

FIRE RESISTANCE TEST REPORT SCHEDULED-1/1
REFERENCE NO. FSE-CSIR-CBRI/0944

Disclaimer: The contents of this report are the privileged and confidential material of CSIR-Central Building Research Institute, Roorkee. Information contained herein is solely intended for use by the client. Technical data provided in the report pertains to the representative sample of client submitted to the Institute and tested. CSIR-CBRI's name or logo cannot be used for commercial purposes. All procedural, legal, and/or operational matters will be the responsibility of the client using this report. Accepting/rejecting the results partly or fully rests with the concerned agencies.

- 1 Name of the Testing Laboratory :** Fire Safety Engineering
CSIR-Central Building Research Institute, Roorkee-
247667, Uttarakhand, India
- 2 Name of the Sponsorer :** M/S Rock Miller All Tech India,
Site No. 4, Assessment No. 34,
Annapoorneshwari Nagae, Near Peenya 2nd Stage,
Banglore, Karnataka-560 058
- 3 Sample Manufacturer :** M/S Rock Miller All Tech India,
Site No. 4, Assessment No. 34,
Annapoorneshwari Nagae, Near Peenya 2nd Stage,
Banglore, Karnataka-560 058
- 4 Manufacturer Consent for Fire Test of Sample :** Yes
- 5 Sample Fire Tested for the Project :** Not Applicable
- 6 Type of Test Sample :** Door
- 7 Surface of Test Sample :** Uncoated
- 8 Symmetry of Sample :** Symmetrical
- 9 Details of Sample :** Single leaf single swing metal door with vision panel
- 10 Dimension of Sample :**
- | | Size | Door Frame | Door Panel |
|-----------|---------|------------|------------|
| Height | 2445 mm | | 2355 mm |
| Width | 1190 mm | | 1114 mm |
| Thickness | 143 mm | | 48 mm |
- 11 Sample in-fill materials :** Rockwool of 96 Kg/m³ in door panel and cement sand mortar in door frame
- 12 Sample Vision Panel :** One No.: 270 mm (H) x 170 mm (W) x 5 mm (T)
(Make: Schott Pyran)

(Signature)

डॉ. नवल किशोर बंजारा / Dr. Nawal Kishor Banjara
मुख्य वैज्ञानिक / Principal Scientist



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY

सी.एस.आई.आर. - केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

रूड़की - 247 667 (उत्तराखण्ड) भारत / Roorkee - 247 667 (U.K.) INDIA



केंद्र के भवन अनुसंधान संस्थान
CENTRAL BUILDING RESEARCH INSTITUTE
(A Constituent Establishment of CSIR)

Note : This original only is valid. Third parties using copies are doing so at their own risk.

- 13 **Sample Hardware** : Door Closer on unexposed face (Make- Dorset) - 01 No., S.S. Ball Bearing Hinges (Make- Dorset) - 04 Nos, Smoke seal at door frame periphery (Make-Falcon), Intumescent seal at door frame grooved periphery (Make-Falcon), Both side operated three point panic bar with bottom rod (top, bottom shoot bolt and Centrally Latched) on exposed face and external trim on unexposed face (Make- Dorset)
- 14 **Sample Weight, Kg** : 127 Kg (Excluding hardware)
- 15 **Description of Sample Construction** : As per Figure 1 and Figure 2
- 16 **Sample Orientation** : Vertical
- 17 **Sample Installation During Fire Test** : Opening outwards the furnace chamber (latched condition)- Self closed, Unlocked
- 18 **Name of the Fire Test** : Fire resistance test
- 19 **Date of the Fire Test** : March 12, 2025
- 20 **Laboratory Ambient Temperature** : 23°C
- 21 **Lab Relative Humidity** : 53%
- 22 **Intended Fire Test Duration** : 120 minutes
- 23 **Fire Exposure & Fire Test Standard** : AS per IS: 3614-2021, Heating conditions as per ISO-834 & general requirement as per ISO-3008, 2019 or IS 17518: Part 1: 2022
- 24 **Furnace Temperature During Sample Fire Test** : Standard and furnace actual time-temperature profiles with respect to time are shown in Table-1.

