SPEEDLINE
DRYWALL SYSTEMS | Part of SIG

Partitioning Systems

www.speedlinedrywall.co.uk

REVISED
04/2024

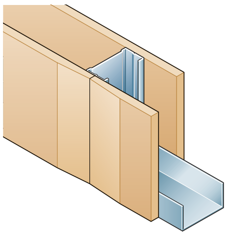
Partitioning Systems

INTRODUCING PARTITIONING SYSTEMS

Speedline offers a full range of metal stud partition systems for use in commercial, education, health & domestic situations. The following section provides details of system performance as well as best practice construction guidance. Changes to components and construction details may effect the stated performances.

Contact the Speedline Technical team for advice and support on your project:
enquiries@speedlinedrywall.co.uk

Contents



PARTITIONING SYSTEMS

SPEEDLINE METAL COMPONENTS

SOLUTIONS

Benefits

- Metal Stud is dimensionally accurate and will not twist or bow.
- Range of stud widths – 48mm, 50mm, 60mm, 70mm, 92mm and 146mm to meet different performance requirements.
- Regularly spaced service holes make services easy to install.
- Acoustic insulation can be installed to increase sound insulation.
- Can be cut to length on site using tin snips or ready cut lengths available to order.
- Frames are designed to fit together.
- Door frames can be formed.
- Range of tests available for:
  - Fire resistance 30-120 mins.
  - Acoustic performance 37-60dB (refer to Resilient Bar and Twin Frame Solutions for increased sound insulation performance).
  - Duty Medium, Heavy and Severe available.

Sectors

- Residential
- Offices
- Healthcare
- Education
- Commercial
- Retail
- RMI
- Student Accommodation

A range of metal components to form partitions, wall linings and suspended ceiling grids. Speedline Partitioning Systems are ideal for use in domestic, residential and commercial builds, for heights up to 10.2m and a wide range of partition thicknesses.

All electrical services should be suitably protected when passing through floor and wiring channels.

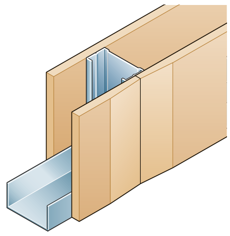
Simple Value Engineered solutions:

- For space dividing partitions refer to Speedline Standard System pages 25 to 30.
- For partitions with improved fire performance refer to Speedline Fire Systems pages 31 to 36.
- For partitions with improved acoustic performance refer to Speedline Acoustic Systems pages 37 to 42.
- For partitions with improved BS 5234 duty ratings performance refer to Speedline High Impact Systems pages 43 to 45.

PARTITIONING SYSTEMS

SPEEDLINE METAL COMPONENTS

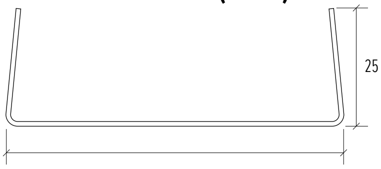
SOLUTIONS



SPEEDLINE TRACK

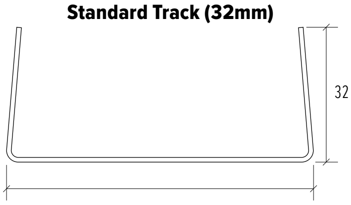
SPT Tracks (25mm leg and 32mm leg tracks) are described as **standard tracks,** both designed with tapered legs to enable friction fitting of studs and can be used for partition heights under 4m.

Standard Track (25mm)

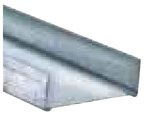


Available in 50, 52, 62, 72 or 77 wide

Standard Track (32mm)



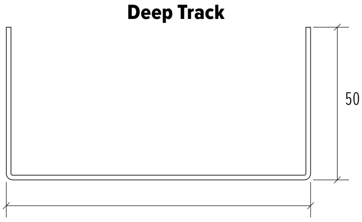
Available in 52, 62, 72, 94 or 148 wide



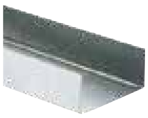
Product Code	Width (mm)	Flange Dimension (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
SPT52	52mm Standard Track	25	0.5	3.00	1.13
PT62	62mm Standard Track	25	0.5	3.00	1.25
SPT72	72mm Standard Track	25	0.5	3.00	1.37
PT77	77mm Standard Track	25	0.5	3.00	1.42
SPDT52	52mm Standard Track	32	0.5	3.00	1.30
PDT62	62mm Standard Track	32	0.5	3.00	1.41
SPDT72	72mm Standard Track	32	0.5	3.00	1.53
SPT94	94mm Standard Track	32	0.5	3.00	1.79
SPT148	148mm Standard Track	32	0.5	3.00	2.40

SPEDT (50mm legs) are described as **deep tracks**, used for partition heights between 4m and 8m, also used as a head track where a deflection head of up to 30mm is needed.

Deep Track



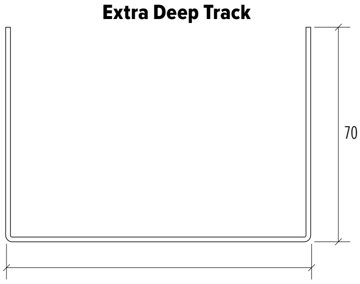
Available in 52, 62, 72, 94 or 148 wide



Product Code	Width (mm)	Flange Dimension (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
SPEDT52	52mm Deep Track	50	0.5	3.00	1.67
PEDT62	62mm Deep Track	50	0.5	3.00	1.79
SPEDT72	72mm Deep Track	50	0.5	3.00	1.91
PEDT94	94mm Deep Track	50	0.5	3.00	2.16
SPDT148	148mm Deep Track	50	0.5	3.00	2.80

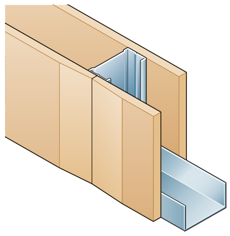
SPXDT (70mm legs) are described as **extra deep tracks**, used for partition heights between 8m and 10.2m, also used as a head track where a deflection head of up to 45mm is needed.

Extra Deep Track



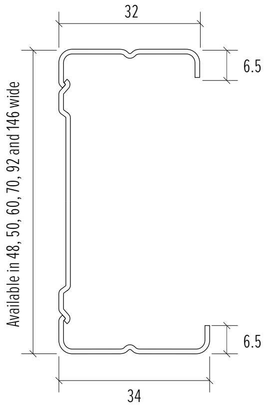
Available in 72, 94 or 148 wide

Product Code	Width (mm)	Flange Dimension (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
SPXDT72	72mm Extra Deep Track	70	0.7	3.00	3.32
PXDT94	94mm Extra Deep Track	70	0.7	3.00	3.69
SPXDT148	148mm Extra Deep Track	70	0.7	3.00	4.58



PARTITIONING SYSTEMS
SPEEDLINE METAL COMPONENTS
SOLUTIONS

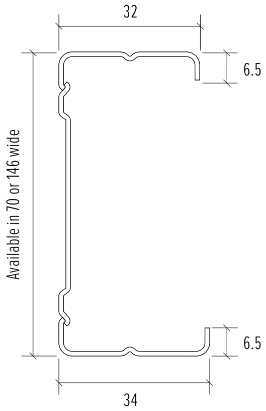
Standard C Stud



SPEEDLINE C STUD

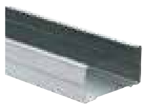
Product Code	Width (mm)	Flange Dimensions (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
SPS50	50mm C Stud	32/34	0.5	2.40 2.70 3.00 3.60	1.15 1.29 1.44 1.72
PS60	60mm C Stud	32/34	0.5	2.70 3.00 3.60	1.40 1.56 1.89
SPS70	70mm C Stud	32/34	0.5	2.40 2.70 3.00 3.60 4.20	1.34 1.51 1.67 2.01 2.34
SPS92	92mm C Stud	32/34	0.5	3.60 4.20	2.32 2.70
SPS146	146mm C Stud	32/34	0.5	3.60 4.20 5.00 6.00	3.09 3.60 4.29 5.14

Heavy Duty C Stud



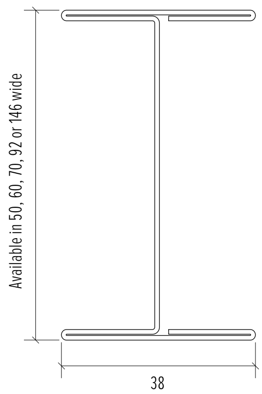
SPEEDLINE HEAVY DUTY C STUD (ROLLED TO ORDER)

Our Heavy Duty C Studs are for situations where slightly greater height is required. See page 24 to increase BS 5234 rigidity duty rating see High Impact System.



Product Code	Width (mm)	Flange Dimensions (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
PSHD70	70mm Heavy Duty C Stud	32/34	0.7	3.60 4.20	2.81 3.28

I Stud



SPEEDLINE I STUD

Product Code	Width (mm)	Flange Dimensions (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
PI50	50mm I Stud	38	0.5	2.70 3.00 3.60	1.98 2.20 2.64
PI60	60mm I Stud	38	0.5	2.70 3.00 3.60 4.20	2.08 2.31 2.77 2.32
PI70	70mm I Stud	38	0.7	3.00 3.60 4.20	2.92 3.50 4.09
PI92	92mm I Stud	38	0.8	3.60 5.00 6.00	5.18 7.20 8.63
PI146	146mm I Stud	38	0.8	3.60 5.00 6.00	6.40 8.89 10.67

SERVICE SUPPORT PLATE

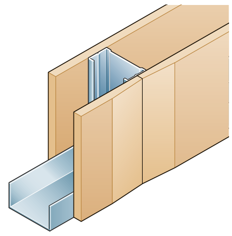
For fixing plywood within the partition

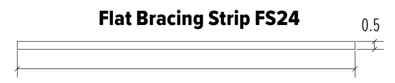
Product Code	Product Description	No in Box	Weight per Box (Kgs)
ASP19B	Service Support Plate	100	10

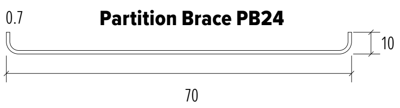
PARTITIONING SYSTEMS

SPEEDLINE METAL COMPONENTS

SOLUTIONS







SPEEDLINE FLAT BRACING STRIP & PARTITION BRACE

Product Code	Product Description	Width (mm)	Nominal Gauge (mm)	Flange Dimension (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
FS24	Flat Bracing Strip	70	0.5		2.40	0.66
PB24	Partition Brace	70	0.7	10	2.40	1.09

Plasterboard Fixing Centres

For all partitions i.e. C Studs, I Studs, Resilient Bar and Wall Liner the following applies:-

General Points

All acoustic test data is conducted within laboratory conditions, built at 600mm centres and is measured as Rw dB figures. The “on site“ conditions in which the partition is to be built may have a significant effect on the test figures quoted, and due to this it is unlikely that the Rw dB figures quoted from laboratory tests will be repeated in “on site” conditions. Deflection heads and reduced stud centres can affect acoustic performance, please refer to page 24 or please contact **enquiries@speedlinedrywall.co.uk**

Plasterboard should be located on the centre line of framing (except Speedline Acoustic Studs where the sight line is off-set). Lightly butt boards together, do not force into position. Fix the boards so that the decorative paper side is on the outside ready to receive a finishing solution. Fixings must penetrate framework by a minimum of 10mm. See table below for minimum Speedline fixing lengths in relation to board thickness. Fixings should be installed not less than 13mm from cut edges and 10mm from bound edges.

Single Layer Installations

Plasterboard must be fixed at 300mm maximum centres to the metal framework with the appropriate length screw. Plasterboard joints must be staggered from one side of the partition to the other.

Double Layer Installations

Inner layers can be fixed at 600mm centres but outer layers must be fixed at 300mm centres to the metal framework with the appropriate length screw. The second layer of plasterboard should be fixed with all joints staggered in relation to the first layer assuming studs fixed at 600mm centres.

Fixing of Floor and Ceiling Tracks

All tracks must be secured to the floor and ceiling in the centre of the profile at 600mm centres with suitable fixings. For 92mm and 148mm tracks we recommend two rows of suitable fixings at 600mm centres staggered by 300mm.

Fixing of C Studs

All wall abutments and partition junction studs to be secured at 600mm maximum centres using suitable fixings.

Partition Brace

For fixing of Partition Brace or for joining stud to track (if required) we recommend the use of Speedline Wafer Head Screws.

Service Holes

All C and I studs are manufactured with 3 service holes to allow electrical cables and pipes to run through the partition.

Service hole positions are:
Hole 1 – 300mm from end to centre of hole
Hole 2 – 900mm from end to centre of hole
Hole 3 – 1500mm from end to centre of hole

All C Studs have rectangular service holes 32mm wide x 75mm long. Take care that alignment holes are concurrent.

Partition Heights

Partition heights can be increased, please refer to height table on page 24 which shows impact of reducing stud centres or use of heavier gauge studs i.e. Heavy Duty C studs or I studs.

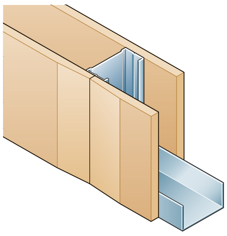
CURVED PARTITIONS

Speedline Track snipped at regular centres to form curve (see table for correct centres).

Radius	Speedline Track snipped at mm centres	Speedline Track fixed at mm centres	Studs mm centres
1-3 metres	50	300	150
3-5 metres	100	400	300
5+ metres	300	600	600

SCREW FIXING LENGTHS

Board Thickness	Speedline Drywall Fixing Length
12.5mm & 15mm	25mm
12.5mm + 12.5mm	25mm + 38mm
12.5mm + 15mm	25mm + 42mm
15mm + 15mm	25mm + 42mm



PARTITIONING SYSTEMS

MAXIMUM HEIGHTS

SPEEDLINE PARTITIONS

C STUDS

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	50mm C Stud			
12.5mm	1	2.5	2.8	2.9
15.0mm	1	2.8	3.1	3.2
12.5mm	2	3.4	4.0	4.1
15.0mm	2	3.7	4.3	4.4
	70mm C Stud			
12.5mm	1	3.6	3.9	4.0
15.0mm	1	3.8	4.1	4.2
12.5mm	2	4.6	5.2	5.4
15.0mm	2	4.9	5.5	5.7
	92mm C Stud			
12.5mm	1	3.9	4.2	4.3
15.0mm	1	4.4	4.7	4.8
12.5mm	2	5.2	5.8	5.9
15.0mm	2	5.9	6.5	6.7
	146mm C Stud			
12.5mm	1	6.2	6.5	6.6
15.0mm	1	6.5	6.8	6.9
12.5mm	2	7.6	8.2	8.4
15.0mm	2	7.9	8.5	8.7

I STUDS – WHEN BOARDED BOTH SIDES

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	50mm I Stud			
12.5mm	1	2.8	3.3	3.6
15.0mm	1	3.1	3.5	3.8
12.5mm	2	3.7	4.1	4.3
15.0mm	2	3.9	4.4	4.5
	70mm I Stud			
12.5mm	1	4.4	4.9	5.4
15.0mm	1	4.6	5.1	5.5
12.5mm	2	5.3	5.7	6.0
15.0mm	2	5.5	5.9	6.2
	92mm I Stud			
12.5mm	1	5.4	6.2	6.8
15.0mm	1	5.5	6.3	6.9
12.5mm	2	6.2	7.1	7.6
15.0mm	2	6.3	7.2	7.8
	146mm I Stud			
12.5mm	1	7.9	8.2	8.5
15.0mm	1	8.1	8.5	8.8
12.5mm	2	8.8	9.6	10.0
15.0mm	2	9.0	9.8	10.2

HEAVY DUTY C STUDS

Board Type	No of layers	600Ctrs	400Ctrs	300Ctrs
	Maximum Height (metres) Stud Centres			
	70mm HEAVY DUTY C Stud			
12.5mm	1	4.0	4.4	4.6
15.0mm	1	4.2	4.6	4.8
12.5mm	2	4.8	5.3	5.6
15.0mm	2	5.3	5.5	5.9
	146mm HEAVY DUTY C Stud			
12.5mm	1	6.6	7.2	7.5
15.0mm	1	6.9	7.5	7.8
12.5mm	2	8.2	8.6	9.0
15.0mm	2	8.5	9.0	9.2

Acoustic Performance on Reduced Stud Centres

Reducing stud centres may reduce the acoustic performance of Speedline Systems. The following acoustic performance reductions are estimated:

No insulation in cavity:

Studs reduced to:	Product Description
400mm 300mm	-2 R_w dB -3 R_w dB

25mm insulation in cavity:

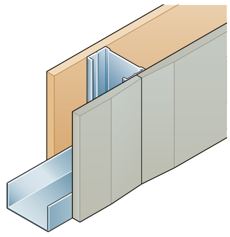
Studs reduced to:	Product Description
400mm 300mm	-0 R_w dB -2 R_w dB

Maximum heights are calculated based on a limiting deflection of L/240 at 200 Pascals.
For Non-Fire Rated Partitions or Fire Rated to BS 476 Part 22 only.

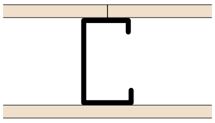
PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

INCOPORATING BRITISH GYPSUM GYPROC WALLBOARD

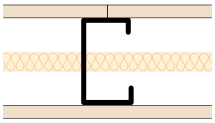


SPEEDLINE STANDARD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD



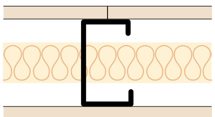
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-B-51
SPS70 70mm C stud	MD	3.6	97	30	37	70-B-51
SPS92 92mm C stud	MD	3.9	119	30	37	92-B-51
SPS146 146mm C stud	MD	6.2	173	30	37	146-B-51



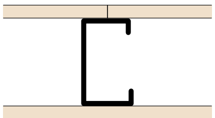
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	39	50-B-51(25)
SPS70 70mm C stud	MD	3.6	97	30	41	70-B-51(25)
SPS92 92mm C stud	MD	3.9	119	30	41	92-B-51(25)
SPS146 146mm C stud	MD	6.2	173	30	41	146-B-51(25)



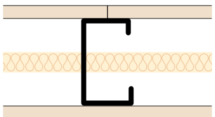
One layer of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline 50mm C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm British Gypsum Gyproc Wallboard (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	41	50-B-51(50)



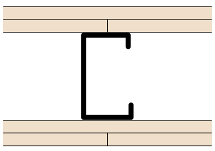
One layer of British Gypsum 15mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	N/A	50-B-52
SPS70 70mm C stud	HD	3.8	102	30	37	70-B-52
SPS92 92mm C stud	HD	4.4	124	30	37	92-B-52
SPS146 146mm C stud	HD	6.5	178	30	37	146-B-52



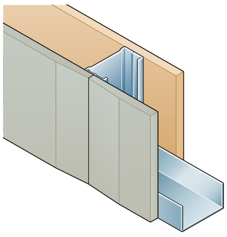
One layer of British Gypsum 15mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	40	50-B-52(25)
SPS70 70mm C stud	HD	3.8	102	30	41	70-B-52(25)
SPS92 92mm C stud	HD	4.4	124	30	41	92-B-52(25)
SPS146 146mm C stud	HD	6.5	178	30	41	146-B-52(25)



Two layers of British Gypsum 12.5mm Gyproc Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	43	50-B-57
SPS70 70mm C stud	SD	4.6	122	60	46	70-B-57
SPS92 92mm C stud	SD	5.2	142	60	46	92-B-57
SPS146 146mm C stud	SD	7.6	198	60	46	146-B-57

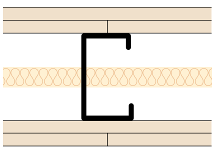


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

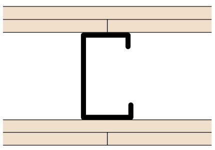
INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC WALLBOARD



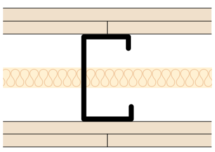
Two layers of British Gypsum 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System Reference
SPS50 50mm C stud	SD	3.4	102	60	47	50-B-57(25)
SPS70 70mm C stud	SD	4.6	122	60	50	70-B-57(25)
SPS92 92mm C stud	SD	5.2	142	60	50	92-B-57(25)
SPS146 146mm C stud	SD	7.6	198	60	50	146-B-57(25)



Two layers of British Gypsum 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System Reference
SPS50 50mm C stud	SD	3.7	112	60	45	50-B-58
SPS70 70mm C stud	SD	4.9	132	60	46	70-B-58
SPS92 92mm C stud	SD	5.9	152	60	46	92-B-58
SPS146 146mm C stud	SD	7.9	208	60	46	146-B-58



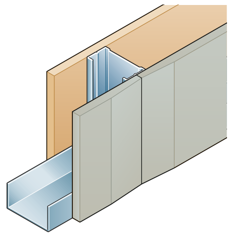
Two layers of British Gypsum 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System Reference
SPS50 50mm C stud	SD	3.7	112	60	47	50-B-58(25)
SPS70 70mm C stud	SD	4.9	132	60	50	70-B-58(25)
SPS92 92mm C stud	SD	5.9	152	60	50	92-B-58(25)
SPS146 146mm C stud	SD	7.9	208	60	50	146-B-58(25)

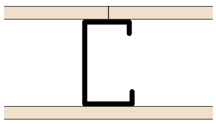
PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

INCORPORATING KNAUF WALLBOARD

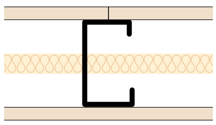


SPEEDLINE STANDARD SYSTEM INCORPORATING KNAUF WALLBOARD



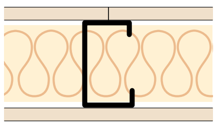
One layer of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-K-51
SPS70 70mm C stud	MD	3.6	97	30	37	70-K-51
SPS92 92mm C stud	MD	3.9	119	30	37	92-K-51
SPS146 146mm C stud	MD	6.2	173	30	37	146-K-51



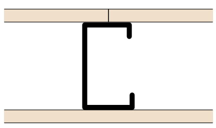
One layer of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	39	50-K-51(25)
SPS70 70mm C stud	MD	3.6	97	30	42	70-K-51(25)
SPS92 92mm C stud	MD	3.9	119	30	42	92-K-51(25)
SPS146 146mm C stud	MD	6.2	173	30	42	146-K-51(25)



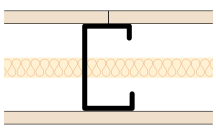
One layer of Knauf 12.5mm Wallboard each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm Knauf Wallboard (50mm APR)	Duty Grade	Max Height[1] (m)	Nominal Thickness (mm)[2]	Fire Resistance (minutes)[3]	Sound Insulation (R_w dB)	System reference
SPS50 50mm C stud	MD	2.5	77	30	42	50-K-51(50)



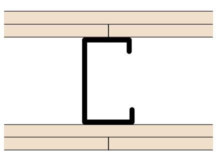
One layer of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	N/A	50-K-52
SPS70 70mm C stud	HD	3.8	102	30	37	70-K-52
SPS92 92mm C stud	HD	4.4	124	30	37	92-K-52
SPS146 146mm C stud	HD	6.5	178	30	37	146-K-52



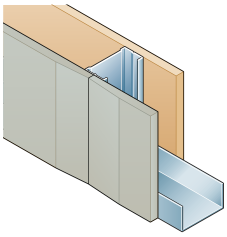
One layer of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	41	50-K-52(25)
SPS70 70mm C stud	HD	3.8	102	30	42	70-K-52(25)
SPS92 92mm C stud	HD	4.4	124	30	42	92-K-52(25)
SPS146 146mm C stud	HD	6.5	178	30	42	146-K-52(25)



Two layers of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	42	50-K-57
SPS70 70mm C stud	SD	4.6	122	60	46	70-K-57
SPS92 92mm C stud	SD	5.2	142	60	46	92-K-57
SPS146 146mm C stud	SD	7.6	198	60	46	146-K-57

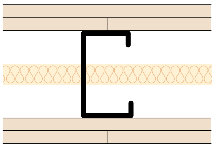


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

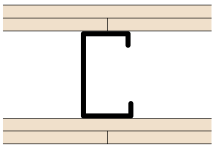
INCORPORATIING KNAUF WALLBOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING KNAUF WALLBOARD



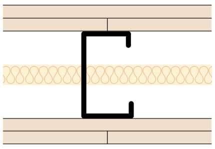
Two layers of Knauf 12.5mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	47	50-K-57(25)
SPS70 70mm C stud	SD	4.6	122	60	49	70-K-57(25)
SPS92 92mm C stud	SD	5.2	142	60	49	92-K-57(25)
SPS146 146mm C stud	SD	7.6	198	60	49	146-K-57(25)



Two layers of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Wallboard (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	60	42	50-K-58
SPS70 70mm C stud	SD	4.9	132	60	46	70-K-58
SPS92 92mm C stud	SD	5.9	152	60	46	92-K-58
SPS146 146mm C stud	SD	7.9	208	60	46	146-K-58

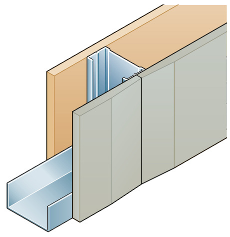


Two layers of Knauf 15mm Wallboard each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

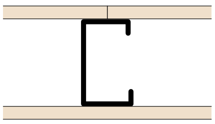
2 x 15mm Knauf Wallboard (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	60	47	50-K-58(25)
SPS70 70mm C stud	SD	4.9	132	60	49	70-K-58(25)
SPS92 92mm C stud	SD	5.9	152	60	49	92-K-58(25)
SPS146 146mm C stud	SD	7.9	208	60	49	146-K-58(25)

SPEEDLINE STANDARD SYSTEMS

INCORPORATIING SINIAT GTEC STANDARD BOARD

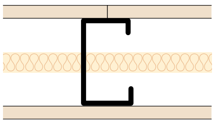


SPEEDLINE STANDARD SYSTEM INCORPORATING SINIAT GTEC STANDARD BOARD



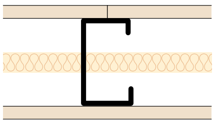
One layer of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	0	N/A	50-S-51
SPS70 70mm C stud	MD	3.6	97	30	N/A	70-S-51
SPS92 92mm C stud	MD	3.9	119	30	N/A	92-S-51
SPS146 146mm C stud	MD	6.2	173	30	N/A	146-S-51



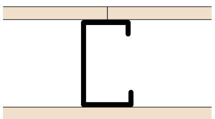
One layer of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	0	N/A	50-S-51(25)
SPS70 70mm C stud	MD	3.6	97	30	40	70-S-51(25)
SPS92 92mm C stud	MD	3.9	119	30	40	92-S-51(25)
SPS146 146mm C stud	MD	6.2	173	30	40	146-S-51(25)



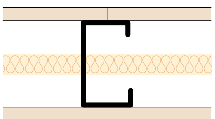
One layer of Siniat 12.5mm GTEC E Board each side of a Speedline C stud at 600mm centres. 25mm APR in cavity.

