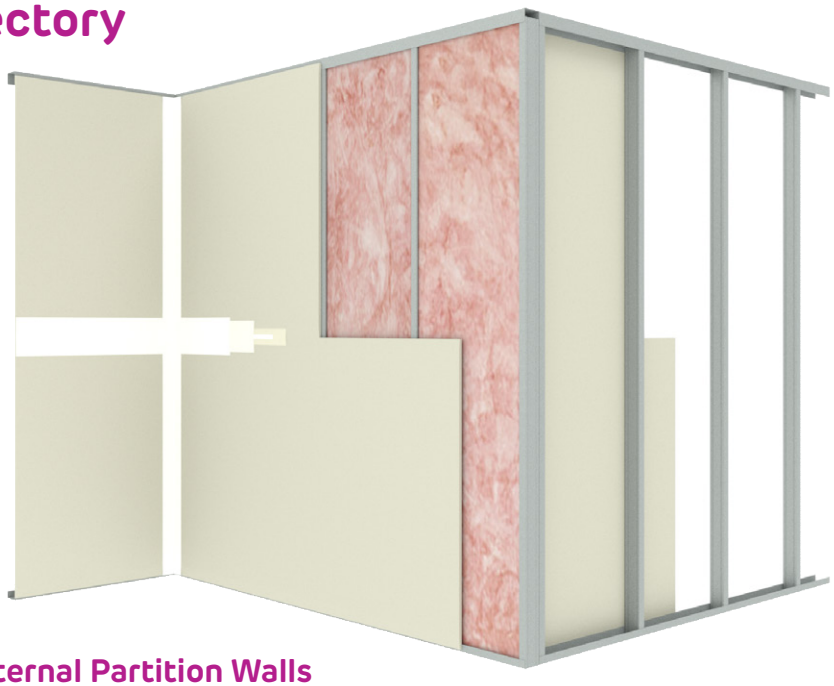
SYSTEMS	**83**
SYSTEM DIRECTORY	83
INSTALLATION	**112**
GENERAL REQUIREMENTS	112
FRAMING	113
WORKED EXAMPLE	128
STEEL PROFILE INFORMATION	129
PLASTERBOARD LAYOUT	137
PLASTERBOARD FIXING	138
CONSTRUCTION DETAILS	**153**
PENETRATIONS	**183**
FIXINGS TO PLASTERBOARD	**211**

3.1 Internal Steel Framed Partition Walls

Internal steel framed walls are used in commercial and high-rise applications such as office buildings and apartment blocks. They are light weight, quick to install, and the components are easy to deliver on site.

This section includes wall systems, installation instructions and construction details for non-fire rated and fire rated internal steel stud walls. The framing tables and construction details are limited to non-load bearing walls (except for self weight). Non-load bearing walls typically have an allowance for deflection at the head of the wall and are not suitable for vertical axial loads, nor are they suitable as bracing shear walls. Contact Siniat for more information.

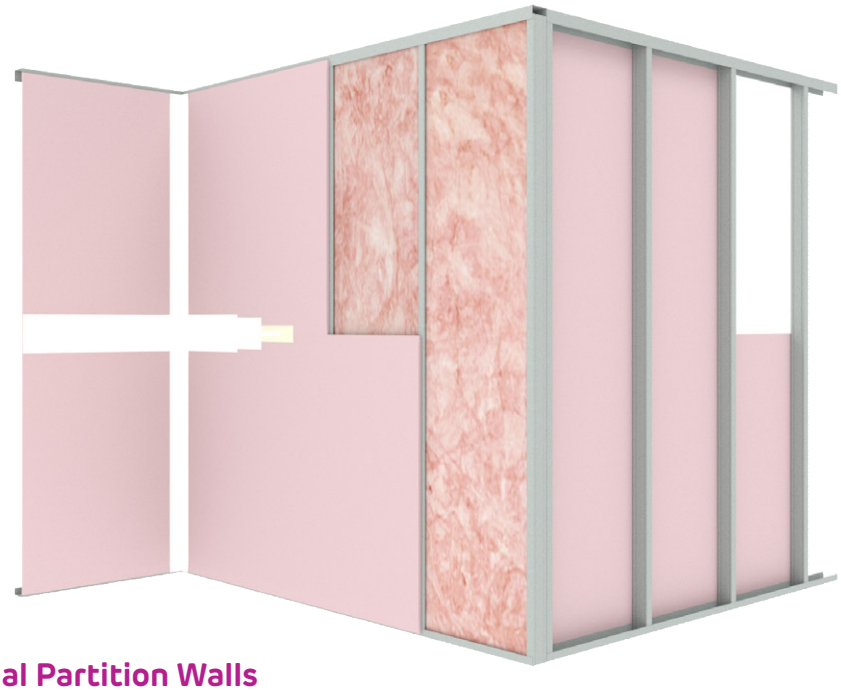
System Directory



Non-fire Rated Internal Partition Walls

System	Side 1	Side 2	Frame	FRL	Acoustics[1]	
					Rw	Rw+Ctr
SSW1	1 x 10mm **masta**shield	-	Stud	-	29	25
SSW10	1 x 10mm **masta**shield	1 x 10mm **masta**shield	Stud	-	40	31
SSW11	1 x 10mm **masta**shield	2 x 10mm **masta**shield	Stud	-	45	35
SSW12	2 x 10mm **masta**shield	2 x 10mm **masta**shield	Stud	-	50	40
SSW210	1 x 10mm **sound**shield	1 x 10mm **sound**shield	Stud	-	43	34
SSW211	1 x 10mm **sound**shield	2 x 10mm **sound**shield	Stud	-	49	39
SSW212	2 x 10mm **sound**shield	2 x 10mm **sound**shield	Stud	-	53	44
SSW4	1 x 13mm **masta**shield	-	Stud	-	32	28
SSW15	1 x 13mm **masta**shield	1 x 13mm **masta**shield	Stud	-	43	33
SSW16	1 x 13mm **masta**shield	2 x 13mm **masta**shield	Stud	-	49	39
SSW17	2 x 13mm **masta**shield	2 x 13mm **masta**shield	Stud	-	53	44
SSW215	1 x 13mm **sound**shield	1 x 13mm **sound**shield	Stud	-	47	39
SSW216	1 x 13mm **sound**shield	2 x 13mm **sound**shield	Stud	-	52	44
SSW217	2 x 13mm **sound**shield	2 x 13mm **sound**shield	Stud	-	55	49
SSW276	1 x 10mm **sound**shield	1 x 10mm **sound**shield	Acoustic stud	-	47	38
SSW277	1 x 10mm **sound**shield	2 x 10mm **sound**shield	Acoustic stud	-	50	42
SSW278	2 x 10mm **sound**shield	2 x 10mm **sound**shield	Acoustic stud	-	57	48
SSW85	1 x 13mm **masta**shield	1 x 13mm **masta**shield	Acoustic stud	-	46	37
SSW86	1 x 13mm **masta**shield	2 x 13mm **masta**shield	Acoustic stud	-	50	41
SSW87	2 x 13mm **masta**shield	2 x 13mm **masta**shield	Acoustic stud	-	56	48
SSW281	1 x 13mm **sound**shield	1 x 13mm **sound**shield	Acoustic stud	-	50	42
SSW282	1 x 13mm **sound**shield	2 x 13mm **sound**shield	Acoustic stud	-	57	49
SSW283	2 x 13mm **sound**shield	2 x 13mm **sound**shield	Acoustic stud	-	62	54
SSW20	1 x 10mm **masta**shield	1 x 10mm **masta**shield	Staggered stud	-	42	31
SSW21	1 x 10mm **masta**shield	2 x 10mm **masta**shield	Staggered stud	-	47	35
SSW22	2 x 10mm **masta**shield	2 x 10mm **masta**shield	Staggered stud	-	52	42
SSW220	1 x 10mm **sound**shield	1 x 10mm **sound**shield	Staggered stud	-	45	33
SSW221	1 x 10mm **sound**shield	2 x 10mm **sound**shield	Staggered stud	-	50	40
SSW222	2 x 10mm **sound**shield	2 x 10mm **sound**shield	Staggered stud	-	54	46
SSW25	1 x 13mm **masta**shield	1 x 13mm **masta**shield	Staggered stud	-	45	33
SSW26	1 x 13mm **masta**shield	2 x 13mm **masta**shield	Staggered stud	-	50	40
SSW27	2 x 13mm **masta**shield	2 x 13mm **masta**shield	Staggered stud	-	54	46
SSW225	1 x 13mm **sound**shield	1 x 13mm **sound**shield	Staggered stud	-	48	40
SSW226	1 x 13mm **sound**shield	2 x 13mm **sound**shield	Staggered stud	-	52	46
SSW227	2 x 13mm **sound**shield	2 x 13mm **sound**shield	Staggered stud	-	58	51

1. Stud, Acoustic Stud and Staggered stud acoustic values determined using 92mm cavity with glasswool insulation.



Fire Rated Internal Partition Walls

System	Side 1	Side 2	Frame	Fire Resistance Level		Acoustics[1]	
						Rw	Rw+Ctr
SSW300	1 x 13mm fireshield	-	Stud	-	-	33	29
SSW301	2 x 13mm fireshield	-	Stud	-/30/30	30/30/30	39	35
SSW302	3 x 13mm fireshield	-	Stud	-/90/90	90/90/90	42	39
SSW310	1 x 13mm fireshield	1 x 13mm fireshield	Stud	-/60/60	30/30/30	46	36
SSW311	1 x 13mm fireshield	2 x 13mm fireshield	Stud	-/90/90	30/30/30	50	42
SSW312	2 x 13mm fireshield	2 x 13mm fireshield	Stud	-/120/120	90/90/90	55	47
SSW314	3 x 13mm fireshield	3 x 13mm fireshield	Stud	-/180/180	120/120/120	59	**53**
SSW910	1 x 13mm trurock	1 x 13mm trurock	Stud	-/60/60	30/30/30	47	39
SSW911	1 x 13mm trurock	2 x 13mm trurock	Stud	-/90/90	30/30/30	52	45
SSW912	2 x 13mm trurock	2 x 13mm trurock	Stud	-/120/120	90/90/90	56	**50**
SSW510	1 x 13mm fireshield	1 x 13mm fireshield + 1 x 6mm Duraliner	Stud	-/60/60	30/30/30	51	42
SSW512	1 x 13mm fireshield + 1 x 6mm Duraliner	1 x 13mm fireshield + 1 x 6mm Duraliner	Stud	-/90/90	30/30/30	55	47
SSW303	1 x 16mm fireshield	-	Stud	-	-	33	30
SSW304	2 x 16mm fireshield	-	Stud	-/60/60	60/60/60	40	37
SSW305	3 x 16mm fireshield	-	Stud	-/120/120	120/120/120	43	40
SSW315	1 x 16mm fireshield	1 x 16mm fireshield	Stud	-/90/90	60/60/60	47	39
SSW316	1 x 16mm fireshield	2 x 16mm fireshield	Stud	-/90/90	60/60/60	52	45
SSW317	2 x 16mm fireshield	2 x 16mm fireshield	Stud	-/120/120	120/120/120	56	**50**
SSW319	3 x 16mm fireshield	3 x 16mm fireshield	Stud	-/240/240	120/120/120	60	**55**
SSW580	4 x 16mm fireshield	4 x 16mm fireshield	Stud	-/240/240	180/180/180	66	**61**
SSW582	2 x 25mm shaftliner + 1 x 13mm fireshield	2 x 25mm shaftliner + 1 x 13mm fireshield	Stud	-/240/240	180/180/180	61	**56**
SSW514	1 x 16mm fireshield	1 x 16mm fireshield + 1 x 6mm Duraliner	Stud	-/90/90	60/60/60	53	43
SSW516	1 x 16mm fireshield + 1 x 6mm Duraliner	1 x 16mm fireshield + 1 x 6mm Duraliner	Stud	-/120/120	60/60/60	56	48
SSW573	1 x 16mm fireshield	1 x 10mm mastashield	Stud	-/60/60	60/60/60	44	32
SSW386	1 x 13mm fireshield	1 x 13mm fireshield	Acoustic stud	-/60/60	30/30/30	50	41
SSW387	1 x 13mm fireshield	2 x 13mm fireshield	Acoustic stud	-/90/90	30/30/30	56	47
SSW388	2 x 13mm fireshield	2 x 13mm fireshield	Acoustic stud	-/120/120	90/90/90	60	**52**
SSW396	1 x 13mm fireshield + 1 x 13mm mastashield	1 x 13mm fireshield + 1 x 13mm mastashield	Acoustic stud	-/90/90	60/60/60	58	**51**

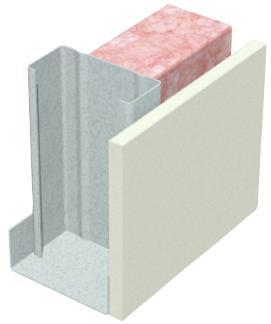
1. Stud and Acoustic Stud acoustic values determined using 92mm cavity with glasswool insulation.

Fire Rated Internal Partition Walls

System	Side 1	Side 2	Frame[2]	Fire Resistance Level		Acoustics[1,2]	
						Rw	Rw+Ctr
SSW551	2 x 13mm fireshield	1 x 13mm fireshield + 1 x 6mm Duraliner	Acoustic stud	-/90/90	30/30/30	59	**50**
SSW552	1 x 13mm fireshield + 1 x 6mm Duraliner	1 x 13mm fireshield + 1 x 6mm Duraliner	Acoustic stud	-/90/90	30/30/30	58	**50**
SSW391	1 x 16mm fireshield	1 x 16mm fireshield	Acoustic stud	-/90/90	60/60/60	51	43
SSW392	1 x 16mm fireshield	2 x 16mm fireshield	Acoustic stud	-/90/90	60/60/60	58	**50**
SSW393	2 x 16mm fireshield	2 x 16mm fireshield	Acoustic stud	-/120/120	120/120/120	62	**54**
SSW397	1 x 16mm fireshield + 1 x 10mm mastashield	1 x 16mm fireshield + 1 x 10mm mastashield	Acoustic stud	-/120/120	60/60/60	61	**51**
SSW555	2 x 16mm fireshield	1 x 16mm fireshield + 1 x 6mm Duraliner	Acoustic stud	-/120/120	60/60/60	62	**53**
SSW556	1 x 16mm fireshield + 1 x 6mm Duraliner	1 x 16mm fireshield + 1 x 6mm Duraliner	Acoustic stud	-/120/120	60/60/60	61	**51**
SSW330	1 x 13mm fireshield	1 x 13mm fireshield	Double stud	-/60/60	30/30/30	50	38
SSW331	1 x 13mm fireshield	2 x 13mm fireshield	Double stud	-/90/90	30/30/30	60	**50**
SSW332	2 x 13mm fireshield	2 x 13mm fireshield	Double stud	-/120/120	90/90/90	63	**53**
SSW380	1 x 13mm fireshield + 1 x 13mm mastashield	1 x 13mm fireshield + 1 x 13mm mastashield	Double stud	-/90/90	60/60/60	62	**50**
SSW531	2 x 13mm fireshield	1 x 13mm fireshield + 1 x 6mm Duraliner	Double stud	-/90/90	30/30/30	63	**50**
SSW532	1 x 13mm fireshield + 1 x 6mm Duraliner	1 x 13mm fireshield + 1 x 6mm Duraliner	Double stud	-/90/90	30/30/30	62	**50**
SSW335	1 x 16mm fireshield	1 x 16mm fireshield	Double stud	-/90/90	60/60/60	60	**50**
SSW336	1 x 16mm fireshield	2 x 16mm fireshield	Double stud	-/90/90	60/60/60	62	**51**
SSW337	2 x 16mm fireshield	2 x 16mm fireshield	Double stud	-/120/120	120/120/120	65	**55**
SSW339	3 x 16mm fireshield	3 x 16mm fireshield	Double stud	-/240/240	120/120/120	72	**61**
SSW581	4 x 16mm fireshield	4 x 16mm fireshield	Double stud	-/240/240	180/180/180	79	**71**
SSW583	2 x 25mm shaftliner + 1 x 13mm fireshield	2 x 25mm shaftliner + 1 x 13mm fireshield	Double stud	-/240/240	180/180/180	77	**70**
SSW381	1 x 16mm fireshield	1 x 16mm fireshield + 1 x 10mm mastashield	Double stud	-/90/90	60/60/60	60	**50**
SSW382	1 x 16mm fireshield + 1 x 10mm mastashield	1 x 16mm fireshield + 1 x 10mm mastashield	Double stud	-/120/120	60/60/60	64	**52**
SSW534	1 x 16mm fireshield	1 x 16mm fireshield + 1 x 6mm Duraliner	Double stud	-/90/90	60/60/60	59	**50**
SSW535	2 x 16mm fireshield	1 x 16mm fireshield + 1 x 6mm Duraliner	Double stud	-/120/120	60/60/60	65	**52**
SSW536	1 x 16mm fireshield + 1 x 6mm Duraliner	1 x 16mm fireshield + 1 x 6mm Duraliner	Double stud	-/120/120	60/60/60	64	**51**
SSW320	1 x 13mm fireshield	1 x 13mm fireshield	Staggered stud	-/60/60	30/30/30	50	41
SSW321	1 x 13mm fireshield	2 x 13mm fireshield	Staggered stud	-/90/90	30/30/30	56	46
SSW322	2 x 13mm fireshield	2 x 13mm fireshield	Staggered stud	-/120/120	90/90/90	58	**50**
SSW520	1 x 13mm fireshield	1 x 13mm fireshield + 1 x 6mm Duraliner	Staggered stud	-/60/60	30/30/30	51	43
SSW522	1 x 13mm fireshield + 1 x 6mm Duraliner	1 x 13mm fireshield + 1 x 6mm Duraliner	Staggered stud	-/90/90	30/30/30	56	48
SSW325	1 x 16mm fireshield	1 x 16mm fireshield	Staggered stud	-/90/90	60/60/60	50	42
SSW326	1 x 16mm fireshield	2 x 16mm fireshield	Staggered stud	-/90/90	60/60/60	52	46
SSW327	2 x 16mm fireshield	2 x 16mm fireshield	Staggered stud	-/120/120	120/120/120	58	**52**
SSW524	1 x 16mm fireshield	1 x 16mm fireshield + 1 x 6mm Duraliner	Staggered stud	-/90/90	60/60/60	52	45
SSW526	1 x 16mm fireshield + 1 x 6mm Duraliner	1 x 16mm fireshield + 1 x 6mm Duraliner	Staggered stud	-/120/120	60/60/60	59	**51**

1. Acoustic stud and Staggered stud acoustic values determined using 92mm cavity with Glasswool insulation.
2. Double stud acoustic values determined using 148mm cavity with Glasswool insulation.

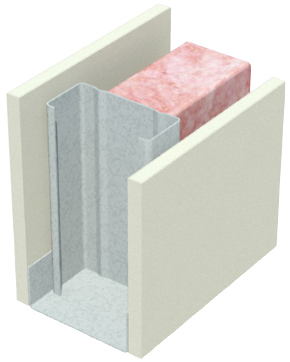
SSW1



- Steel stud framing at maximum 600mm centres
- 1 layer of 10mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	61	25 (21)	29 (25)	Report INSUL v9
64	74			
76	86			
92	102			
150	160			

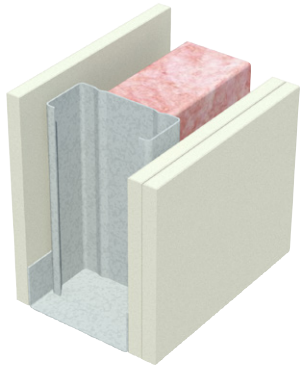
SSW10



- 1 layer of 10mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 1 layer of 10mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	71	33 (24)	37 (29)	Report Day Design 3094-33
64	84	33 (24)	39 (30)	
76	96	33 (24)	39 (30)	
92	112	33 (25)	40 (31)	
150	170	35 (25)	43 (33)	

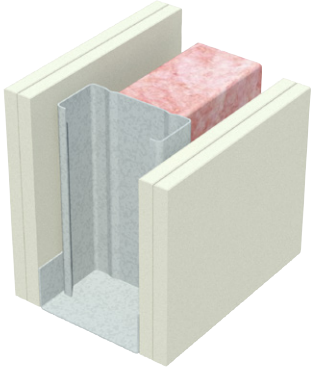
SSW11



- 1 layer of 10mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 10mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	81	37 (28)	42 (34)	Report Day Design 3094-33
64	94	38 (29)	43 (34)	
76	106	38 (29)	44 (35)	
92	122	38 (29)	45 (35)	
150	180	40 (29)	48 (38)	

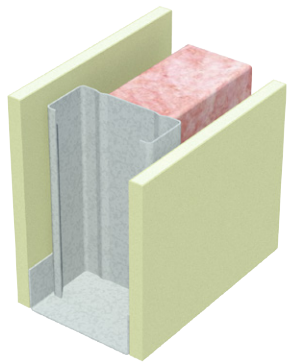
SSW12



- 2 layers of 10mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 10mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	91	40 (31)	47 (37)	Report Day Design 3094-33
64	104	41 (32)	48 (37)	
76	116	41 (32)	49 (39)	
92	132	42 (32)	50 (40)	
150	190	44 (36)	53 (44)	

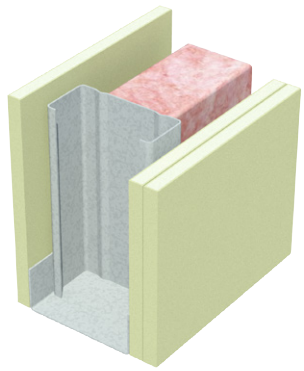
SSW210



- 1 layer of 10mm **sound**shield or **opal**
- Steel stud framing at maximum 600mm centres
- 1 layer of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Reports
51	71	33 (26)	41 (33)	Day Design 3094-33
64	84	33 (26)[1]	42 (33)	
76	96	34 (26)	43 (34)	
92	112	35 (27)	43 (34)	[1]STR057
150	170	37 (27)	46 (36)	

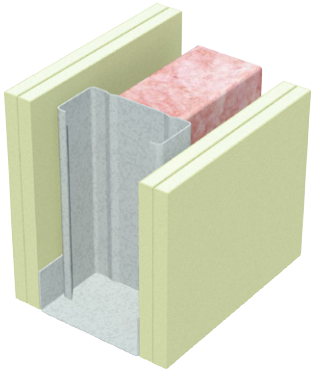
SSW211



- 1 layer of 10mm **sound**shield or **opal**
- Steel stud framing at maximum 600mm centres
- 2 layers of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	81	39 (31)	46 (37)	Day Design 3094-33
64	94	39 (31)	46 (37)	
76	106	40 (31)	48 (37)	
92	122	40 (31)	49 (39)	
150	180	42 (32)	50 (42)	

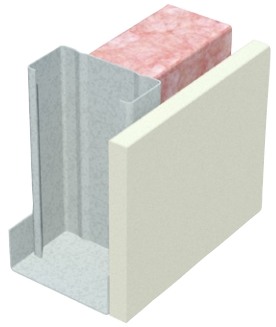
SSW212



- 2 layers of 10mm **sound**shield or **opal**
- Steel stud framing at maximum 600mm centres
- 2 layers of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	91	43 (33)	50 (40)	Day Design 3094-33
64	104	43 (33)	51 (42)	
76	116	44 (34)	52 (43)	
92	132	45 (34)	53 (44)	
150	190	47 (39)	54 (47)	

