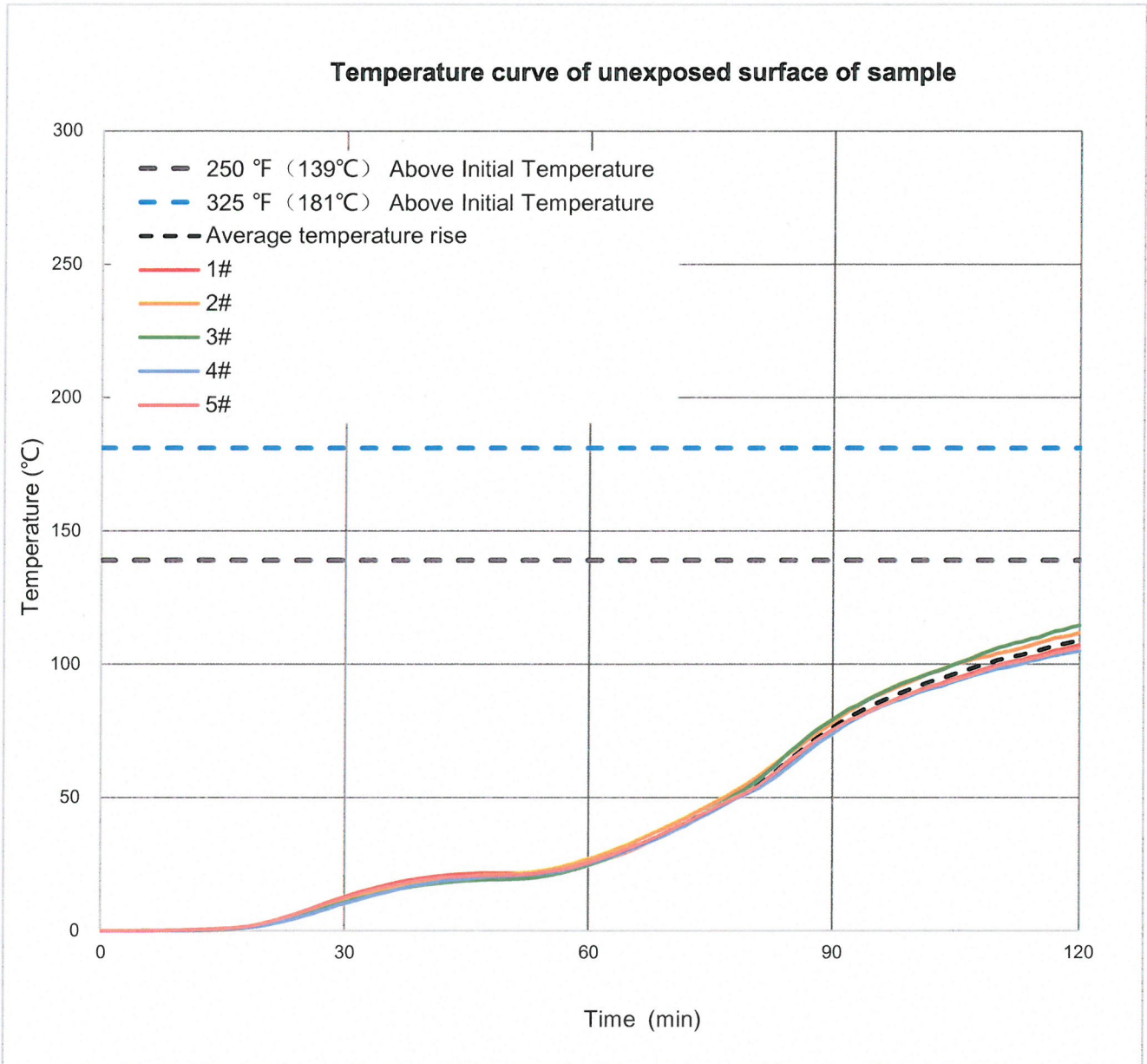


Figure 3 - The temperature / time curve of unexposed surface

To be continued...



