THYROS 60™

Fire-Rated Doorset System

Side-hung 60-minute fire door leaf & frame

FIRE RESISTANCE LEVEL

-/60/45

Structural / Integrity / Insulation (min)

OVERVIEW

The Thyros 60™ is a single, side-hung fire doorset engineered by Nexdor Systems and fire-tested by Jensen Hughes in accordance with AS 1530.4:2014 and AS 1905.1:2015. The composite door leaf, pressed-metal frame and sealing hardware achieve an FRL of -/60/45 across single- and dual-layer plasterboard, timber stud, insulated staggered-stud, concrete and masonry wall constructions. Tested and assessed door hardware is listed in section 04.

01 DOOR LEAF

MAXIMUM LEAF SIZE

Height and width are inversely constrained — reducing width permits greater height.

1020 W	1173 W
2760 H	2500 H

DIMENSIONS IN MM. Oversize leaves assessed in walls min. 144 mm thick (2 × 13 mm FR plasterboard or concrete/masonry). Tested leaf size 2400 H × 1020 W.

FACINGS

- **Base facing:** MDF, 3 – 5 mm thick
- **Optional overlay** up to 1.5 mm, full height & width both sides, bonded over the MDF base facing:
  - Timber veneer / timber facing
  - Steel sheet (e.g. Zincaneal or stainless steel)

02 DOOR FRAME, FIXINGS & BACKFILL

FRAME

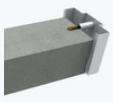
Type	Pressed metal, welded & dressed
Gauge	1.4 – 1.6 mm mild steel
Rebate	Single or double rebate
Fixing centres	Max. 400 mm c/c, all fixing methods

FRAME FIXING METHODS

Five approved fixing systems, matched to wall type as below. Dynabolts require min. 25 mm penetration into the wall; Wire Ties are embedded in the mortar bed.



MS Strap
STUD WALL



Dynabolt
CONCRETE & MASONRY



New Gen
STUD WALL



Partition
STUD WALL



Wire Ties
CONCRETE & MASONRY

WALL TYPE	FRAME FIXING	FRAME BACKFILL
Plasterboard stud wall (1 × or 2 × 13 mm FR)	MS Strap, New Gen, Partition	FR plaster and cornice adhesive, mortar or concrete
Concrete / masonry	Dynabolt, Wire Ties	Mortar, concrete or non-shrink grout

03 APPROVED WALL CONSTRUCTIONS

WALL SYSTEM	MIN. THICKNESS	FRL
Steel stud, single layer 92 mm steel stud, 1 × 13 mm FR plasterboard each side	118 mm	**-/60/45**
Steel stud, dual layer 92 mm steel stud, 2 × 13 mm FR plasterboard each side	144 mm	**-/60/45**
Staggered steel stud, insulated 2 × 76 mm studs in 150 mm track, 2 × 13 mm FR plasterboard each side, 2 × 75 mm glasswool (32 kg/m³)	204 mm	**-/60/45**
Timber stud Single timber stud, min. 2 × 13 mm FR plasterboard each side	—	**-/60/45**
Concrete / masonry Designed to AS 3600 / AS 3700 or tested by an ATL for the required FRL	118 mm	**-/60/45**
Lined concrete / masonry 140 mm concrete/masonry, 1 × 13 mm FR plasterboard each side on 25 × 0.55 mm steel battens; frame fixed direct to substrate	216 mm	**-/60/45**

04 APPROVED DOOR HARDWARE NEW

The hardware below has been fire tested on the Thyros 60™ doorset and achieves an FRL of **-/60/45**, whichever way the door opens relative to the fire. Hardware not listed must be assessed by Jensen Hughes before use.

TYPE	MANUFACTURER / MODEL	FIRE TEST REPORT
Lockset	Zanda 1450.SS mortice lock, 60 mm backset, with 10000.BN Epic Return lever set and 7023.BN round escutcheon with disabled turn	FRT261294 R1.0
Lockset	NOVAS 6000 series mortice lock, 60 mm backset, with CYLO6LSC.KA2Z.864700 cylinder and NOVAS Design Passage lever set 63 on round rose (SSS finish)	FRT262165 R1.0
Door closer	Zanda TS9205 surface-mounted closer, standard arm	FRT261294 R1.0
Door closer	NOVAS 1500 series surface-mounted closer, size 2–5 with backcheck, standard arm	FRT262165 R1.0
Hinges	Zanda 5901 butt hinge, fixed pin, 100 × 100 × 2.5 mm	FRT261294 R1.0
Hinges	NOVAS ball-bearing hinge, fixed pin, 100 × 100 × 2.5 mm	FRT262165 R1.0
Hinges	NOVAS button-tip hinge, fixed or loose pin, 100 × 100 × 2.5 mm	FRT262165 R1.0
Hinges	NOVAS button-tip hinge, fixed pin, 100 × 100 × 2.5 mm, satin black (101025BTFPSBLWS) — finish variant of the tested hinge*	FRT262165 R1.0
Perimeter seal	Raven RP150 perimeter seal, 15 × 15 mm	FRT261294 R1.0
Drop seal	Raven RP8Si mortised bottom drop seal, 34 mm tall × 14 mm thick	FRT261294 R1.0

Fire tests by Jensen Hughes to AS 1530.4:2014. Hardware assessed by Jensen Hughes in master door hardware assessment 262729 DHAR1.1 (issued 26.10.2026, valid to 31.10.2031), read with doorset assessment 253500. The doorset FRL is the lower of the hardware and doorset FRLs. * Satin black finish confirmed by Jensen Hughes (16.10.2026) as covered by the tested hinge. Further hardware is being added through pilot fire tests — contact Nexdor for the latest approved list.