

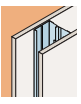
Cormet Acoustic Homespans provides a single solution for all modern domestic partition requirements.

The sound absorbing C studs provide markedly better performance than rigid H studs and the system requires no cross-noggings, contributing to reduced installation time.

Building Regulations now require enhanced acoustic performance in a range of domestic partitions. Cormet Acoustic Homespans uses a combination of high performance metals, which minimise sound bridging, and dense core board technology to provide 40 dB sound performance in a 75mm wide partition.



3



**Introduction**

**Cormet Acoustic Homespans Partition System**

Cormet Acoustic Homespans is a 75mm or 85mm nominal width metal stud partitioning system using 44mm or 50mm metal Acoustic Homespans C Studs set at 450mm centres and one layer of 15mm x 900mm wide Acoustic Homespans wallboard fixed to each side.

Cormet Acoustic Homespans Partition System is a lightweight durable and high performance system:

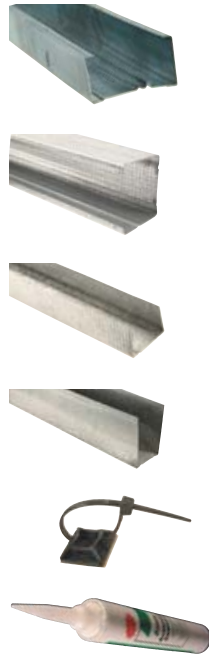
- fast and easy to install
- cost effective against equivalent size of timber stud
- eliminates nail popping and cracking

**Performance**

Cormet Acoustic Homespans has been specifically developed to achieve at least 40dB sound rating without insulation in line with the new Part E Building Regulations.

Cormet Acoustic Homespans has been designed to allow electrical cable installations to meet N.H.B.C. guidelines and BS 7671 requirements for electrical installation.

Cormet Acoustic Homespans wallboard is defined as Class 0 in accordance with National Building Regulations 1991 Approved Documents B1/2/3/4/5 *Fire Safety* and Building Standards (Scotland) Regulations 1990, Regulation D2 when tested to BS 476: Part 6: 1989 and Part 7: 1997 and Euroclass A2. The gypsum core is classified as non-combustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1. Lafarge jointing compounds, metal systems, textures



and bonding compounds are non-combustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1.

**System components**

All metal components are manufactured to BS 7364: 1990 specification for galvanised steel studs and channels for stud and sheet partitions and linings using screw fixed gypsum wallboard.

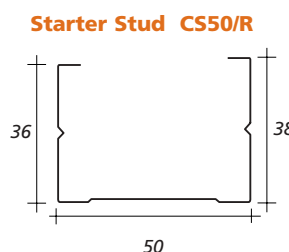
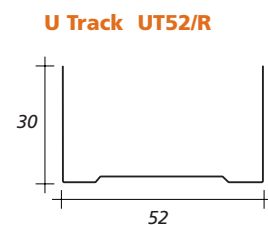
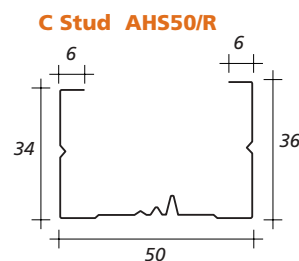
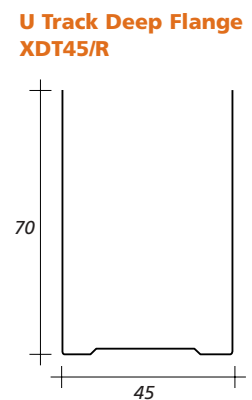
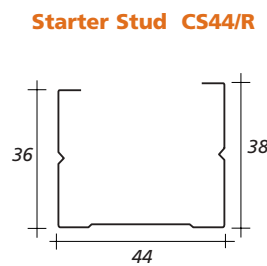
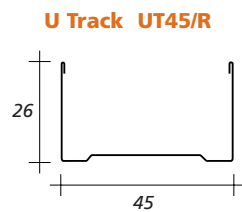
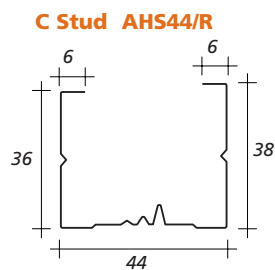
Flanges have deep knurlings for easier screw fixing and plasterboard alignment.

