



# A Guide To Understanding Wall Types

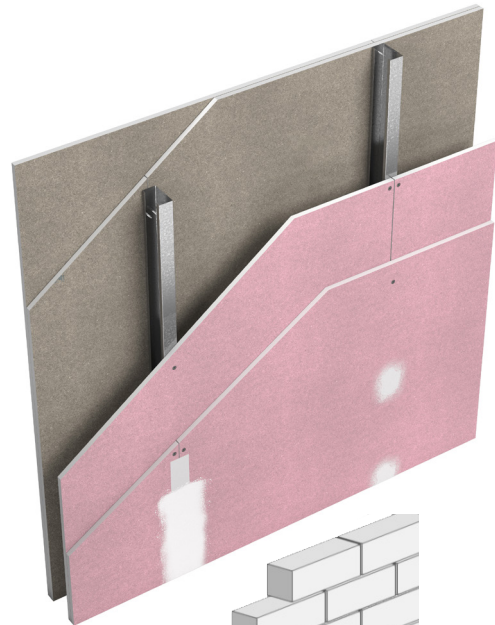
[simplis.co.uk](http://simplis.co.uk)

# Understanding Wall Types

## Standard Flexible

Examples include:

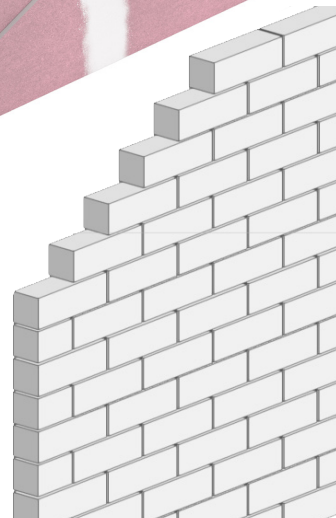
- Plasterboard steel stud partitions
- Plasterboard timber stud partitions



## Standard Rigid

Examples include:

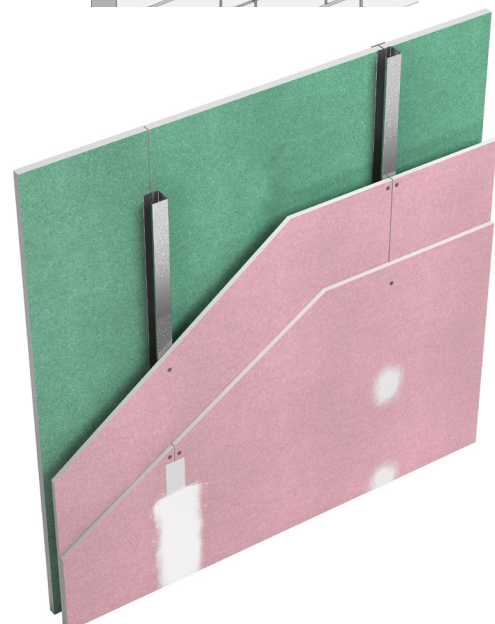
- Blockwork walls
- Concrete walls



## Associated

Examples include:

- Shaftwalls
- Composite panels
- Cast-In-Place (CIP) walls
- Pre-cast concrete with core layer