Naval

डॉ. नवल किशोर बंजारा/Dr. Naval Kishor Banjara
प्रधान वैज्ञानिक / Principal Scientist
सी.एस.आई.आर. - केन्द्रीय भवन अनुसंधान संस्थान
CSIR-Central Building Research Institute
रूड़की - ROORKEE - 247667 (U.K.)



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर. - केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

रूड़की - 247 667 (उत्तराखण्ड) भारत/Roorkee - 247 667 (U.K.) INDIA



अग्नि अनुसंधान प्रयोगशाला
CENTRAL BUILDING RESEARCH INSTITUTE-ROORKEE
(A Constituent Establishment of CSIR)

Note : This original only is valid. Third parties using copies are doing so at their own risk.

- 25 **Furnace Pressure** : Furnace pressure profiles are shown in Table-1.
During Sample Fire Test
- 26 **Sample Tested Under** : Uninsulated
Fire Test Category
- 27 **Position of** : Not Applicable
Thermocouples on the Unexposed Face of the Sample
- 28 **Temperature Profile on** : Not Applicable.
the Unexposed Face of the Sample
- 29 **Position of Radiometer** : Not Applicable.
from the unexposed face of the sample
- 30 **Radiation profile from** : Not Applicable.
the unexposed face of the sample
- 31 **Position of** : Not Applicable.
thermocouples at the Interface of Sample and Protection Applied
- 32 **Temperature Profile at** : Not Applicable.
the Interface of Sample and Protection Applied
- 33 **Sample tests prior to** : Not Applicable
fire test
- a) **Impact Test** : Not Applicable
- b) **Water Absorption Test** : Not Applicable
- c) **Accelerated Ageing** : Not Applicable
Test
- b) **Vibration Test** : Not Applicable
- 34 **Applicability of Fire Resistance Test Criteria As Per Fire Test Standard**
- a) **Radiation (W)** : Not Applicable.
- b) **Thermal Insulation (I)** : Not Applicable
- c) **Integrity (E)** : Applicable up to 120 minutes.
- d) **Stability (R)** : Applicable up to 120 minutes.
- e) **Hose Stream** : Not Applicable.
- f) **Under Load** : Not Applicable.



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर. - केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute
रूड़की - 247 667 (उत्तराखण्ड) भारत/Roorkee - 247 667 (U.K.) INDIA



कीर्ति केशव अग्रवाल अध्यक्ष, संस्थान
 CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE
 (A Constituent Establishment of CSIR)

Note : This original only is valid. Third parties using copies are doing so at their own risk.

35 Performance of Applicable Fire Test Criteria Under Fire Resistance Test

- a) Radiation (W) : Not Applicable.
b) Thermal Insulation (I) : Not Applicable
c) Integrity (E) : No failure at 120 minutes
d) Stability (R) : No failure at 120 minutes
e) Hose Stream : Not Applicable.
f) Under Load : Not Applicable.

36 Under load/Without load : Not Applicable.

37 Fire Test Witnesses : Mr. Shivaramu S. and Mr. Devendra

38 Observations During Fire Resistance Test : No sustained flaming or any gap, voids were observed on unexposed face of sample during 120 minutes of standard fire exposure.

: Vision panel remains clear during entire duration of standard fire exposure.

39 Observations After Fire Resistance Test : Not Applicable.

40 Results of Fire Resistance Test : Sample withstands standard fire exposure for 120 minutes with respect to integrity (E) and stability (R) only.

41 Fire Resistance Rating of the Tested Sample : Sample meets uninsulated metal door fire resistance rating criteria of 120 minutes (One hundred twenty minutes only) with respect to Integrity (E) and Stability (R) only.

