Security Walls

Security wall is an upgrade solution to improve security for any wall system. Applications for security wall can include common walls in multi-residential apartments and hotels, partitioning in shopping centres and retail outlets such as pharmacies.

The system uses a sheet metal barrier that is installed as part of the framing construction. The construction is cost-effective as it allows simple and quick assembly. The security wall upgrade may be applied to any Knauf single, staggered or double stud wall system without reducing fire and acoustic performance.

[For General Requirements, Framing, Plasterboard Layout and Plasterboard Fixing refer to Section 3.1.1]
FIRE RATED AND NON-FIRE RATED DETAILS FOR SECURITY WALLS

FIGURE 1 Wall Head
Steel sheeting between stud and plasterboard

Steel sheeting on one or both sides (thickness based on security requirements)

20mm clearance to stud and plasterboard

Knauf Bindex Fire and Acoustic Sealant required to maintain integrity

Screw or rivet steel sheeting to steel stud wall

Steel sheeting on one or both sides (thickness based on security requirements)

Fix 60-100mm from sheet top. Do not fix through track

Knauf plasterboard

FIGURE 2 Wall Base
Steel sheeting between stud and plasterboard

Steel sheeting on one or both sides (thickness based on security requirements)

5-10mm clearance to plasterboard

Screw or rivet steel sheeting to steel stud wall

FIGURE 3 Single Stud Wall
1 layer of steel sheeting

Plan

Steel sheeting (thickness based on security requirements)

FIGURE 4 Single Stud Wall
2 layers of steel sheeting

Plan

Fix studs together using 10g screws at 600mm max centres vertically, and 100mm from ends

Knauf plasterboard

FIGURE 5 Double Stud Wall
1 layer of steel sheeting between stud framing

Plan

Steel sheeting on one or both sides (thickness based on security requirements)

Fix toggle bolts at 600mm max centres vertically, and 100mm from ends

Knauf plasterboard

FIGURE 6 90° Corner
2 layers of steel sheeting

Plan

Steel sheeting on one or both sides (thickness based on security requirements)

20mm max

Knauf Bindex Fire and Acoustic Sealant depth same as plasterboard thickness

Backing rod

Tracks discontinuous over control joint

Optional control joint bead

FIGURE 7 Intersecting Wall
1 layer of steel sheeting

Plan

Steel sheeting on one or both sides (thickness based on security requirements)

Knauf plasterboard

FIGURE 8 Control Joint
2 layers of steel sheeting

Plan

Steel sheeting on one or both sides (thickness based on security requirements)