

# TEST REPORT

## REACTION TO FIRE TEST

### Test Sponsor:

Panel Technology Factory (Technopanel)  
Al Mashael Riyadh, Saudi Arabia  
T: +966 920 006 292  
Website: [www.technopanel.com.sa](http://www.technopanel.com.sa)

### Test Assembly:

4mm thick Aluminium Composite Panel-FR A2

### 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: 13-May-22

Issue Date: 04-Jan-23

Test Reference No: WC029-6

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DUBAI

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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: +966 920 006 292  
Website: [www.technopanel.com.sa](http://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](http://www.bell-wright.com)

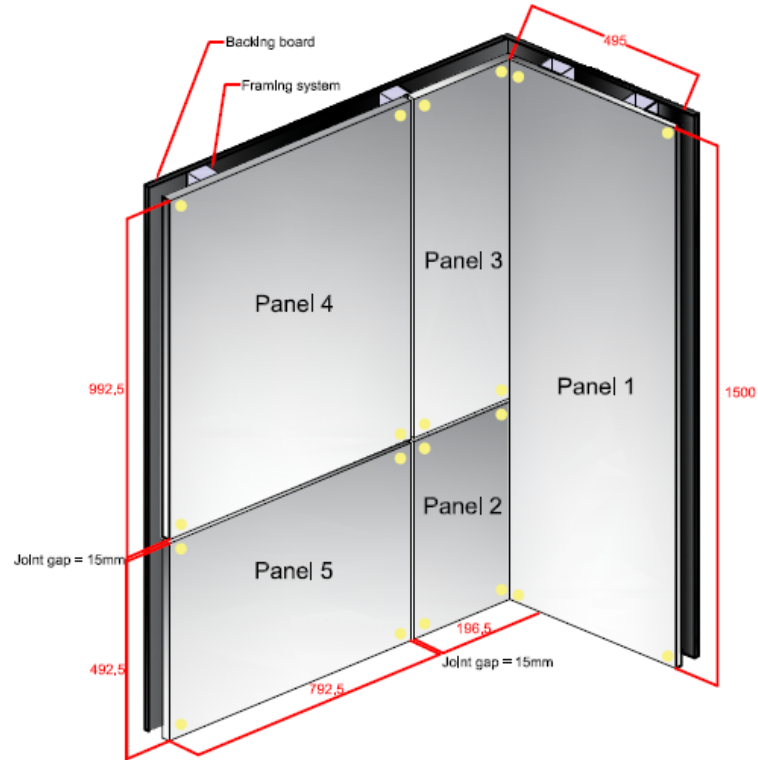
## **4. DATE OF TEST**

Sample received: 28-Apr-22  
Test date: 13-May-22

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).



## 7. 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 28-Apr-22, 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 $\geq 10$ 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 <sub>0.2MJ</sub> (W/s)	7	0	7	5
FIGRA <sub>0.4MJ</sub> (W/s)	7	0	7	5
THR <sub>600s</sub> , MJ	0.8	0.7	1.0	0.8
SMOGRA, m <sup>2</sup> /s <sup>2</sup> <sup>Note 1</sup>	0	0	0	0
TSP <sub>600s</sub> , m <sup>2</sup> <sup>Note 1</sup>	17	18	13	16
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 $\geq 10$ s within the first 600s	Nil	Nil	Nil	Nil
Burning droplets/particles $\leq 10$ 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

