

TEST REPORT

REACTION TO FIRE TEST

Test Sponsor:

Panel Technology Factory (Technopanel)
Al-Mashael
Riyadh, Saudi Arabia
T: +966 92 000 6292
Website: www.technopanel.com.sa

Test Assembly:

4mm thick Aluminium Composite Panel-FRB1

Test Standard

BS EN 13823:2020 Reaction to Fire Tests for Building Products — Building Products excluding Floorings exposed to the Thermal Attack by a Single Burning Item



**THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS**

Test Date: 27-Jan-23
Issue Date: 13-Feb-23
Test Reference No: XA017-1

PO BOX 26385, DUBAI UAE

T +971 (0)4 821 5777

fire@bell-wright.com

www.bell-wright.com

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1. INTRODUCTION

Determination of Reaction to fire performance of building products excluding floorings when exposed to thermal attack by a Single Burning Item (SBI) (a sand-box burner supplied with propane) in accordance with BS EN 13823:2020.

2. SPONSOR

Name: Panel Technology Factory (Technopanel)
Address: Al-Masha'el
Riyadh, Saudi Arabia
T: +966 92 000 6292
Website: www.technopanel.com.sa

3. TESTING LABORATORY

Name: Thomas Bell-Wright International Consultants (TBWIC)
Address: Corner of 46th and 47th Streets,
Jebel Ali Industrial Area 1
Dubai, United Arab Emirates
T: +971 (0)4 821 5777
Website: www.bell-wright.com

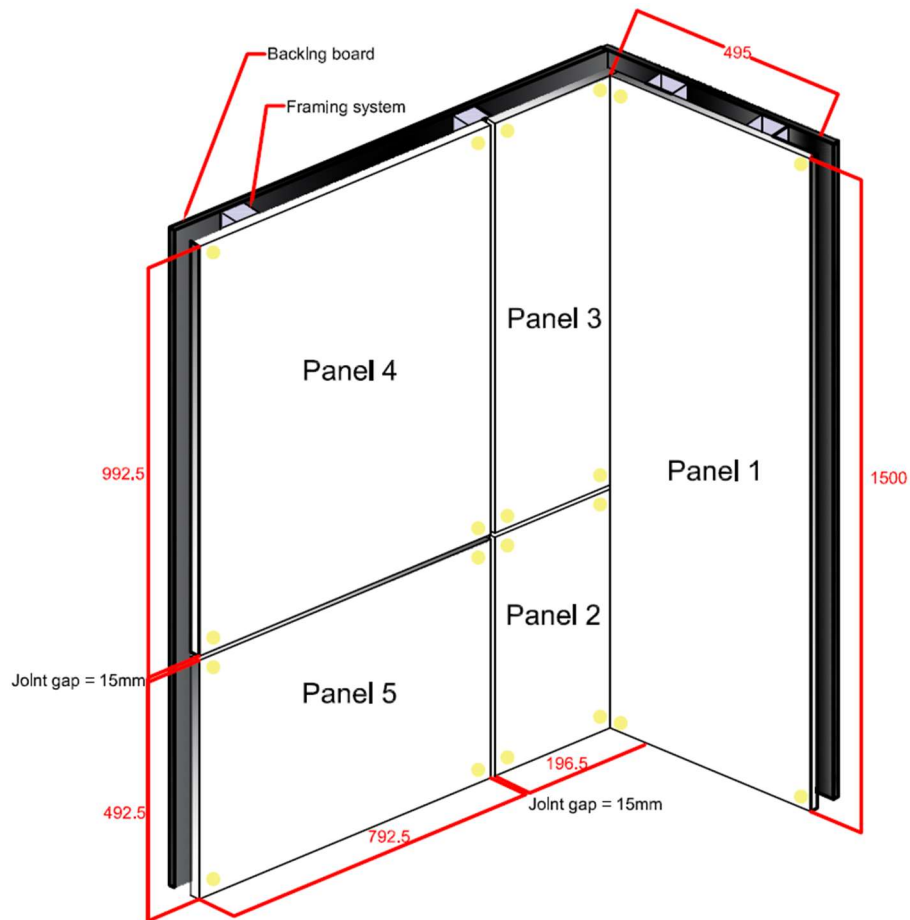
4. DATE OF TEST

Sample received: 24-Jan-23
Test date: 27-Jan-23

The test was not witnessed by the sponsor.



