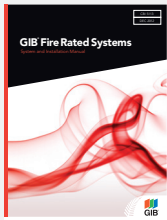


GIB® Fire Rated Systems Update

The update will see an amalgamation into one of a number of documents, including our main 'GIB® Fire Rated Systems (2006)' technical literature, 'Penetrations in GIB® Fire Rated Systems (2003)' and the Technical Bulletin 'Residential Garage Boundary Walls (2009)'.

MAIN SYSTEMS LITERATURE



Changes to the main GIB® Fire Rated Systems include a change from surface finish properties as determined by AS/NZS 1530.3 to Classification in accordance with ISO 5660 Reaction to Fire Tests – Heat release, smoke production and mass loss rate Parts 1 and 2. All un-painted paper-faced

GIB® plasterboard sheet materials now achieve a Group 1-S Classification. For paint or wallpaper finishes contact the supplier of the finishing material.

We will also be including recently tested steel joist floor/ceiling systems.

Remaining changes mainly relate to relatively minor text and drawing clarifications.

PENETRATIONS

Fire systems penetration details will now be incorporated into the GIB® Fire Rated Systems 2012 literature and a live listing of suitable proprietary penetration details and product suppliers will be posted when our new www.gib.co.nz website is launched later this year.

Service penetrations are a 'hot' topic of discussion amongst fire safety practitioners. To minimise issues on-site, the running of building services must be co-ordinated in the design office. Bundling services and

resolving penetrations through fire separations on the drawing board saves time, hassle and mistakes often encountered during the construction process. Before release of our new literature, fire testing will be carried out in collaboration with a number of penetration product suppliers with the aim to come up with robust, simple and standard details that maintain the integrity of GIB® plasterboard fire separations.

BOUNDARY FIRE WALLS

There has also been considerable debate about the post-fire stability requirements for boundary walls of large and smaller structures. NZBC Verification Method B1/VM1 refers to AS/NZS 1170 Clause 4.2.4 for guidance. Although the original provision of this Clause only mentions 'collapse outwards after a fire event', it has been reworded in NZBC B1/VM1, effectively removing the one-way stability option. Post-fire stability is now required in both directions for all fire-rated boundary walls, including those required for small residential structures such as garages.

The stud-to-plate and frame-to-slab fixings using GIB Handibrac®s and 90 x 45 mm timber framing, as published in our bulletin 'GIB® Residential Garage

Boundary Walls 2009', provides post-fire stability in the outward direction, but does not prevent collapse inwards. To achieve equal post-fire stability in both directions, use minimum 140 x 45 mm SG8 timber framing and place the GIB Handibrac®s centrally as illustrated.

The GIB® boundary wall details apply to simple single-storey timber-framed buildings. For more complex structures specific engineering design is required to verify that post-fire stability (in both directions) is achieved.

The required Fire Resistance Rating (FRR) must be determined in accordance with NZBC C/VM2 or Acceptable Solutions C/AS1 to C/AS7. For buildings that form part of single household units, such as garages, the



To receive a copy of the New GIB® Fire Systems 2012 literature in October, please register your details by visiting <http://gib.co.nz/signup/> or by scanning the QR code.

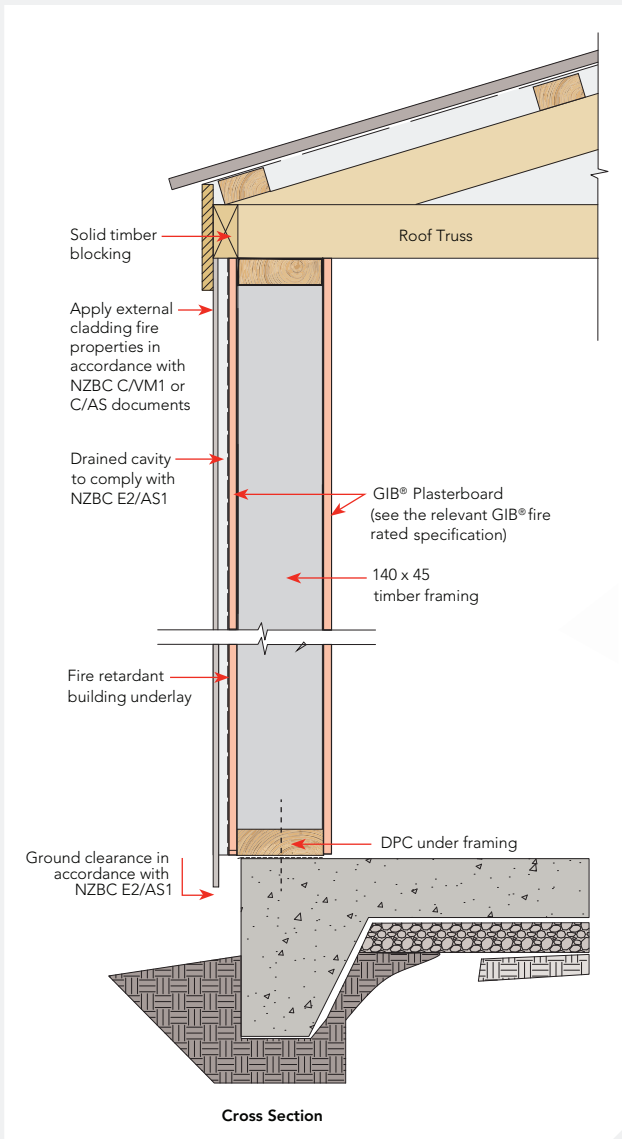


requirement is for a two way 30/30/30 FRR if the wall is located less than 1.0 m from the relevant boundary.