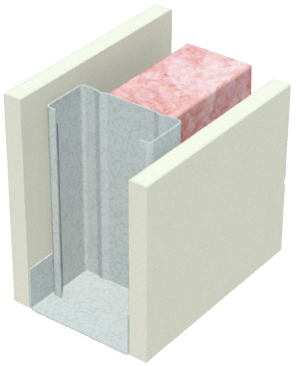
SSW4



- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	64	29 (25)	32 (28)	Report Day Design 3094-35
64	77			
76	89			
92	105			
150	163			

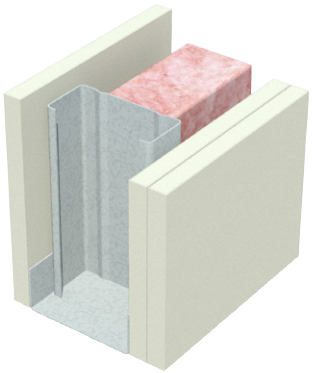
SSW15



- 1 layer of 13mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	77	33 (26)	41 (33)	Report Day Design 3094-33
64	90	34 (26)	42 (33)	
76	102	34 (26)	43 (33)	
92	118	35 (27)	43 (33)	
150	176	37 (27)	45 (37)	

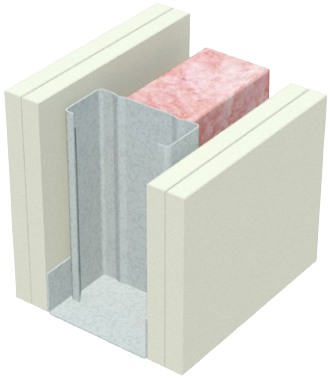
SSW16



- 1 layer of 13mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	90	39 (31)	46 (36)	Report Day Design 3094-33
64	103	39 (31)	47 (37)	
76	115	40 (31)	47 (37)	
92	131	40 (31)	49 (39)	
150	189	42 (32)	50 (42)	

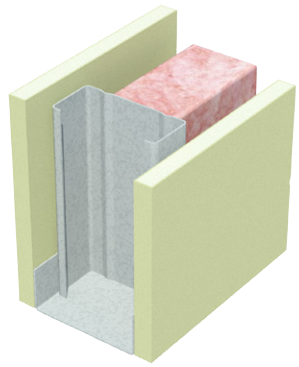
SSW17



- 2 layers of 13mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	103	42 (33)	50 (40)	Report Day Design 3094-33
64	116	43 (33)	51 (41)	
76	128	44 (34)	52 (43)	
92	144	44 (34)	53 (44)	
150	202	47 (39)	54 (47)	

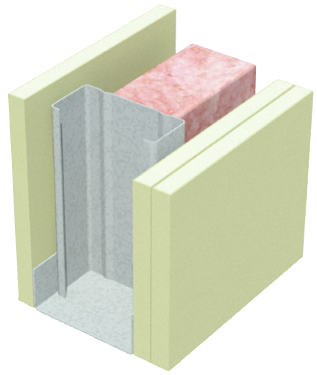
SSW215



- 1 layer of 13mm **sound**shield
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	77	36 (29)	45 (37)	Day Design 3094-33
64	90	37 (29)[1]	45 (37)	
76	102	37 (30)	46 (37)	
92	118	38 (30)	47 (39)	[1]TL442b
150	176	41 (31)	48 (42)	

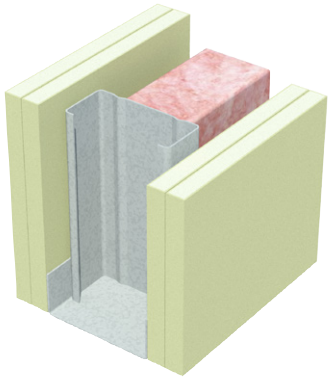
SSW216



- 1 layer of 13mm **sound**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	90	42 (34)	50 (40)	Day Design 3094-33
64	103	43 (34)	51 (42)	
76	115	44 (34)	51 (43)	
92	131	45 (35)	52 (44)	
150	189	47 (37)	53 (47)	

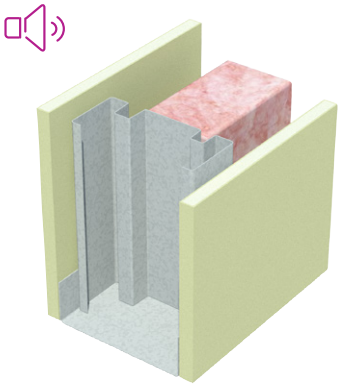
SSW217



- 2 layers of 13mm **sound**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	103	46 (40)	54 (46)	Day Design 3094-33
64	116	47 (41)	55 (47)	
76	128	48 (41)	55 (48)	
92	144	49 (42)	55 (49)	
150	202	51 (44)	56 (52)	

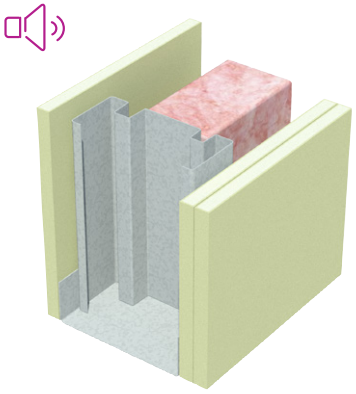
SSW276



- 1 layer of 10mm **sound**shield or **opal**
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	112	41 (34)	47 (38)	Report Day Design 5008.28

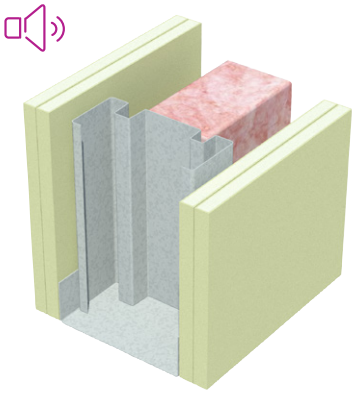
SSW277



- 1 layer of 10mm **sound**shield or **opal**
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	122	43 (36)	50 (42)	Report Day Design 5008.28

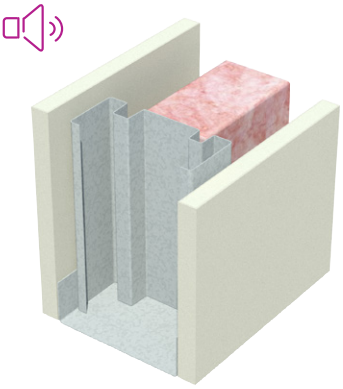
SSW278



- 2 layers of 10mm **sound**shield or **opal**
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 10mm **sound**shield or **opal**

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	132	49 (43)	57 (48)	Report Day Design 5008.28

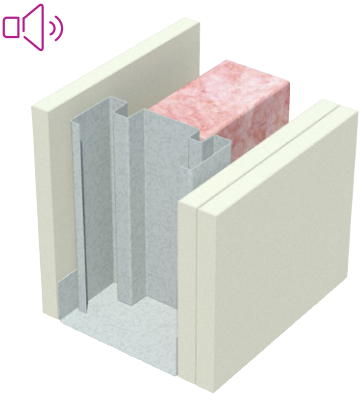
SSW85



- 1 layer of 13mm **masta**shield or **water**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	118	39 (33)	46 (37)	Report Day Design 5008.28

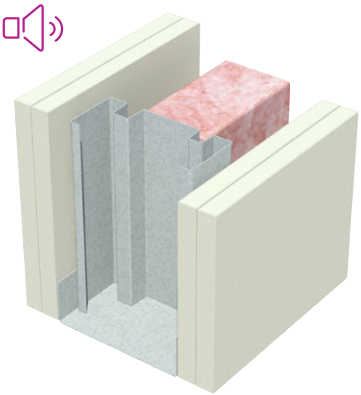
SSW86



- 1 layer of 13mm **masta**shield or **water**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	131	43 (36)	50 (41)	Report Day Design 5008.28

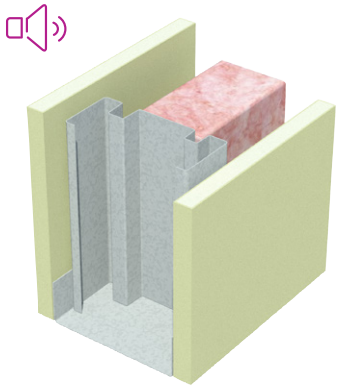
SSW87



- 2 layers of 13mm **masta**shield or **water**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **masta**shield or **water**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	144	49 (43)	56 (48)	Report Day Design 5008.28

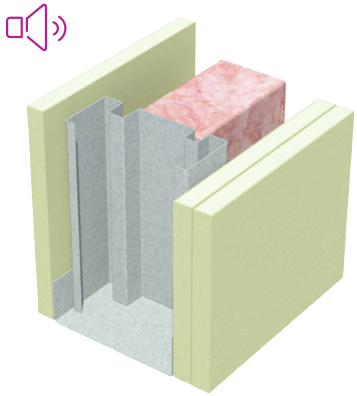
SSW281



- 1 layer of 13mm **sound**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	118	42 (36)	50 (42)	Report Day Design 5008.28

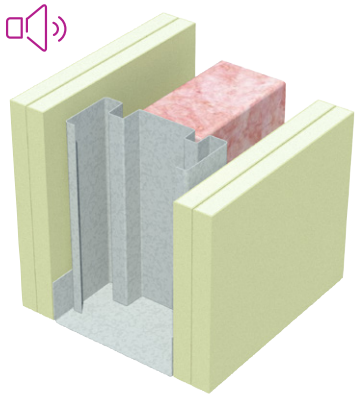
SSW282



- 1 layer of 13mm **sound**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	131	48 (43)	57 (49)	Report Day Design 5008.28

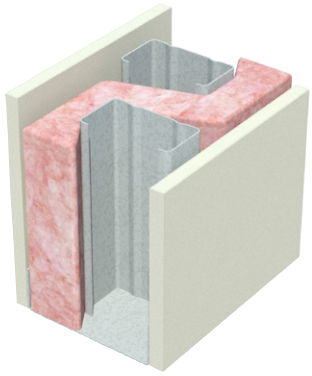
SSW283



- 2 layers of 13mm **sound**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **sound**shield

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	144	54 (50)	62 (54)	Report Day Design 5008.28

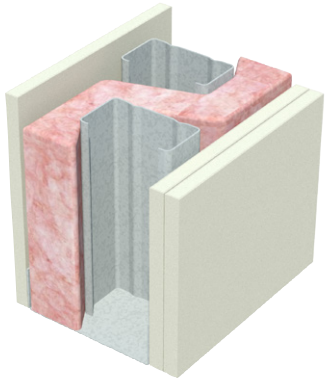
SSW20



- 1 layer of 10mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 10mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	112	33 (36)	42 (31)	43 (32)	Day Design 3094-33
150	170	34 (26)	44 (32)	45 (33)	Note: Impact sound Resistant

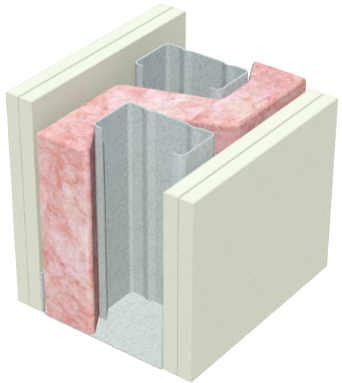
SSW21



- 1 layer of 10mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 10mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	122	37 (29)	47 (35)	48 (36)	Day Design 3094-33
150	180	38 (29)	49 (38)	50 (39)	Note: Impact sound Resistant

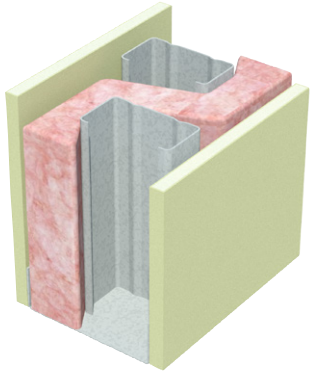
SSW22



- 2 layers of 10mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 10mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	132	42 (33)	52 (42)	52 (43)	Day Design 3094-33
150	190	44 (34)	53 (45)	54 (46)	Note: Impact sound Resistant

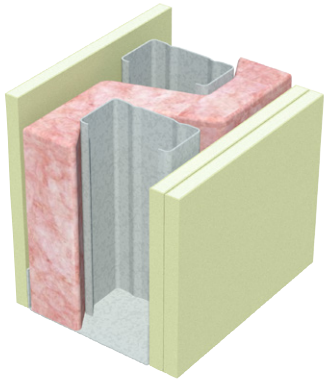
SSW220



- 1 layer of 10mm **sound**shield or **opal**
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 10mm **sound**shield or **opal**

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	112	35 (28)	45 (33)[1]	45 (34)	Day Design 3094-33 [1]TL442g
150	170	37 (28)	46 (36)	47 (37)	Note: Impact sound Resistant

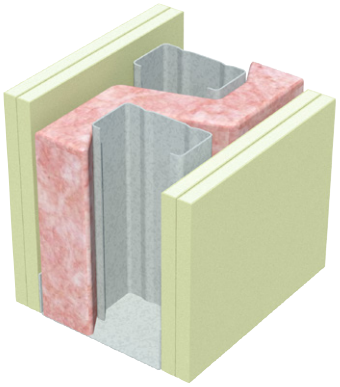
SSW221



- 1 layer of 10mm **sound**shield or **opal**
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 10mm **sound**shield or **opal**

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	122	40 (32)	50 (40)	50 (41)	Day Design 3094-33
150	180	42 (33)	51 (44)	52 (45)	Note: Impact sound Resistant

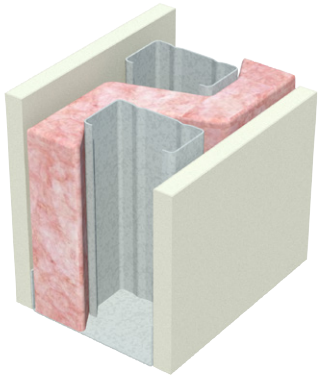
SSW222



- 2 layers of 10mm **sound**shield or **opal**
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 10mm **sound**shield or **opal**

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	132	44 (35)	54 (46)	55 (47)	Day Design 3094-33
150	190	47 (37)	55 (49)	56 (50)	Note: Impact sound Resistant

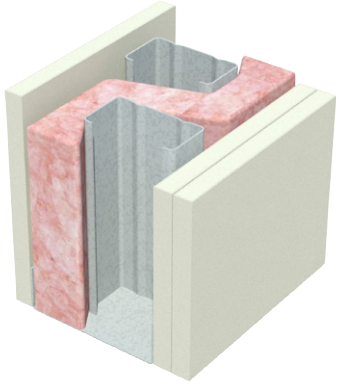
SSW25



- 1 layer of 13mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 13mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	118	35 (27)	45 (33)	45 (34)	Day Design 3094-33
150	176	36 (28)	46 (36)	47 (37)	Note: Impact sound Resistant

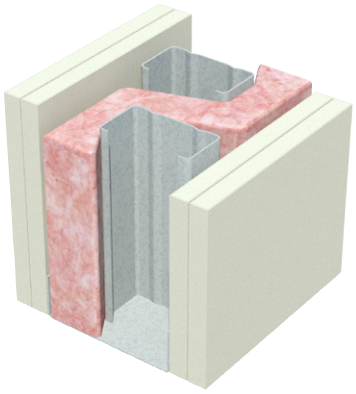
SSW26



- 1 layer of 13mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	131	40 (32)	50 (40)	50 (41)	Day Design 3094-33
150	189	42 (33)	51 (44)	52 (45)	Note: Impact sound Resistant

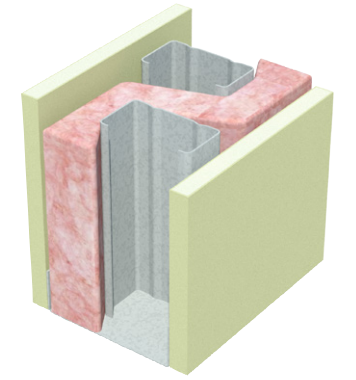
SSW27



- 2 layers of 13mm **masta**shield or **water**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **masta**shield or **water**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	144	44 (35)	54 (46)	54 (47)	Day Design 3094-33
150	202	47 (37)	55 (49)	56 (49)	Note: Impact sound Resistant

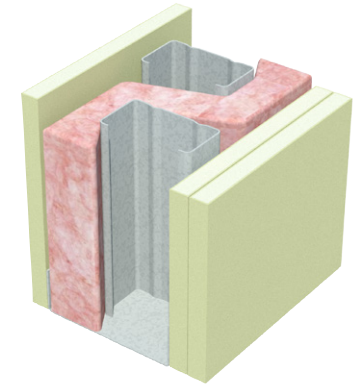
SSW225



- 1 layer of 13mm **sound**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 13mm **sound**shield

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	118	40 (32)	48 (40)	49 (41)	Day Design 3094-33 [1]TL442C
150	176	42 (33)	49 (43)	51 (46)[1]	Note: Impact sound Resistant

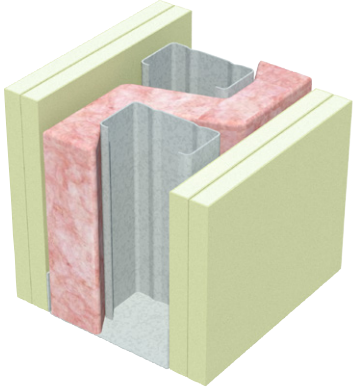
SSW226



- 1 layer of 13mm **sound**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **sound**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	131	44 (36)	52 (46)	53 (47)	Day Design 3094-33
150	189	46 (37)	53 (48)	54 (49)	Note: Impact sound Resistant

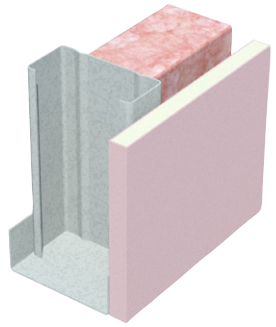
SSW227



- 2 layers of 13mm **sound**shield
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **sound**shield

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report
92	144	49 (42)	58 (51)	59 (52)	Day Design 3094-33 [1]TL442d
150	202	51 (43)	59 (53)[1]	60 (54)	Note: Impact sound Resistant

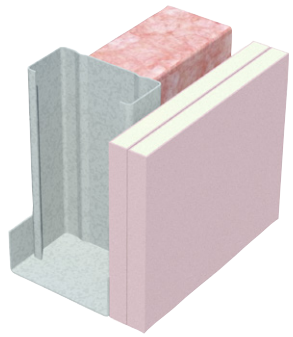
SSW300



- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	64	30 (26)	33 (29)	Report Day Design 3094-35
64	77			
76	89			
92	105			
150	163			

SSW301



- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

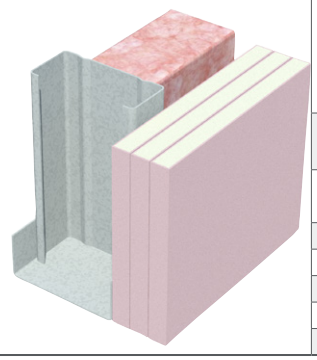
Fire Resistance Level

-/30/30 and **30/30/30** from the lined side only

Report FC13921

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	77	34 (30) [1]	39 (35)	Reports Day Design 3094-33 [1]ATF 1530 INSUL v9
64	90			
76	102			
92	118			
150	176			

SSW302



- Steel stud framing at maximum 600mm centres
- 3 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

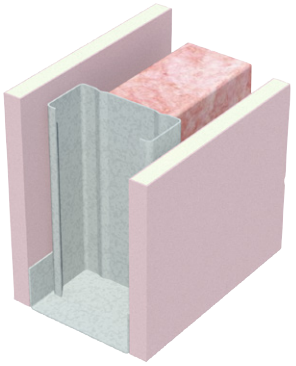
Fire Resistance Level

-/90/90 and **90/90/90** from the lined side only

Report FC13921

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	90	37 (34)	42 (39)	Reports Day Design 3094-33 INSUL v9
64	103			
76	115			
92	131			
150	189			

SSW310



- 1 layer of 13mm **fire**shield or **multi**shield
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield

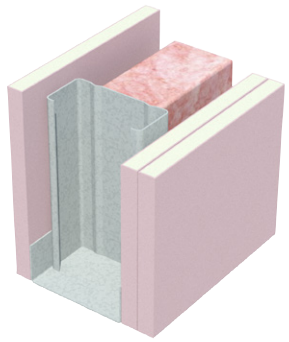
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	
51	77	36 (28)	43 (34)	Reports Day Design 3094-33 [1]STR082 [2]TL561-07 ◉ Use Pink® Partition 50mm 32 kg/m³ R1.5 to achieve 45 (36)
64	90	36 (28)[1]	44 (34)[2] ◉	
76	102	37 (28)	45 (35)	
92	118	38 (29)	46 (36)	
150	176	39 (29)	47 (40)	

SSW311



- 1 layer of 13mm **fire**shield or **multi**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield

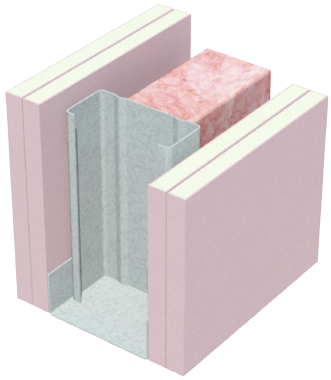
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 11kg/m³ R1.8	Reports
51	90	41 (33)	48 (39)	-	Day Design 3094-33
64	103	42 (33)	49 (39)	-	
76	115	42 (33)	50 (40)	-	
92	131	43 (33)	50 (42)	50 (43)[1]	[1]TL561-05
150	189	45 (35)	52 (45)	-	

SSW312



- 2 layers of 13mm **fire**shield or **multi**shield
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield

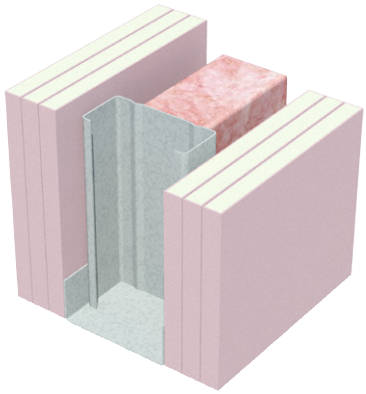
Fire Resistance Level

-/120/120 and **90/90/90** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Reports
51	103	46 (39)	52 (43)	Day Design 3094-33
64	116	47 (40)	53 (45)	
76	128	47 (40)	54 (46)	
92	144	49 (42)[1]	55 (47)	[1]HAS 087
150	202	51 (42)	55 (**50**)	

SSW314



- 3 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 3 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

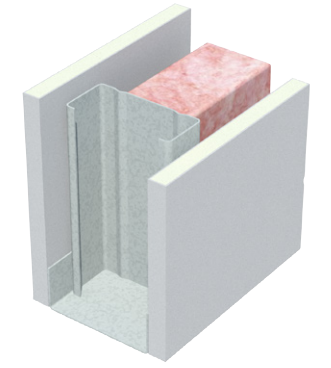
Fire Resistance Level

-/180/180 and **120/120/120** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	129	50 (43)	58 (**50**)	Day Design 3094-33
64	142	51 (43)	58 (**51**)	
76	154	52 (44)	59 (**52**)	
92	170	53 (45)	59 (**53**)	
150	228	56 (48)	60 (**55**)	

SSW910



- 1 layer of 13mm **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **impact**shield or **tru**rock