1 x 12.5mm Siniat GTEC E Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	0	41	50-S-64(25)
SPS70 70mm C stud	MD	3.6	97	30	41	70-S-64(25)



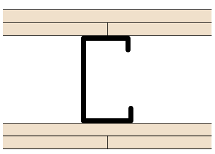
One layer of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	N/A	50-S-52
SPS70 70mm C stud	HD	3.8	102	30	N/A	70-S-52
SPS92 92mm C stud	HD	4.4	124	30	N/A	92-S-52
SPS146 146mm C stud	HD	6.5	178	30	N/A	146-S-52



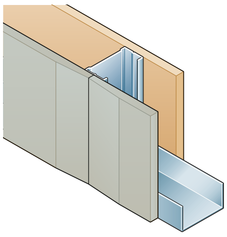
One layer of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	40	50-S-52(25)
SPS70 70mm C stud	HD	3.8	102	30	41	70-S-52(25)
SPS92 92mm C stud	HD	4.4	124	30	41	92-S-52(25)
SPS146 146mm C stud	HD	6.5	178	30	41	146-S-52(25)



Two layers of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	42	50-S-57
SPS70 70mm C stud	SD	4.6	122	60	45	70-S-57
SPS92 92mm C stud	SD	5.2	142	60	45	92-S-57
SPS146 146mm C stud	SD	7.6	198	60	45	146-S-57

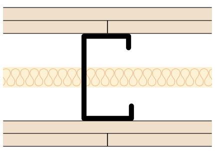


PARTITIONING SYSTEMS

SPEEDLINE STANDARD SYSTEMS

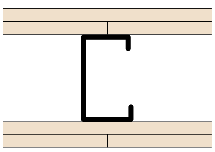
INCORPORATIING SINIAT GTEC STANDARD BOARD

SPEEDLINE STANDARD SYSTEM INCORPORATING SINIAT GTEC STANDARD BOARD



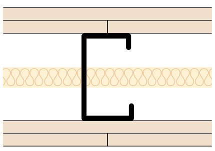
Two layers of Siniat 12.5mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	46	50-S-57(25)
SPS70 70mm C stud	SD	4.6	122	60	49	70-S-57(25)
SPS92 92mm C stud	SD	5.2	142	60	49	92-S-57(25)
SPS146 146mm C stud	SD	7.6	198	60	49	146-S-57(25)



Two layers of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC Standard Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	60	42	50-S-58
SPS70 70mm C stud	SD	4.9	132	60	45	70-S-58
SPS92 92mm C stud	SD	5.9	152	60	45	92-S-58
SPS146 146mm C stud	SD	7.9	208	60	45	146-S-58



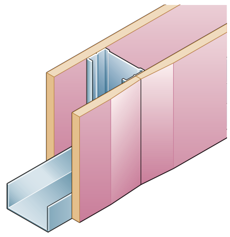
Two layers of Siniat 15mm GTEC Standard Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC Standard Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	60	46	50-S-58(25)
SPS70 70mm C stud	SD	4.9	132	60	49	70-S-58(25)
SPS92 92mm C stud	SD	5.9	152	60	49	92-S-58(25)
SPS146 146mm C stud	SD	7.9	208	60	49	146-S-58(25)

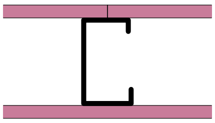
PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC FIRELINE

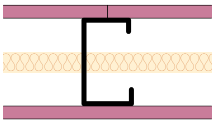


SPEEDLINE FIRE SYSTEM INCORPORATING BRITISH GYPSUM GYPROC FIRELINE



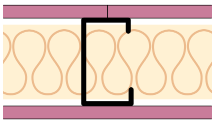
One layer of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-B-55
SPS70 70mm C stud	MD	3.6	97	30	37	70-B-55
SPS92 92mm C stud	MD	3.9	119	30	37	92-B-55
SPS146 146mm C stud	MD	6.2	173	30	37	146-B-55



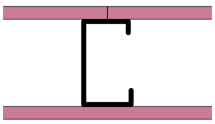
One layer of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	39	50-B-55(25)
SPS70 70mm C stud	MD	3.6	97	30	41	70-B-55(25)
SPS92 92mm C stud	MD	3.9	119	30	41	92-B-55(25)
SPS146 146mm C stud	MD	6.2	173	30	41	146-B-55(25)



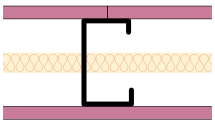
One layer of British Gypsum 12.5mm Gyproc Fireline each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm British Gypsum Gyproc Fireline (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	41	50-B-55(50)



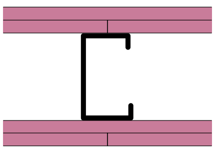
One layer of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	37	50-B-56
SPS70 70mm C stud	HD	3.8	102	60	39	70-B-56
SPS92 92mm C stud	HD	4.4	124	60	39	92-B-56
SPS146 146mm C stud	HD	6.5	178	60	39	146-B-56



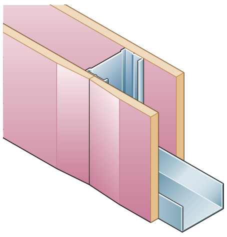
One layer of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	40	50-B-56(25)
SPS70 70mm C stud	HD	3.8	102	60	42	70-B-56(25)
SPS92 92mm C stud	HD	4.4	124	60	42	92-B-56(25)
SPS146 146mm C stud	HD	6.5	178	60	42	146-B-56(25)



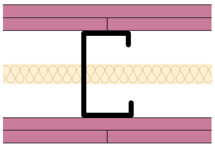
Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	120	43	50-B-61
SPS70 70mm C stud	SD	4.6	122	120	47	70-B-61
SPS92 92mm C stud	SD	5.2	142	120	47	92-B-61
SPS146 146mm C stud	SD	7.6	198	120	47	146-B-61



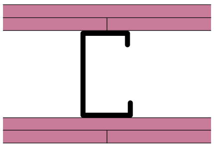
PARTITIONING SYSTEMS
SPEEDLINE FIRE SYSTEMS
INCORPORATING BRITISH GYPSUM GYPROC FIRELINE

SPEEDLINE FIRE SYSTEM INCORPORATING BRITISH GYPSUM GYPROC FIRELINE



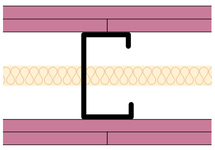
Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	120	47	50-B-61(25)
SPS70 70mm C stud	SD	4.6	122	120	50	70-B-61(25)
SPS92 92mm C stud	SD	5.2	142	120	50	92-B-61(25)
SPS146 146mm C stud	SD	7.6	198	120	50	146-B-61(25)
AS70 70mm Acoustic stud	SD	4.6	122	120	51	AS70-B-161(25)



Two layers of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

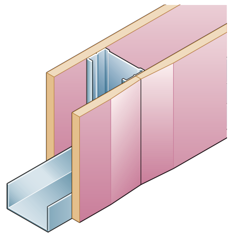
2 x 15mm British Gypsum Gyproc Fireline (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	45	50-B-62
SPS70 70mm C stud	SD	4.9	132	120	47	70-B-62
SPS92 92mm C stud	SD	5.9	154	120	47	92-B-62
SPS146 146mm C stud	SD	7.9	208	120	47	146-B-62



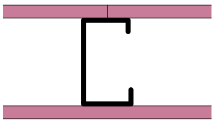
Two layers of British Gypsum 15mm Gyproc Fireline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	47	50-B-62(25)
SPS70 70mm C stud	SD	4.9	132	120	50	70-B-62(25)
SPS92 92mm C stud	SD	5.9	154	120	50	92-B-62(25)
SPS146 146mm C stud	SD	7.9	208	120	50	146-B-62(25)

PARTITIONING SYSTEMS
SPEEDLINE FIRE SYSTEMS
INCORPORATING KNAUF FIRE PANEL

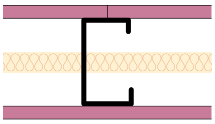


SPEEDLINE FIRE SYSTEM INCORPORATING KNAUF FIRE PANEL



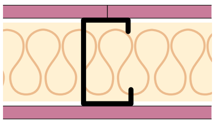
One layer of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-K-55
SPS70 70mm C stud	MD	3.6	97	30	37	70-K-55
SPS92 92mm C stud	MD	3.9	119	30	37	92-K-55
SPS146 146mm C stud	MD	6.2	173	30	37	146-K-55



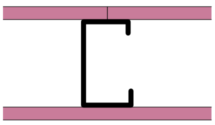
One layer of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	39	50-K-55(25)
SPS70 70mm C stud	MD	3.6	97	30	42	70-K-55(25)
SPS92 92mm C stud	MD	3.9	119	30	42	92-K-55(25)
SPS146 146mm C stud	MD	6.2	173	30	42	146-K-55(25)



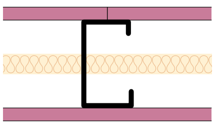
One layer of Knauf 12.5mm Fire Panel each side of a Speedline C stud at 600mm centres. 50mm APR in cavity.

1 x 12.5mm Knauf Fire Panel (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	42	50-K-55(50)



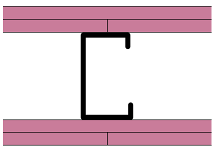
One layer of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	N/A	50-K-56
SPS70 70mm C stud	HD	3.8	102	60	37	70-K-56
SPS92 92mm C stud	HD	4.4	124	60	37	92-K-56
SPS146 146mm C stud	HD	6.5	178	60	37	146-K-56



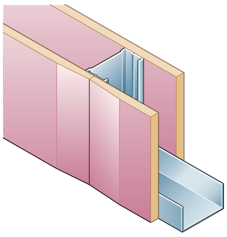
One layer of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	41	50-K-56(25)
SPS70 70mm C stud	HD	3.8	102	60	43	70-K-56(25)
SPS92 92mm C stud	HD	4.4	124	60	43	92-K-56(25)
SPS146 146mm C stud	HD	6.5	178	60	43	146-K-56(25)



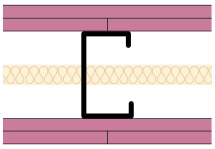
Two layers of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	120	42	50-K-61
SPS70 70mm C stud	SD	4.6	122	120	46	70-K-61
SPS92 92mm C stud	SD	5.2	142	120	46	92-K-61
SPS146 146mm C stud	SD	7.6	198	120	46	146-K-61



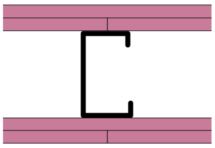
PARTITIONING SYSTEMS
SPEEDLINE FIRE SYSTEMS
INCORPORATING KNAUF FIRE PANEL

SPEEDLINE FIRE SYSTEM INCORPORATING KNAUF FIRE PANEL



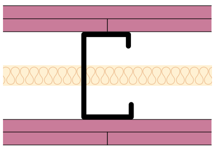
Two layers of Knauf 12.5mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	120	47	50-K-61(25)
SPS70 70mm C stud	SD	4.6	122	120	49	70-K-61(25)
SPS92 92mm C stud	SD	5.2	142	120	49	92-K-61(25)
SPS146 146mm C stud	SD	7.6	198	120	49	146-K-61(25)



Two layers of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Fire Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	42	50-K-62
SPS70 70mm C stud	SD	4.9	132	120	46	70-K-62
SPS92 92mm C stud	SD	5.9	154	120	46	92-K-62
SPS146 146mm C stud	SD	7.9	208	120	46	146-K-62



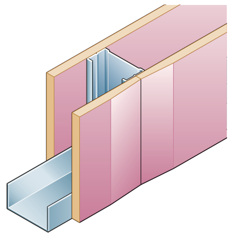
Two layers of Knauf 15mm Fire Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Fire Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	47	50-K-62(25)
SPS70 70mm C stud	SD	4.9	132	120	49	70-K-62(25)
SPS92 92mm C stud	SD	5.9	154	120	49	92-K-62(25)
SPS146 146mm C stud	SD	7.9	208	120	49	146-K-62(25)

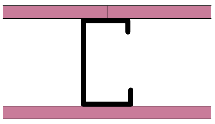
PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

INCORPORATING SINIAT GTEC FIRE BOARD

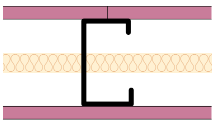


SPEEDLINE FIRE SYSTEM INCORPORATING SINIAT GTEC FIRE BOARD



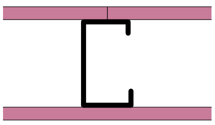
One layer of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	MD	3.6	97	30	N/A	70-S-55
SPS92 92mm C stud	MD	3.9	119	30	N/A	92-S-55
SPS146 146mm C stud	MD	6.2	173	30	N/A	146-S-55



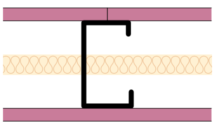
One layer of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	MD	3.6	97	30	40	70-S-55(25)
SPS92 92mm C stud	MD	3.9	119	30	40	92-S-55(25)
SPS146 146mm C stud	MD	6.2	173	30	40	146-S-55(25)



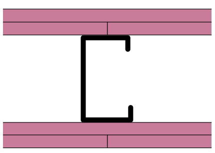
One layer of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	N/A	50-S-56
SPS70 70mm C stud	HD	3.8	102	60	N/A	70-S-56
SPS92 92mm C stud	HD	4.4	124	60	N/A	92-S-56
SPS146 146mm C stud	HD	6.5	178	60	44	146-S-56



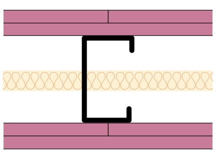
One layer of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_wdB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	41	50-S-56(25)
SPS70 70mm C stud	HD	3.8	102	60	42	70-S-56(25)
SPS92 92mm C stud	HD	4.4	124	60	42	92-S-56(25)
SPS146 146mm C stud	HD	6.5	178	60	48	146-S-56(25)



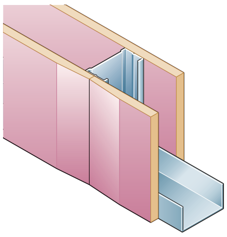
Two layers of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	90	42	50-S-61
SPS70 70mm C stud	SD	4.6	122	90	45	70-S-61
SPS92 92mm C stud	SD	5.2	142	90	45	92-S-61
SPS146 146mm C stud	SD	7.6	198	90	45	146-S-61



Two layers of Siniat 12.5mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	90	46	50-S-61(25)
SPS70 70mm C stud	SD	4.6	122	90	49	70-S-61(25)
SPS92 92mm C stud	SD	5.2	142	90	49	92-S-61(25)
SPS146 146mm C stud	SD	7.6	198	90	49	146-S-61(25)

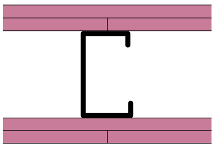


PARTITIONING SYSTEMS

SPEEDLINE FIRE SYSTEMS

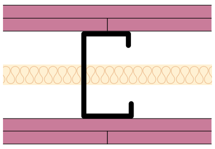
INCORPORATING SINIAT GTEC FIRE BOARD

SPEEDLINE FIRE SYSTEM INCORPORATING SINIAT GTEC FIRE BOARD



Two layers of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	42	50-S-62
SPS70 70mm C stud	SD	4.9	132	120	50	70-S-62
SPS92 92mm C stud	SD	5.9	154	120	50	92-S-62
SPS146 146mm C stud	SD	7.9	208	120	54	146-S-62



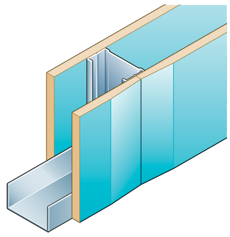
Two layers of Siniat 15mm GTEC Fire Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	46	50-S-62(25)
SPS70 70mm C stud	SD	4.9	132	120	53	70-S-62(25)
SPS92 92mm C stud	SD	5.9	154	120	53	92-S-62(25)
SPS146 146mm C stud	SD	7.9	208	120	55	146-S-62(25)

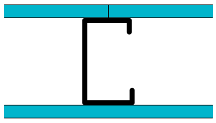
PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC

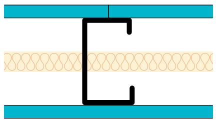


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



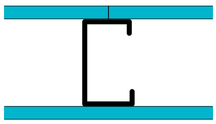
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-B-53
SPS70 70mm C stud	MD	3.6	97	30	40	70-B-53
SPS92 92mm C stud	MD	3.9	119	30	40	92-B-53
SPS146 146mm C stud	MD	6.2	173	30	40	146-B-53
AS70 70mm Acoustic C stud	MD	3.6	97	30	42	AS70-B-153



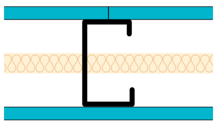
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	44	50-B-53(25)
SPS70 70mm C stud	MD	3.6	97	30	46	70-B-53(25)
SPS92 92mm C stud	MD	3.9	119	30	46	92-B-53(25)
SPS146 146mm C stud	MD	6.2	173	30	46	146-B-53(25)
AS70 70mm Acoustic C stud	MD	3.6	97	30	47	AS70-B-153(25)



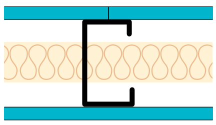
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	40	50-B-54
SPS70 70mm C stud	HD	3.8	102	30	42	70-B-54
SPS92 92mm C stud	HD	4.4	124	30	42	92-B-54
SPS146 146mm C stud	HD	6.5	178	30	47	146-B-54



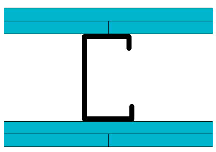
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	44	50-B-54(25)
SPS70 70mm C stud	HD	3.8	102	30	46	70-B-54(25)
SPS92 92mm C stud	HD	4.4	124	30	47	92-B-54(25)
SPS146 146mm C stud	HD	6.5	178	30	52	146-B-54(25)



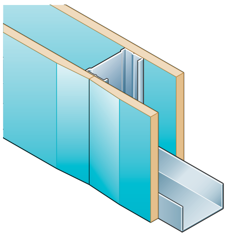
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	45	50-B-54(50)
AS70 70mm Acoustic C stud	HD	3.6	102	30	50	AS70-B-154(50)
AS92 92mm Acoustic C stud	HD	4.4	124	30	54	AS92-B-154(50)
SPS146 146mm C Stud	HD	6.5	178	30	52	146-B-54(50)



Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	48	50-B-59
SPS70 70mm C stud	SD	4.6	122	60	53	70-B-59
SPS92 92mm C stud	SD	5.2	142	60	53	92-B-59
SPS146 146mm C stud	SD	7.6	198	60	53	146-B-59

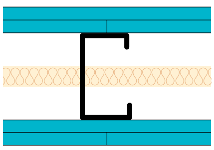


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

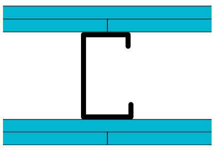
INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



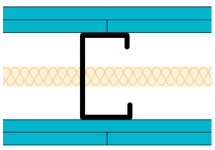
Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
SPS50 50mm C stud	SD	3.4	102	60	54	50-B-59(25)
SPS70 70mm C stud	SD	4.6	122	60	56	70-B-59(25)
SPS92 92mm C stud	SD	5.2	142	60	56	92-B-59(25)
SPS146 146mm C stud	SD	7.6	198	60	56	146-B-59(25)
AS70 70mm Acoustic C stud	SD	4.6	122	60	58 (-8)	AS70-B-159(25)



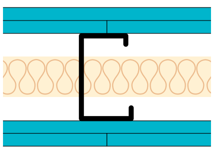
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	90	48	50-B-60
SPS70 70mm C stud	SD	4.9	132	90	53	70-B-60
SPS92 92mm C stud	SD	5.9	154	90	53	92-B-60
SPS146 146mm C stud	SD	7.9	208	90	56	146-B-60



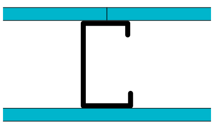
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
SPS50 50mm C stud	SD	3.7	112	90	54	50-B-60(25)
SPS70 70mm C stud	SD	4.9	132	90	56	70-B-60(25)
SPS92 92mm C stud	SD	5.9	154	90	56	92-B-60(25)
SPS146 146mm C stud	SD	7.9	208	90	59 (-6)	146-B-60(25)



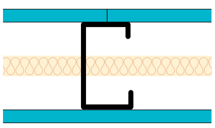
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS92 92mm Acoustic C stud	SD	5.9	154	90	58 (-5)	AS92-B-160(50)
SPS146 146mm C stud	SD	7.9	208	90	59 (-6)	146-B-60(50)



One layer of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc F (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	40	50-B-54F
SPS70 70mm C stud	HD	3.8	102	60	42	70-B-54F
SPS92 92mm C stud	HD	4.4	124	60	42	92-B-54F
SPS146 146mm C stud	HD	6.5	178	60	42	146-B-54F



One layer of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc F (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	60	44	50-B-54F(25)
SPS70 70mm C stud	HD	3.8	102	60	46	70-B-54F(25)
SPS92 92mm C stud	HD	4.4	124	60	47	92-B-54F(25)
SPS146 146mm C stud	HD	6.5	178	60	52	146-B-54F(25)

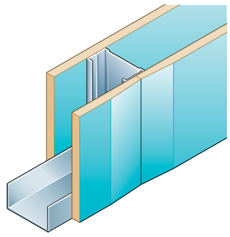
NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	**Fire Rating**
1 x 15mm Soundbloc	30 minutes
1 x 15mm Soundbloc F	60 minutes
2 x 15mm Soundbloc	90 minutes
2 x 15mm Soundbloc F	120 minutes

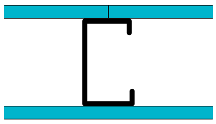
Substantiating Fire Reports are available.

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING KNAUF SOUNDSHIELD PLUS

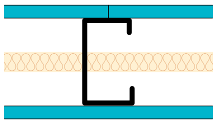


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING KNAUF SOUNDSHIELD PLUS



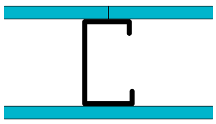
One layer of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	N/A	50-K-53
SPS70 70mm C stud	MD	3.6	97	30	42	70-K-53
SPS92 92mm C stud	MD	3.9	119	30	42	92-K-53
SPS146 146mm C stud	MD	6.2	173	30	42	146-K-53



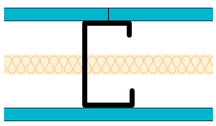
One layer of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	MD	2.5	77	30	44	50-K-53(25)
SPS70 70mm C stud	MD	3.6	97	30	47	70-K-53(25)
SPS92 92mm C stud	MD	3.9	119	30	47	92-K-53(25)
SPS146 146mm C stud	MD	6.2	173	30	47	146-K-53(25)



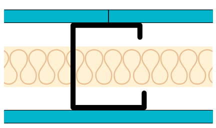
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	2.8	82	30	38	50-K-54
SPS70 70mm C stud	SD	3.8	102	60	42	70-K-54
SPS92 92mm C stud	SD	4.4	124	60	42	92-K-54
SPS146 146mm C stud	SD	6.5	178	60	42	146-K-54



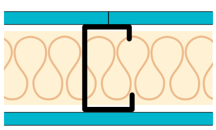
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	2.8	82	30	44	50-K-54(25)
SPS70 70mm C stud	SD	3.8	102	60	47	70-K-54(25)
SPS92 92mm C stud	SD	4.4	124	60	47	92-K-54(25)
SPS146 146mm C stud	SD	6.5	178	60	47	146-K-54(25)



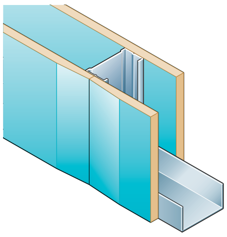
One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-K-154(50)



One layer of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 100mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Soundshield Plus (100mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS92 92mm C stud	SD	4.4	124	60	48	92-K-54(100)
SPS146 146mm C stud	SD	6.5	178	60	48	146-K-54(100)

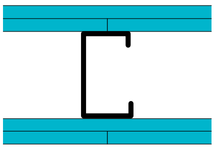


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

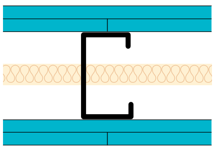
INCORPORATING KNAUF SOUNDSHIELD PLUS

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING KNAUF SOUNDSHIELD PLUS



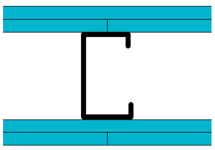
Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	49	50-K-59
SPS70 70mm C stud	SD	4.6	122	60	53	70-K-59
SPS92 92mm C stud	SD	5.2	142	60	53	92-K-59
SPS146 146mm C stud	SD	7.6	198	60	53	146-K-59



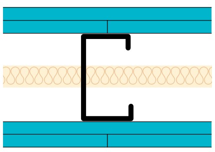
Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	52	50-K-59(25)
SPS70 70mm C stud	SD	4.6	122	60	55	70-K-59(25)
SPS92 92mm C stud	SD	5.2	142	60	55	92-K-59(25)
SPS146 146mm C stud	SD	7.6	198	60	55	146-K-59(25)



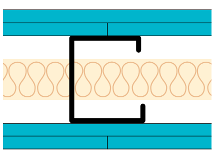
Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	49	50-K-60
SPS70 70mm C stud	SD	4.9	132	120	53	70-K-60
SPS92 92mm C stud	SD	5.9	154	120	53	92-K-60
SPS146 146mm C stud	SD	7.9	208	120	53	146-K-60



Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	120	52	50-K-60(25)
SPS70 70mm C stud	SD	4.9	132	120	55	70-K-60(25)
SPS92 92mm C stud	SD	5.9	154	120	55	92-K-60(25)
SPS146 146mm C stud	SD	7.9	208	120	55	146-K-60(25)



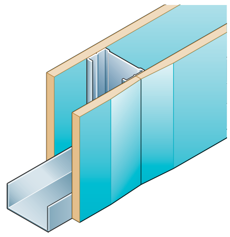
Two layers of Knauf 15mm Soundshield Plus each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.9	132	120	57 (-5)	AS70-K-160(50)

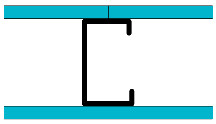
PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

INCORPORATING SINIAT GTEC dB BOARD

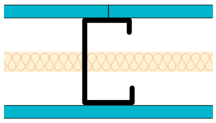


SPEEDLINE ACOUSTIC SYSTEM INCORPORATING SINIAT GTEC dB BOARD



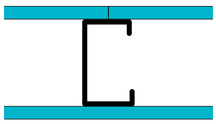
One layer of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	MD	3.6	97	30	40	70-S-53
SPS92 92mm C stud	MD	3.9	119	30	40	92-S-53
SPS146 146mm C stud	MD	6.2	173	30	40	146-S-53



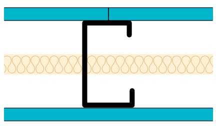
One layer of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 12.5mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	MD	3.6	97	30	45	70-S-53(25)
SPS92 92mm C stud	MD	3.9	119	30	45	92-S-53(25)
SPS146 146mm C stud	MD	6.2	173	30	45	146-S-53(25)



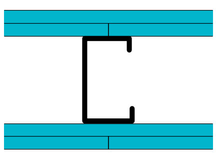
One layer of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	38	50-S-54
SPS70 70mm C stud	HD	3.8	102	30	41	70-S-54
SPS92 92mm C stud	HD	4.4	124	30	41	92-S-54
SPS146 146mm C stud	HD	6.5	178	30	41	146-S-54



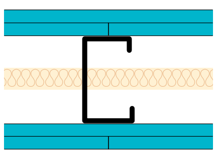
One layer of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	HD	2.8	82	30	42	50-S-54(25)
SPS70 70mm C stud	HD	3.8	102	30	45	70-S-54(25)
SPS92 92mm C stud	HD	4.4	124	30	45	92-S-54(25)
SPS146 146mm C stud	HD	6.5	178	30	45	146-S-54(25)



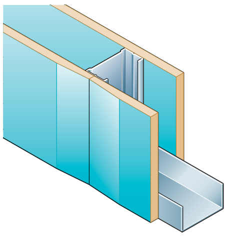
Two layers of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 12.5mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	47	50-S-59
SPS70 70mm C stud	SD	4.6	122	60	50	70-S-59
SPS92 92mm C stud	SD	5.2	142	60	50	92-S-59
SPS146 146mm C stud	SD	7.6	198	60	50	146-S-59



Two layers of Siniat 12.5mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.4	102	60	50	50-S-59(25)
SPS70 70mm C stud	SD	4.6	122	60	52	70-S-59(25)
SPS92 92mm C stud	SD	5.2	142	60	52	92-S-59(25)
SPS146 146mm C stud	SD	7.6	198	60	52	146-S-59(25)

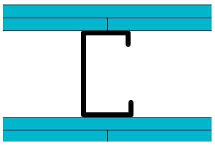


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC SYSTEMS

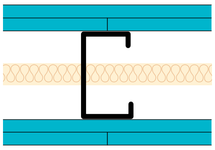
INCORPORATING SINIAT GTEC dB BOARD

SPEEDLINE ACOUSTIC SYSTEM INCORPORATING SINIAT GTEC DB BOARD



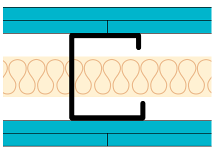
Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	90	47	50-S-60
SPS70 70mm C stud	SD	4.9	132	90	50	70-S-60
SPS92 92mm C stud	SD	5.9	154	90	50	92-S-60
SPS146 146mm C stud	SD	7.9	208	90	50	146-S-60



Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 25mm APR in cavity.
Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS50 50mm C stud	SD	3.7	112	90	50	50-S-60(25)
SPS70 70mm C stud	SD	4.9	132	90	53	70-S-60(25)
SPS92 92mm C stud	SD	5.9	154	90	53	92-S-60(25)
SPS146 146mm C stud	SD	7.9	208	90	53	146-S-60(25)

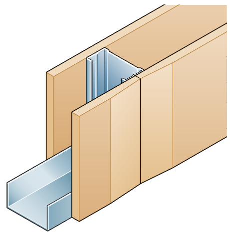


Two layers of Siniat 15mm GTEC dB Board each side of Speedline C stud at 600mm centres. 50mm APR in cavity.
Size of C stud as per table.

