

INTRODUCTION



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Cormet Twin Frame Systems

Cormet Twin Frame Systems offer a number of advantages over heavy masonry construction. They are lightweight, quick to construct, cost-effective, compact and offer high levels of fire resistance and acoustic insulation.

Cormet Resilient Bar Systems

Use of Cormet Resilient Bar improves the acoustic performance of partitions with little increase in width or weight. Cormet Resilient Bars are fixed to one side of the stud partition prior to facing with wallboard.

Cormet Acoustic Stud Systems

The Cormet Acoustic Homespan Partition System uses sound absorbing C studs to achieve a 40 $R_{\rm w}$ dB sound rating, without insulation, in a 75mm wide partition.

Cormet Omega Acoustic Stud has been specially designed to give greater sound insulation performance in the key frequency bands between 250 Hz and 1,000 Hz. Used in conjunction with Cormet U Track and accessories, Omega Acoustic Stud is particularly effective at reducing common daily noise such as sound generated by stereos and other audio-visual equipment.

Cormet C Stud Systems

Cormet C Stud Systems allow guaranteed performance to be achieved across a broad range of domestic, commercial and industrial applications. These systems provide a cost-effective, versatile approach to the assembly of non-loadbearing partitions.

Timber Stud Systems

Timber stud partitions are suitable for limited heights and mainly used in domestic installations. They are able to achieve high levels of fire resistance and sound insulation.

Masonry Systems

Traditional masonry constructions remain the most popular form of construction, accounting for approximately 70% of all new build dwellings. Where such materials are used, drywall systems still have a key role to play in providing acoustic/ thermal performance and finishing solutions. A case in point is the Cormet Dryliner system which offers the developer quicker completion by reducing reliance on wet trades and associated drying out times.

Specialist Junctions and Installations

Creating special design features is greatly simplified using Lafarge drywall systems which can be specified - among others - for deflection head details, junctions to concrete, timber and floating floor constructions, baffles, service and duct penetrations, dampers, door frame details, boxed studs, column encasements, movement joints, and curved partitions. A range of fixings is also available to accommodate different fixtures and loadings.



Table 3.1 to BS 476, and BS EN 1364 Nominal thickness (mm) fire tesistance (minutes) **Cormet Megadeco Partitions, non-loadbearing** BS 5234 System reference Specification RMP 001 Studs: 70mm Cormet C Stud (CS70/R) at 28 3.8 100 60 40 Severe 600mm centres Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides RMP 003 Studs: 70mm Cormet C Stud (CS70/R) at 29 3.8 100 60 49 Severe 600mm centres Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides **Insulation:** 25mm glass mineral wool density 16 kg/m³ RMP 004 30 3.8 100 60 50 Studs: 70mm Cormet C Stud (CS70/R) at Severe 600mm centres Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides Insulation: 50mm glass mineral wool density 16 kg/m³ RMP 050 Studs: 70mm Cormet C Stud (CS70/R) at 41 4.6 120 60 56 Severe 600mm centres Facings: inner layer 9.5mm Lafarge 60 Standard wallboard, outer layer 15mm Lafarge Megadeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³ RMP 009 120 120 Studs: 70mm Cormet C Stud (CS70/R) at 46 4.6 52 Severe 600mm centres Facings: inner layer 12.5mm Lafarge 120 Firecheck or Megadeco wallboard, outer layer 12.5mm Lafarge Megadeco wallboard both sides RMP 011 Studs: 70mm Cormet C Stud (CS70/R) at 47 4.6 120 120 56 Severe 600mm centres Facings: inner layer 12.5mm Lafarge 120 Firecheck or Megadeco wallboard, outer layer 12.5mm Lafarge Megadeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³ AMP 003 Studs: 70mm wide Omega Acoustic Stud 30 3.8 100 60 51 Severe (AS70/R) at 600mm centres Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides Insulation: 50mm glass mineral wool insulation density 16 kg/m³

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plastering. Refer to Section 7 for finishing details.



Table 3.1 (ctd) Cormet Megad	deco Partitions, non-loadbearing	Weight (kghr.)	Maximum hair	$N_{Ominal\ thick}$	Fire Fesisiance (mm) to 85 476	Sound insulation	65 5234 Grade
System reference	Specification	Ž	May	Non	to B.	200	85.3
RMP 127	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides	28	4.2	120	60 60	42	Severe
RMP 128	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	29	4.2	120	60 60	50	Severe
RMP 138	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides Insulation: 50mm glass mineral wool density 16 kg/m³	30	4.2	120	60	51	Severe
RMP 130	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres Facings: inner layer 12.5mm Lafarge dBcheck wallboard, outer layer 12.5mm Lafarge Megadeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	45	4.8	140	90 90	57	Severe
RMP 140	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres Facings: inner layer 15mm Lafarge dBcheck wallboard, outer layer 15mm Lafarge Megadeco wallboard both sides Insulation: 50mm glass mineral wool density 16 kg/m³	46	5	150	120 90	58	Severe
AMP 141	Studs: 90mm wide Omega Acoustic Stud (AS90/R) at 600mm centres Facings: inside layer 15mm Lafarge dBcheck wallboard between studs, outer layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 16 kg/m³	38	4.2	120	60	53	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plastering. Refer to Section 7 for finishing details.



Table 3.1 (ctd) to BS 476 and BS EN 1364 Sound insulation (Rudg) **Cormet Megadeco Partitions, non-loadbearing** Maximum height (m) System reference Specification AMP 142 Studs: 90mm wide Omega Acoustic Stud 55 5.0 150 90 60 Severe (AS90/R) at 600mm centres Facings: inner layer 15mm Lafarge 90 -7 C, dBcheck wallboard, outer layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 16 kg/m³ AMP 138 Studs: 90mm wide Omega Acoustic Stud 31 4.2 120 60 52 Severe (AS90/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 10.5 kg/m³ RMP 062 Studs: 146mm Cormet C Stud (CS146/Y) at 38 6.5 175 60 42 Severe 600mm centres Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides RMP 075 Studs: 146mm Cormet C Stud (CS146/Y) at 39 6.5 175 60 52 Severe Facings: one layer 15mm Lafarge 60 Megadeco wallboard both sides **Insulation:** 25mm glass mineral wool density 18 kg/m³ RMP 038 Studs: two 50mm Cormet C Stud (CS50/R) 4.2 200 120 Severe 63 at 600mm centres, braced horizontally with Cormet V Brace at max. 1.5m centres 90 -7 C, Facings: inner layer 15mm Lafarge WWW BWWWW dBcheck wallboard, outer layer 15mm Lafarge Megadeco wallboard both sides **Insulation:** 25mm glass mineral wool density 18 kg/m³

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plastering. Refer to Section 7 for finishing details.



Table 3.2 Fire resistance (minutes) to 85 476, and 85 EN 1364 Nominal thickness (mm) **Cormet Toughcheck Partitions, non-loadbearing** Maximum height (m) BS 5234 System reference Specification RRP 049 Studs: 70mm Cormet C Stud (CS70/B)* at 27 4.2 95 60 39 Heavy 600mm centres Facings: one layer 12.5mm Lafarge 30 Toughcheck wallboard both sides RRP 055 4.2 95 60 47 Studs: 70mm Cormet C Stud (CS70/B)* at 28 Heavy 600mm centres Facings: one layer 12.5mm Lafarge 30 Toughcheck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m³ RRP 052 Studs: 70mm Cormet C Stud (CS70/B)* at 47 5.4 120 120 52 Severe 600mm centres Facings: two layers 12.5mm Lafarge 120 Toughcheck wallboard both sides RRP 048 Studs: 70mm Cormet C Stud (CS70/B)* at 53 5.4 120 120 55 Severe 600mm centres Facings: two layers 12.5mm Lafarge 120 Toughcheck wallboard both sides **Insulation:** 25mm glass mineral wool insulation density 16 kg/m³ RRP 053 8.4 195 Studs: 146mm Cormet C Stud (CS146/B)* 56 120 54 Severe at 600mm centres Facings: two layers 12.5mm Lafarge 120 Toughcheck wallboard both sides RRP 054 57 8.4 195 Studs: 146mm Cormet C Stud (CS146/B)* 120 58 Severe at 600mm centres Facings: two layers 12.5mm Lafarge 120 Toughcheck wallboard both sides Insulation: 25mm glass mineral wool density min. 16 kg/m³

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

^{*} B gauge studs 0.70mm thickness must be used in these systems



Table 3.3 Cormet dBcheck Partitions, non-loadbearing

	ck Partitions, non-loadbearing	Neight (kg/m²)	Maximum hei	Nominal thick.	Fire resistance (m.) to 85 476	Sound insulation	BS 5234 Grade
System reference	Specification						
RSP 001	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	26	2.8	80	30	40	Heavy
	Facings: one layer 15mm Lafarge dBcheck wallboard both sides				30		
RSP 002	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	22	2.5	75	30	44	Medium
wwwinimwww	Facings: one layer 12.5mm Lafarge dBcheck wallboard both sides				30		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RSP 003	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	43	3.4	100	60	46	Severe
	Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides				60		
RSP 004	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	51	3.7	110	60	48	Severe
	Facings: two layers 15mm Lafarge dBcheck wallboard both sides				60		
RSP 027	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	44	3.4	100	60	54	Severe
www.minimumm	Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides				60		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RSP 006	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	22	3.6	95	30	40	Medium
	Facings: one layer 12.5mm Lafarge dBcheck wallboard both sides				30		
RSP 028	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	23	3.6	95	30	47	Medium
	Facings: one layer 12.5mm Lafarge dBcheck wallboard both sides				30		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RSP 007	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	26	3.8	100	30	42	Heavy
	Facings: one layer 15mm Lafarge dBcheck wallboard both sides				30		

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.3 (ctd) Cormet dBche	ck Partitions, non-loadbearing	Weight (kgm.)	Maximum heir	Sht (m) Nominal thicko-	Fire resistance (m;	Sound insulation	B5 5234 Grade
System reference	Specification	Neig	Max	Nom	Fire to BS	Sou	85.55
RSP 008	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	27	3.8	100	30	48	Heavy
	Facings: one layer 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				30		
RSP 011	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	44	4.6	120	60	56	Severe
	Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³				60		
RSP 013	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	54	4.9	130	90	57	Severe
mmmdummmm	Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				60		
ASP 006	Studs: 70mm wide Omega Acoustic Stud (AS70/R) at 600mm centres	22	3.6	95	30	42	Medium
	Facings: one layer 12.5mm Lafarge dBcheck wallboard both sides				30		
ASP 011	Studs: 70mm wide Omega Acoustic Stud	44	4.6	120	60	58	Severe
nnnnaprimmun	(AS70/R) at 600mm centres Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m³				60		
ASP 013	Studs: 70mm wide Omega Acoustic Stud (AS70/R) at 600mm centres	54	4.9	130	90	59	Severe
nnontananna	Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m ³				60		

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.3 (ctd) Cormet dBcheck Partitions, non-loadbearing

Cormet dBche	lable 3.3 (ctd) Cormet dBcheck Partitions, non-loadbearing				20	364	(B)
System reference	Specification	Weight (Kg/m.)	Maximum he:	Nominal thice.	Fire Fesistance for	Sound insulation	85 5234 Grade
RSP 017	Studs: 146mm Cormet C Stud (CS146/R) at	55	7.9	205	90	57	Severe
	600mm centres Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				60		
RSP 021	Studs: two 50mm Cormet C Studs (CS50/R) at 600mm centres, braced horizontally with Cormet V Brace at max. 1.5m centres	55	4.2	200	90	64	Severe
	Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally, outer layer 12.5mm dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				60	-10 C _{tr}	
RSP 038	Studs: two 50mm Cormet C Studs (CS50/R) at 600mm centres, braced horizontally with Cormet V Brace at max. 1.5m centres Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³	55	4.2	200	90 60	63 -7 C _{tr}	Severe
RSP 022	Studs: two 90mm Cormet C Studs (CS90/W) at 600mm centres, braced at every 3m with Cormet V Brace and Cormet Primary Channel MFCP44 extension	47	8.5	295	60 60	67 -9 C _{tr}	Severe
	Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides Insulation: 100mm glass mineral wool density 10.5 kg/m ³						
RSP 023	Studs: two 90mm Cormet C Studs (CS90/W) at 600mm centres, braced at every 3m with Cormet V Brace and Cormet Primary Channel MFCP44 extension Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 100mm glass mineral wool density 10.5 kg/m³	55	9.5	300	90	69 -9 C _{tr}	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.3 (ctd) **Cormet dBcheck Partitions, non-loadbearing**

Table 3.3 (ctd) Cormet dBche	ck Partitions, non-loadbearing	Weight (Kg/m.)	Maximum heicz	Sont (m) Nominal thicks	Fire esissance (mi)	Sound insulation	855234 Gade
System reference	Specification	Ž	Ž	×	14 0	ς, Ĉ _ε	BS
RSP 025	Studs: two 90mm Cormet C Studs (CS90/W) at 600mm centres, braced at every 3m with Cormet V Brace and Cormet Primary Channel MFCP44 extension Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally, middle and outer layers 12.5mm Lafarge dBcheck wallboard both sides	79	10.5	400	90	72 -7 C _{tr}	Severe
	Insulation: two 100mm glass mineral wool quilts density 10.5 kg/m ³						
RSP 033	Studs: two 90mm Cormet C Studs (CS90/W) at 600mm centres, in UT92/W tracks set 122mm apart. Braced at 3m centres with Cormet V Brace and Cormet Primary Channel MFCP44 extension Facings: inner layer 19mm Lafarge Plank, middle and outer layers 15mm Lafarge dBcheck wallboard both sides Insulation: two 150mm glass mineral wool quilts density 10 kg/m³	85	12	400	90	73 -7 C _{tr}	Severe
RSP 037	Studs: two 90mm Cormet C Studs (CS90/W) at 600mm centres, in UT92/W tracks set 125mm apart. Braced at 3m centres with Cormet V Brace and Cormet Primary Channel MFCP44 extension Facings: three layers of 15mm Lafarge dBcheck wallboard both sides Insulation: two 100mm glass mineral wool quilts density 10 kg/m³	82	12	400	90	74 -7 C _{tr}	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.3 (ctd) Cormot dRebock Partitions, non-loadbearing

Sound insulation (R., dB) fire tesistance (minutes) **Cormet dBcheck Partitions, non-loadbearing** Nominal thickness (mm) to 85 476, and 85 EW 12 System reference Specification RSP 019 53 3.9 130 90 58 Studs: 60mm wide Cormet I Studs (IS60/B) Severe at 300mm centres, staggered in 72mm track with ISC10 clips 60 Facings: two layers 15mm Lafarge dBcheck wallboard both sides **Insulation:** 25mm glass mineral wool density 16 kg/m³ RSP 085 Studs: 60mm wide Cormet I Studs (IS60/B) 53 3.9 130 90 59 Severe at 300mm centres, staggered in 72mm track with ISC10 clips 60 Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 50mm glass mineral wool insulation density 16 kg/m³ RSP 157 Studs: 70mm wide Cormet C Stud (CS70/R) 52 3.0 145 90 62 Severe at 600mm centres Facings: two layers 15mm Lafarge 60 -9 C,, dBcheck wallboard both sides and with Cormet Resilient Bar (RBD3000) to one side at 600mm vertical centres Insulation: 50mm glass mineral wool insulation density 16 kg/m³ Studs: 90mm wide Cormet C Stud (CS90/R) RSP 158 52 3.6 165 90 62 Severe at 600mm centres Facings: two layers 15mm Lafarge -9 C_{tr} 60 dBcheck wallboard both sides and with Cormet Resilient Bar (RBD3000) to one side at 600mm vertical centres Insulation: 50mm glass mineral wool insulation density 16 kg/m³ RSP 159 Studs: 146mm Cormet C Stud (CS146/R) at 52 5.4 220 90 63 Severe 600mm centres -8 C_{tr} Facings: two layers 15mm Lafarge 60 dBcheck wallboard both sides and with Cormet Resilient Bar (RBD3000) to one side at 600mm vertical centres Insulation: 50mm glass mineral wool insulation density 16 kg/m³

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.4
Cormet Firecheck Partitions, non-loadbearing
– 50mm C Studs

- 50mm C Stud	Specification	Weight (kg/m²)	Maximum hs:	Nominal thick.	Fire resistance for	Sound insulation	BS 5234 Grade
RFP 010	Studs: 50mm Cormet C Stud (CS50/R) at	41	3.6	100	120	45	Severe
	600mm centres Facings: two layers 12.5mm Lafarge				00		
	Firecheck wallboard both sides				90		
RFP 016	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	43	3.6	100	120	52	Severe
www famound	Facings: two layers 12.5mm Lafarge Firecheck wallboard both sides				90		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 013	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	26	2.8	80	60	44	Heavy
	Facings: one layer 15mm Lafarge Firecheck wallboard both sides				60		
	Insulation: 50mm glass mineral wool density 16 kg/m ³						
RFP 111	Studs: two 50mm Cormet C Stud (CS50/R) at 600mm centres set 45mm apart	86	6.0	205	240	60	Severe
	Facings: inner layer 15mm Lafarge Firecheck wallboard, outer layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard				240	-10 C _{tr}	
	Core: three layers 15mm Lafarge Firecheck wallboard						
RFP 112	Studs: two 50mm Cormet C Stud (CS50/R) at 600mm centres set 45mm apart	88	6.0	205	240	65	Severe
	Facings: inner layer 15mm Lafarge Firecheck wallboard, outer layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard Insulation: 25mm glass mineral wool quilt in each cavity density 16 kg/m³ Core: three layers 15mm Lafarge Firecheck				240	-10 C _{tr}	
	wallboard						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.4 (ctd)

– 70mm C Stu	eck Partitions, non-loadbearing ds	Weight Koz.	Ут?) Махітит _{he:}	Nominal thics	Fire resistance for	Sound insulation	BS 5234 Grade
System reference RFP 043	Specification Studs: 70mm Cormet C Stud (CS70/R) at	25	3.8	100	60 60	39	Heavy
117 045	600mm centres	23	5.0	100	00	33	ricavy
	Facings: one layer 15mm Lafarge Firecheck wallboard both sides				30		
RFP 044	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	26	3.8	100	60	47	Heavy
nnnnnnnnn	Facings: one layer 15mm Lafarge Firecheck wallboard both sides				60		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 045	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	40	4.9	130	120	50	Severe
	Facings: two layers 15mm Lafarge Firecheck wallboard both sides				120		
RFP 046	Studs: 70mm Cormet C Stud (CS70/R) 600mm centres	41	4.9	130	120	57	Severe
	Facings: two layers 15mm Lafarge Firecheck wallboard both sides				120		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 049	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	22	3.6	95	60	45	Medium
	Facings: one layer 12.5mm Lafarge Firecheck wallboard both sides				60		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 050	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	42	4.6	120	120	53	Severe
	Facings: two layers 15mm Lafarge Firecheck wallboard both sides				120		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 054	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	41	4.6	120	120	48	Severe
	Facings: two layers 12.5mm Lafarge Firecheck wallboard both sides				120		
RFP 057	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	50	3.0	140	120	62	Severe
	Facings: inner layer 15mm Lafarge Firecheck wallboard, outer layer 15mm Lafarge Firecheck wallboard or Megadeco and with Cormet Resilient Bar (RBD3000) to one side at 600mm vertical centres Insulation: 50mm glass mineral wool				120	-9 C _{tr}	
	density 16 kg/m³						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may