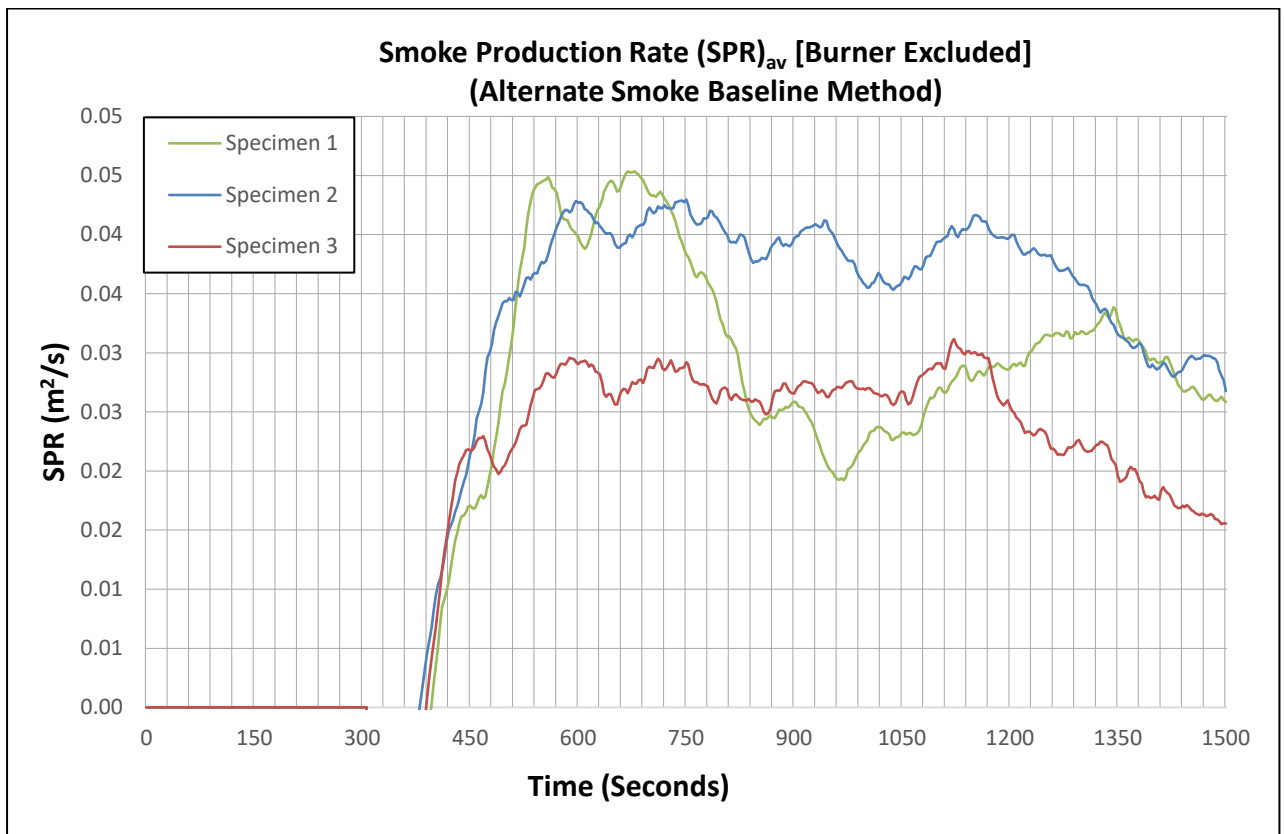
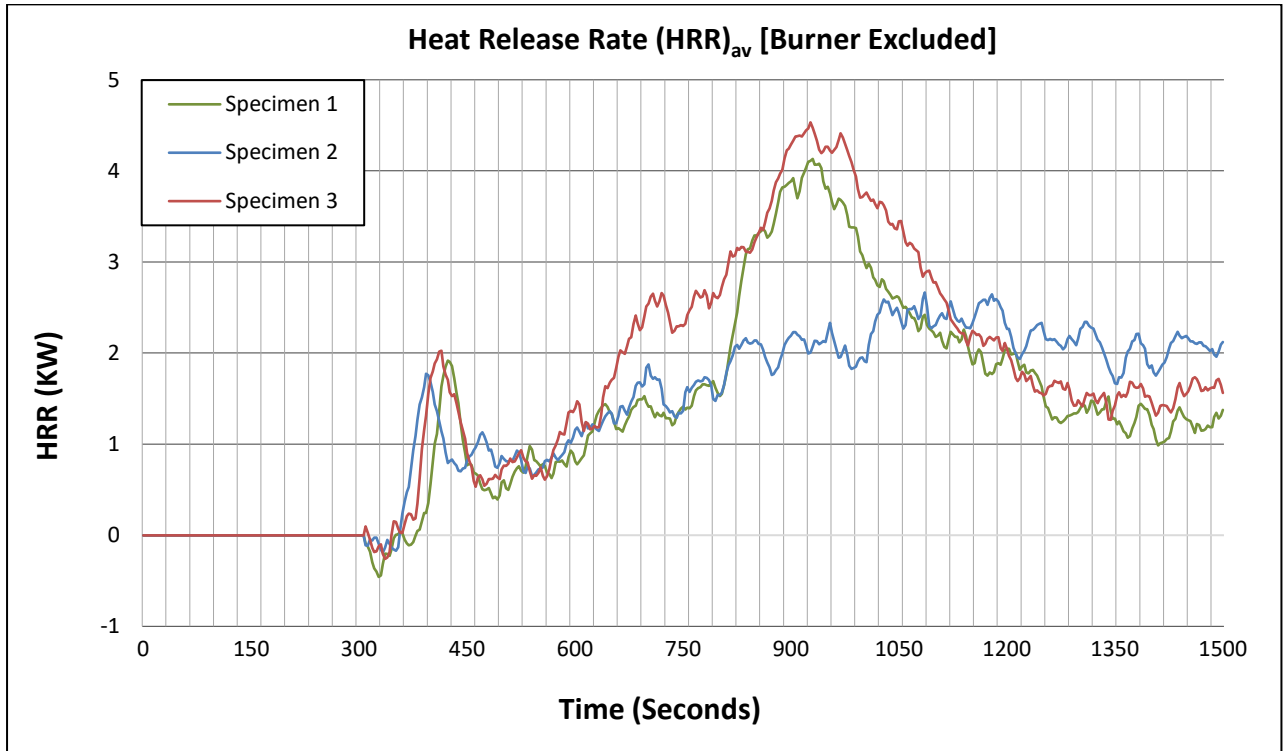