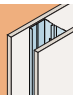
**Table 3.8 Cormet Acoustic Homespans components**

Component	Lengths (mm)	Lafarge code
Acoustic Homespans C-Stud	2400	AHS44/R
	2400	AHS50/R
Acoustic Homespans Starter Stud	2400	CS44/R
	2400	CS50/R
Homespans U Track	2400, 2700	UT45/R
	2400,2700	UT52/R
Homespans U Track Deep Flange	2400	XDT45/R
Self Adhesive Cable Tie	-	CTF
Lafarge Intumescent Acoustic Sealant	0.9 litres	ACOUSTIC
	0.38 litres	ACO38

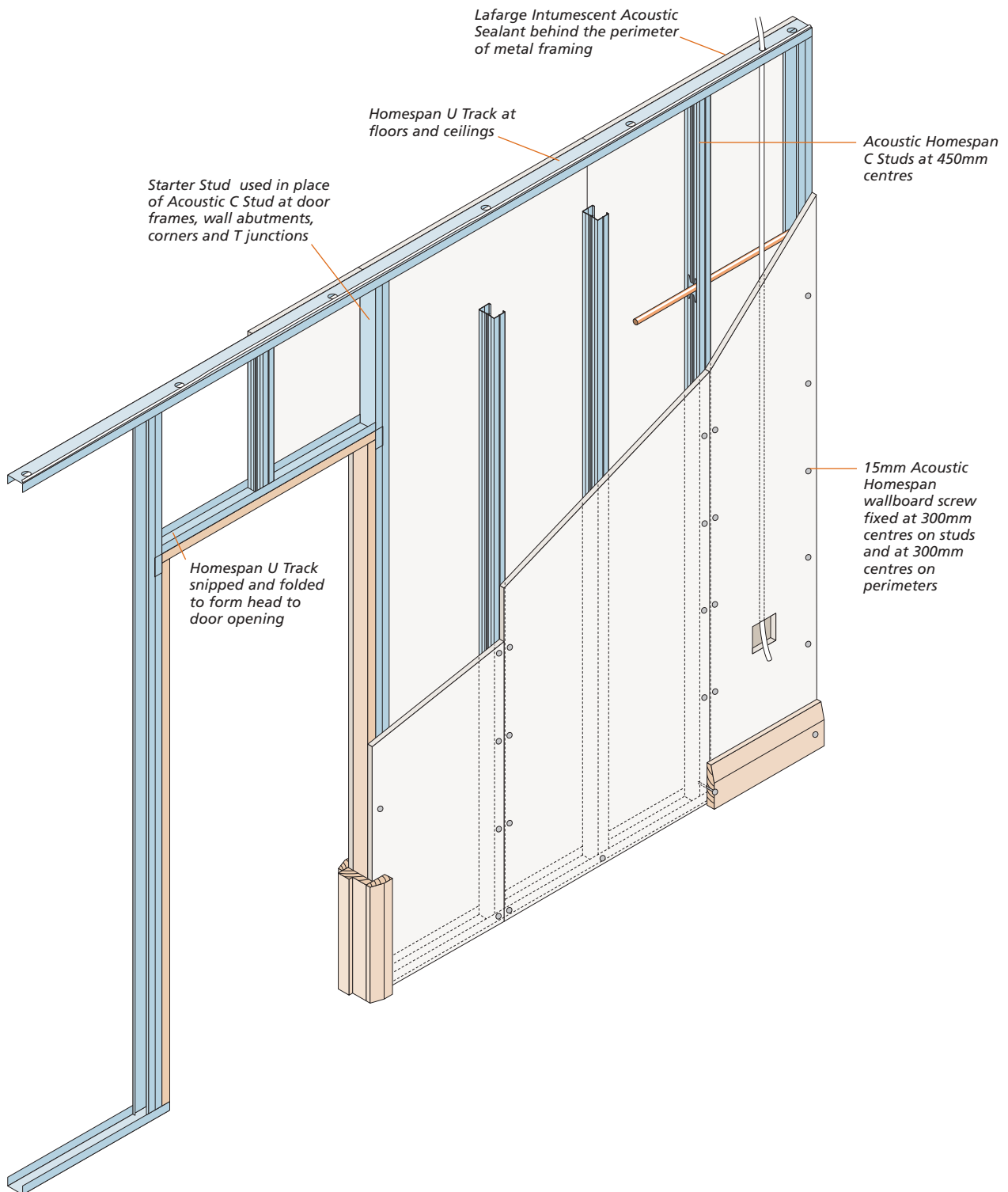
**Table 3.9 Acoustic Homespans wallboard**