Table 3.4 (ctd) Cormet Firecheck Partitions , non-loadbearing – 90mm C Studs		Weight (kgm.)	Maximum heiz	$^{\circ}$	Fire esistance (r.)	Sound insulation	Bs 5234 Grade
System reference	Specification	Weig	Maxi,	Nomi	fire, to BS	Soun,	85.52
ACP 050	Studs: 70mm wide Omega Acoustic Stud (AS70/R) at 600mm centres Facings: inner layer 12.5mm Lafarge	43	4.6	120	120 90	54	Severe
	Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard or Megadeco wallboard both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
ACP 054	Studs: 70mm wide Omega Acoustic Stud (AS70/R) at 600mm centres	41	4.6	120	120	50	Severe
	Facings: inner layer 12.5mm Lafarge Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard or Megadeco wallboard both sides				90		
RFP 125	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	22	3.9	115	60	45	Medium
	Facings: one layer 12.5mm Lafarge Firecheck wallboard both sides				30		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 127	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	26	4.4	120	60	40	Heavy
	Facings: one layer 15mm Lafarge Firecheck wallboard on both sides				60		
RFP 128	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	27	4.4	120	60	47	Heavy
	Facings: one layer 15mm Lafarge Firecheck wallboard on both sides				60		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
RFP 134	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	42	5.2	140	120	49	Severe
	Facings: inner layer 12.5mm Lafarge Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard on both sides				120		
RFP 135	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	43	5.2	140	120	54	Severe
	Facings: inner layer 12.5mm Lafarge Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard on both sides Insulation: 25mm glass mineral wool				120		
	density 16 kg/m³						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.4 (ctd) Cormet Firecheck Partitions, non-loadbearing – 146mm C Studs

- 146mm C Stu	eck Partitions, non-loadbearing uds	Weight (kg/h.z	Maximum heice	Sont (m) Nominal thick-	Fire resistance (mm) to 85 476	Sound insulation (C. if application of	85 5234 Grade
System reference	Specification	2	5.	>	4.0	s 6.	43
RFP 062	Studs: 146mm Cormet C Stud (CS146/R) at 600mm centres Facings: one layer 15mm Lafarge Firecheck wallboard both sides	26	6.5	175	60	42	Heavy
RFP 063	Studs: 146mm Cormet C Stud (CS146/R) at	27	6.5	175	60	48	Heavy
nananananan	600mm centres Facings: one layer 15mm Lafarge Firecheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				60		
RFP 068	Studs: 146mm Cormet C Stud (CS146/R) at	43	7.6	205	120	57	Severe
	600mm centres Facings: two layers 15mm Lafarge Firecheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³				120		
RFP 071	Studs: 146mm Cormet C Stud (CS146/R) at	42	7.6	195	120	50	Severe
	600mm centres Facings: two layers 15mm Lafarge Firecheck wallboard both sides				120		
RFP 076	Studs: 146mm Cormet C Stud (CS146/R) at 600mm centres Facings: two layers 15mm Lafarge Firecheck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	45	7.6	195	120 120	56	Severe
	-						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.5
Cormet Echeck Partitions, non-loadbearing

Cormet Echeck	Weight (Lom?) Maximum height (m) Nominal thickness (mm) fire esistance (minutes) Sound insulation (R. 1364 (C. if applicable) (R. 48) BS 5234 Grade						
System reference	Specification	Weig	Maxir	Nomi	Fire to BS	Soun	BS 52,
REP 001	Studs: 50mm Cormet C Stud (CS50/R) at	19	2.5	75	30	34	Medium
	600mm centres Facings: one layer 12.5mm Lafarge Echeck				30		
	wallboard both sides						
REP 002	Studs: 50mm Cormet C Stud (CS50/R) at	20	2.5	75	30	40	Medium
	600mm centres Facings: one layer 12.5mm Lafarge Echeck				30		
	wallboard both sides Insulation: 25mm glass mineral wool						
	insulation density 16 kg/m³						
REP 005	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	37	3.4	100	60	43	Severe
	Facings: two layers 12.5mm Lafarge Echeck wallboard both sides				60		
	ECHECK Wallboard both sides						
REP 006	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	38	3.4	100	60	49	Severe
www	Facings: two layers 12.5mm Lafarge Echeck wallboard both sides				60		
	Insulation: 25mm glass mineral wool density 16 kg/m ³						
REP 041	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	19	3.6	95	30	36	Medium
	Facings: one layer 12.5mm Lafarge Echeck wallboard both sides				30		
REP 042	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	20	3.6	95	30	42	Medium
	Facings: one layer 12.5mm Lafarge Echeck wallboard both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
With stude at 400mm co	ntros maximum haight can be increased by 0.20m for sing	la lavor haa	rding and 0	60m for de	aubla lavor	hoarding /	VI maximum h

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.5 (ctd) to 85 476 and 85 EN 1364 Sound insulation (R. dB) **Cormet Echeck Partitions, non-loadbearing** Nominal thickness (mm) System reference Specification REP 045 Studs: 70mm Cormet C Stud (CS70/R) at 37 4.6 120 60 46 Severe 600mm centres Facings: two layers 12.5mm Lafarge 60 Echeck wallboard both sides 38 4.6 120 RFP 046 Studs: 70mm Cormet C Stud (CS70/R) at 60 50 Severe 600mm centres Facings: two layers 12.5mm Lafarge 60 Echeck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m³ REP 064 38 7.6 195 60 48 Studs: 146mm Cormet C Stud (CS146/R) at Severe 600mm centres Facings: two layers 12.5mm Lafarge 60 Echeck wallboard both sides RFP 067 Studs: 146mm Cormet C Stud (CS146/R) at 39 7.6 195 60 52 Severe 600mm centres Facings: two layers 12.5mm Lafarge 60 Echeck wallboard both sides Insulation: 25mm glass mineral wool density 16k g/m³ REP 155 48 3.0 150 90 Studs: 70mm Cormet C Stud (CS70/R) at 63 Severe 600mm centres Facings: inner layer 19mm Lafarge Plank 60 -9 C, fixed with long edges horizontally to stud side and long edges vertically to resilient bar side. Outer layer 12.5mm Lafarge Echeck wallboard. Cormet Resilient Bar (RBD3000) fixed to one side at 600mm vertical centres Insulation: 50mm glass mineral wool density 16 kg/m³

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.5 (ctd) Fire resistance (minutes)
85 476, and 85 EN 1364 Sound insulation (R., dB) **Cormet Echeck Partitions, non-loadbearing** System reference Specification 4.2 REP 091 Studs: two 50mm Cormet C Studs (CS50/R) 39 195 60 54 Severe at 600mm centres, set 40mm apart, braced horizontally with Cormet V Brace at max. 60 1.5m centres Facings: two layers 12.5mm Lafarge Echeck wallboard both sides **Insulation:** 25mm glass mineral wool density 16 kg/m³ REP 093 48 4.2 200 90 60 Severe Studs: two 50mm Cormet C Studs (CS50/R) at 600mm centres, set 40mm apart, braced horizontally with Cormet V Brace at max. 60 -11 C, 1.5m centres mmm#mmmm Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally, outer layer 12.5mm Lafarge Echeck wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³ REP 094 230 Studs: two 70mm Cormet C Studs (CS70/R) 39 4.8 60 55 Severe at 600mm centres, set 40mm apart, braced horizontally with Cormet V Brace at max. 60 1.5m centres WWW #WWW Facings: two layers 12.5mm Lafarge

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

Rock mineral wool density 40 kg/m³ may be used in lieu of glass mineral wool as specified.

Echeck wallboard both sides

density 16 kg/m³

Insulation: 25mm glass mineral wool



Table 3.6 Cormet Standard Wallhoard Partitions

Cormet Standa non-loadbeari	ard Wallboard Partitions, ng			t (m)	ss (mm)	s EN 1364	(Rade)
System reference	Specification	Weight (Kg/m²)	Maximum heie.	Sominal thick.	Fire resistance (mm)	sound insulax.	BS 5234 Grade
RCP 001	Studs: 50mm Cormet C Stud (CS50/R) at	19	2.5	75	0	34	Medium
	600mm centres Facings: one layer 12.5mm Lafarge Standard or Predeco wallboard both sides				0		
RCP 002	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	20	2.5	75	0	39	Medium
nmmulummunu	Facings: one layer 12.5mm Lafarge Standard or Predeco wallboard both sides				0		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
RCP 005	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	37	3.4	100	30	42	Severe
	Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides				30		
RCP 006	Studs: 50mm Cormet C Stud (CS50/R) at 600mm centres	38	3.4	100	30	49	Severe
	Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
RCP 041	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	19	3.6	95	0	36	Medium
	Facings: one layer 12.5mm Lafarge Standard or Predeco wallboard both sides				0		
RCP 042	Studs: 70mm Cormet C Stud (CS70/R) at 600 mm centres	20	3.6	95	0	42	Medium
	Facings: one layer 12.5mm Lafarge Standard or Predeco wallboard both sides				0		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plaster finishing. Refer to Section 7 for finishing details.



Table 3.6 (ctd) **Cormet Standard Wallboard Partitions,** non-loadbearing

Cormet Standa non-loadbearir	rd Wallboard Partitions, ng	Weight (kg/m2)	Maximum ha:	Nominal thicko	e resistance (Sound insulation	BS 5234 Grade
System reference	Specification	Ž	Ma	%	to b	So 0,20	BS.
RCP 045	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	37	4.6	120	60	46	Severe
	Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides				30		
RCP 046	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	38	4.6	120	60	49	Severe
	Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m ³				30		
RCP 121	Studs: 90mm Cormet C Stud (CS90/R) at 600mm centres	20	3.9	115	0	38	Medium
	Facings: one layer 12.5mm Lafarge Standard or Predeco wallboard both sides				0		
RCP 155	Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres	48	3	150	90	63	Severe
	Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally to stud side and long edges vertically to resilient bar side. Outer layer 12.5mm Lafarge Standard or Predeco wallboard. Cormet Resilient Bar (RBD3000) fixed to one side at 600mm vertical centres				60	-10 C _{tr}	
	Insulation: 50mm glass mineral wool density 16 kg/m ³						

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plaster finishing. Refer to Section 7 for finishing details.



Table 3.6 (ctd)

Cormet Stand non-loadbeari	ard Wallboard Partitions, ng	Weight (kg/m.z.	Maximum he:	Nominal thick.	Fire resistance (mm)	Sound insulation of	Bs S234 Grade
System reference	Specification	Ž	Na	% o	to B	200	BS
RCP 064	Studs: 146mm Cormet C Stud (CS146/R) at 600mm centres	38	7.6	195	60	48	Severe
	Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides				30		
RCP 067	Studs: 146mm Cormet C Stud (CS146/R) at 600mm centres Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	39	7.6	195	60 30	52	Severe
RCP 068	Studs: 146mm Cormet C Stud (CS146/R) at 600mm centres Facings: inner layer 15mm Lafarge Standard wallboard, outer layer 15mm Lafarge Standard or Predeco wall board both sides Insulation: 25mm glass mineral wool density 16 kg/m³	47	8.2	205	90	53	Severe
RCP 091	Studs: two 50mm Cormet C Studs (CS50/R) at 600mm centres, set 40mm apart, braced at max 1.5m centres with Cormet V Brace Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	39	4.2	190	60 30	54	Severe
RCP 094	Studs: two 70mm Cormet C Studs (CS70/R) at 600mm centres, set 40mm apart, braced at max 1.5m centres with Cormet V Brace Facings: two layers 12.5mm Lafarge Standard or Predeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m ³	39	4.8	230	60 30	55	Severe
RCP 093	Studs: two 50mm Cormet C Studs (CS50/R) at 600mm centres, set 40mm apart, braced at max 1.5m centres with Cormet V Brace Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally, outer layer 12.5mm Lafarge Standard or Predeco wallboard both sides Insulation: 25mm glass mineral wool density 16 kg/m³	48	4.2	205	60 60	60 -11 C _{tr}	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

The Deco system is not suitable for plaster finishing. Refer to Section 7 for finishing details. Rock mineral wool density 40 kg/m³ may be used in lieu of glass mineral wool as specified.



Table 3.7 Cormet Acoustic Homespan Partitions, non-loadbearing

non-loadbeari	ng	Weight (kg/hz)	Maximum he:	Nominal thick.	Fire resistance for	Sound insulas:	Grade
System reference	Specification	W_{eight}	Maxim	Nomina	Fire res	Sound	BS 5234 Grade
AHSP 001	Studs: 44mm Acoustic Homespan C Stud (AHS44/R) at 450mm centres	28	2.7	75	30	40	Heavy
E	Facings: one layer 15mm Lafarge Acoustic Homespan wallboard both sides				30		
AHSP 002	Studs: 44mm Acoustic Homespan C Stud (AHS44/R) at 450mm centres	29	2.7	75	30	43	Heavy
uwwwwhihamww	Facings: one layer 15mm Lafarge Acoustic Homespan wallboard both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
AHSP 003	Studs: 50mm Acoustic Homespan C Stud (AHS50/R) at 450mm centres	28	2.8	80	30	40	Heavy
E	Facings: one layer 15mm Lafarge Acoustic Homespan wallboard both sides				30		
AHSP 004	Studs: 50mm Acoustic Homespan C Stud (AHS50/R) at 450mm centres	29	2.8	80	30	43	Heavy
	Facings: one layer 15mm Lafarge Acoustic Homespan wall board both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
			,,				

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.8
Cormet Omega Acoustic Stud Partitions, non-loadbearing

non-loadbeari	ng Specification	Weight (kg)m3	Maximum he:	Nominal thick.	Fire resistance for	sound insular.	85 5234 Grade
ASP 006	Studs: 70mm Omega Acoustic Stud	22	3.6	95	30	42	Medium
	(AS70/R) at 600mm centres Facings: one layer 12.5mm Lafarge dBcheck wallboard both sides				30		
AMP 003	Studs: 70mm Omega Acoustic Stud	30	3.8	100	60	51	Severe
	(AS70/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides Insulation: 50mm glass mineral wool insulation density 16 kg/m ³				60		
ASP 011	Studs: 70mm Omega Acoustic Stud (AS70/R) at 600mm centres Facings: two layers 12.5mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m³	44	4.6	120	60 60	58	Severe
ASP 013	Studs: 70mm Omega Acoustic Stud (AS70/R) at 600mm centres Facings: two layers 15mm Lafarge dBcheck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m ³	54	4.9	130	90	59	Severe
ACP 054	Studs: 70mm Omega Acoustic Stud (AS70/R) at 600mm centres Facings: inner layer 12.5mm Lafarge Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard or Megadeco wallboard both sides	41	4.6	120	120 90	50	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.



Table 3.8 (ctd) **Cormet Omega Acoustic Stud Partitions,** non-loadbearing

Table 3.8 (ctd) Cormet Omeg non-loadbeari	a Acoustic Stud Partitions, ng	Weight (kg/m²	Maximum he:	Soft (m) Nominal thickn	Fire Pasisane (mm) to BS 476	Sound insulari	B5 5234 Grade
System reference	Specification	Weig	Max	Nom	Fire to BS	Sour	BSS
ACP 050	Studs: 70mm Omega Acoustic Stud (AS70/R) at 600mm centres Facings: inner layer 12.5mm Lafarge Firecheck wallboard, outer layer 12.5mm Lafarge Firecheck wallboard or Megadeco wallboard both sides Insulation: 25mm glass mineral wool	43	4.6	120	90	54	Severe
AMP 141	insulation density 16 kg/m³ Studs: 90mm Omega Acoustic Stud (AS90/R) at 600mm centres Facings: inside layer 15mm Lafarge dBcheck wallboard between studs, outer	38	4.2	120	60 60	53	Severe
	layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 16 kg/m ³						
AMP 142	Studs: 90mm Omega Acoustic Stud (AS90/R) at 600mm centres Facings: inner layer 15mm Lafarge dBcheck wallboard, outer layer 15mm Lafarge Firecheck wallboard or Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 16 kg/m³	55	5.0	150	90	60 -7 C _{tr}	Severe
AMP 138	Studs: 90mm Omega Acoustic Stud (AS90/R) at 600mm centres Facings: one layer 15mm Lafarge Megadeco wallboard both sides Insulation: 75mm glass mineral wool insulation density 10.5 kg/m³	31	4.2	120	60	52	Severe

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

Table 3.9 Lafarge Drywall Timber Stud Partitions, loadbearing

Table 3.9 Lafarge Drywa loadbearing	all Timber Stud Partitions,	Weight (Golm?)	Maximum hai.	Sht (m) Nominal thicks	Fire Fisher (mm) to BS 476	Sound insulation in	BS S234 Grade
System reference	Specification	Z	Za,	N ₀ ,	fire to B	S Or	88.
ETP 001	Studs: 38 x 63mm at 600mm centres Facings: one layer 12.5mm Lafarge Echeck wallboard both sides	21	3.0	90	30 30	35	Medium
ETP 003	Studs: 38 x 63mm at 600mm centres Facings: one layer 12.5mm Lafarge Echeck wallboard both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m ³	22	3.0	90	30	40	Medium
ETP 002	Studs: 47 x 75mm at 600mm centres Facings: two layers 12.5mm Lafarge Echeck wallboard to both sides	39	3.0	125	60 30	43	Severe
PART 1004	Studs: 47 x 75mm at 600mm centres Facings: two layers 12.5mm Lafarge Echeck wallboard to both sides Insulation: 25mm glass mineral wool insulation density 16 kg/m ³	40	3.0	125	60 30	46	Severe
ETP 006	Studs: 38 x 89mm at 600mm centres Facings: one layer 12.5mm Lafarge Echeck to both sides	21	3.6	115	30 30	37	Medium
RTP 152	Studs: 38 x 89mm at 600mm centres Facings: two layers 15mm Lafarge dBcheck wallboard one side, other side two layers 15mm Lafarge dBcheck wallboard fixed to Cormet Resilient Bar (RBD3000) at 600mm vertical centres Insulation: 25mm glass mineral wool density 16 kg/m ³	55	3.6	165	60	59	Severe
RTP 021	Studs: 38 x 63mm at 600mm centres Facings: one layer 12.5mm Lafarge Firecheck to both sides	21	2.7	100	60 30	36	Medium

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

Table 3.9 (ctd) **Lafarge Drywall Timber Stud Partitions,** loadbearing

Table 3.9 (ctd) Lafarge Drywa loadbearing	all Timber Stud Partitions,	Weight (Long)	Maximum ha:	Sont (m) Nominal thicko	Fire Pesisiance (mm) to 85 476	Sound insulation	B5 5234 Grade
System reference	Specification	Ž	Ma	% 0	to 1.	مي گې	BS
RTP 001	Studs: 38 x 63mm at 600mm centres	21	3.0	90	0	35	Medium
	Facings: one layer 12.5mm Lafarge Standard wallboard both sides				0		
RTP 003	Studs: 38 x 63mm at 600mm centres	22	3.0	90	0	40	Medium
	Facings: one layer 12.5mm Lafarge Standard wallboard both sides				0		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
RTP 002	Studs: 47 x 75mm at 600mm centres	39	3.0	125	30	43	Severe
	Facings: two layers 12.5mm Lafarge Standard wallboard both sides				30		
RTP 004	Studs: 47 x 75mm at 600mm centres	60	3.0	125	30	46	Severe
	Facings: two layers 12.5mm Lafarge Standard wallboard both sides				30		
	Insulation: 25mm glass mineral wool insulation density 16 kg/m ³						
RTP 005	Studs: 38 x 89mm at 600mm centres	21	2.7	114	0	37	Medium
	Facings: one layer 12.5mm Lafarge Standard wallboard both sides				0		
RTP 022	Studs: 38 x 63mm at 600mm centres	38	3	113	60	46	Severe
	Facings: two layers 12.5mm Lafarge Standard wallboard both sides				30		
00000001	Insulation: 25mm glass mineral wool density 16 kg/m ³				30		
RTP 031	Studs: 38 x 63mm at 600mm centres	38	3	113	30	39	Severe
	Facings: two layers 12.5 Lafarge Standard wallboard on both sides				30		

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

Table 3.10 Lafarge Drywall Timber Stud Partition High Performance, loadbearing

	all Timber Stud Partition Ince, loadbearing	Weight (kg/m.s.	Maximum ha:	Soft (m) Nominal thick	Fire resistance (C)	Sound insulation is	85 5234 Grade
System reference	Specification	Weig	Max	Non	Fire to By	Sou	855
RFL 011*	Studs: pairs of studs 38 x 89mm at 600mm centres forming two separate frames set 50mm apart, braced at mid-height Facings: both sides: inner layer 19mm Lafarge Plank with long edges horizontal, outer layer 12.5mm Lafarge Firecheck wallboard Insulation: 2 x 50mm glass mineral wool density 16 kg/m³	55	3.6	295	60	65 -12 C _{tr}	Severe
RFL 050*	Studs: pairs of studs 38 x 89mm at 600mm centres forming two separate frames set	56	3.6	290	60	66	Severe
	50mm apart, braced at mid-height Facings: both sides 15mm Lafarge Firecheck wallboard with long edges horizontal Insulation: 2 x 50mm glass mineral wool density 16 kg/m³				60	-9 C _{tr}	
E-WT-1 (Robust Detail)	Studs: pairs of studs 38 x 89mm at 600mm centres forming two separate frames set 50mm apart, each with 40mm x 3mm maximum ties at 1200mm centres horizontally, one tie per storey height vertically Facings: two layers each side - inner layer 19mm Lafarge Plank with long edges horizontal, outer layer 12.5mm Standard wallboard (gives total minimum weight 22 kg/m² each side) Insulation: one layer 60mm rock mineral wool batts density 33-60 kg/m³ between studs. Alternatively, use two layers glass mineral wool quilt density 10 kg/m³	55	3.6	293	60 30	Robust Detail Solution	Severe
E-WT-2 (Robust Detail)	Studs: pairs of studs 38 x 89mm at 600mm centres forming two separate frames set 50mm apart, with 40mm x 3mm maximum ties at 1200mm centres horizontally, one tie per storey height vertical, and 9mm sheathing Facings: two layers each side - inner layer 19mm Lafarge Plank with long edges horizontal, outer layer 12.5mm Lafarge Standard wallboard (gives total minimum weight 22 kg/m² each side) Insulation: one layer 60mm rock mineral wool batts density 33-60 kg/m³ between studs. Alternatively, use two layers glass mineral wool quilt density 10 kg/m³	60	3.6	301	60 30	Robust Detail Solution	Severe

^{*} These details are deemed-to-satisfy the Robust Detail criteria

With studs at 400mm centres, maximum height can be increased by 0.30m for single layer boarding and 0.60m for double layer boarding. All maximum heights based on deflection L/240 Pa U.D.L. For partitions at 4.2m and above, Deep Flange U Track should be used at the partition head.

