

# TEST REPORT

## REACTION TO FIRE TEST

### Test Sponsor:

CSR Martini Pty Limited  
4 Macdonald Road,  
Ingleburn NSW 2565, Australia  
Tel: 1300 767 776, Fax: 02 9829 2211  
E: martinienquiries@csr.com.au

### Test Material/Assembly:

3D Moulded Decorative Wall Tiles

### Test Standard:

BS EN 13823:2010 +A1:2014 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: 6-Aug-19  
Issue Date: 2-Sep-19  
Test Reference No.: TF058-1

PO BOX 26385, DUBAI UAE

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[www.bell-wright.com](http://www.bell-wright.com)

DUBAI

ABU DHABI

DOHA



## Accreditation

ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories with:

United Kingdom Accreditation Service (UKAS) - Testing Laboratory: **4439**  
[www.ukas.com](http://www.ukas.com)



## Memberships

Members of European Group of Organization for Fire Testing, Inspection and Certification

[www.egolf.org.uk](http://www.egolf.org.uk)

Member of International Trade Council

[www.thetradecouncil.com](http://www.thetradecouncil.com)

Member of Association for Specialist Fire Protection

[www.asfp.org.uk](http://www.asfp.org.uk)

Member of Centre for Window and Cladding Technology

[www.cwct.co.uk](http://www.cwct.co.uk)



The work which is the subject of this report falls wholly or partly under the accreditations of **ISO 17025** **UKAS**.



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ACOUSTEK



## 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 13823:2010 +A1:2014.

## 2. SPONSOR

Name: CSR Martini Pty Limited  
Address: 4 Macdonald Road,  
Ingleburn NSW 2565, Australia  
Tel: 1300 767 776, Fax: 02 9829 2211  
E: martinienquiries@csr.com.au

## 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

## 3. DATE OF TEST

Sample received: 10-Jul-19  
Test date: 6-Aug-19

The test had not been witnessed by the sponsor.

## 4. SPECIMEN DESCRIPTION

*Note: The testing laboratory does not hold any responsibility for the information that has been provided by the test sponsor which could not be verified by the testing laboratory, as this could affect the validity of the test result. All information that could not be verified will be indicated by an asterisk (\*) mark.*

