FIRE DOOR TESTING AT IPIRTI

With the increasing building activities and stringent building regulations the behaviour of building components from various panel products or in combination with other materials against fire and to ensure occupants safety is the need of the hour. With the recent regulations relating to buildings in India, there is also a market for fire retardant wooden doors in housing applications. There are huge opportunities for developers and architects to add value to their properties through these fire retardant doors. Occupants of buildings will be the major beneficiaries as it gives them additional peace of mind and protection from fire without compromising the use of green building materials viz. wood and panel products. Keeping future requirements of building bye-laws in our country and to facilitate testing of fire check doors, the facility is being established at IPIRTI for testing fire performance of full size door/shutters as per national/international standards such as BS 476 (part 20 and 22), IS 3614 (part 2), ISO 3008:2007 and BS EN 1634-1:2000 using latest technologies and instrumentation comparable with best in the world.

Fire doors are “rated” by time (in minutes or hours) that a door can withstand exposure to fire test conditions and the failure criteria is assessed by Integrity & Insulation. Hourly ratings include 120 minutes, 90 minutes, 60 minutes and 30 minutes with the maximum rating required of any swinging type fire door being three hours.

Salient features of the fire door testing setup are:-

- Vertical front open furnace structure with imported burners having refractory bricks & ceramic wool blanket for best heat insulation
- Computer programmable Automated LPG burners with computer controlled LPG and air flow
- Hot gas exhaust with automated damper system
- Single girder EOT crane with electric hoist
- Test frame to hold door under test with trolley and roller skid
- K-Type thermocouple assembly with data logger facility
- PC based multi-channel data logger and software controlled test.
- The system is equipped with fire-fighting and safety equipments.

For further details please contact:
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