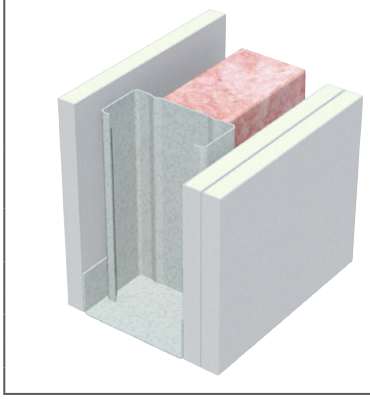
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Reports
51	77	36 (29)	45 (37)	Day Design 5008-09 3094-33
64	90	37 (30)	46 (37)	
76	102	38 (30)	47 (38)	
92	118	38 (30)	47 (39)	
150	176	40 (31)	49 (42)	

SSW911



- 1 layer of 13mm **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **impact**shield or **tru**rock

Fire Resistance Level

-/90/90 and **30/30/30** from either side

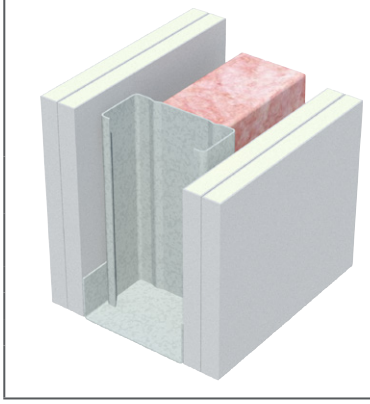
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	90	43 (34)	50 (41)
64	103	43 (34)	51 (42)
76	115	44 (35)	51 (44)
92	131	45 (35)	52 (45)
150	189	47 (37)	53 (48)

Reports

Day Design 5008-09 3094-33

SSW912



- 2 layers of 13mm **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **impact**shield or **tru**rock

Fire Resistance Level

-/120/120 and **90/90/90** from either side

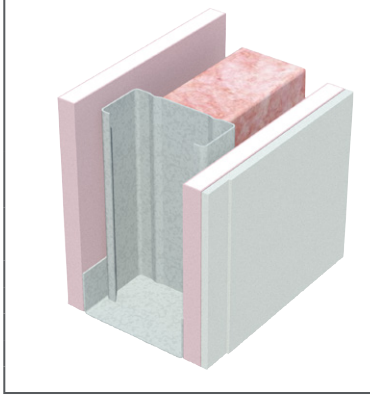
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	103	47 (40)	54 (46)
64	116	48 (41)	55 (48)
76	128	49 (41)	55 (49)
92	144	49 (42)	56 (**50**)
150	202	52 (44)	56 (**52**)

Reports

Day Design 5008-09 3094-33

SSW510



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level

-/60/60 and **30/30/30** from either side

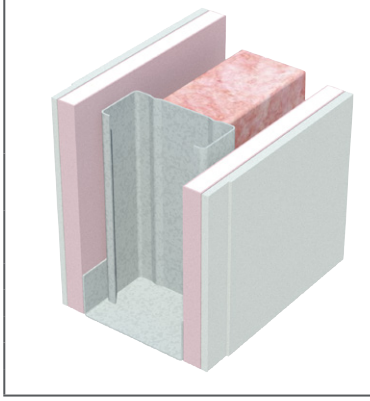
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	83	42 (32)	48 (39)
64	96	42 (32)	49 (39)
76	108	42 (32)	50 (40)
92	124	43 (33)	51 (42)
150	182	45 (34)	52 (45)

Reports

Day Design 3094-33

SSW512



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level

-/90/90 and **30/30/30** from either side

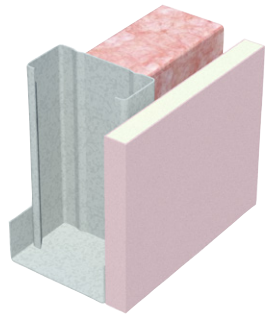
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	89	45 (35)	53 (42)
64	102	46 (35)	54 (44)
76	114	46 (36)	55 (46)
92	130	47 (36)	55 (47)
150	188	49 (41)	56 (**50**)

Reports

Day Design 3094-33

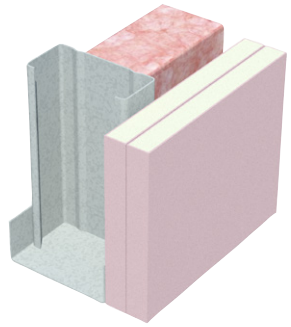
SSW303



- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	67	30 (27)	33 (30)	Day Design 3094-35 INSUL v9
64	80			
76	92			
92	108			
150	166			

SSW304



- Steel stud framing at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

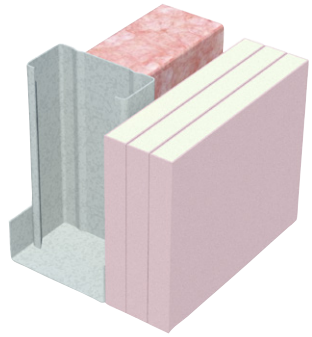
Fire Resistance Level

-/60/60 and **60/60/60** from the lined side only

Report FC13921

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	83	35 (31)	40 (37)	Day Design 3094-33 INSUL v9
64	96			
76	108			
92	124			
150	182			

SSW305



- Steel stud framing at maximum 600mm centres
- 3 layers of 16mm **fire**shield or **multi**shield or **tru**rock

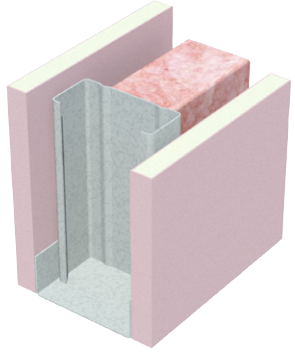
Fire Resistance Level

-/120/120 and **120/120/120** from the lined side only

Report FC13921

Stud Size (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
51	99	38 (35)	43 (40)	Day Design 3094-33 INSUL v9
64	112			
76	124			
92	140			
150	198			

SSW315



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

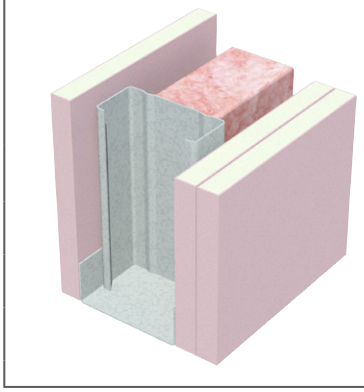
-/90/90 and **60/60/60** from either side using Glasswool insulation

-/60/60 and **60/60/60** from either side using either polyester insulation or no insulation

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Reports Day Design 3094-33
51	83	36 (29)	45 (37)	
64	96	37 (29)[1]	46 (37)	
76	108	38 (30)	47 (38)	
92	124	38 (30)	47 (39)	[1]HAS 086
150	182	40 (31)	49 (42)	

SSW316



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

-/90/90 and **60/60/60** from either side

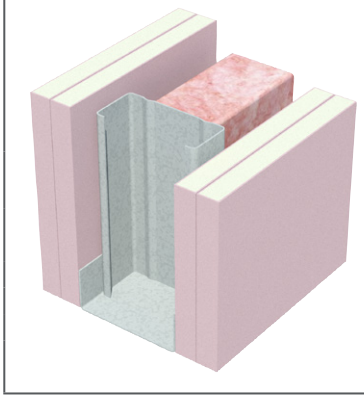
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	99	43 (34)	50 (41)
64	112	43 (34)	51 (42)
76	124	44 (35)	51 (44)
92	140	45 (35)	52 (45)
150	198	47 (37)	53 (48)

Report

Day Design 3094-33

SSW317



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

-/120/120 and **120/120/120** from either side

Report FC13921

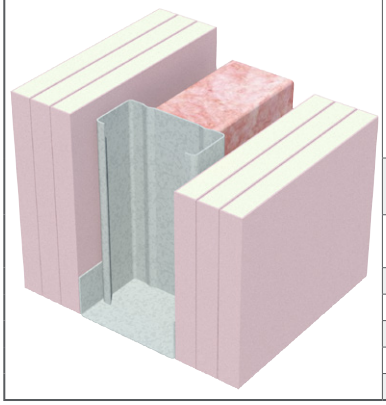
Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	115	47 (40)	54 (46)
64	128	48 (41)	55 (48)
76	140	49 (41)	55 (49)
92	156	49 (42)[1]	56 (**50**)
150	214	52 (44)	56 (**52**)

Report

Day Design 3094-33

[1]HAS087

SSW319



- 3 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 3 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

-/240/240 and **120/120/120** from either side

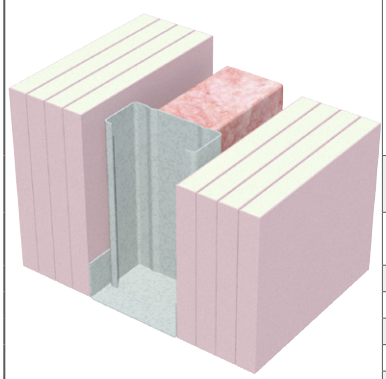
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	147	53 (46)	59 (**52**)
64	160	54 (47)	59 (**54**)
76	172	55 (47)	60 (**54**)
92	188	56 (48)	60 (**55**)
150	246	59 (**50**)	60 (**56**)

Reports

Day Design 3094-33

SSW580



- 4 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 4 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

-/240/240 and **180/180/180** from either side

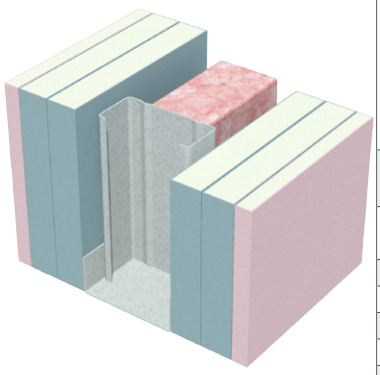
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)	
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2
51	179	61 (**53**)	65 (**58**)
64	192	62 (**54**)	66 (**59**)
76	204	62 (**55**)	66 (**60**)
92	220	63 (**56**)	66 (**61**)
150	278	64 (**58**)	67 (**62**)

Reports

INSUL v9

SSW582



- 2 layers of 25mm **shaft**liner or **inter**shield + 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 2 layers of 25mm **shaft**liner or **inter**shield + 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

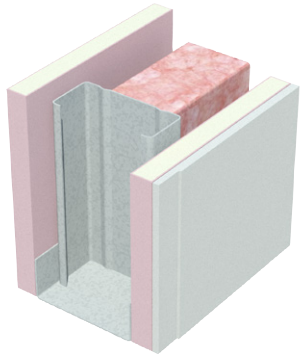
Fire Resistance Level

-/240/240 and **180/180/180** from either side

Report FC13921

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	177	57 (49)	60 (**53**)	Reports INSUL v9
64	190	57 (**50**)	60 (**55**)	
76	202	58 (**51**)	60 (**55**)	
92	218	58 (**51**)	61 (**56**)	
150	276	59 (**53**)	61 (**57**)	

SSW514



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

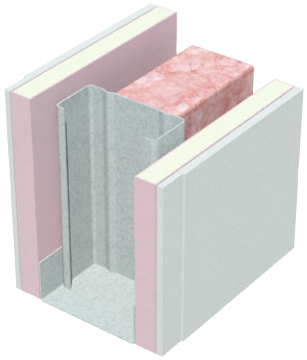
Fire Resistance Level

-/90/90 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	89	44 (32)	49 (37)	Reports INSUL v9
64	102	46 (34)	51 (39)	
76	114	47 (36)	52 (43)	
92	130	48 (38)	53 (43)	
150	188	50 (42)	56 (47)	

SSW516



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

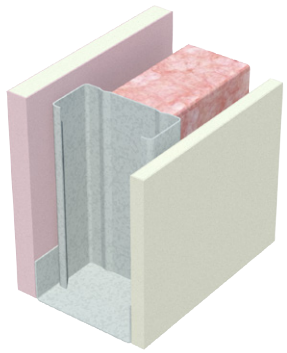
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	95	46 (39)	54 (44)	Reports Day Design 3094-33
64	108	47 (40)	55 (46)	
76	120	47 (40)	55 (47)	
92	136	48 (41)	56 (48)	
150	194	51 (42)	56 (**51**)	

SSW573



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- 1 layer of 10mm **masta**shield or **water**shield

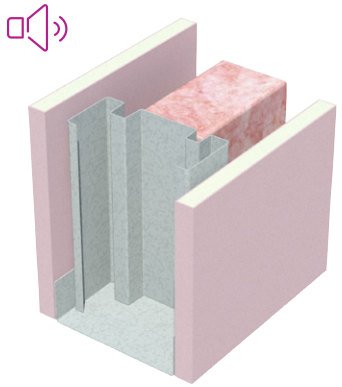
Fire Resistance Level

-/60/60 and **60/60/60** from the fire rated plasterboard side

Report FC13921

Stud Size (mm)	**Wall Width** (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT **Rw (Rw + Ctr)**		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
51	77	37 (29)	41 (31)	Reports Insul
64	90	38 (29)	42 (32)	
76	102	38 (29)	43 (31)	
92	118	39 (29)	44 (32)	
150	176	41 (32)	47 (36)	

SSW386



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

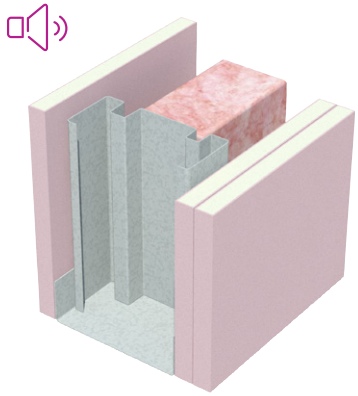
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	Reports
92 Siniat Acoustic Stud	118	42 (35)	50 (41)[1]	Day Design 5008.28 [1]TL738-2

SSW387



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

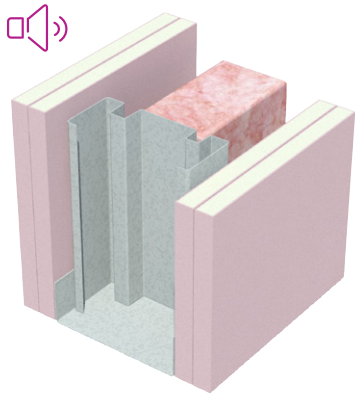
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	Report
92 Siniat Acoustic Stud	131	48 (41)	56 (47)	Day Design 5008.28

SSW388



- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

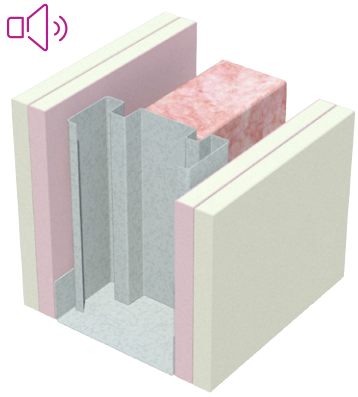
Fire Resistance Level

-/120/120 and **90/90/90** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	Report
92 Siniat Acoustic Stud	144	54 (48)	60 (**52**)	Day Design 5008.28

SSW396



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 13mm **masta**shield or **water**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 13mm **masta**shield or **water**shield

Order of wall linings can be reversed

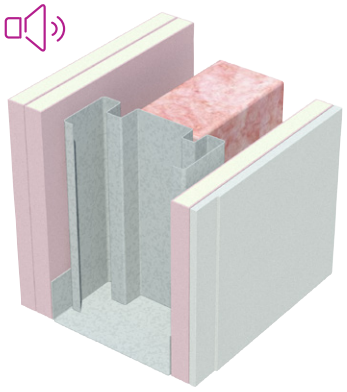
Fire Resistance Level

-/90/90 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	Reports
92 Siniat Acoustic Stud	144	51 (45)	58 (**51**)[1]	Day Design 5008.28 [1]TL738-3

SSW551



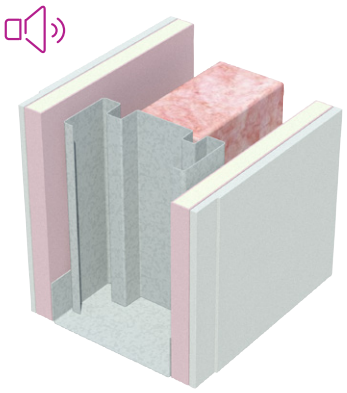
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level
-/90/90 and **30/30/30** from either side
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	137	51 (44)	59 (**50**)	Report Day Design 5008.28

SSW552



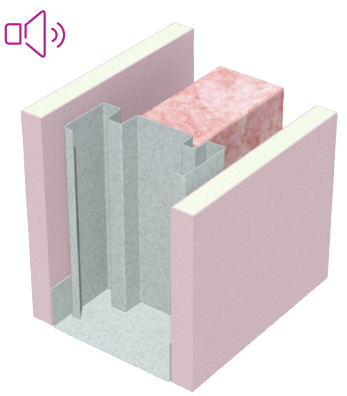
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level
-/90/90 and **30/30/30** from either side
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	130	51 (44)	58 (**50**)	Report Day Design 5008.28

SSW391

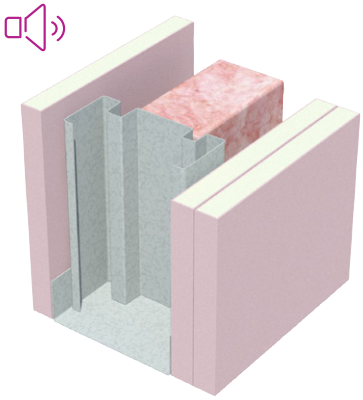


- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level
-/90/90 and **60/60/60** from either side using Glasswool insulation
-/60/60 and **60/60/60** from either side using either polyester insulation or no insulation
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** Rw (Rw + Ctr)				
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	Pink® Partition 75mm 11 kg/m³ R1.8	Pink® Partition 90mm 14 kg/m³ R2.2	Reports
92 Siniat Acoustic Stud	124	42 (36)	at **600**mm stud centres 51 (43)[1]	at **450**mm stud centres 50 (41)[2]	at **400**mm stud centres 50 (41)[3]	Day Design 5008.28 [1]TL738-1 [2]TL737-4 [3]TL737-5

SSW392

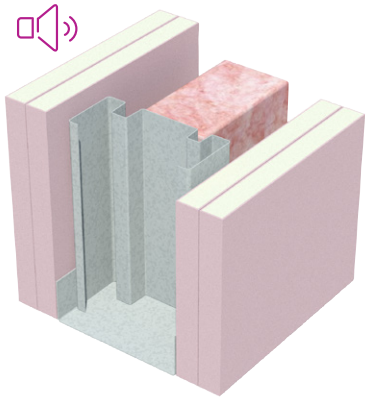


- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level
-/90/90 and **60/60/60** from either side
Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	140	50 (44)	58 (**50**)	Report Day Design 5008.28

SSW393



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

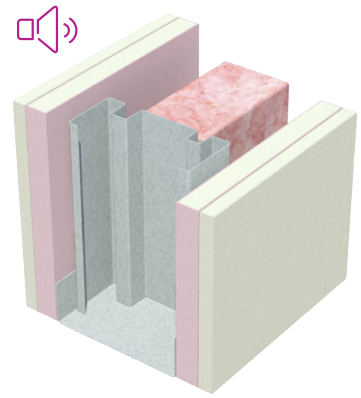
Fire Resistance Level

-/120/120 and **120/120/120** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	156	54 (47)	62 (**54**)	Report Day Design 5008.28

SSW397



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 10mm **masta**shield or **water**shield
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 10mm **masta**shield or **water**shield

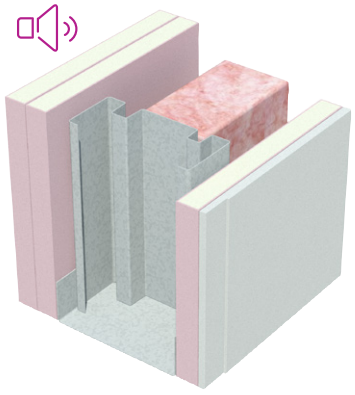
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	144	53 (45)	61 (**51**)	Report Day Design 5008.28

SSW555



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

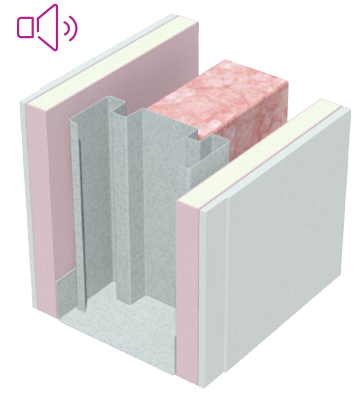
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	146	54 (46)	62 (**53**)	Report Day Design 5008.28

SSW556



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner
- 92mm Siniat **acoustic** stud at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

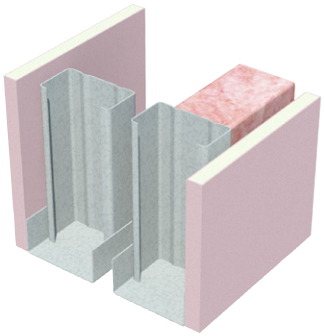
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Stud Size (mm)	Wall Width (mm)	**Sound Insulation** for studs at 600mm centres and thinnest BMT Rw (Rw + Ctr)		
		No insulation	Pink® Partition 75mm 11 kg/m³ R1.8	
92 Siniat Acoustic Stud	136	52 (45)	61 (**51**)	Report Day Design 5008.28

SSW330



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

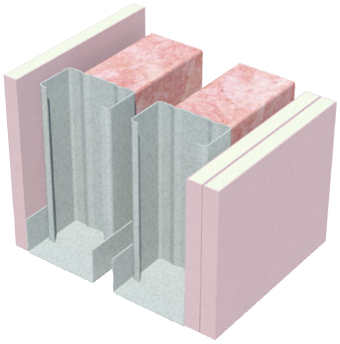
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Reports Day Design 3094-33 [1]ATF 1528 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 174	42 (35)[1]	50 (38)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 226	43 (36)	51 (41)	

SSW331



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

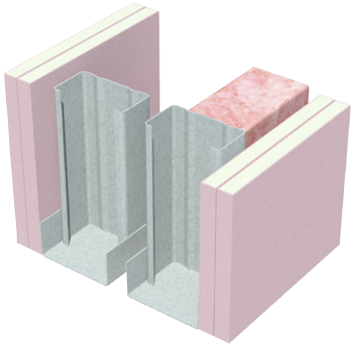
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 75mm 11 kg/m³ R1.8	Day Design 4738-L15 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 187	46 (39)	56 (45)	60 (**50**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 239	47 (39)	57 (46)	61 (**50**)	

SSW332



- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

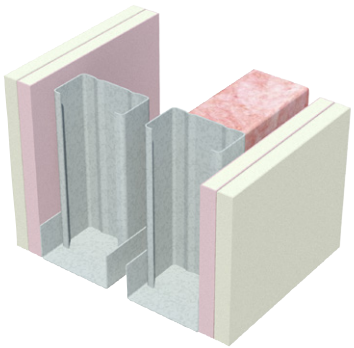
Fire Resistance Level

-/120/120 and **90/90/90** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 75mm 11 kg/m³ R1.8	Day Design 4738-L12 [1]ATF1534 [2]TL525-1 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 200	53 (45)[1]	62 (**50**)	63 (**53**)[2]	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 252	55 (46)	63 (**52**)	64 (**55**)	

SSW380



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 13mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 13mm **masta**shield or **water**shield

Fire Resistance Level

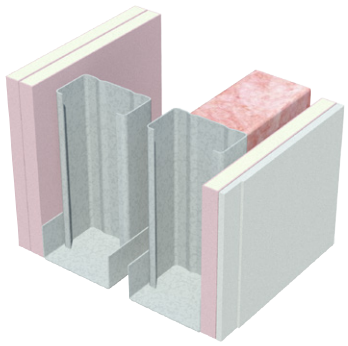
-/90/90 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)				
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 11 kg/m³ R1.8	Reports Day Design 3094-48 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 200	51 (42)	61 (48)	64 (**51**)	62 (**50**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 252	52 (44)	62 (**50**)	65 (**52**)	63 (**52**)	

'2 x' indicates insulation in both frames.