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

Table 3.11 Robust Detail Masonry Systems

Table 3.11 Robust Detail	Masonry Systems			(u _u	tes) 1364 dB)
		Nim	Nominal	Fire resists.	Sound insulation (R, dB)
System reference	Specification	Z	*	to to	, ? ₂
E-WM-1 (Robust Detail)	Blocks: double leaf 100mm dense aggregate concrete density 1850-2300 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Finish: 13mm plaster or cement:sand render with plaster skim (min 10 kg/m²) both sides	5.2	315	240	Robust Detail Solution
E-WM-2 (Robust Detail)	Blocks: double leaf 100mm lightweight aggregate concrete density 1350-1600 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Finish: 13mm plaster or cement:sand render with plaster skim (min 10 kg/m²) both sides	5.2	315	240	Robust Detail Solution
E-WM-3 (Robust Detail)	Blocks: double leaf 100mm dense aggregate concrete density 1850-2300 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Render: 8mm cement:sand render Lining: one layer 12.5mm gypsum based board (nominal 8 kg/m²) on dabs	5.2	315	240	Robust Detail Solution
E-WM-4 (Robust Detail)	Blocks: double leaf 100mm lightweight aggregate concrete density 1350-1600 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Render: 8mm cement:sand render Lining: one layer 12.5mm gypsum based board (nominal 8 kg/m²) on dabs	5.2	315	240	Robust Detail Solution
E-WM-5 (Robust Detail)	Blocks: double leaf 100mm cellular Besblock 'Star Performer' dense aggregate: core concrete density 1995 kg/m³, block concrete density 1528 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Render: 8mm cement:sand render Lining: one layer 12.5mm gypsum based board (nominal 8 kg/m²) on dabs	5.2	315	240	Robust Detail Solution
E-WM-6 (Robust Detail)	Blocks: double leaf Aircrete concrete density 600-800 kg/m³, 75mm cavity, tied with 'Tie type A' (as Approved Document E) Render: 8mm cement:sand render Lining: one layer 12.5mm gypsum based board (nominal 8 kg/m²) on dabs	5.2	315	240	Robust Detail Solution

Table 3.11 Separating Walls – Structural Steel Systems

Separating Wa	lls – Structural Steel Systems		t (m)	ss (mm)	ninutes) EN 1365	" (R, dB)
System reference	Specification	Maximus	Nomina,	Fire resistant	Sound insulas	Grade to BS 523,
RLP 01	Studs: two 70mm structural steel studs at 600mm	3.6**	250	60	65	Severe
	centres, by other manufacturers Facings: two layers each side - inner layer 15mm Lafarge Standard wallboard, outer layer 15mm Lafarge Firecheck wallboard			60	-7 C _{tr}	
	Insulation: 50mm glass mineral wool density 24 kg/m ³					
RLP 03*	Studs: two 100mm structural steel studs at 600mm centres, by other manufacturers	4.0**	310	90	66	Severe
	Facings: two layers each side - 15mm Lafarge dBcheck wallboard Insulation: two layers 75mm glass mineral wool density			60	-9 C _{tr}	
	24 kg/m³ in each stud cavity					
RLP 14	Studs: 150mm structural steel studs at 600mm centres, by other manufacturers Facings: two layers each side - inner layer 15mm Lafarge	4.5**	245	60	64	Severe
	dBcheck wallboard, outer layer 15mm Lafarge Firecheck wallboard, and Cormet Resilient Bar (RBD3000) at 400mm vertical centres			60	-7 C _{tr}	
	Insulation: 50mm glass mineral wool density 24 kg/m ³ between studs					
E-WS-1 (Robust Detail)	Studs: two 100mm structural steel studs at 600mm centres, by other manufacturers	4.5**	310	60	Detail	Severe
	Facings: two layers each side - inner layer 15mm Lafarge dBcheck wallboard, outer layer 12.5mm Lafarge dBcheck wallboard (gives total minimum weight 22 kg/m² each side)			60	Solution	
	Insulation: one layer 50mm glass mineral wool density 24 kg/m³ between studs. Alternatively, use 2 layers glass mineral wool quilt density 10 kg/m³, minimum 25mm thick per layer					
E-WS-1: Alternative (Robust Detail)	Studs: two 100mm structural steel studs at 600mm centres, by other manufacturers	4.5**	315	60	Detail	Severe
	Facings: two layers each side - inner layer 19mm Lafarge Plank with long edges horizontal, outer layer 12.5mm Lafarge Firecheck wallboard (gives total minimum weight 22 kg/m² each side)			60	Solution	
	Insulation: one layer 50mm glass mineral wool density 24 kg/m³ between studs. Alternatively, use 2 layers glass mineral wool quilt density 10 kg/m³, minimum 25mm thick per layer					
Note						

Note

Performance values are for imperforate, jointed systems using only Lafarge components and installed to the Lafarge specification given. Any alterations may well impair the quoted performance criteria.

^{*} These details are deemed-to-satisfy the Robust Detail criteria

^{**} For the maximum height values shown, lateral restraint to the steel framing is assumed. Please refer to structural engineer as these are for guidance only.

Case study

The Met Office, Exeter



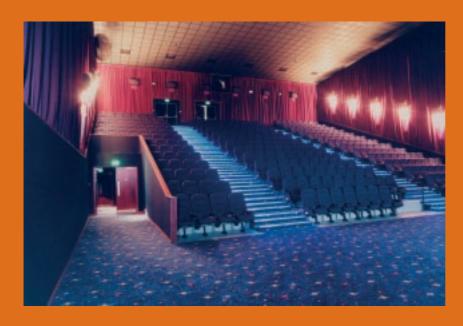
The Met Office's £80 million headquarters relies on drywall systems from Lafarge Plasterboard. The company 'sproducts have been used throughout the complex to create dramatic design features for partitions, wall linings, ceilings, and fire resistant column and beam encasements. Approximately 100,000m² of board have been installed, along with a range of metal stud configurations, in the construction of 22 different partition specifications. Key design features include a striking conical viewing area looking out over the development 'scentral indoor street and elliptical meeting rooms

Hart Du Mar office Auditor Brooten Makes

Main contractor: Costain Skarska Joint Versure

Drywall contractor: Ultimate IPD Interiors/ECL Contracts





Cormet Twin Wall Partitions are designed for installations requiring enhanced fire, sound or impact resistance and for use in creating exceptionally wide or high partitions.

Ideal for fast-track projects, they offer markedly better sound performance/ thickness ratios than can be achieved using blockwork.

This has made them popular for buildings ranging from manufacturing facilities, multiplex cinemas and multioccupancy domestic properties to hospitals.





CORMET TWIN FRAME SYSTEMS

Introduction

Cormet Twin Frame Systems

Cormet non-load bearing Twin Wall Systems constructed from plasterboard facings on metal studs have considerable advantages compared with traditional heavy masonry construction.

They are:

- lightweight
- quick to construct
- cost effective
- compact
- able to achieve high levels of fire resistance and acoustic insulation.

There are two types of Cormet systems:

- staggered stud systems in single track
- twin frame systems constructed using two separate metal frames, set a minimum of 40mm apart and braced together.

Performance

The selection of system, and the type, number and thickness of board layers will depend on the partition height and the performance required for fire resistance and sound insulation. Refer to the performance table 3.1, 3.3, 3.5 and

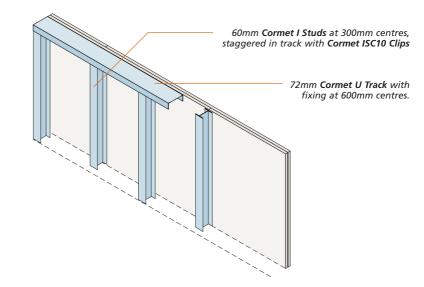
Lafarge plasterboards are defined as Class 0 in accordance with National **Building Regulations 1991 Approved** Documents B1/2/3/4/5 Fire Safety and **Building Standards (Scotland)** Regulations 1990, Regulation D2 when tested to BS 476: Part 6: 1989 and Part 7: 1997 and Euroclass A2. The gypsum core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

Boarding

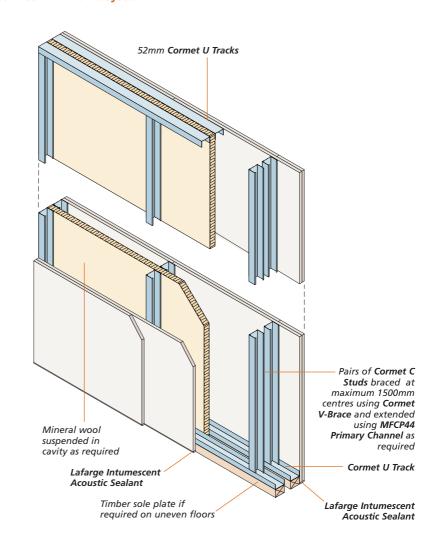
On partitions over single board height, stagger layers by a minimum of 300mm.

Stagger layers on each side of partition with previous layer.

Cormet Staggered I Stud system (system RSP 019 shown)



Cormet Twin frame system





Components

Components

Components used are as on pages 123-124, with additional components as shown on the right.

Colour coding is used to identify metal thickness:

Red (R) 0.5mm

Blue (B) 0.7mm

White (W) 0.9mm

Maximum heights shown in tables 3.1, 3.3. 3.5 and 3.6 refer to 0.50mm thick studs (red gauge). If 0.70mm thick studs (blue gauge) are used then the maximum heights can be increased by 0.30m for single layer systems 0.60m for double layer.

All framing 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 wallboards.



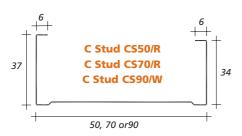
3.12 Components for Cormet High Performance Partitions

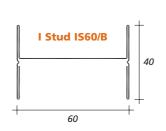
Component colour code metal thickness (mm)	Lafarge code	Dimensions (mm)
I Stud blue gauge 0.5mm	IS60/B	40 x 60
C Stud	CS50/R CS70/R	36 x 50 x 34 36 x 70 x 34
	CS90/W	36 x 90 x 34
Staggered Stud Clip	ISC10	12 x 27.5 x 38
V Brace	VBRACE	100 x 42

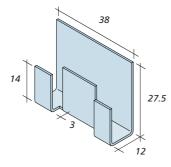
RAFT50

12 x 50



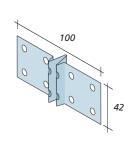






Lafarge Resilient Tape

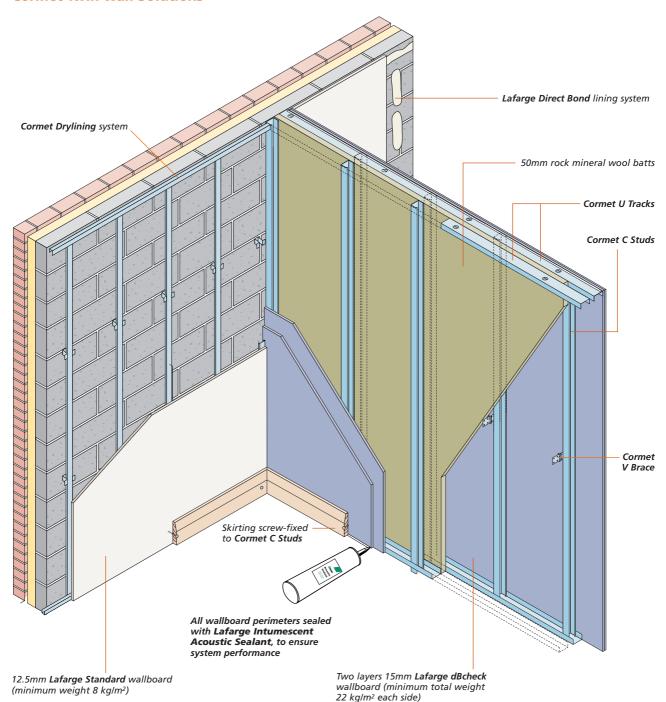




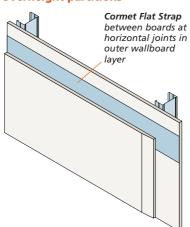
Cormet V Brace VBRACE



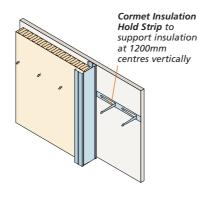
Cormet Twin Wall Solutions



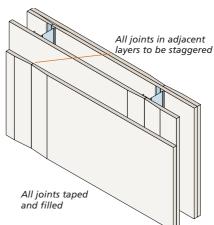
Overheight partitions



Suspension of mineral wool



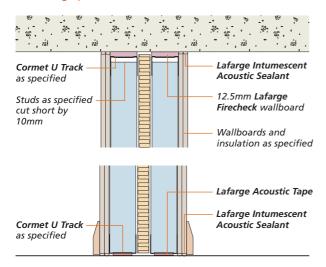
Partitions with double layer boarding





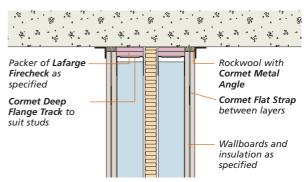
Ceiling and skirting detail

Fire rating up to 60 minutes, maximum deflection 10mm



Typical deflection head detail

Fire rating up to 60 minutes, maximum deflection 25mm

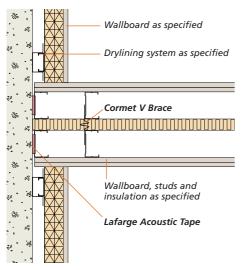


Note on head packer:

Max deflection	Packer required
8mm	1x12.5mm Firecheck*
10mm	1x15mm Firecheck*
15mm	1x19mm Plank
20mm	2x12.5mm Firecheck**
25mm	2x15mm Firecheck*
Motor:	

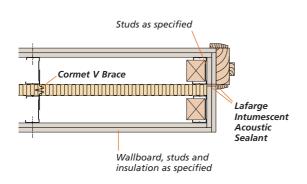
- * Firecheck can be substituted by Megadeco, Toughcheck or MR Firecheck
- ** Firecheck can be substituted by 25mm Firecheck Coreboard

Junction with external concrete wall

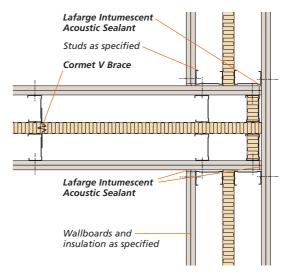


Junction with external concrete wall

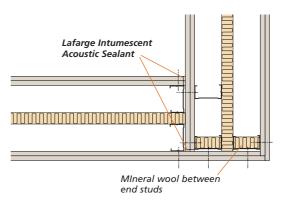
Typical door jamb detail



T junction (plan)



Corner detail



CORMET (R)

Specification

Cormet Twin Wall Systems

Scope

Cormet Twin Wall partition using twin Cormet C Studs fitted into Cormet U Track at head and floor where superior fire and acoustic performance may be required.

Additional clauses

Add general clauses (see Section 8) if required for:

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

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (insert Editinge system reference from reformance fables)
Location
Client reference
Performance
Maximum heightm
Fire ratingmins
Airborne insulationR _w dB

System reference (Insert Lafarge system reference from Performance Tables)

Thicknessmm
Weightkg/m²

Grade to BS 5234:

Horizontal joints

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Insulation

(Specify insulation thickness and grade/density from the Performance Tables)

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Studs

Two Cormet C Studs, reference CS50/R, CS60/R, CS70/R, CS90/R, CS146/R, CS70/B, CS90/B, CS146/B, CS90/W, CS70/Y, CS90/Y or CS146/Y, width 50, 60, 70, 90 or 146mm at max 600mm centres

Bracing

Cormet Acoustic Brace (VBRACE) at centres as defined in performance tables.

Floor track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Head track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or Steel use Spit SC6 Pins (Select from 15, 20)mm

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)
Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge screws at 300mm centres

Type Drywall Self-tapping, or Toughcheck Self-tapping, or Checkpoint Self-tapping, or Megadeco Self-tapping.

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Finishing

Lafarge Taping and jointing system, or Lafarge Supreme Skim Plaster, or Lafarge Predeco taping and jointing system

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.



Specification

Cormet Staggered I Stud Systems

Scope

Cormet Staggered I Stud partition using Cormet I Studs in a staggered pattern fitted into a single Cormet U Track at head and floor. Used where acoustic performance may be required.

Additional clauses

Add general clauses (see Section 8) if required for:

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

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/ nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Lafarge system reference from Performance Tables)
Location
Client reference
Performance
Maximum heightm
Fire ratingmins
Airborne insulationR _w dB
Thicknessmm
Weightkg/m²
Horizontal joints

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Insulation

(Specify insulation thickness and grade/density from the Performance Tables)

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Studs

Cormet I Studs, reference CS70/R and IS60/B at max 300mm centres

Bracing

Cormet Staggered Stud Clip, reference ISC10.

Floor track

Cormet U Track, reference UT72/R at 600mm centres.

Head track

Cormet U Track, reference UT72/R at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or

Steel use Spit SC6 Pins (Select from 15, 20)mm

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)

Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge screws at 300mm centres

Type Drywall Self-tapping, or Toughcheck Self-tapping, or Checkpoint Selftapping, or Megadeco Self-tapping.

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Finishing

Lafarge Taping and jointing system, or

Lafarge Supreme Skim Plaster, or

Lafarge Predeco taping and jointing system

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.

Case study

Ster Century cinema, Basingstoke



The new Ster Century cinema at Festival Place, Basingstoke provides a stunning example of the versatility of modern drywall materials. Systems from Lafarge Plasterboard have been used to create a dramatic entrance foyer, with eye-catching curved and barrelied features along with cut-outs to house recessed lighting. The drop bulkheads, which create a canopy over retail areas, are constructed using a suspended metal furring system in conjunction with twin layers of Contour board. Other curves within the dramatic ceiling design are formed from pre-wetted Firecheck. Toughcheck boards are used for vertical linings.



Client: Grosvenor Developments

Drywall contractor: Hillcrest

Main contractor: Long Construction





Cormet Resilient Bar provides a degree of isolation between the wallboard surface and the supporting structure, thus improving the acoustic performance of the partition.



3



Introduction

Cormet Resilient Bar Systems

Partitions using the Cormet Resilient Bar are constructed in the usual way, but the Cormet Resilient Bars are fixed to one side of the stud partition and faced with wallboard.