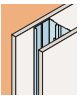
Properties	
Thickness	15mm
Width	900mm
Length	2400mm (stock size)
	2700mm (specialist size)
Tapered edge	Yes
Square edge	Yes





**Cormet Acoustic Homespans Partition System**





**Application details**

**Detailing**

**Skirting details**

Various skirting detail options are available. For example Homespans U Track can either be screw fixed to a timber sole plate, or by including a skirting block, formed by boxing 100mm off cuts of nogging section, screw fixed directly to the floor.

Alternatively, using a single component, Homespans U Track Deep Flange can also be screw fixed directly to the floor.

At door jams as for method 1 Homespans U Track is used as an end stud and screw fixed at 600mm centres to softwood sub frame.

Alternatively, use a 44mm or 50mm Starter Stud.

**Door openings**

There are two alternative ways of forming an opening. The first is shown below and uses a 32 or 44mm wide timber sub-frame screw fixed to the back face of the CS44R Starter Studs.

The alternative method, shown opposite, uses a timber insert to strengthen the Starter Stud and provide fixings for the plasterboard and door frame.

For both door frame alternatives, the door head is formed from U track, which is snipped and folded up at each end. The verticals are screw fixed to the Starter Studs.

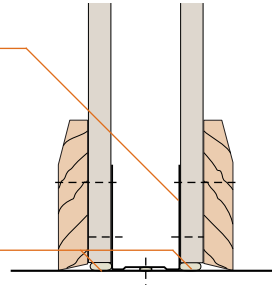
**Junctions**

At right angles, T junctions and abutments, the Acoustic Homespans Starter Stud is used as an end stud.

**Alternative skirting fixing details**

*Homespan Deep Flange U Track fixed to floor at max. 600mm centres*

*Apply 6mm bead of Lafarge Intumescent Acoustic Sealant around perimeter*

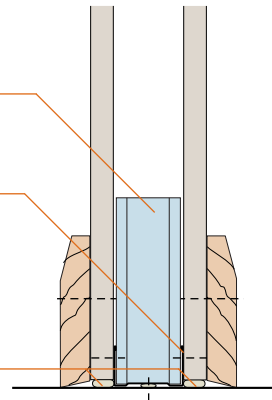


**Deep flange floor track**

*Off cuts of studs boxed together and fixed vertically into track midway between studs*

*Homespan U Track without sole plate*

*Apply 6mm bead of Lafarge Intumescent Acoustic Sealant around perimeter*



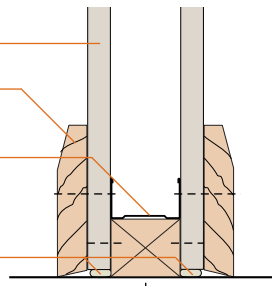
**Floor track including skirting block**