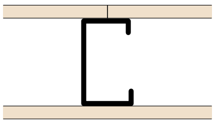
2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.9	132	90	56 (-4)	AS70-S-160(50)

SPEEDLINE HIGH IMPACT SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC DURALINE

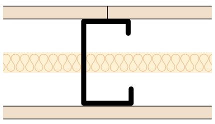


SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC DURALINE



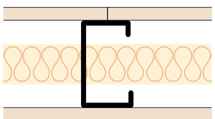
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PSHD70 70mm Heavy Duty C stud	SD	4.2	102	60	44	PSHD70-B-63



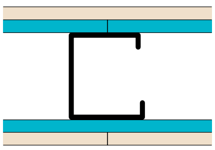
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PSHD70 70mm Heavy Duty C stud	SD	4.2	102	60	47	PSHD70-B-63 (25)
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-B-163(25)



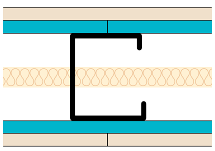
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PSHD70 70mm Heavy Duty C stud	SD	4.2	102	60	48	PSHD70-B-63 (50)
AS70 70mm Acoustic C stud	SD	3.8	102	60	50	AS70-B-163(50)
AS92 92mm Acoustic C stud	SD	4.4	124	60	53	AS92-B-163(50)



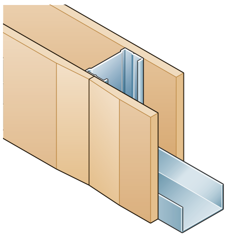
Inner layer of British Gypsum 12.5mm Gyproc Soundbloc, outer layer of British Gypsum 15mm Gyproc Duraline to each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc Inner 1 x 15mm British Gypsum Gyproc Duraline Outer (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	4.6	127	60	53	AS70-B-165



Inner layer of British Gypsum 12.5mm Gyproc Soundbloc, outer layer of British Gypsum 15mm Gyproc Duraline to each side of Speedline C stud at 600mm centres. Size 25mm APR in cavity of C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc Inner 1 x 15mm British Gypsum Gyproc Duraline Outer (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.6	127	60	60 (-8)	AS70-B-165(25)

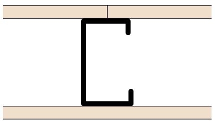


PARTITIONING SYSTEMS

SPEEDLINE HIGH IMPACT SYSTEMS

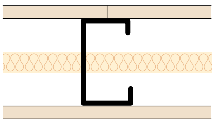
INCORPORATING KNAUF IMPACT PANEL

SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING KNAUF IMPACT PANEL



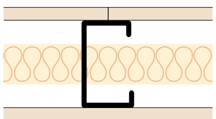
One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PSHD70 70mm Heavy Duty C stud	SD	4.2	102	60	39	PSHD70-K-63
AS70 70mm Acoustic C stud	SD	3.8	102	60	40	AS70-K-163



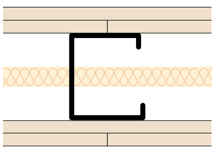
One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PSHD70 70mm Heavy Duty C stud	SD	4.2	102	60	43	PSHD70-K-63 (25)
AS70 70mm Acoustic C stud	SD	3.8	102	60	43	AS70-K-163(25)



One layer of Knauf 15mm Impact Panel each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm Knauf Impact Panel (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-K-163(50)



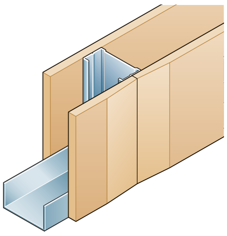
Two layers of Knauf 15mm Impact Panel to each side of Speedline C stud at 600mm centres. Size of C stud as per table. 25mm APR in cavity.

2 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.9	132	120	57 (-7)	AS70-K-166(25)

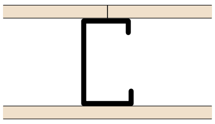
PARTITIONING SYSTEMS

SPEEDLINE HIGH IMPACT SYSTEMS

INCORPORATING SINIAT GTEC MEGADECO

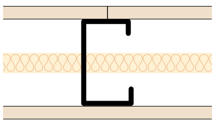


SPEEDLINE HIGH IMPACT SYSTEM INCORPORATING SINIAT GTEC MEGADECO



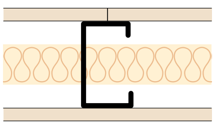
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	SD	3.8	102	60	40	70-S-63
SPS92 92mm C stud	SD	4.4	124	60	40	92-S-63
SPS146 146mm C stud	SD	6.5	178	60	40	146-S-63



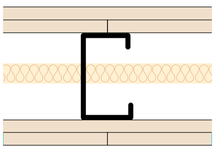
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	SD	3.8	102	60	44	70-S-63(25)
AS70 Acoustic C stud	SD	3.8	102	60	47	AS70-S-163(25)
SPS92 92mm C stud	SD	4.4	124	60	44	92-S-63(25)
SPS146 146mm C stud	SD	6.5	178	60	44	146-S-63(25)



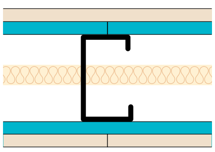
One layer of Siniat 15mm GTEC Megadeco each side of Speedline C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

1 x 15mm Siniat GTEC Megadeco (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	SD	3.8	102	60	47	70-S-63(50)
AS70 Acoustic C stud	SD	3.8	102	60	48	AS70-S-163(50)
SPS92 92mm C stud	SD	4.4	124	60	47	92-S-63(50)
SPS146 146mm C stud	SD	6.5	178	60	47	146-S-63(50)



Inner layer of Siniat 12.5mm GTEC Standard Board, outer layer of Siniat 15mm GTEC Megadeco to each side of Speedline C stud at 600mm centres. Size of C stud as per table.

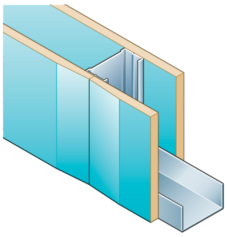
1 x 12.5mm Siniat GTEC Standard Board inner 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
SPS70 70mm C stud	SD	4.6	127	60	52	70-S-65(25)



Inner layer of Siniat 15mm GTEC dB Board, outer layer of Siniat 15mm GTEC Megadeco to each side of Speedline C stud at 600mm centres. Size of C stud as per table 25mm APR in cavity.

1 x 15mm Siniat GTEC dB Board inner 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
SPS70 70mm C stud	SD	4.9	132	90	53	70-S-66(25)
AS70 70mm Acoustic C stud	SD	4.9	132	90	56 (-7)	AS70-S-166(25)

Finishing as per manufacturers recommendations



PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

SOLUTIONS

Benefits

- Ideal for domestic, residential and commercial use.
- For use where additional acoustic performance is required without increasing the partition width.
- Fire resistance 30-120 mins.
- Acoustic 40-63 Rw dB.
- Duty Rating: Medium, Heavy and Severe available.
- Designed with multiple benefits to aid application - sight lines run off-centre to assist correct plasterboard installation and they have a knurled stud surface for increased screw retention.
- Regularly spaced service holes.
- Dimensionally accurate.
- Available in two widths 70 & 92mm, and various lengths from 2.7m to 4.2m.
- Bespoke lengths available subject to minimum order quantities or can be cut to length using tin snips or power tools.

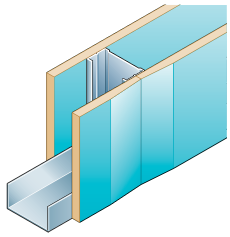
Sectors

- Residential
- Offices
- Healthcare
- Education
- Commercial
- Retail
- RMI
- Student Accommodation

Our Speedline Acoustic C-Studs are the vertical components used to create a non-load bearing wall partition. They have been designed to offer better sound insulation than our standard C-Studs in the key speech frequency bands (250 to 1000Hz) whilst maintaining structural strength and integrity. This enables slimmer partitions to be constructed, maximising floor space but still satisfying high acoustic requirements.

SPEEDLINE ACOUSTIC C STUD SYSTEMS

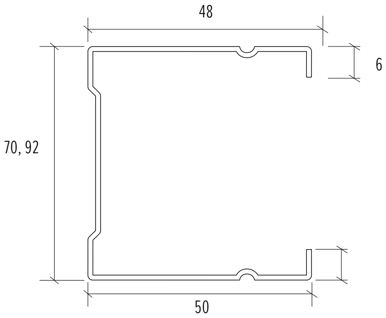
SOLUTIONS



Acoustic Stud

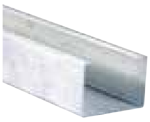
Speedline Acoustic C stud partitions are constructed in the same way as standard C stud systems. With the exception that the plasterboard edge should be aligned with the offset sight line on the acoustic C stud. Plasterboard fixing centres remain the same.

Acoustic C Stud



When fixing plasterboards to Speedline Acoustic Stud ensure the plasterboard edge is aligned to the offset sight line.

ACOUSTIC C STUD

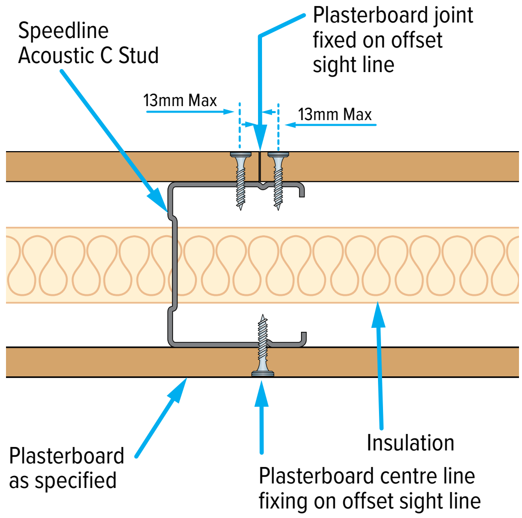
	Product Code	Width (mm)	Flange Dimensions (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
	AS70	70mm Acoustic C stud	48/50	0.5	2.70 3.00 3.60 4.20	1.85 2.06 2.47 2.88
	AS92	92mm Acoustic C stud	48/50	0.5	3.60 4.20	2.78 3.24

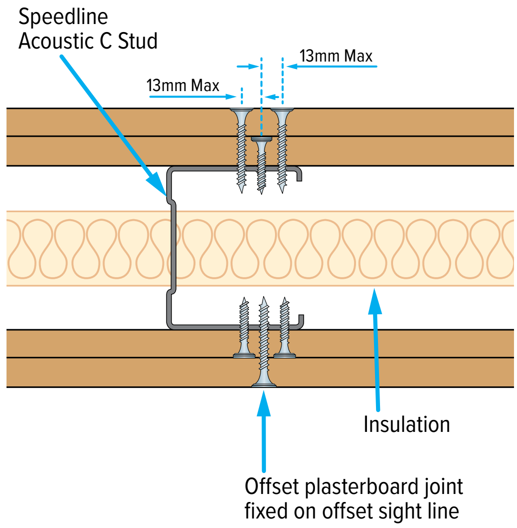
Construction

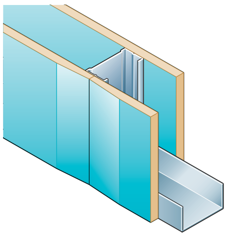
Care must be taken in construction to ensure a structure selected for its acoustic performance performs to its maximum capability. As sound will find the smallest crack and expose it as a weak point, your structure should be built to eliminate the ability for sound to transfer through easily.

A single 25mm hole in an otherwise acoustically sound partition can reduce performance by up to 15dB. Although a 25mm hole should be visible a crack as small as 1mm thick will not always be obvious and, if not treated with an acoustic sealant, will be detrimental to the structure.

An acoustic construction is only as good as its weakest point.





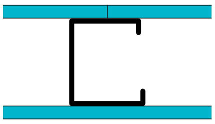


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

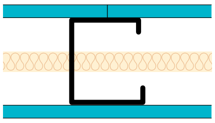
INCORPORATING BRITISH GYPSUM GYPROC BOARDS

SPEEDLINE ACOUSTIC STUDS SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



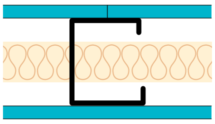
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	MD	3.6	97	30	42	AS70-B-153



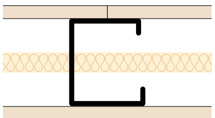
One layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	MD	3.6	97	30	47	AS70-B-153(25)



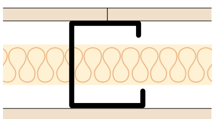
One layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	HD	3.8	102	30	50	AS70-B-154(50)
AS92 92mm Acoustic C stud	HD	4.4	124	30	54	AS92-B-154(50)



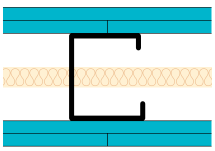
One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-B-163(25)



One layer of British Gypsum 15mm Gyproc Duraline each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm British Gypsum Gyproc Duraline (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	50	AS70-B-163(50)
AS92 92mm Acoustic C Stud	SD	4.4	124	60	53	AS92-B-163(50)



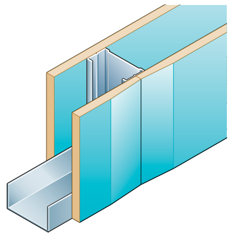
Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

2 x 12.5mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.6	122	60	58 (-8)	AS70-B-159(25)

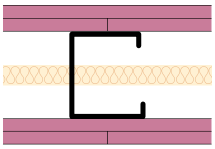
PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC BOARDS

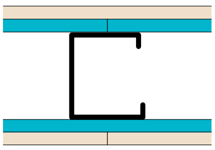


SPEEDLINE ACOUSTIC STUDS SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



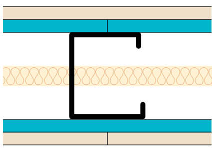
Two layers of British Gypsum 12.5mm Gyproc Fireline each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

2 x 12.5mm British Gypsum Gyproc Fireline (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	4.6	122	120	51	AS70-B-161(25)



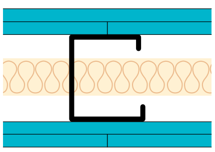
Two layers made up of 1 x British Gypsum 12.5mm Gyproc Soundbloc inner and 1 x British Gypsum 15mm Gyproc Duraline outer each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc inner 1 x 15mm British Gypsum Gyproc Duraline outer (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	4.6	127	60	53	AS70-B-165



Two layers made up of 1 x British Gypsum 12.5mm Gyproc Soundbloc inner and 1 x British Gypsum 15mm Gyproc Duraline outer each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 12.5mm British Gypsum Gyproc Soundbloc inner 1 x 15mm British Gypsum Gyproc Duraline outer (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS70 70mm Acoustic C stud	SD	4.6	127	60	60 (-8)	AS70-B-165(25)



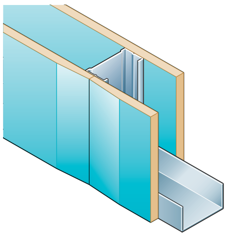
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
AS92 92mm Acoustic C stud	SD	5.9	154	90	58 (-5)	AS92-B-160(50)

NOTE: Substituting 15mm Soundbloc to 15mm Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	Fire Rating
1 x 15mm Soundbloc	30 minutes
1 x 15mm Soundbloc F	60 minutes
2 x 15mm Soundbloc	60 minutes
2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

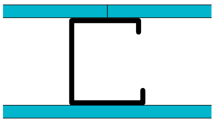


PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

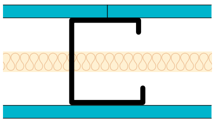
INCORPORATING KNAUF BOARDS

SPEEDLINE ACOUSTIC C STUD SYSTEM INCORPORATING KNAUF BOARDS



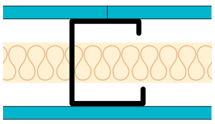
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	42	AS70-K-154



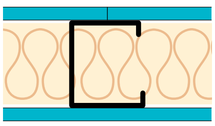
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	47	AS70-K-154(25)



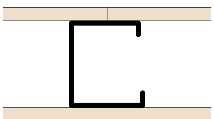
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-K-154(50)



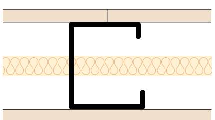
One layer of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 100mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Soundshield Plus (100mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS92 92mm Acoustic C stud	SD	4.4	124	60	52	AS92-K-154(100)



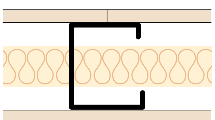
One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. No APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Impact Panel (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	40	AS70-K-163



One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.

1 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	43	AS70-K-163(25)

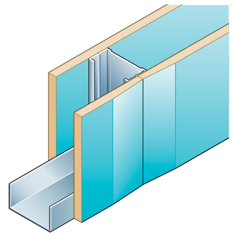


One layer of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.

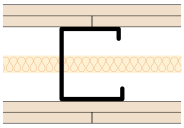
1 x 15mm Knauf Impact Panel (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-K-163(50)

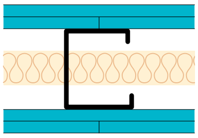
PARTITIONING SYSTEMS

SPEEDLINE ACOUSTIC C STUD SYSTEMS

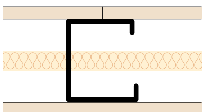


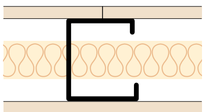
SPEEDLINE ACOUSTIC C STUD SYSTEM INCORPORATING KNAUF BOARDS

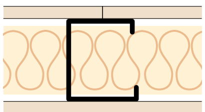
 Two layers of Knauf 15mm Impact Panel each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.	2 x 15mm Knauf Impact Panel (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
	AS70 70mm Acoustic C stud	SD	4.9	132	120	57 (-7)	AS70-K-166(25)

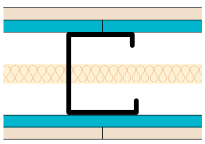
 Two layers of Knauf 15mm Soundshield Plus each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.	2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
	AS70 70mm Acoustic C stud	SD	4.9	132	120	57 (-5)	AS70-K-160(50)

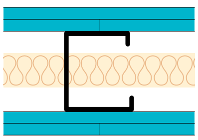
SPEEDLINE ACOUSIC C STUD SYSTEM INCORPORATING SINIAT GTEC BOARDS

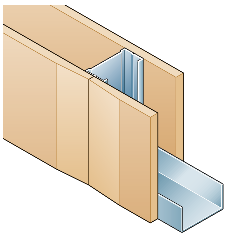
 One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.	1 x 15mm Siniat GTEC Megadeco (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
	AS70 70mm Acoustic C stud	SD	3.8	102	60	47	AS70-S-163(25)

 One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.	1 x 15mm Siniat GTEC Megadeco (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
	AS70 70mm Acoustic C stud	SD	3.8	102	60	48	AS70-S-163(50)
	AS92 92mm Acoustic C Stud	SD	4.4	124	60	49	AS92-S-163(50)

 One layer of Siniat GTEC 15mm Megadeco each side of Speedline Acoustic C stud at 600mm centres. 100mm APR in cavity. Size of Acoustic C stud as per table.	1 x 15mm Siniat GTEC Megadeco (100mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
	AS92 92mm Acoustic C Stud	SD	4.4	124	60	50	AS92-S-163(100)

 Two layers comprising of Siniat GTEC 1 x 15mm dB Board inner and 1 x 15mm Siniat GTEC Megadeco outer each side of Speedline Acoustic C stud at 600mm centres. 25mm APR in cavity. Size of Acoustic C stud as per table.	1 x 15mm Siniat GTEC dB Board 1 x 15mm Siniat GTEC Megadeco outer (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
	AS70 70mm Acoustic C stud	SD	4.9	132	90	56 (-7)	AS70-S-166SR(25)

 Two layers of Siniat GTEC 15mm GTEC dB Board each side of Speedline Acoustic C stud at 600mm centres. 50mm APR in cavity. Size of Acoustic C stud as per table.	2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
	AS70 70mm Acoustic C stud	SD	4.9	132	90	56(-4)	AS70-S-160(50)

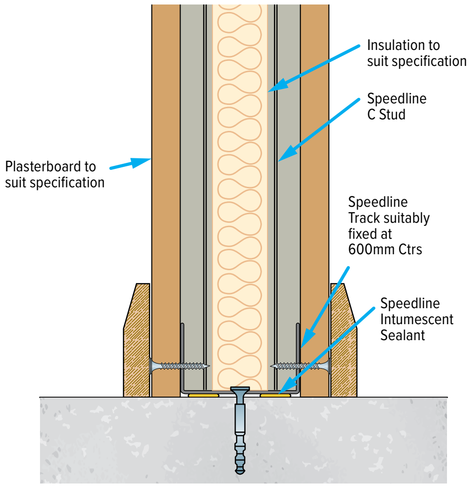


PARTITIONING SYSTEMS

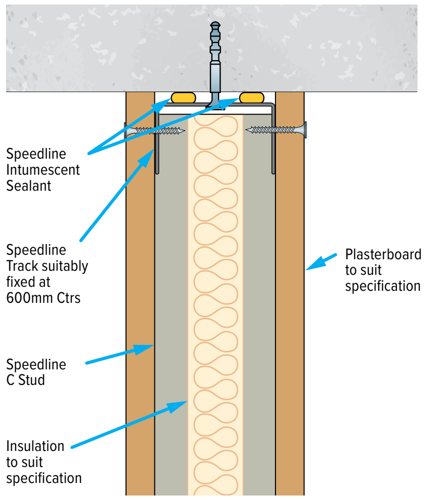
SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

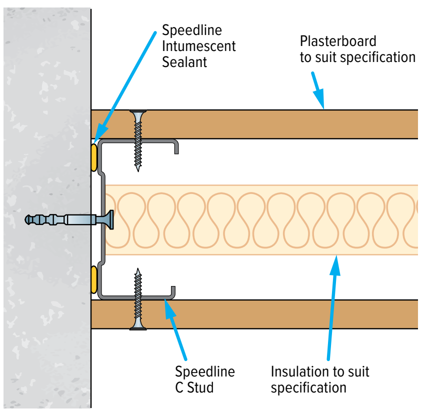
C STUD
SKIRTING DETAIL



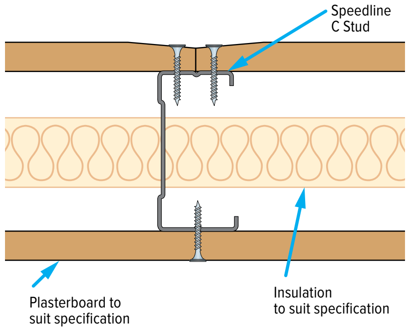
C STUD
FIXED HEAD DETAIL



C STUD
WALL ABUTMENT DETAIL

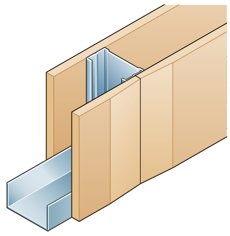


C STUD
STAGGERED JOINT

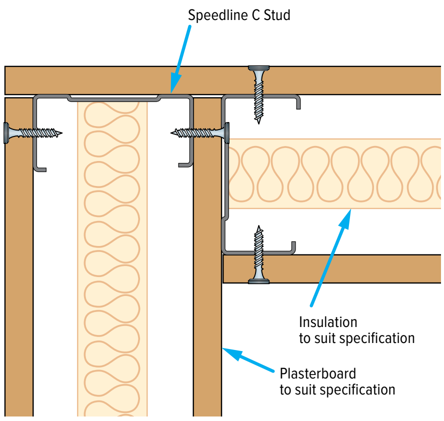


SINGLE FRAME CONSTRUCTION DETAILS

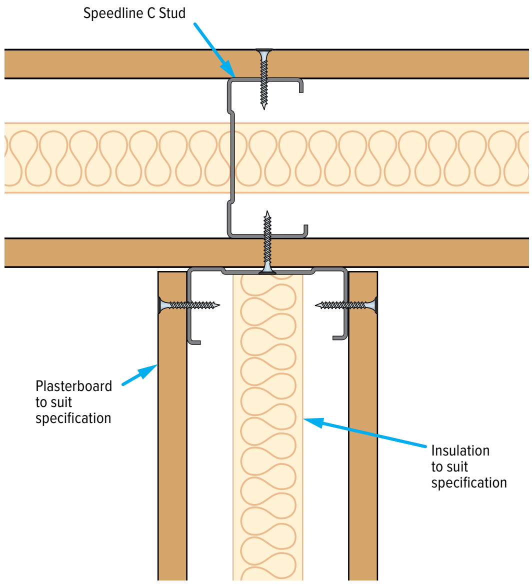
SINGLE LAYER



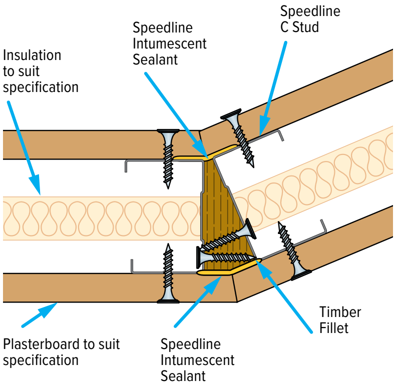
C STUD
CORNER DETAIL



C STUD
T JUNCTION



C STUD
IRREGULAR ANGLE CORNER DETAIL



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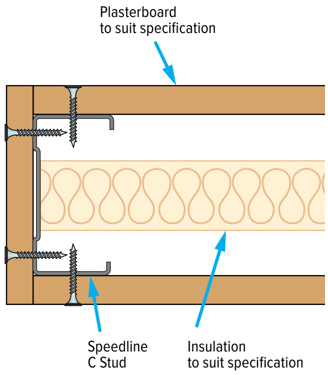
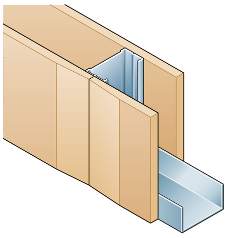
STOP END DETAIL





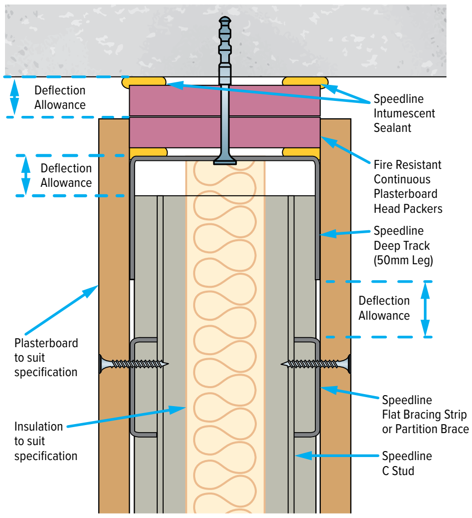
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

C STUD

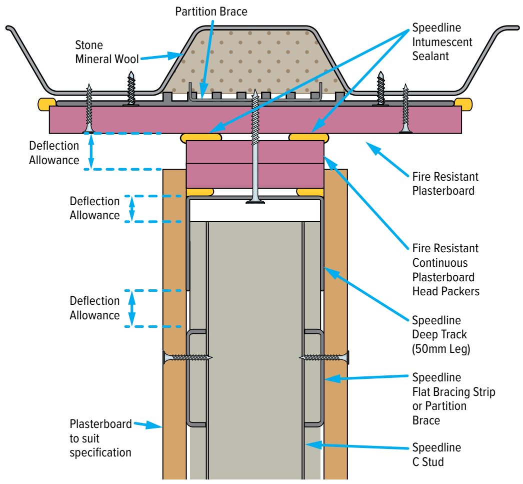
DEFLECTION HEAD – UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

C STUD

DEFLECTION HEAD – PARALLEL TO PROFILED SOFFIT – UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

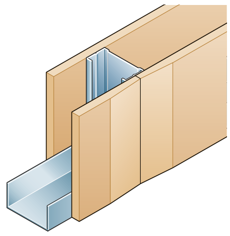
For various deflection requirements please refer to table below:

HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE

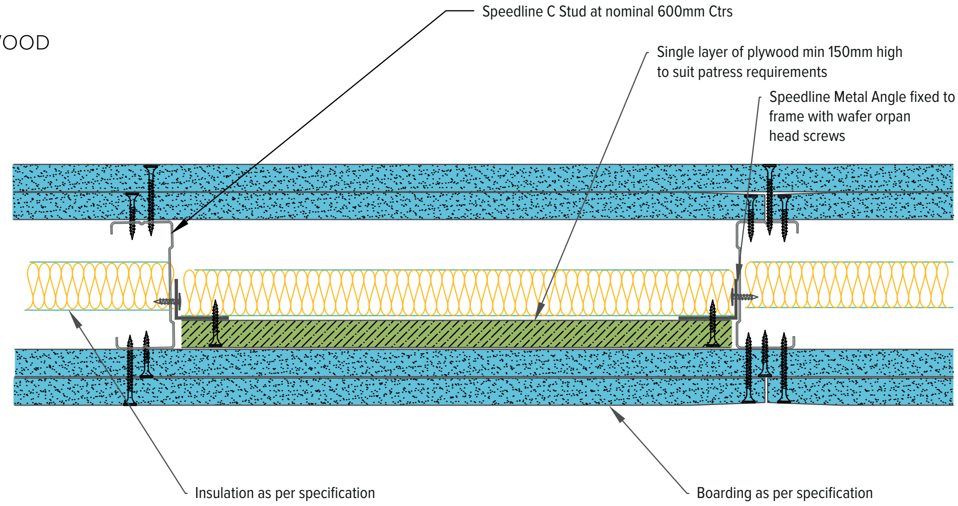
Deflection	Board Thickness	Head Track
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboard or 3 x 12.5mm Fire Boards	SPEDT 50mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPDT 70mm Leg

