

FRL FOR FIRE DOORSETS

Fire Resistance Levels (FRL) are not assigned to individual materials but to a complete system as an indication of its ability to contain a fire. A fire rated doorset is defined as the frame, door and hardware. The FRL achieved by a system in a test is expressed in minutes for which the system fulfills each of three criteria. These are, in order:

Structural Adequacy [or Load Bearing], Integrity and Insulation (written as a/b/c).

When subjected to a FIRE TEST a fire doorset cannot additionally absorb the stress of bearing load. Therefore the structural or load bearing capacity of the opening must be provided by the opening itself.

As a fire rated doorset is not considered a load bearing element the first criteria is represented by a dash (or NA, not applicable), for example 1 hour rated doorsets are expressed as:



DtS compliance with NCC/BCA for fire doorsets will require an insulation level of only 30 minutes irrespective of the fire rating of the wall. This dispensation is primarily to permit the design and testing of fire doors of a practical and functional thickness.

Panels over and access panels may be considered as part of the wall and require the full insulation rating as the wall. This should be confirmed with your BCA certifier or Fire Engineer.

Fire and design requirements can limit the maximum size of door leaves and may restrict certain systems in some applications. Please always consult with your fire door supplier for system specifications.

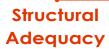






Therefore a fire wall with $\cdots > 60 / 60 / 60$

Insulation





The ability to maintain stability and adequate load bearing capacity as determined by AS 1530.4

Criteria NOT required for Fire Doors



Integrity

The ability to resist the passage of flames and hot gases as specified by AS 1530.4



The ability to maintain a temperature over the whole of the exposed surface below that specified by AS 1530.4 Capped at 30-mins for Fire Doors

- / 60 / 30 <···· REQUIRES THIS FOR 1-HOUR FIRE DOORS