6. SPECIMEN DRAWING



Drawing 1: Dimensions of the long and short wing of the test specimen.
All dimensions are in millimeters (mm).



Drawing 2: Top view of the mounted specimen with airgap.
All dimensions are in millimeters (mm).



8. METHOD OF TEST

8.1. Test Procedure

The test was performed in accordance with the requirements of BS EN 13823:2020 “Reaction to fire tests for building products – Building products excluding floorings exposed to the thermal attack by the single burning item”.

8.2. Conditioning

After delivery on 24-Jan-23, the specimens were conditioned to constant weight at 21 to 25 °C and 45 to 55% relative humidity as per BS EN 13238:2010 “Reaction to fire tests for building products – Conditioning procedures and general rules for selection of substrates”.

Note: There were deviations observed in the temperature and relative humidity in 4 separate probes of thermo-hygrometer in our conditioning room, however the average values were within the limit.

9. OBSERVATION

Test Data and Observation

Observations			
Occurrence of sustained flames reaching the far edge of long wing specimen at any height between 500-1000mm at any time during the test - LFS	Nil	Nil	Nil
Flaming droplets/particles within the first 600s	Nil	Nil	Nil
Burning droplets/particles ≥10 s within the first 600s	Nil	Nil	Nil
End of test, s	1560	1560	1560

10. SUMMARY OF RESULTS

The test specimen has been evaluated in accordance with BS EN 13823:2020 Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item.

Deviations: If any deviations from the test method.

The complete test results for the specimen are:

TEST PARAMETERS	TEST RESULTS			Average
	Specimen 1	Specimen 2	Specimen 3	
FIGRA _{0.2MJ} (W/s)	23	16	10	16
FIGRA _{0.4MJ} (W/s)	23	16	10	16
THR _{600s} , MJ	1.8	1.7	1.3	1.6
SMOGR _A , m ² /s ² Note 1	0	0	0	0
TSP _{600s} , m ² Note 1	13	25	16	18
Occurrence of sustained flames reaching the far edge of long wing specimen at any height between 500-1000mm at any time during the test - LFS	Nil	Nil	Nil	Nil
Flaming droplets/particles ≥ 10s within the first 600s	Nil	Nil	Nil	Nil
Burning droplets/particles ≤10 s within the first 600s	Nil	Nil	Nil	Nil

Note 1: Corrected value as per ANNEX A, Clause A.6.1.2 of BS EN 13823:2020.



11. LIMITATION

“The test results relate to the behavior of the test specimens of a product under the particular conditions of the test; they are not intended to be sole criterion for assessing the potential fire hazard of the product in use”- Clause 10q, BS EN 13823:2020.

Results are valid for the tested configuration only.

This report and all records of the test to which it relates may be not be retained by TBWIC further than 5 years from the date of testing.

This test report is respectfully submitted by: Thomas Bell-Wright International Consultants

Prepared by:

Reviewed and Authorized by:



