Gyproc Habito
Installation and fixing guidance

British Gypsum
SAINT-GOBAIN

Contents

Before you start

Selecting the right tools

Due to the dense nature of the core of the board, we have developed a range of high performance plasterboard fixings especially for installing Gyproc Habito.

Performance screws

The head of the screw has a slight lip around the head, which is designed to capture any of the board core that is removed while you are fixing the board into position. This ensures a flush finish every time.

The fixings are available in four sizes to cover single and double layer systems on both timber and metal stud framework.

British Gypsum High Performance Screws are available in 25mm lengths for single layer and 35mm lengths for double layer systems into metal frames. 40mm and 50mm fixings are designed for single and double layer systems into timber frames.

Impact drivers

Through our research and live site trials, we have found that impact drivers are best suited for fixing Gyproc Habito to both timber and metal frames. Standard drill drivers and high speed drywall screw guns can also be used. The advantage of an impact driver is the limited pressure required to fix through the board to the background frame. It is natural with a tougher material to feel additional pressure is required to fix, but this is not the case with the combination of an impact driver and the high performance fixings designed specifically for use with Gyproc Habito.

Example impact driver (left) and drill driver

Health and safety

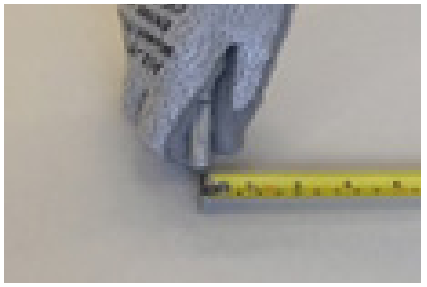
Before commencing any construction, please carry out an appropriate Health and Safety appraisal and consult the material safety data sheets to ensure you have the appropriate Health and Safety protective equipment. This can be found at our website: british-gypsum.com

Cutting tools

There are several ways to cut Gyproc Habito.

For cutting strips of less than 150mm, we recommend the Gyproc Habito is cut with either a hand saw, jigsaw or electric plunge saw with guide rails.

For sections above 150mm, the board can be scored and snapped by using a standard retractable knife.



Score and snap

To ensure correct leverage can be applied to the board, we recommend you score and snap with the boards on the pallet or off a trestled work area. This allows you to apply the required downward pressure.

Step 1

For cuts between 150mm and 600mm wide, measure and mark out the section to be cut.

Score as you would for any plasterboard, applying sufficient pressure to cut through the paper liner.

Step 2

Position the board so the section to be removed is overhanging the pallet or trestle bench.

Push down on the area to be snapped off.

Step 3

Once the board starts to break, fold the board downwards and finally snap the board back up on itself.

The traditional method of scoring one side of the plasterboard, folding the cut section and scoring the second side can also be used.

Step 4

A single pass with a surform should be sufficient to provide the perfect finish to the edge of the board.

Cutting Gyproc Habito

For smaller off cuts and around door or window details, we recommend the use of a fine toothed saw or jigsaw. For cutting multiple boards, a circular plunge saw is recommended. For ease of use, we suggest you cut directly from the pallet or a tressled work area.

Step 1

Cutting Gyproc Habito with a hand saw is very similar to cutting through timber based sheet materials.

For multiple boards, we recommend a circular plunge saw which is linked to a dust extraction system.

Step 2

Having marked the upper board ready for cutting, ensure the boards to be cut are overhanging other boards, so you do not cut into the boards below.

Step 3

Ensure the edges and sides of the boards are aligned, so you cut the same amount off each of the boards.

Set the depth gauge on the saw to cut through the number of boards required. We are using a 75mm plunge saw, suitable for cutting a number of boards in one pass.

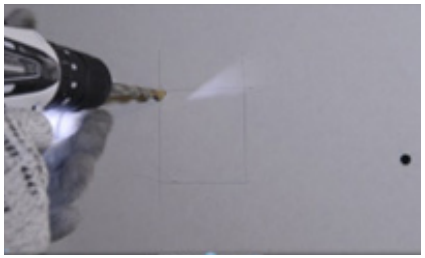
Step 4

Cutting with either of these methods provides an excellent finish that requires no further treatment. There are a number of power tool manufacturers who have plunge saws and guide rails on the market.