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 7 of 16

Table 1 - Unexposed surface temperature

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
0	0	0	0	0	0
0.5	0	0	0	0	0
1	0	0	0	0	0
1.5	0	0	0	0	0
2	0	0	0	0	0
2.5	0	0	0	0	0
3	0	0	0	0	0
3.5	0	0	0	0	0
4	0	0	0	0	0
4.5	0	0	0	0	0
5	0	0	0	0	0
5.5	0	0	0	0	0
6	0	0	0	0	0
6.5	0	0	0	0	0
7	0	0	0	0	0
7.5	0	0	0	0	0
8	0	0	0	0	0
8.5	0	0	0	0	0
9	0	0	0	0	0
9.5	0	0	0	0	0
10	0	0	0	0	0
10.5	0	0	0	0	0
11	0	0	0	0	0
11.5	0	0	0	0	0
12	0	0	0	0	0
12.5	1	0	0	0	1
13	1	0	0	0	1
13.5	1	0	0	0	1
14	1	0	0	0	1
14.5	1	0	1	0	1
15	1	0	1	0	1
15.5	1	1	1	1	1
16	1	1	1	1	1
16.5	1	1	1	1	1
17	1	1	1	1	1
17.5	2	1	1	1	2

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbzr@bitfr.ha.cn Homepage: www.hnbzr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 8 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
18	2	1	1	1	2
18.5	2	2	2	1	2
19	2	2	2	1	2
19.5	3	2	2	2	3
20	3	2	2	2	3
20.5	3	3	3	3	4
21	3	3	3	3	4
21.5	4	4	4	3	4
22	4	4	4	3	4
22.5	5	4	4	4	5
23	5	4	4	4	5
23.5	6	5	5	5	6
24	6	5	5	5	6
24.5	7	6	6	6	7
25	7	6	6	6	7
25.5	8	7	7	6	8
26	8	7	7	6	8
26.5	9	8	8	7	9
27	9	8	8	7	9
27.5	10	9	9	8	10
28	11	9	9	8	10
28.5	12	10	10	9	11
29	12	10	10	9	11
29.5	13	11	11	10	12
30	13	11	11	10	12
30.5	14	12	12	11	13
31	14	12	12	11	13
31.5	15	13	12	12	14
32	15	13	12	12	14
32.5	15	14	13	13	15
33	15	14	13	13	15
33.5	16	14	14	14	16
34	16	14	14	14	16
34.5	17	15	15	14	16
35	17	15	15	14	16
35.5	18	16	15	15	17
36	18	16	15	15	17

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbzr@bitfr.ha.cn Homepage: www.hnbzr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 9 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
36.5	18	17	16	16	18
37	18	17	16	16	18
37.5	19	17	16	17	18
38	19	17	16	17	18
38.5	20	18	17	17	19
39	20	18	17	17	19
39.5	20	18	17	18	19
40	20	18	17	18	19
40.5	20	19	18	18	20
41	20	19	18	18	20
41.5	21	19	18	19	20
42	21	19	18	19	20
42.5	21	20	18	19	20
43	21	20	18	19	20
43.5	21	20	19	19	20
44	21	20	19	19	20
44.5	21	20	19	19	21
45	21	20	19	19	21
45.5	22	21	19	20	21
46	22	21	19	20	21
46.5	22	21	19	20	21
47	22	21	19	20	21
47.5	22	21	19	20	21
48	22	21	19	20	21
48.5	22	21	19	20	21
49	22	21	19	20	21
49.5	22	21	19	20	21
50	22	21	19	20	21
50.5	22	21	19	21	21
51	22	21	19	21	21
51.5	22	22	19	21	21
52	22	22	19	21	21
52.5	22	22	20	21	21
53	22	22	20	21	21
53.5	22	22	20	21	22
54	22	22	20	21	22
54.5	22	23	21	22	22