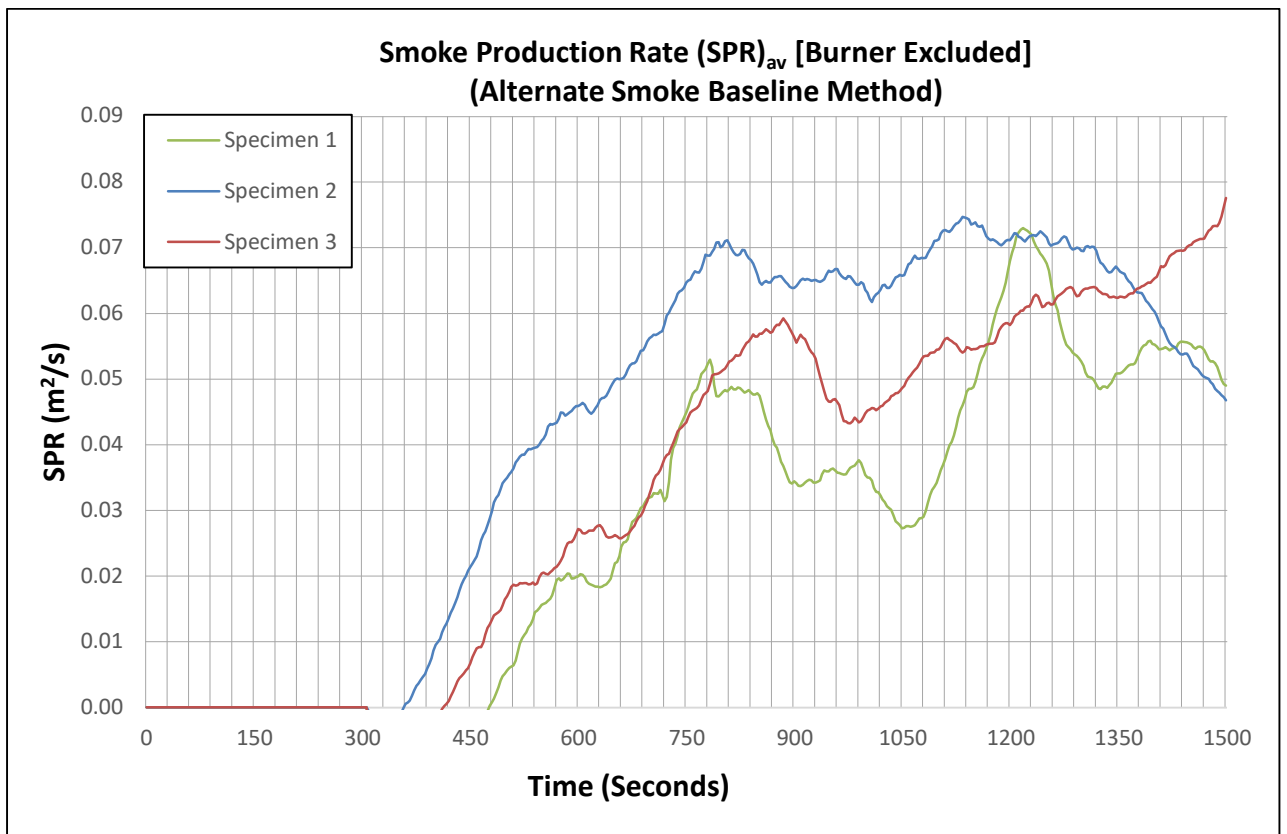
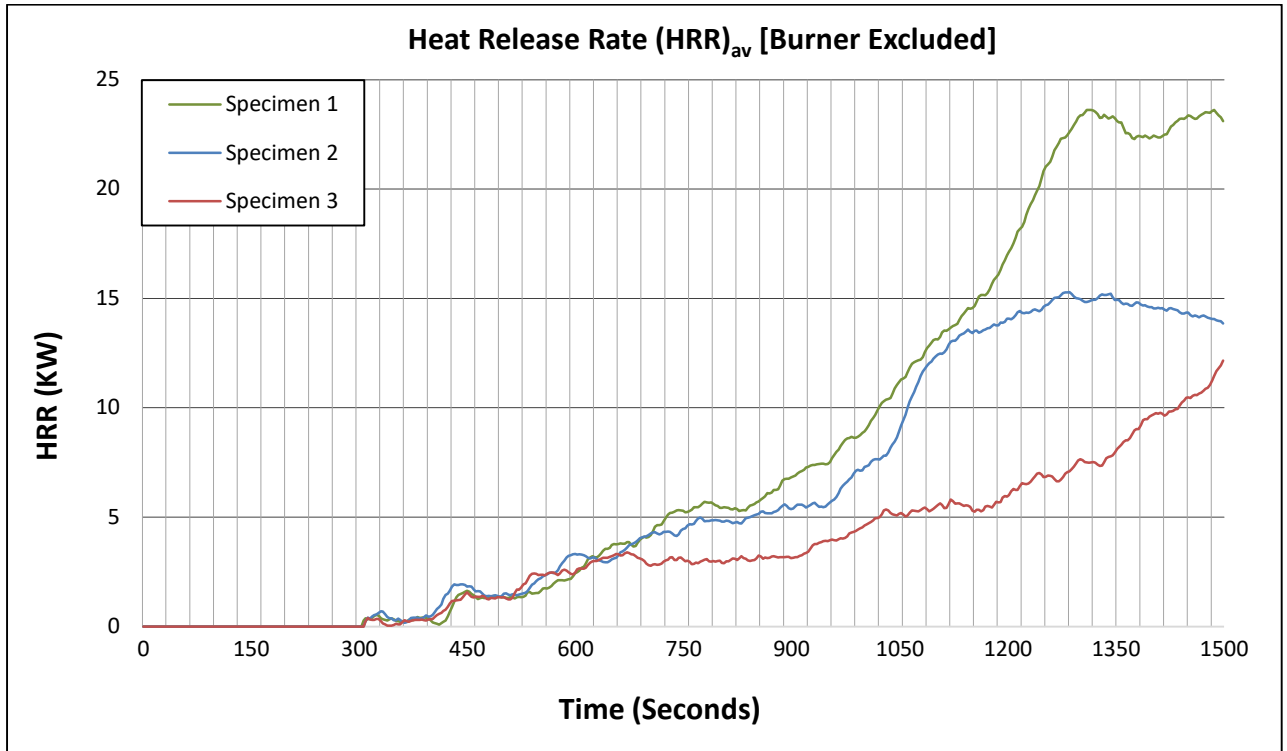
Malak Megly
Junior Fire Testing Engineer

