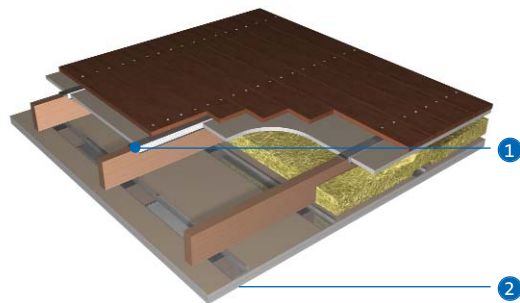


GypFloor SILENT

Sound insulating floor system

GypFloor SILENT is specified in residential conversion or improvement work to upgrade an existing timber joist floor. It is also used in new-build to meet the acoustic requirements of national Building Regulations to reduce sound transmission through upper floors. It should be used in conjunction with an appropriate ceiling lining.





- 1 Gypframe SIF1 Floor Channel, Gypframe SIF2 Floor Channel or Gypframe SIF4 Floor Channel.
- 2 Gypframe RB1 Resilient Bar

Key facts

- Dramatically improves airborne and impact sound insulation of existing timber joist floors
- Minimal increase in floor depth
- Used in conversion work and refurbishment to meet acoustic regulations
- Resilient interface between channel and floor joist

Components

Gyproc and Glasroc products



Gyproc WallBoard^{1,2}

Thickness	12.5mm
Width	1200mm



Gyproc SoundBloc¹

Thickness	12.5, 15mm
Width	1200mm



Gyproc FireLine¹

Thickness	15mm
Width	1200mm



Gyproc Plank

Thickness	19mm
Width	600mm



Glasroc MultiBoard

Thickness	12.5mm
Width	1200mm

¹ Moisture resistant boards are specified in intermittent wet use areas e.g. shower areas, bathrooms, and kitchens.

² Also available in DUPLEX grades where vapour control is required.

Gypframe metal products



Gypframe SIF1 Floor Channel

Width	127mm
For joists up to 63mm wide	



Gypframe SIF2 Floor Channel

Width	85mm
For joists over 75mm and perimeters	



Gypframe SIF4 Floor Channel

Width	140mm
For joists 64mm to 75mm wide	



Gypframe RB1 Resilient Bar

Fixing and finishing products



Gypframe SIF Floor Screws

For fixing floorboards through Gyproc Plank into the Gypframe floor channel flange.



Gyproc Drywall Screws

For fixing boards to Gyproc RB1 Resilient Bars, and Gyproc RB1 Resilient Bars to timber joists.



Gyproc Sealant

For sealing air paths to achieve optimum sound insulation.



Gyproc jointing materials

For seamless jointing.

Fixing and finishing products



Gyproc Skimcoat, Gyproc Carlite Finish or Gyproc Board Finish

To provide a plaster skim finish.



Moy Plus Roll

For providing acoustic / thermal insulation.

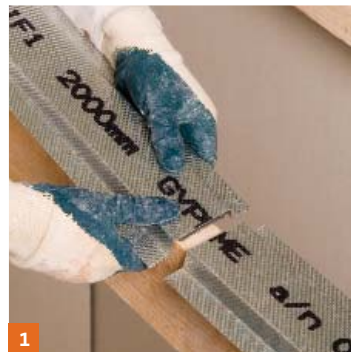
Construction tips

- Estimated construction time 0.5m²/ man hour - ready for finishing
- The system will add approx. 7mm height to the finish floor level
- The finished surface of the applied ceiling will be 48mm from the underside of the joists (when Gypframe RB1 Resilient Bar, a layer of 19mm Gyproc Plank and 12.5mm Gyproc SoundBloc are applied)
- The system is primarily intended for traditional solid timber joist floors – intensity of distributed load of up to 5.0kN/m² and a concentrated load of 4.5kN
- In refurbishment work check the level of existing joists is not misaligned – if so consider **GypLyner™** systems or **CasoLine mF** suspended ceiling to the underside of the joists
- Ensure tops of joists are level to accommodate SIF floor channels
- Ascertain the correct Gypframe SIF Floor Channel to use - Joist width up to 63mm use Gypframe SIF1 Floor Channel, for joists 64mm - 75mm use Gypframe SIF4 Floor Channel, and for joists over 75mm use Gypframe SIF2 Floor Channel (2 per joist position unless adjacent to the wall)

Construction tips (cont'd)