42 Test Report Issue Date : April 03, 2025

Naval

डॉ. नवल किशोर बंजारा/Dr. Naval Kishor Banjara
प्रधान वैज्ञानिक / Principal Scientist
सी.एस.आई.आर.-केन्द्रीय भवन अनुसंधान संस्थान
CSIR-Central Building Research Institute
रूड़की - ROORKEE



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर.-केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

रूड़की - 247 667 (उत्तराखण्ड) भारत/Roorkee - 247 667 (U.K.) INDIA



केन्द्रीय भवन अनुसंधान संस्थान, रूड़की
CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE
(A Constituent Establishment of CSIR)

Note : This original only is valid. Third parties using copies are doing so at their own risk.

43 Test Report Issued To : M/S Rock Miller All Tech India,
Site No. 4, Assessment No. 34,
Annapoorneshwari Nagae, Near Peenya 2nd Stage,
Banglore, Karnataka-560 058

44 Validity Period of Fire : Five years period from the date of fire resistance test of
Test Report the sample.

This is to certify that representative metal fire door sample of M/S Rock Miller All Tech India, Bangalore, Karnataka-560 058, has been investigated for fire resistance by Fire Safety Engineering, CSIR-Central Building Research Institute, Roorkee, Uttarakhand, India in accordance with the standard and meets fire resistance rating criteria indicated on this fire resistance test report.

Report Prepared by

Bhawna
(Bhawna)

Report Approved Authority

Nawal
03/04/25
(Dr. Nawal Kishor Banjara)

डॉ. नवल किशोर बंजारा/Dr. Nawal Kishor Banjara
प्रधान वैज्ञानिक / Principal Scientist
सी.एस.आई.आर.-केन्द्रीय भवन अनुसंधान संस्थान
CSIR-Central Building Research Institute
रूड़की-Roorkee -247667 (U.K.)



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर.-केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

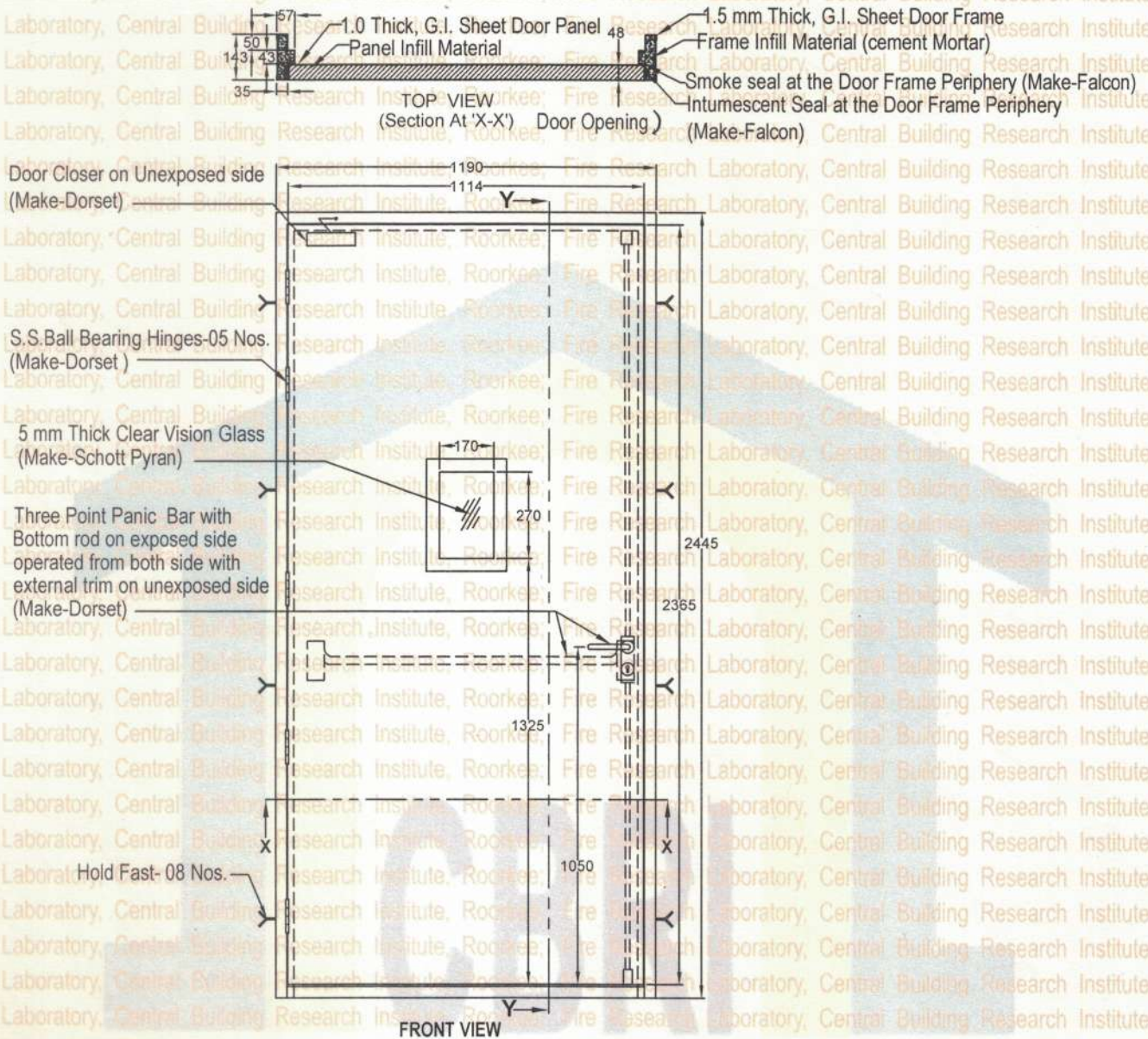
रूड़की - 247 667 (उत्तराखण्ड) भारत/Roorkee - 247 667 (U.K.) INDIA