# Standard Flexible

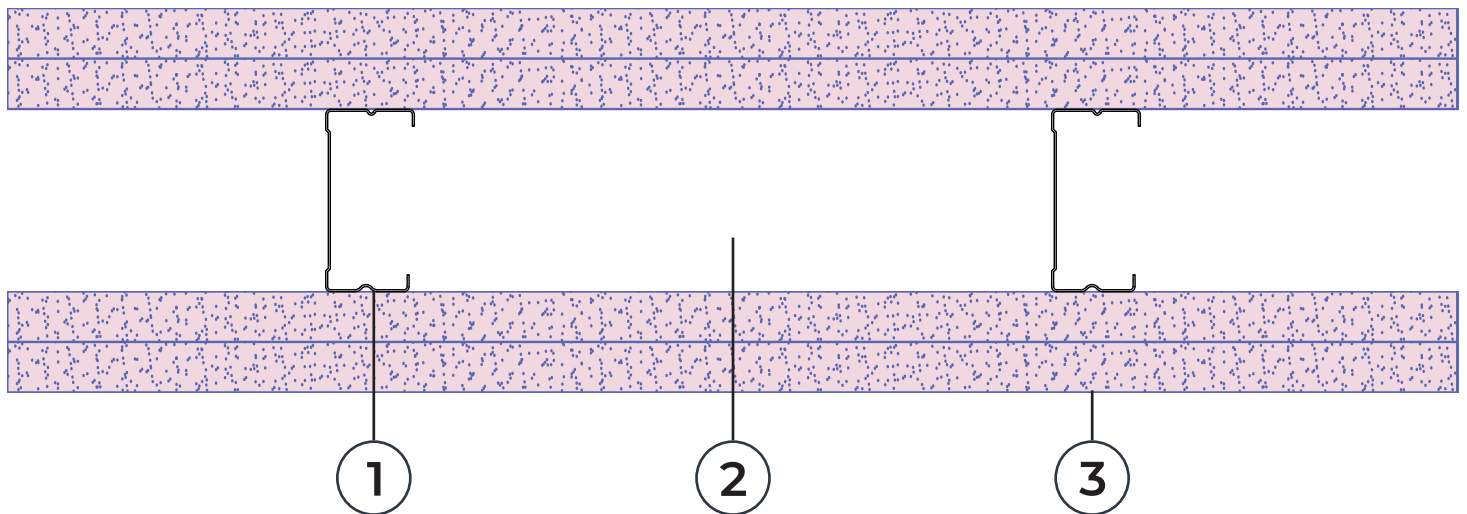
## Commonly built from materials such as:

- Plasterboard
- Timber or Metal Studs
- Insulation/Mineral Wool

## Typically used as partition walls in areas such as:

- Offices
- Retail Units
- Hospitals/Clinics
- Hotels/Apartments

## Example Cross Section: Plasterboard Steel Stud Partition



- 1** Stud Work: Steel or Timber
- 2** Cavity: May contain insulation material
- 3** Plasterboard: May have multiple layers depending on the requirements of the wall

**Note:** Flexible walls are typically symmetrical in construction.

# Standard Rigid

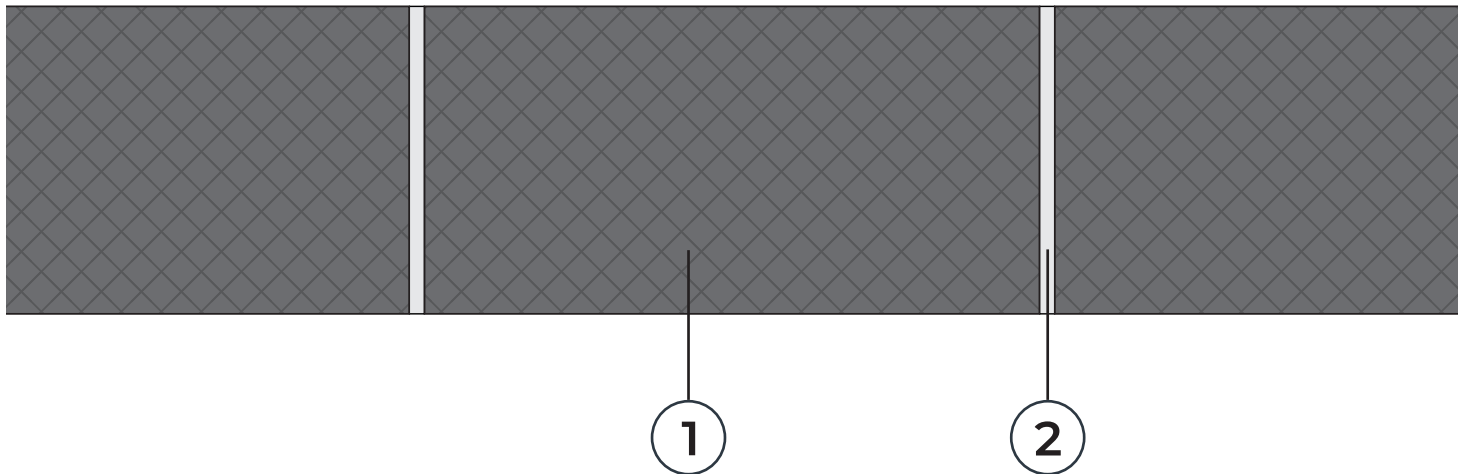
## Commonly built from materials such as:

- Blockwork
- Concrete

## Typically used as a structural support in areas such as:

- Homes/Offices/Hospitals
- Around Stairwells
- Public Buildings

## Example Cross Section: Blockwork Wall



1 Blockwork

2 Mortar

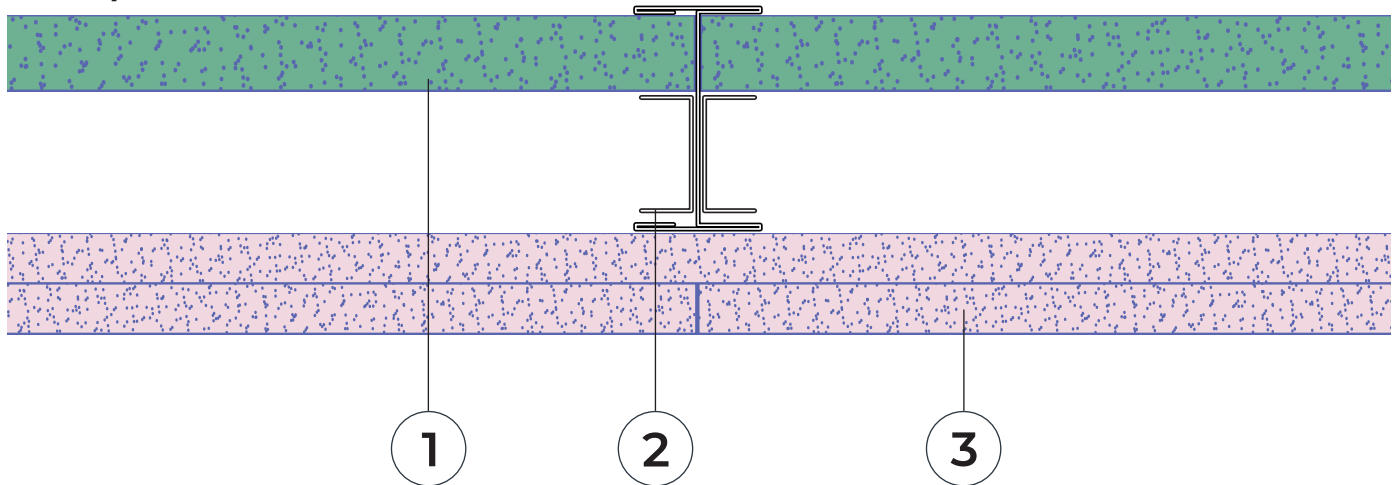
# Associated

If your wall doesn't fit into the Rigid or Flexible categories, it is more than likely an Associated Wall.

## Common Associated Wall Types include:

- **Service risers in high-rise buildings:** Shaftwalls enclosing utilities like plumbing and cabling (See cross-section below)
- **Office spaces:** Demountable acoustic panels for sound control
- **Industrial plants:** Pre-cast concrete with structural cores for durable separation between process areas

## Example Cross Section: Shaftwall



- 1** CoreBoard to shaft side: Board types can come in a variety of thicknesses and number of layers
- 2** Metal channels: Depth and design may vary
- 3** FireLine to non-shaft side: Board types can come in a variety of thicknesses and number of layers

**Note:** Shaftwalls are typically asymmetrical in construction as they are designed to be built and accessed from only one side.

# Fire Test Compatibility

A fire-tested access panel or riser door tested in one wall type cannot automatically be assumed to perform equivalently in a different wall system.

The direct application rules outlined in **Section 13.5.4 of EN 1634-1:2014 +A1:2018** clarify how specific test data can be applied. This is summarised in the table below.

	Can be used in Rigid Wall	Can be used in Flexible Wall*
Uninsulated Door Tested in Rigid Wall	✓	✓
Insulated Door Tested in Rigid Wall	✓	✗
Uninsulated Door Tested in Flexible Wall	✗	✓
Insulated Door Tested in Flexible Wall	✗	✓

\*Must be equal to or greater than the wall that the product was tested into. (For tests into **rigid** wall, where applicable into **flexible** wall, the wall is required to be **FR120+**).

Under the **test standard**, the **minimum distance** between **adjacent door sets** is **300mm** for **Flexible** and **Associated** door sets, and **200mm** for **Rigid** door sets.

**Note:** Insulated doors are lined with plasterboard and/or mineral wool.