SSW531



- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

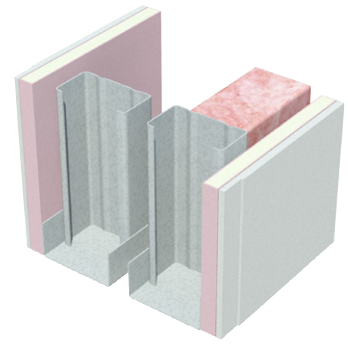
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg, 2 x 64mm studs plus 20mm air gap)	≥ 193	52 (44)	63 (**50**)	
≥ 200 (eg, 2 x 64mm studs plus 72mm air gap)	≥ 245	54 (45)	64 (**52**)	

SSW532



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

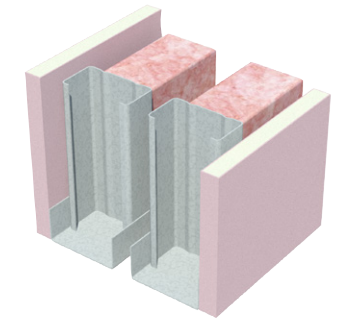
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction ◉ Use Pink® Partition 75mm 11 kg/m³ R1.8 to achieve 62 (**50**)
≥ 148 (eg, 2 x 64mm studs plus 20mm air gap)	≥ 186	52 (43)	62 (49) ◉	
≥ 200 (eg, 2 x 64mm studs plus 72mm air gap)	≥ 238	54 (45)	63 (**52**)	

SSW335



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

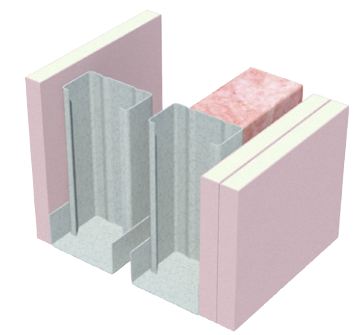
-/90/90 and **60/60/60** from either side using Glasswool insulation

-/60/60 and **60/60/60** from either side using either polyester insulation or no insulation

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)					
		No insulation	Pink 50mm 11 kg/m³ R1.2	**2 x** Pink 75mm 11 kg/m³ R1.8	**2 x** Pink 75mm 14 kg/m³ R1.9	**2 x** Pink 110mm 11 kg/m³ R2.5	Reports Day Design 3094-33, [1]TL525-3 [2]TL574-1 [3]TL525-2 [4]TL738-4 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg, 2 x 64mm studs plus 20mm air gap)	≥ 180	44 (37)	53 (42)	60 (**50**)[4]	60 (**50**)[2]	-	
≥ 172 (eg, 2 x 64mm studs plus 44mm air gap)	≥ 204	-	-	-	-	60 (**50**)[3]	
≥ 200 (eg, 2 x 64mm studs plus 72mm air gap)	≥ 232	45 (38)	54 (44)	61 (**51**)[1]	-	-	

SSW336



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

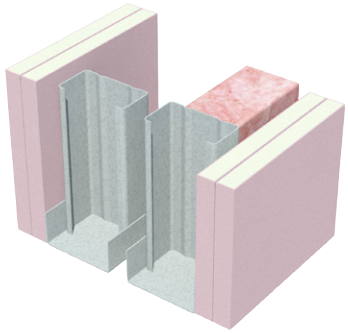
-/90/90 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 50mm 11kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg, 2 x 64mm studs plus 20mm air gap)	≥ 196	50 (42)	59 (48)	62 (**51**)	
≥ 200 (eg, 2 x 64mm studs plus 72mm air gap)	≥ 248	52 (44)	60 (**50**)	-	

'2 x' indicates insulation in both frames.

SSW337



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

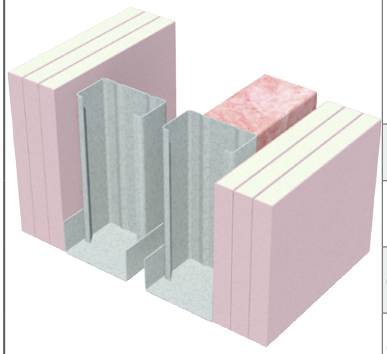
Fire Resistance Level

-/120/120 and **120/120/120** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 4738-L4 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 212	56 (47)	65 (**53**)	65 (**55**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 264	58 (49)	66 (**56**)	67 (**57**)	

SSW339



- 3 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 3 layers of 16mm **fire**shield or **multi**shield or **tru**rock

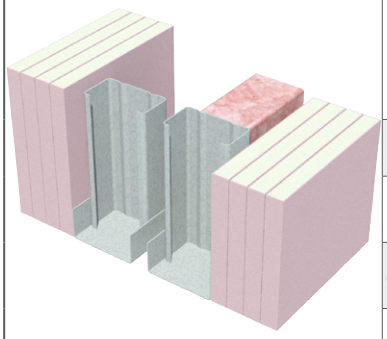
Fire Resistance Level

-/240/240 and **120/120/120** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 244	62 (**53**)	72 (**61**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 296	64 (**55**)	73 (**63**)	

SSW581



- 4 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 4 layers of 16mm **fire**shield or **multi**shield or **tru**rock

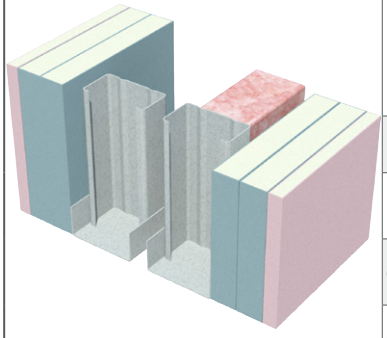
Fire Resistance Level

-/240/240 and **180/180/180** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report INSUL v9 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 276	69 (**63**)	79 (**71**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 328	69 (**64**)	80 (**73**)	

SSW583



- 2 layers of 25mm **shaft**liner or **inter**shield + 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 2 layers of 25mm **shaft**liner or **inter**shield + 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

Fire Resistance Level

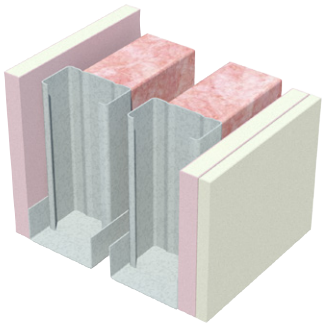
-/240/240 and **180/180/180** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report INSUL v9 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 274	66 (**60**)	77 (**70**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 326	66 (**61**)	78 (**71**)	

'2 x' indicates insulation in both frames.

SSW381



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 10mm **masta**shield or **water**shield

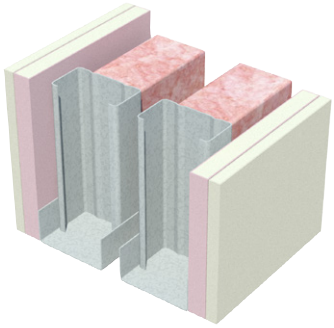
Fire Resistance Level

-/90/90 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)				
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 11 kg/m³ R1.8	**2 x** Pink® Partition 75mm 11 kg/m³ R1.8	Report
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 190	46 (39)	56 (46)	57 (48)	60 (**50**)	Day Design 3094-39 Note: Impact sound Resistant - Discontinuous Construction
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 242	48 (40)	58 (48)	59 (**50**)	62 (**52**)	

SSW382



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 10mm **masta**shield or **water**shield
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 10mm **masta**shield or **water**shield

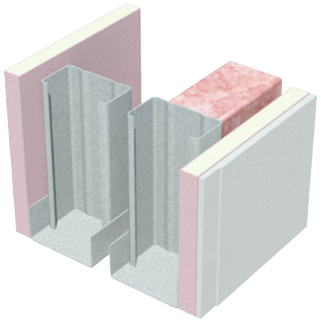
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 50mm 11kg/m³ R1.2	Report
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 200	50 (43)	61 (49)	64 (**52**)	Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 252	52 (44)	62 (**51**)	-	

SSW534



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

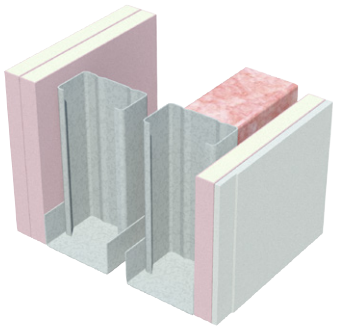
Fire Resistance Level

-/90/90 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Day Design 3094-33
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 186	50 (42)	59 (47)	Note: Impact sound Resistant - Discontinuous Construction
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 238	51 (43)	59 (49) ◉	◉ Use Pink® Partition 75mm 11 kg/m³ R1.8 to achieve 59 (**50**)

SSW535



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level

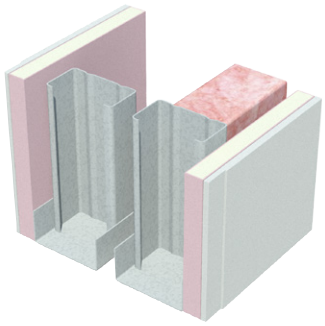
-/120/120 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 202	55 (47)	65 (**52**)	Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 254	57 (48)	66 (**55**)	

'2 x' indicates insulation in both frames.

SSW536



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner
- Steel stud framing at maximum 600mm centres
- Minimum 20mm air gap
- Steel stud framing at maximum 600mm centres
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

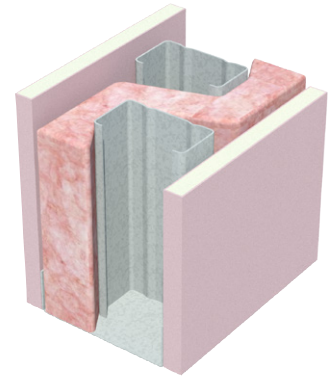
Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Minimum Cavity Size (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant - Discontinuous Construction
≥ 148 (eg. 2 x 64mm studs plus 20mm air gap)	≥ 192	54 (46)	64 (**51**)	
≥ 200 (eg. 2 x 64mm studs plus 72mm air gap)	≥ 244	56 (47)	65 (**54**)	

SSW320



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

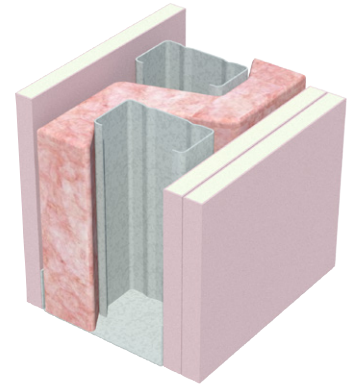
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report Day Design 3094-33 [1]TL554-18 Note: Impact sound Resistant
92	118	38 (30)	47 (36)	50 (41)[1]	
150	176	39 (30)	48 (39)	-	

SSW321



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

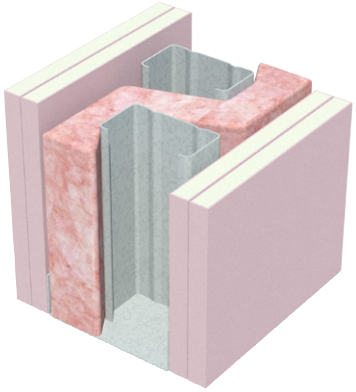
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)			
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 14kg/m³ R1.9	Report Day Design 3094-33 [1]TL554-19 Note: Impact sound Resistant
92	131	43 (34)	51 (43)	56 (46)[1]	
150	189	45 (35)	52 (46)	-	

SSW322



- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock

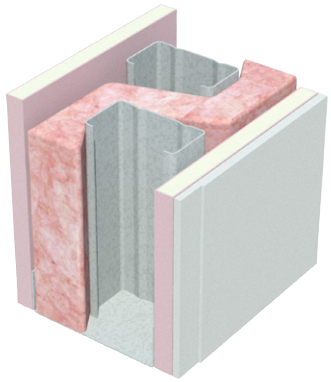
Fire Resistance Level

-/120/120 and **90/90/90** from either side

Report FC13921

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant
92	144	47 (40)	58 (**50**)	
150	202	49 (41)	58 (**52**)	

SSW520



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

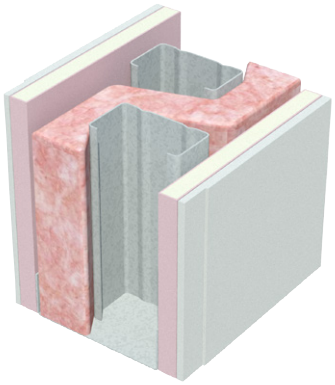
Fire Resistance Level

-/60/60 and **30/30/30** from either side

Report FC13921

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
92	124	43 (34)	51 (43)	Report Day Design 3094-33 Note: Impact sound Resistant
150	182	45 (35)	53 (46)	

SSW522



- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 13mm **fire**shield or **multi**shield or **impact**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

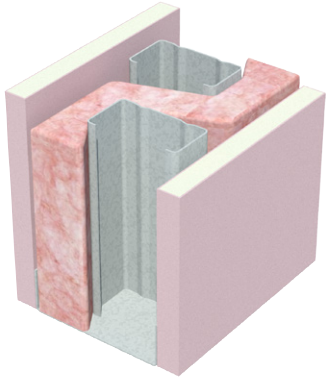
Fire Resistance Level

-/90/90 and **30/30/30** from either side

Report FC13921

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
92	130	47 (37)	56 (48)	Report Day Design 3094-33 Note: Impact sound Resistant
150	188	49 (39)	57 (**51**)	

SSW325



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

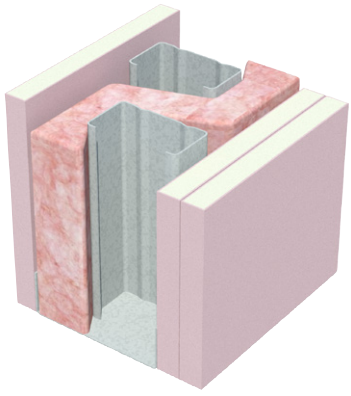
-/90/90 and **60/60/60** from either side using Glasswool insulation

-/60/60 and **60/60/60** from either side using either polyester insulation or no insulation

Report FC13921

Track Width (mm)	Width (mm)	Sound Insulation Rw (Rw + Ctr)				
		No insulation	Pink® Partition 50mm 11kg/m³ R1.2	**2 x** Pink® Partition 50mm 11kg/m³ R1.2	Pink® Partition 75mm 11kg/m³ R1.8	
92	124	40 (32)	48 (41)	52 (44)[1]	50 (42)	Reports Day Design 3094-33, 5008-8 [1]TL510b Note: Impact sound Resistant
150	182	42 (33)	49 (44)	-	-	

SSW326



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

Fire Resistance Level

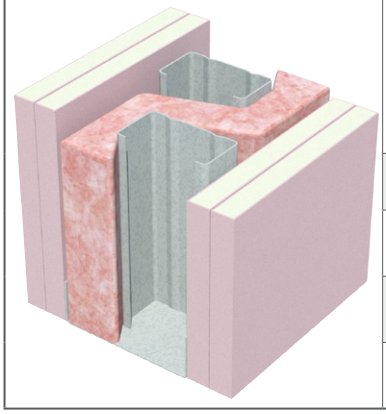
-/90/90 and **60/60/60** from either side

Report FC13921

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	
92	140	45 (36)	52 (46)	Report Day Design 3094-33 Note: Impact sound Resistant
150	198	47 (38)	53 (48)	

'2 x' indicates insulation in both frames

SSW327



- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 2 layers of 16mm **fire**shield or **multi**shield or **tru**rock

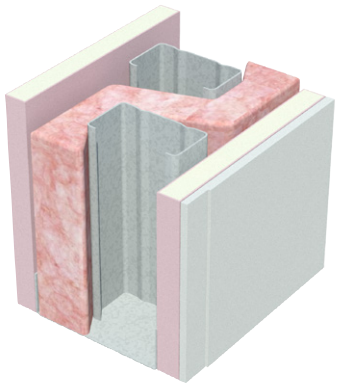
Fire Resistance Level

-/120/120 and **120/120/120** from either side

Report FC13921

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant
92	156	49 (42)	58 (**52**)	
150	214	51 (44)	59 (**53**)	

SSW524



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

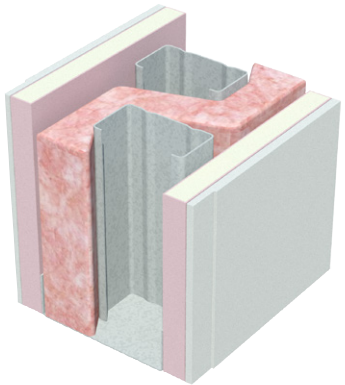
Fire Resistance Level

-/90/90 and **60/60/60** from either side

Report FC13921

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant
92	130	44 (35)	52 (45)	
150	188	46 (37)	53 (48)	

SSW526



- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner
- Staggered steel studs at maximum 600mm centres (300mm staggered)
- 1 layer of 16mm **fire**shield or **multi**shield or **tru**rock + 6mm Duraliner

Order of wall linings can be reversed

Fire Resistance Level

-/120/120 and **60/60/60** from either side

Report FC13921

Track Width (mm)	Wall Width (mm)	Sound Insulation Rw (Rw + Ctr)		
		No insulation	Pink® Partition 50mm 11 kg/m³ R1.2	Report Day Design 3094-33 Note: Impact sound Resistant
92	136	48 (41)	59 (**51**)	
150	194	50 (42)	59 (**53**)	

General Requirements

	Non-fire Rated	Fire Rated
Install control joints in internal steel framed walls: > With plasterboard at 12m maximum intervals > With fibre cement at 9m maximum intervals for steel framing < 0.8mm BMT > With fibre cement at 6m maximum intervals for steel framing > 0.8mm BMT > With tiles at 4.5m maximum intervals (plasterboard or fibre cement) > At all movement joints in the building > At any change in the substrate > At the floor line in stairwells.	✓	✓
Only joint the face layer. As a minimum, use paper tape with any Siniat jointing compound applied in one or two coats to the thickness of two coats. Alternatively, use **bindex** fire and acoustic sealant according to the Product Data Sheet.		✓
Use approved fire rated penetration details. Fire penetrations may require fire collars or other devices to maintain fire performance.		✓
Load bearing structural steel members in wall cavities have the Structural Adequacy component of the system's Fire Resistance Level.		✓
Non-load bearing system Fire Resistance Levels (eg: -/60/60) are based on using Siniat steel framing.		✓
Wall systems with a Structural Adequacy component to their Fire Resistance Level (eg: 60/60/60) may be built with any steel framing provided it is designed according to the relevant Australian Standards, has a minimum 51mm cavity and maximum 600mm horizontal or vertical framing centres for the fixing of linings. As an example, a wall could be comprised of steel studs and an additional layer of furring channels, with or without resilient mounts.		✓
Use **bindex** fire and acoustic sealant on all gaps and around perimeter.		✓
Attach all fixtures to studs or noggings/blocking. Wall anchors must not be fixed to the plasterboard of fire rated walls.		✓
fireshield may be substituted with **multi**shield, **impact**shield, **tru**rock and **tru**rock HD of the same or greater thickness and maintain fire performance.		✓

For acceptable modifications or variations to fire rated systems, refer to Section 2.3 fire Resistance

Framing

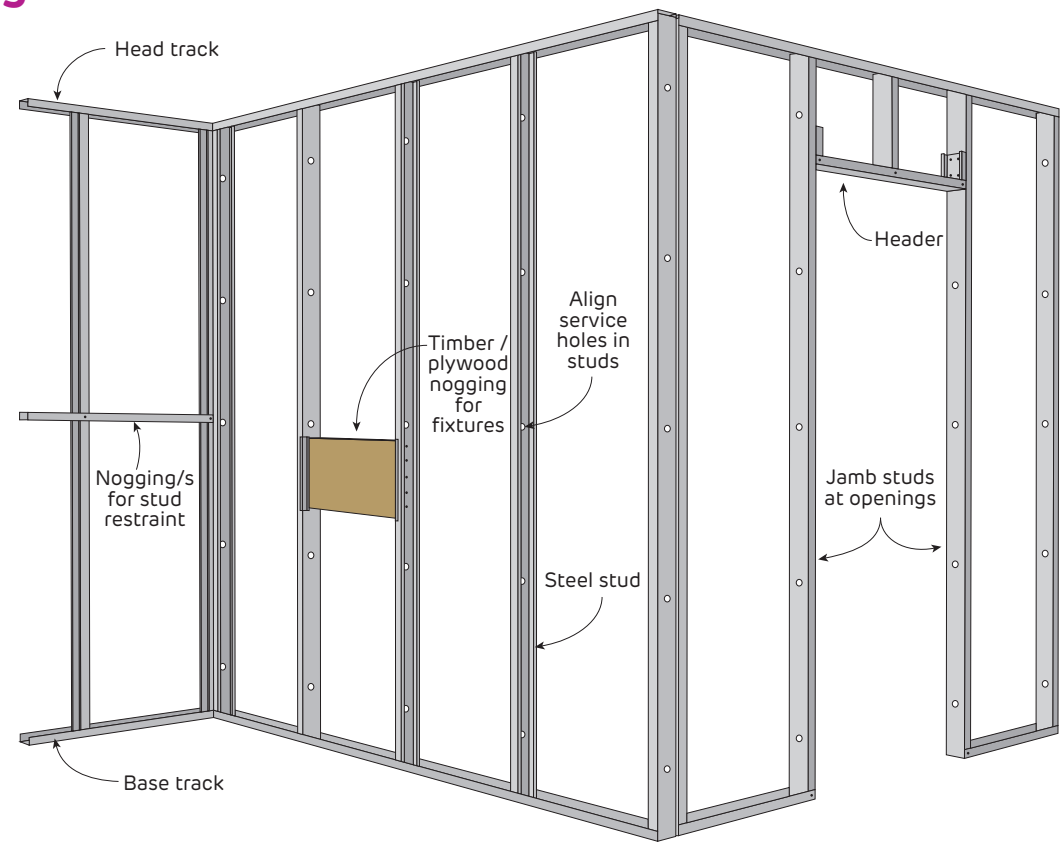


FIGURE 1 Internal Steel Frame Wall Layout

	Non-fire Rated	Fire Rated
Use a Deflection Head Track if soffit movement of up to 20mm is expected. For higher requirements contact Siniat. Refer to Construction Details for clearances.	✓	✓
Framing members as per framing table or structural design up to 600mm maximum spacing.	✓	✓
Face studs in the same direction if possible, to allow easier fastening of wall lining. However, installation of some services may require the studs to be positioned in opposite directions. Refer to Construction Details.	✓	✓
Twist studs into tracks and push studs down completely into bottom track.	✓	✓

Table 1 Maximum Head and Base Track Anchor Spacing

Stud Spacing (mm)	Maximum Anchor Spacing (mm)
600	600
450	600
400	600
300	450
200	300

1. Additional anchors 100mm maximum from track ends.
2. 150mm studs require 2 anchors across width unless using an 80mm wide Universal Bracket (UB80).

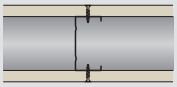
> Noggings are permitted to assist the fixing of services. Copper Chromium Arsenate (CCA) treated timber must not be used.

