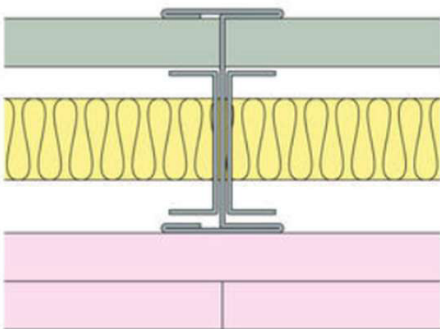


# KNOWLEDGE SHARE: 002

**TITLE:** WALL COMPATIBILITY CHECKS  
**BUILDING TYPE:** ALL BUILDINGS

## OVERVIEW OF THE PROBLEM

According to service penetration testing standards, there are defined types of walls (referred to as standard supporting constructions) that can be tested and used in practice. These are typically symmetrical flexible partitions which use type 'F' gypsum boards and rigid masonry, blockwork, or concrete walls. Often, there are other types of walls that could be found on projects which are defined as non-standard by the testing standards e.g. metal faced sandwich panels, asymmetrical shaft walls and partition walls which do not use type 'F' gypsum boards.



### A306041 (A) (EN)

[See full details for this specification](#)

Gypframe 70 I 70 'I' Studs at 600mm centres with Gyproc CoreBoard 19mm between studs, secured by Gypframe G110 Retaining Channel. Two layers of Gyproc FireLine 12.5mm to non-shaft ...

[Read more](#)

Fire Integrity (mins)	60	Fire Insulation (mins)	60	Sound Insulation (Airborne) Rw (dB)	44
Duty Rating	Severe	Maximum Height (mm)	4200	Partition Thickness (mm)	97

Figure 1: example of 'non-standard' wall types as defined in BS 1363-1 (image courtesy of British Gypsum)

## WHY IS THIS A PROBLEM?

If the type of wall used in practice differs from the wall used in the test or is not permitted under the direct field of application (e.g., thicker, denser, increased number of boards), it may not be compliant. Depending on the project, this could present numerous issues, particularly when architects specify multiple types of non-standard walls.

## RECOMMENDATIONS

It is recommended that as early as practicable, specific products are selected (e.g., fire resisting ductwork and dampers) so that checks can be carried out to make sure that the walls in which these items are intended to be installed are compatible with the tested or certified detail. Other service penetration details (e.g., for MEP services) should also be checked. Wall types can then be rationalised to suit, or other routes to compliance can be sought – furnace testing or third-party assessment.