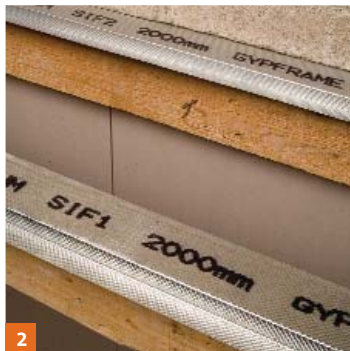
- To maintain optimum sound insulation consider the following:
 - Ceilings should be fixed prior to drylining / plastering on walls. If this is not possible abut the ceiling against the wall surface
 - Make suitable provision to minimise flanking sound in the surrounding structure
 - Seal the perimeter, including gaps between wall and floor linings with Gyproc Sealant
 - Glue joints of chipboard flooring
 - Gypframe SIF Floor Channel must not be mechanically fixed to the joists

Installation - Floor

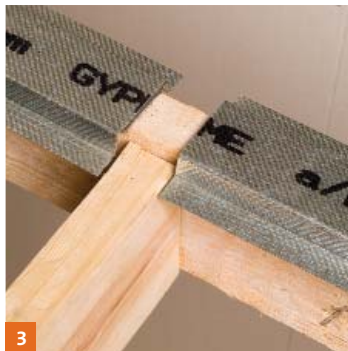


Installation (standard) for joists 63mm or less

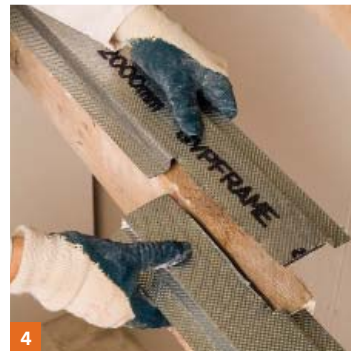
- Locate Gypframe SIF1 Floor Channel sections centrally over the joists, leaving a 6mm clearance gap at walls.
- Where joints in channel occur, butt the sections together.



- Where joists run close to the wall (30mm gap or less), locate Gyprframe SIF2 Floor Channel in place of Gyprframe SIF1 Floor Channel.



- Stop SIF channels either side of strutting or services which interrupt channel location.



- Where joists overlap, cut away the channel legs to allow channels to run through.



• Cut Gyproc Plank to a neat (not tight) fit between channels. Allow a 3mm gap between Gyproc Plank and channel sides.

NB Ensure that the vertical flanges of the channels do not impinge on the sides of the joists when the Gyproc Plank infills are installed.

NB To minimise waste cut Gyproc Plank across its length to create tiles which lie bound edge to bound edge.



• Lay flooring, following good joinery practice, across the channels and screw-fix through the Gyproc Plank to the channel flange on one side only using a Gypframe SIF Floor Screws. (See Figure 12).

NB Do not fix flooring directly to joists below channel.



Services

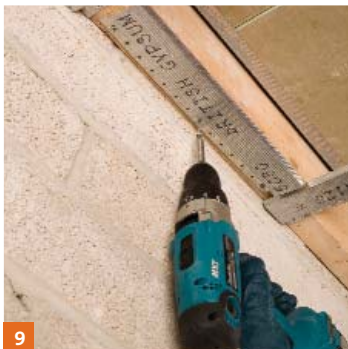
• Where water pipes or other services penetrate the floor, cut Gyproc Plank and flooring to allow a small clearance. Seal any gaps in order to minimise loss of acoustic performance, and suitably fire-stop (if required).

Installation - RB1 Ceiling



8

- Mark the underside of joists at maximum 450mm centres to indicate the positioning of Gyprock RB1 Resilient Bars (centres will be 400mm for 2400mm long board).
- Fix Gyprock RB1 Resilient Bars through their pre-drilled flange to each joist using 36mm Gyprock Drywall Screws.
- If the resilient bars are not long enough to span the ceiling, join by nesting together under a joist and insert a screw through both flanges.



9

- Cut Gyprock RB1 Resilient Bar noggings to fit between the rows of bar at the ceiling perimeter and screw-fix to the joist.