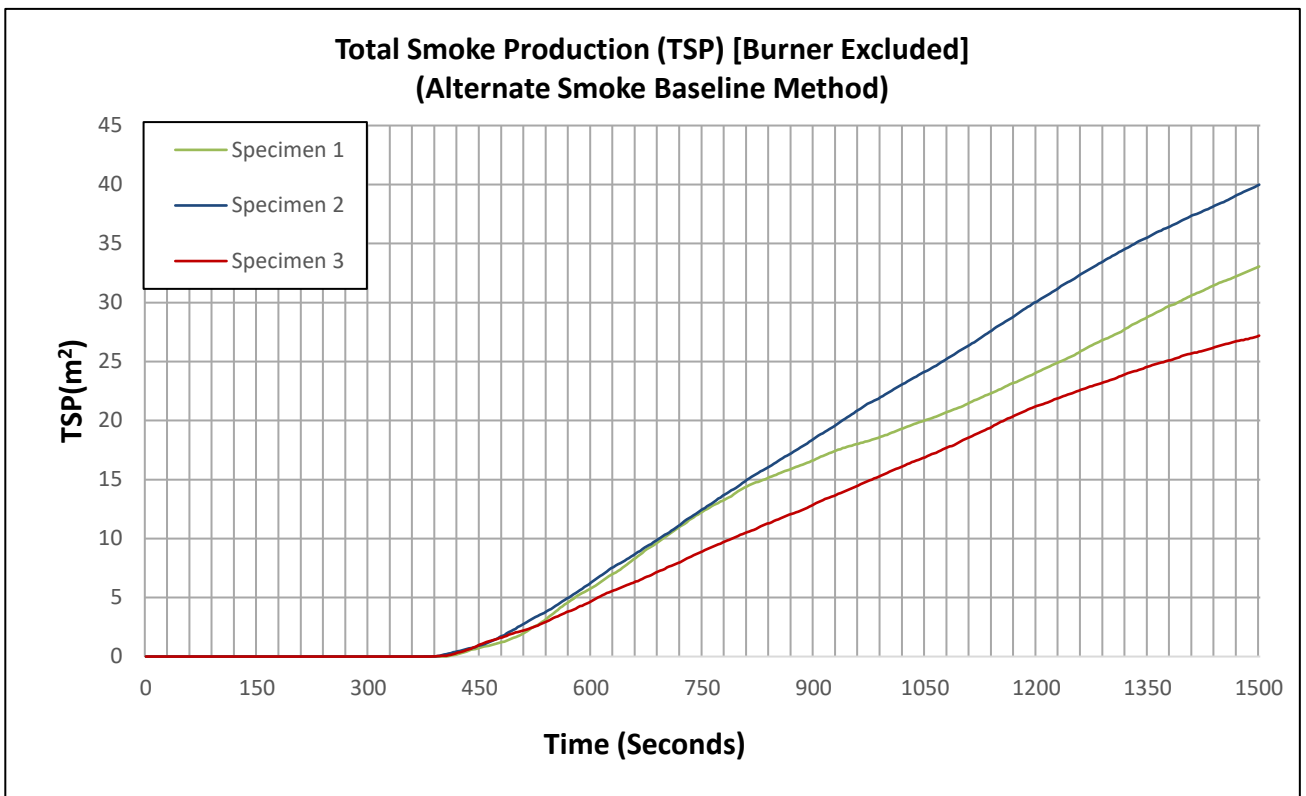