> Plumbing and electrical services must not protrude beyond the face of the studs.

Siniat Internal Wind Load Calculator

Table 2 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.39
			Serviceability pressure W_S (kPa)	0.25

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2740	2840	2980	2310	2380	2490
	450	3070	3190	3340	2580	2670	2780
	400	3210	3340	3510	2700	2790	2910
	300	3580	3730	3930	3010	3120	3260
64 x 0.5	600	3330	3440	3580	2790	2870	2970
	450	3730	3870	4040	3130	3220	3340
	400	3900	4050	4240	3270	3380	3500
	300	4310	4500	4730	3640	3770	3930
64 x 0.75	600	3670	3770	3900	3100	3170	3260
	450	4080	4220	4380	3450	3540	3650
	400	4260	4410	4580	3610	3710	3820
	300	4690	4870	5080	4000	4120	4260
64 x 1.15	600	4090	4190	4310	3480	3550	3630
	450	4540	4660	4810	3870	3950	4050
	400	4720	4860	5020	4030	4120	4230
	300	5190	5350	5550	4450	4560	4700
76 x 0.55	600	3970	4100	4260	3330	3410	3520
	450	4430	4600	4790	3720	3830	3960
	400	4620	4800	5010	3890	4010	4150
	300	5070	5290	5550	4300	4460	4640
76 x 0.75	600	4310	4430	4570	3640	3720	3810
	450	4780	4940	5120	4050	4150	4280
	400	4980	5150	5350	4220	4340	4470
	300	5450	5660	5900	4660	4800	4970
76 x 1.15	600	4750	4870	5000	4040	4120	4210
	450	5250	5400	5570	4480	4580	4690
	400	5460	5620	5810	4660	4770	4900
	300	5970	6160	6390	5130	5260	5420
92 x 0.55	600	4740	4900	5080	3970	4070	4190
	450	5250	5460	5690	4420	4560	4720
	400	5460	5680	5940	4610	4760	4940
	300	5950	6210	6520	5060	5250	5470
92 x 0.75	600	5060	5220	5390	4270	4370	4480
	450	5590	5780	6010	4740	4870	5020
	400	5800	6010	6260	4930	5080	5250
	300	6320	6560	6860	5410	5590	5800
92 x 1.15	600	5590	5740	5910	4760	4850	4960
	450	6150	6330	6550	5260	5380	5530
	400	6380	6580	6810	5460	5600	5760
	300	6940	7170	7370	5980	6140	6340
150 x 0.75	600	7200	7300	7410	6110	6200	6300
	450	7730	7860	8000	6770	6900	7040
	400	7940	8080	8240	7050	7190	7310
	300	8470	8630	8820	7580	7710	7850
150 x 1.15	600	7780	7870	7970	6850	6940	7040
	450	8340	8450	8580	7460	7550	7640
	400	8570	8690	8830	7670	7770	7870
	300	9140	9290	9450	8210	8320	8440

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8800	1
8800 - 9450	2

Concrete Anchor Table

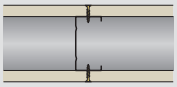
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 9450	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 3 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.54
			Serviceability pressure W_S (kPa)	0.35

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2370	2450	2560	2010	2070	2160
	450	2660	2750	2860	2250	2310	2400
	400	2780	2880	3000	2350	2420	2510
	300	3100	3220	3360	2620	2700	2800
64 x 0.5	600	2870	2950	3060	2420	2480	2560
	450	3220	3320	3450	2710	2780	2870
	400	3370	3480	3620	2840	2910	3010
	300	3740	3880	4050	3160	3260	3370
64 x 0.75	600	3190	3260	3360	2700	2760	2820
	450	3550	3650	3760	3010	3080	3160
	400	3710	3820	3940	3150	3220	3300
	300	4110	4240	4390	3500	3580	3690
64 x 1.15	600	3580	3650	3730	3050	3100	3160
	450	3970	4060	4170	3390	3450	3520
	400	4140	4240	4360	3540	3600	3680
	300	4570	4690	4830	3910	4000	4100
76 x 0.55	600	3430	3520	3630	2890	2950	3030
	450	3830	3950	4090	3230	3310	3400
	400	4010	4140	4290	3380	3460	3570
	300	4430	4590	4780	3750	3860	3990
76 x 0.75	600	3740	3830	3930	3170	3230	3300
	450	4170	4280	4410	3530	3610	3690
	400	4340	4470	4610	3690	3770	3870
	300	4780	4940	5120	4080	4190	4310
76 x 1.15	600	4150	4230	4330	3540	3590	3660
	450	4600	4710	4830	3930	4000	4080
	400	4790	4910	5050	4100	4170	4270
	300	5260	5410	5580	4520	4620	4730
92 x 0.55	600	4090	4200	4330	3430	3510	3590
	450	4550	4700	4870	3840	3930	4040
	400	4740	4910	5090	4010	4110	4240
	300	5210	5410	5640	4430	4560	4720
92 x 0.75	600	4390	4500	4620	3710	3780	3860
	450	4870	5010	5180	4130	4230	4330
	400	5070	5230	5410	4310	4410	4530
	300	5550	5740	5970	4750	4880	5030
92 x 1.15	600	4890	4990	5110	4170	4230	4310
	450	5400	5530	5690	4610	4700	4800
	400	5610	5760	5930	4800	4900	5020
	300	6130	6310	6510	5280	5400	5540
150 x 0.75	600	6280	6380	6490	5340	5400	5470
	450	6960	7100	7230	5930	6020	6120
	400	7230	7340	7460	6180	6290	6390
	300	7730	7860	8000	6810	6950	7090
150 x 1.15	600	7040	7130	7230	6020	6080	6150
	450	7600	7690	7790	6660	6750	6840
	400	7820	7920	8030	6930	7030	7140
	300	8360	8480	8610	7500	7590	7690

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8610	1

Concrete Anchor Table

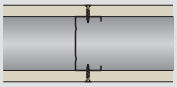
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8610	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 4 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.70
			Serviceability pressure W_S (kPa)	0.45

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2140	2210	2300	1820	1870	1950
	450	2390	2460	2560	2030	2080	2160
	400	2500	2580	2680	2120	2180	2250
	300	2790	2890	3000	2370	2430	2510
64 x 0.5	600	2580	2650	2740	2190	2230	2300
	450	2890	2970	3070	2440	2500	2570
	400	3030	3110	3220	2560	2620	2690
	300	3370	3480	3610	2850	2930	3010
64 x 0.75	600	2880	2940	3010	2450	2490	2550
	450	3210	3280	3370	2730	2780	2840
	400	3350	3430	3530	2850	2900	2970
	300	3720	3820	3940	3170	3240	3320
64 x 1.15	600	3240	3300	3370	2770	2810	2860
	450	3600	3670	3750	3080	3130	3180
	400	3760	3830	3920	3210	3270	3330
	300	4150	4250	4360	3560	3620	3700
76 x 0.55	600	3080	3150	3240	2600	2650	2710
	450	3450	3540	3640	2910	2970	3040
	400	3600	3700	3820	3040	3110	3190
	300	3990	4120	4270	3390	3470	3570
76 x 0.75	600	3370	3440	3520	2870	2910	2970
	450	3760	3850	3950	3190	3250	3320
	400	3920	4020	4130	3340	3400	3480
	300	4330	4460	4600	3700	3780	3880
76 x 1.15	600	3760	3820	3900	3210	3250	3310
	450	4170	4250	4350	3570	3620	3680
	400	4350	4440	4550	3720	3780	3850
	300	4790	4900	5040	4110	4190	4280
92 x 0.55	600	3670	3750	3850	3090	3150	3210
	450	4090	4140	4140	3450	3530	3610
	400	4130	4130	4130	3610	3690	3790
	300	4710	4870	5050	4000	4110	4230
92 x 0.75	600	3960	4040	4130	3350	3410	3470
	450	4400	4510	4630	3730	3810	3890
	400	4580	4710	4850	3900	3980	4070
	300	5040	5190	5370	4310	4410	4530
92 x 1.15	600	4430	4510	4590	3780	3830	3890
	450	4900	5000	5120	4190	4260	4330
	400	5100	5210	5340	4360	4440	4530
	300	5590	5730	5900	4800	4900	5020
150 x 0.75	600	5680	5750	5830	4840	4890	4930
	450	6220	6220	6220	5380	5450	5510
	400	6570	6690	6810	5610	5690	5770
	300	7210	7320	7450	6190	6300	6410
150 x 1.15	600	6390	6460	6540	5470	5520	5570
	450	7060	7160	7250	6060	6130	6200
	400	7300	7390	7470	6310	6390	6470
	300	7820	7920	8020	6950	7050	7160

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8020	1

Concrete Anchor Table

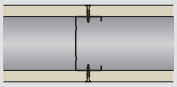
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8020	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 5 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.59
					Serviceability pressure W_S (kPa)		0.25
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
51 x 0.5	600	2740	2840	2980	2310	2380	2490
	450	3070	3190	3340	2580	2670	2780
	400	3210	3340	3510	2700	2790	2910
	300	3580	3730	3930	3010	3120	3260
64 x 0.5	600	3240	3350	3410	2790	2870	2970
	450	3730	3870	4040	3130	3220	3340
	400	3900	4050	4240	3270	3380	3500
	300	4310	4500	4730	3640	3770	3930
64 x 0.75	600	3670	3770	3900	3100	3170	3260
	450	4080	4220	4380	3450	3540	3650
	400	4260	4410	4580	3610	3710	3820
	300	4690	4870	5080	4000	4120	4260
64 x 1.15	600	4090	4190	4310	3480	3550	3630
	450	4540	4660	4810	3870	3950	4050
	400	4720	4860	5020	4030	4120	4230
	300	5190	5350	5550	4450	4560	4700
76 x 0.55	600	3810	3900	3950	3330	3410	3520
	450	4430	4600	4790	3720	3830	3960
	400	4620	4800	4900	3890	4010	4150
	300	5070	5290	5550	4300	4460	4640
76 x 0.75	600	4310	4430	4570	3640	3720	3810
	450	4780	4940	5120	4050	4150	4280
	400	4980	5150	5350	4220	4340	4470
	300	5450	5660	5900	4660	4800	4970
76 x 1.15	600	4750	4870	5000	4040	4120	4210
	450	5250	5400	5570	4480	4580	4690
	400	5460	5620	5810	4660	4770	4900
	300	5970	6160	6390	5130	5260	5420
92 x 0.55	600	4570	4680	4690	3970	4070	4190
	450	4910	4910	4910	4420	4560	4720
	400	4900	4900	4900	4610	4760	4900
	300	5950	6210	6520	5060	5250	5470
92 x 0.75	600	5060	5220	5390	4270	4370	4480
	450	5590	5780	6010	4740	4870	5020
	400	5800	6010	6260	4930	5080	5250
	300	6320	6560	6860	5410	5590	5800
92 x 1.15	600	5590	5740	5910	4760	4850	4960
	450	6150	6330	6550	5260	5380	5530
	400	6380	6580	6810	5460	5600	5760
	300	6940	7170	7370	5980	6140	6340
150 x 0.75	600	6580	6630	6600	6110	6200	6300
	450	7380	7380	7380	6770	6900	7040
	400	7940	8080	8240	7050	7190	7310
	300	8470	8630	8820	7580	7710	7850
150 x 1.15	600	7780	7870	7970	6850	6940	7040
	450	8340	8450	8580	7460	7550	7640
	400	8570	8690	8830	7670	7770	7870
	300	9140	9290	9450	8210	8320	8440

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8800	1
8800 - 9450	2

Concrete Anchor Table

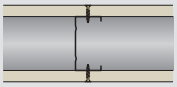
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 9450	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 6 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.83
			Serviceability pressure W_S (kPa)	0.35

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2220	2330	2440	2010	2070	2160
	450	2660	2750	2860	2250	2310	2400
	400	2780	2880	3000	2350	2420	2510
	300	3100	3220	3360	2620	2700	2800
64 x 0.5	600	2560	2640	2720	2420	2480	2560
	450	3110	3170	3170	2710	2780	2870
	400	3170	3170	3170	2840	2910	3010
	300	3740	3880	4050	3160	3260	3370
64 x 0.75	600	3190	3260	3360	2700	2760	2820
	450	3550	3650	3760	3010	3080	3160
	400	3710	3820	3940	3150	3220	3300
	300	4110	4240	4390	3500	3580	3690
64 x 1.15	600	3580	3650	3730	3050	3100	3160
	450	3970	4060	4170	3390	3450	3520
	400	4140	4240	4360	3540	3600	3680
	300	4570	4690	4830	3910	4000	4100
76 x 0.55	600	3010	3080	3130	2890	2950	3030
	450	3490	3490	3490	3230	3310	3400
	400	3480	3480	3480	3380	3460	3480
	300	4430	4590	4650	3750	3860	3990
76 x 0.75	600	3740	3830	3930	3170	3230	3300
	450	4170	4280	4410	3530	3610	3690
	400	4340	4470	4610	3690	3770	3870
	300	4780	4940	5120	4080	4190	4310
76 x 1.15	600	4150	4230	4330	3540	3590	3660
	450	4600	4710	4830	3930	4000	4080
	400	4790	4910	5050	4100	4170	4270
	300	5260	5410	5580	4520	4620	4730
92 x 0.55	600	3490	3490	3490	3430	3490	3490
	450	3490	3490	3490	3490	3490	3490
	400	3480	3480	3480	3480	3480	3480
	300	4650	4650	4650	4430	4560	4650
92 x 0.75	600	4390	4500	4620	3710	3780	3860
	450	4870	5010	5180	4130	4230	4330
	400	5070	5230	5410	4310	4410	4530
	300	5550	5740	5970	4750	4880	5030
92 x 1.15	600	4890	4990	5110	4170	4230	4310
	450	5400	5530	5690	4610	4700	4800
	400	5610	5760	5930	4800	4900	5020
	300	6130	6310	6510	5280	5400	5540
150 x 0.75	600	4930	4930	4930	4930	4930	4930
	450	5240	5240	5240	5240	5240	5240
	400	5900	5900	5900	5900	5900	5900
	300	7730	7860	7870	6810	6950	7090
150 x 1.15	600	7040	7130	7220	6020	6080	6150
	450	7600	7690	7790	6660	6750	6840
	400	7820	7920	8030	6930	7030	7140
	300	8360	8480	8610	7500	7590	7690

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8610	1

Concrete Anchor Table

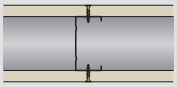
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8610	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 7 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		1.07
					Serviceability pressure W_S (kPa)		0.45
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
51 x 0.5	600	1880	1970	2070	1820	1870	1950
	450	2250	2360	2460	2030	2080	2160
	400	2430	2460	2460	2120	2180	2250
	300	2790	2890	3000	2370	2430	2510
64 x 0.5	600	2140	2220	2290	2140	2220	2290
	450	2460	2460	2460	2440	2460	2460
	400	2460	2460	2460	2460	2460	2460
	300	3170	3170	3170	2850	2930	3010
64 x 0.75	600	2880	2940	3010	2450	2490	2550
	450	3210	3280	3370	2730	2780	2840
	400	3350	3430	3530	2850	2900	2970
	300	3720	3820	3940	3170	3240	3320
64 x 1.15	600	3240	3300	3370	2770	2810	2860
	450	3600	3670	3750	3080	3130	3180
	400	3760	3830	3920	3210	3270	3330
	300	4150	4250	4360	3560	3620	3700
76 x 0.55	600	2520	2590	2640	2520	2590	2640
	450	2710	2710	2710	2710	2710	2710
	400	2700	2700	2700	2700	2700	2700
	300	3610	3610	3610	3390	3470	3570
76 x 0.75	600	3340	3440	3520	2870	2910	2970
	450	3760	3850	3950	3190	3250	3320
	400	3920	4020	4130	3340	3400	3480
	300	4330	4460	4600	3700	3780	3880
76 x 1.15	600	3760	3820	3900	3210	3250	3310
	450	4170	4250	4350	3570	3620	3680
	400	4350	4440	4550	3720	3780	3850
	300	4790	4900	5040	4110	4190	4280
92 x 0.55	600	2710	2710	2710	2710	2710	2710
	450	2710	2710	2710	2710	2710	2710
	400	2700	2700	2700	2700	2700	2700
	300	3610	3610	3610	3610	3610	3610
92 x 0.75	600	3790	3830	3830	3350	3410	3470
	450	4070	4070	4070	3730	3810	3890
	400	4570	4570	4570	3900	3980	4070
	300	5040	5190	5370	4310	4410	4530
92 x 1.15	600	4430	4510	4590	3780	3830	3890
	450	4900	5000	5120	4190	4260	4330
	400	5100	5210	5340	4360	4440	4530
	300	5590	5730	5900	4800	4900	5020
150 x 0.75	600	3830	3830	3830	3830	3830	3830
	450	4070	4070	4070	4070	4070	4070
	400	4570	4570	4570	4570	4570	4570
	300	6100	6100	6100	6100	6100	6100
150 x 1.15	600	5600	5600	5600	5470	5520	5570
	450	7060	7160	7250	6060	6130	6200
	400	7300	7390	7470	6310	6390	6470
	300	7820	7920	8020	6950	7050	7160

Nogging Table

Wall Height (mm)	No. of Noggings evenly spaced
0 - 4400	0
4400 - 8020	1

Concrete Anchor Table

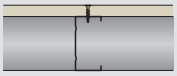
Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8020	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

1. Table refers to Siniat steel studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
4. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
5. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
6. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
7. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
10. For BCA Building Importance Level 4, please contact Siniat.

Table 8 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.39
			Serviceability pressure W_S (kPa)	0.25

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2400	2430	2490	2080	2110	2150
	450	2650	2690	2740	2300	2320	2360
	400	2770	2800	2850	2390	2420	2460
	300	3060	3100	3150	2650	2670	2710
64 x 0.5	600	2850	2880	2920	2470	2490	2530
	450	3160	3190	3240	2730	2750	2790
	400	3300	3330	3370	2850	2870	2900
	300	3650	3690	3740	3150	3180	3210
64 x 0.75	600	3230	3260	3290	2800	2820	2850
	450	3570	3600	3640	3090	3110	3140
	400	3720	3760	3800	3220	3240	3270
	300	4120	4160	4200	3560	3590	3620
64 x 1.15	600	3690	3720	3750	3200	3220	3250
	450	4080	4110	4150	3540	3560	3580
	400	4250	4280	4320	3690	3710	3730
	300	4700	4730	4780	4070	4100	4130
76 x 0.55	600	3380	3400	3410	2920	2940	2970
	450	3740	3770	3810	3230	3250	3280
	400	3900	3930	3980	3370	3390	3420
	300	4310	4350	4410	3720	3750	3790
76 x 0.75	600	3760	3790	3820	3250	3270	3300
	450	4160	4190	4230	3600	3620	3650
	400	4340	4370	4410	3750	3770	3800
	300	4790	4840	4890	4140	4180	4210
76 x 1.15	600	4260	4280	4310	3690	3710	3730
	450	4700	4740	4770	4070	4100	4120
	400	4900	4930	4970	4240	4270	4300
	300	5400	5450	5500	4680	4710	4750
92 x 0.55	600	3970	3980	3950	3420	3440	3470
	450	4400	4430	4470	3790	3820	3850
	400	4580	4620	4670	3950	3980	4010
	300	5060	5120	5180	4370	4410	4450
92 x 0.75	600	4350	4380	4420	3760	3780	3810
	450	4820	4850	4900	4160	4190	4220
	400	5020	5060	5110	4340	4360	4400
	300	5540	5590	5650	4790	4830	4870
92 x 1.15	600	4970	5000	5030	4300	4320	4350
	450	5490	5530	5570	4750	4780	4810
	400	5720	5760	5800	4950	4980	5010
	300	6300	6350	6410	5460	5500	5540
150 x 0.75	600	5660	5620	5590	5520	5530	5550
	450	6600	6550	6520	6100	6120	6150
	400	6860	6820	6790	6350	6380	6410
	300	7490	7460	7440	7010	7050	7090
150 x 1.15	600	7260	7280	7300	6320	6330	6350
	450	7810	7840	7860	6970	7000	7020
	400	8050	8080	8100	7240	7260	7280
	300	8650	8680	8720	7790	7810	7840

Nogging Table

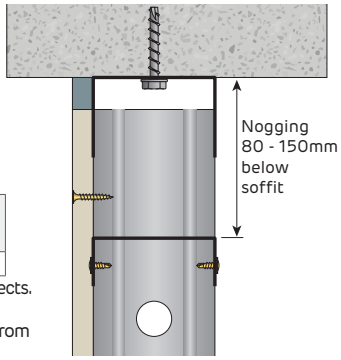
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 8000	3 plus soffit nogging
8000 - 8880	4 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8880	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

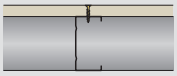
Soffit Nogging



1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_s = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

Table 9 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.46
			Serviceability pressure W_S (kPa)	0.3

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2250	2280	2330	1950	1970	2010
	450	2490	2520	2560	2150	2180	2210
	400	2590	2620	2670	2240	2270	2300
	300	2870	2900	2940	2480	2500	2540
64 x 0.5	600	2670	2700	2710	2310	2330	2370
	450	2960	2990	3030	2560	2580	2610
	400	3080	3110	3150	2670	2690	2720
	300	3410	3450	3490	2950	2970	3010
64 x 0.75	600	3030	3050	3080	2620	2640	2670
	450	3350	3370	3410	2900	2920	2940
	400	3490	3520	3550	3020	3040	3070
	300	3860	3890	3930	3340	3360	3390
64 x 1.15	600	3460	3490	3510	3010	3020	3040
	450	3830	3850	3880	3320	3340	3360
	400	3990	4010	4050	3460	3480	3500
	300	4400	4430	4470	3820	3840	3870
76 x 0.55	600	3160	3190	3170	2730	2750	2780
	450	3500	3530	3560	3030	3050	3070
	400	3650	3680	3720	3150	3170	3200
	300	4040	4070	4120	3490	3510	3550
76 x 0.75	600	3520	3550	3580	3050	3070	3090
	450	3900	3930	3960	3370	3390	3420
	400	4060	4090	4130	3510	3540	3560
	300	4490	4530	4570	3880	3910	3940
76 x 1.15	600	3990	4010	4040	3460	3470	3490
	450	4410	4440	4470	3820	3840	3860
	400	4590	4620	4660	3980	4000	4020
	300	5070	5100	5150	4390	4420	4450
92 x 0.55	600	3710	3690	3670	3210	3220	3250
	450	4110	4140	4180	3550	3570	3600
	400	4290	4320	4360	3700	3720	3750
	300	4710	4710	4710	4090	4120	4160
92 x 0.75	600	4070	4100	4130	3520	3540	3560
	450	4510	4540	4580	3900	3920	3950
	400	4700	4730	4770	4060	4090	4110
	300	5190	5230	5280	4490	4520	4550
92 x 1.15	600	4660	4680	4710	4030	4050	4070
	450	5140	5180	5210	4460	4480	4500
	400	5360	5390	5430	4640	4670	4690
	300	5910	5950	6000	5120	5150	5190
150 x 0.75	600	5360	5320	5300	5170	5190	5200
	450	6230	6200	6180	5720	5740	5760
	400	6490	6470	6440	5960	5980	6000
	300	7130	7110	7090	6580	6610	6640
150 x 1.15	600	6830	6850	6870	5930	5940	5950
	450	7450	7470	7490	6540	6560	6580
	400	7680	7700	7720	6810	6830	6860
	300	8250	8280	8310	7430	7450	7470