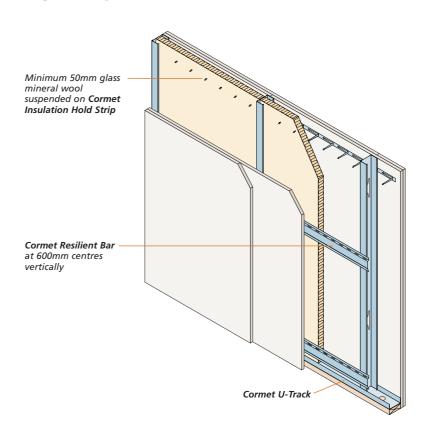
The benefit of **Cormet Resilient Bar** is that it improves the acoustic performance of the partition with little increase in partition width or weight.

Performance

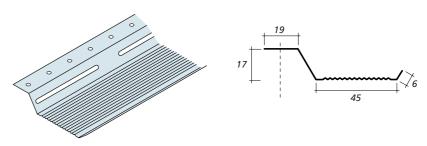
The selection of system, and the type, number and thickness of board layers will depend on the partition height and the performance required for fire resistance and sound insulation. Refer to the performance tables 3.3, 3.4, 3.5, 3.6 and 3.9.

Lafarge plasterboards are 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, textures and bonding compounds and Cormet metal systems are non-combustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1.

Single frame system with Resilient Bar



Cormet Resilient Bar RBD3000





Cormet Resilient Bar

Where the **Cormet Resilient Bar** is to be fixed to timber or metal studs the following centres apply.

For single layer boarding fix **Cormet Resilient Bar** at 400mm centres.

For double layer board fix **Cormet Resilient Bar** at 600mm centres.

When fixing the Cormet Resilient Bars, remember that the top Cormet Resilient Bar is fixed in the inverted position, 50mm down from the soffit. The final Cormet Resilient Bar should be installed no more than 50mm from the floor. The remaining Cormet Resilient Bars are installed at vertical centres to suit boarding, ie 600mm for double layer and 400mm for single layer.

Screw fix the Cormet Resilient Bars to the Cormet studs using 25mm Drywall Self Tapping Screws.

Screw fix the wallboard to the **Cormet Resilient Bar** only, ensuring the screw does not touch the metal substrate.

For screw lengths for fixing plasterboard to **Cormet Resilient Bars** see Table 3.13.

For fixing **Cormet Resilient Bar** to timber studs use 38mm **Lafarge High Thread Screws**.

Table 3.13 Recommended screw lengths for fixing plasterboard to Cormet Resilient Bars

Plasterboard thickness (mm)	Screw length (mm)
12.5	25
15.0	25
19.0	32
12.5 + 12.5	38
19.0 + 12.5	44
15.0 + 15.0	44

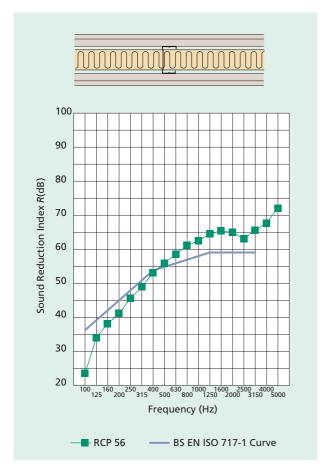
Comparison of systems with and without Cormet Resilient Bar

Studs: 70mm Cormet C Stud (CS70/R) at 600mm centres

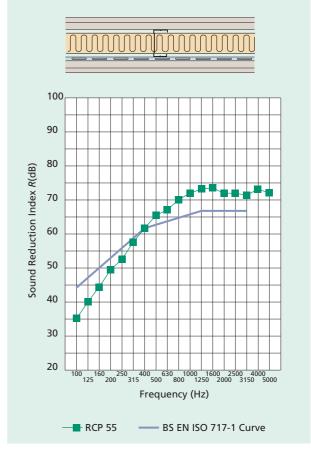
Facings: inner layer 19mm Lafarge Plank fixed with long edges horizontally

Facings: outer layer 12.5mm Lafarge Standard wallboard each side

Insulation: 50mm glass mineral wool density 16 kg/m³



System reference RCP 56 (without Resilient Bar) R_wdB 55

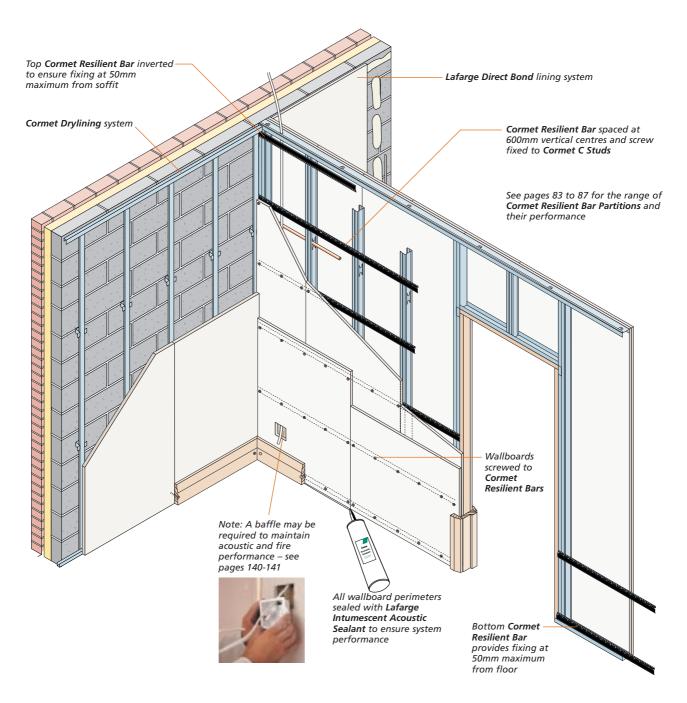


System reference RCP 55 (with Cormet Resilient Bar) R_wdB 63

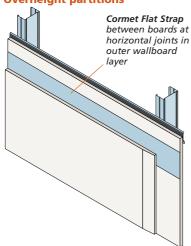
Note: superior performance with Cormet Resilient Bar



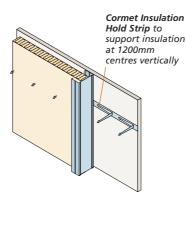
Cormet Resilient Bar Solutions



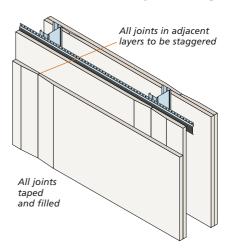
Overheight partitions



Suspension of mineral wool

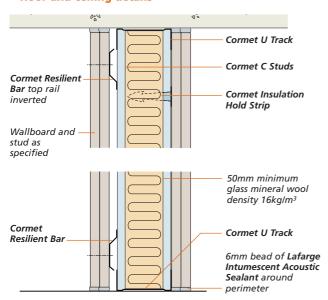


Partitions with double layer boarding

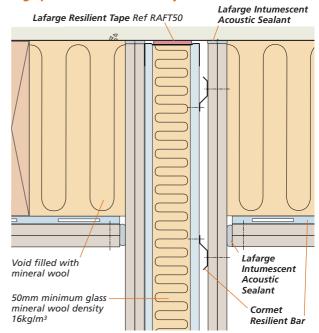




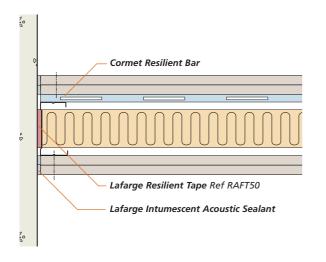
Single frame system with Cormet Resilient Bar – floor and ceiling details



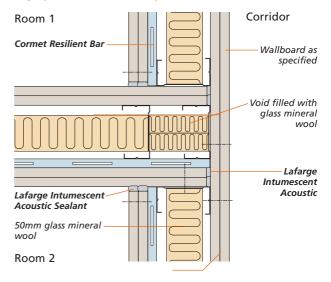
High performance wall head junction



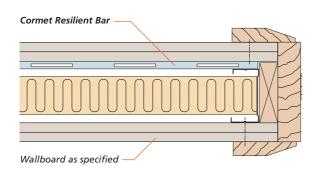
Junction with masonry wall



High performance wall T junction



Door opening detail



Wallboard setting out



CORMET RESILIENT BAR SYSTEMS



Specification

Cormet Partition with Resilient Bar

Scope

Partition constructed of **Cormet C Studs** with **Cormet Resilient Bar** to one side of partition to improve acoustic performance.

Additional clauses

Add general clauses (see Section 8) if required for:

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

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Lafarge system reference from Performance Tables) Location
Client reference
Performance
Maximum heightm
Fire ratingmins
Airborne insulationR _w dB
Thicknessmm
Weightkg/m²
Grade to BS 5234

Horizontal joints

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Insulation

(Specify insulation thickness and grade/density from the Performance Tables)

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Studs

Cormet C Studs, reference CS50/R, CS60/R, CS70/R, CS90/R, CS146/R, CS70/B, CS90/B, CS146/B, CS90/W, CS70/Y, CS90/Y or CS146/Y, width 50, 60, 70, 90 or 146mm at max 600mm centres

Resilient Bar

Install Cormet Resilient Bar RBD3000 to one side of studs at 600mm vertical centres, using 25mm Lafarge Drywall Self Tapping Screws.

Floor track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Head track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or

Steel use Spit SC6 Pins (Select from 15, 20)mm

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)

Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge screws at 300mm centres

Type Drywall Self-tapping, or Toughcheck Self-tapping, or Checkpoint Self-tapping, or Megadeco Self-tapping.

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Finishing

Lafarge Taping and jointing system, or Lafarge Supreme Skim Plaster, or

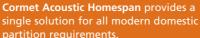
Lafarge Predeco taping and jointing system

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.





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 Homespan** uses a combination of high performance metals, which minimise sound bridging, and dense core board technology to provide 40 R_w dB sound performance in a 75mm wide partition without the need to install insulation within the system.

The Cormet Omega Acoustic Stud has a unique bulb design which means less acoustic energy is transmitted through the stud and so more impact and airborne sound is absorbed within the partition. Substituting the Cormet Omega Acoustic Stud for a standard Cormet C Stud increases the acoustic performance of the system without any loss in partition strength.





CORMET ACOUSTIC STUD SYSTEMS



Introduction

Cormet Acoustic Partition Systems

Lafarge produce two acoustic partition systems:

- Cormet Acoustic Homespan
- Omega Acoustic Stud Partition

Cormet Acoustic Homespan

Cormet Acoustic Homespan is a 75mm or 80mm nominal width metal stud partitioning system using 44mm or 50mm metal Cormet Acoustic Homespan C Studs set at 450mm centres and one layer of 15mm thick x 900mm wide Acoustic Homespan wallboard fixed to each

Cormet Acoustic Homespan 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 Homespan C Studs have been specifically developed to achieve at least 40R_w dB sound rating without insulation in-line with the latest Part E Approved Document.

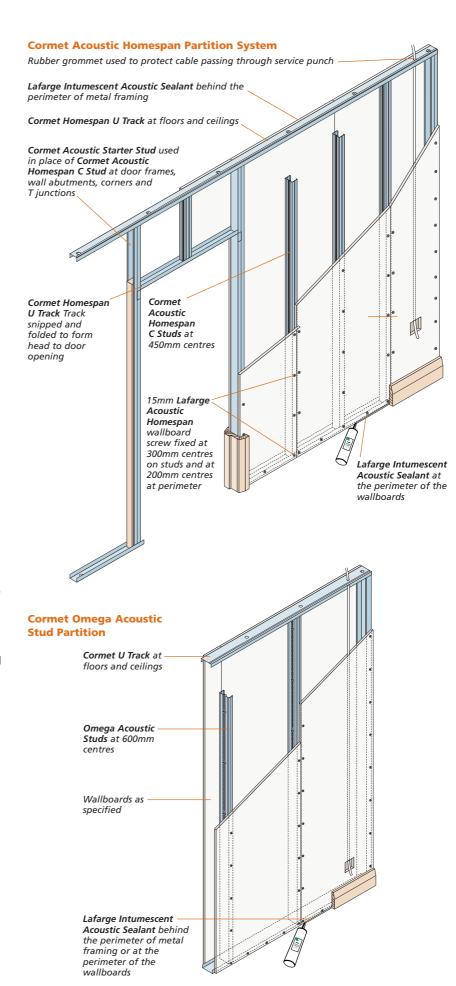
Cormet Acoustic Homespan

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

Lafarge Acoustic Homespan 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 noncombustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1. Lafarge jointing compounds, metal systems, textures and bonding compounds are noncombustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1.

Omega Acoustic Stud Partition

The Omega Acoustic Stud has a unique bulb design with engineered twin slots, which creates a resilient spring section. The spring section means less acoustic energy is transmitted through the stud and so more impact and airborne sound is absorbed within the partition.



ACOUSTIC (intu)

ACO38 (intu)



Components

Substituting the Omega Acoustic Stud for a standard Cormet C Stud increases the acoustic performance of the system and improves the overall R_wdB figure with no significant loss of partition strength. For individual system performance see Cormet Omega Stud partitions in table 3.8.

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 3.15 Acoustic Homespan wallboard

Properties	Homespan wallboard	MR Homespan wallboard
Thickness	15mm	15mm
Width	900mm	900mm
Length	1800, 2400 and 2700mm	2400mm
Tapered edge	Yes	Yes
Square edge	Yes	No













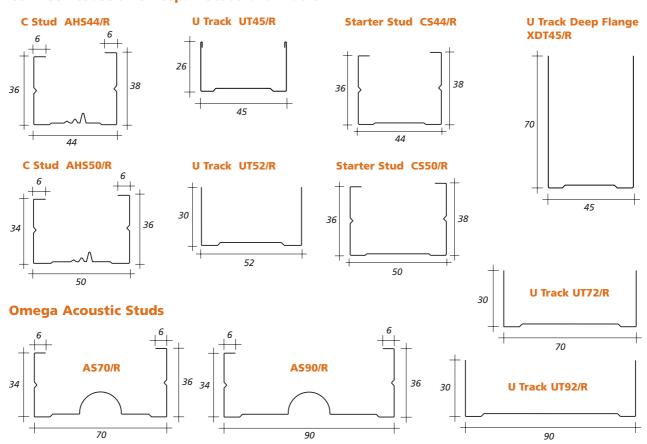


Table 3.14 Cormet Acoustic components			
Component	Width (mm)	Lengths (mm)	Lafarge code
Acoustic Homespan	44	2400	AHS44/R
C Stud	50	2400	AHS50/R
Acoustic Homespan	44	2400	CS44/R
Starter Stud	50	2400	CS50/R
Homespan	45	2400, 2700	UT45/R
U Track	52	3000	UT52/R
Homespan	45	2400	XDT45/R
U Track Deep Flange	52	3000	UDT52/B
Omega Acoustic Stud	70	2400, 2700, 3000, 3600	AS70/R
	90		AS90/R
	30	3600, 3900, 4200	NUECA
U Track	70	3000	UT72/R
	90	3000	UT92/R

0.9 litres

0.38 litres

Cormet Acoustic Homespan Studs and Tracks

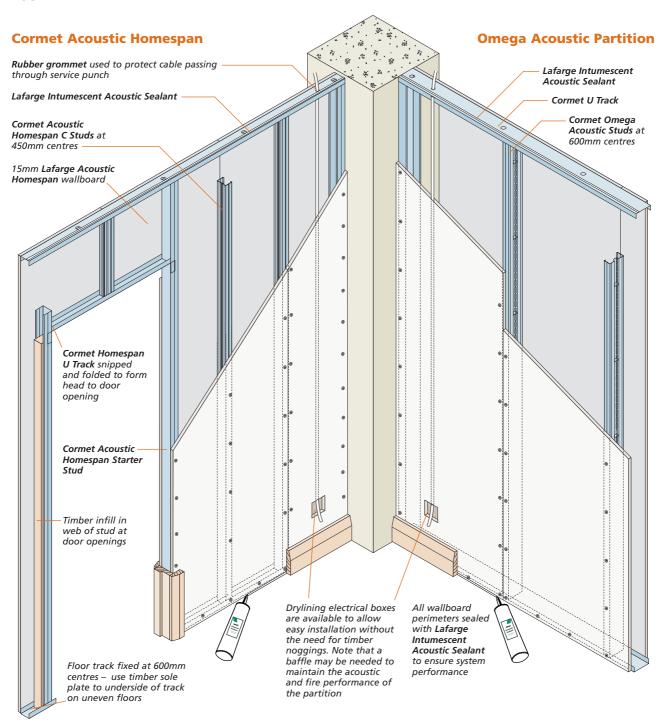


Lafarge Intumescent

Acoustic Sealant



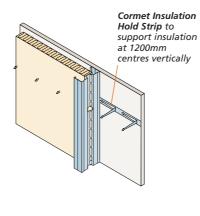
Application details



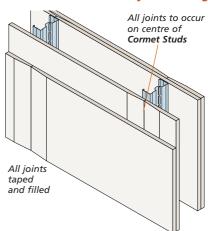
Overheight partitions

Cormet Fixing Channel or Cormet Flat Strap Fs90/W at horizontal joints in outer wallboard layer

Suspension of mineral wool



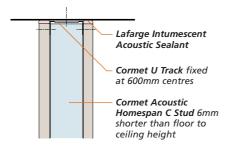
Partitions with double layer boarding



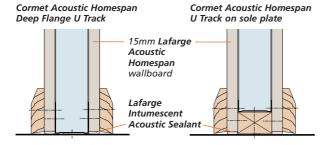


Application details

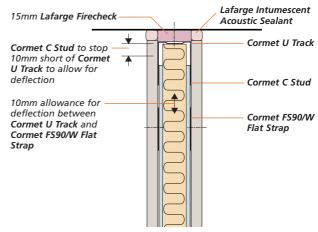
Ceiling detail (section)



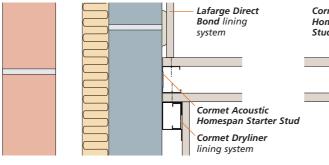
Alternative skirting fixing details (sections)



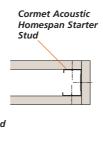
10mm deflection head - 60 minute fire rated



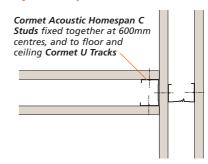
Junction with masonry wall (plan)



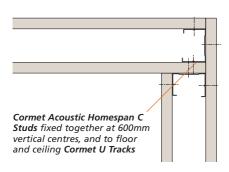
Partition end (plan)



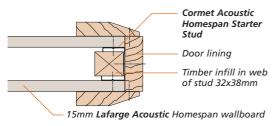
T junction (plan)



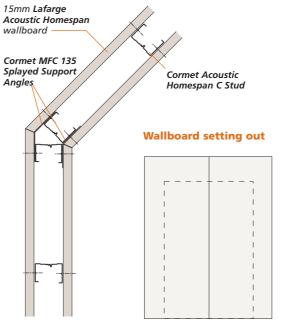
Corner junction (plan)



Typical door jamb detail (plan)



135° splayed corner (plan)



Cut wallboard for door openings as shown to avoid joints running parallel to framing studs at side of door

Door opening shown dotted

CORMET ACOUSTIC STUD SYSTEMS



Specification clauses

Cormet Acoustic Homespan Partition

Scope

A lightweight, durable and high performance partition systems developed for the housing market.

The system has been designed to achieve a 40 R_wdB sound rating without insulation and meets BS 7671 requirements for electrical installation.

Additional clauses

Add general clauses if required for:

- Expansion/movement joints
- Health and safety
- Storage of Materials
- Site conditions and workmanship

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

To complete the clause select the appropriate data as indicated on the right.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Lafarge system reference from Performance Tables)

Location

Client reference

Performance

Maximum heightm

Fire resistance: 30 mins

Airborne sound insulationRw dB

Thicknessmm
Weightkg/m²
Grade to BS 5234: Heavy

Horizontal joints

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Studs

Cormet Acoustic Homespan Studs, reference AHS44/R or AHS50/R, width 44 or 50mm at max 450mm centres.

Head deflection allowance

Consult with Lafarge Plasterboard Ltd Technical Dept for recommendations and details.