For deflection requirements greater than 45mm please contact enquiries@speedlinedrywall.co.uk

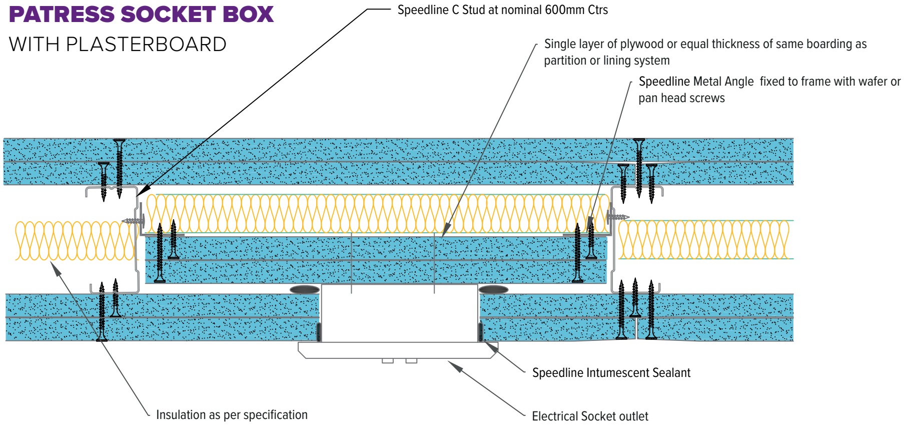
PARTITIONING SYSTEMS
SINGLE FRAME CONSTRUCTION DETAILS
SINGLE LAYER



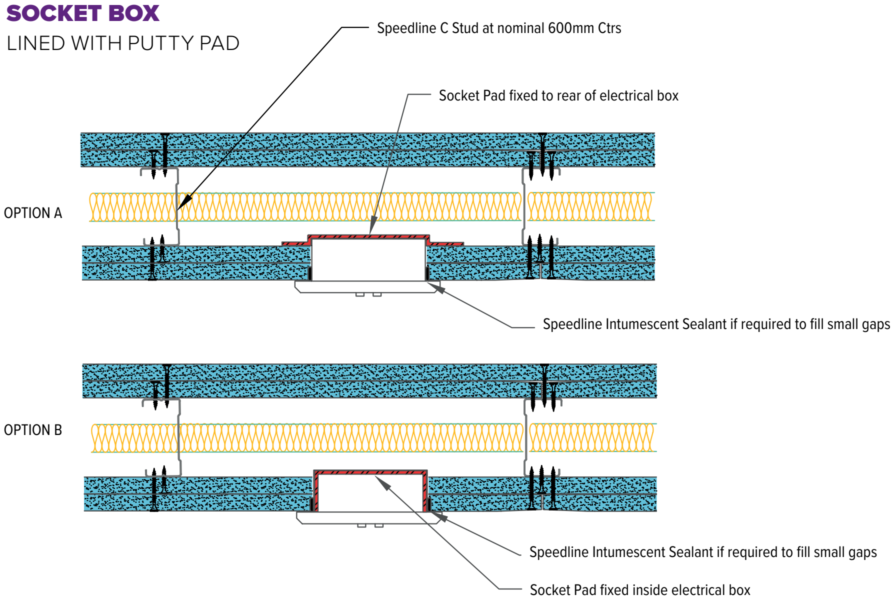
PATRESS
WITH PLYWOOD



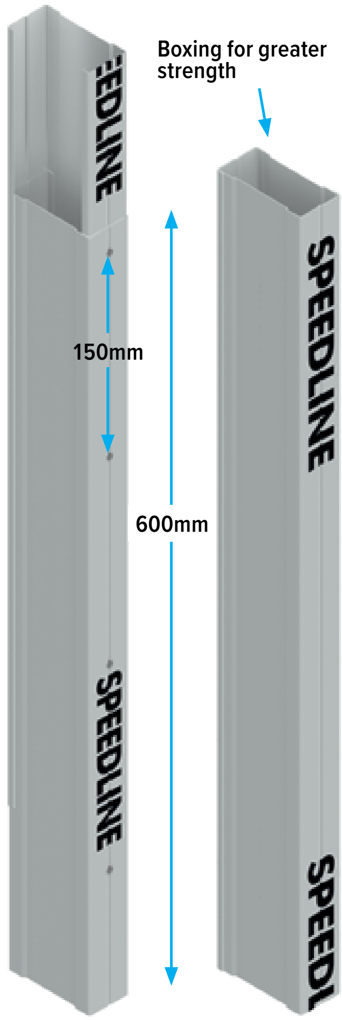
PATRESS SOCKET BOX
WITH PLASTERBOARD



SOCKET BOX
LINED WITH PUTTY PAD



Splicing for greater height. Overlap 600mm. Four Speedline Wafer Head Drywall screws at 150mm centres.



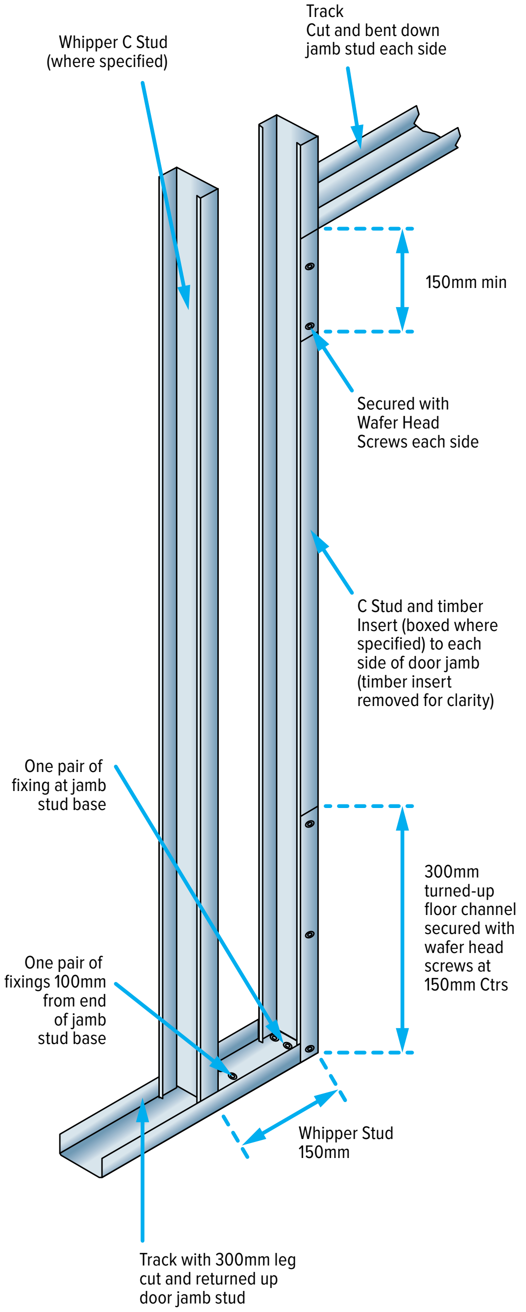
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

SINGLE LAYER

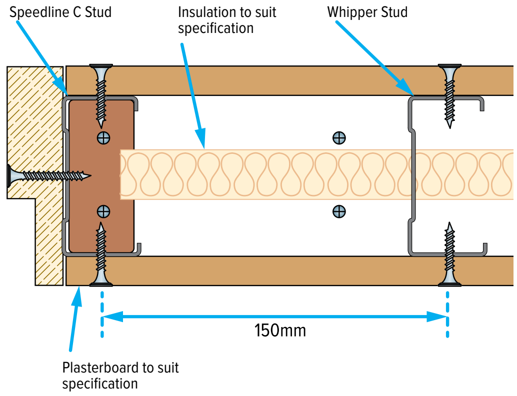
DOOR FRAME

DETAILS



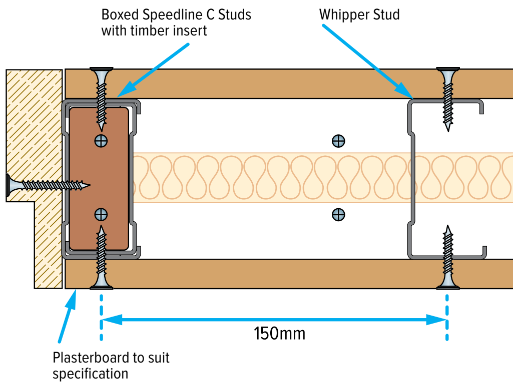
DOOR JAMB

DETAIL – DOORS UP TO 25kgs



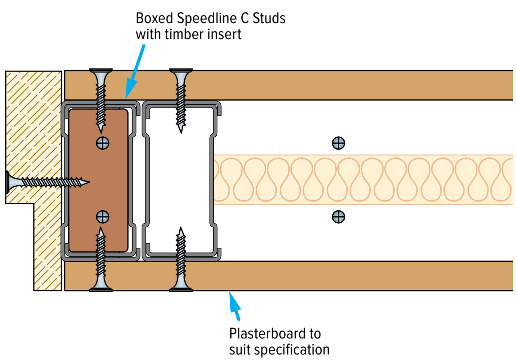
DOOR JAMB

DETAIL – DOORS UP TO 60kgs



DOOR JAMB

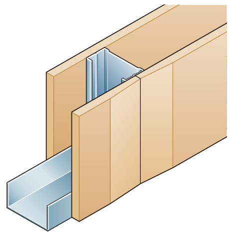
DETAIL – DOORS UP TO 100kgs



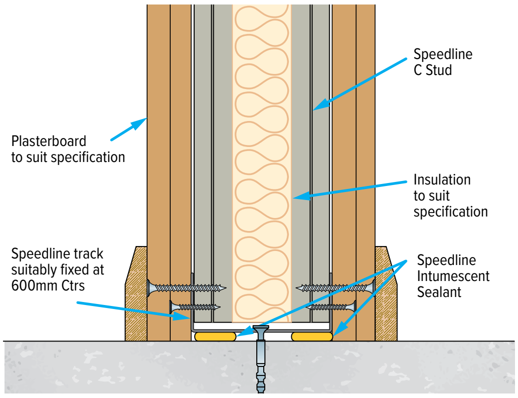
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

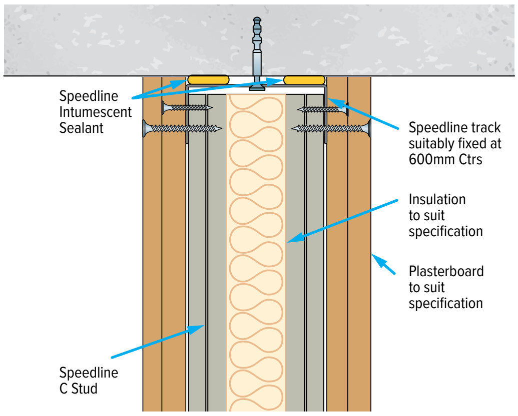
DOUBLE LAYER



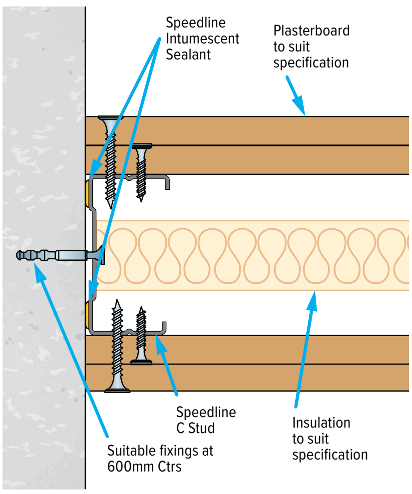
C STUD
SKIRTING DETAIL



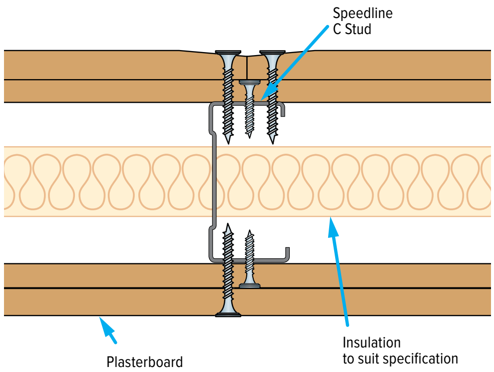
C STUD
HEAD DETAIL

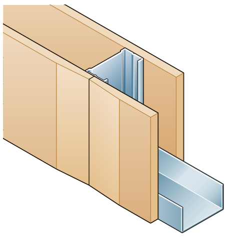


C STUD
WALL ABUTMENT DETAIL



C STUD
STAGGERED JOINT



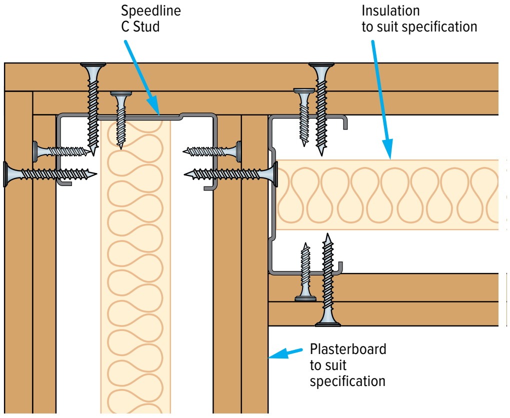


PARTITIONING SYSTEMS

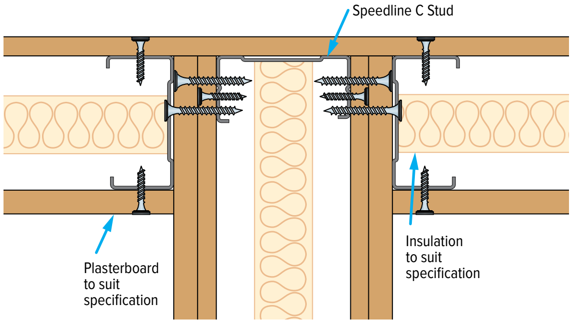
SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER

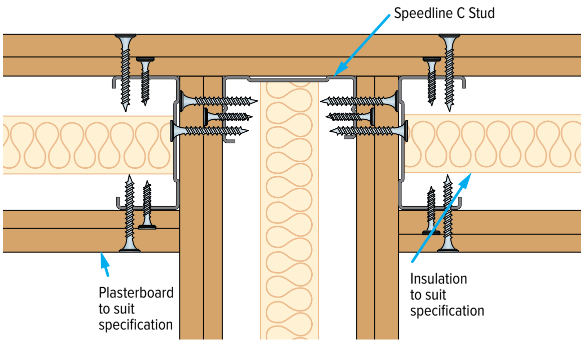
C STUD
CORNER DETAIL



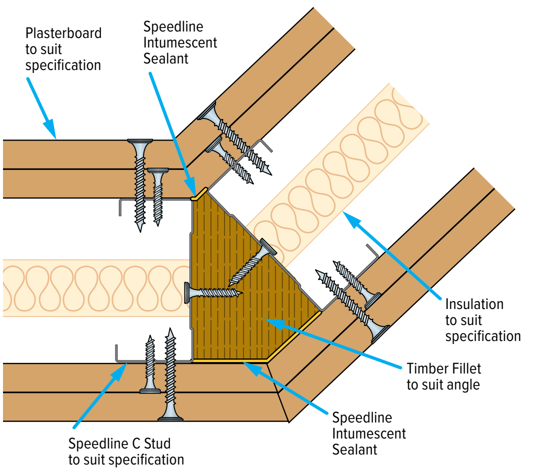
C STUD
T JUNCTION – DOUBLE LAYER
INTO SINGLE LAYER



C STUD
T JUNCTION

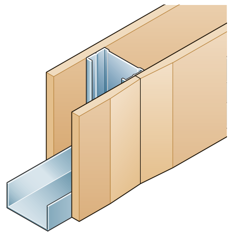


C STUD
IRREGULAR ANGLE CORNER

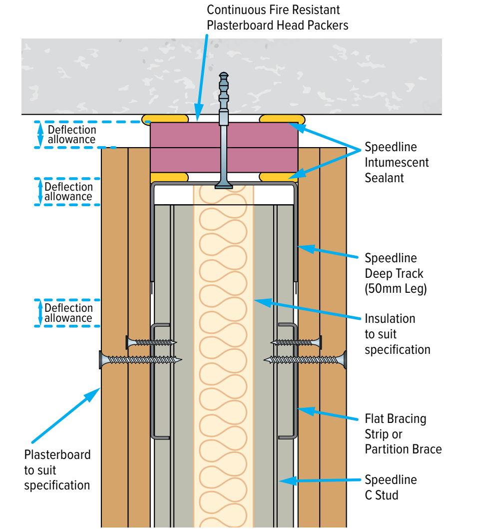


SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER

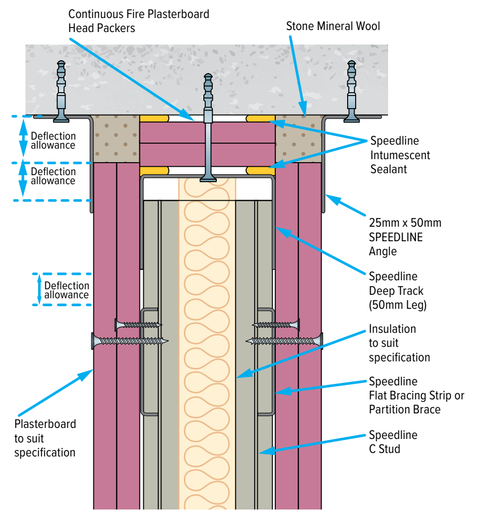


C STUD
DEFLECTION HEAD – UP TO 60 MINS FIRE RESISTANCE



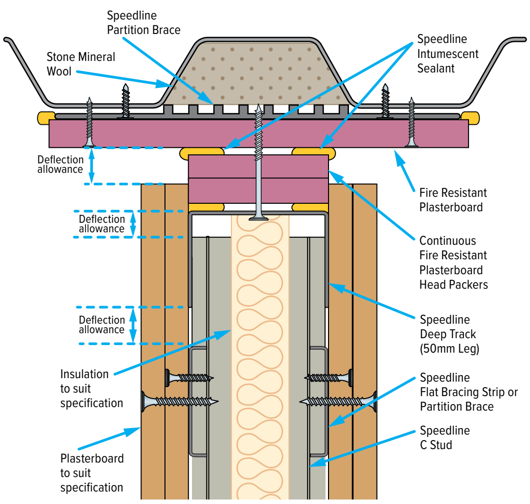
To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

C STUD
DEFLECTION HEAD - UP TO 120 MINS FIRE RESISTANCE



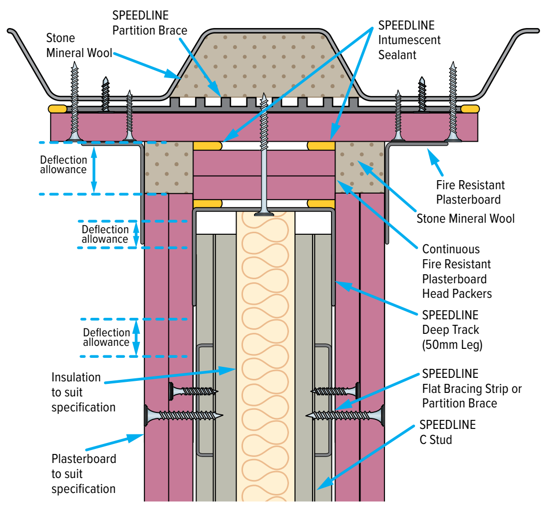
To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

C STUD
DEFLECTION HEAD - PARALLEL TO PROFILED SOFFIT - UP TO 60 MINS FIRE RESISTANCE

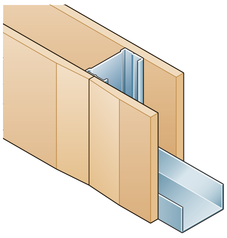


To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

C STUD
DEFLECTION HEAD - PARALLEL TO PROFILED SOFFIT - UP TO 120 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.



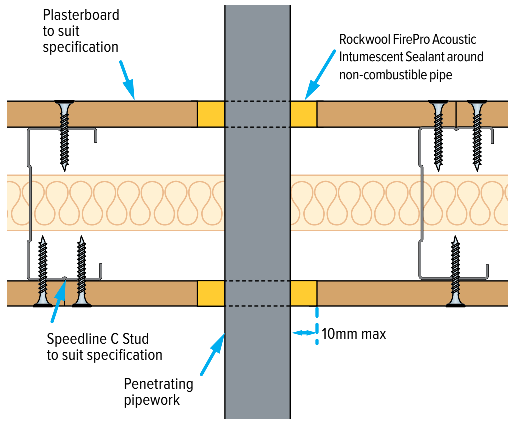
PARTITIONING SYSTEMS

SINGLE FRAME CONSTRUCTION DETAILS

DOUBLE LAYER

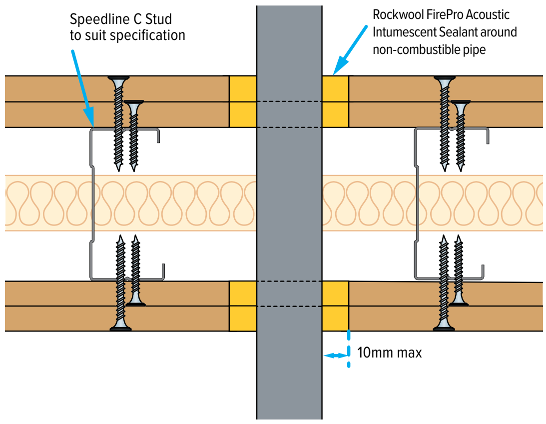
SINGLE LAYER

PIPE PENETRATION (UP TO 39mm DIAMETER)



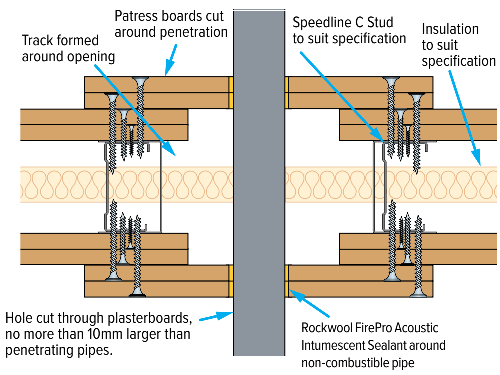
DOUBLE LAYER

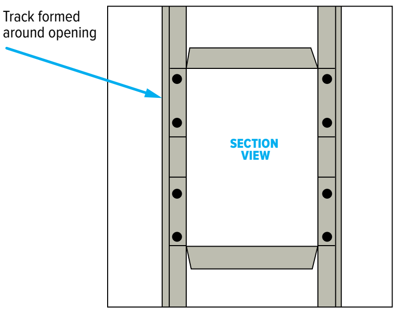
PIPE PENETRATION (UP TO 39mm DIAMETER)



DOUBLE LAYER

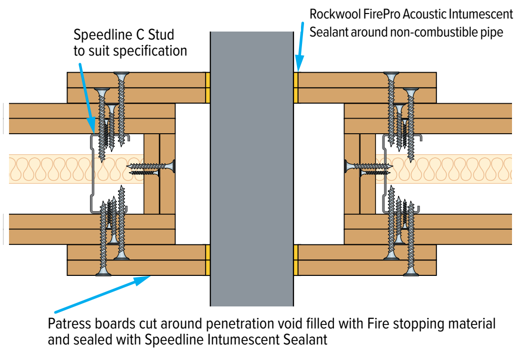
PIPE PENETRATION (BOX OUT FRAME)

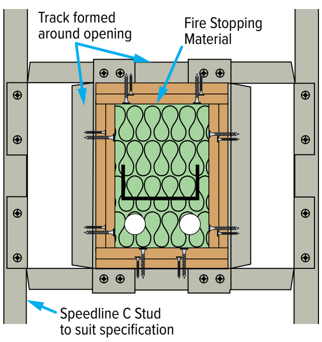




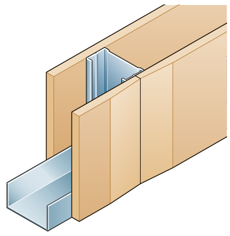
DOUBLE LAYER

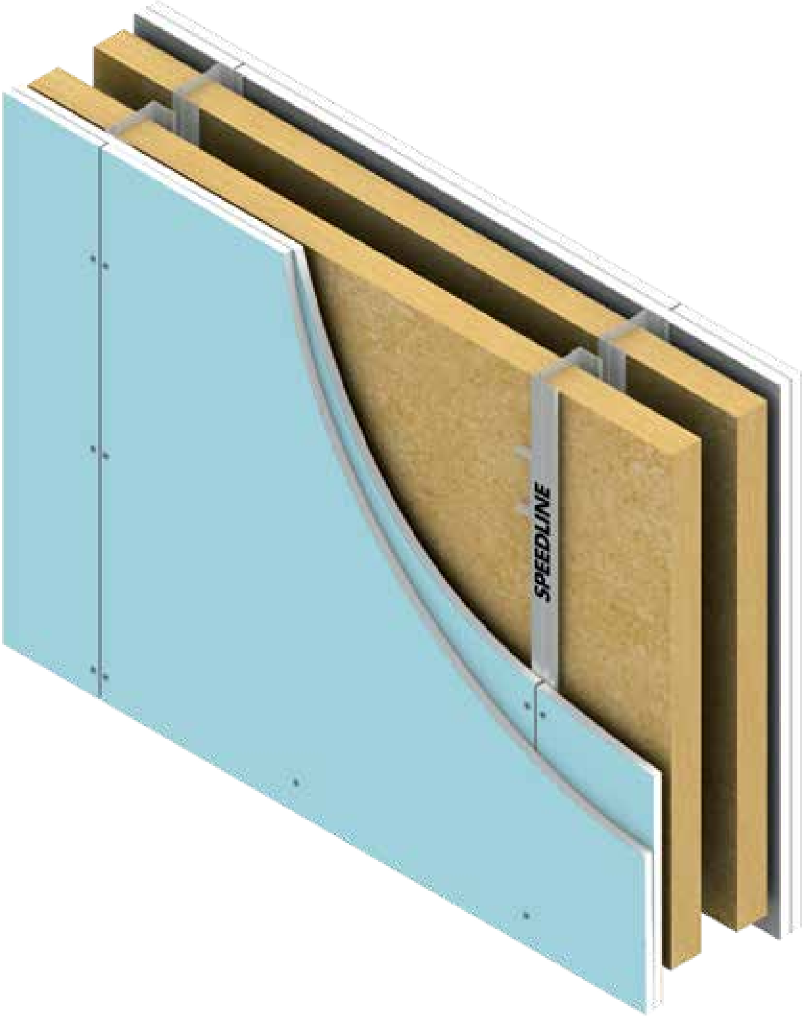
LETTERBOX PENETRATION (BOX OUT FRAME)





SPEEDLINE TWIN FRAME SOLUTIONS





Benefits

- Variable cavity thickness.
- Overall construction 200mm to 400mm on tested configurations.
- Speedline thermal braced C stud twin frame achieves Rw 65dB and a theoretical U value of 0.0W/m²K.

Speedline range of twin frames partitions are available in three options:

- Braced C stud twin frames with performance up to R_w 65dB.
- Unbraced heavy duty C stud twin frames performance up to R_w 68dB.
- Unbraced I stud twin frames performance up to R_w 70dB.

Separating walls in residential applications, partitions between rooms in commercial, healthcare or education buildings require wall build ups with high levels of acoustic performance. Bracing C studs every 1200mm vertically.

All sound insulation data is based on laboratory evaluation of the building element in isolation and cannot reproduce your installed local conditions. It is important that flanking transmission is considered at design stage.

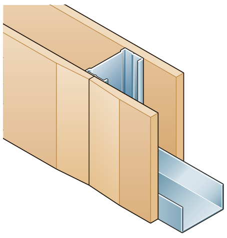
On site testing is measured using a different scale. It uses $D_{nT,w}$ Standardised Level Difference. Values on site are approximately 7 to 8 decibels lower than achieved in the laboratory, one of the primary reasons for this difference will be the downgrading due to flanking transmission. This highlights the need for good design and flanking details to help minimise these reductions. Deflection head details if used can also be expected to impact negatively on the decibel rating achieved on site.

Residential requirements for party walls under Building Regulations Approved document E are measured as $D_{nT,w}$ + C_{tr}. We print the C & C_{tr} figures in brackets after the Rw dB figures. For example Twin I stud wall TWPI50-B-60 (50) on page 71 is 67 (-4;-10).

NB Please refer to pages 21-23 for product codes.

