BUREAU OF INDIAN STANDARDS

AGENDA

Our Ref: CED 36:WG01/A-2.13 **11 November 2024**

Working Group for IS 3614, CED 36 WG01 : 13th Meeting

Thursday, 28 November 2024 : 10:30 AM Onwards

Venue: Hybrid Meeting (*Virtually through WebEx & Physically at BIS HQ*)

- **Meeting Link:** Click here
- **Meeting ID:** 2514 339 7492
- **Password:** CED36

Convener: Dr Shorab Jain **Member Secretary:** Shri Rajesh Choudhary

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Item 0 OPENING REMARKS

Item 1 COMPOSITION OF THE WORKING GROUP

1.1 The composition of the working group as last reviewed by the Fire Safety Sectional Committee, CED 36 is as follows:

Sl No.	Organization Name	Representative
1.	NAVAIR International Private Limited, New Delhi	Shri Atul Gupta
2.	Pacific Fire Controls, New Delhi	Shri Rakesh Kumar Arora
3.	Saint-Gobain India Private Limited, Chennai	Shri Ashwin Kishore
4.	Shakti Hormann Private Limited, New Delhi	Shri Mahesh Kumar Singh
		Shri Vuppala Vivek
5.	Sleek Boards Marketing Services LLP, Pune	Shri Nitin Vaze
6.	Tufwud Doors and Accessories Private Limited, Kolkata	Shri Praveen Khemka

The Group may **NOTE**.

Item 2 ISSUES ARISING FROM THE PREVIOUS MEETINGS

2.1 Shri Rajneesh Patial, Regional Manager, Navair International Pvt. Ltd had indicated the following:

7.2.5 Door Leaf

There are various constructions used for the manufacture of fire doors. These can be used in a number of configurations, which vary from single leaf and double leaf single swing, with a possible option for story-height doorsets using transoms or flush-over panels. It is important to note that doors tested in one configuration might not be suitable for another configuration.

Navair Request for Clarification:

Seeking clarification regarding Item Code **7.2.5** pertaining to the fire evidence testing report for doorsets.

As per our understanding, the requirement stipulates that a single leaf doorsets should be accompanied by a fire evidence testing report for single leaf doors, whereas a double leaf doorsets should be supported by a report applicable to double leaf doors. However, for the sake of absolute clarity and compliance.

Ensuring the correct testing report for each type of doorsets is crucial to adhere to safety standards and regulations. Therefore, I would appreciate your prompt response to this inquiry to avoid any ambiguity or misunderstanding.

The above comment was considered in the last meeting of the Group and in the last meeting of the Fire Safety Sectional Committee, CED 36. During the meeting the Committee, CED 36 discussed that **a double leaf fire door passing a fire test according to IS 3614:2021 does not guarantee compliance for single leaf fire doors. Any change in components within a fire door assembly, particularly the door leaf, can significantly impact fire performance. Therefore, the Committee, CED 36 decided that separate test certificates shall be obtained for both double and single leaf fire doors.**

The Group may **NOTE.**

2.2 Inclusion of Wooden Sliding Doors and Glazed Fire Doors in IS 3614: 2021

2.2.1 In the earlier meetings the Group decided to include the wooden sliding doors and glazed fire doors in IS 3614: 2021. The Group had requested Shri Rakesh Kumar Arora to prepare the draft specifications for the wooden sliding doors. No inputs have been received so far.

2.2.2 The Group also decided to include glazed fire doors in IS 3614: 2021. In the last meeting, it was noted that while the glazed fire doors were included in the draft version of IS 3614: 2021, they were subsequently removed from the final version of the standard due to the unavailability of an Indian Standard for fire-rated glass. The Glass, Glassware and Laboratoryware Sectional Committee, CHD 10 of BIS, is currently formulating an Indian Standard on fire-rated glass. It was decided that once this standard is available, glazed fire doors will be included in IS 3614: 2021.