Floor track

Cormet U Track, reference UT45/R or UT52/R, width 45 or 52mm fixed at 600mm centres.

Head track

Cormet U Track, reference UT45/R or UT52/R, width 45 or 52mm fixed at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or

Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or

Steel use Spit SC6 Pins (Select from 15, 20)mm

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Boarding

Single layer of 15mm Lafarge Homespun wallboard to each side.

Board fixings

Lafarge Drywall Self Tapping screws at 300mm centres.

Length: 32mm

Finishing

Lafarge Taping and jointing system

Primer/sealer

1 coat Lafarge Universal Sealer prior to paint or wallpaper, or

2 coats Lafarge Drywall Sealer when vapour control is a consideration.

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.



Specification clauses

Omega Acoustic Partition

Scope

A lightweight, durable and high performance partition system developed to provide improved sound performance.

Additional clauses

Add general clauses if required for:

- Expansion/movement joints
- Health and safety
- Storage of Materials
- Site conditions and workmanship

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

To complete the clause select the appropriate data as indicated on the right.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/ nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Lafarge system reference from Performance Tables) Location
Client reference
Performance
Maximum heightm
Fire resistance:mins
Airborne sound insulationR _w dB
Thicknessmm
Weightkg/m²
Grade to BS 5234:
Horizontal joints

Horizontal joints

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Omega Acoustic Studs, reference AS70/R or AS90/R, width 70 or 90mm at max 600mm centres.

Head deflection allowance

Consult with Lafarge Plasterboard Ltd Technical Dept for recommendations and details.

Floor track

Cormet U Track, reference UT72/R or UT92/R, width 70 or 90mm fixed at 600mm centres.

Head track

Cormet U Track, reference UT72/R or UT92/R, width 70 or 90mm fixed at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or

Steel use Spit SC6 Pins (Select from 15, 20)mm

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)

Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge screws at 300mm centres

Type Drywall Self-tapping, or Toughcheck Self-tapping, or Checkpoint Selftapping, or Megadeco Self-tapping.

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Finishing

Lafarge Taping and jointing system

1 coat Lafarge Universal Sealer prior to paint or wallpaper, or

2 coats Lafarge Drywall Sealer when vapour control is a consideration.

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.



Installation



Note: 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.

Step one

Mark out the line of the partition. Fix Cormet U Track to timber or concrete floor along the setting out line at 600mm centres, using suitable fixings.



Step four

Place the ceiling
Cormet U Track on
top of the end wall
stud. Then, using an
Cormet Acoustic
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.

To maximise the acoustic and fire performance use Lafarge Intumescent Acoustic Sealant and seal the gap between the perimeters and the wallboard or alternatively a continuous bead can be applied to the back of the Cormet U Tracks and perimeter studs.



Step two

Cut the Cormet U
Acoustic Stud to
length as necessary
using Lafarge tin
snips. Studs should
be cut 5mm shorter
than the floor to
ceiling height.



Step five

Install all intermediate Acoustic C Studs. Cut Studs 5mm shorter than the floor to ceiling height to allow for floor variations. Insert the Studs into the Cormet 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 Cormet U Tracks.



Note: Lafarge intumescent Acoustic Sealant should be applied as shown above.

Step three

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



Step six

Use Starter Studs, if required, 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



Step seven

Form the door header by using a piece Cormet 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.



Step ten

Fix Lafarge wallboard to one side of the partition. Cut the board 5mm shorter than the floor to ceiling height, butt firmly against the ceiling and fix with Lafarge Drywall Self-Tapping Screws at 300mm centres in the field of the board and 200mm at the partition perimeter.



Step eight

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



Step eleven

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



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



Step twelve Finish as required prior to decoration. Refer to Section 7.

Case study

British Empire and Commonwealth Museum, Bristol



Megadeco board has become a key 'exhibit at the new British Empire and Commonwealth Museum recently opened in the heart of Bristol. The High performance drywall product has been central to the renovation and refurbishment of Bristol Old Station which houses the museum. The space features a number of internal partitions, from 3 to 5 metres in height, created using Megadeco, which is integral to the design of the display areas. Fixed to timber studs, the boards are installed with 10mm shadow gaps, to create a grid like system which accommodates a number of recessed showcases.

Client: British and Commonwealth Museum

Mais contractor: Mixiri

Exhibition graphics: RFA Design







The wide range of **Cormet Metal Partitions** allows repeatable,
guaranteed performance to be
achieved across a broad range of
applications from apartments, cinemas
and factories to hospitals, museums,
and schools.





CORMET

Lafarge

Introduction

Cormet Partitions

Cormet metal stud partitioning is an economical friction-fit system used for the assembly of frames for non-loadbearing partitions. The unique design of the components ensures high strength with easy installation.

Cormet partitions are suitable for domestic and commercial use. They are strong high performance systems which are:

- cost effective
- lightweight
- versatile
- able to achieve high levels of fire resistance, acoustic and thermal insulation.

Performance

The selection of **Cormet C Stud** size, and the type, number and thickness of plasterboard layers will depend on the partition height and the performance required for fire resistance and sound insulation. Refer to the performance tables 3.1 to 3.6

Lafarge Performance Board* Partitions

Lafarge performance partitions comprise Cormet C Stud framing and Lafarge performance wallboards to provide a stronger partition which is more resistant to knocks and scratches.

In addition, **Lafarge** performance partitions provide superior sound insulation and fire resistance.

Performance

Lafarge performance wallboards are 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.

Intumescent Acoustic Sealant to Intermediate studs Cormet track back of all tracks inserted in floor fixed to soffit at and end studs and ceiling tracks 600mm centres Perimeter Cormet stud fixed to end wall at 600mm centres Lafarge Intumescent Acoustic Sealant around perimeter Single layer boarding: joints on opposite faces offset, all joints taped and filled Cormet track fixed to floor at 600mm centres Lafarge Intumescent Acoustic Sealant applied around perimeter of partition

Partition with single layer boarding

Note

Timber sole plate, if required

on uneven floors

^{*} Toughcheck, dBcheck, Firecheck, Megadeco and Moisture Resistant Firecheck.



Components

The range of **Cormet** partition components is shown in the table opposite and in the drawings on the following page.

Rigidising plus vertical ribs in the stud webs ensures stiffness with strength, whilst the fold-outs allow for better services access. The flanges have deep knurling for easier screw-fixing, and plasterboard alignment guides, all of which makes installation even easier.

Colour coding is used to identify metal thickness: Red (R) 0.50mm Blue (B) 0.70mm White (W) 0.90mm Yellow (Y) 1.2mm.

Maximum heights shown in performance tables 3.1 to 3.8 refer to 0.50mm thick studs (Red gauge). If 0.70mm thick studs (Blue gauge) are used the maximum height can be increased by 0.30m for systems faced with a single layer of plasterboard and by 0.60m for double layer systems.

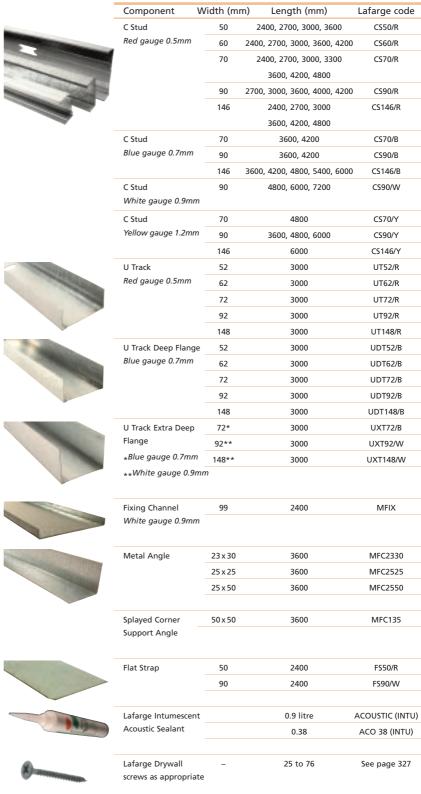
Cormet Deep Flange U Tracks are used for partitions with heights above 4.2m, or at the soffit where a deflection head is required.

Cormet Fixing Channel MFIX or Cormet Flat Strap FS90/W can be fixed horizontally between two metal studs to provide extra support and maintain fire integrity of the system when board heights are exceeded.

As an alternative **Cormet Flat Strap** FS50/R may be used between wallboards on double layer board systems.

All 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 wallboards.

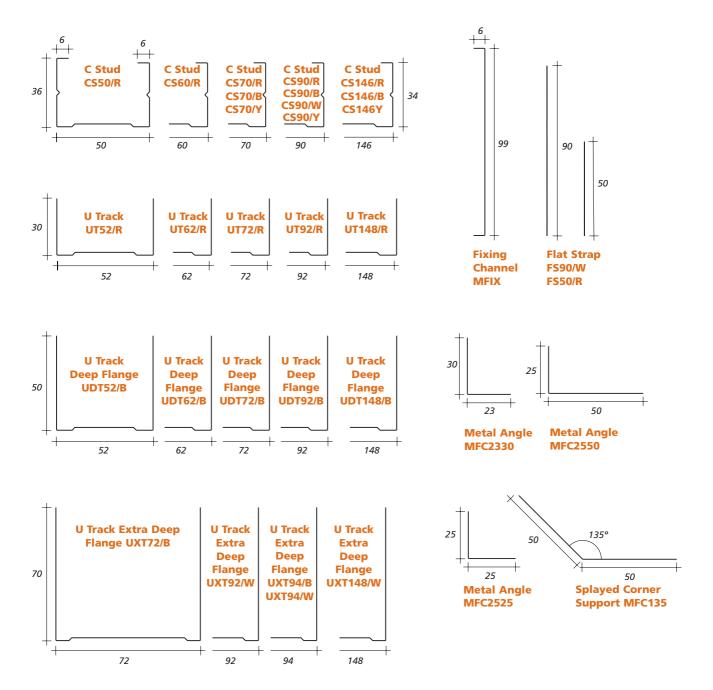


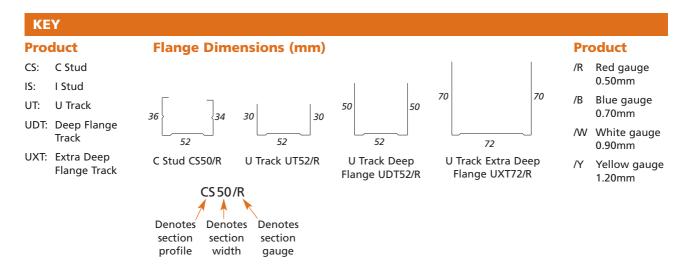


Component specifications may vary from those shown.



Components







Application details

System assembly

Framing

Set out Cormet U Tracks along the setting out line of the partition at floor and ceiling, and fix at 600mm centres. If applying the Cormet U Tracks direct to new concrete which has not completely dried out, a damp proofing membrane should be used.

Timber sole plates

For floors that are uneven or being screeded after the installation of the partition, a timber sole plate may be required.

Stud lengths

Cut Cormet C Studs 5mm shorter than the floor to ceiling height to allow for floor variations. Insert the Cormet C Studs into the Cormet U Tracks and twist to lock. Perimeter Cormet C Studs should be fixed at 600mm centres with the webs flat against abutting walls or partitions.

The intermediate Cormet C Studs should all face the same way and be positioned at either 400mm or 600mm centres as required. Arrange the framing so that plasterboard widths of less than 300mm are avoided. Intermediate studs should not be fixed to Cormet U Tracks to allow for adjustment when fixing boards.

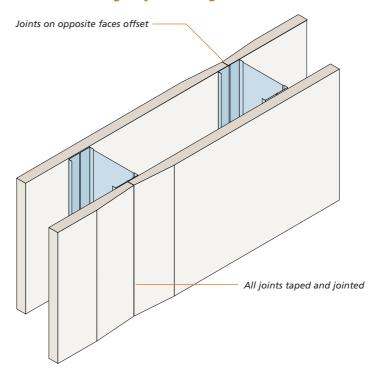
Openings

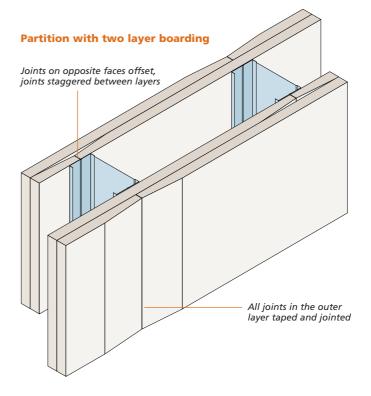
Use extra Cormet C Studs at openings, corners, junctions and stop ends, fixing to head and floor U tracks with Lafarge Wafer Head Screws or crimping tool.

Doors and windows can be built into the partitioning by positioning and fixing full-length studs on each side of the openings. **Cormet U Track** is cut to form the head of the opening, and lined with 38mm deep timber where required.

Make provision for fixtures as described in table 3.23.

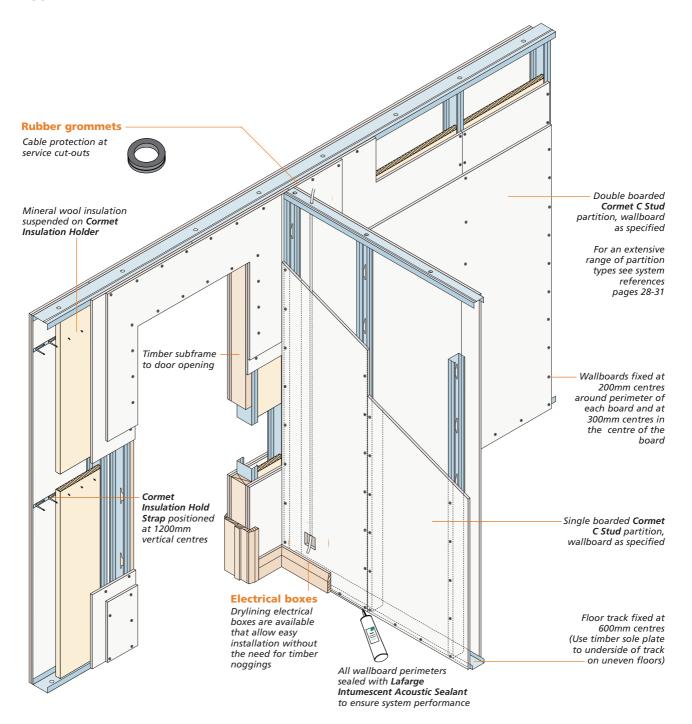
Partition with single layer boarding



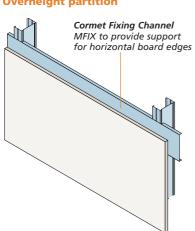


CORMET

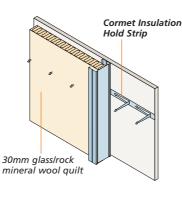
Application details



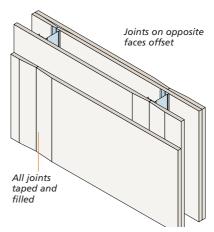
Overheight partition



Suspension of mineral wool quilt



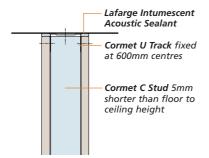
Partition with double layer boarding



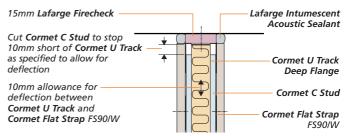


Application details

Ceiling detail (section)



10mm deflection head fire rated up to 60 minutes (section)

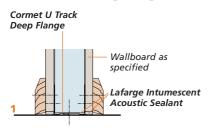


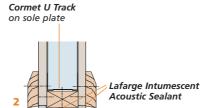
Note on head packer:

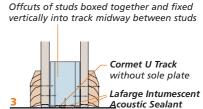
Max deflection	Packer required
8mm	1x12.5mm Firecheck*
10mm	1x15mm Firecheck*
15mm	1x19mm Plank
20mm	2x12.5mm Firecheck**
25mm	2x15mm Firecheck*

Notes: * Firecheck can be substituted by Megadeco, Toughcheck or MR Firecheck
** Firecheck can be substituted by 25mm Firecheck Coreboard

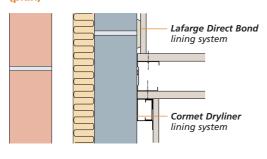
Alternative skirting fixing details (sections 1 to 3)







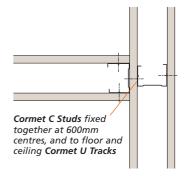
Junction with masonry wall (plan)



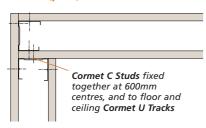




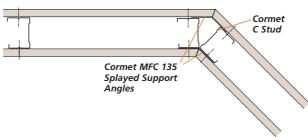
T junction (plan)



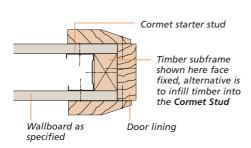
Corner (plan)



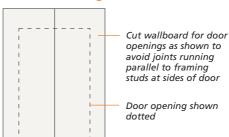
135° splayed corner (plan)



Typical door jamb detail (plan)



Wallboard setting out





Specification clauses

Cormet Metal Stud Partitions

Scope

Metal stud partitions within domestic and commercial buildings where maximum height may exceed board lengths and/or where fire and acoustic performance is required.

Additional clauses

Add general clauses (see Section 8) if required for:

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

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/ nbssearch/index.asp



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Latarge system reference from Performance Tables)
Location
Client reference
Performance
Maximum heightm
Fire ratingmins
Airborne insulationR _w dB
Thicknessmm

Horizontal joints

Weightkg/m²

Grade to BS 5234

If partition height exceeds board height, use Cormet Channel MFIX or Cormet Fixing Strap FS90/W in single boarded partitions or Cormet Fixing Strap FS50/R or FS90/W in double boarded partitions.

Insulation

(Specify insulation thickness and grade/density from the Performance Tables)

Acoustic mastic

6mm bead of Lafarge Acoustic Sealant around perimeter of the framing.

Studs

Cormet C Studs, reference CS50/R, CS60/R, CS70/R, CS90/R, CS146/R, CS70/B, CS90/B, CS146/B, CS90/W, CS70/Y, CS90/Y or CS146/Y, width 50, 60, 70, 90 or 146mm at max 600mm centres

Head deflection allowance

Consult with Lafarge Plasterboard Ltd Technical Dept for recommendations and details.

Bracing

Cormet Flat Strap FS50/R at mid height.

Floor track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Head track

Cormet U Track, reference UT52/R, UT62/R, UT72/R, UT92/R, UT148/R, width 52, 62, 72, 92, 148mm fixed at 600mm centres.

Floor/head track fixings

Spit Pulsa 700P nailing system for concrete or steel using fixings dependent on material substrates at max 600mm centres

Standard concrete use Spit C6 Pins (Select from 20, 25, 30, 35, 40)mm, or Hard concrete use Spit HC6 Pins (Select from 17, 20, 22, 27)mm, or

Spit Hammer-In fixing for concrete at maximum 600mm centres

Type Spit Hit CL35 (Select from 30, 40, 50)mm

Steel use Spit SC6 Pins (Select from 15, 20)mm

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)
Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge screws at 300mm centres

Type Drywall Self-tapping, or Toughcheck Self-tapping, or Checkpoint Self-tapping, or Megadeco Self-tapping.

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Finishing

Lafarge Taping and jointing system, or Lafarge Supreme Skim Plaster, or Lafarge Predeco taping and jointing system

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.

Given the vast selection of different types of substrate that are encountered on-site, it is strongly recommended that adequate site tests be carried out to establish a recommended load on fixings.



Installation



If applying the **Cormet U Track** direct to new concrete which has not completely dried out, a damp proofing membrane should be used.

Step one

From a fixed point mark out the line of partition. Fix Cormet U Track to timber or concrete floor along the setting out line of the partition at 600mm centres using suitable fixings.

Note: A timber sole plate may be required on uneven floors or when partitions are installed prior to screed being laid.



Step four

Place ceiling Cormet U Track onto end wall Cormet C Stud. Using a Cormet C Stud and spirit level, plumb opposite end of ceiling U track with floor U track and screw-fix into position at 600mm centres.

Fix remaining end wall Cormet C Stud.