Socket and pipe detailing

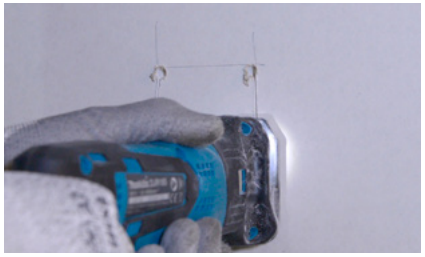
Step 1

Mark out the location for your area to be cut. Here we are marking out for a single socket. Drill a hole wide enough for the jigsaw blade to penetrate through, here shown in the top left hand corner of the box.



Step 2

Insert blade and cut upwards then across, allowing the blade to cut through the board and not forcing the tool, as this risks damaging the blades. Cut up into the corner of the box, then slowly rotate 90 degrees to cut along the socket length. Remove blade and repeat process along the bottom and left side of the opening.



Step 3

Circular cutting for pipes and other openings can be done by using a holesaw. Both tools and techniques provide a smooth finish and do not require re-work.

Fixing to Gyproc Habito

Fixing safety

In this section, we also cover the fixing capability of a variety of other fixings, as some fixtures will require smaller screws, due to the size of the item being fixed.

All of our fixing performance guidance is based on a safe working load, which provides a safety factor of four, as used in the fixings industry. Guidance for Gyproc Habito is up to 15kg per fixing (number 10 or 5mm diameter woodscrew), note the failure point of this fixing will be four times this weight. The safety factor is to ensure items remain securely fixed to Gyproc Habito, with the safety factor providing security for both the homeowner and installer.

NB: Please note that loads should not exceed the fixing manufacturer's guidance and that any fixture should always be fitted in accordance with the manufacturer's installation guidance.

It is also important to ensure that the partition system is capable of supporting the loads.

	Fixing	Diameter	Loading (kg)
	No 6	3.5mm	12.4
	No 8	4mm	12.9
	No 10	5mm	15
	No 12	6mm	15

	Fixing	Loading (kg)
	HM5 Cavity fixing	33.7

Table 1 provides recommended fixing by size and type, typical safe working load for that fixing and typical failure load – Note, do not exceed typical safe working load per fixing and recommended load for that the manufacturer provides for the fixing.

Getting started

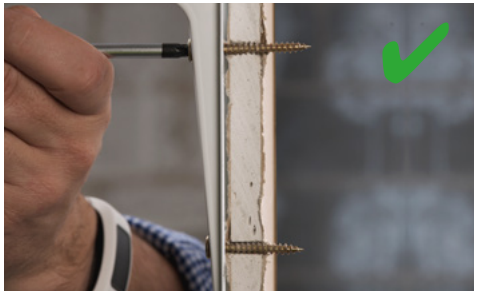
This section is designed to give you an understanding of how to fix and tighten fixtures into Gyproc Habito. Please ensure you have correctly measured and marked the location of the fixings prior to commencing fixing through the board

NOTE
It is important to use a detector to make sure there are no electrical cables or pipework behind the location where the fixings will penetrate the board

Using the correct length fitting

Ensure you have the correct length of screw to fully penetrate through the item to be fixed and through the Gyproc Habito board. If the screw does not penetrate through the plasterboard, fixing capability will not reach recommended levels and there will be a risk of failure.

As you can see below, a screw that does not fully penetrate through the Gyproc Habito board does not have the same amount of contact with the inside of the board as the screw that has fully passed through the board. This will lead to a reduced fixing performance.



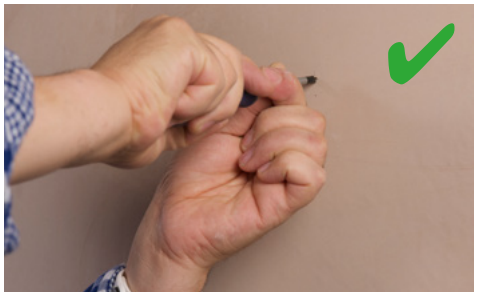
Correct fixing penetration through the board

Incorrect fixing penetration through the board

Ensuring the perfect fixing

When fixing through a plaster finish, we recommend routing the plaster with either a routing attachment or screwdriver. This ensures that when fixing to Gyproc Habito the plaster does not break off, leaving an area that may require repair.