Utilising British Gypsum Boards	Duty Grade	Max Height (m)	Nominal Width (mm)	Fire Resistance (mins)	Sound Insulation with 2 x 50mm APR Infill (R_w dB) (C_{tr})	Sound Insulation with 1 x 50mm APR Infill (R_w dB) (C_{tr})	Test Reference with 2 x 50mm APR	Test Reference with 50mm APR
Twin PI 50 stud with 2 x 15mm British Gypsum Gyproc Soundbloc and APR as per table	SD	2.7	200	90	70 (-10)	67 (-10)	TWI50-B-60(2x50)(200)	TWI50-B-60(50)(200)

SPEEDLINE DRYWALL SYSTEMS | Part of SIG



PARTITIONING SYSTEMS

SPEEDLINE TWIN FRAME SOLUTIONS

This information is provided only as a guide and should be read in conjunction with Building Regulations Approved Document E.

The primary objective of the Building Regulations Approved Document E is to raise the standard of sound insulation in all dwellings as well as between rooms in hostels, hotels and residential homes. This applies in all new builds, refurbishments and conversions.

The solutions in the residential sector of this document are aimed at satisfying:

E1 Protection against sound from other parts of the building and adjoining buildings.

E2 Protection against sound within a dwelling/house etc.

Dwelling-houses and flats – performance standards for separating walls, separating floors and stairs that have a separating function.		Airborne sound insulation D_{nTw} + C_{tr} dB (Minimum values)	Impact sound insulation L_{nTw} dB (Maximum values)
Purpose built dwelling - houses and flats	Walls	45	–
	Floors and Stairs	45	62
Dwelling houses and flats formed by material change of use	Walls	43	–
	Floors and Stairs	43	64

Laboratory values for new internal walls and floors within dwelling-houses, flats and rooms for residential purposes, whether purpose built or formed by material change of use. All internal walls and floors, within a dwelling, are required to achieve R_W 40dB, with the exception of walls which include a door.

Pre-Completion Testing

- **Buildings are to be tested prior to completion in order to confirm they meet or exceed Part E standards.**
- **The Regulations require that one in ten of each construction type requires testing.**

Full details of pre-completion testing are explained in Section 1 of the Approved Document E.

Robust Details

The robustdetails® have undergone an extensive sound insulation testing regime, robust design analysis and independent audit and have satisfied the robustdetails® Management Board that they should provide a level of sound insulation compliant with Part E (England and Wales) and Part G (Northern Ireland).

The robustdetails® scheme provides an alternative to pre-completion testing for demonstrating compliance with the performance standards for new build dwellings. Every dwelling built using the scheme needs to be registered with robustdetails® and a plot registration fee paid.

Wall Lining

Most Common Builds:

- **Two layers 12.5mm acoustic plasterboard, subject to board having combined mass of 22 kg/m².**
- **12.5mm sound resistant plasterboard outer leaf and 19mm inner leaf (mounted horizontally). Subject to combined mass of 22 kg/m².**
- **Two or more layers of gypsum-based board minimum (total nominal mass per unit area 22 kg/m²) both sides.**
- **All joints staggered.**

Wall Width

200mm (min) between inner faces of wall linings.

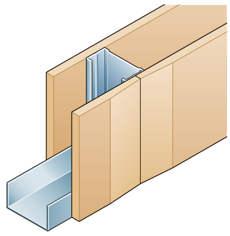
Absorbent Material

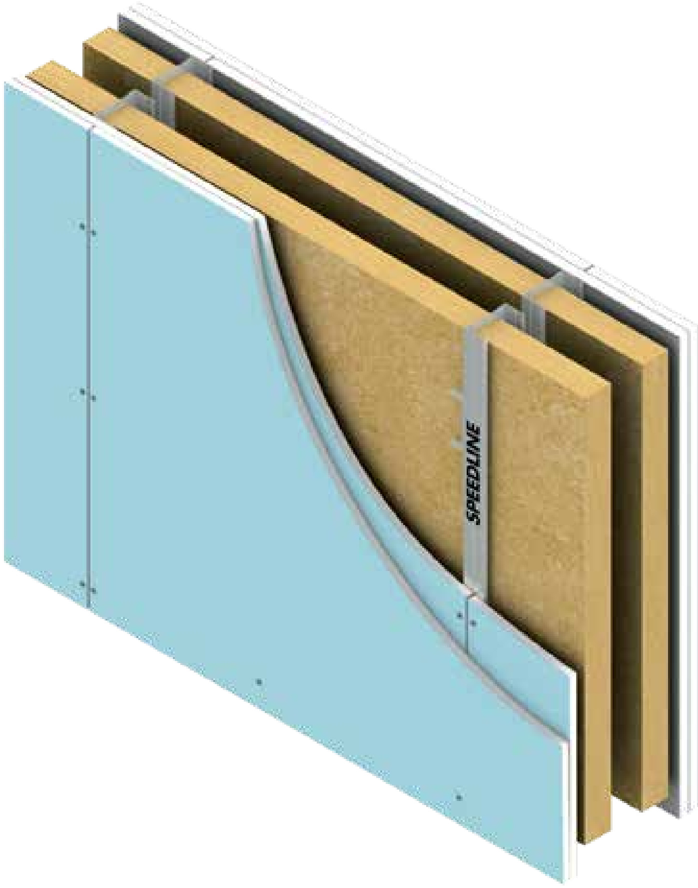
- **One layer 50mm (min) unfaced mineral wool batts (density 33-60 kg/m³).**
- **Two layers 25mm (min) unfaced mineral wool batts (density 33-60 kg/m³).**
- **Two layers 25mm (min) unfaced mineral wool quilt (density min 10 kg/m³).**
- **Refer to robust details specification for checklists and construction details.**

Do

- **Keep wall linings at least 200mm apart.**
- **Ensure the batts cover whole wall area and are fitted together tightly.**
- **Make sure batts are not tightly compressed by the twin frames.**
- **Ensure that all cavity stops/closers are flexible or are fixed to one frame only.**
- **Make sure there is no connection between the two leaves except where ties are necessary for structural reasons.**
- **Stagger joints in wall linings to avoid air paths.**
- **Seal all joints in outer layer with tape or caulk with sealant.**

SPEEDLINE TWIN FRAME SOLUTIONS





Where pre completion testing is to be used, Part E stipulates that the builder needs to demonstrate that the prescribed acoustic rating has been achieved. To satisfy, 1 in 10 new dwellings of the same build type should be pre completion tested on site. The testing is applicable to separating walls and floors. The testing will need to be carried out by an accredited third party. Twin Frame walls have the potential to satisfy the relevant criteria.

All acoustic test data is conducted under laboratory conditions, built at 600mm centres and measured as R_W dB figures. The "on site" conditions in which the partition is to be built may have a significant effect on the test figures quoted, and due to this it is unlikely that the R_W dB figures quoted from laboratory tests will be repeated in "on site" conditions. Deflection head details can also negatively affect performance please contact **enquiries@speedlinedrywall.co.uk** for further details.

Thermal Efficient Braced C Stud Wall

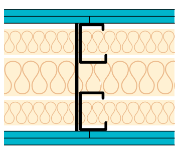
Braced C stud with void completely filled to give a theoretical U value of 0.0W/m²K

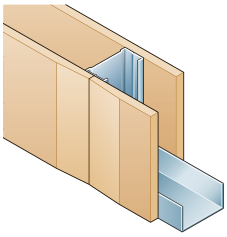
In order to assist with SAP calculations, Theoretical Party Wall U values, cavities within party walls need to be fully filled with insulation.

Speedline have conducted testing with the cavity fully filled with insulation. Please see system reference TWC50-B-59(2x50+100)(250).

For further assistance and additional solutions please contact **enquiries@speedlinedrywall.co.uk**

Example

	2 x 12.5mm British Gypsum Gyproc Soundbloc (1 x 100mm APR & 2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
 Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as per table. (1 x 100mm APR & 2 x 50mm APR in cavity).	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	250	60	65 (-8)	TWC50-B-59(2x50+100)(250)

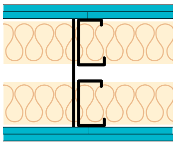


PARTITIONING SYSTEMS

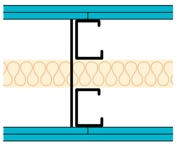
SPEEDLINE BRACED TWIN FRAME SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC BOARDS

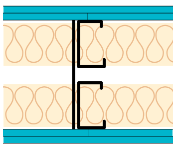
SPEEDLINE BRACED TWIN FRAME SYSTEM INCORPORATING BRITISH GYPSUM GYPROC BOARDS



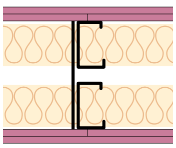
	2 x 12.5mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as per table. (2 x 50mm APR in cavity).	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	240	60	63 (-9)	TWC50-B-59(2x50)(240)



	2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Double layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	90	62 (-9)	TWC50-B-60 (50)(200)

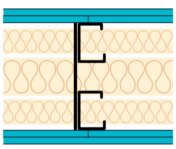


	2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Double layer of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	90	65 (-8)	TWC50-B-60 (2x50)(200)



	2 x 15mm British Gypsum Gyproc Fireline (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Double layer of British Gypsum 15mm Gyproc Fireline each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	62 (-8)	TWC50-B-60(2x50)(200)

Braced C stud Twin Frame constructed with a fully filled Cavity. Often with new SAP regulations we are asked to increase the amount of insulation to fully fill the cavity. Designers should refer to the latest Part L requirements in new build to ensure their requirements are satisfied. The constructions above can all be reproduced with a fully filled cavity and as long as the compression of the insulation is less than 10 percent we would expect no loss of acoustic performance.
Speedline has a fully tested system with a full filled cavity (refer to table below).



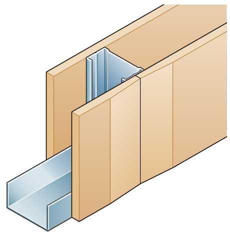
	2 x 12.5mm British Gypsum Gyproc Soundbloc (1 x 100mm APR & 2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_wdB)[5] (C_{tr})	System reference
Double layer of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. Size of C stud as per table. (1 x 100mm APR & 2 x 50mm APR in cavity).	Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	250	60	65 (-8)	TWC50-B-59(2x50+100) (250)

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

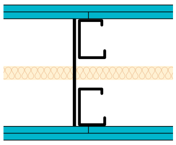
Board Configuration		Fire Rating	
	2 x 15mm Soundbloc		90 minutes
	2 x 15mm Soundbloc F		120 minutes substantiating fire reports are available.

SPEEDLINE BRACED TWIN FRAME SYSTEMS

INCORPORATING KNAUF BOARDS

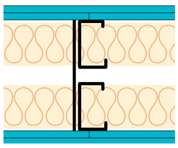


SPEEDLINE BRACED TWIN FRAM SYSTEM INCORPORATING KNAUF BOARDS



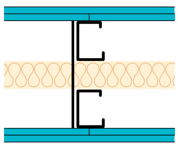
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 25mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	58 (-8)	TWC50-K-60 (25)(200)



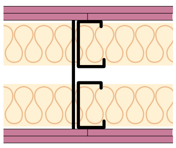
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	63 (-8)	TWC50-K-60 (2x50)(200)



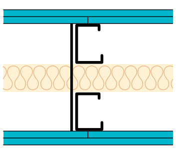
Two layers of Knauf 15mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	62 (-7)	TWC50-K-62 (2x50)(200)



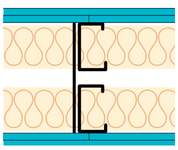
Two layers of Knauf 15mm Fire Panel each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Knauf Fire Panel (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	64 (-8)	TWC50-K-62 (2x50)(200)



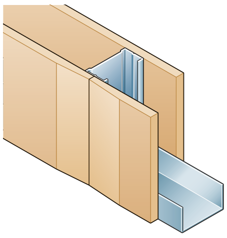
Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 50mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	60	63 (-7)	TWC50-K-59 (50)(200)



Two layers of Knauf 12.5mm Soundshield Plus each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 12.5mm Knauf Soundshield Plus (2x50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	60	63 (-7)	PW50-K-59 (2x50)

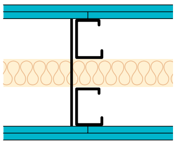


PARTITIONING SYSTEMS

SPEEDLINE BRACED TWIN FRAME SYSTEMS

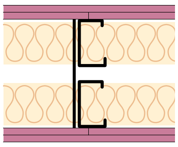
INCORPORATING SINIAT GTEC BOARDS

SPEEDLINE BRACED TWIN FRAME SYSTEM INCORPORATING SINIAT GTEC BOARDS



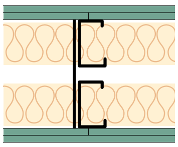
Two layers of Siniat 15mm GTEC dB Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 1 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (1 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	90	62 (-7)	TWC50-S-60 (50)(200)



Two layers of Siniat 15mm GTEC Fire Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC Fire Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	64 (-9)	TWC50-S-62 (2x50)(200)

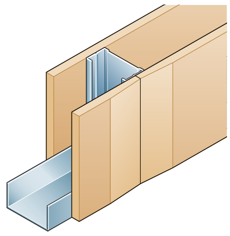


Two layers of Siniat 15mm GTEC MR Fire Board each side of Speedline braced twin frame 50mm C stud at 600mm centres. 2 x 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC MR Fire Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Braced Twin Frame SPS50 50mm C stud wall	SD	6.2	200	120	63 (-10)	TWC50-S-62MR (2x50)(200)

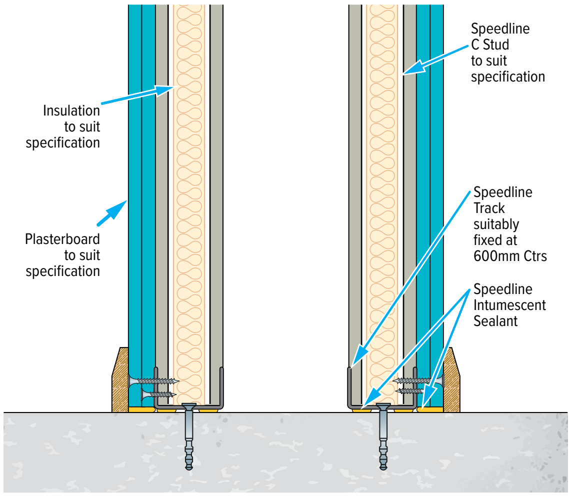
SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS



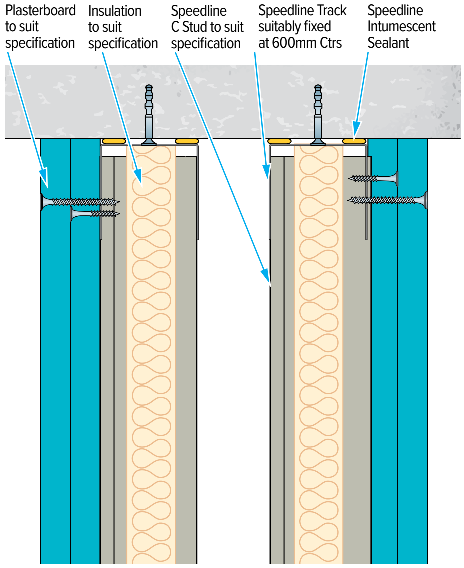
BRACED C STUD TWIN FRAME

SKIRTING DETAIL



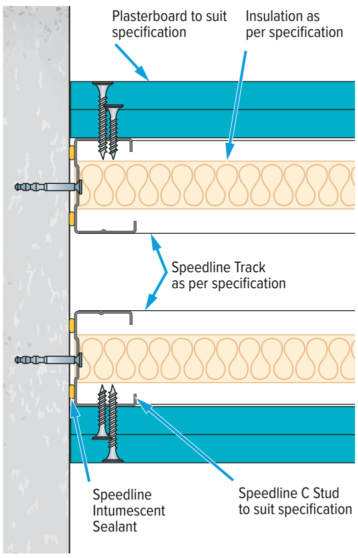
BRACED C STUD TWIN FRAME

FIXED HEAD DETAIL



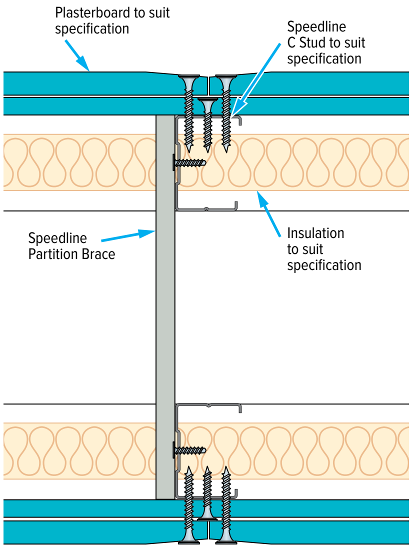
BRACED C STUD TWIN FRAME

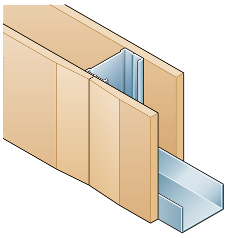
WALL ABUTMENT



BRACED C STUD TWIN FRAME

STAGGERED JOINT





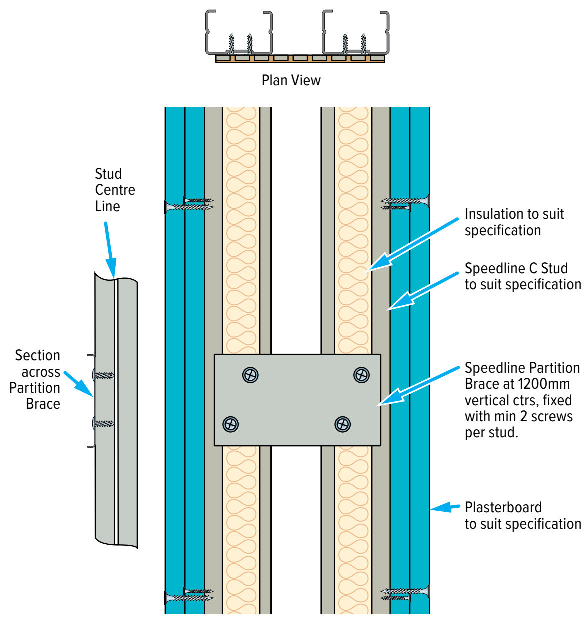
PARTITIONING SYSTEMS

SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS

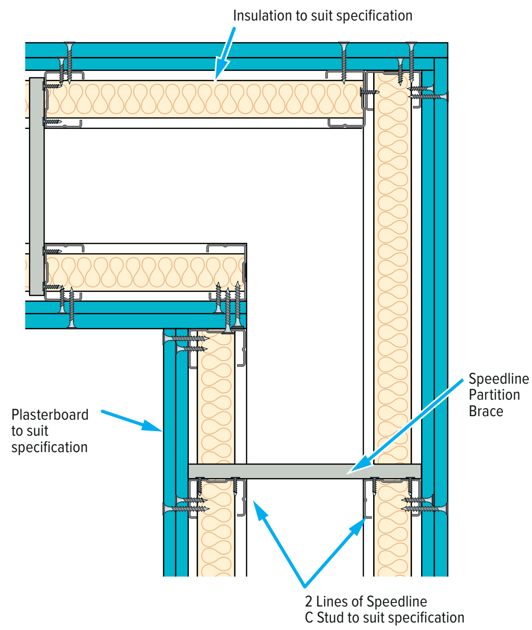
BRACED C STUD TWIN FRAME

HORIZONTAL BOARD JOINT



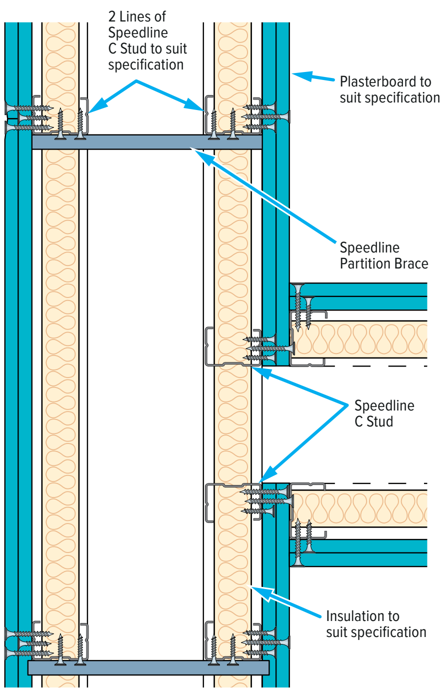
BRACED C STUD TWIN FRAME

CORNER DETAIL



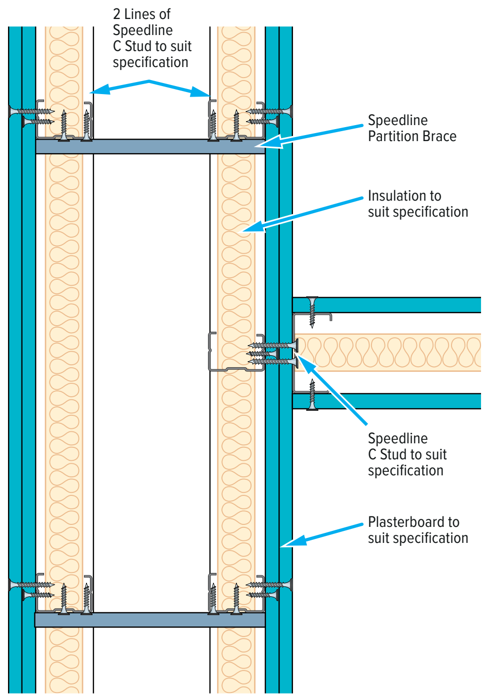
BRACED C STUD TWIN FRAME

ACOUSTIC T JUNCTION



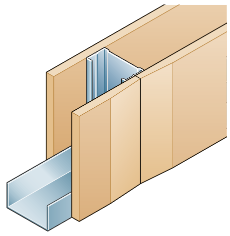
BRACED C STUD TWIN FRAME

T JUNCTION TO STANDARD PARTITION



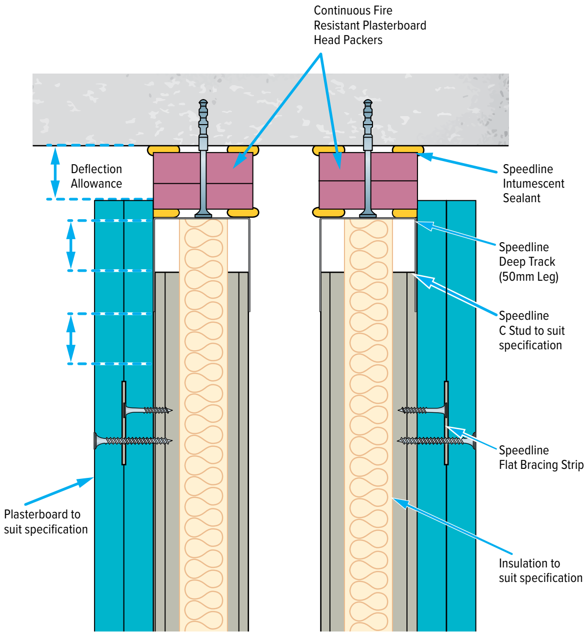
SPEEDLINE BRACED TWIN FRAME SYSTEMS

DETAILS



BRACED C STUD TWIN FRAME

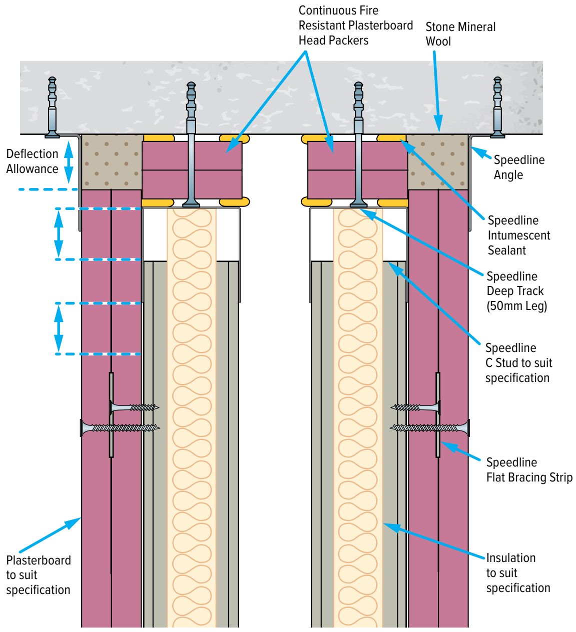
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

BRACED C STUD TWIN FRAME

DEFLECTION HEAD UP TO 120 MINS FIRE RESISTANCE

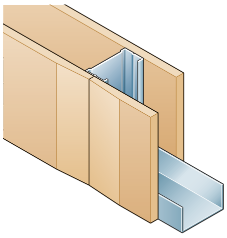


To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

For various deflection requirements please refer to table below:

HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE

Deflection	Board Thickness	Head Track
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboards or 3 x 12.5mm Fire Boards	SPEDT 50mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPDT 70mm Leg



PARTITIONING SYSTEMS

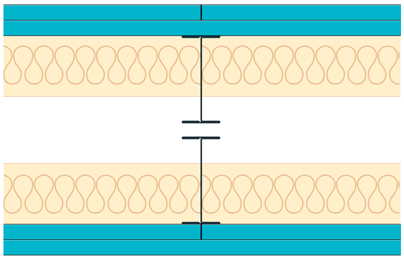
SPEEDLINE UNBRACED TWIN STUD SYSTEMS

SOLUTIONS

SPEEDLINE UNBRACED TWIN I STUDS

High Performance Walls

Our non-load bearing high performance walls, constructed from plasterboard facings on metal studs, offer considerable advantages over traditional heavy masonry construction. They are lighter weight, quicker to construct and more cost-effective and able to achieve high levels of fire resistance and sound insulation..



Speedline can offer two options:

- Unbraced I studs
- Unbraced heavy duty Speedline C studs i.e. PSHD70 (0.7mm gauge)

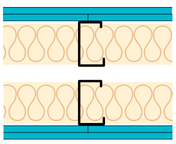
Benefits

- Acoustics up to R_w 70dB with C_{tr} of -10.
- Suitable for use with Code for Sustainable Homes or BREEAM.
- Suitable for party wall construction with requirements of +3 to +8dB $D_{nT,w}$ on ADE requirements of 45 $D_{nT,w}$ + C_{tr}.
- Fire resistance up to 120 mins BS 476: Part 22.
- Structural columns can be incorporated within the partition cavity due to unbraced twin frame design.

SPEEDLINE UNBRACED HEAVY DUTY C STUDS

Benefits

- Tested to BS 5234 achieved Severe duty rating
- Up to 120 minutes fire resistance
- Achieves R_w 68dB (C_{tr} -8)
- Suitable for use with Code for Sustainable Homes or BREEAM
- Structural columns can be incorporated within with the partition cavity due to unbraced twin frame design

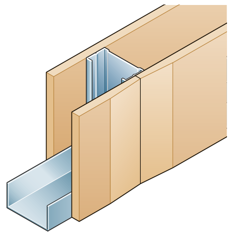
	2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
 Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline unbraced Twin Frame PSHD70 Heavy Duty C stud at 600mm centres. 2 x 50mm APR in cavity.	Unbraced Twin Frame PSHD70 70mm Heavy Duty C stud	SD	3.0	220	90	68 (-8)	TWHD70-B-60 (2x50)

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

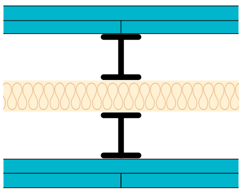
Board Configuration		**Fire Rating**	
	2 x 15mm Soundbloc		90 minutes
	2 x 15mm Soundbloc F		120 minutes

Substantiating Fire Reports are available.

SPEEDLINE UNBRACED TWIN STUD SYSTEMS

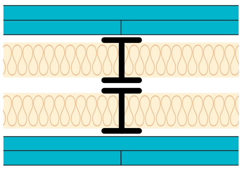


SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 50mm APR in cavity. Size of I stud as per table.

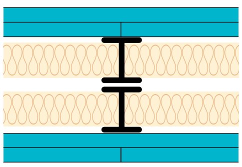
2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Unbraced Twin Frame PI50 50mm I Stud Wall	SD	2.7	200	90	67 (-10)	TWI50-B-60(50)(200)
Unbraced Twin Frame PI60 60mm I Stud Wall	SD	3.3	200	90	67 (-10)	TWI60-B-60(50)(200)
Unbraced Twin Frame PI70 70mm I Stud Wall	SD	3.9	210	90	67 (-10)	TWI70-B-60(50)(210)
Unbraced Twin Frame PI92 92mm I Stud Wall	SD	5.4	250	90	67 (-10)	TWI92-B-60(50)(250)
Unbraced Twin Frame PI146 146mm I Stud Wall	SD	7.2	360	90	67 (-10)	TWI146-B-60(50)(360)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 2 x 50mm APR in cavity. Size of I stud as per table.