To maximise the acoustic and fire performance use Lafarge Intumescent Acoustic Sealant and seal the gap between the perimeters and the wallboard or alternatively a continuous bead can be applied to the back of the Cormet U Tracks and perimeter studs.



Step two

Cut Cormet U Track (and Cormet C Studs) to length as necessary using Lafarge tin snips.

Cormet C Studs to be cut 5mm shorter than floor to ceiling height.



Step five

Mark floor and ceiling at centres as specified below for the location of intermediate C Studs:

At max. 400mm centres for 9.5mm plasterboard or 600mm centres for 12.5 mm plasterboard. Arrange the framing so that plasterboard widths of less than 300mm are avoided.

See step 9 for installation of intermediate studs.



Step three

Install a Cormet C Stud, using a spirit level to plumb on end wall; screw fix at 600mm centres using suitable fixings.

Note: Fix opposite end wall Cormet C Stud only after ceiling Cormet U Track has been installed.



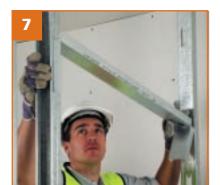
Step six

Use extra Cormet C Studs at openings, corners, T junctions and stop ends as shown in details. These extra studs must be fixed to head and floor Cormet U Tracks with Lafarge Wafer Head Self Tapping Screws or crimping tool.

Note: The door frame background metal construction details shown above, form one of three possible alternatives.

CORMET C STUD SYSTEMS

Installation



Step seven

Form the door header by using a piece of Cormet U Track. The length should be equal to the width of the door frame plus a minimum of 300mm in order to allow 150mm at each end to be cut and folded down.



Step ten

Form as required, one of the following alternative timber background constructions for fixing door frames:

(a) Fix a 38mm x 38mm timber insert into back of door frame Cormet C Studs and header. Secure using Lafarge Drywall High Thread Screws through face of Cormet C Stud into the timber.

(b) Fix a timber subframe to the face of the door frame Cormet C Studs and header using **Lafarge** Drywall Self Tapping Screws.



Step eight

Secure header onto Cormet C Studs using a crimping tool or **Lafarge Wafer** Head Self Tapping

This detail applies to all door frame assembly alternatives. See step 5.



Step eleven

Install door frame into position and secure by screwing through the door frame into one of the alternative background constructions above using Lafarge Drywall High Thread Screws. Ensure that the screws penetrate each of the components forming the background constructions.



Step nine

Install all intermediate C Studs.

Cut Cormet C Studs 5mm shorter than the floor to ceiling height to allow for floor variations. Insert the Cormet C Studs into the Cormet U Tracks and twist to lock. The intermediate Cormet C Studs should all face the same way. They should not be fixed to Cormet U Tracks in order to allow for adjustment when fixing plasterboards.



Step twelve

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

Note: Use Toughcheck Drywall Screws for Toughcheck Partitions and Checkpoint Self Tapping Screws for dBcheck Partitions.



Timber stud partitions are frequently used in timber-frame houses, in small renovation projects and in home extensions where they may be load bearing or non-load bearing, depending on specification.

Plasterboard can be screw fixed to timber, which offers superior performance and limits the risk of nail popping caused by the timber subframe drying out. Alternatively plasterboard can be nailed directly to the timber.





Introduction

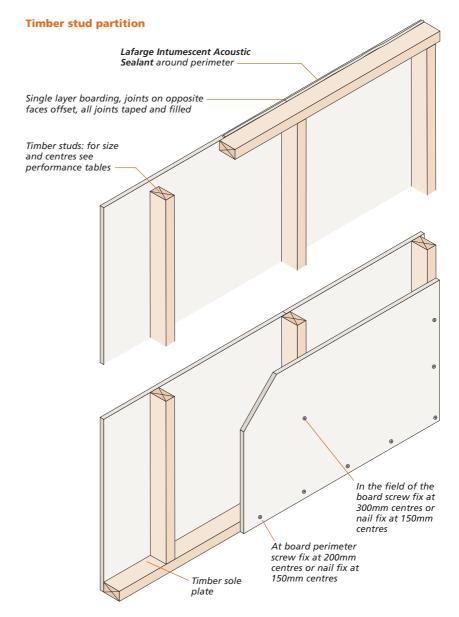
Lafarge Drywall Timber Stud Partitions

Timber stud partitions are suitable for limited heights, and typically for domestic use.

Performance

The selection of stud size and type, number and thickness of board layers will depend on the partition height and performance required for fire resistance, sound insulation and duty rating to BS 5432: Part 2. Refer to the performance tables 3.9 to 3.10.

Lafarge plasterboards are 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 noncombustible when tested in accordance with BS 476: Part 4: 1970 and Euroclass A1. Lafarge jointing compounds, metal systems, textures and bonding compounds are noncombustible when tested in accordance with BS 476: Part 4: 1970 and Furoclass A1.

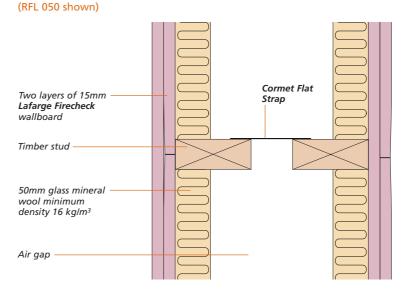


High performance walls

High performance timber framed walls are constructed from two independent timber frames with a cavity between. Each side is lined with two layers of 15mm Lafarge dBcheck wallboard. 50mm glass mineral wool insulation is applied between the studs to both frames. A brace secures the two frames at mid height.

High performance walls should be kept free of service penetrations. If this is not possible, baffle details should be installed – for guidance refer to pages 150-151, which offers a number of solutions for **Cormet** metal stud partitions, which work on the same principles for timber frame, or call the Technical Enquiryline for advice.

Timber stud partition – high performance wall



Components

Components

The components used in Lafarge Drywall Timber Stud partitions are listed in table 3.17.

System assembly

All framing must be straight, plumb and true, and provide a firm support for the plasterboards. Timber studs should be installed at maximum 400mm centres for 9.5mm plasterboard, and at maximum 600mm centres for 12.5mm and 15mm plasterboard. Framing should be arranged so as to avoid plasterboard widths of less than 300mm. Plasterboard edges must be supported at all openings and corners. All framing should provide a minimum bearing width for the plasterboard of not less than 38mm. The timber studs must be fixed to timber floor and ceiling plates.

The plasterboard should be fixed with Lafarge Drywall High Thread Screws at 200mm centres at the board perimeter and 300mm centres in the field of the board, or Lafarge Drywall Nails at 150mm centres for both perimeter and field of boarding. See tables 3.19 and 3.20 for recommended lengths of nails and screws.

Where sound insulation is required, apply a 6mm continuous bead of Lafarge Intumescent Acoustic Sealant around the perimeter of the framing or wallboard.

Lafarge Cove provides a neat finish to the wall/ceiling junction. See Section 7.

Cormet Resilient Bar

Where the **Cormet Resilient Bar** is to be fixed to timber studs the following centres apply.

For single layer 12.5mm plasterboard fix **Cormet Resilient Bar** at 400mm centres horizontally.

For double layers of 12.5mm plasterboard and thicker plasterboard, fix **Cormet Resilient Bar** at 600mm centres horizontally.

Fix initial **Cormet Resilient Bar** 50mm down from ceiling, last Resilient Bar 50mm from floor.

Screw fix the **Cormet Resilient Bars** to the timber supports using 32mm Drywall High Thread Screws.

Screw fix the plasterboard to the **Cormet Resilient Bar** only, ensuring the screw does not touch the timber substrate.

Table 3.17 Timber stud components

	Component	Dimensions	Lafarge code
	Lafarge Intumescent	0.9 litres	ACOUSTIC (INTU)
	Acoustic Sealant	0.38 litres	ACO38 (INTU)
	Lafarge Drywall High	32-63mm	32DHT25, 38DHT25
***	Thread Screws		41DHT25, 51DHT25
****			63DHT25
	Cormet Resilient Bar	3000mm	RBD3000
L.	Drywall Nail	30-65mm	NAIL30ZINC
			NAIL40ZINC
			NAIL50ZINC
			NAIL60ZINC

Table 3.18 Recommended screw lengths for fixing plasterboard to Cormet Resilient Bars

Plasterboard thickness (mm)	Screw length (mm)
12.5	25
15.0	25
19.0	32
12.5 + 12.5	38
19.0 + 12.5	44
15.0 + 15.0	44

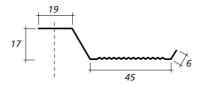
Table 3.20 Recommended nail lengths for timber framing

Construction	Plasterboard thickness (mm)	Nail Length (mm)
Single layer	12.5	40
	15.0	40
	19.0	50
Double layer	12.5 + 12.5	50
	12.5 + 19.0	65
	15.0 + 15.0	65

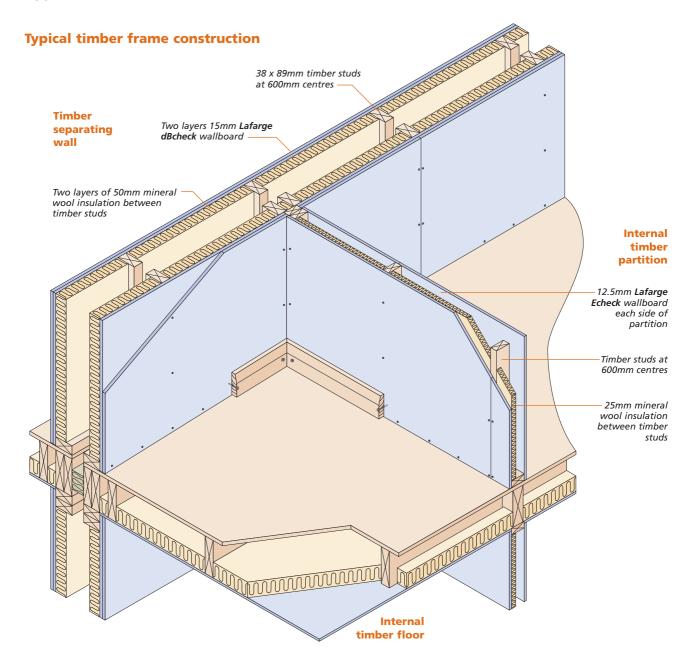
Table 3.19 Recommended screw lengths for timber framing

Construction	Plasterboard thickness (mm)	Screw length (mm)
Single layer	6	32
	12.5	38
	15.0	38
	19.0	41
Double layer	6 + 6	38
	12.5 + 12.5	51
	12.5 + 19.0	63
	15.0 + 15.0	63

Cormet Resilient Bar RBD3000



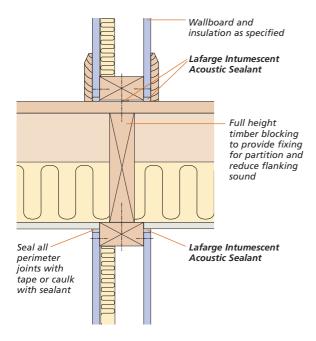
Application details



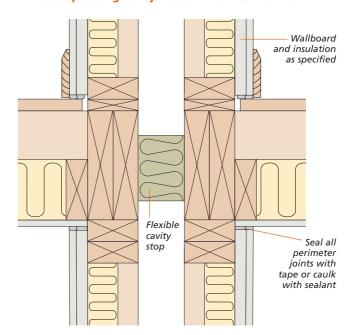
Overheight partitions Suspension of mineral wool Timber nogging to support horizontal edge of plasterboard All joints to occur on centre of timber studs centres vertically All joints to occur on centre of timber studs

Application details

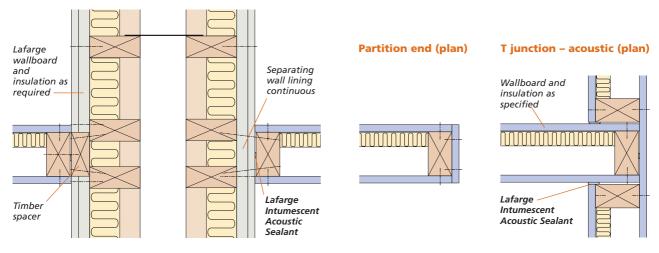
Partition head and sill



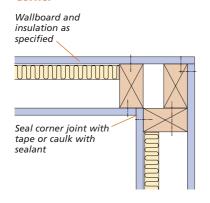
Timber separating wall junction with internal floor



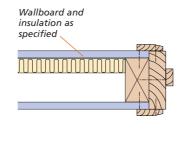
Party wall junction with partition – alternatives (plan)



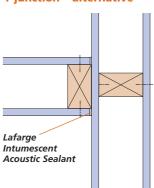
Corner



Door jamb



T junction - alternative



Specification clauses

Lafarge Timber Stud Partitions

Scope

Internal walls, partitions, separating walls and external walls constructed using softwood timber studs lined with Lafarge plasterboards.

Additional clauses

Add general clauses if required for:

- Expansion/movement joints
- Health and safety
- Storage of Materials
- Site conditions and workmanship

NBS clauses

When using the NBS Specification, use clause K10 PLASTERBOARD DRY LININGS/PARTITIONS/CEILINGS.

To complete the clause select the appropriate data as indicated on the right.

The Lafarge Plasterboard website contains a full set of NBS clauses, completed for each Lafarge Plasterboard system. See: www.lafargeplasterboard.co.uk/ nbssearch/index.asp0



Notes:

Red text lists alternative product specifications.

(Italic red text within brackets gives advice on selecting the information needed).

System reference (Insert Lafarge system reference from Performance Tables)
Location
Client reference
Performance
Maximum heightm
Fire ratingmins
Airborne insulationR _w dB
Thicknessmm
Weightkg/m²
Grade to BS 5234
Having stall is into

Horizontal joints

If partition height exceeds board height, use horizontal timber noggings to provide support for fixings.

Insulation

(Specify insulation thickness and grade/density from the Performance Tables)

Acoustic mastic

6mm bead of Lafarge Intumescent Acoustic Sealant around perimeter of the framing.

Timber framing

Timber studsmm xmm at max 600mm centres
Timber sole platemm xmm fixed at 600mm centres.
Timber head platemm xmm fixed at 600mm centres.

Boarding

Single or double layer of wallboard.

Inner layer (Specify wallboard from the Performance Tables)

Outer layer (Specify wallboard from the Performance Tables)

Board fixings

Lafarge Drywall Self Tapping Screws at maximum 300mm centres,

Length, inner layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm

Length, outer layer (Select from 25, 32, 38, 41, 44, 51, 57, 63, 67, 76)mm, or

Lafarge Drywall Nails at maximum 150 mm centres at the board perimeter and maximum 200mm centres in the field of the board,

Length, inner layer (Select from 30, 40, 50, 65)mm

Length, outer layer (Select from 30, 40, 50, 65)mm

Finishing

Lafarge Taping and jointing system, or

Lafarge Supreme Skim Plaster, or

Lafarge Predeco taping and jointing system

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.



Masonry separating walls remain by far the most common construction method within the housebuilding market. However, in conjunction with Lafarge drywall systems the overall performance with regard to thermal and sound, as well as the speed of completion, can be greatly improved.

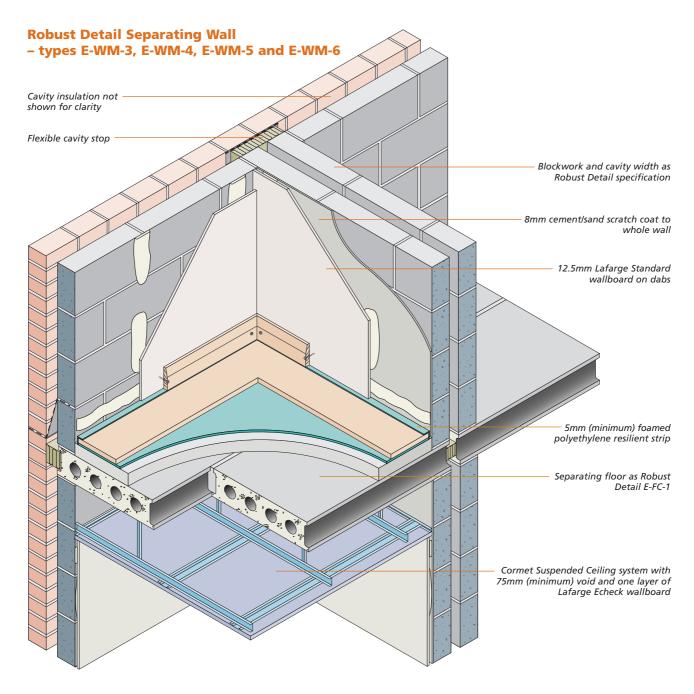
Drywall Benefits and Typical System Solutions

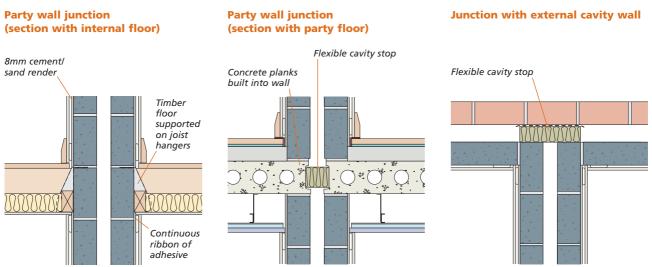
Direct Bond to inner skin of construction

- Reduction in wet trades
- Quicker completion times
- Reduced drying out time
- Improved thermal performance

Cormet Dryliner to inner skin of construction

- Improved thermal performance
- Reduction in wet trades
- Quicker completion times
- Reduced drying out time
- Creates cavity in which services can be installed
- Greater acoustic performance







Drywall solutions are becoming increasingly popular due to the ease of construction and flexibility offered to the architect to accommodate specialist design features – while being able to maintain the practical requirements of fire and acoustic performance

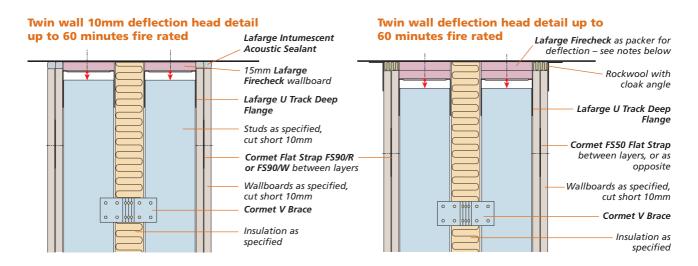
In the following section we offer a wide range of typical drywall solutions. If the detail you require is not shown, please contact our Enquiryline.