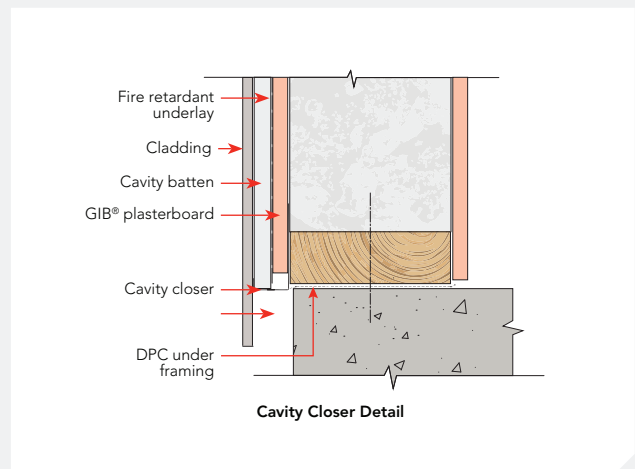
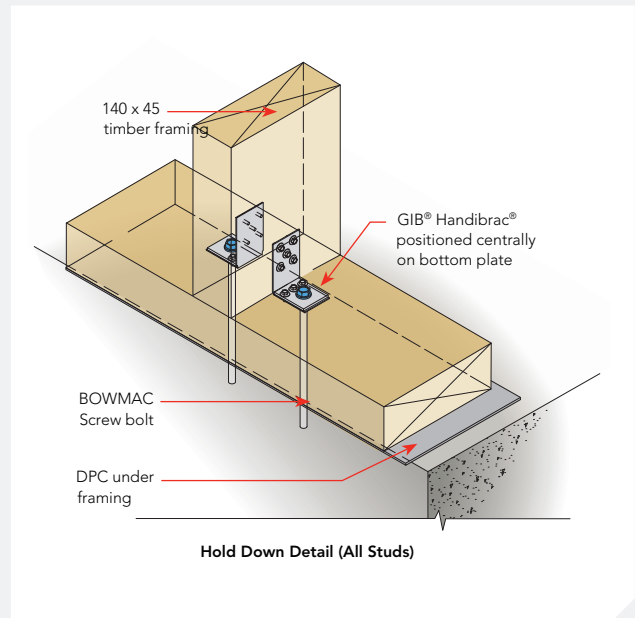
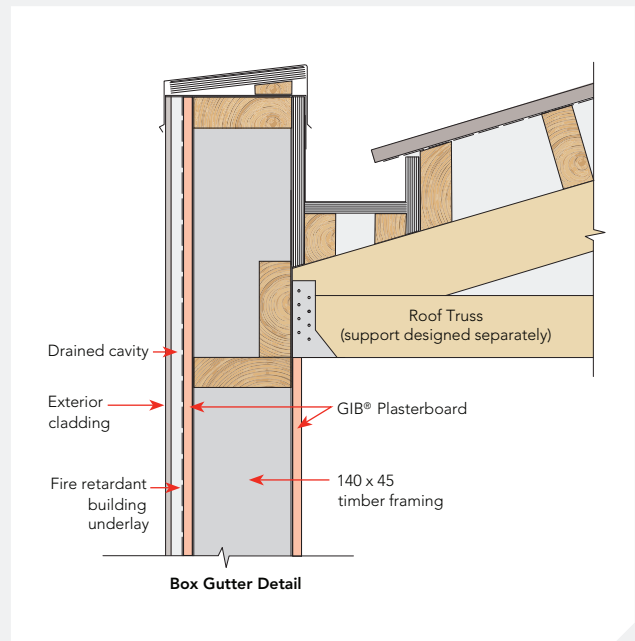
The drawings below assume a standard wall height of 2.4 m, minimum stud dimensions of 140 x 45 mm and studs at 600 mm centres.

Walls from 2.4 to 3.0 m in height require studs at 400 mm centres. Framing details must be in accordance with NZS3604:2011 and the cladding must be installed in accordance with NZBC E2/AS1. Claddings over GIB® plasterboard must be installed over a fire retardant building underlay and drained cavity complying with NZBC E2/AS1.

Note that claddings within 1 metre from the relevant boundary must meet the external surface finish requirements of the NZBC supporting documents for protection from fire.



These drawings are schematic and full construction and cladding details must comply with NZS 3604 and NZBC E2/AS1 and incorporate a drained cavity for all cladding types



FOR FURTHER INFORMATION VISIT WWW.GIB.CO.NZ

GIB® Information Bulletin
 GIB Fire Rated Systems Update
 September 2012