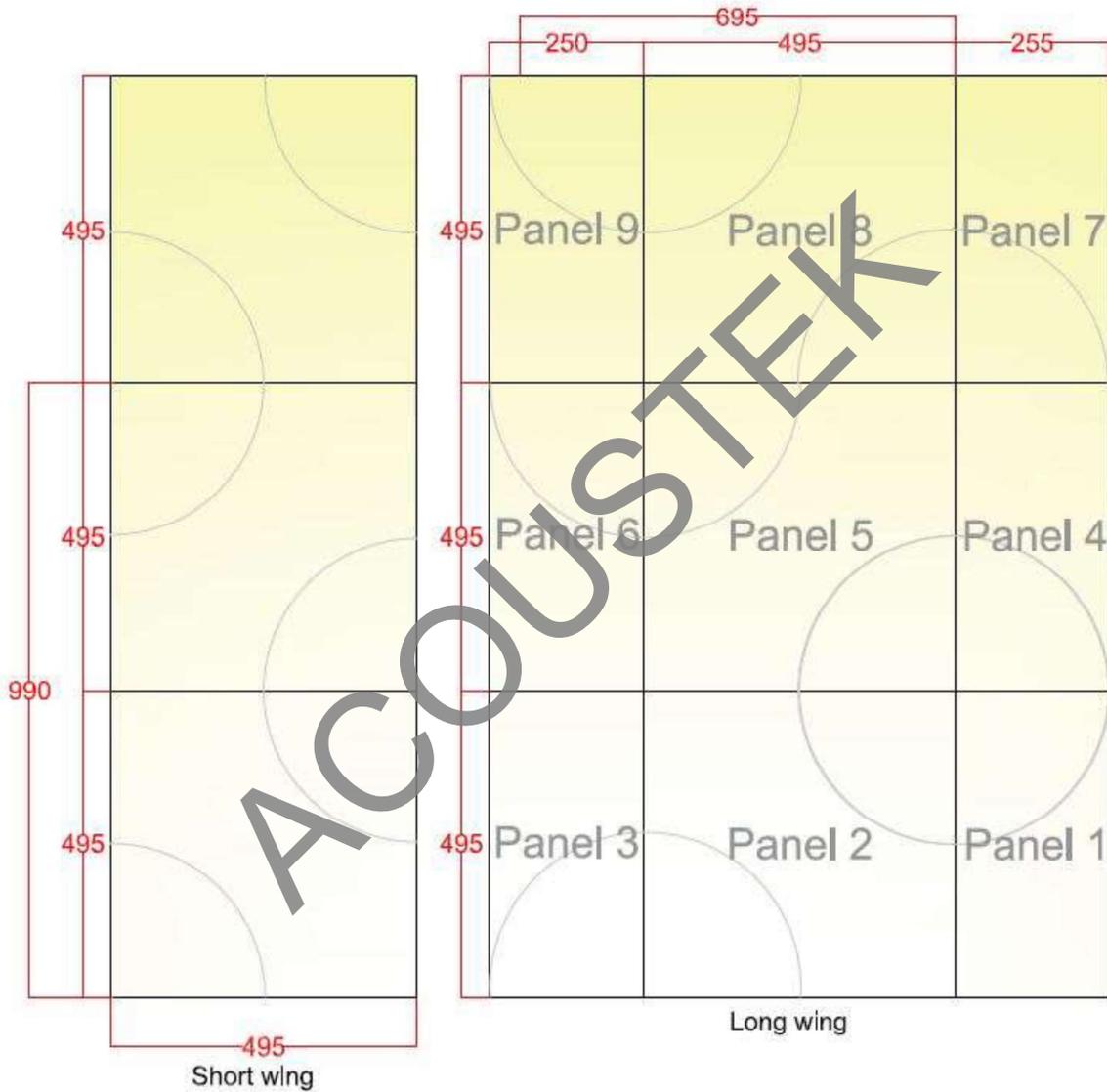
<b>Product Name</b>	3D Moulded Decorative Wall Tiles (Available size: 495 x 495mm, Flange height: 50mm)
<b>Manufacturer</b>	CSR Martini Pty Limited
<b>Thickness</b>	3-4mm (measured by TBWIC)
<b>Area weight</b>	1.1 kg/m <sup>2</sup> (measured by TBWIC)
<b>Type of joint</b>	1. Vertical Joints: Butt jointed at 200 and 695mm from the corner line, measured when the wings are mounted. 2. Horizontal Joints: Butt jointed at 495 and 990mm from the bottom edge of the specimen. Refer to Drawing No.1 for more details.
<b>Specimen Dimensions</b>	Small Wing: 3 Nos of Panels - 495 x 495mm (w x h) (Measured) Long Wing: Panel 1, 4 and 7 – 255 x 495mm (w x h) (Measured) Panel 3, 6 and 9 – 250 x 495 mm (w x h) (Measured) Panel 2, 5 and 8 – 495 x 495mm (w x h) (Measured) Refer to Drawing No.1 for more details.



**Specimen Placement/  
Mounting**

The 3D Moulded Decorative Wall Tiles was prepared according to section 5.2.2 of BS EN 13823:2010+A1:2014. It was mounted mechanically using plastic clips on calcium silicate board substrate and was tested without air gap.

## 5. SPECIMEN DRAWING



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



## 6. SPECIMEN VERIFICATION

The choice and design and the definition of the specimen had been made by CSR Martini Pty Limited, and TBWIC testing laboratory has not been involved in the selection or design of the specimen. Similarly, the results of the test apply only to the samples as received.

*Note: There are contexts where information has been provided by the sponsor and verification of information has been done through either technical datasheet or other document submission, or as indicated directly by the sponsor. For this reason, materials have been tested in an as-received condition and TBWIC bears no liability for the legitimacy of the submitted information.*

## 7. METHOD OF TEST

### 7.1. Test Procedure

The specimen consisted of large and a small wing which were mounted on a trolley using mechanical clamps. The trolley with a sandbox burner at the bottom of the vertical corner is positioned in a frame beneath an exhaust system.

A gas burner (primary burner) with a heat release rate of 30 kW was in the corner of the small and long wing during testing. The test duration was 21 minutes. The combustion gases were collected through a hood where heat release rate and smoke production were measured instrumentally and physical characteristics were assessed by observation.