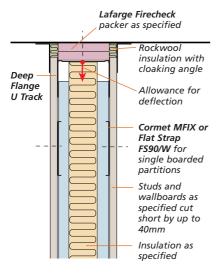




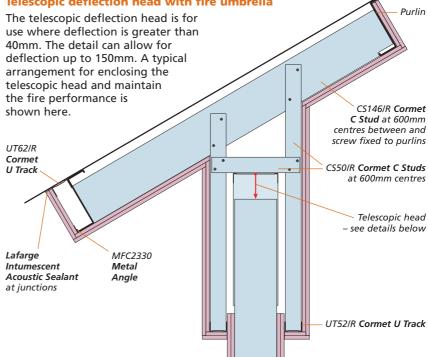
Deflection head details



Single stud partition with one layer of plasterboard deflection head detail up to 60 minutes fire rated



Telescopic deflection head with fire umbrella



Note on head packer

	•
Max deflection	Packer required
8mm	1x12.5mm Firecheck*
10mm	1x15mm Firecheck*
15mm	1x19mm Plank
20mm	2x12.5mm Firecheck**
25mm	2x15mm Firecheck*

Notes: * Firecheck can be substituted by Megadeco, Toughcheck or MR Firecheck

Detail of telescopic head Detail of telescopic head - exploded view - assembled view Head track UXT148/W Studs to be cut The C stud slides short by 80mm up and down plus deflection within the box Stud CS146/R The box totally encloses the C Length = 370mm plus stud and holds it deflection required in place. UXT148/W 146mm wide stud as specified

^{**} Firecheck can be substituted by 25mm Firecheck Coreboard

specified



Deflection head details

At profiled soffit (along profile) Alternative details at profiled soffit (across profile) Lafarge Intumescent Appropriate Appropriate Cormet MFIX Acoustic Sealant insulation by others insulation by across profile others Deflection Lafarge Firecheck 15mm Lafarge refer to note on Firecheck Lafarge head packer wallboard Lafarge Firecheck Firecheck refer to Studs as wallboard Studs and note on specified cut wallboard as head Cormet Flat short specified packer strap Cormet Flat Cormet Flat Studs and strap Strap between wallboard lavers as specified Insulation as

Insulation

as specified

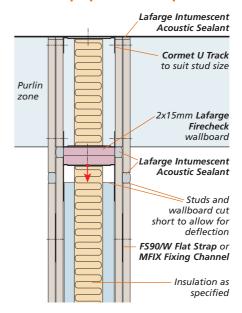
Junction with purlins at 1800mm centres

Wallboards

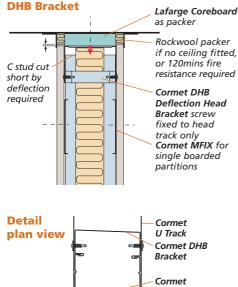
as specified

Deep Flange Deep U Track Flange U Track stud assembly Cormet Screw fix with C Stud Wafer Head screws at 150mm centres (300mm stitch pattern) Lafarge wallboard as specified Timber fillet to suit angle of root Metal Angle Lafarge Firecheck refer to note on head packer MFC2330 Metal Angle FS90/W Flat Strap or Studs and wallboard MFIX Fixing Channel cut short by required deflection

Partition perpendicular to purlins

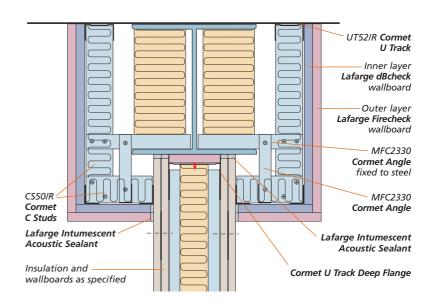


Deflection head using Cormet



C Stud

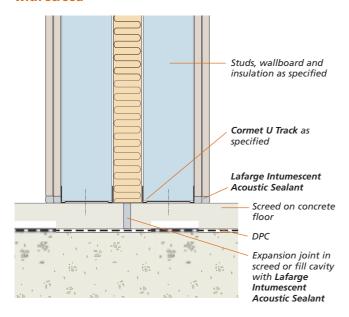
Deflection head under beam



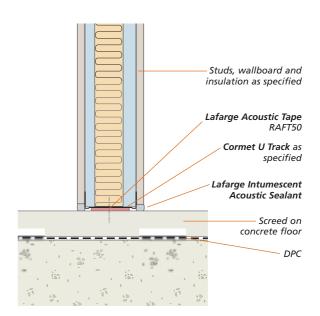


Floor details

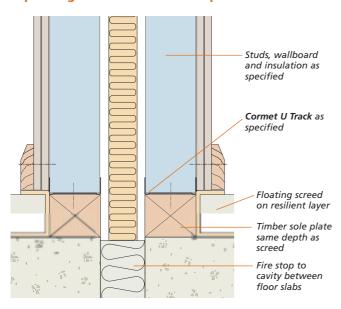
Twin frame separating wall to concrete floor with screed



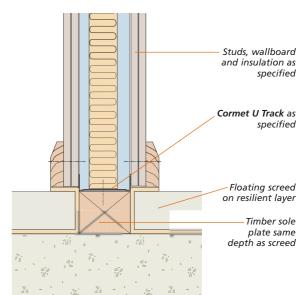
Internal partition to concrete floor with screed



Separating wall with timber sole plate

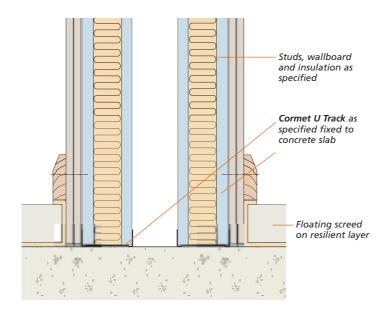


Partition with timber sole plate

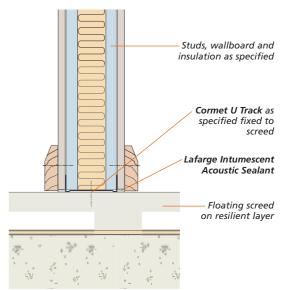




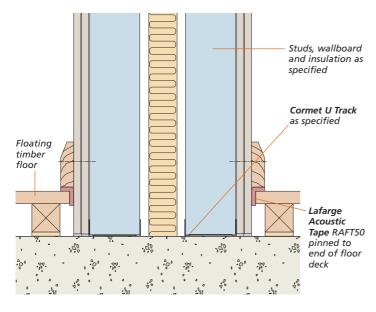
Twin frame separating wall with floating screed



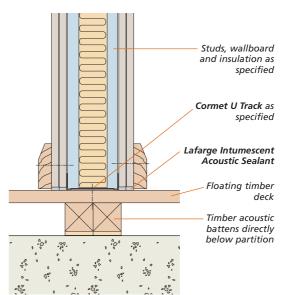
Internal partition on floating screed



Twin frame separating wall with floating timber floor



Internal partition on floating timber floor





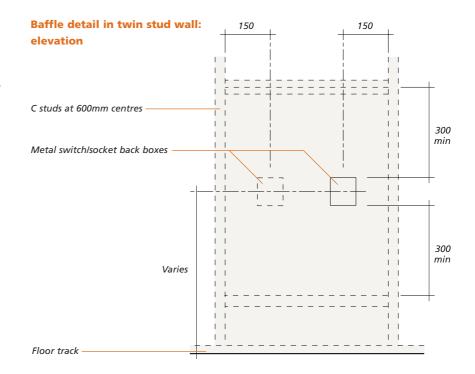
Baffle details

Service outlets

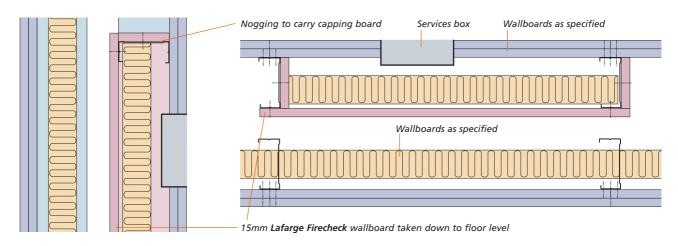
If services are to be installed in high performance partitions it is essential to maintain the fire and acoustic performance of the partition system.

Service outlets should be offset so that they do not lie back-to-back. Use Cormet Fixing Channel or noggings to support outlets as necessary, and seal around them with Lafarge Intumescent Acoustic Sealant. To maintain fire performance, form a baffle with 15mm Lafarge Firecheck wallboard extending at least 300mm above and below the outlets and secured to noggings in the centre of the cavity.

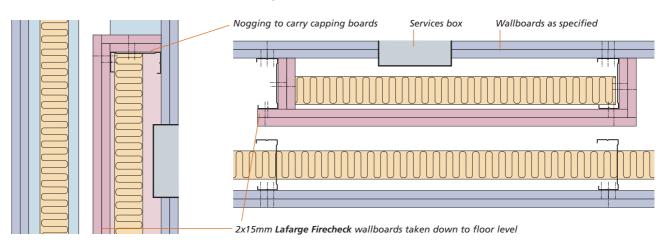
A baffle box is required even where there is a box on one side only.



60 minute baffle in twin wall (section and plan)



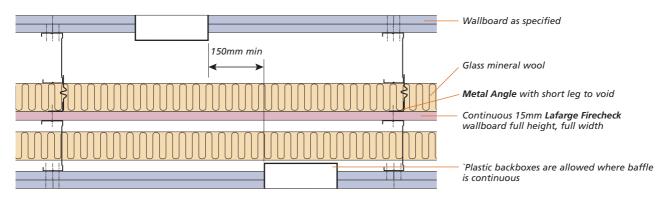
120 minute baffle in twin wall (section and plan)



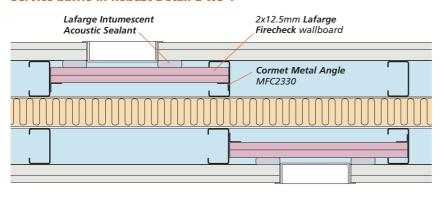


Baffle details

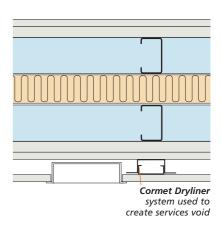
Continuous baffle in twin wall



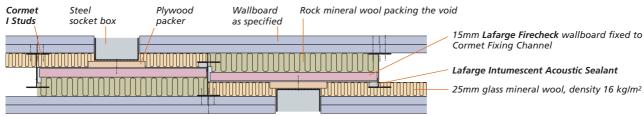
Service baffle in Robust Detail E-WS-1



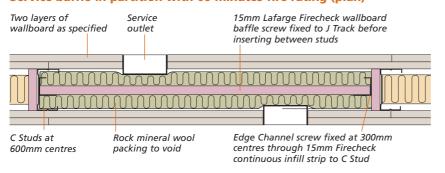
Alternative – service void formed using Cormet Dryliner



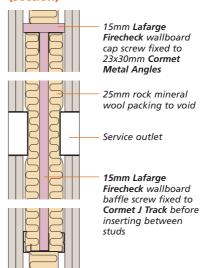
Service baffle in staggered I stud partition



Service baffle in partition with 60 minutes fire rating (plan)



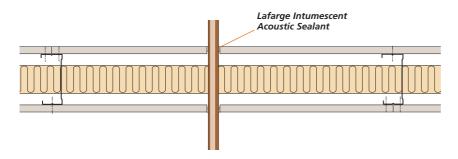
(section)



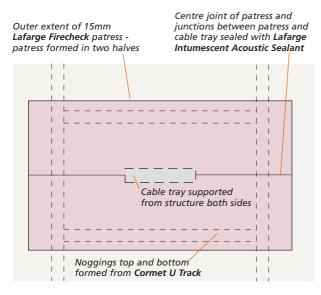


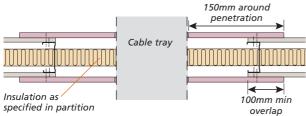
Service and duct penetrations

Pipe penetration <50mm

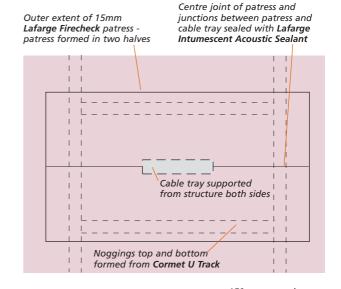


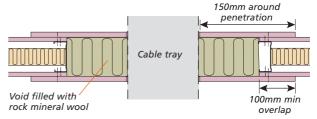
Cable tray penetration through non fire rated partition (elevation and plan)





Cable tray penetration through fire rated partition (elevation and plan)





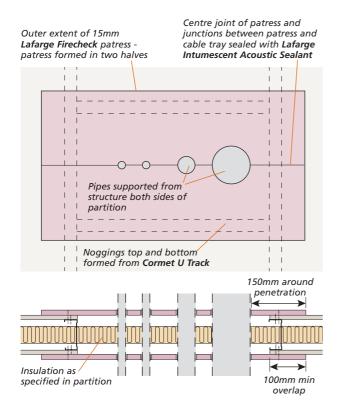
Fire penetrations

Integrity of penetrations to be maintained by others.

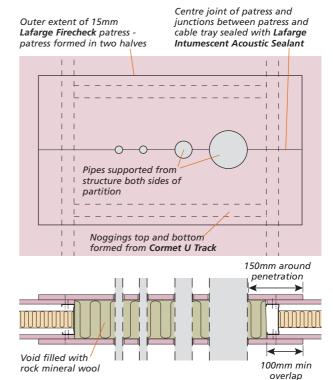


Service and duct penetrations

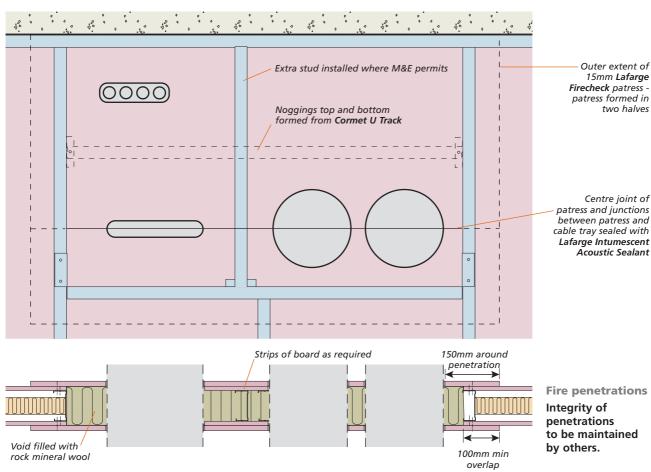
Multiple pipe penetration through non fire rated partition (elevation and plan)



Multiple pipe penetration through fire rated partition (elevation and plan)



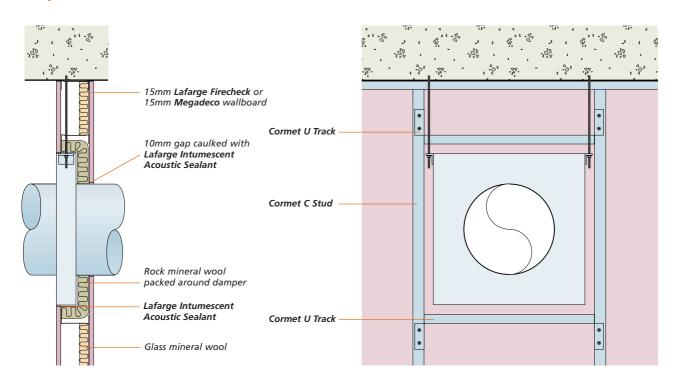
Duct penetration over 600mm wide through fire rated partition (section and plan)



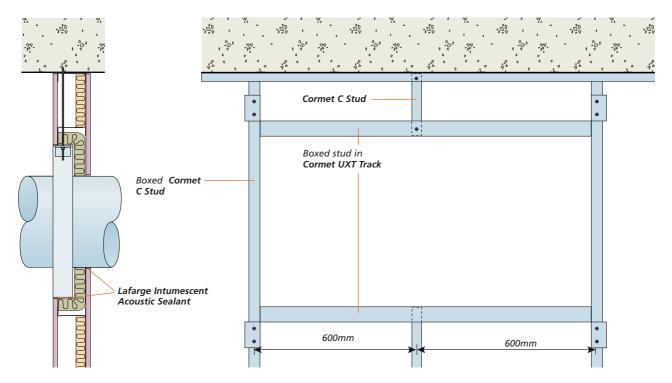


Dampers

Damper installation less than 500mm wide



Damper installation over 500mm wide



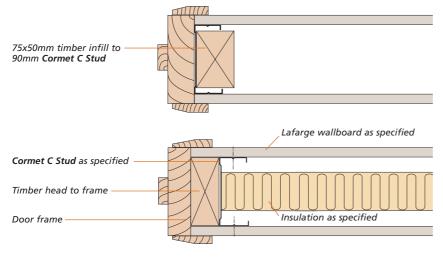
Fire penetrations

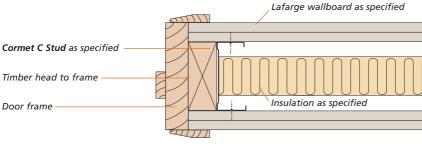
Integrity of penetrations to be maintained by others.

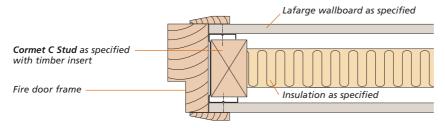


Door frame details

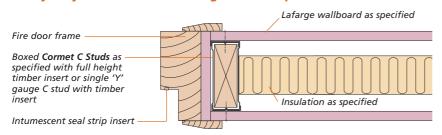
Door frame detail showing timber infill



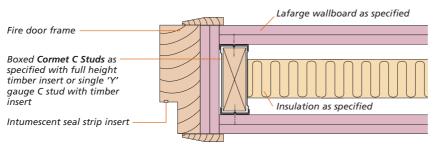




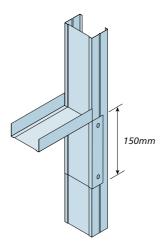
Heavy duty fire door frame in single boarded partition



Heavy duty fire door frame in double boarded partition



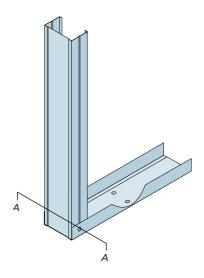
Head detail



Notes:

At the head, **Cormet U Track** is cut and bent to extend 450mm down the face of the studs and fixed twice to each side.

Base detail



Section AA



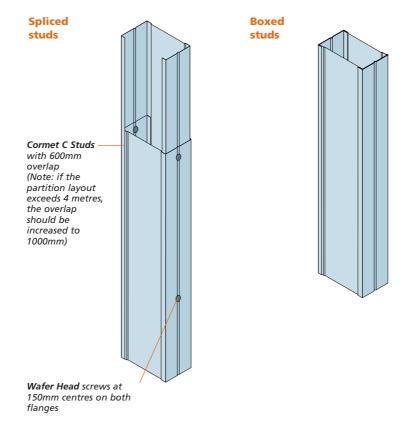


Boxing and Splicing studs

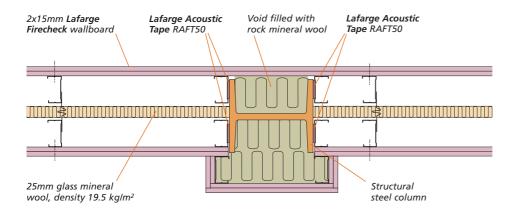
Boxed studs

Cormet C Studs may be boxed together to give partitions of greater rigidity and height and to provide support at doorways. The bearing faces of the Cormet C Studs are asymmetrical (36mm and 34mm) to allow for boxing. Nest alternate short and long faces and snap together.

To avoid bulging track leave 50mm both ends as single stud.



Column in party wall





Movement joints

Movement control joints for partitions

Movement control joints may be required to relieve normal structural movement without loading the partition. Movement control joints are required in partitions at intervals not exceeding 10 metres, where the partition crosses or abuts a structural movement joint, and where partitions of dissimilar materials meet in the same plane.

At movement joints, leave a 12.5mm gap in the Cormet U Tracks at head and base. Fix a Cormet C Stud on one side, 10mm from the gap, and line the web with two layers of 15mm Lafarge Firecheck wallboards. Place another stud, web facing web on the opposite side of the gap, as shown. Board the partition, leaving a continuous 12.5mm gap between boards along the line of the movement joint.

Cut Cormet Movement Control Joint to length; butt joint lengths end to end where necessary. Attach to the plasterboard surface with 13mm galvanised or sherardized or zinc electro-plated staples at 150mm centres. Apply Lafarge Fast Set in two coats, feathering out the edges of the second coat. After finishing, remove the masking strip from the centre of the joint.

Wind loading

Cormet Metal Stud Partitions are non-loadbearing but can accept a degree of wind loading, for example when used in buildings with large or multiple external doors. Information can be provided on specifications to suit individual requirements, including the provision of deflection heads. As a guide, a 7.6m high partition consisting of 146mm

Cormet C Studs with two layers of 12.5mm Lafarge dBcheck wallboard resists a pressure of 200N/m², with a deflection limit of L/240 (where L is the partition height in mm)

Electrical services

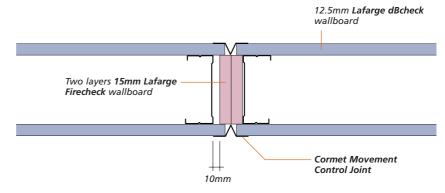
The installation of electrical services should be carried out in accordance with the recommendations of the Institution of Electrical Engineers. The cut-outs in the studs can be used for routing electrical and other small services. Cables should be protected by conduit or other suitable precautions taken to prevent abrasion when they pass through the metal frame.