*15mm Acoustic Homespans wallboard*

*Skirting*

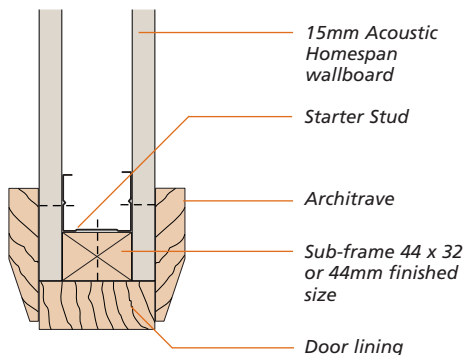
*Homespan U Track on sole plate*

*Apply 6mm bead of Lafarge Intumescent Acoustic Sealant around perimeter*

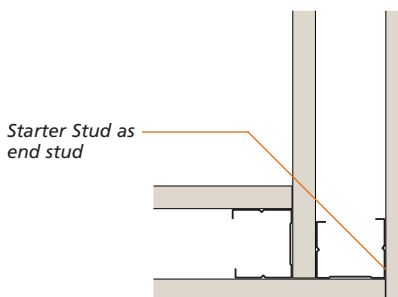


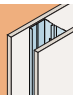
**Floor track onto a timber sole plate**

**Typical door jamb detail**



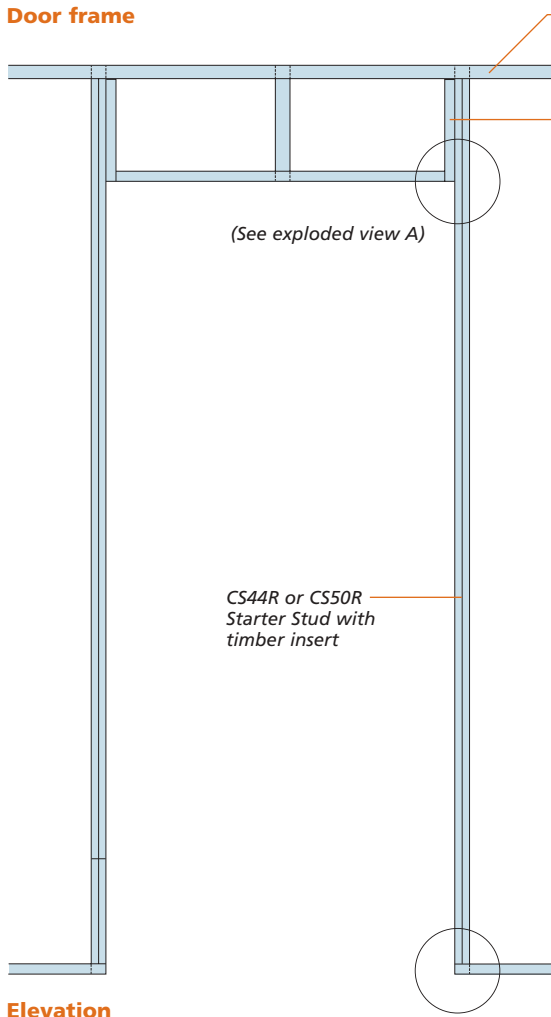
**Corner detail**





**Application details**

**Door frame**



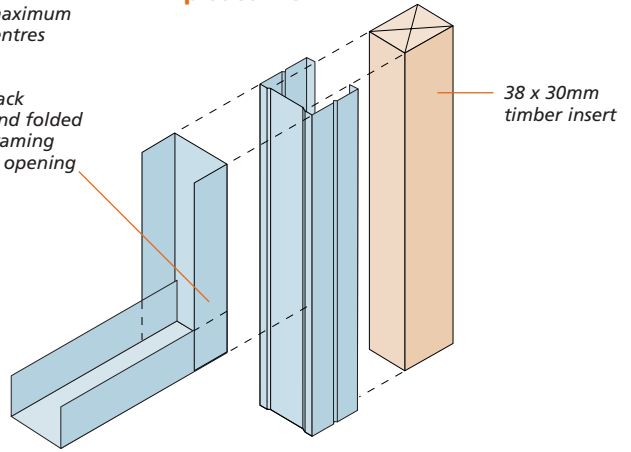
**Elevation**

(See exploded view B)