It is informed that the draft for the new standard titled "Fire Resistant Glass — Specification," Document: CHD 10 (22416), has completed the wide circulation stage. Therefore, the draft specifications for glazed fire doors may now be prepared.

Item 3 COMMENTS ON IS 3614: 2021 'FIRE DOORS AND DOORSETS — SPECIFICATION'

3.1 Various comments have been received on IS 3614: 2021. The detailed comments are as below:

Sl No.	Commentator	Comment/Modified Wording
1.	Shri Sidharth Surajgarhia, Intelligate, Noida	**Subject**: Clarity on onsite fabrication, punching in Metal Fire Door & Type of door tag With ref. to above subject please inform, a) If any Punching, Drilling or tapping for fixing of hardware is allowed onsite in a Metal Fire door. b) Whether door tag should be pasted or riveted on a Fire door. Whether Fire door should come with Door tag or can be fixed after Fire door has been installed on site.
2.	Shri Sidharth Surajgarhia, Intelligate, Noida	This is in ref. to Glazed Fire doors being installed in various Govt. projects pan India as per DSR specifications in which insulation in item 9.161 | 9.162 & 9.163 [Metal Frame & Shutter] has been mentioned as min. 20 minutes whereas in IS 3614:2021 [para 5.2 & 5.3] **5.2** Insulated Door — Insulated doors shall be tested for both integrity and insulation and designated accordingly. For example, if a door has passed 120 min of integrity, and 30 min of insulation, then it is designated as 'FD 120 with 30 min insulation'. The provision of this standard requires any insulated fire door to have a minimum insulation fire resistance period of 30 min. **5.3** Un-insulated Door — A door tested for fire rating of integrity only and not requiring any minimum insulation shall be considered as uninsulated door. The door shall be designated accordingly. For example, if a door has passed 120 min of integrity alone and no insulation or for insulation less than 30 min, it is designated as 'FD 120'. Since minimum insulation of 30 minutes is required to qualify as an insulated door, kindly clarify what should be the insulation criteria in Metal Glazed Fire door.

3.	Shri Praveen Khemka, Tufwud Doors and Accessories Pvt. Ltd.	I propose including the following agenda items for the upcoming CED 36: WG01 meeting scheduled on 30th September 2024, based on our recent correspondence with CED 46 regarding fire door standards and the National Building Code (NBC) provisions. These items are critical for clarification and discussion among the members: 1. Minimum Insulation Criteria for Fire Doors (IS 3614:2021 Amendment): whereas the preamble of NBC as well as most tables of NBC Part 4 mention that the given requirements are MINIMUM in nature. 2.22 note defines insulation as 30 minutes. We should seek clarification or **clarify in our meeting** - whether this is minimum or optimal, and thus circulate the minutes to CED 46. (Specifically, many experts think that staircase exits, and confined areas should be protected by fully insulated doors.) 2. ISI Marking Requirements for Fire Doors we should make a formal request for a "Quality Control Order" by DPIIT to make ISI-marked products mandatory in Fire Doors, as they have done for other firefighting equipment. This will promote BIS and Quality thinking in FD manufacturers.
4.	Shri Nitin Vaze, Sleek Boards Marketing Services LLP, Pune	As all are aware the detailing for wooden doors included in the IS 3614 is very scanty compared to the detailing stated for metal doors. In order to broaden the base, the essential details attached are suggested inclusions to be added as an amendment to IS 3614. The details are given in **Annex 1**.
5.	Shri K Parameswara Reddy, Shakti Hormann Pvt. Ltd., Medchal	Please find attached Points required to discuss and decision on Specimen Samples for Inspection & Testing Verification of samples before and after the test as per latest methodology IS 17518 not being followed by test Labs. **As per IS 3614 –** **7.3 Fire Rated Hinged Doors (Wooden Composite)** **7.3.3 Construction** Door frames should be supplied by the door manufacturer only, with proper certification and test results for the size of the door sets. **Shakti Hormann request clarity and improvement on construction**