Incorrect fixing penetration through the board



Correct fixing penetration through the board

Tip: ensure correct fixing penetration through the board

To ensure correct fixing penetration through the board, measure the distance from the front to rear of item to be fixed, add 12.5mm for the thickness of the Gyproc Habito plasterboard and a further 8mm for penetration through the board. If the Gyproc Habito boards have a plaster skim finish, add a further 2mm into this calculation.

Example: TV bracket 20mm overall thickness, plus 12.5mm, plus 8mm = minimum fixing length of 40.5mm.

Using the right fixing technique

Different wall types require slightly different techniques to be used for fixing through them. Here we will explain the different techniques required for Gyproc Habito to ensure you get the best performance from your wall and a secure fixing hold every time.

Identifying resistance

Start to screw through the item to be fixed to the wall. You will feel a strong resistance, similar to screwing through wood.

Once the screw has penetrated through the back of the Gyproc Habito board, you will feel the resistance reduce and it will become a lot easier to fix. Continue to tighten the screw until you feel resistance again, gently turning until you have secured the item to be fixed into position. Now repeat the procedure, fixing the item to be fixed as per the manufacturer's guidance for the correct number of fixings.

Strong resistance, resistance reduction as you break through the board

Stop when resistance returns

Using an electric screwdriver

The procedure is the same for an electric screwdrive or combination drill/ driver. Ensure the torque setting is set to a low starting point for screwing and not set to the drill position.

Start to drive the fixing into position, increasing torque setting until the screw turns. This setting is designed to ensure that you do not over-tighten fixings. Continue to drive the screw through the item being fixed until close to completion and slow the driver down, until the screw is tight. Repeat the procedure, fixing the item to be fixed as per the manufacturer's guidance for the correct number of fixings.

Incorrect setting as driver is set to drill position

Driver set to correct position with low torque setting

Over-tightening

It is important that you do not over- tighten fixings into Gyproc Habito. Any material you are fixing into has a limit to how much a fixing can be tightened. Once you feel strong resistance when tightening a screw, stop.

Items fixed to walls

Items fixed to walls can be either flushed to the wall, or as with the shelf bracket shown, have an arched design with a cavity between the screw hole and plasterboard. Through our research we have found that over-tightening a screw through this cavity not only weakens the fixing strength of Gyproc Habito, but can actually pull the fixing through the board, acting as a corkscrew would when removing a cork.

The same effect will occur with a specialist fixing, as seen opposite. Again the plug is drawn back through the plasterboard, creating a larger hole.

A simple solution to stop this occurring is to fit a washer behind the item to be fixed. This removed the cantilever effect of the bracket design. This can also be achieved through packing out the bracket.

Opposite is a specialist plasterboard plug has been used, but again the cavity in the bracket acts to pull the plug through the plasterboard. Again a plug or washer would resolve this effect.

Sequence to show fixing pulling back through the plasterboard, effectively drilling a hole

"Gyproc", "Thistle", "Gypframe" and "Glasroc" are all registered trademarks of Saint-Gobain Construction Products UK Limited. "Isover" is a registered trademark of Saint-Gobain Isover and "Artex" is a registered trademark of Saint-Gobain Construction Products UK Limited.

Saint-Gobain Construction Products UK Limited is a limited company registered in England under company number 734396, having its registered office at Saint-Gobain House, Binley Business Park, Coventry, CV3 2TT, UK. Saint-Gobain Construction Products UK Limited trades as British Gypsum for part of its business activities.

British Gypsum reserves the right to revise product specification without notice. The information herein should not be read in isolation as it is meant only as guidance for the user, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of work. For a comprehensive and up-to-date library of information visit the British Gypsum website at: british-gypsum.com. For information about products supplied by Artex Limited or Saint-Gobain Isover please see their respective websites.

"British Gypsum" is a registered trademark of Saint-Gobain Construction Products UK Limited.

Technical enquiries
British Gypsum
Technical Advice Centre
East Leake
Loughborough
Leicestershire
LE12 6HX

Telephone: 0844 800 1991
Fax: 0844 561 8816
Email: bgtechnical.enquiries@bpb.com

Training enquiries: 0844 561 8810

British Gypsum March 2016 BG-GHFG-16-02

british-gypsum.com

SAINT-GOBAIN