



Quality Alert

Drylining Detailing Issues

Drylined walls are typical on almost all of our projects, however it is becoming more common that defects are becoming apparent post handover, leading to costly investigative and remedial works, typically in live environments.

On a recent SEND School project, cracking was seen to be occurring on board joints along a long section of corridor wall, typically but not always at door locations. Initially thought to be due to settlement, joints were made good at the end of the defects period and closed. Some weeks later however the cracks reappeared. Following some further investigation by both British Gypsum and our drylining consultant the walls were opened up to investigate the construction to ensure details were followed correctly and defective workmanship was not the cause. The results of the investigations were that the door detailing was constructed correctly, in line with BG standard door detail. The detailing design was then investigated for compliance.

Upon investigation of the design parameters for this standard detail, the doors installed on the scheme fouled this in two instances:

1—The detail was produced for doors ‘up to 60kg’. The doors in some instances exceeded this by just 2kg at 62kg, but the majority were 69kg and 76kg.

2—The detail was produced for door openings up to 1200mm wide. The structural openings in the drylining were 1610mm wide in this instance as they included a full height side screen.



Cracking example and investigation works

Discussing this issue at length with British Gypsum it is clear now that there were several fundamental failings that have led to works being installed on the project which don't provide the required level of robustness, which is leading to repeat failing of the system.

Key learning:

1—Ensure that the designer responsible for Drylining (usually the Architect) provide a full project pack of specific construction details for that system.

2—Ensure key details are reproduced by the Architect. Typical details are generally provided, however this can lead to assumptions that these are the only applicable details for the scheme. Challenge lazy designers

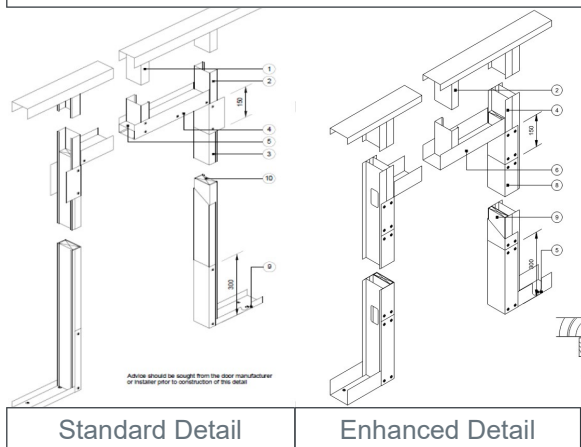
3—Procure the internal doors early. Door weights can have a fundamental impact on the wall system specified. Increase in stud sizes/boarding requirements can impact space requirements, general design coordination and have a commercial impact.

4—Ensure when the internal doors are procured that the specification is reviewed again by the Architect. Wall specification and detail packs need to be accurate to what has actually been procured.

5—Site teams can only inspect elements of work against the design information provided. We need to ensure we have all the tools to hand to pick up any deviations from design.

6—Don't assume this will be raised by your drylining consultant during construction stage inspections.

Typical Examples of BG Design Detail Drawings



This advice should be used, where the above is applicable, and the information discussed with your team highlighting the following points:

- Challenge design team to provide the right level of drylining detail required
- Seek early supply chain input on anticipated door weights to properly specify walls
- Ensure opening sizes and not just door weights are reviewed to provide the right detail

Toolbox Talk Packages (put an 'x' next to the related work packages):

Brickwork / Blockwork	Doors & Windows	Roof	Drainage	Frames	Roads, Paths, Pavings & Surfacing	Site preparation works
Substructure	FFE	Flooring	Internal walls & partitions, Ceilings	X Joinery / General Carpentry	Painting	Fire & Lightning protection
Walling (Tiling)	Electrical installations	Services / Systems	Water installations	DFMA (Offsite Manufacture)	Design	Miscellaneous



Everyone has the right to be

100% Safe