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongfeng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbizr@bitfr.ha.cn Homepage: www.hnbizr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 10 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
55	22	23	21	22	22
55.5	22	23	21	22	23
56	22	23	21	22	23
56.5	23	24	22	23	23
57	23	24	22	23	23
57.5	23	25	23	23	24
58	23	25	23	23	24
58.5	24	26	24	24	25
59	24	26	24	24	25
59.5	25	27	25	25	25
60	25	27	25	25	25
60.5	26	28	26	26	26
61	26	28	26	26	27
61.5	27	29	27	27	28
62	27	29	27	27	28
62.5	28	30	28	28	29
63	28	30	28	28	29
63.5	29	31	29	29	30
64	29	31	29	29	30
64.5	30	32	30	30	31
65	30	33	30	30	31
65.5	31	34	31	31	32
66	31	34	32	31	32
66.5	32	35	33	32	33
67	33	35	33	33	33
67.5	34	36	34	34	34
68	34	37	35	34	35
68.5	35	38	36	35	36
69	35	38	36	35	36
69.5	36	39	37	36	37
70	37	40	37	37	38
70.5	38	41	38	38	39
71	38	41	39	38	39
71.5	39	42	40	39	40
72	40	42	41	39	41
72.5	41	43	42	40	42
73	41	44	42	41	42

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbzr@bitfr.ha.cn Homepage: www.hnbzr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 11 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
73.5	42	45	43	42	43
74	43	46	44	43	44
74.5	44	47	45	44	45
75	44	47	45	44	45
75.5	45	48	46	45	46
76	46	49	47	46	47
76.5	47	50	48	47	48
77	48	51	49	48	48
77.5	49	52	50	49	49
78	49	52	51	49	50
78.5	50	53	52	50	51
79	51	54	53	51	51
79.5	52	55	54	52	52
80	52	56	55	52	53
80.5	53	57	56	53	54
81	54	58	57	54	55
81.5	55	60	59	55	56
82	56	61	60	56	57
82.5	57	62	61	57	59
83	58	63	62	58	60
83.5	59	64	64	59	61
84	60	65	65	60	62
84.5	62	66	67	61	64
85	63	67	68	62	65
85.5	64	68	69	64	66
86	65	69	70	65	67
86.5	67	71	72	66	68
87	68	72	73	67	69
87.5	70	73	74	69	71
88	71	74	75	70	72
88.5	72	75	76	71	73
89	73	76	77	72	74
89.5	74	77	78	73	75
90	75	78	79	74	75
90.5	76	79	80	75	76
91	77	80	81	76	77
91.5	78	81	82	77	78

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbizr@bitfr.ha.cn Homepage: www.hnbizr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 12 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
92	79	82	83	78	79
92.5	80	83	84	79	80
93	80	84	85	80	80
93.5	81	85	86	81	81
94	82	86	86	82	82
94.5	83	87	87	83	83
95	83	88	88	83	83
95.5	84	89	89	84	84
96	85	89	90	85	85
96.5	86	90	91	86	86
97	86	91	91	86	86
97.5	87	92	92	87	87
98	87	92	93	87	87
98.5	88	93	94	88	88
99	89	93	94	88	89
99.5	90	94	95	89	90
100	90	94	95	89	90
100.5	91	95	96	90	91
101	91	96	96	90	91
101.5	92	97	97	91	92
102	92	97	97	91	92
102.5	93	98	98	92	93
103	93	98	98	92	93
103.5	94	99	99	93	93
104	94	99	99	93	93
104.5	95	100	100	94	94
105	95	100	100	94	94
105.5	96	101	101	95	95
106	96	101	101	95	95
106.5	97	102	102	96	96
107	97	102	103	96	96
107.5	98	103	104	97	97
108	98	103	104	97	97
108.5	99	103	105	98	98
109	99	103	105	98	98
109.5	100	104	106	98	99
110	100	104	106	98	100