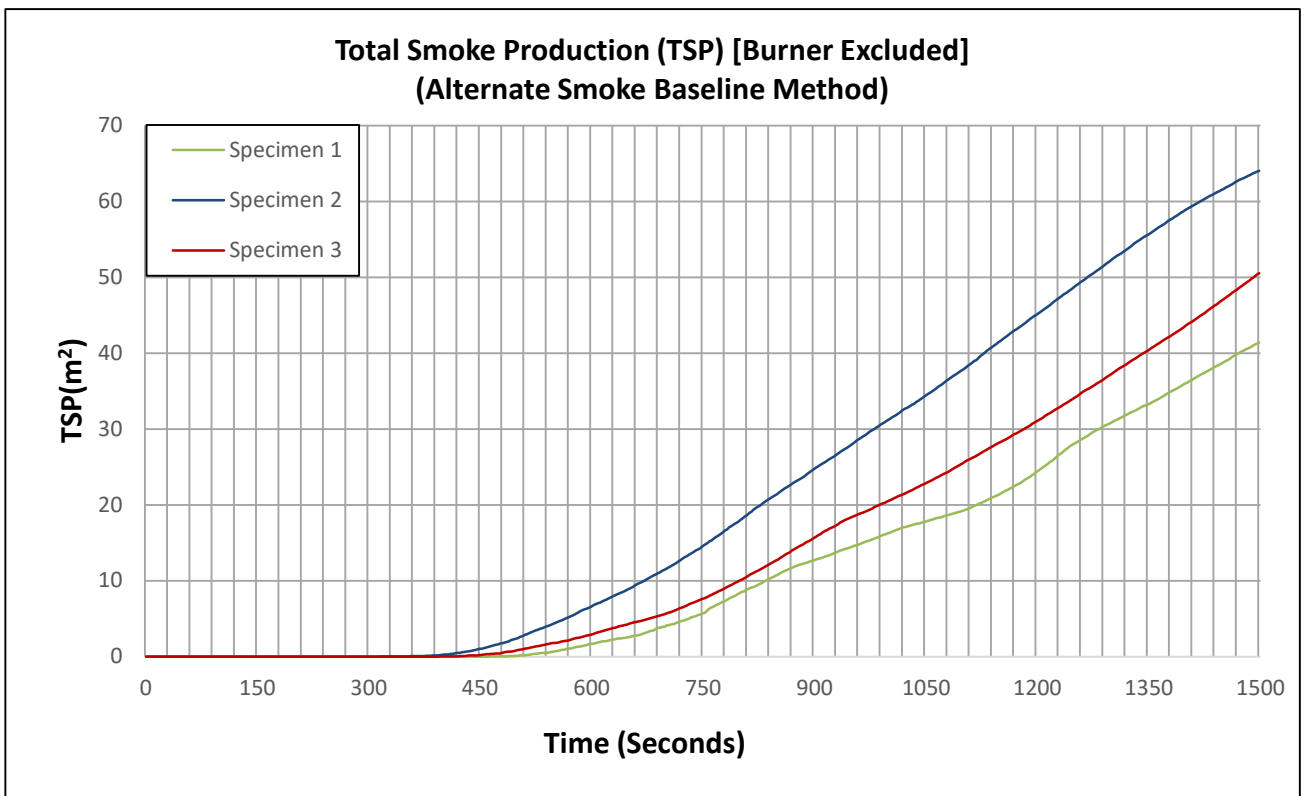
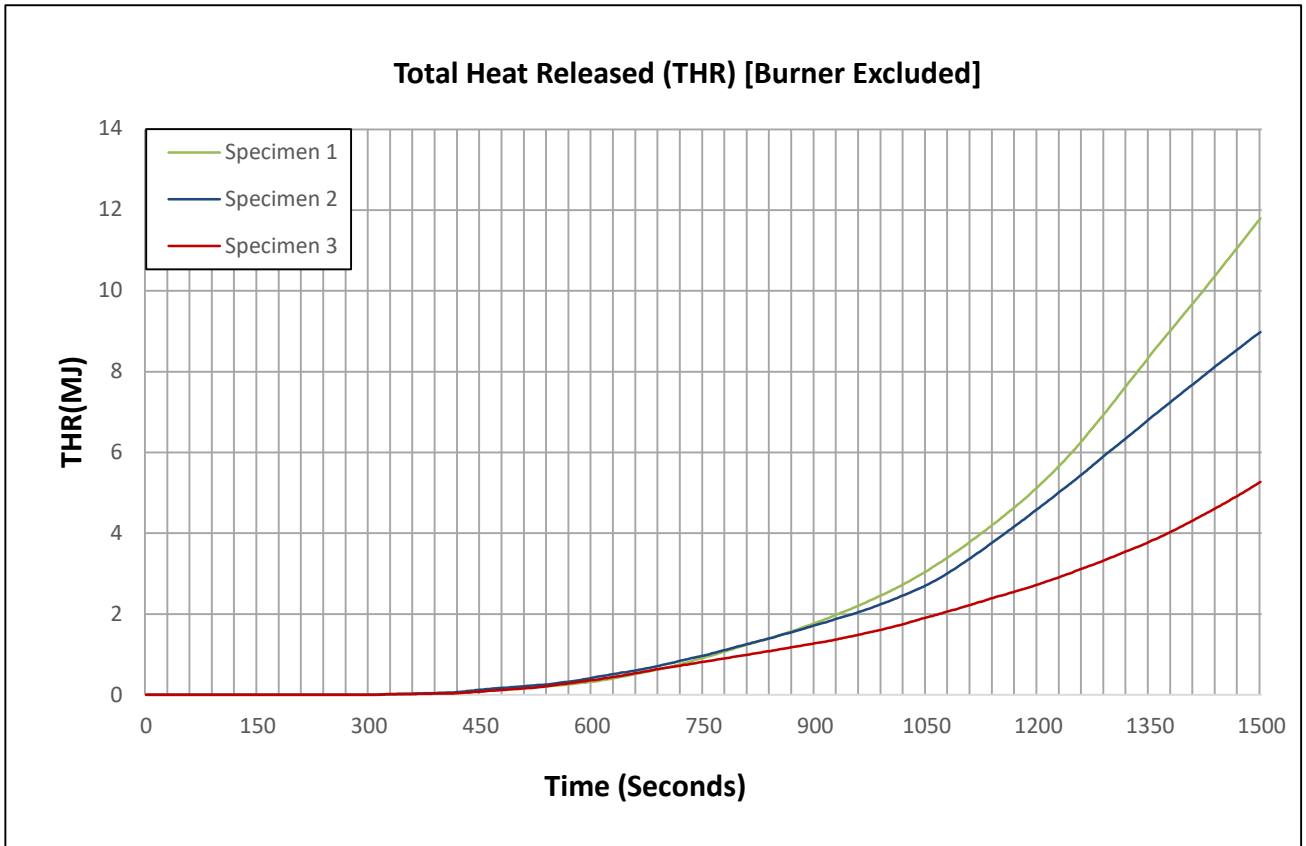
Suketa Tyagi
Manager – Reaction to Fire