Nogging Table

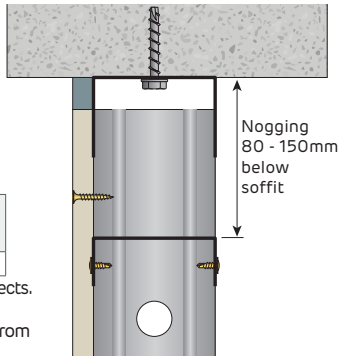
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 8000	3 plus soffit nogging
8000 - 8460	4 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8460	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

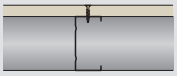
Soffit Nogging



1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

Table 10 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.54
			Serviceability pressure W_S (kPa)	0.35

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2130	2160	2200	1850	1870	1910
	450	2350	2380	2420	2040	2060	2090
	400	2450	2480	2520	2120	2140	2180
	300	2710	2740	2780	2350	2370	2400
64 x 0.5	600	2530	2530	2520	2190	2210	2240
	450	2800	2820	2860	2420	2440	2470
	400	2920	2940	2980	2520	2540	2570
	300	3230	3260	3300	2790	2810	2840
64 x 0.75	600	2870	2890	2920	2480	2500	2530
	450	3170	3190	3220	2740	2760	2790
	400	3300	3330	3360	2860	2880	2900
	300	3650	3680	3710	3160	3180	3210
64 x 1.15	600	3280	3300	3330	2850	2860	2880
	450	3630	3650	3670	3140	3160	3180
	400	3780	3800	3830	3280	3290	3310
	300	4170	4200	4230	3620	3640	3660
76 x 0.55	600	2960	2930	2910	2590	2610	2630
	450	3310	3340	3370	2860	2880	2910
	400	3450	3480	3510	2980	3000	3030
	300	3820	3850	3890	3300	3320	3350
76 x 0.75	600	3330	3360	3380	2890	2900	2930
	450	3690	3710	3740	3190	3210	3230
	400	3840	3870	3900	3330	3350	3370
	300	4250	4280	4320	3680	3700	3730
76 x 1.15	600	3780	3800	3820	3280	3290	3310
	450	4180	4200	4230	3620	3640	3660
	400	4350	4370	4400	3770	3790	3810
	300	4800	4830	4870	4160	4180	4210
92 x 0.55	600	3440	3430	3410	3030	3050	3070
	450	3890	3910	3930	3360	3380	3400
	400	3970	3970	3970	3500	3520	3550
	300	4010	4010	4010	3870	3900	3930
92 x 0.75	600	3860	3880	3900	3340	3350	3370
	450	4270	4290	4320	3690	3710	3730
	400	4440	4480	4510	3840	3870	3890
	300	4910	4950	4990	4250	4280	4310
92 x 1.15	600	4410	4430	4450	3820	3840	3850
	450	4870	4900	4930	4220	4240	4260
	400	5070	5100	5140	4400	4420	4440
	300	5590	5630	5680	4850	4880	4910
150 x 0.75	600	5060	5040	5010	4900	4910	4920
	450	5610	5590	5560	5420	5430	5450
	400	6130	6130	6110	5640	5660	5680
	300	6660	6660	6660	6230	6250	6280
150 x 1.15	600	6470	6490	6510	5620	5630	5640
	450	7140	7170	7200	6200	6220	6230
	400	7370	7400	7420	6460	6470	6490
	300	7930	7950	7980	7120	7150	7170

Nogging Table

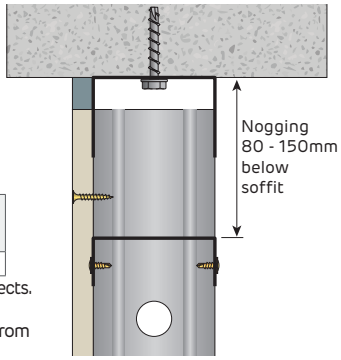
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 8000	3 plus soffit nogging
8000 - 8120	4 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8120	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

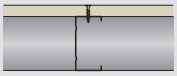
Soffit Nogging



1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_s = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

Table 11 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.59
			Serviceability pressure W_S (kPa)	0.25

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2150	2150	2140	2080	2110	2140
	450	2480	2480	2470	2300	2320	2360
	400	2630	2630	2610	2390	2420	2460
	300	3040	3040	3040	2650	2670	2710
64 x 0.5	600	2430	2430	2410	2430	2430	2410
	450	2810	2800	2780	2730	2750	2780
	400	2980	2970	2950	2850	2870	2900
	300	3440	3440	3430	3150	3180	3210
64 x 0.75	600	3230	3260	3260	2800	2820	2850
	450	3570	3600	3640	3090	3110	3140
	400	3720	3760	3800	3220	3240	3270
	300	4120	4160	4200	3560	3590	3620
64 x 1.15	600	3690	3720	3750	3200	3220	3250
	450	4080	4110	4150	3540	3560	3580
	400	4250	4280	4320	3690	3710	3730
	300	4700	4730	4780	4070	4100	4130
76 x 0.55	600	2830	2810	2800	2830	2810	2800
	450	3270	3270	3250	3230	3250	3250
	400	3470	3470	3450	3370	3390	3420
	300	3670	3670	3670	3670	3670	3670
76 x 0.75	600	3680	3680	3670	3250	3270	3300
	450	4160	4190	4230	3600	3620	3650
	400	4340	4370	4410	3750	3770	3800
	300	4790	4840	4890	4140	4180	4210
76 x 1.15	600	4260	4280	4310	3690	3710	3730
	450	4700	4740	4770	4070	4100	4120
	400	4900	4930	4970	4240	4270	4300
	300	5400	5450	5500	4680	4710	4750
92 x 0.55	600	3290	3290	3270	3290	3290	3270
	450	3670	3670	3670	3670	3670	3670
	400	3630	3630	3630	3630	3630	3630
	300	3670	3670	3670	3670	3670	3670
92 x 0.75	600	4090	4080	4060	3760	3780	3810
	450	4710	4700	4680	4160	4190	4220
	400	4930	4920	4900	4340	4360	4400
	300	5440	5440	5420	4790	4830	4870
92 x 1.15	600	4970	5000	5010	4300	4320	4350
	450	5490	5530	5520	4750	4780	4810
	400	5720	5750	5730	4950	4980	5010
	300	6300	6350	6410	5460	5500	5540
150 x 0.75	600	4890	4880	4860	4890	4880	4860
	450	5440	5430	5400	5440	5430	5400
	400	5660	5650	5630	5660	5650	5630
	300	6100	6100	6100	6100	6100	6100
150 x 1.15	600	6560	6560	6550	6320	6330	6350
	450	7110	7110	7110	6970	7000	7020
	400	8050	8080	8090	7240	7260	7280
	300	8650	8680	8720	7790	7810	7840

Nogging Table

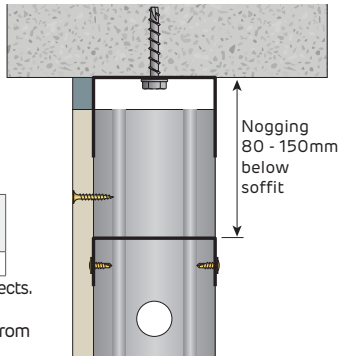
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 8000	3 plus soffit nogging
8000 - 8790	4 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8790	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

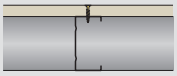
Soffit Nogging



1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

Table 12 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.71
			Serviceability pressure W_S (kPa)	0.3

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	1960	1960	1960	1950	1960	1960
	450	2260	2260	2260	2150	2180	2210
	400	2400	2400	2400	2240	2270	2300
	300	2770	2770	2760	2480	2500	2540
64 x 0.5	600	2220	2220	2210	2220	2220	2210
	450	2560	2560	2550	2560	2560	2550
	400	2720	2720	2710	2670	2690	2710
	300	3050	3050	3050	2950	2970	3010
64 x 0.75	600	2980	2980	2960	2620	2640	2670
	450	3350	3370	3410	2900	2920	2940
	400	3490	3520	3550	3020	3040	3070
	300	3860	3890	3930	3340	3360	3390
64 x 1.15	600	3460	3490	3510	3010	3020	3040
	450	3830	3850	3880	3320	3340	3360
	400	3990	4010	4050	3460	3480	3500
	300	4400	4430	4470	3820	3840	3870
76 x 0.55	600	2580	2580	2570	2580	2580	2570
	450	2980	2980	2960	2980	2980	2960
	400	3020	3020	3020	3020	3020	3020
	300	3050	3050	3050	3050	3050	3050
76 x 0.75	600	3350	3350	3350	3050	3070	3090
	450	3870	3870	3870	3370	3390	3420
	400	4060	4090	4110	3510	3540	3560
	300	4490	4530	4570	3880	3910	3940
76 x 1.15	600	3990	4010	4040	3460	3470	3490
	450	4410	4440	4470	3820	3840	3860
	400	4590	4620	4660	3980	4000	4020
	300	5070	5100	5150	4390	4420	4450
92 x 0.55	600	3000	3000	3000	3000	3000	3000
	450	3050	3050	3050	3050	3050	3050
	400	3020	3020	3020	3020	3020	3020
	300	3050	3050	3050	3050	3050	3050
92 x 0.75	600	3720	3720	3720	3520	3540	3560
	450	4300	4300	4290	3900	3920	3950
	400	4560	4560	4550	4060	4090	4110
	300	5070	5070	5070	4490	4520	4550
92 x 1.15	600	4660	4680	4710	4030	4050	4070
	450	5140	5180	5210	4460	4480	4500
	400	5360	5390	5420	4640	4670	4690
	300	5910	5930	6000	5120	5150	5190
150 x 0.75	600	4550	4550	4540	4550	4550	4540
	450	5070	5070	5070	5070	5070	5070
	400	5010	5010	5010	5010	5010	5010
	300	5070	5070	5070	5070	5070	5070
150 x 1.15	600	6190	6190	6190	5810	5810	5800
	450	6760	6760	6760	6540	6560	6580
	400	6980	6980	6980	6810	6830	6860
	300	8250	8280	8310	7430	7450	7470

Nogging Table

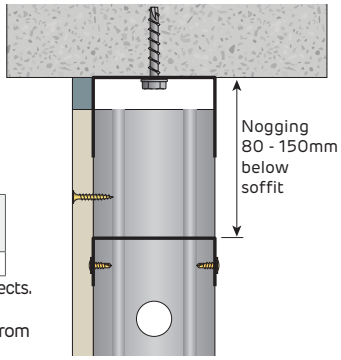
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 8000	3 plus soffit nogging
8000 - 8350	4 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 8350	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

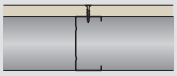
Soffit Nogging



1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_s = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

Table 13 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Steel stud walls lined full height on one side only		Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)	0.83
			Serviceability pressure W_S (kPa)	0.35

Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	1810	1810	1810	1810	1810	1810
	450	2090	2090	2090	2040	2060	2090
	400	2220	2220	2220	2120	2140	2180
	300	2570	2570	2570	2350	2370	2400
64 x 0.5	600	2050	2050	2050	2050	2050	2050
	450	2370	2370	2370	2370	2370	2370
	400	2510	2510	2510	2510	2510	2510
	300	2610	2610	2610	2610	2610	2610
64 x 0.75	600	2750	2750	2750	2480	2500	2530
	450	3170	3180	3180	2740	2760	2790
	400	3300	3330	3360	2860	2880	2900
	300	3650	3680	3710	3160	3180	3210
64 x 1.15	600	3280	3300	3330	2850	2860	2880
	450	3630	3650	3670	3140	3160	3180
	400	3780	3800	3830	3280	3290	3310
	300	4170	4200	4230	3620	3640	3660
76 x 0.55	600	2390	2390	2380	2390	2390	2380
	450	2610	2610	2610	2610	2610	2610
	400	2580	2580	2580	2580	2580	2580
	300	2610	2610	2610	2610	2610	2610
76 x 0.75	600	3100	3100	3100	2890	2900	2930
	450	3580	3580	3580	3190	3210	3230
	400	3800	3800	3800	3330	3350	3370
	300	4250	4280	4320	3680	3700	3730
76 x 1.15	600	3780	3800	3820	3280	3290	3310
	450	4180	4200	4230	3620	3640	3660
	400	4350	4370	4400	3770	3790	3810
	300	4800	4830	4870	4160	4180	4210
92 x 0.55	600	2610	2610	2610	2610	2610	2610
	450	2610	2610	2610	2610	2610	2610
	400	2580	2580	2580	2580	2580	2580
	300	2610	2610	2610	2610	2610	2610
92 x 0.75	600	3440	3440	3440	3340	3350	3370
	450	3980	3980	3980	3690	3710	3730
	400	4220	4220	4220	3840	3870	3890
	300	4330	4330	4330	4250	4280	4310
92 x 1.15	600	4410	4430	4440	3820	3840	3850
	450	4870	4900	4930	4220	4240	4260
	400	5070	5100	5140	4400	4420	4440
	300	5590	5630	5650	4850	4880	4910
150 x 0.75	600	4270	4270	4270	4270	4270	4270
	450	4330	4330	4330	4330	4330	4330
	400	4290	4290	4290	4290	4290	4290
	300	4330	4330	4330	4330	4330	4330
150 x 1.15	600	5550	5550	5550	5550	5550	5550
	450	6450	6450	6450	6200	6220	6230
	400	6680	6680	6680	6460	6470	6490
	300	7230	7230	7230	7120	7150	7170

Nogging Table

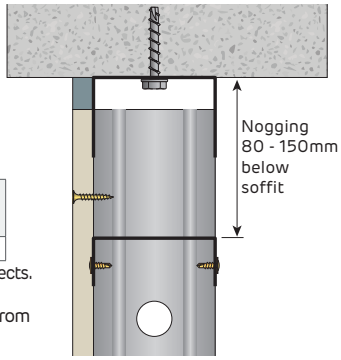
Wall Height (mm)	No. of Noggings evenly spaced
0 - 3000	1 plus soffit nogging
3000 - 6000	2 plus soffit nogging
6000 - 7230	3 plus soffit nogging

Concrete Anchor Table

Wall Height (mm)	C1 Anchor	C2 Anchor
0 - 7230	SA6x45	SXTB08055

1. Concrete 20 MPa minimum. No edge / spacing effects.
2. Anchors at maximum 1.5 x stud spacing up to 600mm maximum, and also 100mm maximum from track ends.
3. 150mm studs require 2 anchors across width.

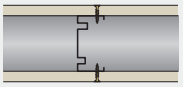
Soffit Nogging

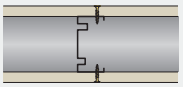


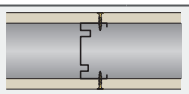
1. Table refers to Siniat steel of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Base and head track must be similar Base Metal Thickness (BMT) as the stud.
3. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection). Screw fix base track to unlined side of stud.
4. Stud frames lined on one side only (including double stud walls) must have an additional soffit nogging installed 80-150mm as shown, unless using a slotted deflection head track.
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*
8. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
9. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.

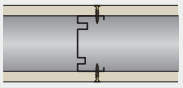
Table 14 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.39
					Serviceability pressure W_S (kPa)		0.25
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	5010	5170	5350	4220	4320	4440
	450mm	5540	5740	5970	4690	4820	4980

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.54
					Serviceability pressure W_S (kPa)		0.35
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	4350	4460	4580	3670	3740	3820
	450mm	4820	4970	5130	4090	4180	4290

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.70
					Serviceability pressure W_S (kPa)		0.45
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	3910	4000	4090	3310	3370	3430
	450mm	4350	4460	4590	3690	3760	3840

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.85
					Serviceability pressure W_S (kPa)		0.55
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	3600	3670	3750	3060	3100	3150
	450mm	3840	3840	3840	3410	3460	3530

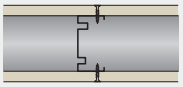
Concrete Anchor Table

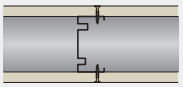
C1 Anchor	C2 Anchor	Anchor Spacing
SA6x45	SXTB08055	600mm maximum plus 100mm maximum from track ends

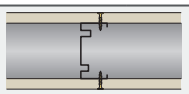
1. Table refers to Siniat steel acoustic studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Deflection Head Track must be 0.55mm Base Metal Thickness (BMT) or greater. Base track must be 0.5mm BMT or greater.
3. Noggings may reduce sound insulation performance.
4. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
8. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
9. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
10. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
11. For BCA Building Importance Level 4, please contact Siniat.

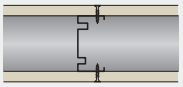
Table 15 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.59
					Serviceability pressure W_S (kPa)		0.25
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	4970	5170	5350	4220	4320	4440
	450mm	5530	5530	5530	4690	4820	4980

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		0.83
					Serviceability pressure W_S (kPa)		0.35
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	3870	3930	3930	3670	3740	3820
	450mm	3930	3930	3930	3930	3930	3930

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		1.07
					Serviceability pressure W_S (kPa)		0.45
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	3050	3050	3050	3050	3050	3050
	450mm	3050	3050	3050	3050	3050	3050

Siniat Acoustic Stud walls lined full height on both sides				Up to BCA Building Importance Level 3	Ultimate pressure W_U (kPa)		1.30
					Serviceability pressure W_S (kPa)		0.55
Stud Depth and BMT (mm)	**Maximum Stud Centres (mm)**	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	**13mm**	**16mm**	**10mm**	**13mm**	**16mm**
92 x 0.55 Acoustic Stud	600mm	2510	2510	2510	2510	2510	2510
	450mm	2510	2510	2510	2510	2510	2510

Concrete Anchor Table

C1 Anchor	C2 Anchor	Anchor Spacing
SA6x45	SXTB08055	600mm maximum plus 100mm maximum from track ends

1. Table refers to Siniat steel acoustic studs of grade G300 steel with Zincalume™ AM150 corrosion protection.
2. Deflection Head Track must be 0.55mm Base Metal Thickness (BMT) or greater. Base track must be 0.5mm BMT or greater.
3. Noggings may reduce sound insulation performance.
4. Connections to base track and head track checked. Head track checked with a minimum 20mm overlap length of the stud to DH-Track (max 20mm downward and 10mm upwards overhead soffit deflection).
5. Maximum wall heights based upon ultimate (Wu) lateral wind pressures and the serviceability (Ws) deflection limits stated. Not for external walls.
6. Wall heights include self weight but are not applicable to axially loaded (load bearing) studs, nor are they suitable as bracing shear walls. Point loads and other loads such as shelf loads or live loads are not considered, and must be checked with Siniat.
7. Designed in accordance with *AS/NZS 4600:2018 Cold Formed Steel Structures*.
8. Wind pressures determined in accordance with *AS/NZS 1170.2 Wind Actions*.
9. Earthquake loads determined in accordance with *AS1170.4 Earthquake Actions* using k_p = 1.3, Z= 0.1, Ch(0) = 1.3, a_x = 3, I_c = 1.5., R_c = 2.5 for parts and R_c = 1 for connections. Contact Siniat or a structural engineer to check walls for other earthquake actions or any imposed by ceiling loads during an earthquake. Specific project information is required.
10. The nominated wind pressures, deflection limits and earthquake load criteria must be checked for suitability for a specific project.
11. For BCA Building Importance Level 4, please contact Siniat.

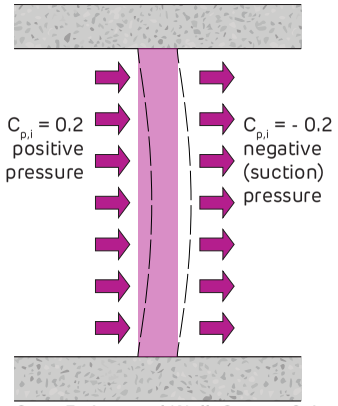
Worked Example

Internal wall partition lined full height on both sides

- Single leaf internal partition - lined full height with 13mm plasterboard on both sides
- Wall is not tiled, so deflection limit h/240 is suitable
- Height of partition is 3400mm
- Shopping centre that is effectively sealed where the external walls have non-opening windows
- Internal partition is adjacent to an external wall with no potential opening in any external surface greater than 0.5%
- Building Importance Level 2
- Terrain Category 2
- Internal partition is located 25m above ground level.

Step 1 *Determine $C_{p,i\ net}$*

From Section 2.3, first find the appropriate $C_{p,i\ net}$ from the information above, the internal wall partition is the same as Case 3, therefore the appropriate $C_{p,i\ net}$ is 0.4.



Case 3: Internal Wall $C_{p,i\ net}$ = 0.4

1. Air-conditioned Hospitals, Offices and Shopping Centres (except loading docks) that are effectively sealed where the external walls have non-opening windows
2. Single leaf internal wall
3. Effectively sealed wall
4. Adjacent to an external wall, or other internal walls that provide an effective seal between spaces.

Step 2 *Determine the Wind Region*

From Figure 2 'Australian Wind Regions' in Section 2.3, find Newcastle located in Wind Region A.

Step 3 *Determine the building's Importance Level (IL)*

Usually found on the front page of the Structural Engineers notes for the project. In this case the IL is 2.

Step 4 *Determine the Terrain Category (TC)* of the surrounding landscape around the building. Also usually found on the front page of the Structural Engineers notes for the project. In this case the TC is 2.

Step 5 *Determine Ultimate (W_U) and Serviceability (W_S) Wind Pressures.*

The floor of the building where the partition is to be built is 25m above the ground level. Refer to Table 23 in Section 2.3 'Internal Wind Pressures $C_{p,i}$ = 0.4'. The pressures found are Wu = 0.59 kPa, and Ws = 0.40 kPa.

Step 6 *Determine frame.*

Use the relevant 'Internal Non-Load Bearing Steel Stud Wall Height Table' in Section 3.1. For this case the internal wind pressures are rounded up to the nearest tables nominated pressure which are W_U = 0.70 kPa and W_S = 0.45 kPa.

Answer

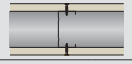
64 x 0.75mm BMT studs at 400mm centres to reach a height of 3430mm.