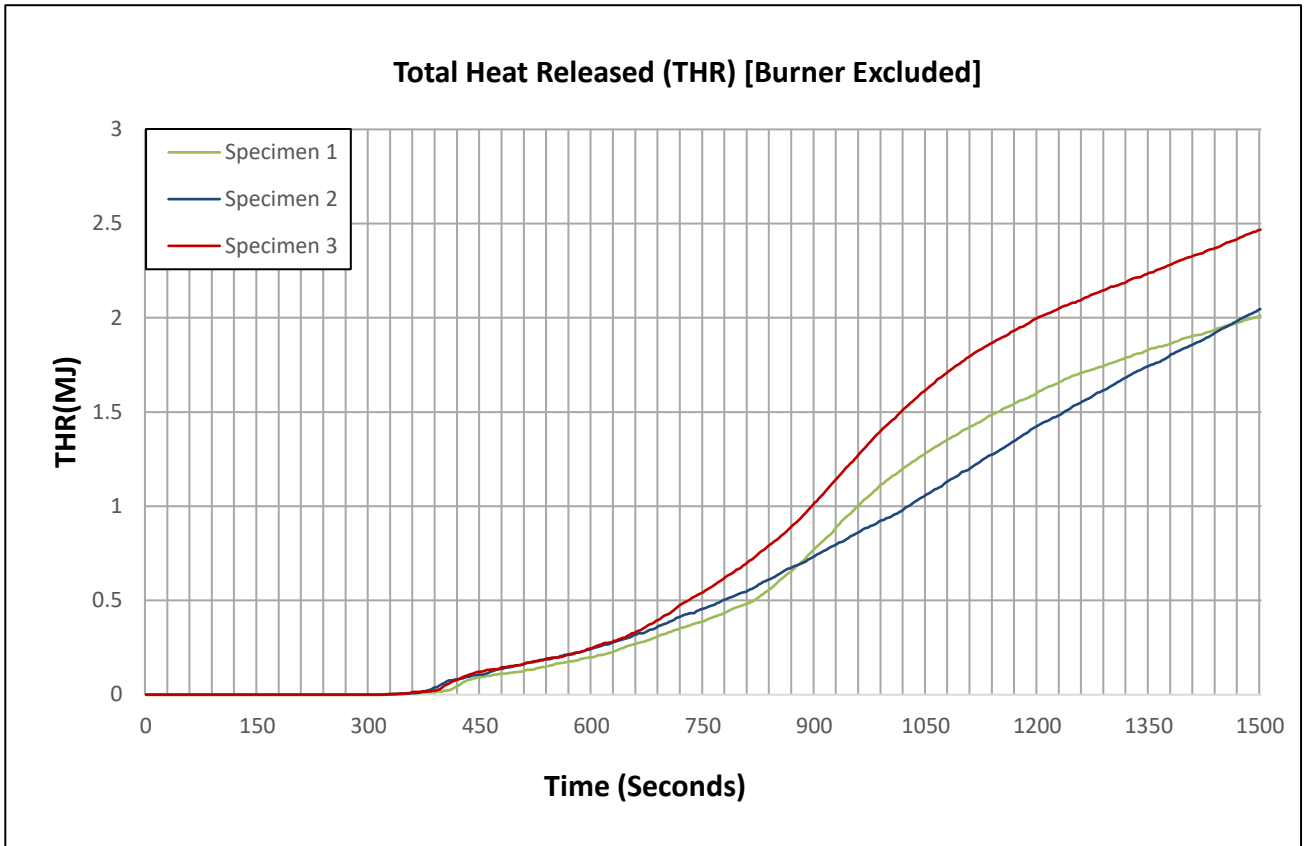
  