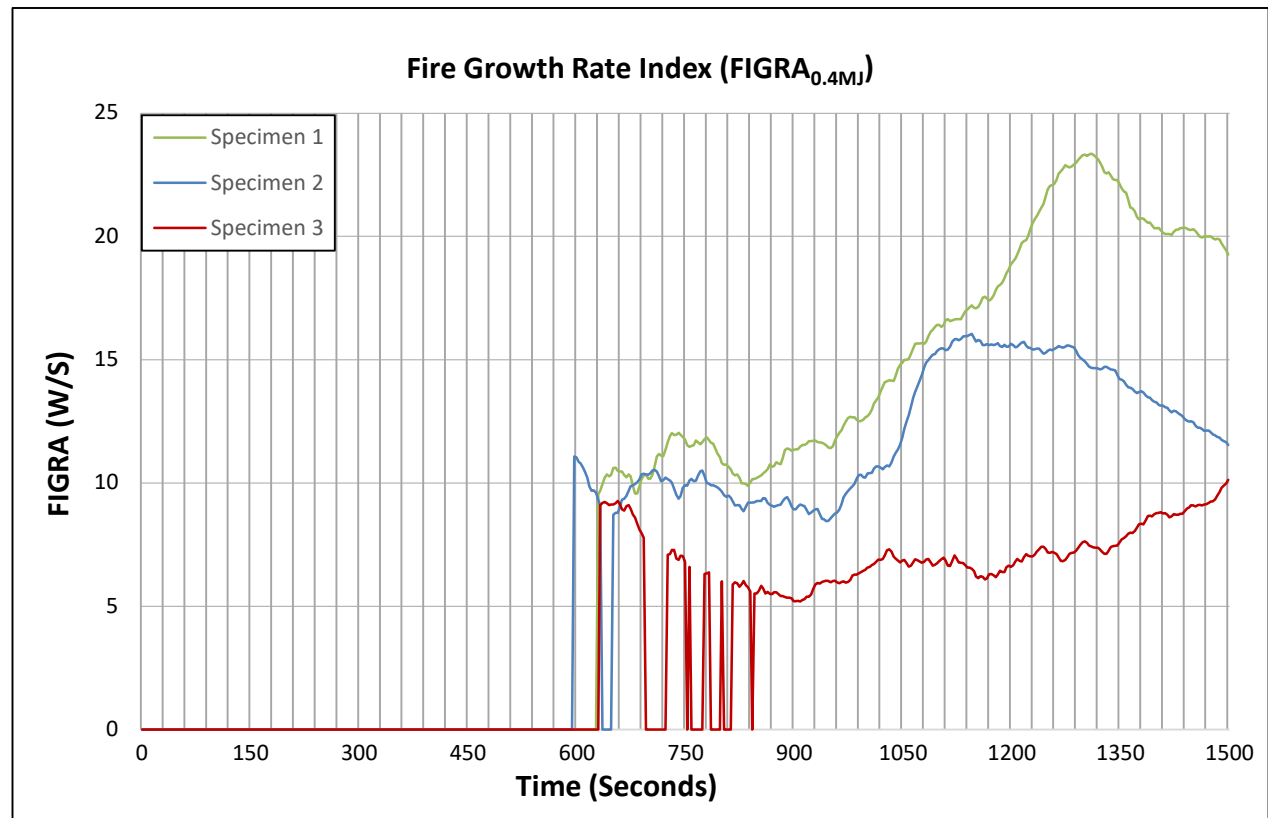
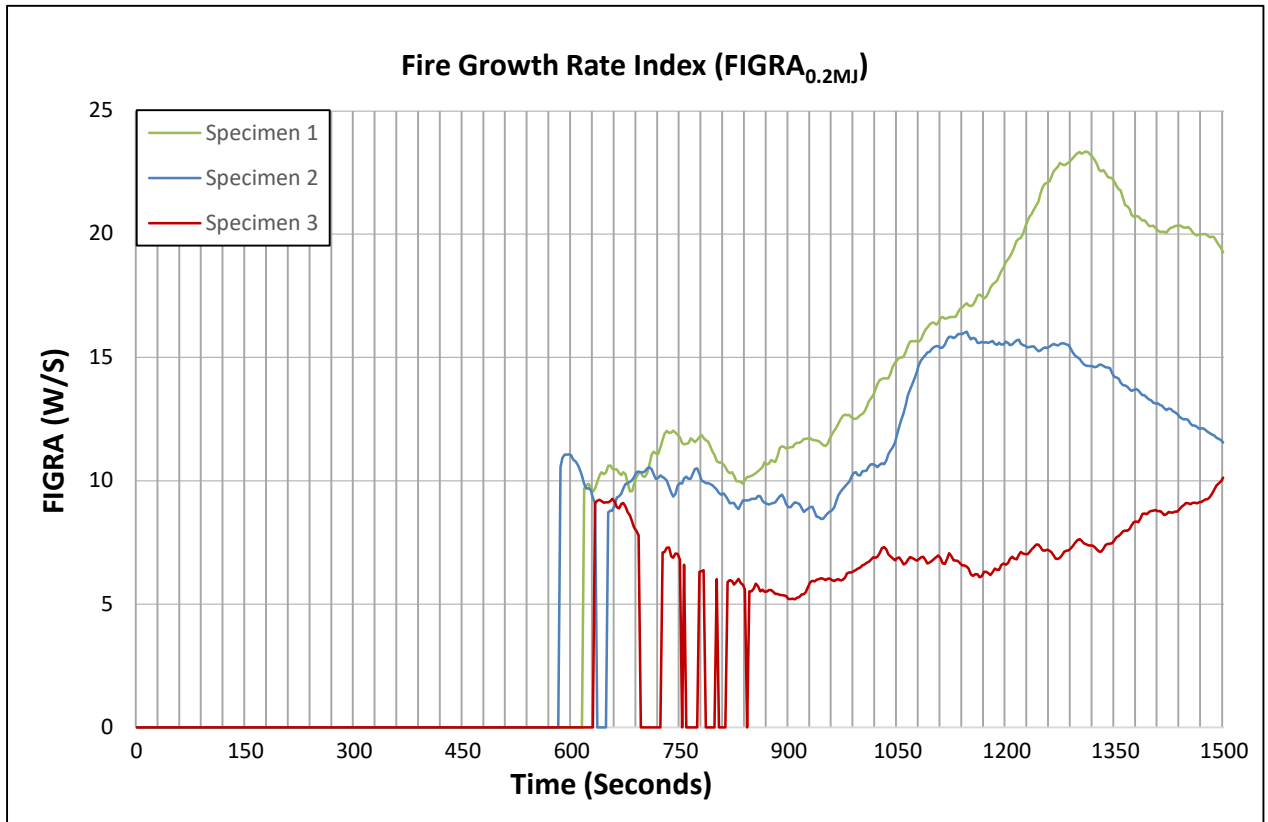
Report Revision Tracking		
Revision No.	Date Issued	Notes & Amendments
Rev. 00	13-Feb-23	This is the first issue of the report. No revisions are included.