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbizr@bitfr.ha.cn Homepage: www.hnbizr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 13 of 16

Time (min)	Thermocouple No.				
	1#(°C)	2#(°C)	3#(°C)	4#(°C)	5#(°C)
110.5	100	105	107	99	100
111	100	105	107	99	100
111.5	101	105	108	100	101
112	101	105	108	100	101
112.5	102	106	109	100	101
113	102	106	109	100	101
113.5	103	107	110	101	102
114	103	107	110	101	102
114.5	103	108	110	102	103
115	103	108	110	102	103
115.5	104	109	111	103	103
116	104	109	111	103	103
116.5	105	110	112	103	104
117	105	110	112	103	104
117.5	106	110	113	104	105
118	106	110	113	104	105
118.5	106	111	114	104	106
119	106	111	114	104	106
119.5	107	112	115	105	106
120	107	112	115	105	106

To be continued...

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbzlzr@bitfr.ha.cn Homepage: www.hnbzlzr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

Date: Dec. 16, 2024

Page 14 of 16

Table 2 - Temperature in the furnace

TIME (min)	Standard temperature (°C)	Actual furnace temperature (°C)	TIME (min)	Standard temperature (°C)	Actual furnace temperature (°C)
0	20	21	31	847	828
1	124	399	32	851	834
2	227	523	33	855	839
3	331	593	34	858	843
4	434	638	35	862	856
5	538	650	36	865	862
6	571	651	37	869	867
7	604	661	38	872	873
8	638	667	39	875	877
9	671	678	40	878	880
10	704	688	41	881	885
11	715	700	42	884	889
12	726	707	43	886	893
13	738	713	44	889	897
14	749	733	45	892	901
15	760	745	46	895	905
16	767	753	47	897	908
17	774	756	48	900	905
18	781	766	49	903	903
19	788	771	50	905	903
20	795	776	51	907	906
21	800	780	52	910	911
22	806	787	53	912	912
23	811	791	54	914	913
24	816	801	55	916	916
25	821	802	56	918	919
26	826	808	57	920	921
27	830	807	58	923	922
28	835	814	59	925	925
29	839	821	60	927	928
30	843	823			

To be continued...

BITFR (Henan) Company Limited

No.5, Weidu High-tech Industrial Park, Hongteng Road, Weidu District, Xuchang City, Henan Province (Zip code: 461000)

Tel: 0374-8323888 Fax: 0374-5378555 Email: hnbizr@bitfr.ha.cn Homepage: www.hnbizr.cn

This report shall not be reproduced unless with prior written approval from BITFR (Henan) Company Limited.

For conditions of Issuance of this test report, Please refer to the overleaf or homepage