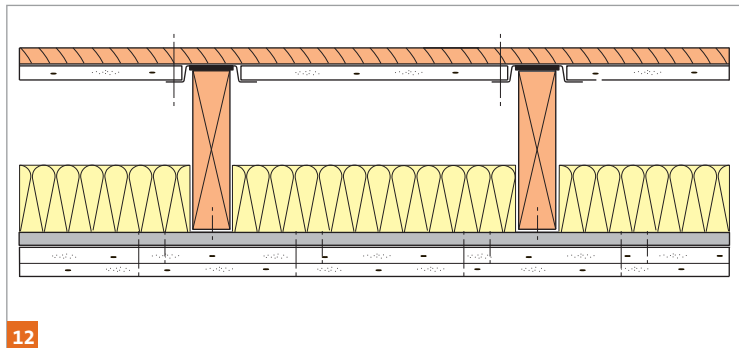
10

- Lay Moy Plus Roll (100mm) between joists to rest on the resilient bars.
- Fix base layer board to the resilient bars using appropriate length Gyprock Drywall Screws with the long edge of boards at right angles to the resilient bars.
- Insert screws at 230mm maximum centres in the field of boards, and 150mm maximum centres at board ends.



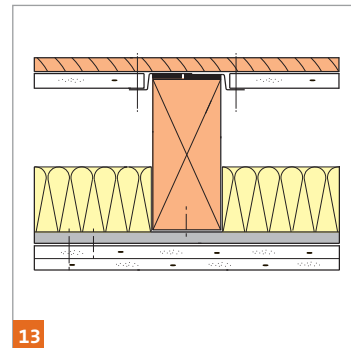
- Fix face layer board through to all resilient bar supports using appropriate length Gyproc Drywall Screws. Insert screws no closer than 10mm from bound board edges and 13mm from cut edges. Stagger board joints in the second layer relative to the first (See **Junction details**).

NB Select length of fixing to provide a nominal 10mm penetration into the Gyproframe RB1 Resilient Bar supports. Ensure no contact of screw with timber joists.



Typical section through floor

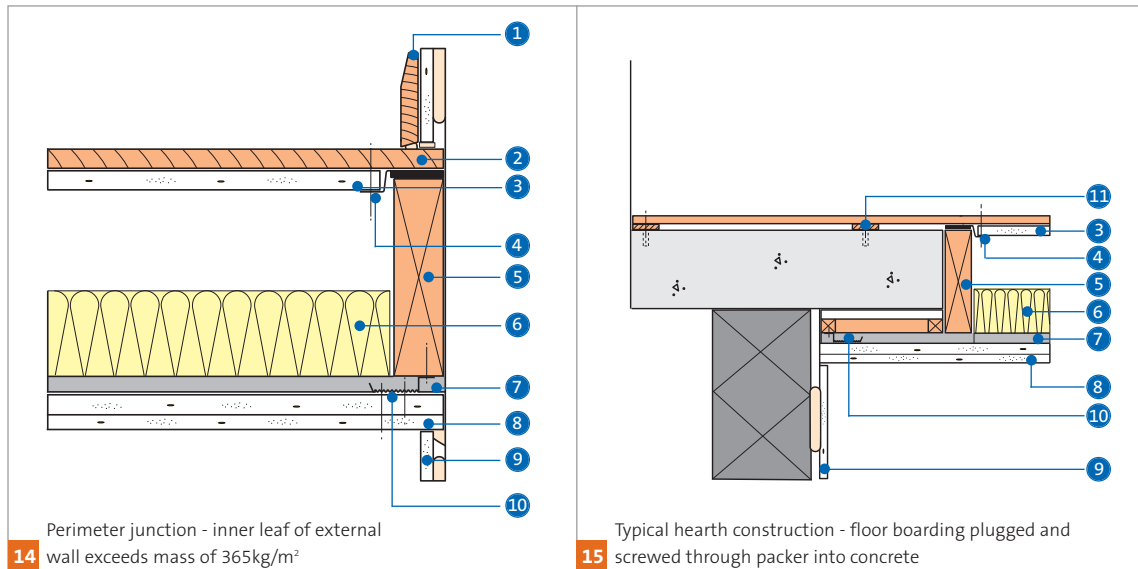
- Gypframe SIF1 Floor Channel - for joists up to 63mm wide
- Gypframe SIF4 Floor Channel - for joists 64 - 75mm wide



Installation for joists over 75mm

- As standard but use two Gypframe SIF2 Floor Channels per joist.
- Cut away the foam inlay on one channel to facilitate overlap, and leave a 2 - 3mm clearance gap between each channel and the side of the joist.