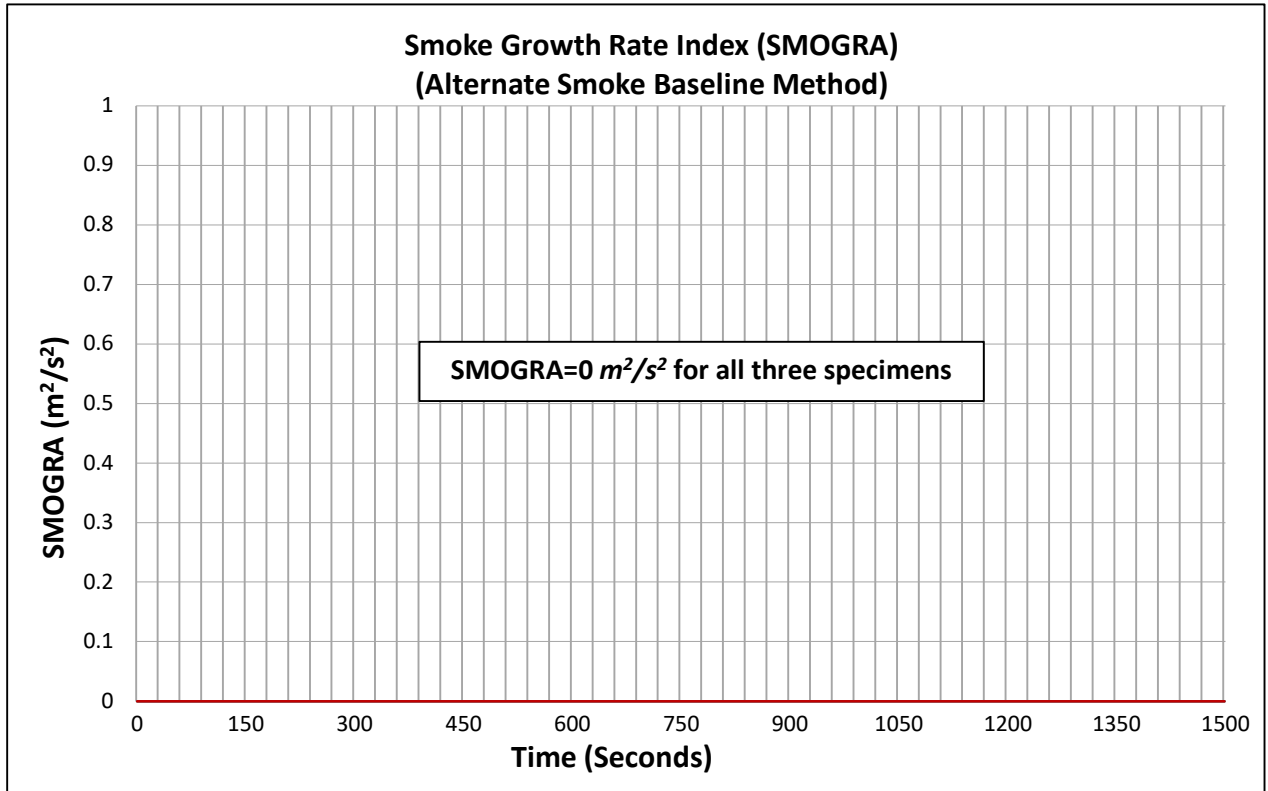


12. APPENDIX 1- GRAPHS



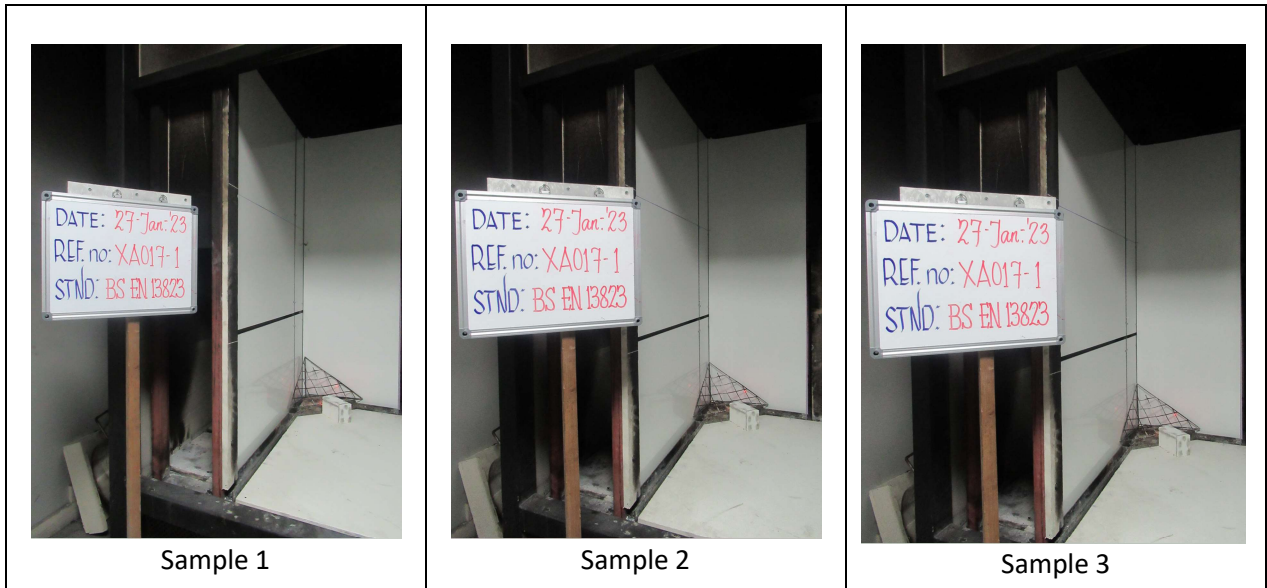








13. APPENDIX 2- PHOTOGRAPHS



Specimen before the test



Specimen after the test

---- End of Test Report ----