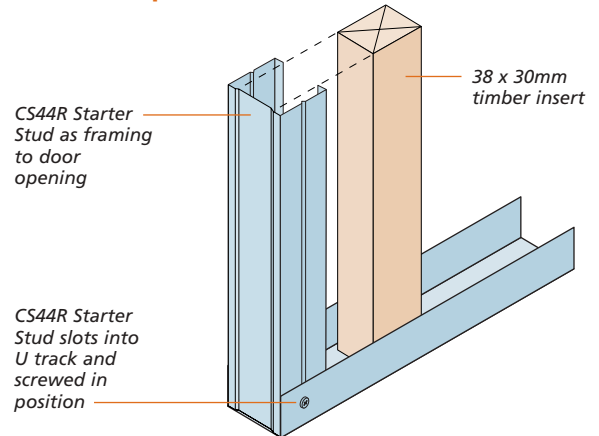
UT45IR Head Track fixed at maximum 600mm centres

UT45IR Track snipped and folded to form framing over door opening

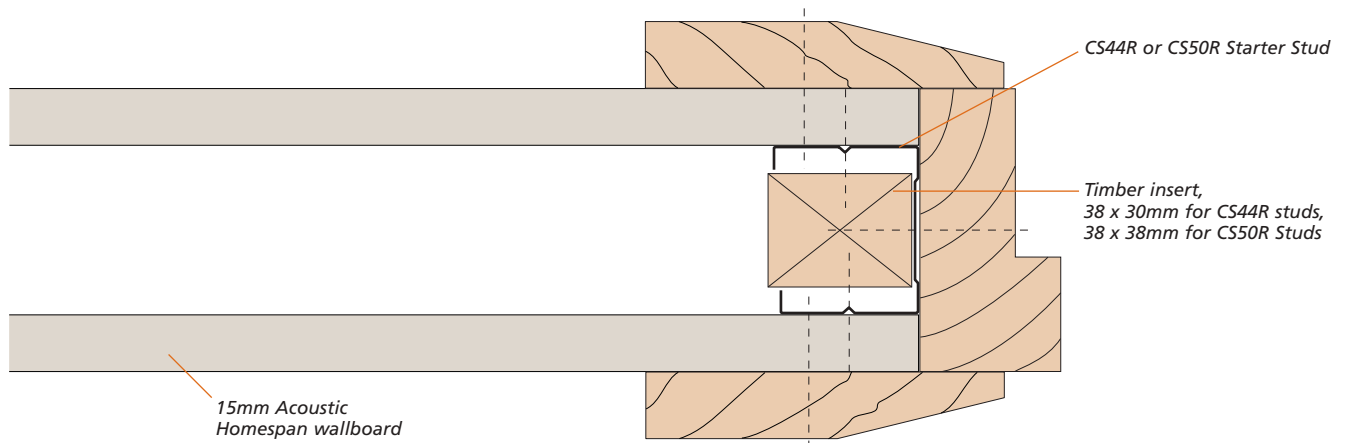
**Exploded view A**

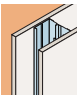


**Exploded view B**



**Alternative door jamb detail**

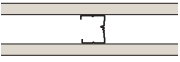







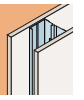
**Performance tables**

**Partitions: Metal Stud**

**Table 3.10 Cormet Acoustic Homespans Partitions**

System reference	Specification	Weight (kg/m <sup>2</sup> )	Maximum height (m)	Normal thickness (mm)	Fire resistance (minutes)	Sound insulation (R <sub>w</sub> dB)	BS 5234 Grade
AHSP 01 	<b>Studs:</b> 44mm wide Acoustic Homespans C Studs at 450mm centres <b>Facings:</b> one layer 15mm Cormet Acoustic Homespans wallboard both sides	28	2.7	75	30	40	Medium
AHSP 02 	As AHSP01 with 25mm glass mineral wool insulation density 19.5 kg/m <sup>3</sup>	29	2.7	75	30	43	Medium
AHSP 03 	<b>Studs:</b> 50mm wide Acoustic Homespans C Studs at 450mm centres <b>Facings:</b> one layer 15mm Cormet Acoustic Homespans wallboard both sides	28	2.8	80	30	40	Medium
AHSP 04 	As AHSP03 with 25mm glass mineral wool insulation density 19.5 kg/m <sup>3</sup>	29	2.8	80	30	43	Medium

Rock mineral wool density 33kg/m<sup>3</sup> may be used in lieu of glass mineral wool as specified



## Cormet Acoustic Homespans Partitions

### Scope

Metal studs partition system for housing achieving 40 R<sub>w</sub>dB without insulation.