Suketa Tyagi  
Manager – Reaction to Fire

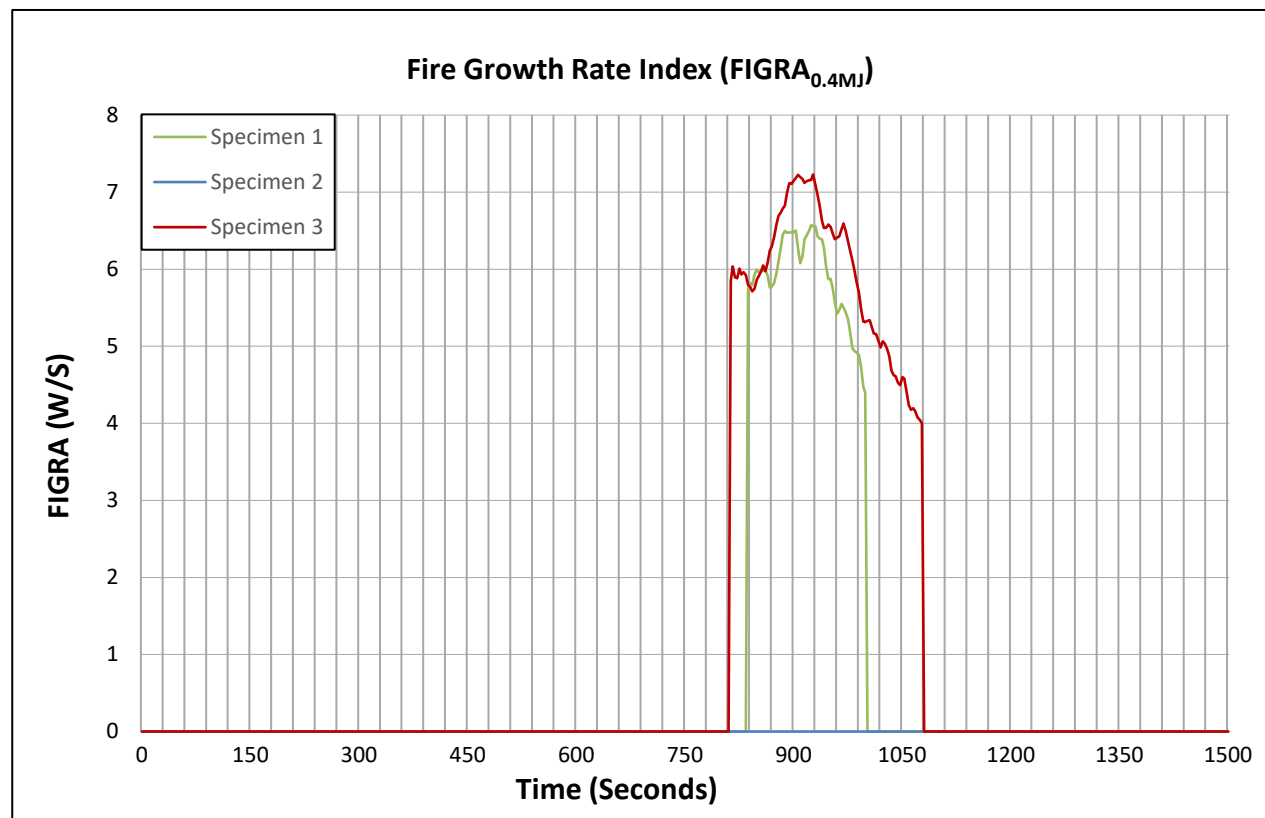
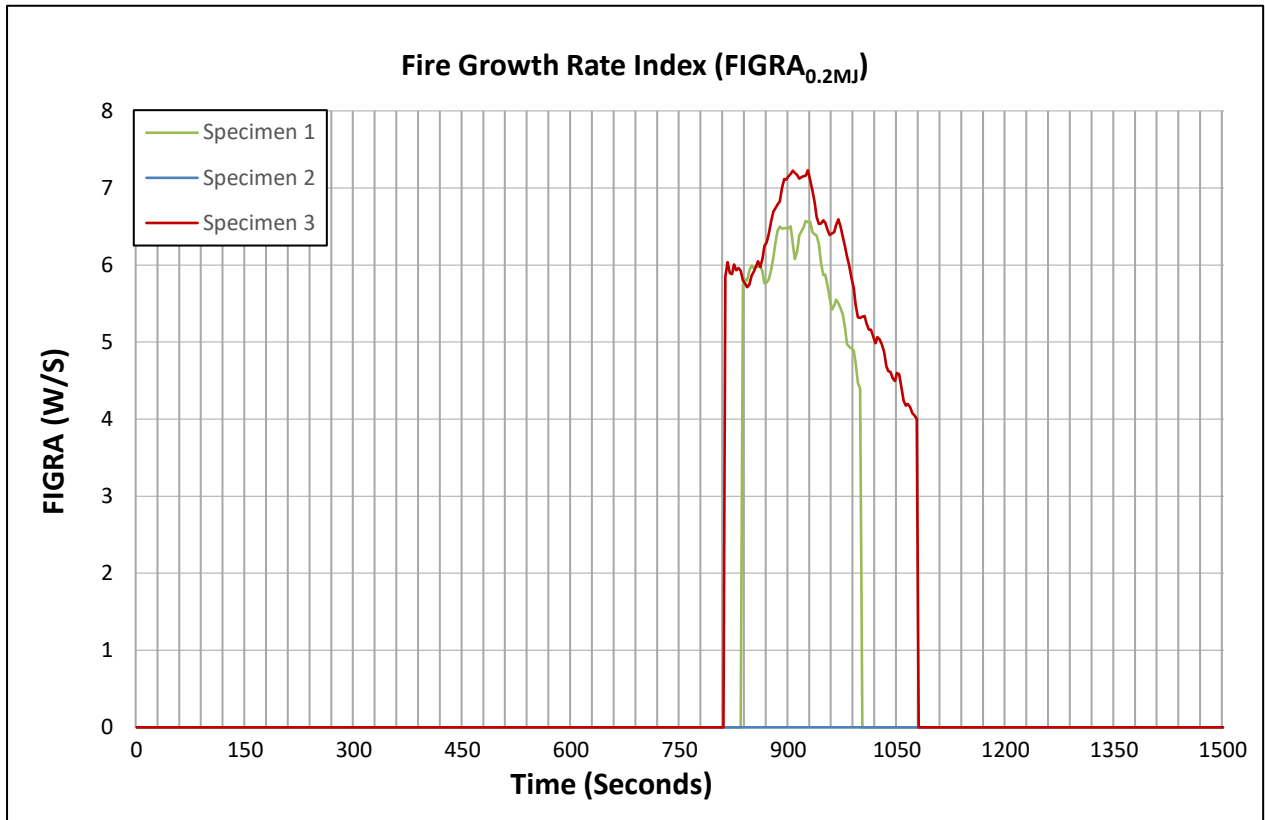
Report Revision Tracking		
Revision No.	Date Issued	Notes & Amendments
Rev. 00	04-Jan-23	This is the first issue of the report. No revisions are included.