Table 23 Internal Wind Pressures $C_{p,i}$ =0.4

Building Importance Level 2																								
Region	A												B1 and B2											
Ultimate Wind Speed V500 (m/s)	45												57											
Serviceability Wind Speed V25 (m/s)	37												39											
Terrain Category	1			2			2.5			3			1			2			2.5			3		
Height above ground (z)	10	25	50	10	25	50	10	25	50	10	25	50	10	25	50	10	25	50	10	25	50	10	25	50
$M_{z,cat}$	1.08	1.16	1.23	1.00	1.10	1.18	0.92	1.04	1.13	0.83	0.97	1.07	1.08	1.16	1.23	1.00	1.10	1.18	0.92	1.04	1.13	0.83	0.97	1.07
Ultimate Wind Pressure (kPa)	0.57	0.65	0.74	0.49	0.59	0.68	0.41	0.53	0.62	0.33	0.46	0.56	0.91	1.05	1.18	0.78	0.94	1.09	0.65	0.84	1.00	0.54	0.73	0.89
Serviceability Wind Pressure (kPa)	0.38	0.44	0.50	0.33	0.40	0.46	0.28	0.36	0.42	0.23	0.31	0.38	0.43	0.49	0.55	0.37	0.44	0.51	0.31	0.39	0.47	0.25	0.34	0.42

Table 4 Internal Non-Load Bearing Steel Stud Wall Height Table (mm) - WIND REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

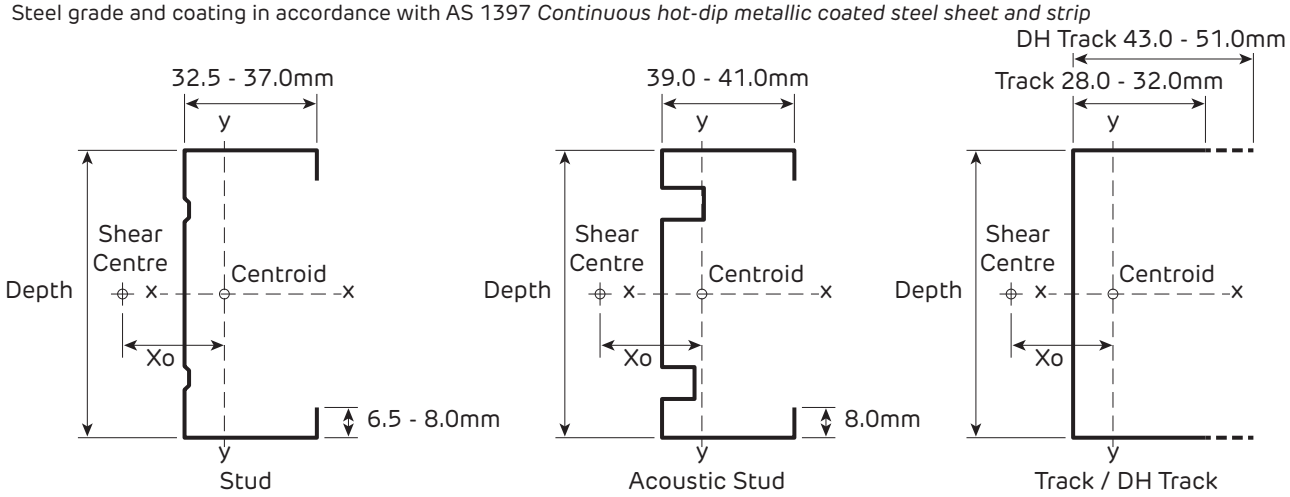
Steel stud walls lined full height on both sides			Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.70
					Serviceability pressure W_S (kPa)		0.45
Stud Depth and BMT (mm)	Maximum Stud Centres (mm)	Deflection limited to H/240 or 30mm max Untiled plasterboard wall lining			Deflection limited to H/360, or 20mm max Any tiled or rendered wall		
		10mm	13mm	16mm	10mm	13mm	16mm
51 x 0.5	600	2140	2210	2300	1820	1870	1950
	450	2390	2460	2560	2030	2080	2160
	400	2500	2580	2680	2120	2180	2250
	300	2790	2890	3000	2370	2430	2510
64 x 0.5	600	2580	2650	2740	2190	2230	2300
	450	2890	2970	3070	2440	2500	2570
	400	3030	3110	3220	2560	2620	2690
	300	3370	3480	3610	2850	2930	3010
64 x 0.75	600	2880	2940	3010	2450	2490	2550
	450	3210	3280	3370	2730	2780	2840
	400	3350	3430	3530	2850	2900	2970
	300	3720	3820	3940	3170	3240	3320

Steel Profile Information

Material

Manufacturer	Grade	Ultimate	Yield	Coating
Siniat	G300	340 MPa	300 MPa	AM150

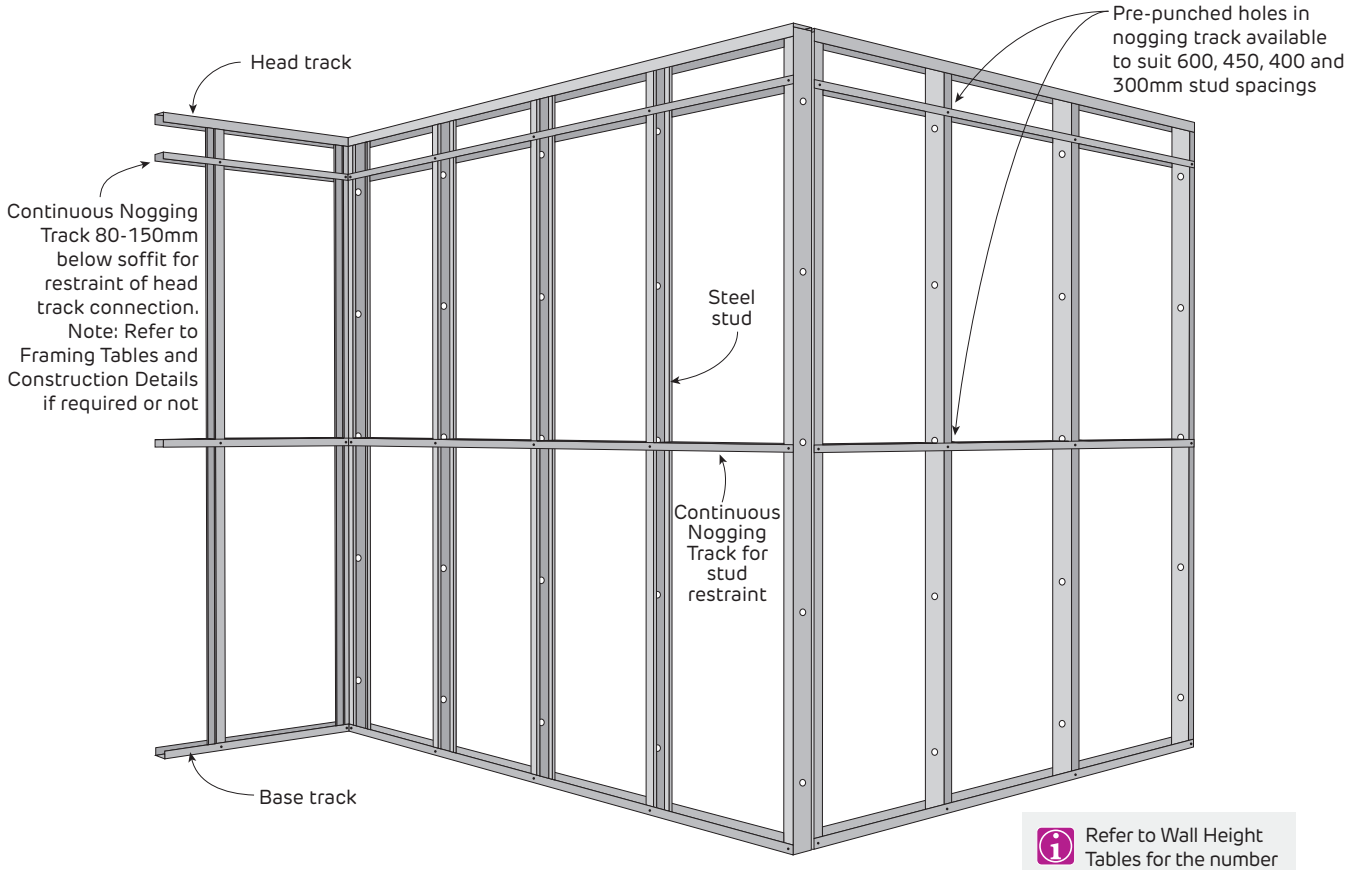
1. Steel grade and coating in accordance with AS 1397 *Continuous hot-dip metallic coated steel sheet and strip*



Section Properties

Profile	Dimensions (mm)		Shear Centre from Centroid (mm)	Area (mm²)	Moment of Inertia (mm⁴)		Section Modulus (mm³)		Torsion Constant J (mm⁴)	Warping Constant Iw (mm⁶)
	Depth	BMT	Xo		Ixx	Iyy	Zxx	Zyy		
Stud	51	0.5	-28.7	63.3	28,320	10,170	1,127	449	5.3	5,498,000
	64	0.5	-26.4	69.3	46,840	10,640	1,481	453	5.8	8,545,000
	64	0.75	-26.5	103.8	69,520	15,960	2,207	686	19.5	12,930,000
	64	1.15	-26.7	158.8	105,700	24,870	3,376	1,056	70.0	19,320,000
	76	0.55	-25.2	83.2	77,040	12,860	2,049	518	8.4	13,980,000
	76	0.75	-27.3	116.9	108,400	20,140	2,891	798	21.9	22,800,000
	76	1.15	-26.4	176.0	160,600	28,700	4,305	1,161	77.6	31,980,000
	92	0.55	-24.4	93.4	121,800	14,540	2,672	571	9.4	23,680,000
	92	0.75	-24.2	126.8	164,300	19,450	3,611	767	23.8	31,460,000
	92	1.15	-24.7	194.7	251,300	30,770	5,548	1,199	85.8	48,940,000
	150	0.75	-20.0	171.1	529,700	23,340	7,110	847	32.1	98,580,000
	150	1.15	-20.0	262.1	808,500	35,850	10,880	1,296	115.6	150,300,000
Acoustic Stud	92	0.55	-22.2	126.4	156,600	20,220	3,376	712	12.8	33,640,000
Track	51	0.5	-22.8	57.9	27,190	6,850	1,051	290	4.8	3,112,000
	64	0.5	-17.8	60.4	40,650	5,196	1,256	236	5.0	3,717,000
	64	0.7	-17.5	84.2	56,920	7,046	1,750	323	13.8	5,081,000
	64	1.15	-18.1	140.1	95,810	12,444	2,937	558	61.8	8,989,000
	76	0.55	-18.2	68.4	63,000	6,549	1,642	273	5.7	6,639,000
	76	0.7	-17.9	95.4	88,180	8,896	2,289	375	15.6	9,084,000
	76	1.15	-16.7	153.5	141,000	12,780	3,642	561	67.7	13,160,000
	92	0.55	-16.5	75.9	96,680	6,602	2,085	271	6.3	9,939,000
	92	0.7	-16.6	106.7	137,000	9,375	2,942	383	17.4	14,210,000
	92	1.15	-15.6	172.6	220,300	13,780	4,714	583	76.1	21,050,000
	150	0.75	-13.0	157.6	468,000	11,220	6,199	429	29.6	47,330,000
	150	1.15	-12.9	241.5	718,500	16,890	9,491	649	106.5	71,610,000
DH Track	51	0.55	-38.3	82.5	43,020	22,890	1,651	687	8.3	10,820,000
	64	0.55	-35.7	89.1	68,770	24,040	2,118	700	9.0	17,460,000
	64	0.7	-35.9	113.6	88,020	30,890	2,706	897	18.6	22,490,000
	64	1.15	-35.7	186.3	145,500	50,170	4,450	1,461	82.1	36,820,000
	76	0.55	-31.4	92.4	94,900	21,510	2,467	640	9.3	21,830,000
	76	0.7	-32.4	119.2	123,500	29,280	3,206	854	19.5	29,780,000
	76	1.15	-33.0	193.2	188,300	48,250	5,062	1,409	85.2	45,660,000
	92	0.55	-32.0	104.4	151,400	27,030	3,263	739	10.5	40,000,000
	92	0.7	-32.2	133.2	194,300	34,750	4,176	947	21.8	51,680,000
	92	1.15	-30.7	215.3	314,200	51,950	6,714	1,457	94.9	78,040,000
	150	0.75	-25.5	183.9	617,700	39,310	8,181	1,016	34.5	158,600,000
	150	1.15	-25.4	280.8	937,400	59,520	12,450	1,546	123.8	238,600,000

Fire Rated and Non-Fire Rated
Continuous Nogging Track



Refer to Wall Height Tables for the number of noggings required

FIGURE 2 Steel Stud Frame with Continuous Nogging Track

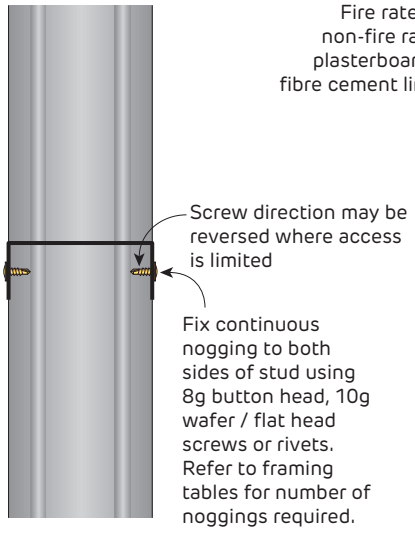


FIGURE 3 Continuous Nogging Track
Non-load bearing walls lined or unlined, and load bearing walls
Section

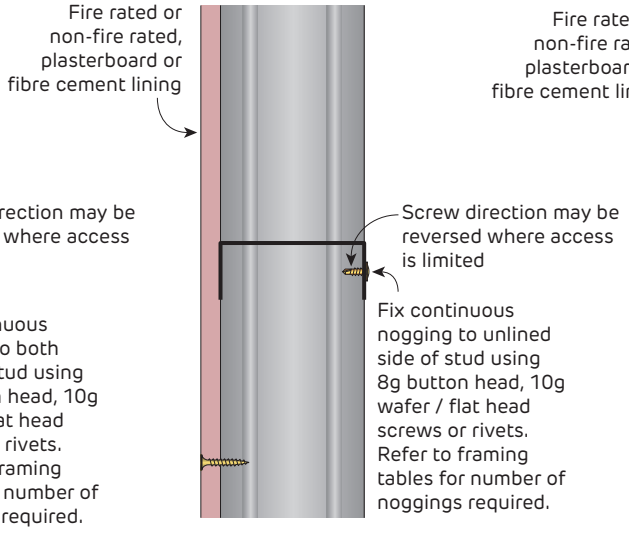


FIGURE 4 Continuous Nogging Track
Non-load bearing walls lined on one side only
Section

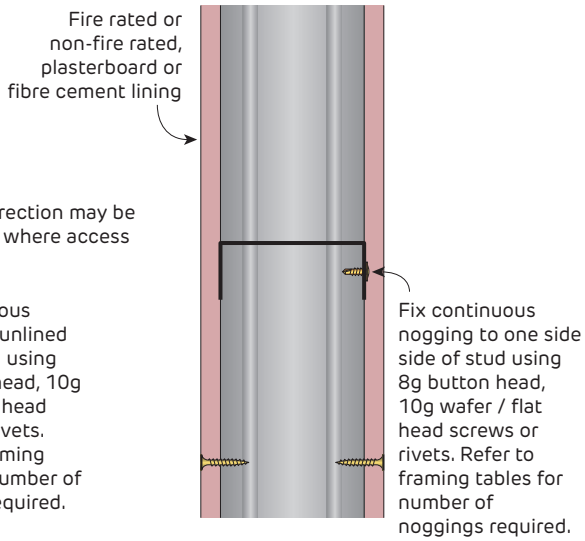
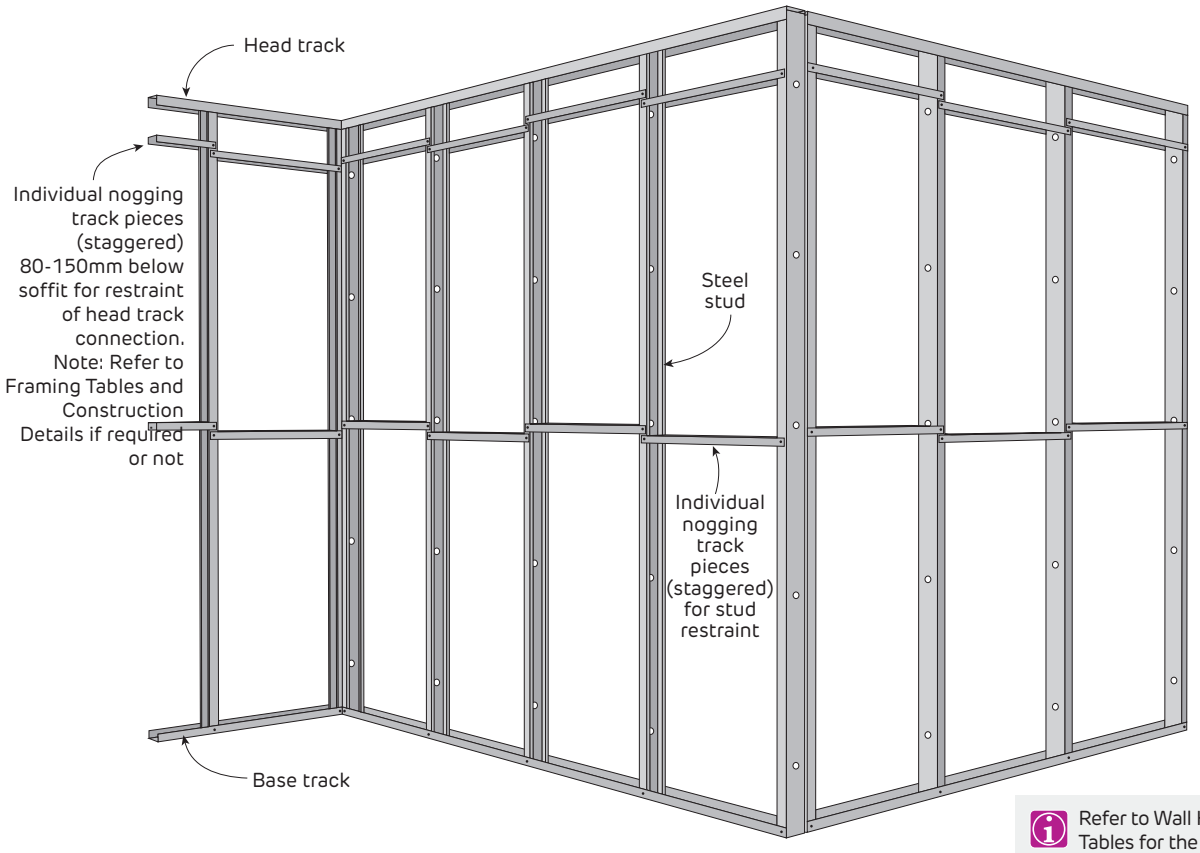


FIGURE 5 Continuous Nogging Track
Non-load bearing walls lined on both sides
Section

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles.10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated and Non-Fire Rated
Individual Nogging Track Pieces



Refer to Wall Height Tables for the number of noggings required

FIGURE 6 Steel Stud Frame with Individual Nogging Track Pieces

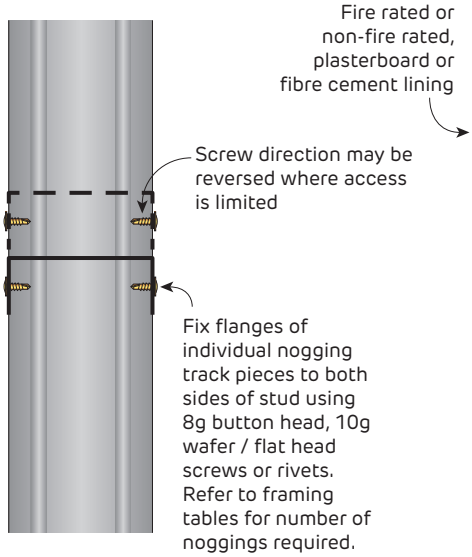


FIGURE 7 Individual Nogging Track Pieces
Non-load bearing walls lined or unlined, and load bearing walls
Section

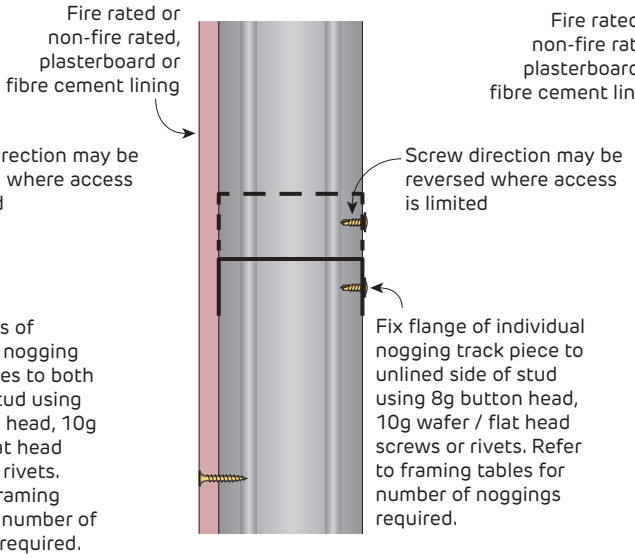


FIGURE 8 Individual Nogging Track Pieces
Non-load bearing walls lined on one side only
Section

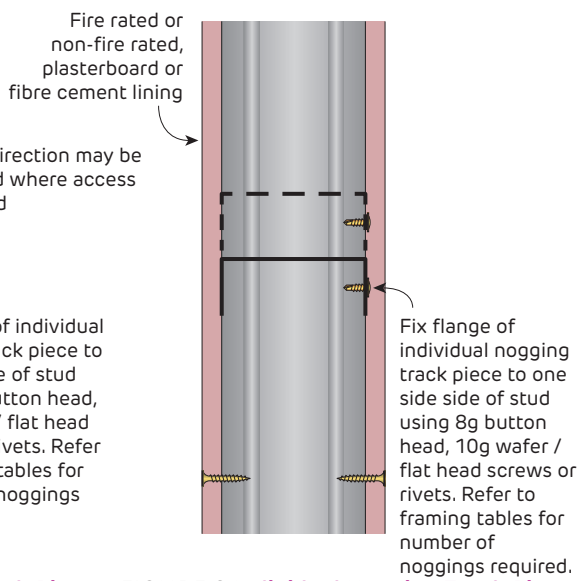


FIGURE 9 Individual Nogging Track Pieces
Non-load bearing walls lined on both sides
Section

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles.10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated and Non-Fire Rated
Strap and Block Nogging Track