### Additional clauses

Add general clauses if required for:

- Expansion/movement joints
- Health and safety
- Storage of materials
- Site condition and workmanship

See Section 8.

### Key

- Recommended**  
Apply this clause in all situations.
- Either/or**  
Apply either this clause or the other depending on requirement/preference.
- If required**  
Apply this clause only if required.
- \* Choice of product.

Lafarge Plasterboard recommend the use of detailed specification clauses as shown.

Selection of the appropriate system and subsequent specification clause is made easier by the use of Lafarge SELECT 2 at [www.lafargeplasterboard.co.uk](http://www.lafargeplasterboard.co.uk).

Alternatively, Cormet Acoustic Homespans Partitions can be incorporated into the N.B.S.(National Building Specification) work schedule K31 Plasterboard fixed partitions/inner walls/linings. See [www.lafargeplasterboard.co.uk/nbssearch/index.asp](http://www.lafargeplasterboard.co.uk/nbssearch/index.asp)

For further details please contact our Technical Enquiryline 01275 377789.

### ■ Cormet Acoustic Homespans Partition system reference

**HSP** ..... See table 3.10  
 Partition nominal thickness ..... mm  
 Partition height ..... mm

### ■ Location

**Damp proof course**  
 To be installed under full width of partition  
 Type .....  
 By .....

### Timber sole plate

Treated softwood sole plate width ..... mm x 38mm deep fixed to substrate at maximum 600mm centres using suitable proprietary fixings. *May be required when floor uneven*

### ■ Metal framing components

Framing components to be hot dipped galvanised steel to BS EN 10143: 1993 and BS EN 10142: 1990 and Approved Document A1, 1995 designated DX51D and Z275 NAO. Sections rolled to BS 2994: 1987.

### ■ Studs

Cormet Acoustic Homespans Studs reference AHS44/R or AHS50/R, metal thickness 0.5mm, width 44mm at 450mm centres, installed into U Tracks.

### Floor and head tracks

- Cormet Homespans U Tracks reference UT45/R at floor and soffit, ends, corners and openings. *Depends on skirting fixing*
- Cormet Homespans U Tracks reference XDT45/R at floor. Cormet Homespans U Tracks reference UT45/R at head, ends, corners and openings, thickness 0.5mm, width 45mm fixed at maximum 600mm centres to substrate using suitable proprietary fixings.

### Acoustic Sealant

Apply a 6mm continuous bead of Lafarge Intumescent Acoustic Sealant around the perimeter of the framing. *Required to meet the sound insulation values as shown in table 3.10*

### Boarding

- One layer Lafarge Acoustic Homespans wallboard Type 1 to BS 1230: Part 1: 1985, thickness 15mm to both sides of framework.
- One layer Lafarge Acoustic Homespans wallboard Type 1 to BS 1230: Part 1: 1985, thickness 15mm to both sides of framework.
- One layer Lafarge Moisturecheck Acoustic Homespans wallboard, Type 3 to BS 1230: Part 1: 1985, thickness 15mm to bathroom side of framework.

### ■ Fixings

Lafarge Drywall Self Tapping Screws length 25mm, reference 25DST25 in fixing pattern as Lafarge installation instructions,

### Accessories

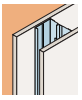
- 25mm Rubber Grommets.
- Self Adhesive Cable Ties.

### ■ Finished partition tolerances

Finished system to comply with tolerances in BS 8212: 1995 section 3.3.