2 x 15mm British Gypsum Gyproc Soundbloc (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Unbraced Twin Frame PI50 50mm I Stud Wall	SD	2.7	200	90	70 (-10)	TWI50-B-60(2x50)(200)
Unbraced Twin Frame PI60 60mm I Stud Wall	SD	3.3	200	90	70 (-10)	TWI60-B-60(2x50)(200)
Unbraced Twin Frame PI70 70mm I Stud Wall	SD	3.9	210	90	70 (-10)	TWI70-B-60(2x50)(210)
Unbraced Twin Frame PI92 92mm I Stud Wall	SD	5.4	250	90	70 (-10)	TWI92-B-60(2x50)(250)
Unbraced Twin Frame PI146 146mm I Stud Wall	SD	7.2	360	90	70 (-10)	TWI146-B-60(50)(360)

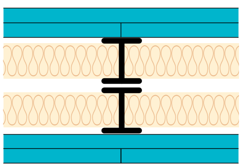
SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING KNAUF SOUNDSHIELD PLUS



Two layers of Knauf 15mm Soundshield Plus each side of Speedline Unbraced Twin Frame I stud at 600mm centres. 2 x 50mm APR in cavity. Size of I stud as per table.

2 x 15mm Knauf Soundshield Plus (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Unbraced Twin Frame PI50 50mm I Stud Wall	SD	2.7	200	120	69 (-9)	TWI50-K-60(2x50)(200)
Unbraced Twin Frame PI60 60mm I Stud Wall	SD	3.3	200	120	69 (-9)	TWI60-K-60(2x50)(200)
Unbraced Twin Frame PI70 70mm I Stud Wall	SD	3.9	210	120	69 (-9)	TWI70-K-60(2x50)(210)
Unbraced Twin Frame PI92 92mm I Stud Wall	SD	5.4	250	120	69 (-9)	TWI92-K-60(2x50)(250)
Unbraced Twin Frame PI146 146mm I Stud Wall	SD	7.2	360	120	69 (-9)	TWI146-K-60(2x50)(360)

SPEEDLINE TWIN FRAME I STUD PARTITIONS INCORPORATING SINIAT GTEC dB BOARDS



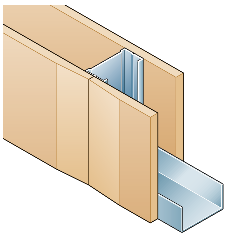
Two layers of Siniat 15mm GTEC dB Board each side of Speedline Braced Twin Frame 50mm C stud at 600mm centres. 2 X 50mm APR in cavity. Size of C stud as per table.

2 x 15mm Siniat GTEC dB Board (2 x 50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Unbraced Twin Frame PI50 50mm I Stud Wall	SD	2.7	200	90	69 (-8)	TWI50-S-60(2x50)(200)
Unbraced Twin Frame PI60 60mm I Stud Wall	SD	3.3	200	90	69 (-8)	TWI60-S-60(2x50)(200)
Unbraced Twin Frame PI70 70mm I Stud Wall	SD	3.9	210	90	69 (-8)	TWI70-S-60(2x50)(210)
Unbraced Twin Frame PI92 92mm I Stud Wall	SD	5.4	250	90	69 (-8)	TWI92-S-60(2x50)(250)
Unbraced Twin Frame PI146 146mm I Stud Wall	SD	7.2	360	90	69 (-8)	TWI146-S-60(2x50)(360)

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration	Fire Rating
2 x 15mm Soundbloc	90 minutes
2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

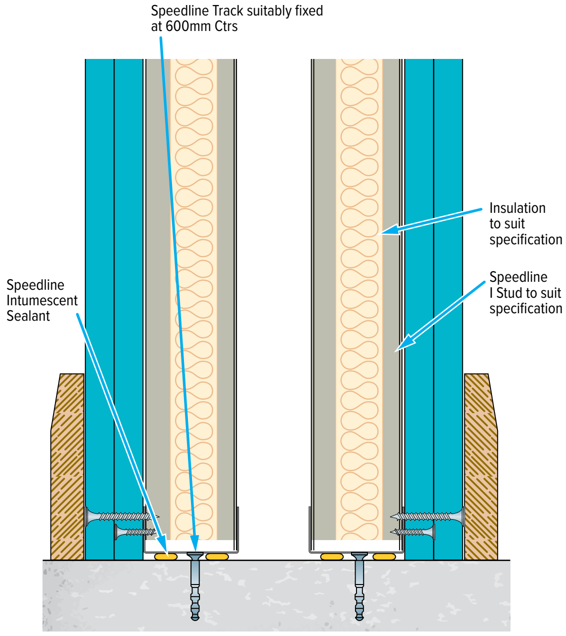


PARTITIONING SYSTEMS

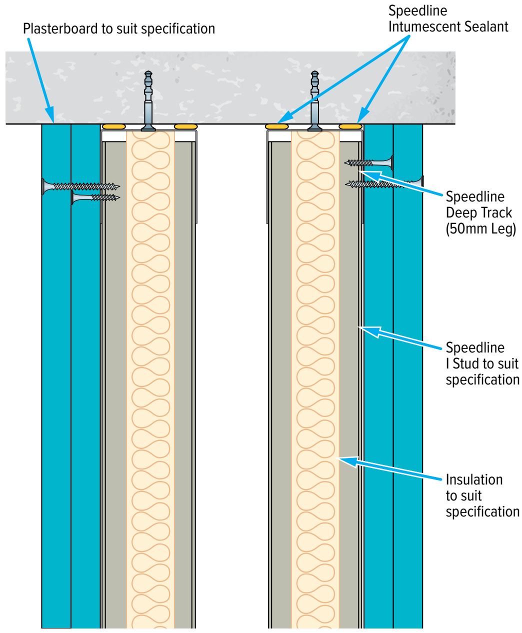
TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

TWIN FRAME CONSTRUCTION DETAILS – UNBRACED

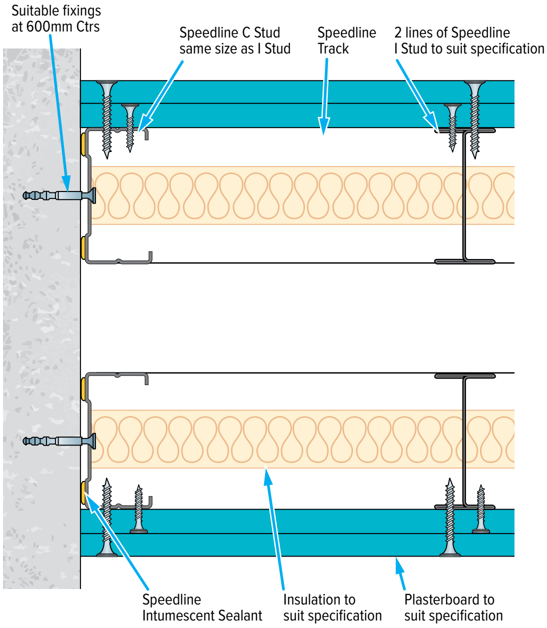
I STUD TWIN FRAME
SKIRTING DETAIL



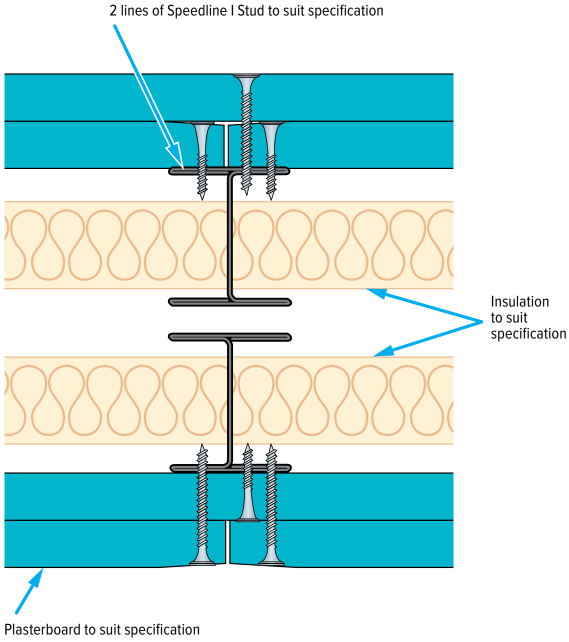
I STUD TWIN FRAME
FIXED HEAD DETAIL



I STUD TWIN FRAME
WALL ABUTMENT



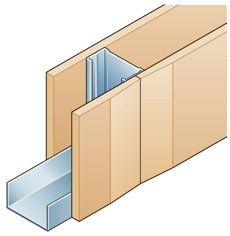
I STUD TWIN FRAME
STAGGERED JOINT



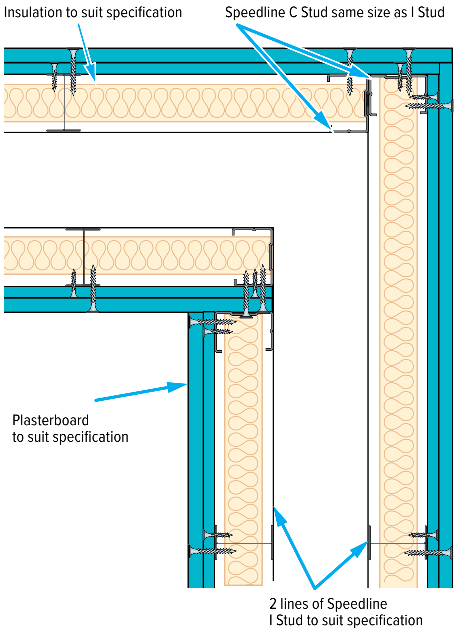
SPEEDLINE DRYWALL SYSTEMS | Part of SIG

TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

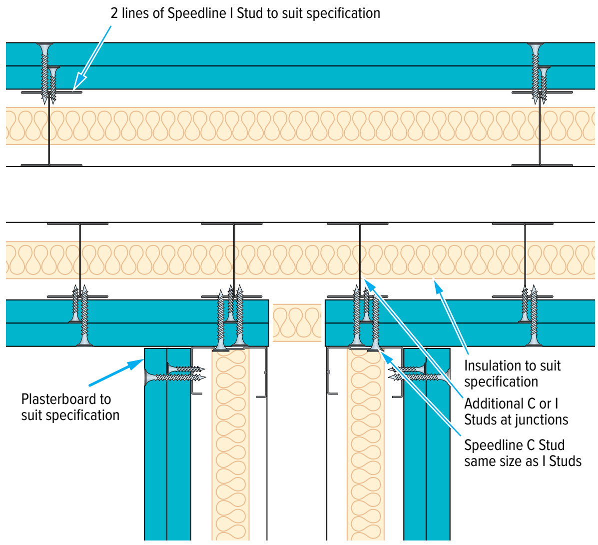
TWIN FRAME CONSTRUCTION DETAILS – UNBRACED



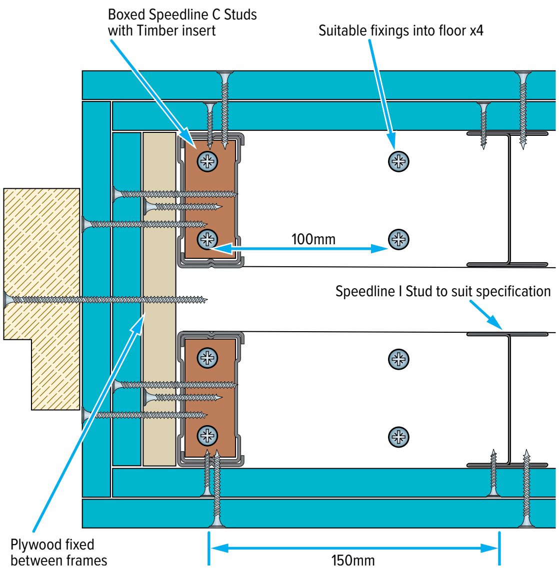
I STUD TWIN FRAME
CORNER DETAIL



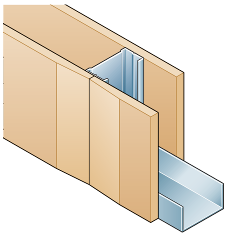
I STUD TWIN FRAME
ACOUSTIC T JUNCTION



I STUD TWIN FRAME
DOOR UP TO 60kgs WITH PLYWOOD



- For socket box, pattressing and service penetrations please refer to pages 55 & 60 for details.



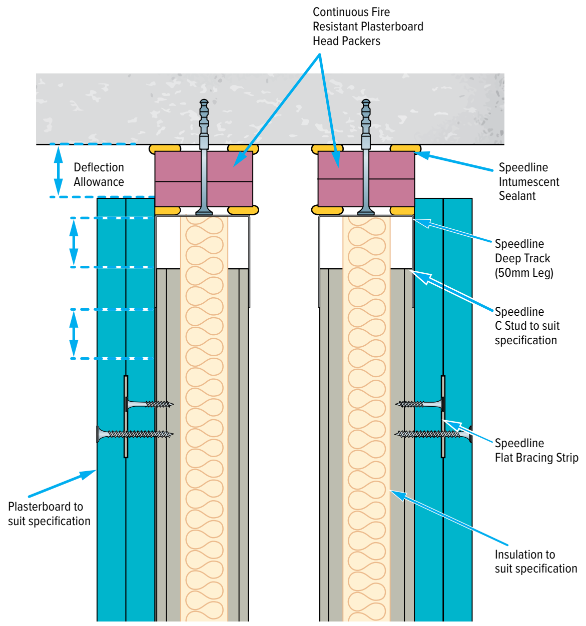
PARTITIONING SYSTEMS

TWIN FRAME CONSTRUCTION DETAILS - UNBRACED

TWIN FRAME CONSTRUCTION DETAILS – UNBRACED

TWIN I DEFLECTION HEAD

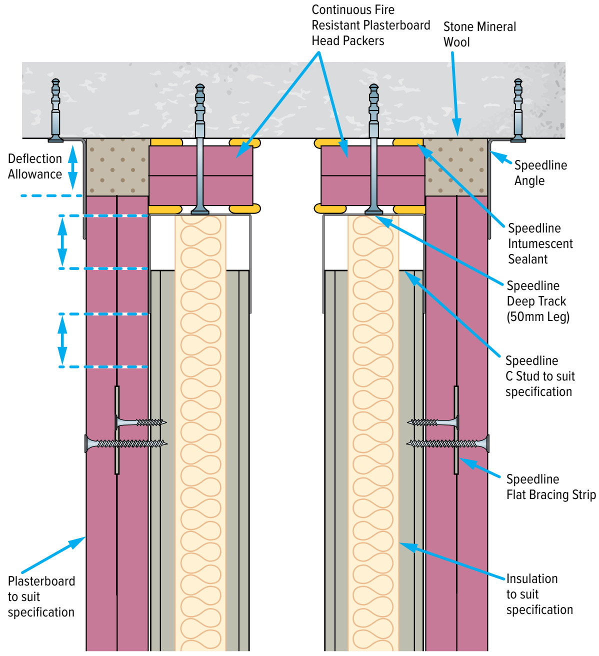
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

TWIN I DEFLECTION HEAD

DEFLECTION HEAD UP TO 120 MINS FIRE RESISTANCE

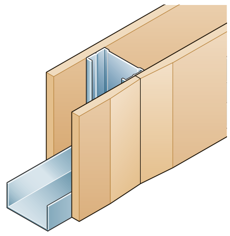


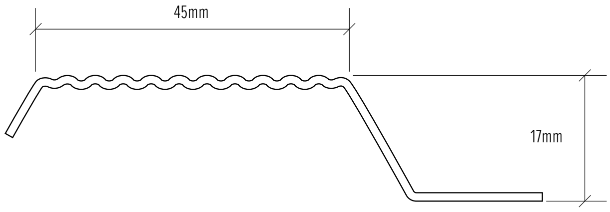
For various deflection requirements please refer to table below:

HEAD PACKER THICKNESS PER DEFLECTION ALLOWANCE

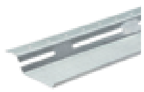
Deflection	Board Thickness	Head Track
Up to 10mm	15mm Fire Boards	SPT 25mm Leg
Up to 15mm	19mm Coreboard	SPEDT 50mm Leg
Up to 25mm	2 x 15mm Fire Boards	SPEDT 50mm Leg
Up to 30mm	2 x 19mm Coreboards or 3 x 12.5mm Fire Boards	SPEDT 50mm Leg
Up to 40mm	3 x 15mm Fire Boards	SPXDT 70mm Leg
Up to 45mm	3 x 19mm Coreboards	SPDT 70mm Leg

SPEEDLINE RESILIENT BAR SYSTEMS





RESILIENT BAR JOIST

	Product Code	Product Description	Stock Lengths (Metre)	Weight per Length (Kgs)
	RB565	Resilient Bar Joist x 0.5mm	3.0	1.04

Resilient Bar

Where Speedline Resilient Bar Joist is to be fixed to metal studs, fix bar at 600mm vertical centres. Fix the initial Speedline Resilient Bar Joist 50mm down from the head of partition and the last bar 50mm from the floor. Screw fix the Speedline Resilient Bar Joists to the studs using Speedline Wafer Head Self-tapping Screws. Screw fix the plasterboard to the Speedline Resilient Bar Joist only, ensuring the screw does not touch the metal substrate. Bars are joined by butting together on the stud.

- **Reduced overall construction nominal width.**
- **Pre-completion testing needed.**
- **Part E requirements:**
  Refurbishments 43 $D_{nT,w} + C_{tr}$.

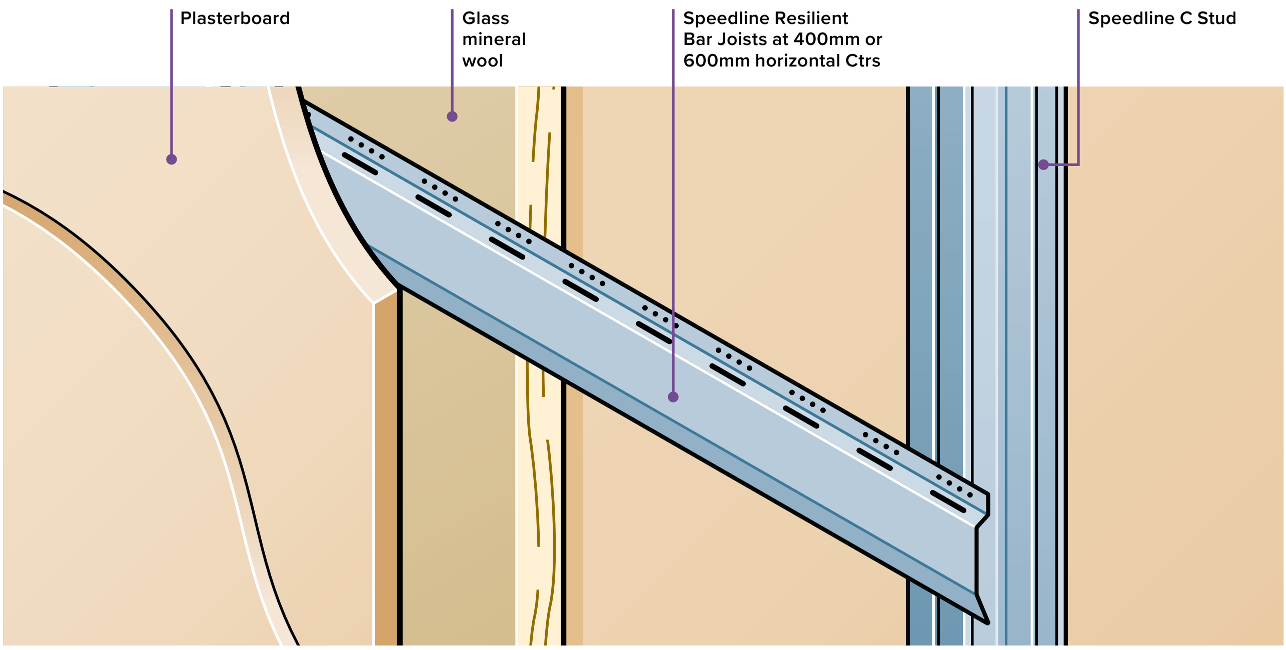
All sound insulation data is based on laboratory evaluation of the building element in isolation and cannot reproduce your installed local conditions. The actual tests carried out are used to offer an order of magnitude comparison for the performance of the various systems. Sound insulation on site is a function of the partition chosen and the associated structures in which it is installed.

Speedline take no responsibility for overall design and we would advise that specialist advice is sought at an early stage. All test data and system specifications are for systems constructed with materials and components as shown. The inclusion of other components without prior approval or constructed on site contrary to these documents will invalidate test certification and system performance.

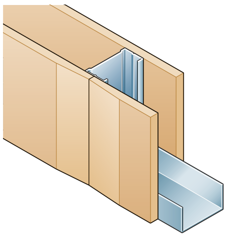
The use of resilient bar walls has a greater emphasis on standard of workmanship. If installed correctly it has the potential to satisfy requirements for material change of use applications.

Sectors

- **Hotels**
- **Residential**
- **Student Accommodation**



PLEASE NOTE: Speedline Resilient Bar Joist hanging from screw, apart from uppermost.

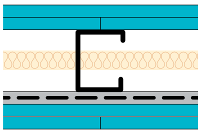


PARTITIONING SYSTEMS

SPEEDLINE RESILIENT BAR JOIST SYSTEMS

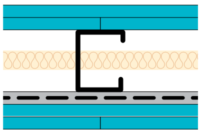
INCORPORATING BRITISH GYPSUM GYPROC BOARDS

SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BAR JOISTS (ONE SIDE ONLY) WITH BRITISH GYPSUM GYPROC BOARDS



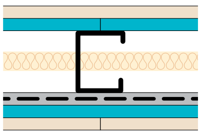
Two layers of British Gypsum 12.5mm Gyproc Soundbloc each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 12.5mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.0	138	60	59 (-7)	RB70-B-59(50)



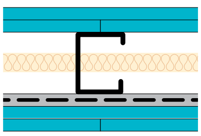
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	90	61 (-8)	RB70-B-60(50)



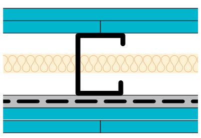
Two layers made up of 1 x British Gypsum 15mm Gyproc Soundbloc Inner Layer and 1x British Gypsum 15mm Gyproc Duraline outer layer each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.

1x 15mm British Gypsum Gyproc Soundbloc Inner Layer 1 x 15mm British Gypsum Gyproc Duraline Outer Layer (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	90	61(-3:-8)	RB70-B-66SR(50)



Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline 92mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
SPS92 92mm C stud with RB565 Resilient Bar Joist one side only	SD	5.0	170	90	63 (-7)	RB92-B-60(50)



Two layers of British Gypsum 15mm Gyproc Soundbloc F each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.

2 x 15mm British Gypsum Gyproc Soundbloc F (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	120	61 (-8)	RB70-B-60F(50)

NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

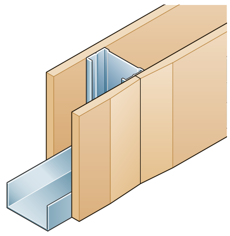
Board Configuration		**Fire Rating**
	2 x 15mm Soundbloc	90 minutes
	2 x 15mm Soundbloc F	120 minutes

Substantiating Fire Reports are available.

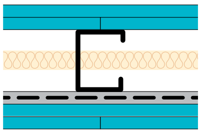
SPEEDLINE RESILIENT BAR JOIST SYSTEMS

INCORPORATING KNAUF BOARDS

INCORPORATING SINIAT GTEC BOARDS

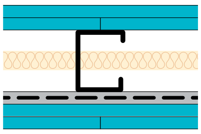


SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BAR JOISTS (ONE SIDE ONLY) WITH KNAUF BOARDS

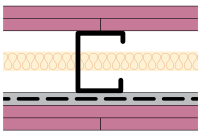


	2 x 15mm Knauf Soundshield Plus (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Two layers of Knauf 15mm Soundshield Plus each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.	SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	120	61 (-7)	RB70-K-60(50)

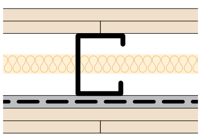
SPEEDLINE PARTITION FRAMES INCORPORATING SPEEDLINE RB565 RESILIENT BAR JOISTS (ONE SIDE ONLY) WITH SINIAT GTEC BOARDS



	2 x 15mm Siniat GTEC dB Board (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Two layers of 15mm Siniat 15mm GTEC dB Board each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.	SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	90	61 (-7)	RB70-S-60(50)



	2 x 15mm Siniat GTEC Fire Board (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (C_{tr})	System reference
Two layers of 15mm Siniat 15mm GTEC Fire Board each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.	SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	148	120	62 (-9)	RB70-S-62(50)



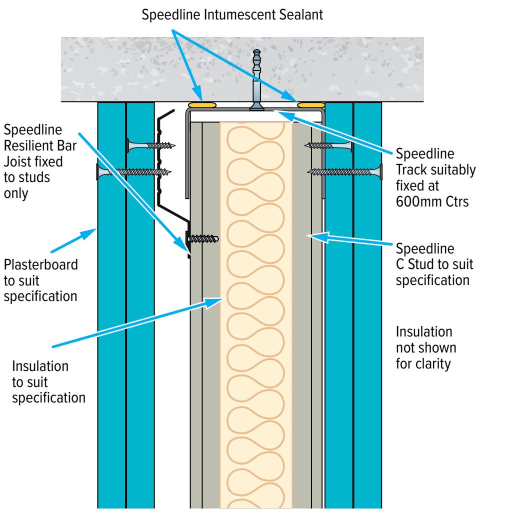
	1 x 19mm Siniat GTEC Plank Inner Layer 1 x 12.5mm Siniat GTEC Standard Board (50mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5] (Ctr)	System reference
Two layers made up of 1 x 19mm Siniat 19mm GTEC Plank inner layer and Siniat 12.5mm GTEC Standard Board outer layer each side of Speedline 70mm C stud at 600mm centres with Speedline Resilient Bar Joist fixed perpendicular to the stud one side only. 50mm APR in cavity.	SPS70 70mm C stud with RB565 Resilient Bar Joist one side only	SD	4.2	150	60	63 (-10)	RB70-S-76WB(50)

PARTITIONING SYSTEMS

RESILIENT BAR JOIST CONSTRUCTION DETAILS

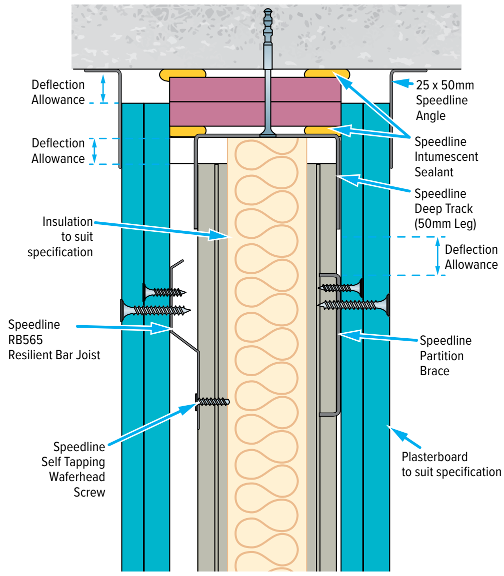
C STUD WITH RESILIENT BAR JOIST

FIXED HEAD



C STUD WITH RESILIENT BAR JOIST

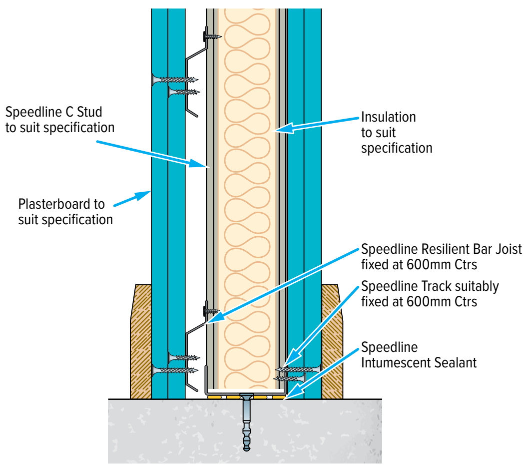
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE



To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

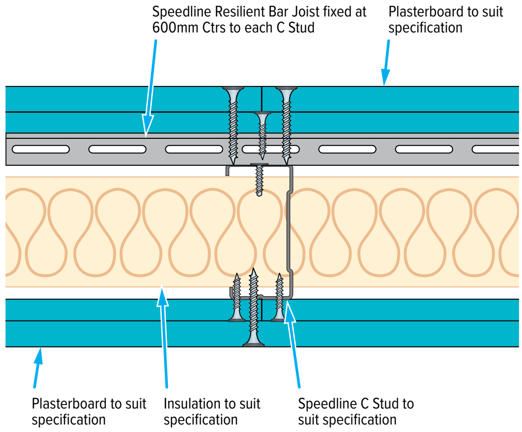
C STUD WITH RESILIENT BAR JOIST

BASE DETAIL

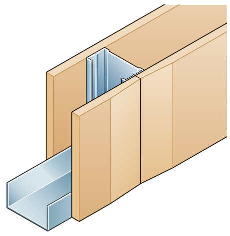


C STUD WITH RESILIENT BAR JOIST

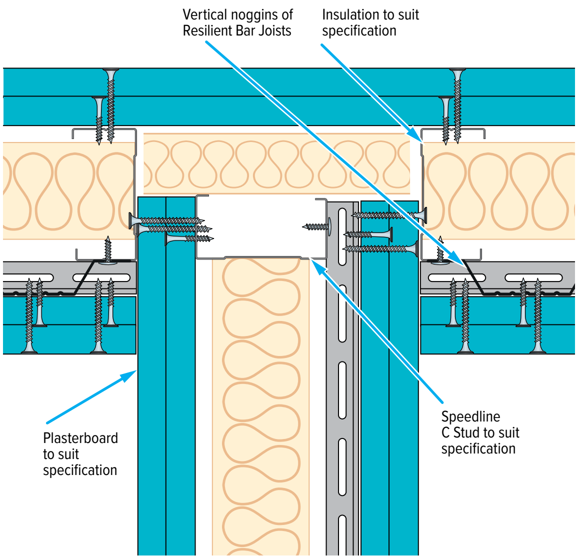
STAGGERED JOINT



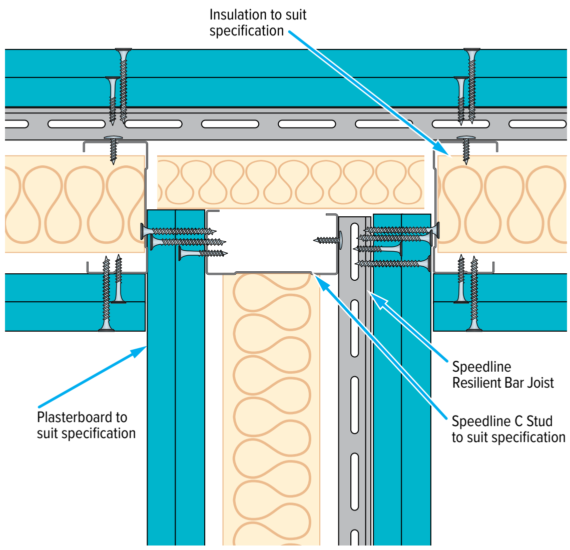
RESILIENT BAR JOIST CONSTRUCTION DETAILS



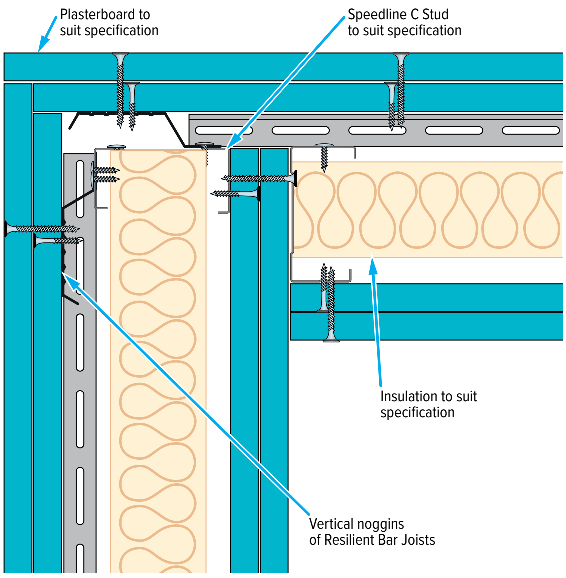
C STUD WITH RESILIENT BAR JOIST
T JUNCTION DETAIL 1



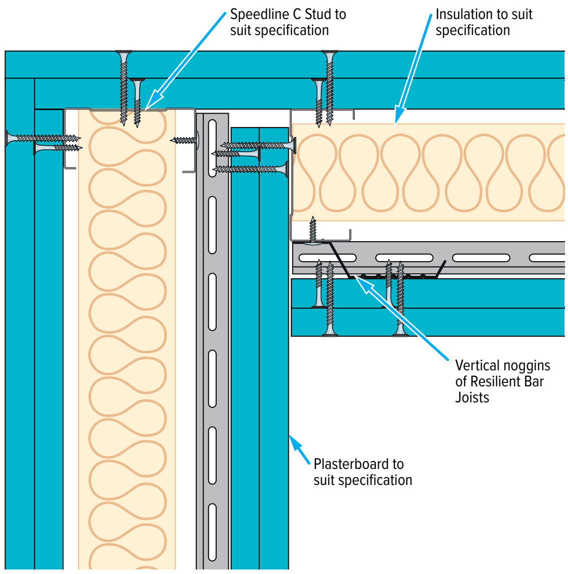
C STUD WITH RESILIENT BAR JOIST
T JUNCTION DETAIL 2

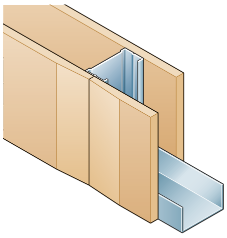


C STUD WITH RESILIENT BAR JOIST
EXTERNAL CORNER



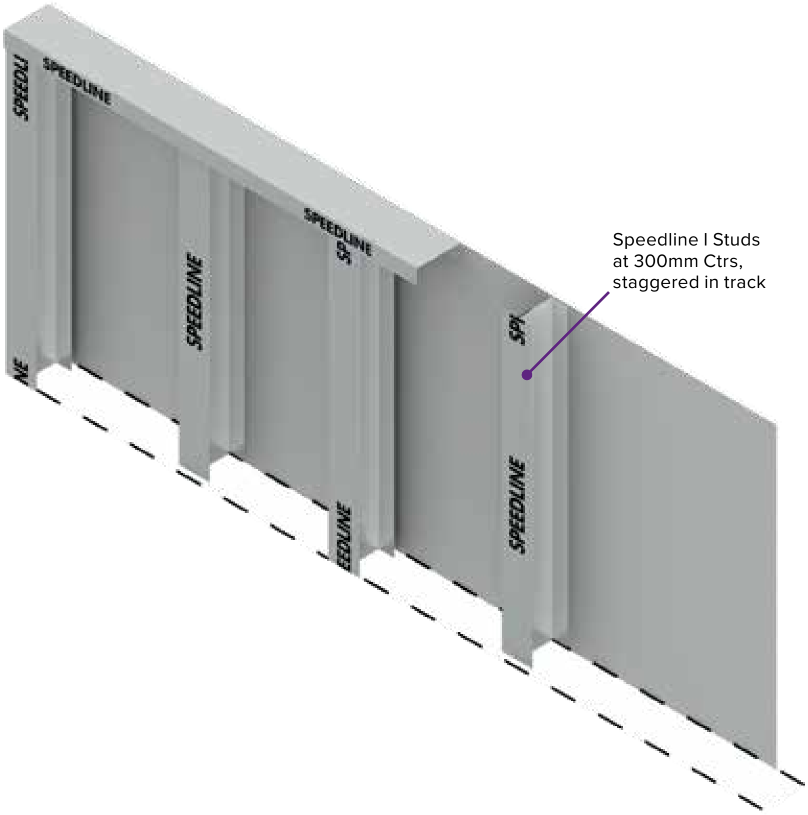
C STUD WITH RESILIENT BAR JOIST
INTERNAL CORNER





PARTITIONING SYSTEMS

SPEEDLINE STAGGERED I STUD SYSTEMS



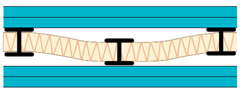
Installation Benefits

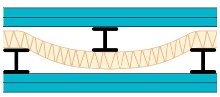
- Easy to cut to length using tin snips.
- Door frames simply formed.
- Frames easily fit together.
- Cut outs in studs for electrical and service requirements.
- Sight line in studs for lining up with plasterboard.

Sectors

- Education
- Healthcare
- Leisure
- Residential
- Student Accommodation

SPEEDLINE STAGGERED I STUD SYSTEM INCORPORATING BRITISH GYPSUM GYPROC SOUNDBLOC

	2 x 15mm British Gypsum Gyproc Soundbloc (25mm APR)	Duty Grade¹	Max Height² (m)	Nominal Thickness (mm)³	Fire Resistance (minutes)⁴	Sound Insulation (R_w dB)⁵ (C_{tr})	System reference
	SPS60 60mm I stud in 72mm track	SD	3.3	132	90	58 (-8)	SS60-B-60 (25)
Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline staggered I stud frames at 300mm centres. 25mm APR in cavity.	PI70 70mm I stud in 94mm track	SD	3.9	154	90	58 (-8)	SS70-B-60 (25)

	2 x 15mm British Gypsum Gyproc Soundbloc (50mm APR)	Duty Grade¹	Max Height² (m)	Nominal Thickness (mm)³	Fire Resistance (minutes)⁴	Sound Insulation (R_w dB)⁵ (C_{tr})	System reference
 Two layers of British Gypsum 15mm Gyproc Soundbloc each side of Speedline staggered I stud frames at 300mm centres. 50mm APR in cavity.	PI92 92mm I stud in 148mm track	SD	5.4	208	90	61 (-6)	SS92-B-60 (50)

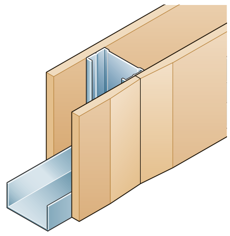
NOTE: Substituting 15mm Gyproc Soundbloc to 15mm Gyproc Soundbloc F has the following effect on BS 476 Fire ratings:

Board Configuration		Fire Rating	
	2 x 15mm Soundbloc		90 minutes
	2 x 15mm Soundbloc F		120 minutes

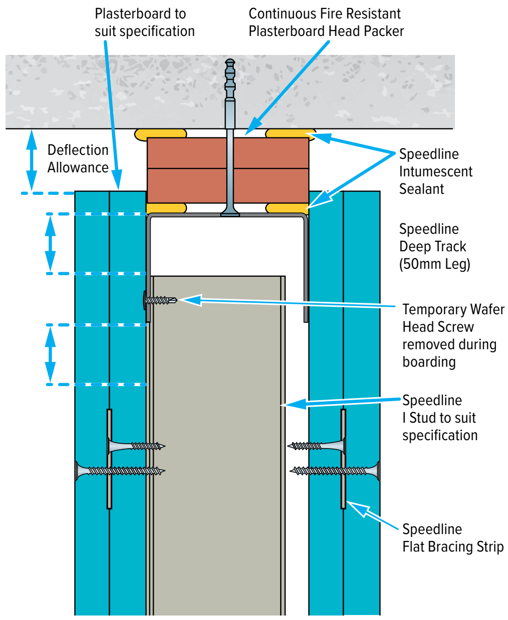
Substantiating Fire Reports are available.

PARTITIONING SYSTEMS

SPEEDLINE STAGGERED I STUD SYSTEMS

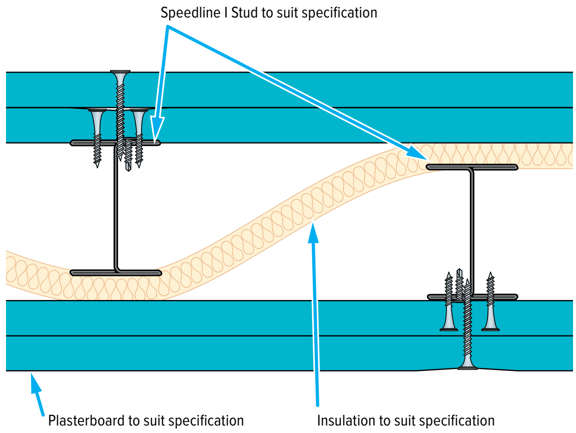


STAGGERED I STUD
DEFLECTION HEAD UP TO 60 MINS FIRE RESISTANCE

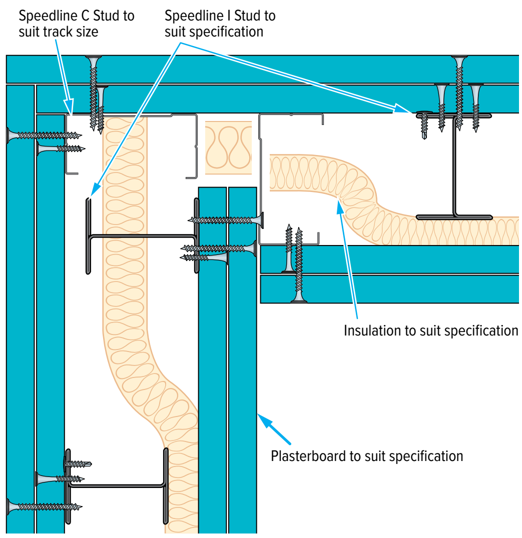


To maintain fire and acoustic integrity all air paths must be suitably sealed with Speedline Intumescent Sealant.

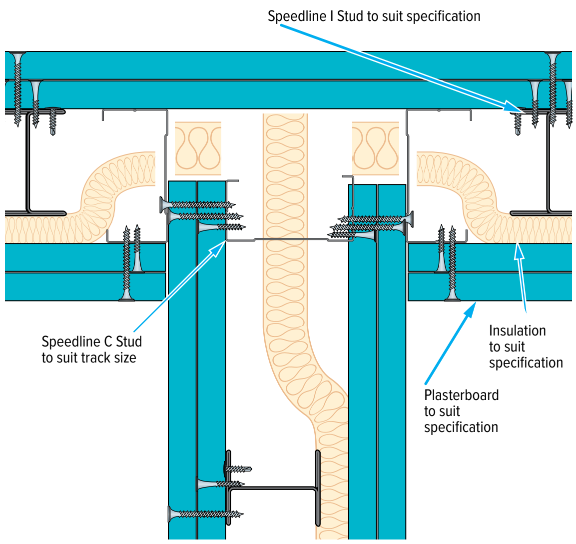
STAGGERED I STUD
STAGGERED JOINT

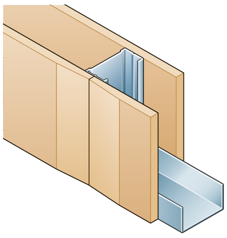


STAGGERED I STUD
CORNER DETAIL



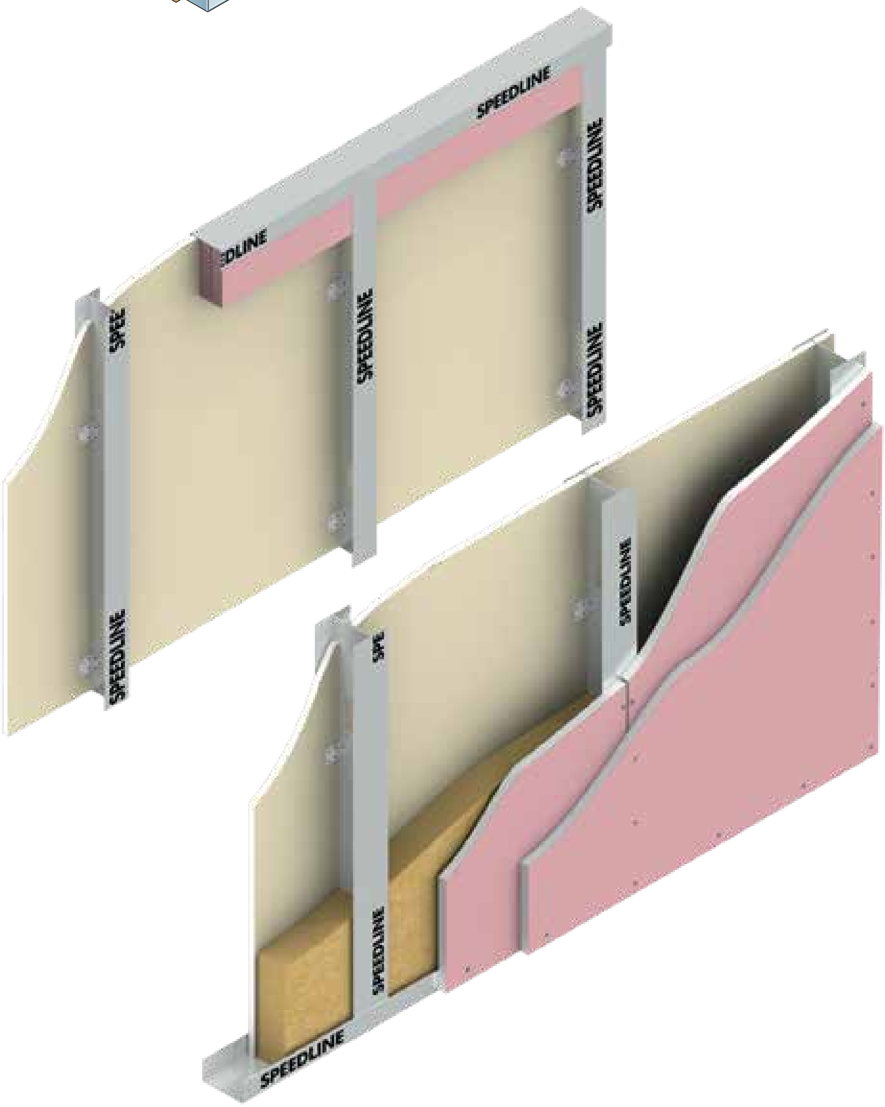
STAGGERED I STUD
TEE JUNCTION DETAIL





PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS



Benefits

- Fast and simple to erect.
- Cost effective.
- Good impact resistance and stiffness.
- Lighter in weight than masonry.
- High level of fire protection.
- Allows any thickness of coreboard to be used.

A high performance fire protection system to enclose lift shafts and service rises.

The Speedline Shaft Encasement System allows installation to take place from the landing side only.

This system is non load bearing and designed to fit between structural floors.

Sectors

- High Rise Residential
- Education
- Healthcare
- Leisure
- Student Accommodation
- Offices

Construction

The Speedline Shaft Encasement System is installed from the non shaft side using I Stud framing.

Fix extra deep (70mm leg) track to ceiling with suitable fixings spaced at 600mm maximum centres. Fix either 25mm standard or 32mm leg track along the floor with suitable fixings spaced at 600mm maximum centres. For 94mm and 148mm tracks we recommend two rows of staggered fixings at 600mm maximum centres.

Coreboard nominally 595mm wide by either 19mm or 25mm thick is cut to length 25mm less than the overall height for standard track and 32mm for 32mm leg track. The coreboard is located between the I Studs and secured using shaft encasement brackets spaced at 600mm maximum centres.

The 25mm or 32mm gap is left at the top of the partition.

Fire resistant plasterboard packers 100mm deep are screw fixed to the coreboard at the head of the partition.

It is important that the packers are tight against the head track and that the packers fill the full width of the track.

Speedline Intumescent Sealant must be used:

- **On all metal to structure surfaces**
- **On all metal to coreboard surfaces**
- **Between plasterboard packers and coreboard at the head detail.**

Corner and junction information is detailed separately.

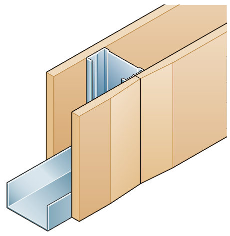
Fire resistant plasterboard is fixed to the outside of the framework on the non shaft side of the partition.

Two Layer and Three Layer Installations

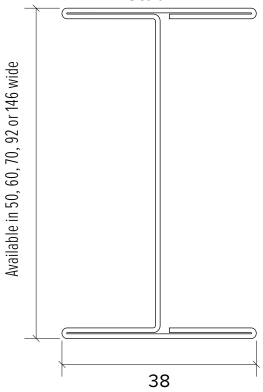
Inner layers of fire resistant plasterboard can be fixed at 600mm maximum centres but outer layer must be fixed at 300mm maximum centres to the metal framework with the appropriate screw. All layers of fire resistant plasterboard should be fixed with all joints staggered.

PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS



I Stud



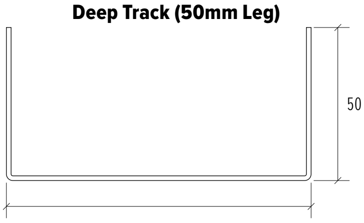
SPEEDLINE I STUD

	Product Code	Width (mm)	Nominal Gauge (mm)	Flange Dimensions (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
	PI50	50mm I Stud	0.5	38	2.70 3.00 3.60	1.98 2.20 2.64
	PI60	60mm I Stud	0.5	38	2.70 3.00 3.60 4.20	2.08 2.31 2.77 3.23
	PI70	70mm I Stud	0.7	38	3.00 3.60 4.20	2.92 3.50 4.09
	PI92	92mm I Stud	0.8	38	3.60 5.00 6.00	5.18 7.20 8.63
	PI146	146mm I Stud	0.8	38	3.60 5.00 6.00	6.40 8.89 10.67

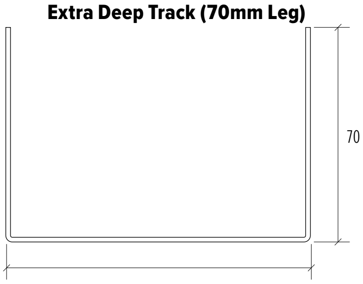
Standard Track

32mm Leg Track

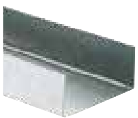
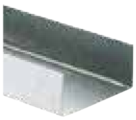
Deep Track (50mm Leg)



Extra Deep Track (70mm Leg)

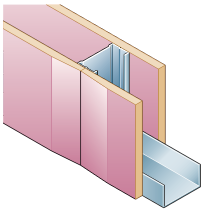


SPEEDLINE TRACK

	Product Code	Width (mm)	Height (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
	SPT52	52mm Track	25mm leg	0.5	3.00	1.13
	SPT62	62mm Track	25mm leg	0.5	3.00	1.25
	SPT72	72mm Track	25mm leg	0.5	3.00	1.37
	SPT94	94mm Track	32mm leg	0.5	3.00	1.79
	SPT148	148mm Track	32mm leg	0.5	3.00	2.40
	SPEDT52	52mm Deep Track	50mm leg	0.5	3.00	1.67
	SPEDT62	62mm Deep Track	50mm leg	0.5	3.00	1.79
	SPEDT72	72mm Deep Track	50mm leg	0.5	3.00	1.91
	SPEDT94	94mm Deep Track	50mm leg	0.5	3.00	2.16
	SPDT148	148mm Deep Track	50mm leg	0.5	3.00	2.80
	SPXDT72	72mm Extra Deep Track	70mm leg	0.7	3.00	3.32
	SPXDT94	94mm Extra Deep Track	70mm leg	0.7	3.00	3.69
	SPXDT148	148mm Extra Deep Track	70mm leg	0.7	3.00	4.58

ACCESSORIES

	Product Code	Product Description	Qty Per Box	Weight per Box (Kgs)
	ASB62	Shaft Encasement Fixing Bracket	1000	17.6

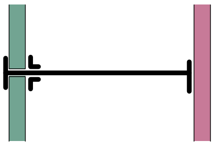


PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

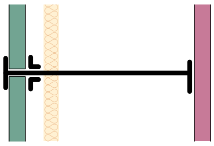
INCORPORATING BRITISH GYPSUM GYPROC 19MM COREBOARD AND GYPROC FIRELINE

SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC 19mm COREBOARD AND GYPROC FIRELINE



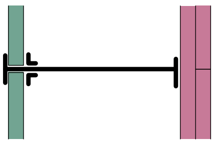
One layer of British Gypsum 15 mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 1 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height^2 (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	HD	3.8	77	60	39	SE60-B-56
PI70 70mm I stud	HD	4.2	87	60	39	SE70-B-56
PI92 92mm I stud	HD	6	109	60	40	SE92-B-56
PI146 146mm I stud	HD	7	163	60	43	SE146-B-56



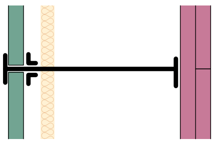
One layer of British Gypsum 15 mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 1 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height^2 m	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	HD	3.8	77	60	42	SE60-B-56(25)
PI70 70mm I stud	HD	4.2	87	60	42	SE70-B-56(25)
PI92 92mm I stud	HD	6	109	60	43	SE92-B-56(25)
PI146 146 mm I stud	HD	7	163	60	46	SE146-B-56(25)



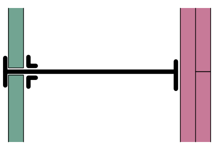
Two layers of British Gypsum 12.5mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 12.5mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height^2 (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.4	87	60	37	SE60-B-61
PI70 70mm I stud	SD	4.4	97	60	40	SE70-B-61
PI92 92mm I stud	SD	6.4	119	60	42	SE92-B-61
PI146 146mm I stud	SD	7.5	173	60	45	SE146-B-61



Two layers of British Gypsum 12.5mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 12.5mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height^2 (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.4	87	60	46 ℮	SE60-B-61(25)
PI70 70mm I stud	SD	4.4	97	60	46 ℮	SE70-B-61(25)
PI92 92mm I stud	SD	6.4	119	60	46 ℮	SE92-B-61(25)
PI146 146mm I stud	SD	7.5	173	60	50	SE146-B-61(25)

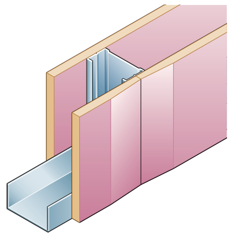


Two layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

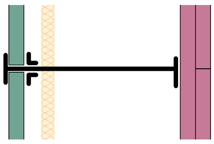
1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height^2 (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	41	SE60-B-62
PI70 70mm I stud	SD	4.5	102	120	41	SE70-B-62
PI92 92mm I stud	SD	6.7	124	120	43	SE92-B-62
PI146 146mm I stud	SD	7.9	178	120	45	SE146-B-62

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

INCORPORATING BRITISH GYPSUM GYPROC 19MM COREBOARD AND GYPROC FIRELINE

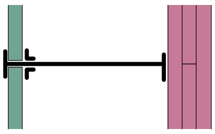


SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM GYPROC 19mm COREBOARD AND GYPROC FIRELINE



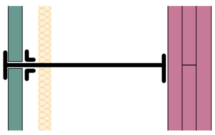
Two layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 2 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	47 ℮	SE60-B-62(25)
PI70 70mm I stud	SD	4.5	102	120	47 ℮	SE70-B-62(25)
PI92 92mm I stud	SD	6.7	124	120	47 ℮	SE92-B-62(25)
PI146 146mm I stud	SD	7.9	178	120	50	SE146-B-62(25)



Three layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 3 x 15mm British Gypsum Gyproc Fireline landing side (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[6]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	107	120	42	SE60-B-72
PI70 70mm I stud	SD	4.5	117	120	43	SE70-B-72
PI92 92mm I stud	SD	6.7	139	120	45	SE92-B-72
PI146 146mm I stud	SD	7.9	193	120	47	SE146-B-72

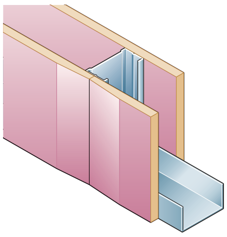


Three layers of British Gypsum 15mm Gyproc Fireline landing side and 19mm Gyproc Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm British Gypsum Gyproc Coreboard between I studs 3 x 15mm British Gypsum Gyproc Fireline landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[6]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	107	120	49 ℮	SE60-B-72(25)
PI70 70mm I stud	SD	4.5	117	120	49 ℮	SE70-B-72(25)
PI92 92mm I stud	SD	6.7	139	120	49 ℮	SE92-B-72(25)
PI146 146mm I stud	SD	7.9	193	120	50	SE146-B-72(25)

7. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft. The system will satisfy the insulation criteria for 60 minutes if the studs are included.

NOTE: Acoustic performance for Shaft Encasement system is a mixture of tested configurations and estimates. All sound insulation data marked with a # are actual UKAS accredited test results. All Knauf Sound insulation data is estimated.
Please note – when exposed to fire on landing side these systems may not satisfy the insulation performance criteria on framing members. Therefore when specifying these systems it must be checked with the relevant approval authority for the building project that this is acceptable, perhaps on the grounds that there will be no combustible materials in close proximity of the framing sections within the shaft.