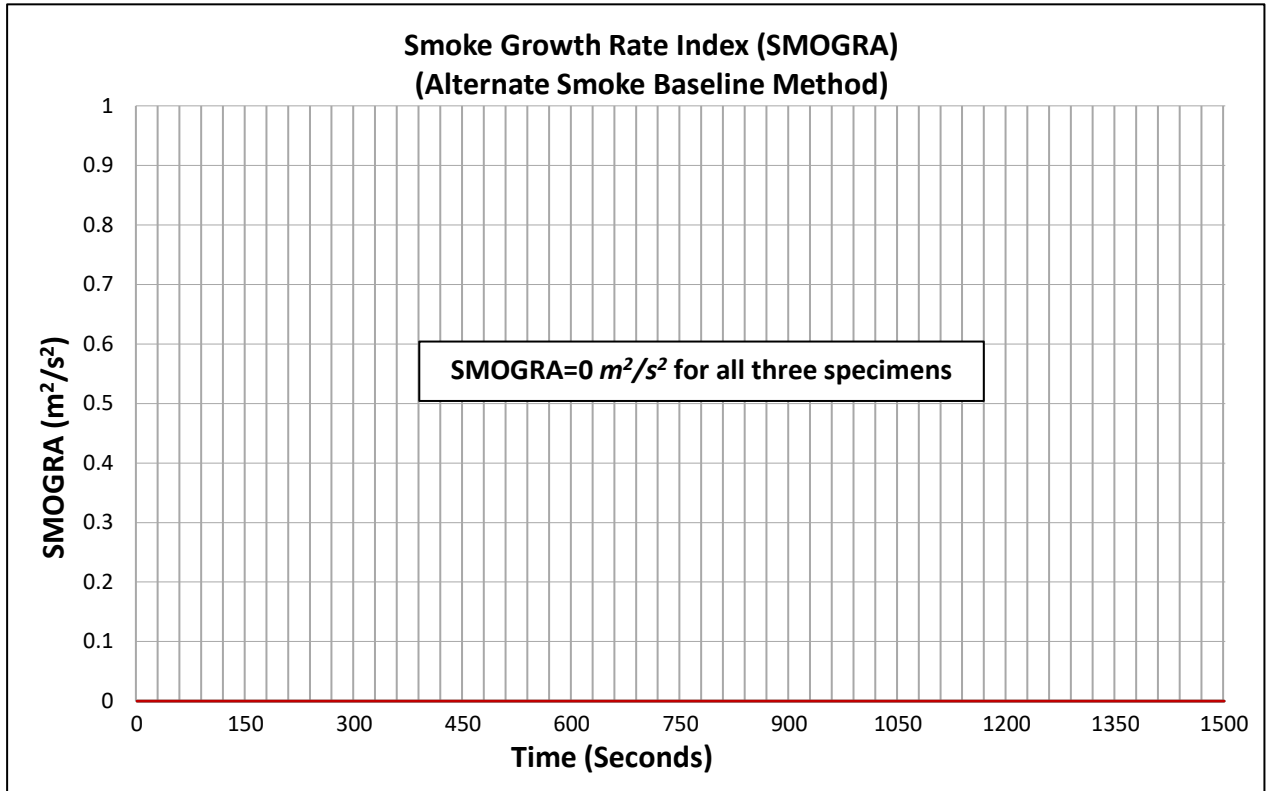
## 12. APPENDIX 1- GRAPHS













### 13. APPENDIX 2- PHOTOGRAPHS



**Specimen before the test**



**Specimen after the test**

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