Table 3.20 Wall grades by categories of duty

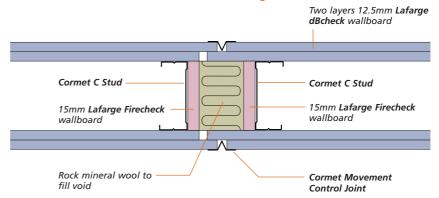
BS 5234 : Part 2 : 1992

Grade		Category of duty	Examples
LIGHT LD DUTY		Adjacent space only accessible to persons with high incentive to exercise care. Small chance of accident occurring or of misuse.	Domestic accommodation
MEDIUM DUTY	MD	Adjacent space moderately used primarily by persons with some incentive to exercise care. Some chance of accident occurring and of misuse.	Office accommodation
HEAVY DUTY	HD	Adjacent space frequently used by public and others with little incentive to exercise care. Chances of accident occurring and of misuse.	Public circulation areas Industrial areas
SEVERE DUTY	SD	Adjacent space intensively used by public and others with little incentive to exercise care. Prone to vandalism and Heavy abnormally rough use.	Major circulation areas Industrial areas

Movement Control Joint 30 minute fire rating



Movement Control Joint 60 minute fire rating



Earth Bonding

The electrical installation should be carried out in accordance with the I.E.E. Wiring Regulations and the advice of the National Inspection Council for Electrical Installation Contracting (NICEIC) should be sought.



Curved partitions

Curved Metal Stud Partitions

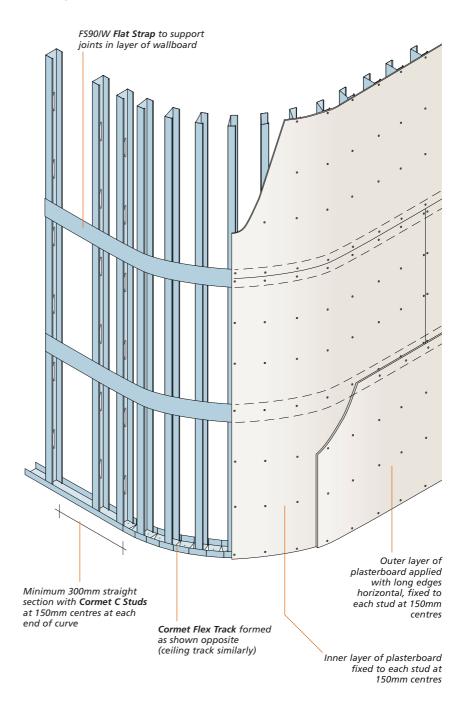
The versatility and strength of **Cormet C Studs** enables curved partitions to be easily constructed, to create flowing surfaces that offset flat wall areas.

To achieve smooth curves, studs are used at close centres, and the plasterboard is wetted before application with long edges horizontal.

Curving plasterboard

Most plasterboards can be curved when wetted. Lafarge Contour wallboard however can be curved to similar radii when dry by fixing the wallboard directly to the supporting frame. Curves of a tighter radius can be obtained by using Lafarge Contour wallboard in a wetted form. Lafarge Contour wallboard can be curved in either direction and to a minimum radius of 600mm. See table 3.21.

Curved partition





Board wetting

Thoroughly wet the side to be compressed of each plasterboard sheet using a brush or roller. Do not wet the opposite side. Allow the boards to stand for at least one hour before installation.

When bending to a tight radius ensure that the wetting process softens the core of the wallboard.

System assembly

Cormet Flex Track

Cormet Flex Track is designed to allow easy construction of curved walls, partitions and ceilings.

It is a galvanised 0.7mm metal angle used in place of standard metal angle or standard **Cormet U Track**. It is supplied pre-cut to allow a minimum radius of 600mm to be achieved.

Metal stud framing

Mark out the curves on the floor and ceiling. Curve width should be 2mm greater than the width of the Cormet C Stud.

Fix the Flex Track to the floor and ceiling at 300mm centres along both lines of the marked curve.

Insert Cormet C Studs into the track around the curve at centres shown in table 3.21. Where multiple board layers are installed, it may be necessary to insert extra studs at the board edges to account for the difference which arises between the inner and outer board radii.

Boarding

Start boarding at one end. Butt plasterboards firmly against the ceiling. Screw fix the first stud, fixing from the midpoint of the board, at 150mm centres, as illustrated. Refer to table 3.25 for recommended screw lengths. Carefully screw the board to the framing, stud by stud, pushing the board against the framing.

Ensure that the plasterboards are completely dry before jointing and making cut-outs for services.

On double layer boarding systems, the horizontal joint of the outer layer of wallboard may be supported by the use of FS50/R or FS90/W Cormet Flat Strap fixed between wallboard layers if required.

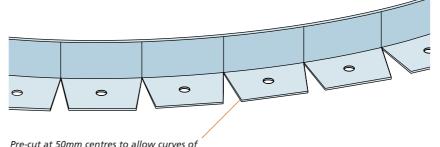
Table 3.21 Bending radii and stud centres

Radius	res (mm)			
(mm)	6mm Contour wallboard	9.5mm plasterboard	12.5mm plasterboard	15.0mm plasterboard
600 –900	150w	-	_	-
900 –1000	200d	150w	_	-
1000 –1500	200d	200w	150w	-
1500 –2000	200d	250w	200w	-
2000 –2500	200d	300w	200w	150w
2500 –3000	250d	350w	300w	200w
3000 –4000	300d	450w	400w	200w
4000 +	300d	450w	500w	350w

w = wetted

d = dry

Flex Track



minimum radius of 600mm

Table 3.22 Cormet Flex Track

Lafarge	Metal	Dimensions	Length
Code	Thickness (mm)	(mm)	(mm)
MFLEX	0.7	30 x 23	3000

Jointing

Stagger all joints between layers. All joints should be taped and filled in accordance with Lafarge Plasterboard's instructions. See Section 7.

Fixtures

Fixing to Lafarge wallboards

Drywall constructions can accommodate most fixtures providing the appropriate fixings or fixing provisions are used.

Where the locations of fixtures are known before the construction is commenced, fixing provisions can be designed and installed into the construction.

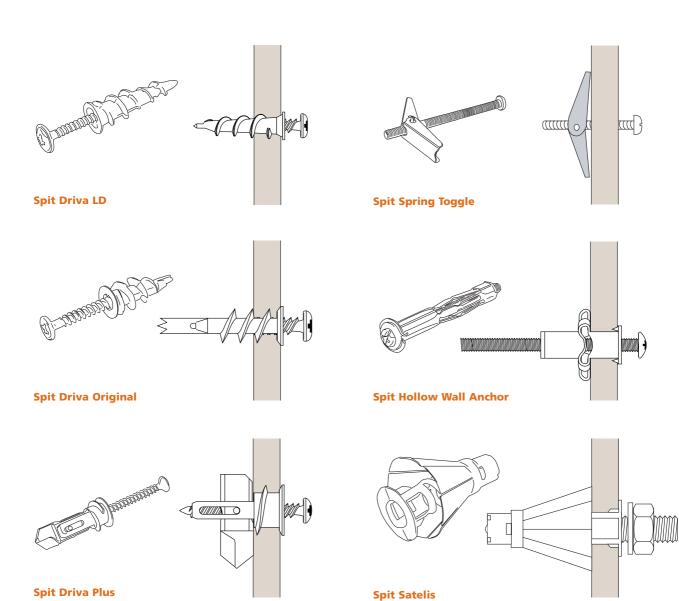
Alternatively, fixtures can be attached directly to the finished dry linings using the recommended fixings given in table 3.23.

For the medium and heavyweight fixings in table 3.23 it is very important that the plasterboard is carefully and accurately drilled and that all fixings are installed as per the manufacturer's instructions. Holes should never be punched. On the bigger fixtures, it is necessary to use a minimum of four fixings.

Table 3.23 Fixtures

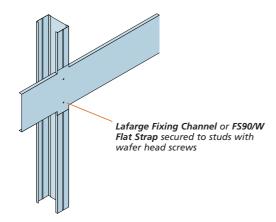
Examples	Fixing provisions*	Notes
Small pictures	Picture hooks	
	Wood screws	
Mirrors	Spit Driva LD	See manufacturer's
Floor cupboards	Spit Driva original	literature for
Light fittings	Spit Diva Plus	Maximum loadings
Coat hooks	Fixing channel	
Radiators	Spit Spring Toggle	See manufacturer's
Wall cupboards	Spit Hollow Anchor	literature for
Water heaters	Spit Satelis	Maximum loadings
Sanitary ware	Fixing Channel	
	Timber battens	
	Boxed studs	
	Extra studs	
Wall mounted sanitary ware	See diagrams on opposite page	
Large wall cupboards		
Heavy shelving		
	Small pictures Mirrors Floor cupboards Light fittings Coat hooks Radiators Wall cupboards Water heaters Sanitary ware Wall mounted sanitary ware Large wall cupboards	Small pictures Picture hooks Wood screws Mirrors Spit Driva LD Floor cupboards Spit Driva original Light fittings Spit Diva Plus Coat hooks Fixing channel Radiators Spit Spring Toggle Wall cupboards Spit Hollow Anchor Water heaters Spit Satelis Sanitary ware Fixing Channel Timber battens Boxed studs Extra studs Wall mounted sanitary ware Large wall cupboards

^{*} See manufacturer's literature for maximum loadings

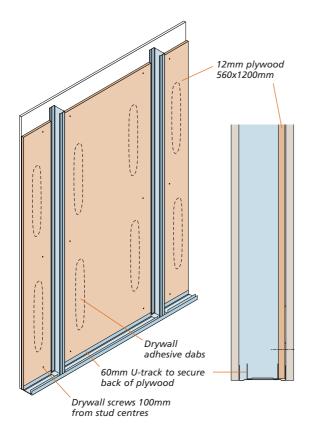




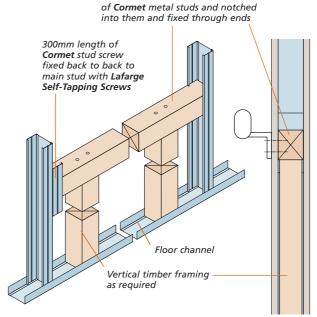
Foe medium weight items



For heavy weight items

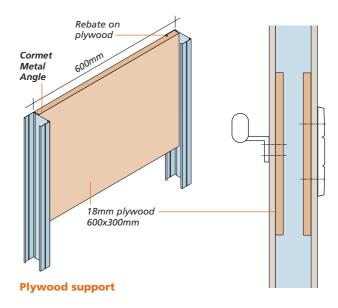


Plywood patress



Horizontal nogging and central stud of sawn softwood to suit size

Timber support





Tips on installation

Board fixing

For fixing to timber, use nails or screws as specified in tables 8.4 or 8.9. For fixing to metal, use screws as specified in table 8.5.

Lafarge Drywall Screws

Bugle head screws for fixing plasterboard to metal or timber studs. Lafarge Drywall Screws have a unique head design to eliminate paper burrs and provide a flush finish. Extra-sharp points and highgrip threads result in fast penetration through the plasterboard and stud. The screws are black phosphate coated and lightly oiled for protection against corrosion.

Lafarge Drywall High Thread Screws are used for attaching plasterboard to timber framework.

Lafarge Drywall Self Tapping Screws are for light gauge metal up to 0.7mm thick.

Lafarge Drywall Self Drilling Screws are for heavy gauge metal from 0.7mm to approximately 2.0mm thick.

Installation

Drive Screws:

- at least 10mm in from paperbound edges of plasterboard
- at least 13mm in from cut edges of plasterboard
- at least 6mm in from edges of timber framing
- at least 3mm in from the edges of metal framing.

Screw spacing: Partitions, maximum 300mm. Ceilings, maximum 230mm in the field of the plasterboard, 150mm at cut edges and perimeter. Linings, maximum 300mm.

Table 8.4 Recommended screw lengths*

Construction	Plasterboard thickness (mm)	Screw length (mm)
Timber framing	6	32
Single layer	12.5	38
	15.0	38
	19.0	41
Timber framing	6 + 6	38
Double layer	12.5 + 12.5	51
	12.5 + 19.0	63
	15.0 + 15.0	63
Metal framing	6	25
Single layer	12.5	25
	15.0	32
	19.0	38
	25.0	41
Metal framing	6 + 6	25
	12.5 + 12.5	38
	15.0 + 15.0	44
	12.5 + 19.0	51
	25.0 + 12.5	57
	25.0 + 25.0	63

^{*} Except for fixing to Cormet metal furring wall channels and Resilient Bar. See table 4.16 on page 184.

Drive screws squarely through board and into framing until screw head is just recessed. Spot screw heads with Lafarge jointing compound to provide a flush surface.

Lafarge Pan Head Screws and Lafarge Wafer Head Screws are used primarily for fixing Cormet metal studs and other Cormet metal framing components together: selftapping for light gauge metal and self-drilling for heavy gauge metal.

Lafarge Toughcheck Screws are used for fixing **Lafarge Toughcheck** wallboard.

Lafarge Checkpoint Screws are used for fixing Lafarge Moisturecheck, dBcheck and Firecheck wallboards to 0.5mm light gauge Cormet metal studs.

Lafarge Drywall Nails

Zinc-coated ring shanked Drywall Nails with a thin wide head for maximum board holding without paper breakage. The long, sharp diamond point ensures ease of fixing. Complies with BS 8212: 1995 for fixing plasterboard to timber.

Installation

Drive nails:

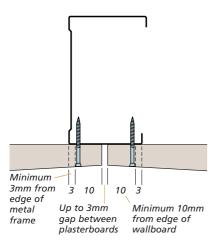
- at least 10mm in from paperbound edges of plasterboard
- at least 13mm in from cut edges of plasterboard
- at least 6mm in from edges of timber framing.

Nail spacing: maximum 150mm (all systems).

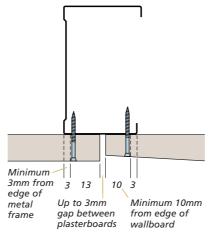
Drive nails squarely through plasterboard and into timber framing using a dimple head drywall hammer until the nail head is just recessed. Spot nail heads with Lafarge jointing compound to provide a flush surface.

Table 8.5 Recommended nail lengths for timber framing

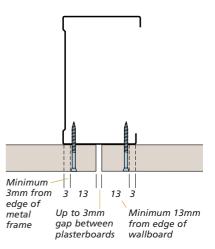
Construction	Plasterboard thickness (mm)	Nail Length (mm)	
Single layer	12.5	40	
	15.0	40	
	19.0	50	
Double layer	12.5 + 12.5	50	
	12.5 + 19.0	65	
	15.0 + 15.0	65	



Fixing position at bound edges of boards



Fixing positions at bound edge/cut edge joint



Fixing positions at cut edges of boards



Tiling onto Lafarge Wallboard

Tiling

Tiling is suitable for a wide range of applications with varying conditions, ranging from domestic splashbacks to shower cubicles in public buildings.

Ceramic tiling should be applied to Lafarge Standard wallboard or Lafarge Moisturecheck wallboard depending on the severity of the conditions. Lafarge Standard wallboard may be used as the base for tiling in areas such as splashbacks behind kitchen sinks and wash hand basins. In other areas where there is likely to be more splashing of water on the surface, e.g. showers, it is preferable to use Lafarge Moisturecheck wallboard. If Lafarge Standard wallboard is used it should be treated on the face with two coats of Lafarge Drywall Sealer.

Where the tiling is to cover the entire drylined wall surface, square edge boards may be used. Where an area of the drylining will remain untiled, taper edge boards should be used so that flush joints can be formed in the exposed areas; in this case the concealed joints should be filled with a waterproof ceramic tile adhesive.

Care should be taken to ensure that the framing members and lining boards offer adequate support to prevent flexing, particularly for partitions which may be tiled on one side only. Tiled areas not extending down to the floor should be provided with horizontal supports at the base of the tiling.

Additional support requirements are given in table 3.26. Supports for baths, basins and other plumbing fixtures must be provided independently of the plasterboard.

It is essential that detailing at junctions, angles and perimeters is designed to prevent moisture penetration. Seal around pipes, baths, shower fittings, openings and outlets with a waterproof silicone sealant.

Recommendations in table 3.26 apply to the use of tiles up to 12.5mm thick with a maximum weight of 32 kg/m², fixed in accordance with BS 6431: Part 9, using a thin-bed adhesive (nominal thickness 3mm).**

Drylining systems using Lafarge Bonding Compound in their construction should be allowed 10 days to achieve their full strength before tiling.

Repairs

Minor damage to plasterboard may be repaired by filling with Lafarge Fast Set and sanding smooth. Areas of damage too large for filling should be repaired by one of the methods below.

Cut out a rectangular piece of the boarding around the damaged area using a fine-toothed keyhole saw. Bevel the edges of the hole inwards at 45° with a rasp or sanding block. Cut a piece of board to the same size as the hole and bevel the edges to an exact fit. Apply Lafarge Fast Set to the edges of the hole and fit the patch piece in place using

Lafarge Patching Tape; leave to set for 1 hour. Finish around the patch as described under Jointing above.

If necessary, bond a strip of plasterboard behind the hole to provide extra support before inserting the patch piece.

For larger repairs, cut a rectangular piece of plasterboard 50mm larger than the hole or damaged area. Place it over the hole and mark its position. Cut through the damaged board along the diagonals of the marked rectangle with a finetoothed keyhole saw; then cut through the paper facing around the rectangle with a sharp knife, break away and remove the cut pieces of the board.

Cut two backing pieces of plasterboard and bond to the back of the boarding using Lafarge Fast Set on each side of the hole; allow to harden for 1 hour.

Apply Lafarge Fast Set to the backing pieces and fit the patch piece of plasterboard into the hole using Lafarge Patching Tape; leave to set for 1 hour. Finish around the patch as described under Jointing above.

Table 3.26 Plasterboard to receive ceramic tiling (BS 8212)

System		Board thickness (mm)	Support centres (mm)	Additional support	Maximum tiling height (m)
Drylining	Direct Bond	12.5	450*	Horizontal dabs at 1/3 centres in height	3.6
	Lafarge Dryliner	12.5	400	-	3.6
	Independent 70mm I Studs	2 x 12.5	400	Mid-point support	3.0
Partitions	Laminated	50, 63	-	None	2.4
		55, 70	-	None	2.6
	Timber	12.5	400 – 450	None	3.0
		12.5	600	Timber noggings at 600mm vertical centres	2.4
Cormet metal stud	50mm studs	2 x 12.5	400	None	3.6
	70mm studs	2 x 12.5	400	None	3.6
	146mm studs	2 x 12.5	600	Additional studs at 300mm centres up to tile he	ght

^{*}Bonding compound dab row centres

^{**}Full specification for ceramic tiling to plasterboard is available from the Tile Association, Forum Court, 83 Copers Road, Beckenham, Kent, BR3 1NR

PARTITIONS

WHAT CAN GO WRONG CHECKLIST

performance of the partition.

Partitions Checklist

Ite	ms to check	Yes	No	Date completed
		(√)	(\sqrt	
1.	Has sealant been applied to the back of the steel U channels or timber framing before fixing to the wall floor and ceiling?			
	This sealant has the vital role of filling any gaps due to the undulations in the structure and thus preventing unwanted airpaths.			
2.	Is the mineral wool the correct thickness and density?			
	Inadequate thickness and density will reduce the acoustic performance.			
3.	Is the mineral wool quilt installed with no gaps at the joints and butted up tightly at the perimeter?			
	Gaps will allow the sound to travel right through rather than being partially absorbed as it passes through the mineral wool.			
4.	Where Cormet Resilient Bars are used do the wallboard screws come into contact with the main studs?			
	To check this, the side of the partition with the Resilient Bar must be boarded out first, so a visual check can be made before the other side is boarded out.			
5.	Are all joints in double boarded applications staggered?			
	Plan the board layout to avoid both layers of board having a vertical joint at the same stud.			
6.	Is the gap at the base of the wallboard filled with Lafarge Acoustic Sealant?			
	If left unfilled this will be a weak point for the sound to pass through.			
7.	Has the correct type of wallboard been used?			
	The wrong type of wallboard may adversely affect performance. Lafarge wallboards are colour coded to make it easier for the correct board to be identified.			
8.	Have electrical sockets and other services been installed correctly?			
	Wallboard baffles must be built behind the electrical boxes to maintain the sound			