### 7.2. Conditioning

After delivery on 10-Jul-19, the specimens were conditioned to constant weight at 21 to 25 °C and 45 to 55% relative humidity.

## 8. OBSERVATIONS

Test Data and Observation

General Information	Specimen 1	Specimen 2	Specimen 3
Checks Analyzers, Start of Test, min:s	0:00	0:00	0:00
Auxiliary burner switched on, s	123	124	123
Gas flow switched from auxiliary burner to the main burner, s	303	303	303
<b>Observations</b>			
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



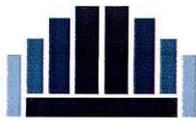
## 9. SUMMARY OF RESULTS

The test specimen has been evaluated in accordance with BS EN 13823:2010 +A1:2014 Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item.

TEST PARAMETERS	TEST RESULTS			Average
	Specimen 1	Specimen 2	Specimen 3	
FIGRA, W/s (THR (t) Threshold of 0.2 MJ)	53	35	47	45
FIGRA, W/s (THR (t) Threshold of 0.4 MJ)	53	35	47	45
THR 600s, MJ	5.5	4.2	5.8	5.2
SMOGRA, m <sup>2</sup> /s <sup>2</sup>	0	0	0	0
TSP 600s, m <sup>2</sup>	19	13	18	17
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

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 13823:2010+A1:2014.

Any product supplied or used during the test should be taken carefully to ensure that it is fully represented by the specimens which were tested.



## 10. LIMITATION

Results are valid for the tested configuration only.

## 11. RECOMMENDATION

This report and all records of the test to which it relates may 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:

for:

Sujana Haridas  
Fire Testing Engineer



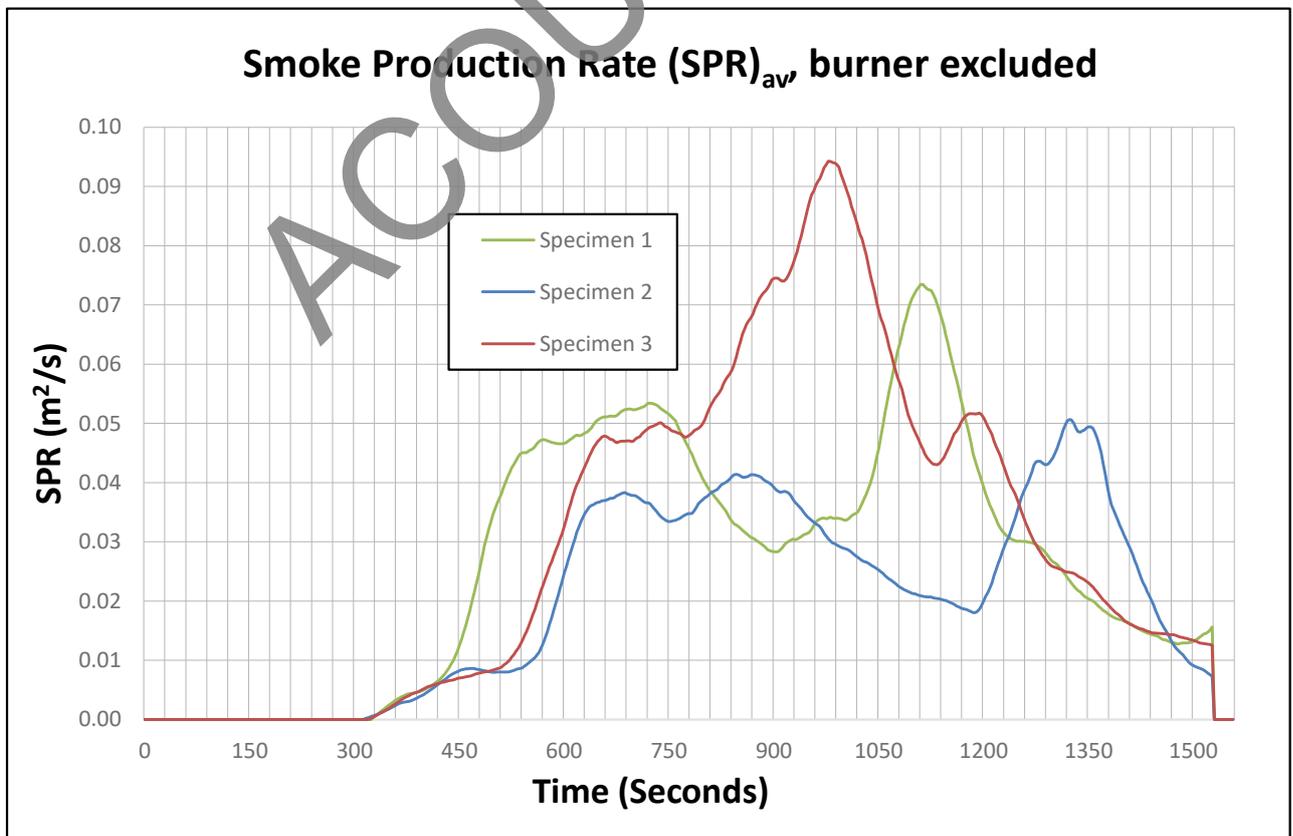
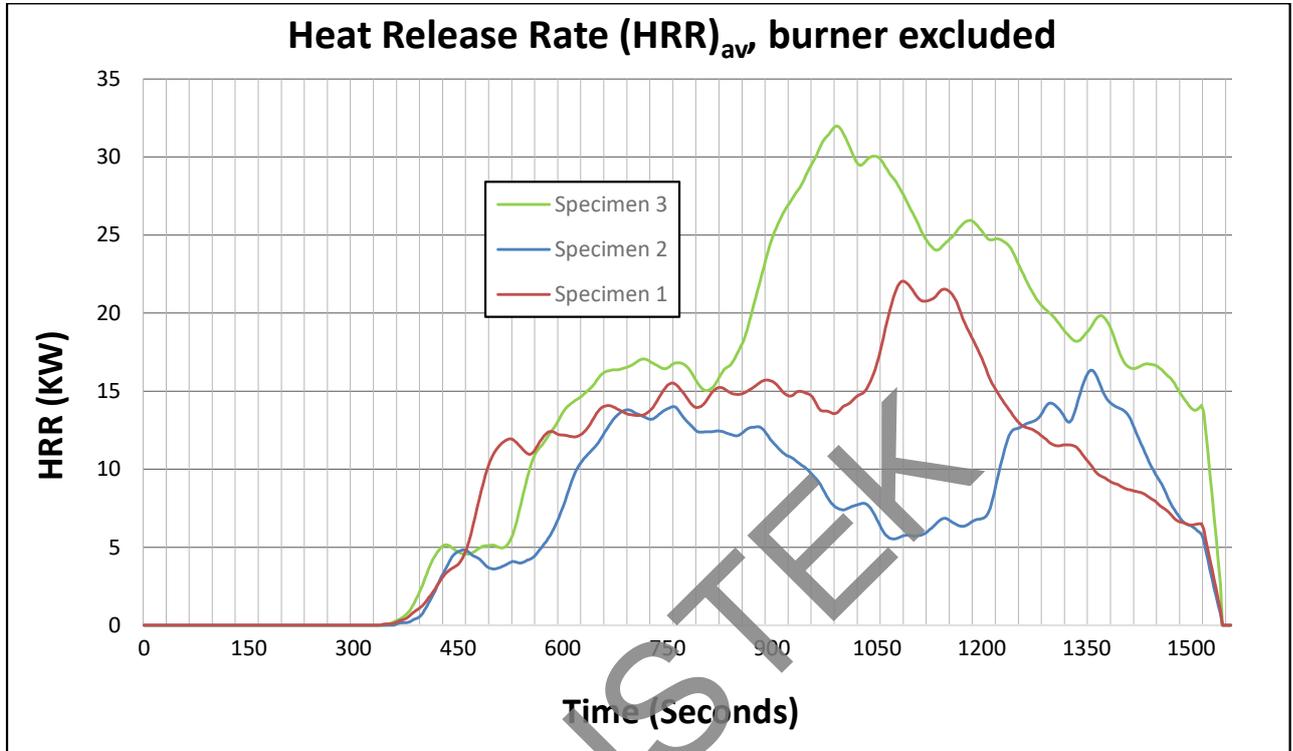
Reviewed and Approved by:

Suketa Tyagi  
Reaction to Fire Manager

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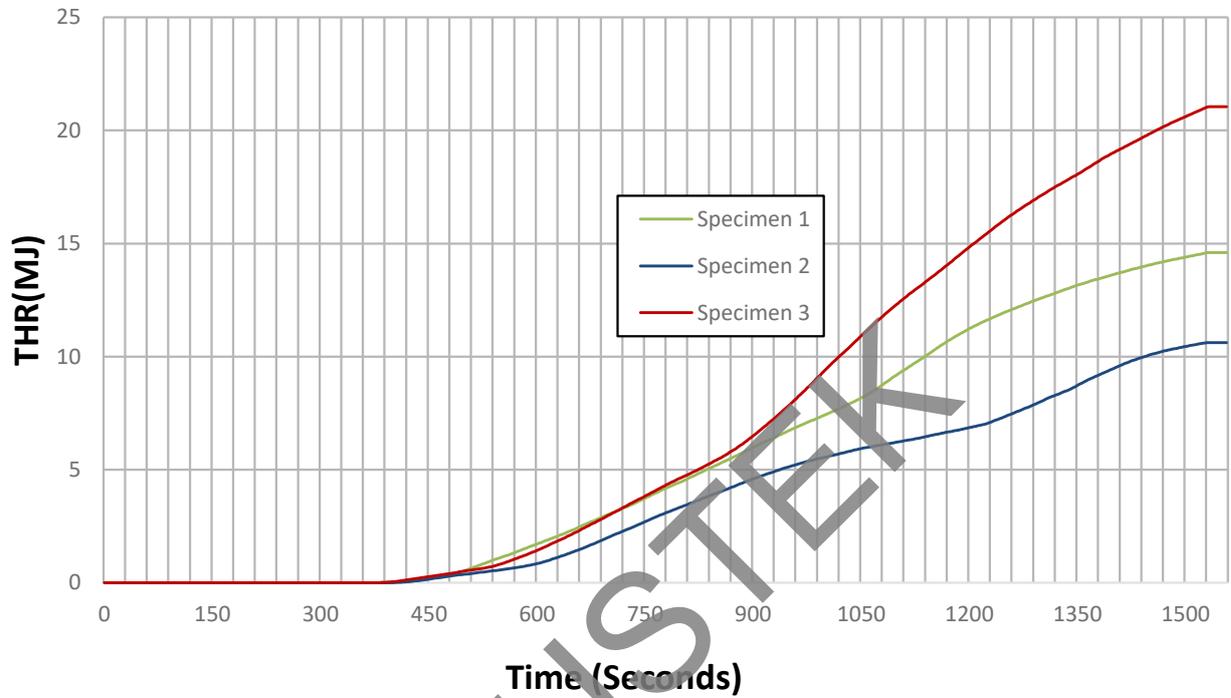