		1. All Fire Rated Hinged Doors (Wooden composite) will be mandatory to supplied as the complete assembly from the manufacturer i.e. Door frame, Door shutter including hardware to be supplied by the Fire Door manufacturer as Door set. 2. Door frame construction either Wooden composite or steel. Wooden composite door frame construction as per IS 3614: 2021 and steel door frame construction as per IS 4351:2024. 3. Door shutter Construction as per IS 3614: 2021 or as per IS 2191: 2022 4. Fire Rated Hinged Doors (Wooden Composite) tested as per IS 17518:2022 Required detailed discussion and decision on above points for improvement
6.	Shri K Parameswara Reddy, Shakti Hormann Pvt. Ltd., Medchal	**<u>As per IS 17518 –Fire Resistance Tests</u>** **6.2 Number of specimens** The number of test specimens shall be selected as described in ISO 834-1. **Clause 6.5 Verification** **6.5.1** The sponsor shall provide a specification to a level of detail sufficient to allow the laboratory to conduct a detailed examination of the specimen before the test and to agree on the accuracy of the information supplied. ISO 834-1 provides detailed guidance on verification of the test specimen. **6.5.2** When the method of construction precludes a detailed survey of the specimen without having to permanently damage it, or if it is considered that it will subsequently be impossible to evaluate construction details from a post-test examination, then one of two options shall be exercised by the laboratory: — either the laboratory shall oversee the manufacture of the door or shutter assembly(ies) subjected to the test, or — the sponsor shall, at the discretion of the laboratory, be requested to supply an additional assembly or that part of the assembly that cannot be verified (e.g. a door leaf) in addition to the number required for the testing. The

		laboratory shall then choose freely which of these shall be subjected to the testing and which shall be used to verify the construction.
7.	Shri K Parameswara Reddy, Shakti Hormann Pvt. Ltd., Medchal	**<u>As per ISO 834-1 Fire Resistance Tests</u>** **7.3 Number of test specimens** **7.5 Test specimen verification** The sponsor shall provide a description of all constructional details, drawings and schedule of major components and their manufacturer/supplier, and an assembly procedure to the test laboratory, prior to the test. This shall be done sufficiently in advance of the test to assist the laboratory which shall verify the conformity of the test specimen with the information provided, as far as possible, and any area of discrepancy which shall be resolved prior to starting the test. In order to ensure that the description of the element, and its construction in particular, is in conformity with the element tested, the laboratory shall either verify the fabrication of the element or request one or more additional test specimens. **Shakti Hörmann request for Additions, to ensure clarity and improvement of the Standard of BIS approved Labs:** Regarding Clauses 6.2, 6.5, 6.5.2 Verification of Test Specimens. Test Labs approved by BIS should follow the below process: The lab needs to request the manufacturer to deliver two identical specimens which are intended for the Fire Test. First visual and measurement inspection (Length, Width, thickness and weight) is to be conducted and recorded after which both the specimens shall be weighed independently (only Shutter and Frame, without the hardware accessories) in order to establish the uniformity of specimens. If there is variance in any of the above points, the Lab shall not test the specimen supplied.

		If both the visual and weights of the specimens are similar, then the lab reserves the right to choose, which of the specimens is to be tested. Post the Test, the lab reserves the right to cut open the untested specimen, in the presence of the manufacturer. The manufacturer, reserves the right to take back, both the tested and untested specimens. As the number of BIS approved labs, are increasing we would request the BIS Review Committee to look into this matter urgently. The above points need to be discussed and approved for compulsory implementation as this will ensure that all the Labs are following stringent processes, thereby ensuring the Standard of BIS is not diluted.

The Group may **CONSIDER**.

Item 4 DISCUSSION ON APPLICATION OF VARIOUS TYPES OF FIRE DOORS IN BUILDING OCCUPANCIES

Item 5 ANY OTHER BUSINESS

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