FIRE + RESCUE

POSITION STATEMENT SUMMARY

Fire doors with fire activated retaining devices (e.g. bolts)

Position

Effective 23 December 2024, the following is a position of Fire and Rescue NSW (FRNSW):

FRNSW require fire doors to remain functional (i.e. openable and closeable) for the duration of any fire to allow safe evacuation of occupants and to facilitate fire brigade intervention. Fire doors should not be fitted with supplementary fire activated retaining devices that render the door inoperable once activated by fire.

Note: Clause 2.1.4.1 of AS 1905.1:2015 *Components for the protection of openings in fire-resistant walls Part 1: Fire-resistant doorsets* states all hardware shall function so that the door leaf is self-latching; fire activated retaining devices are not self-latching.

FRNSW understand that fire activated retaining devices, such as fire bolts, are being installed within some fire resisting doorsets to allow the door to pass the fire resistance requirements of AS 1530.4:2014 Methods for fire tests on building materials, components and structures, Part 4: Fire-resistance tests for elements of construction.

Fire activated retaining devices are supplementary hardware that latch the door leaf to the frame when activated by fire and can be triggered by various means (e.g. intumescent, fusible link, magnetic), and secure the door shut to minimise warping and ensure integrity.

However, if these devices activate prior to or during occupant evacuation or fire brigade intervention then Performance Requirement D1P2 of the *National Construction Code* (NCC) is not being satisfied as occupants may have their egress impeded or become trapped in the building and fire brigade intervention may be impeded.

Note: Fire activated retaining devices may trigger early during fire, or even prior through unintended deployment, and render the door inoperable well within the maximum duration of the door's corresponding fire test period.

Certifiers must ensure that Performance Requirement D1P2 is being satisfied to ensure fire doors remain readily openable by a person seeking egress or by firefighters undertaking intervention. Reliance should not be solely placed on AS 1530.4:2014 test reports as evidence of suitability.

Reference must be made to the FRNSW website to ensure this position is current at the time of use, and this position has not been superseded or revoked.

Summary

This position statement supersedes the previous position titled *Fire doors with fire activated bolts* last updated 29 April 2024. The term 'bolts' has been expanded to include any type of securing device and clarification is made with reference to AS 1905.1 provisions.

This position statement stipulates that the installation of fire activated retaining devices in fire resisting doorsets cannot override the door's primary function of remaining openable during a fire event. If this requirement is not met, then Performance Requirement D1P2 is not being satisfied.

An informative note identifies that AS 1905 requires all hardware to function in a manner that ensures the door leaf, or leaves, remain self-latching. Fire activated retaining devices do not provide any self-latching functionality therefore render the fire door as non-compliant.

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Commentary notes that fire activated retaining devices are being installed to pass the fire resistance requirements of AS 1530.4:2014. However, these devices also have the potential to activate early in the fire's duration and render the door inoperable, potentially impeding the safe egress of building occupants as well as hampering fire brigade intervention. A fire door must remain readily openable via an approved self-latching mechanism.

Note: Clause 2.1.4.2 of AS 1905.1 states any bolt or other device that renders the door non-self-latching shall not be used.

AS 1530.4:2014 test reports include information relevant to building designers, but these reports should not be solely relied upon as evidence of the door's suitability. Certifiers are reminded that suitability must be determined with reference to Performance Requirement D1P2 in addition to fire resistance requirements of AS 1530.4:2014.

This position statement has been authorised for release by Chief Superintendent Fire Safety, FRNSW.

Contact us

For further information contact the Fire Safety Branch on (02) 9742 7434 or email firesafety@fire.nsw.gov.au.

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