Note : This original only is valid. Third parties using copies are doing so at their own risk.



केन्द्रीय भवन अनुसंधान संस्थान, रूड़की
CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE
(A Constituent Establishment of CSIR)

FIRE EXPOSED FACE



Note:

Colour of Door Frame and Door Shutter:- Uncoated
Infill Material-Rockwool 96 kg/m³(Panel), Cement Mortar(Frame)
Weight of Door-127 kg (Excluding Hardware)

ALL DIMENSIONS ARE IN MM
SCALE - N.T.S.

DRAWING NO.	1/1-0944(1)
PREPARED BY	Bhawna
CHECKED BY	Naina
APPROVED BY	Naina

Fig. 1: Construction Details of Single Leaf Single Swing G.I. Composite Fire Door with Vision Panel (Uninsulated Specimen) Evaluated for Fire Resistance on March 12, 2025.



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर - केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

रुड़की - 247 667 (उत्तराखण्ड) भारत / Roorkee - 247 667 (U.K.) INDIA

Note : This original only is valid. Third parties using copies are doing so at their own risk.



केन्द्रीय भवन अनुसंधान संस्थान, रुड़की
CENTRAL BUILDING RESEARCH INSTITUTE, R
(A Constituent Establishment of CSIR)

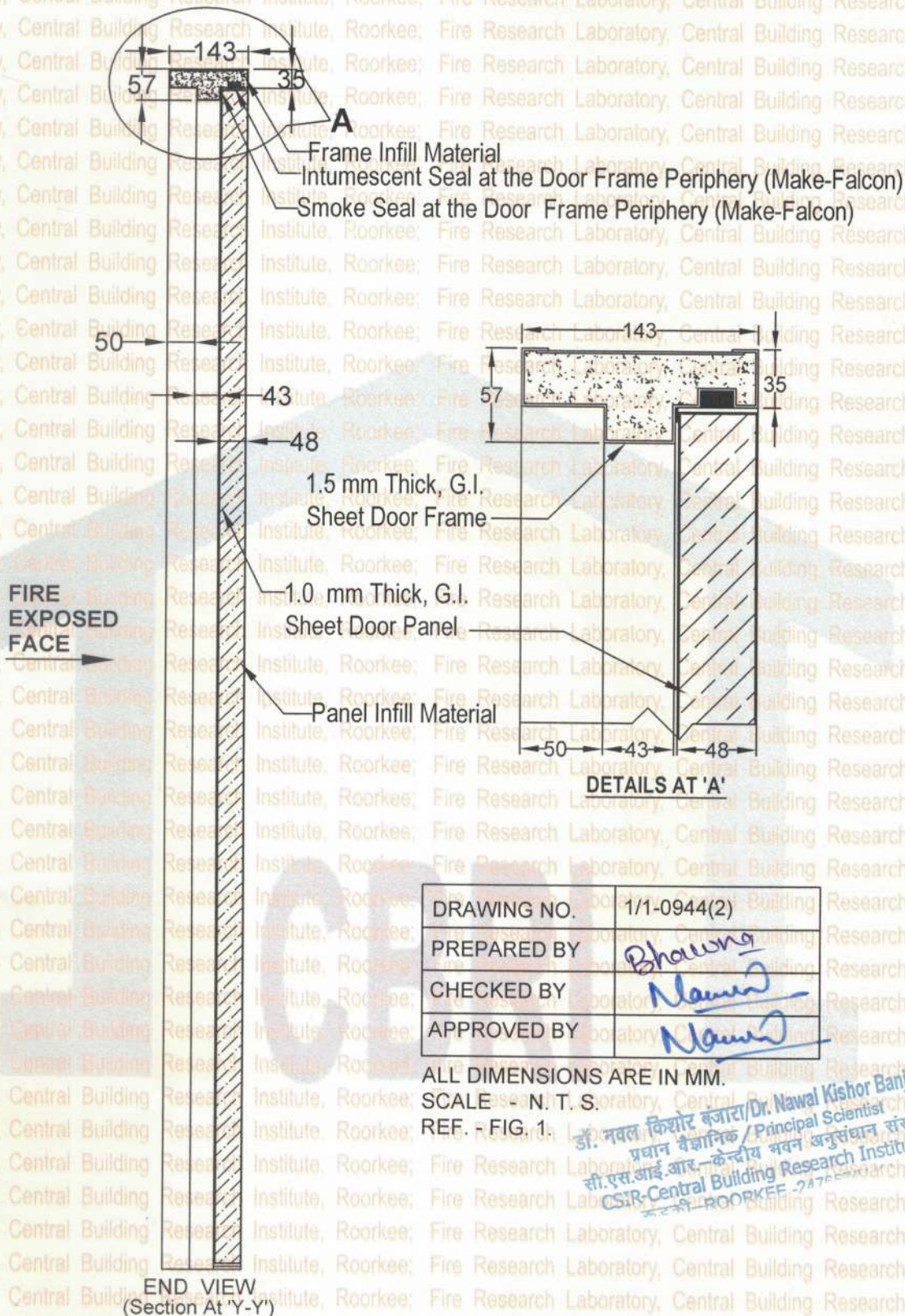


Fig. 2: Sectional Details of Single Leaf Single Swing G.I. Composite Fire Door with Vision Panel (Uninsulated specimen) Evaluated for Fire Resistance on March 12, 2025.



अग्नि अनुसंधान प्रयोगशाला
FIRE RESEARCH LABORATORY
सी.एस.आई.आर - केन्द्रीय भवन अनुसंधान संस्थान
CSIR - Central Building Research Institute

रूड़की - 247 667 (उत्तराखण्ड) भारत / Roorkee - 247 667 (U.K.) INDIA

Note : This original only is valid. Third parties using copies are doing so at their own risk.



केन्द्रीय भवन अनुसंधान संस्थान, रूड़की
 CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE
 (A Constituent Establishment of CSIR)