## 12. APPENDIX 1- GRAPHS

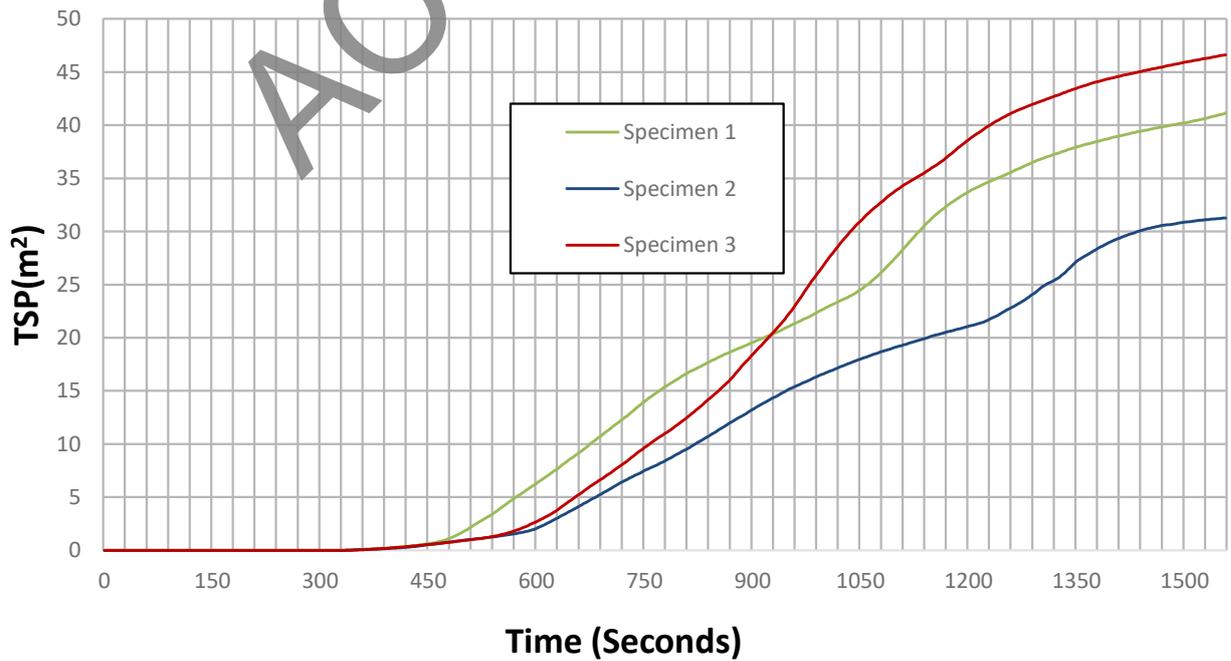


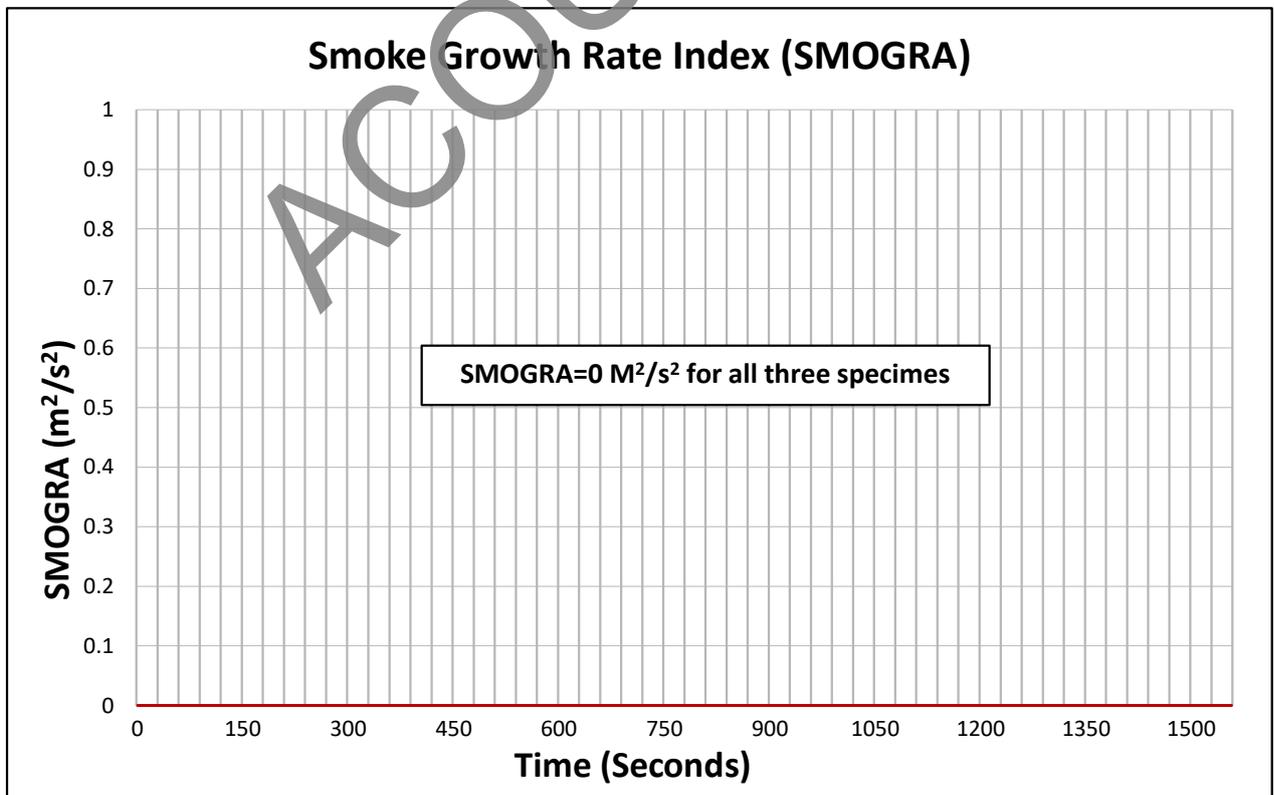
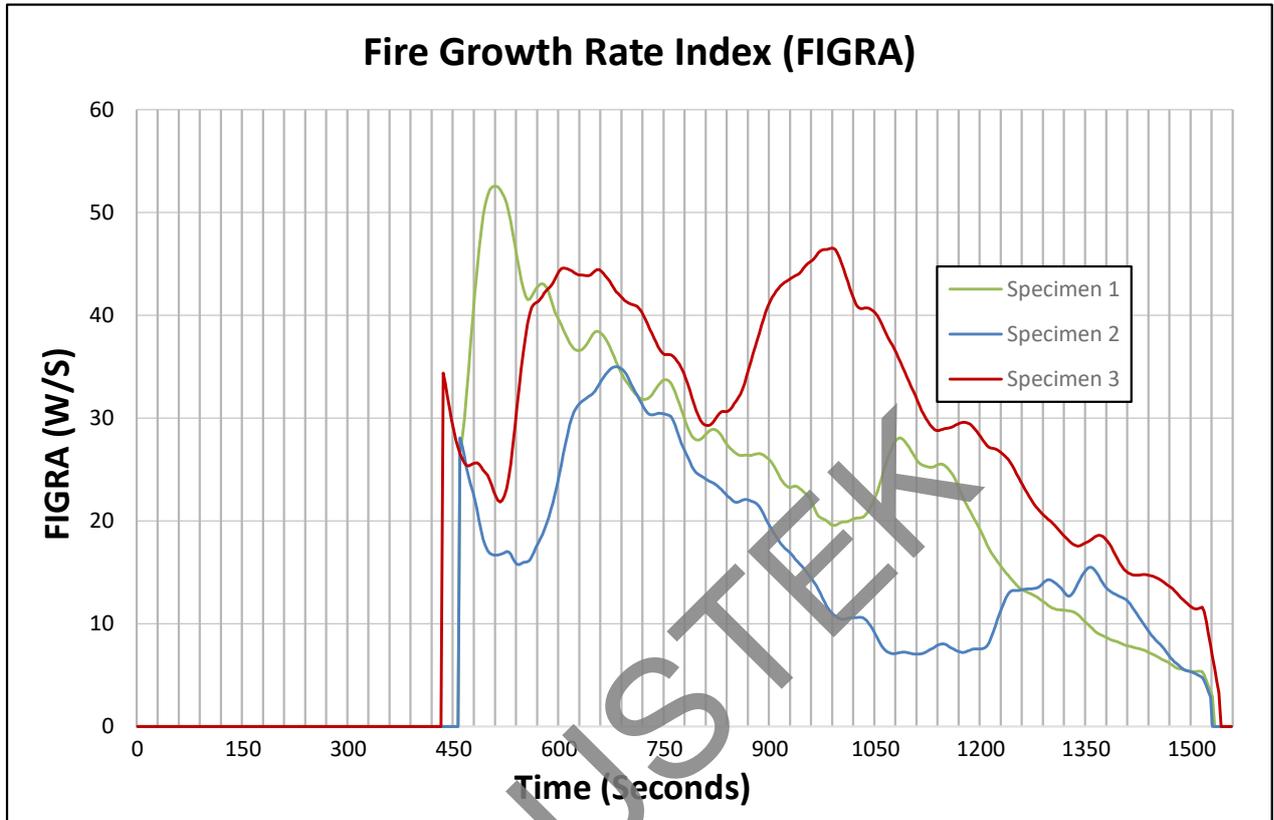


### Total Heat Released (THR), Burner Excluded



### Total Smoke Production (TSP), Burner Excluded







### 13. APPENDIX 2- PHOTOS



**Photo 1: Specimens before the test**



**Photo 2: Specimens after the test**

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