Junction details

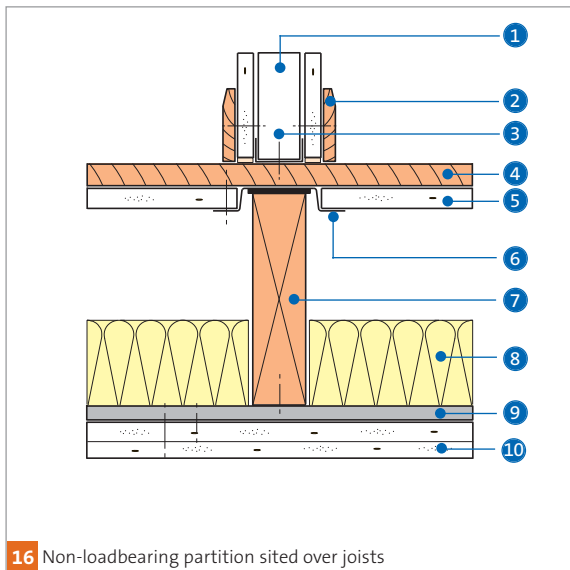


- ① Skirting
- ② Chipboard / softwood flooring
- ③ Gyproc Plank
- ④ Gyproframe SIF2 Floor Channel

- ⑤ Solid timber joist
- ⑥ 100mm Moy Plus Roll
- ⑦ Gyproframe RB1 Resilient Bars
- ⑧ Ceiling lining boards

- ⑨ Wall lining
- ⑩ Gyproframe RB1 Resilient Bar noggings
- ⑪ Packer

Junction details

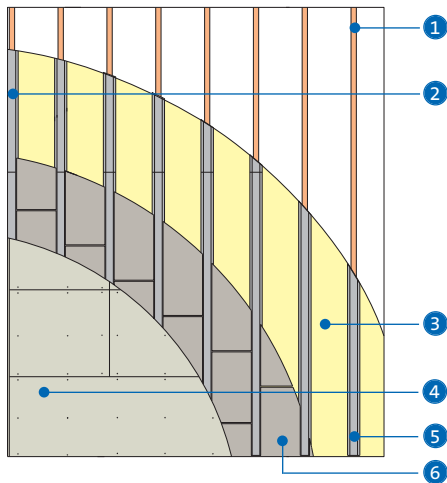


Siting of non-loadbearing partitions

- Where the partition is required to run parallel to the joists, but not directly over them, provide joist noggings at 600mm intervals.
- Cap the noggings with short lengths of Gypframe SIF1 Floor Channel under the line of the partition.

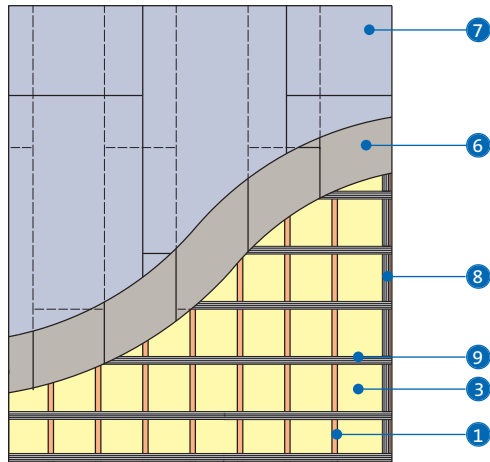
- | | | |
|--|--------------------------------------|-------------------------------|
| 1 GypWall™ partition | 4 Chipboard / softwood flooring | 8 100mm Moy Plus Roll |
| 2 Skirting | 5 Gyproc Plank | 9 Gypframe RB1 Resilient Bars |
| 3 Fixing length selected to avoid reaching the Gypframe SIF1 Floor Channel | 6 Gypframe SIF1 / SIF4 Floor Channel | 10 Ceiling lining boards |
| | 7 Solid timber joist | |

Junction details - plan drawings



17 Cut-away floor plan (chipboard flooring)

- ① Solid timber joists
- ② Gypframe SIF2 Floor Channel
- ③ Moy Plus Roll (100mm)
- ④ Chipboard flooring
- ⑤ Gypframe SIF1 / SIF4 Floor Channel
- ⑥ Gyproc Plank



18 Reflected ceiling plan (12.5mm x 1200mm x 2700mm Gyproc SoundBloc over Gyproc Plank fixed to Gypframe RB1 Resilient Bars)

- ⑧ Gypframe RB1 Resilient Bar noggings at room perimeter
- ⑨ Gypframe RB1 Resilient Bar