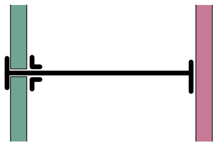


PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

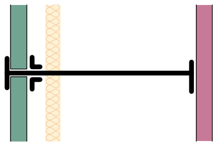
INCORPORATING KNAUF 19MM COREBOARD AND FIRE PANEL

SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING KNAUF 19mm COREBOARD AND FIRE PANEL



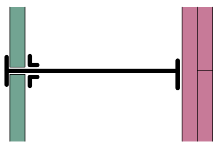
One layer of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm Knauf Coreboard between I studs 1 x 15mm Knauf Fire Panel landing side (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	HD	3.8	77	60	39	SE60-K-56
PI70 70mm I stud	HD	4.2	87	60	39	SE70-K-56
PI92 92mm I stud	HD	6	109	60	40	SE92-K-56
PI146 146 mm I stud	HD	7	163	60	43	SE146-K-56



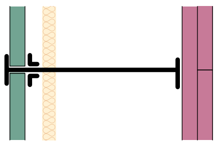
One layer of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600 mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 19mm Knauf Coreboard between I studs 1 x 15mm Knauf Fire Panel landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	HD	3.8	77	60	42	SE60-K-56(25)
PI70 70mm I stud	HD	4.2	87	60	42	SE70-K-56(25)
PI92 92mm I stud	HD	6	109	60	43	SE92-K-56(25)
PI146 146 mm I stud	HD	7	163	60	46	SE146-K-56(25)



Two layers of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm Knauf Coreboard between I studs 2 x 15mm Knauf Fire Panel landing side (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	41	SE60-K-62
PI70 70mm I stud	SD	4.5	102	120	41	SE70-K-62
PI92 92mm I stud	SD	6.7	124	120	43	SE92-K-62
PI146 146mm I stud	SD	7.9	178	120	45	SE146-K-62



Two layers of Knauf 15mm Fire Panel landing side and 19mm Knauf Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm Knauf Coreboard between I studs 2 x 15mm Knauf Fire Panel landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	47	SE60-K-62(25)
PI70 70mm I stud	SD	4.5	102	120	47	SE70-K-62(25)
PI92 92mm I stud	SD	6.7	124	120	47	SE92-K-62(25)
PI146 146mm I stud	SD	7.9	178	120	50	SE146-K-62(25)

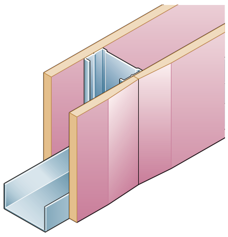
7. See note above
8. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft.

NOTE: Acoustic performance for Shaft Encasement System is a mixture of tested configurations and estimates. All sound insulation data marked with a # are actual UKAS accredited test results. All Knauf Sound insulation data is estimated. Please note – when exposed to fire on landing side these systems may not satisfy the insulation performance criteria on framing members. Therefore when specifying these systems it must be checked with the relevant approval authority for the building project that this is acceptable, perhaps on the grounds that there will be no combustible materials in close proximity of the framing sections within the shaft.

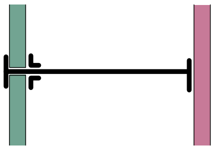
PARTITIONING SYSTEMS

SPEEDLINE SHAFT ENCASEMENT SYSTEMS

INCORPORATING SINIAT GTEC 19/25MM COREBOARD AND GTEC FIRE BOARD

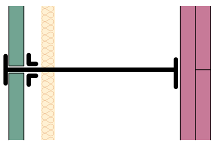


SPEEDLINE SHAFT ENCASEMENT SYSTEM INCORPORATING SINIAT GTEC 19/25MM COREBOARD AND GTEC FIRE BOARD



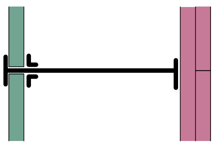
One layer of Siniat 15mm GTEC Fire Board landing side and 19mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 19mm GTEC Coreboard between I studs 1 x 15mm Siniat GTEC Fire Board landing side (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	HD	3.8	77	60	39	SE60-S-56
PI70 70mm I stud	HD	4.2	87	60	39	SE70-S-56
PI92 92mm I stud	HD	6	109	60	40	SE92-S-56
PI146 146mm I stud	HD	7	163	60	43	SE146-S-56



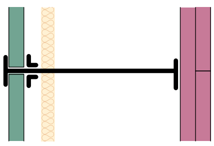
Two layers of Siniat 12.5mm GTEC Fire Board landing side and 25mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table. 25mm APR in cavity.

1 x 25mm GTEC Coreboard between I studs 2 x 12.5mm Siniat GTEC Fire Board landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.4	87	90	46	SE60-S-61(25)
PI70 70mm I stud	SD	4.4	97	90	46	SE70-S-61(25)
PI92 92mm I stud	SD	6.4	119	90	46	SE92-S-61(25)
PI146 146mm I stud	SD	7.5	173	90	50	SE146-S-61(25)



Two layers of Siniat 19mm GTEC Fire Board landing side and 25mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

1 x 25mm GTEC Coreboard between I studs 2 x 19mm Siniat GTEC Fire Board landing side (No APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	41	SE60-S-62
PI70 70mm I stud	SD	4.5	102	120	41	SE70-S-62
PI92 92mm I stud	SD	6.7	124	120	43	SE92-S-62
PI146 146mm I stud	SD	7.9	178	120	45	SE146-S-62



Two layers of Siniat 19mm GTEC Fire Board landing side and 25mm GTEC Coreboard secured in-between Speedline I stud at 600mm centres. Size of I stud as per table.

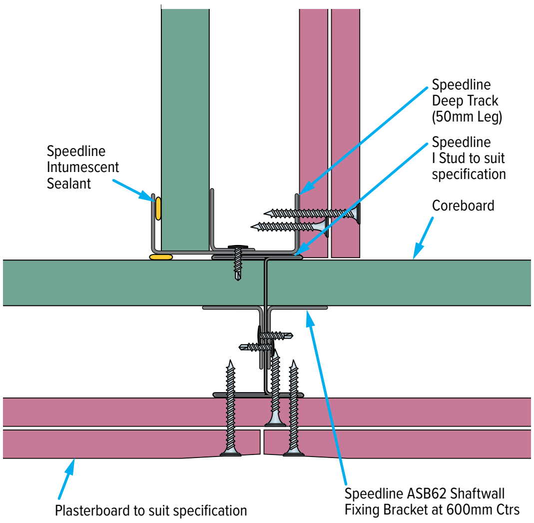
1 x 25mm GTEC Coreboard between I studs 2 x 19mm Siniat GTEC Fire Board landing side (25mm APR)	Duty Grade[1]	Max Height[2] (m)	Nominal Thickness (mm)[3]	Fire Resistance (minutes)[4]	Sound Insulation (R_w dB)[5]	System reference
PI60 60mm I stud	SD	4.5	92	120	47	SE60-S-62(25)
PI70 70mm I stud	SD	4.5	102	120	47	SE70-S-62(25)
PI92 92mm I stud	SD	6.7	124	120	47	SE92-S-62(25)
PI146 146mm I stud	SD	7.9	178	120	50	SE146-S-62(25)

7. See note above
8. Note: When exposed to fire on the landing side, these systems did not satisfy the insulation performance criteria on the framing members. Therefore, when specifying this system, it must be checked with the relevant approval authority, for the building project that this is acceptable, perhaps on the grounds that there will be no combustible material in close proximity, of the framing sections within the shaft.

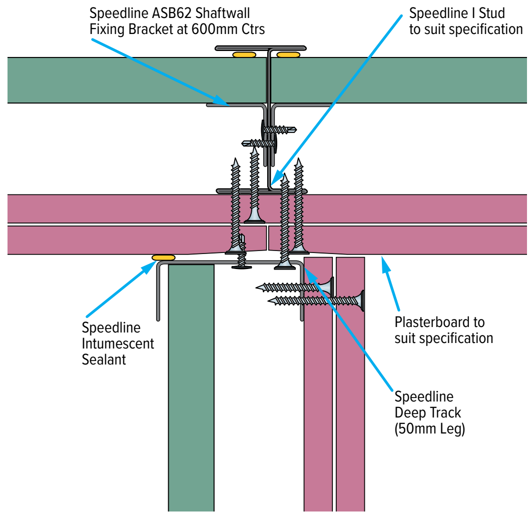
PARTITIONING SYSTEMS

SHAFT ENCASEMENT CONSTRUCTION DETAILS

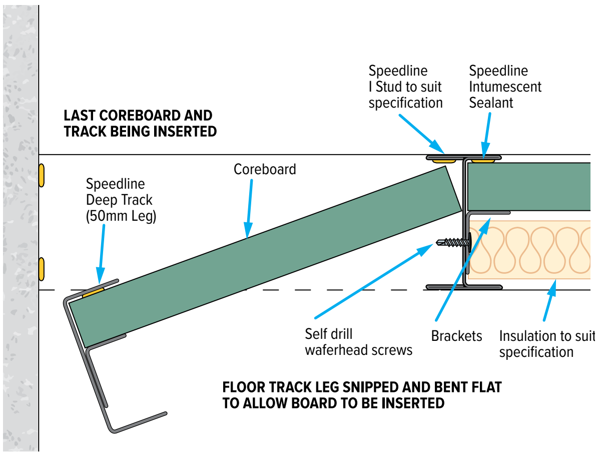
SHAFT ENCASEMENT
JUNCTION SHAFT SIDE



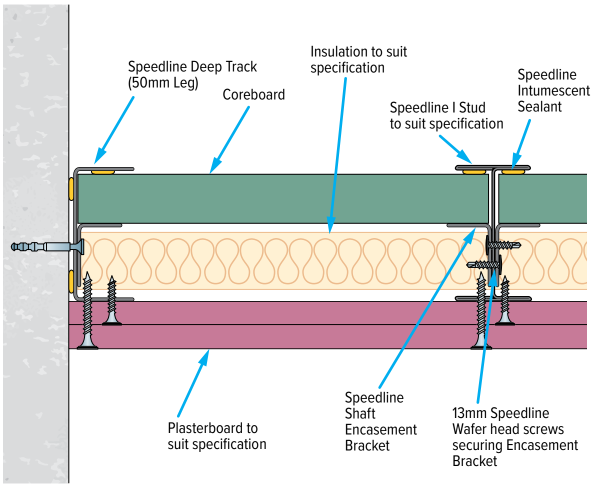
SHAFT ENCASEMENT
JUNCTION ROOM SIDE



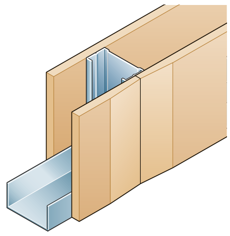
SHAFT ENCASEMENT
END WALL DETAIL



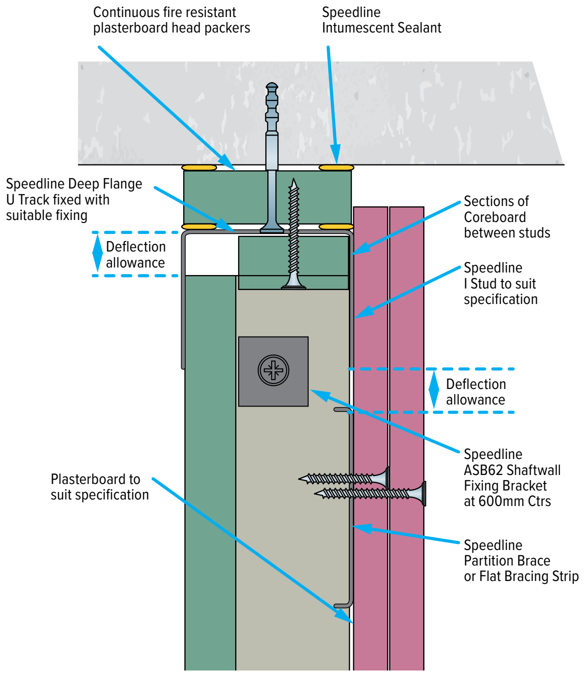
SHAFT ENCASEMENT
END WALL DETAIL



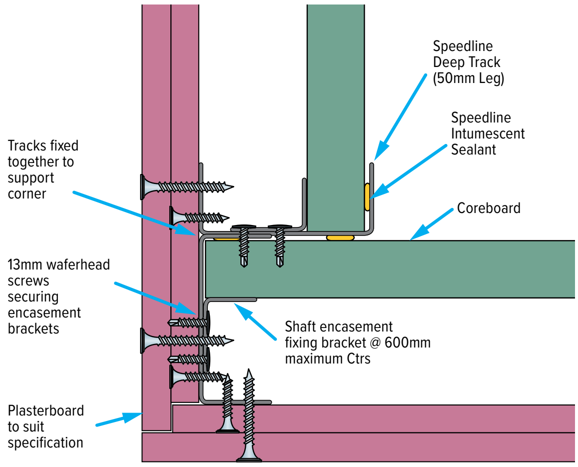
SHAFT ENCASEMENT CONSTRUCTION DETAILS



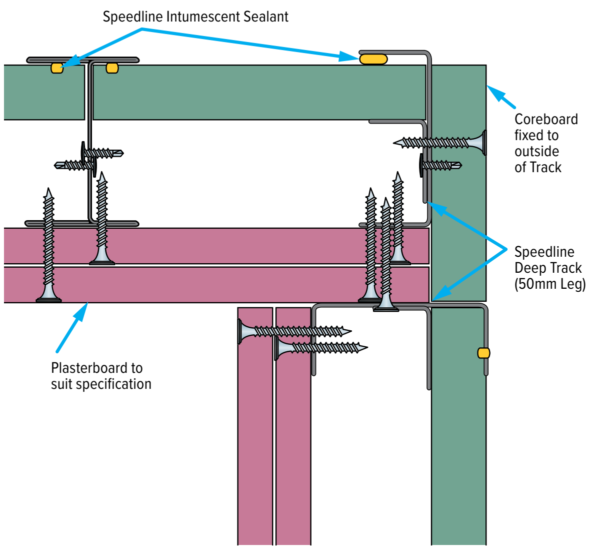
SHAFT ENCASEMENT
DEFLECTION HEAD GENERAL LAYOUT



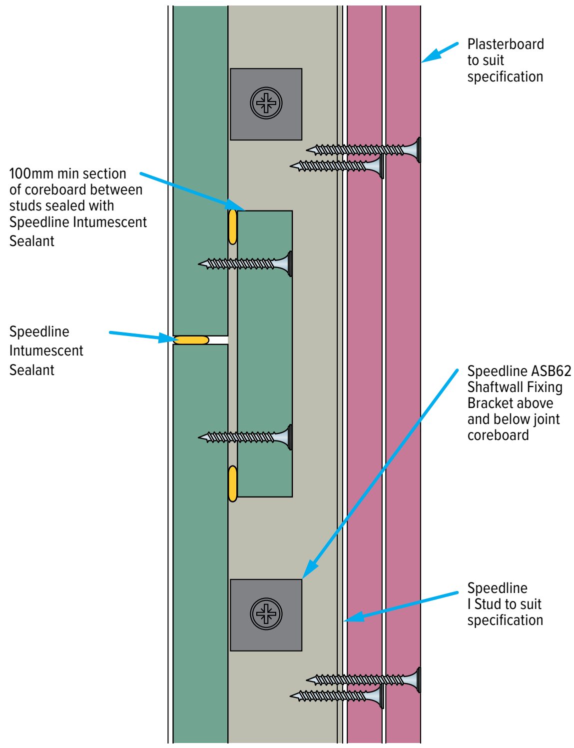
SHAFT ENCASEMENT
EXTERNAL CORNER

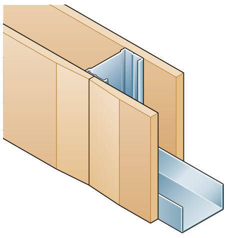


SHAFT ENCASEMENT
INTERNAL CORNER



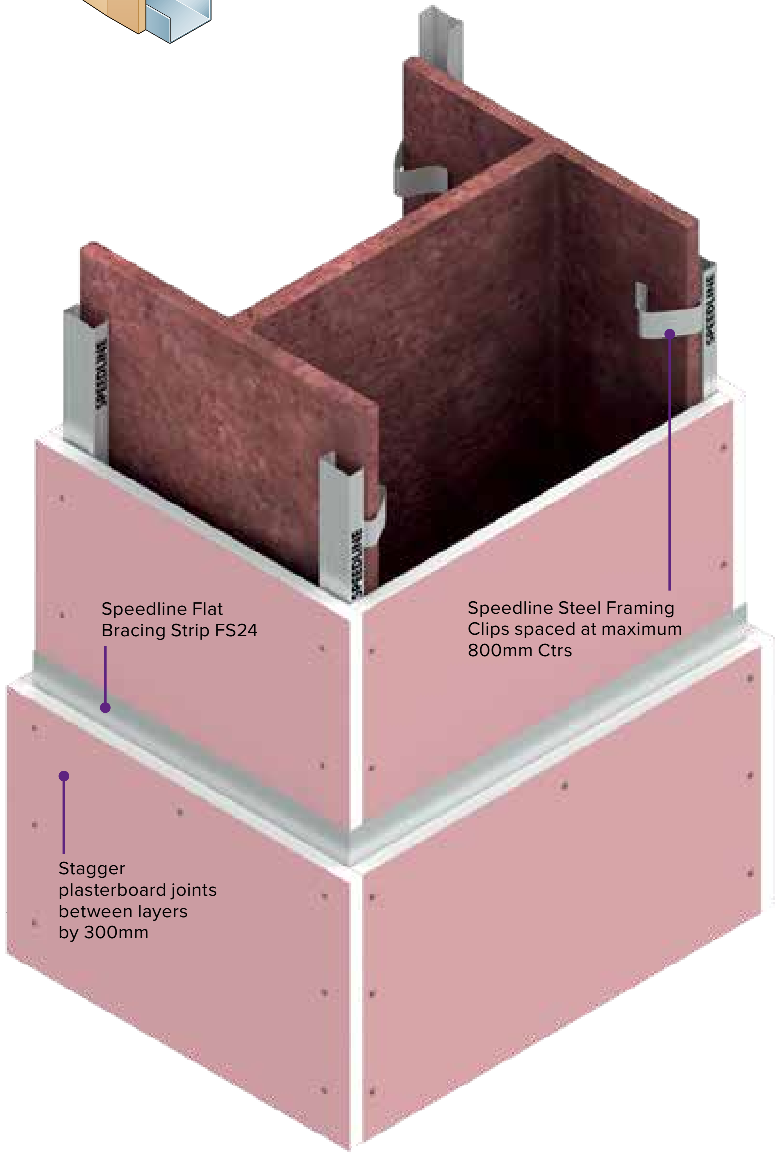
SHAFT ENCASEMENT
COREBOARD JOINT





PARTITIONING SYSTEMS

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM



Benefits

- Fast & simple method to clad structural beams and columns.
- Provides protection for 3 or 4 sided applications.
- High level of fire protection.
- No special installation techniques required.

A high performance fire protection system to enclose structural I columns and beams. The Speedline Column and Beam Encasement System provides 120 minutes fire protection up to section factor A/V $(H^p/A)m^{-1}$ 125 to BS476 Part 21:1987.

Sectors

- High Rise Residential
- Education
- Healthcare
- Commercial
- Student Accommodation
- Offices

Construction

4 Sided Column & Beam Encasement

Steel framing clips are friction fitted to the column or beams flanges at maximum 800mm centres. Speedline Wall/Ceiling Liner is located over the clips to encase the column or beam. Fire resistant plasterboard is fixed to the outside of the metal framework.

3 Sided Column & Beam Encasement

Speedline 25mm x 25mm Steel Angle is located to both sides of the wall/soffit flange and secured at 600mm centres using suitable fixings.

Steel framing clips are friction fitted to the other 2 column of beam flanges at maximum 800mm centres. Speedline Wall/Ceiling Liner is located over the clips to encase the column or beam. Fire resistant plasterboard is fixed to the outside of the metal framework.

Board Installation

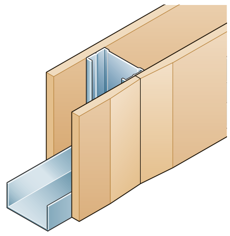
All layers of British Gypsum Gyproc Fireline plasterboard must be fixed at 300mm maximum centres to the framework using the appropriate length Speedline Drywall Screw with board joints staggered between layers. Speedline Partition Brace or Flat Bracing Strip must be used behind any horizontal join in the plasterboard.

Where the column or beam web flange dimensions exceed 600mm addition support will be required for the plasterboard.

This system has been tested for up to 120 minutes fire protection using British Gypsum Gyproc Fireline Plasterboard to the steel column or beam. For advice on the combination of fire resistant plasterboard needed to achieve the required fire protection please contact our Technical Department at enquiries@speedlinedrywall.co.uk To determine the fire protection required the width, depth and mass of the column or beam will be required along with the type of construction being built i.e. 3 sided or 4 sided.

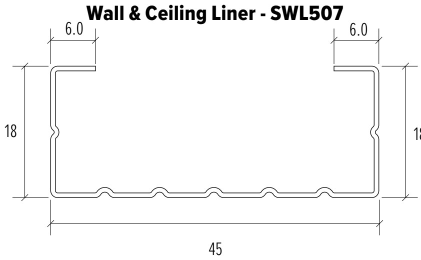
PARTITIONING SYSTEMS

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM

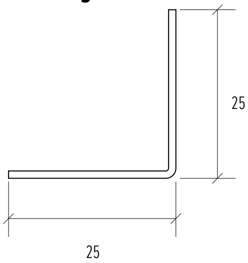


SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM INCORPORATING BRITISH GYPSUM 15MM GYPROC FIRELINE

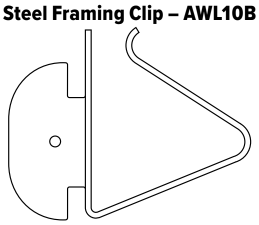
Wall & Ceiling Liner - SWL507



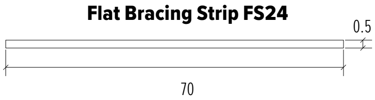
Angle – SSL06



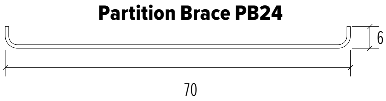
Steel Framing Clip – AWL10B



Flat Bracing Strip FS24



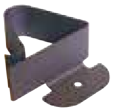
Partition Brace PB24



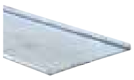
SPEEDLINE CEILING LINER SYSTEM

	Product Code	Product Description	Width (mm)	Height (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
	SWL507	Wall & Ceiling Liner			0.5	2.40 2.70 3.00 3.60	0.83 0.93 1.04 1.25
	SSL06	90 Degree Angle	25mm leg	25mm leg	0.7	3.60	0.89

ACCESSORIES

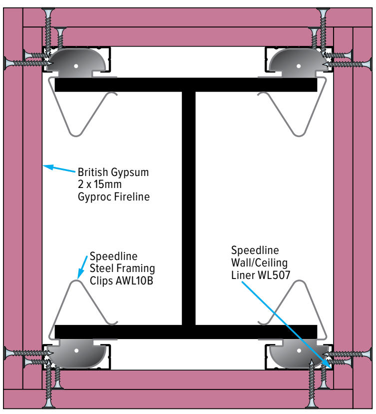
	Product Code	Product Description	Qty per Box	Weight per Box (Kgs)
	AWL05B	Wall & Ceiling Liner Connector	100	1.35
	AWL10B	Steel Framing Clip	100	6.90

SPEEDLINE FLAT BRACING STRIP & PARTITION BRACE

	Product Code	Product Description	Width (mm)	Nominal Gauge (mm)	Stock Lengths (Metre)	Weight per Length (Kgs)
	FS24	Flat Bracing Strip	70	0.5	2.40	0.66
	PB24	Partition Brace	70	0.7	2.40	1.09

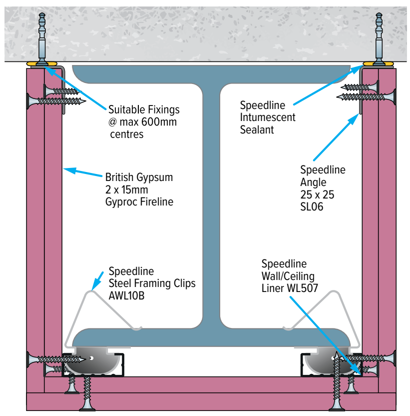
Column & Beam Encasement

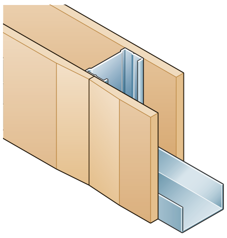
4 sided showing double layer of 15mm British Gypsum Gyproc Fireline plasterboard



Column & Beam Encasement

3 sided showing double layer of 15mm British Gypsum Gyproc Fireline plasterboard



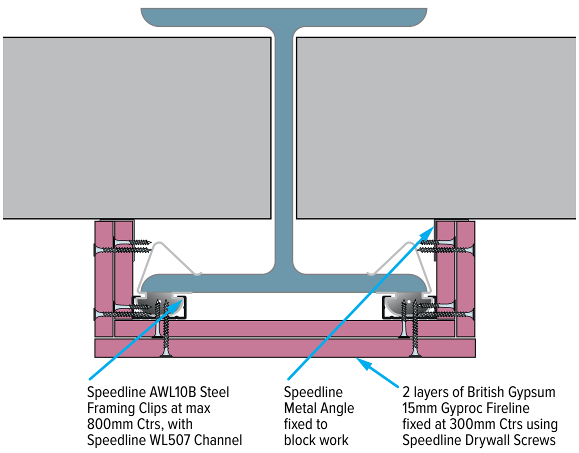


PARTITIONING SYSTEMS

SPEEDLINE COLUMN & BEAM ENCASEMENT SYSTEM

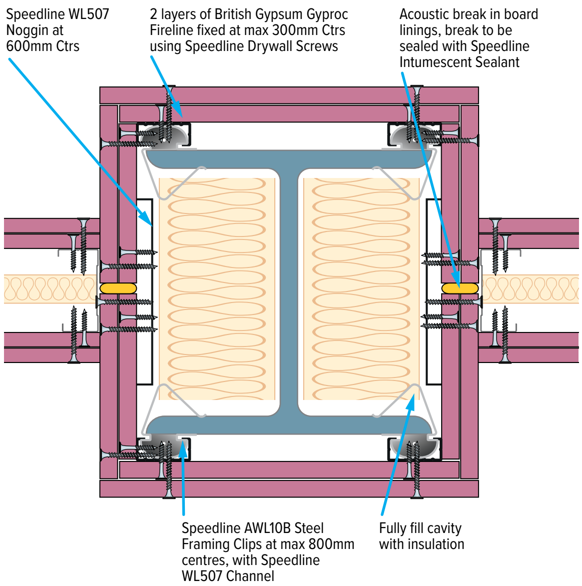
COLUMN & BEAM ENCASEMENT

COLUMN IN WALL ENCASEMENT



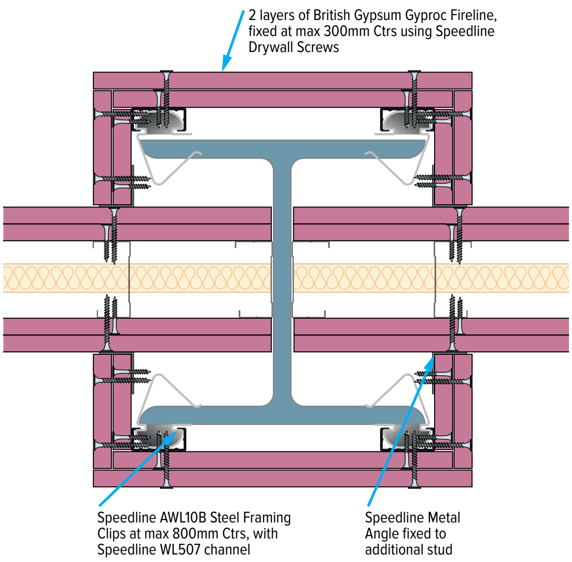
COLUMN & BEAM ENCASEMENT

PARTITION ABUTMENT



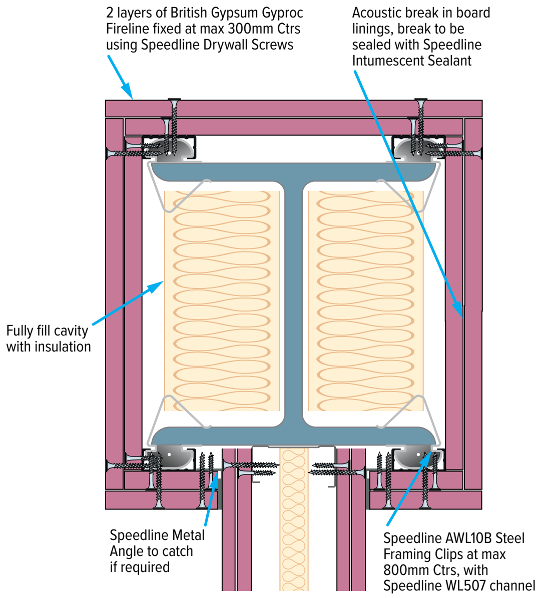
COLUMN & BEAM ENCASEMENT

PARTITION ABUTMENT BREAKING LININGS



COLUMN & BEAM ENCASEMENT

PARTITION ABUTMENT ONTO FLANGE OF STEEL



SECTION
DETAIL