Test Report

NO.: BITFR202411137

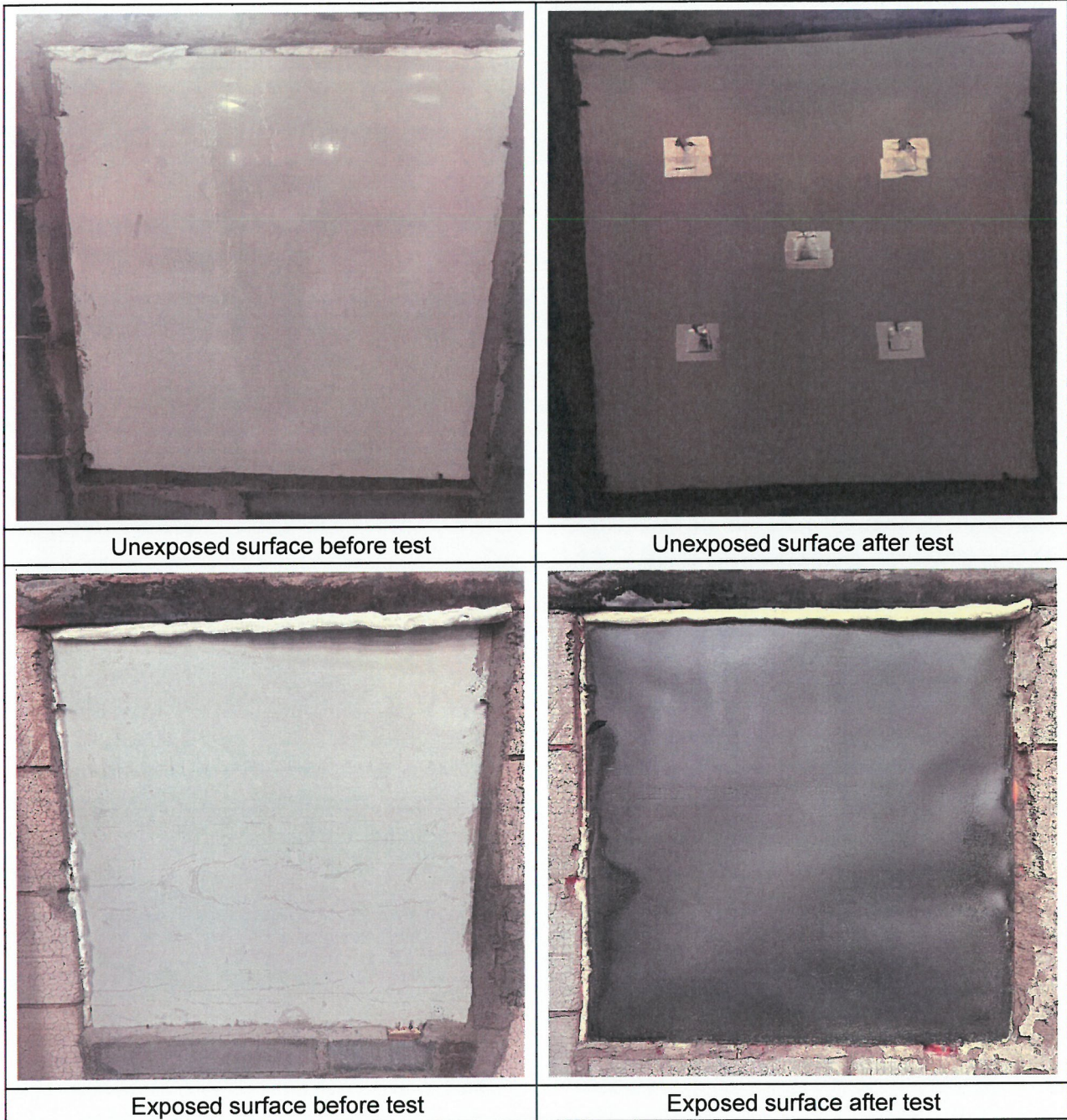
Date: Dec. 16, 2024

Page 15 of 16

TIME (min)	Standard temperature (°C)	Actual furnace temperature (°C)	TIME (min)	Standard temperature (°C)	Actual furnace temperature (°C)
61	929	929	91	979	982
62	931	932	92	981	982
63	933	935	93	982	985
64	935	938	94	984	985
65	937	938	95	985	986
66	939	943	96	986	988
67	941	944	97	987	988
68	942	947	98	989	991
69	944	949	99	990	991
70	946	952	100	991	991
71	948	955	101	992	994
72	950	955	102	993	997
73	951	957	103	994	996
74	953	957	104	995	998
75	955	959	105	996	998
76	957	962	106	997	1000
77	958	964	107	998	998
78	960	964	108	999	997
79	961	967	109	1000	998
80	963	969	110	1001	999
81	965	972	111	1002	999
82	966	971	112	1003	1000
83	968	974	113	1004	1002
84	969	975	114	1005	1001
85	971	977	115	1006	1002
86	972	975	116	1007	1004
87	974	976	117	1008	1004
88	975	978	118	1008	1004
89	977	978	119	1009	1008
90	978	980	120	1010	1007

To be continued...

Photo Appendix



****End of Report****