### ■ Materials and Installation

All materials unless otherwise indicated shall be supplied by Lafarge Plasterboard Ltd, and shall be installed in accordance with their current literature and in accordance with BS 8212: 1995.



**Installation**



**1**

**Step one**

Mark out the line of the partition. Fix Lafarge U Track (UT45R or UT52R) to timber or concrete floor along the setting out line at 600mm centres, using suitable fixings. When installing the U Tracks directly onto new concrete which has not completely dried out, a damp proofing membrane should be used. On uneven floors a timber sole plate may be required.



**4**

**Step four**

Place the ceiling U Track on top of the end wall Stud. Then, using an Acoustic Homespan Stud and spirit level, ensure the opposite end of the ceiling U Track is plumb with the floor U Track and screw-fix it into position at 600mm centres.



**2**

**Step two**

Cut U Track (and Acoustic Homespan Studs) to length as necessary using Lafarge tin snips. Studs should be cut 5mm shorter than the floor to ceiling height.



**5**

**Step five**

Install all intermediate Acoustic Homespan Studs. Cut Studs 5mm shorter than the floor to ceiling height to allow for floor variations. Insert the Studs into the U Tracks at 450mm centres and twist to lock. The intermediate Studs should all face the same way. To allow adjustment when fixing plasterboards, Studs should not be screw fixed to the U Tracks.



**3**

**Step three**

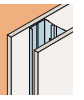
Using a spirit level to ensure it is plumb, fix a Starter Stud to the end wall, with suitable fixings at 600mm centres.



**6**

**Step six**

Use Starter Studs (CS44R) at door openings, corners, T junctions and stop ends as shown in details. These extra studs must be fixed to ceiling and floor U Tracks with Lafarge Wafer Head Self Tapping Screws or using a crimping tool.



**Installation**



**7**

**Step seven**

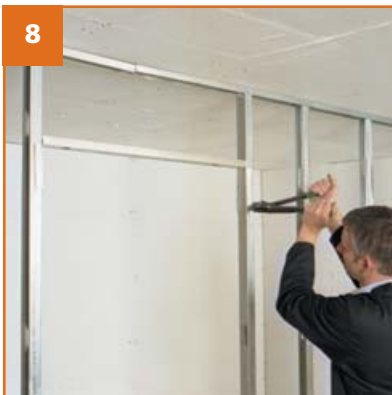
Form the door header by using a piece U Track. Cut the Track so that it is equal to the width of the door frame plus a minimum 300mm, in order to allow 150mm at each end to be cut and folded down.



**10**

**Step ten**

Fix Acoustic Homespans board to one side of the partition. Cut the board 5mm to 8mm shorter than the floor to ceiling height, butt firmly against the ceiling and fix with Lafarge 25mm Drywall Self-Tapping Screws at 300mm centres.



**8**

**Step eight**

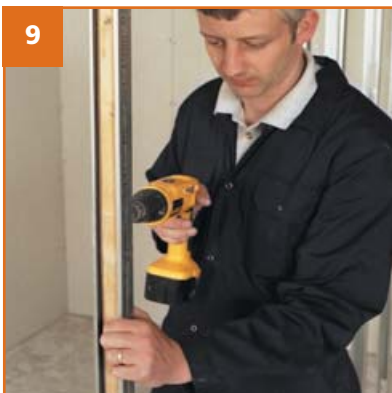
Secure the header to the Starter Studs using a crimping tool or Lafarge Wafer Head Self Tapping Screws.



**11**

**Step eleven**

When one side is complete, repeat for the other side of the partition, ensuring that the joints are staggered by 450mm.



**9**

**Step nine**

Form a timber background construction to create a secure fixing for the door frame by placing a suitably sized timber insert into the back of door frame Studs and header Track. Secure these timbers using Lafarge Drywall High Thread Screws through the face of the Studs into the timber.



**12**

**Step twelve**

To maximise the acoustic performance use Lafarge Intumescent Acoustic Sealant and seal the floor track.

**3**