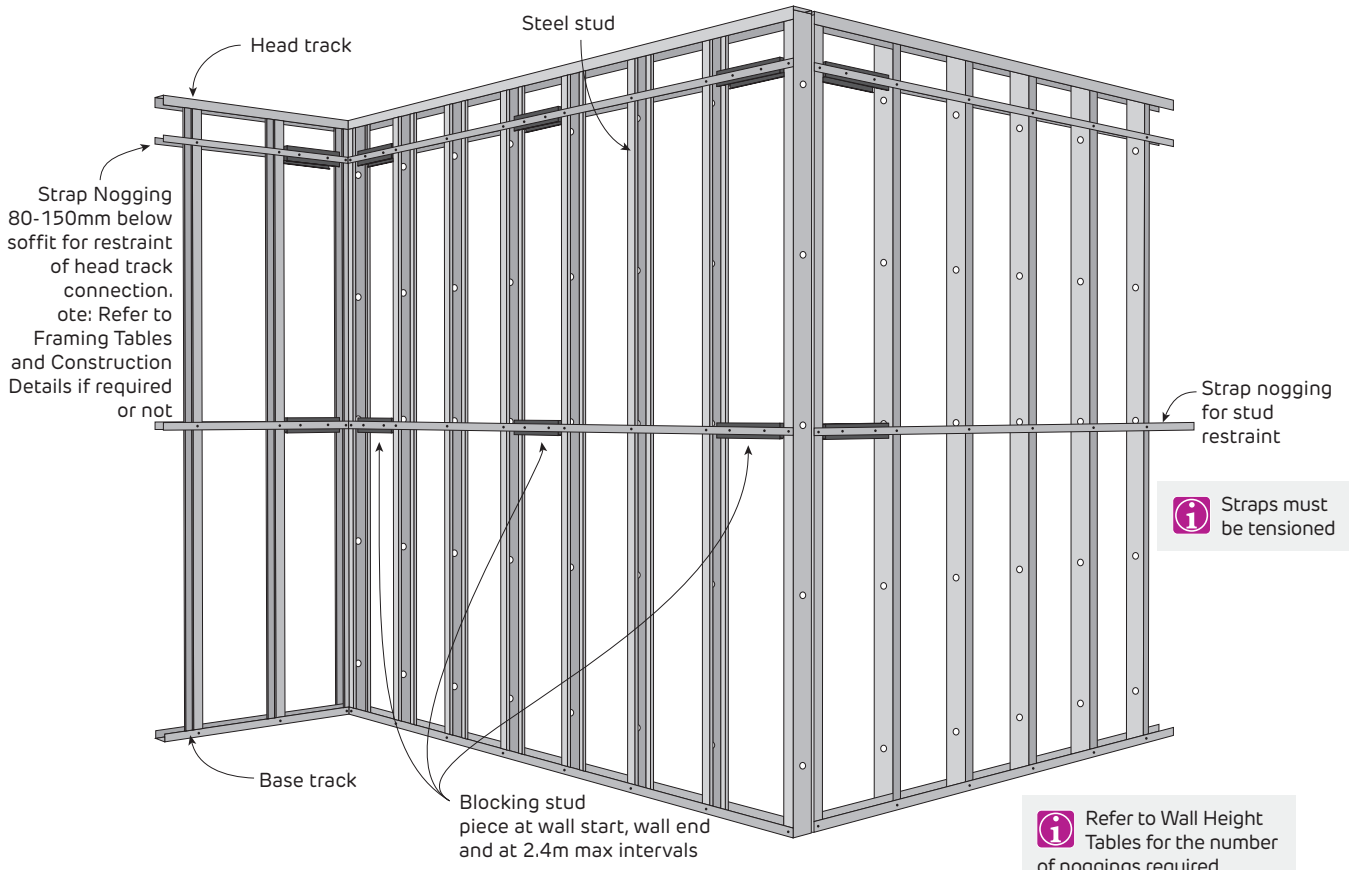


FIGURE 10 Steel Stud Frame with Strap and Block Nogging

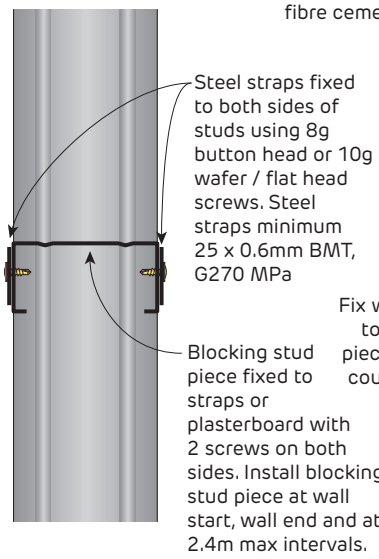


FIGURE 11 Strap and Block Nogging
Non-load bearing walls lined or unlined, and load bearing walls
Section

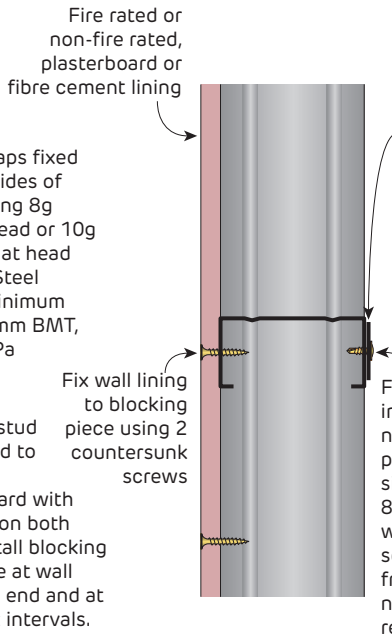


FIGURE 12 Strap and Block Nogging
Non-load bearing walls lined on one side only
Section

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles.10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

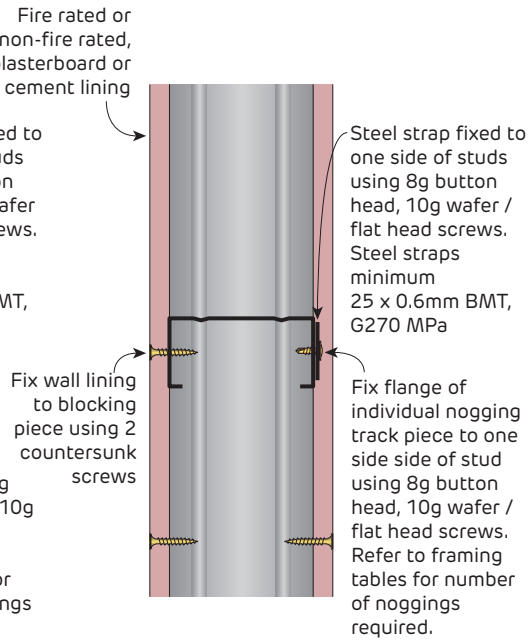


FIGURE 13 Strap and Block Nogging
Non-load bearing walls lined on both sides
Section

Fire Rated and Non-Fire Rated
Strap and Block Nogging Track

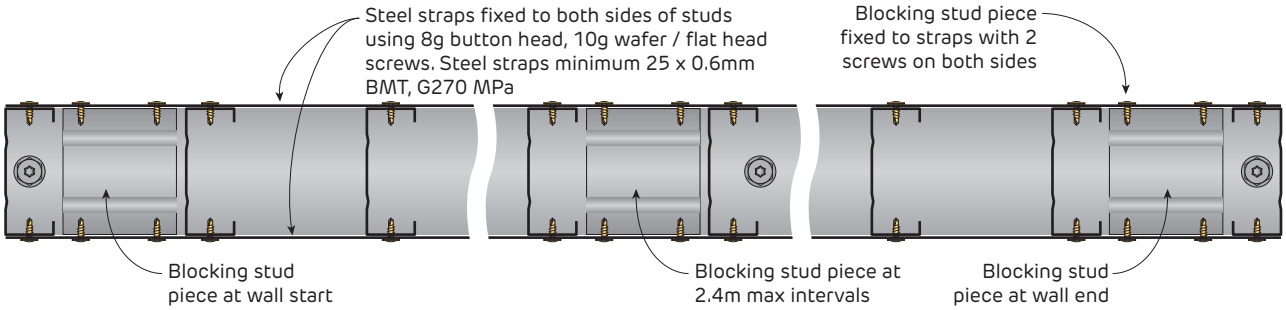


FIGURE 14 Unlined Stud Wall
Non-load bearing walls lined or unlined, and load bearing walls
Plan

Straps must be tensioned

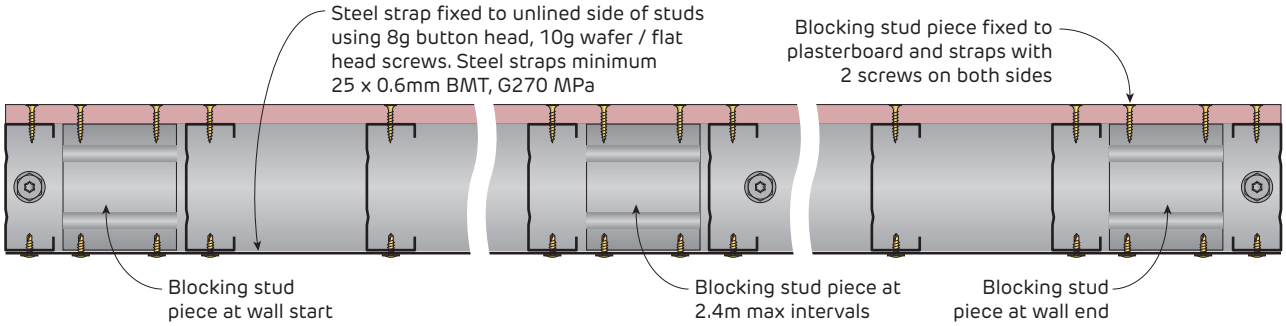


FIGURE 15 Stud Wall Lined on One Side Only
Non-load bearing walls lined on one side only
Plan

Refer to Wall Height Tables for the number of noggings required

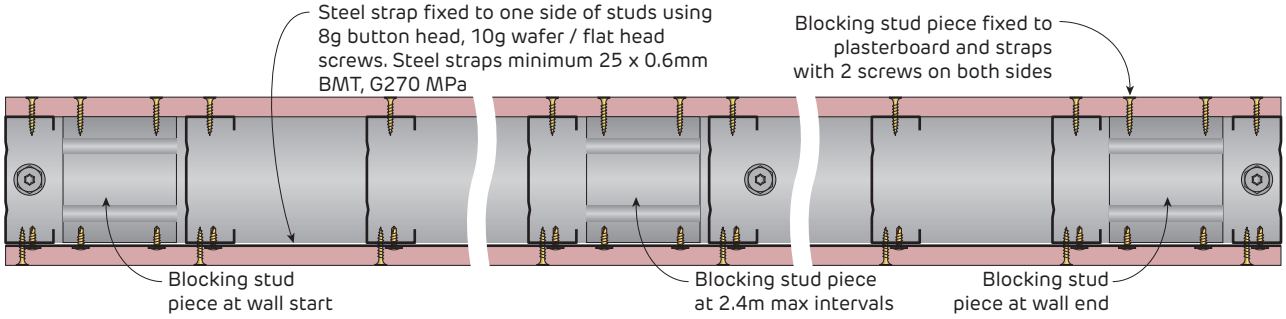


FIGURE 16 Stud Wall Lined on Both Sides
Non-load bearing walls lined on both sides
Plan

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles.10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated and Non-Fire Rated
Strap Noggings

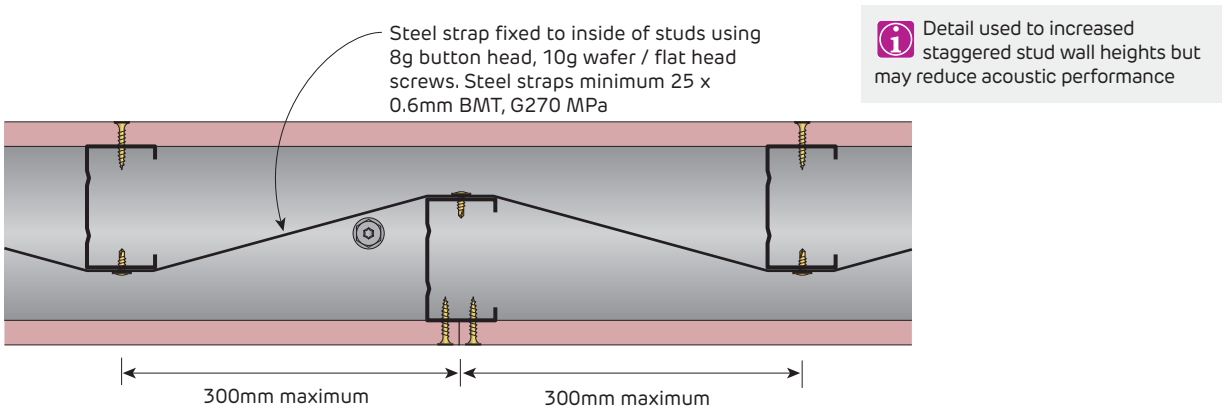


FIGURE 17 Strap Nogging for Staggered Stud Walls
Plan

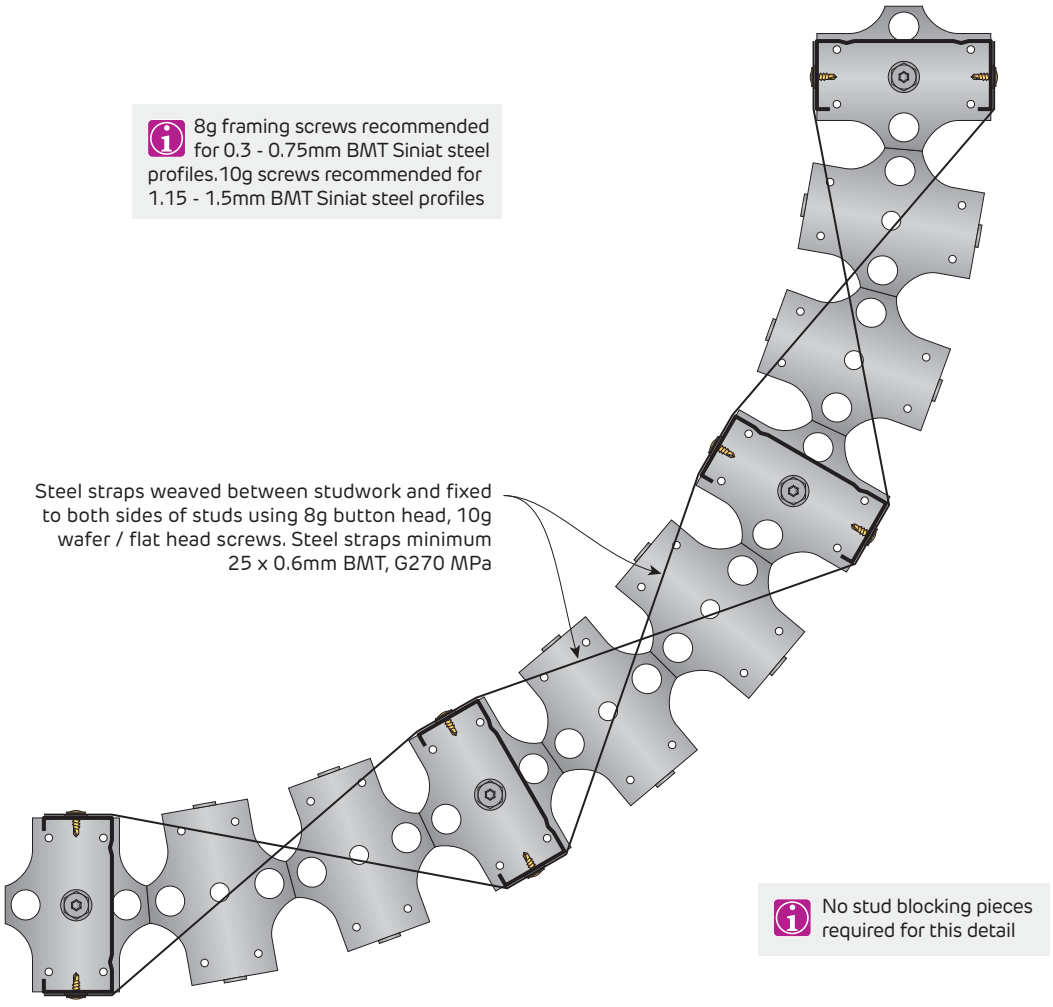


FIGURE 18 Strap Nogging for Curved Stud Walls
Plan

Fire Rated and Non-Fire Rated
Fixing of Boxed Studs and Back-to-back Studs

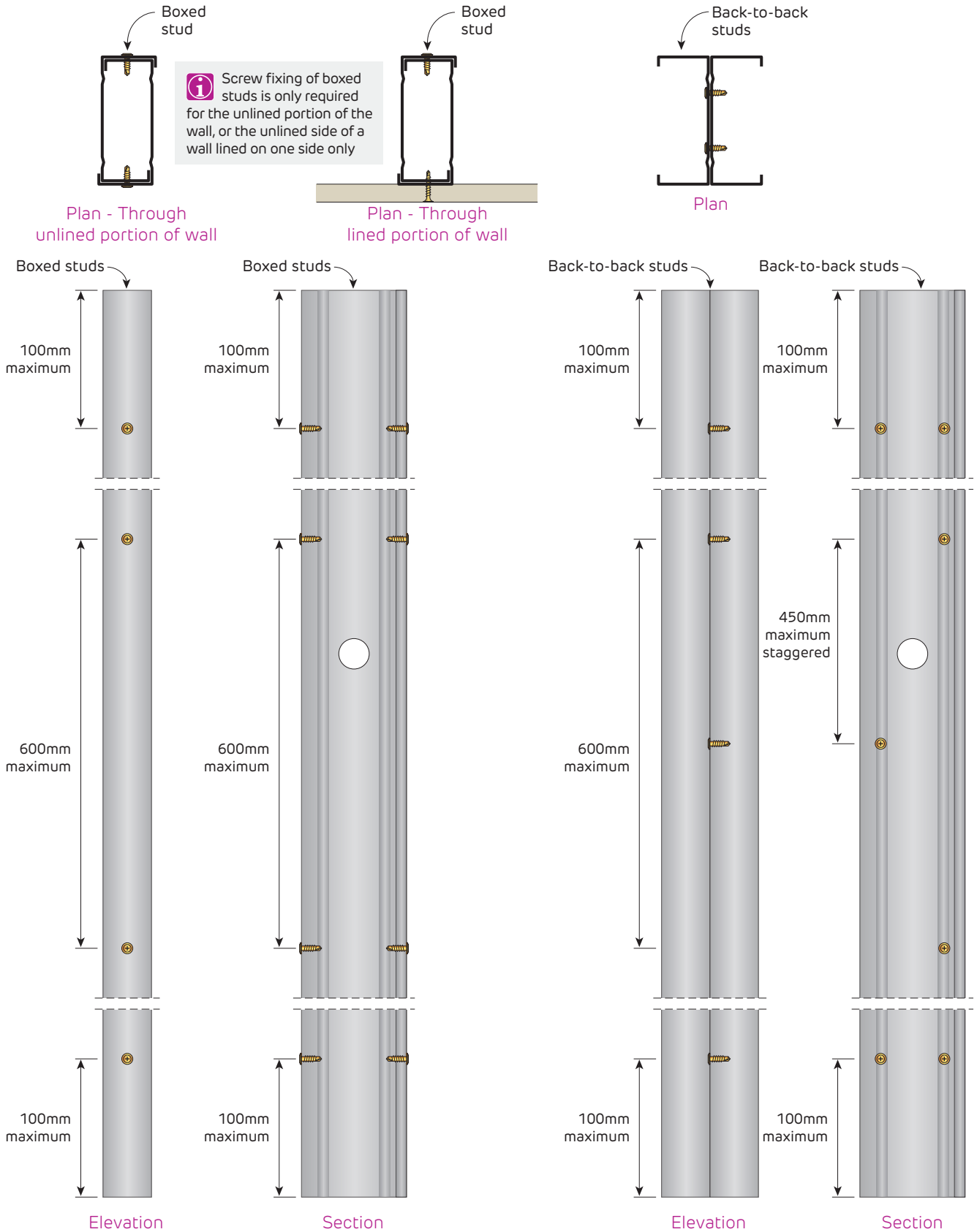


FIGURE 19 Fixing of Boxed Studs

FIGURE 20 Fixing of Back-to-back Studs

Non-Load Bearing Wall
Steel Stud Cut-Out Tolerances

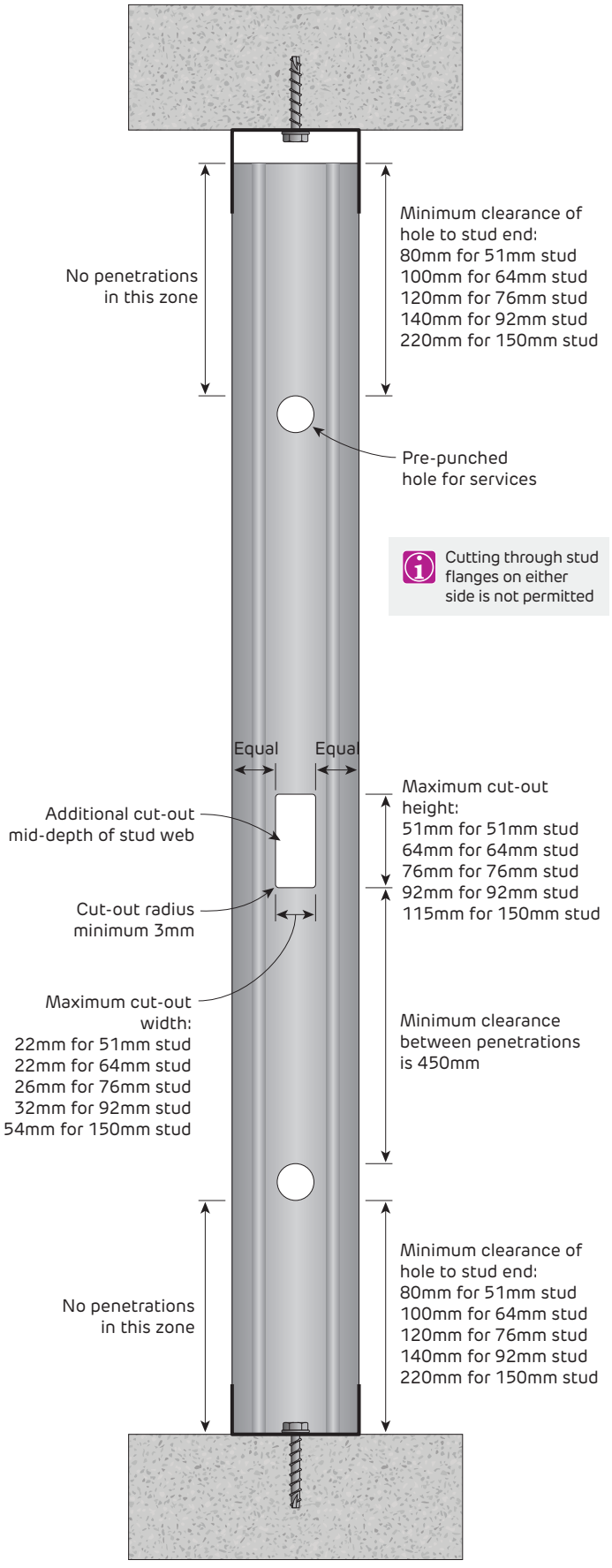


FIGURE 21 Stud Cut-out Tolerances
Non-load bearing walls only
Section

Plasterboard Layout

	Non-fire Rated	Fire Rated
Vertical joints must be 200mm minimum from the edge of any opening such as windows and doorways to minimise cracking at the joints.	✓	✓
Install sheets horizontally when using Siniat Acoustic Stud. Float and back block butt joints according to Installation figures.	✓	✓
Horizontal Layout		
Stagger butt joints in single layer systems by 300mm minimum on adjoining sheets and on opposite sides of the wall.	✓	✓
Stagger butt joints in multilayer systems by 300mm minimum on adjoining sheets and between layers.	✓	✓
First layer butt joints must be backed by a stud or back-blocked.	✓	✓
Stagger recessed edges by 300mm minimum between layers.	✓	✓
Stagger recessed edges in single layer systems by 300mm minimum on opposite sides of the wall or alternatively, back by a nogging.		✓
Vertical Layout		
Alternate from one side of the wall to the other when fixing the plasterboard sheets.	✓	✓
Stagger butt joints in single layer systems by 300mm minimum on adjoining sheets and on opposite sides of the wall.	✓	✓
Stagger butt joints by 300mm minimum on adjoining sheets and between layers.	✓	✓
First layer butt joints must be backed by a nogging or back-blocked.	✓	
First layer butt joints must be backed by a nogging.		✓
Stagger recessed edges by 300mm minimum between layers.	✓	✓
Stagger recessed edges by 300mm minimum on opposite sides of the wall for single layer systems	✓	✓

> Install plasterboard sheets horizontally when practical to minimise stud twisting and reduce the effect of glancing light.

> Minimise butt joints by using long sheets.

Plasterboard Fixing

	Non-fire Rated	Fire Rated
Drive screws to just below the sheet surface, taking care not to break the paper linerboard. For over-driven screws, install another screw 20mm away. Leave or remove the over-driven screw and patch.	✓	✓
Laminating screws can be used to fix butt joints in the second and third layer.	✓	✓
Screw and Adhesive Method		
Apply mastagrip Stud Adhesive after the frame is clean, dry, and free from grease, dust and other contaminants.	✓	
Apply mastagrip daubs 200mm minimum from screws and plasterboard edges.	✓	
Screw Only Method		
Use the 'Screw Only Method' in tiled or fire rated areas.	✓	✓

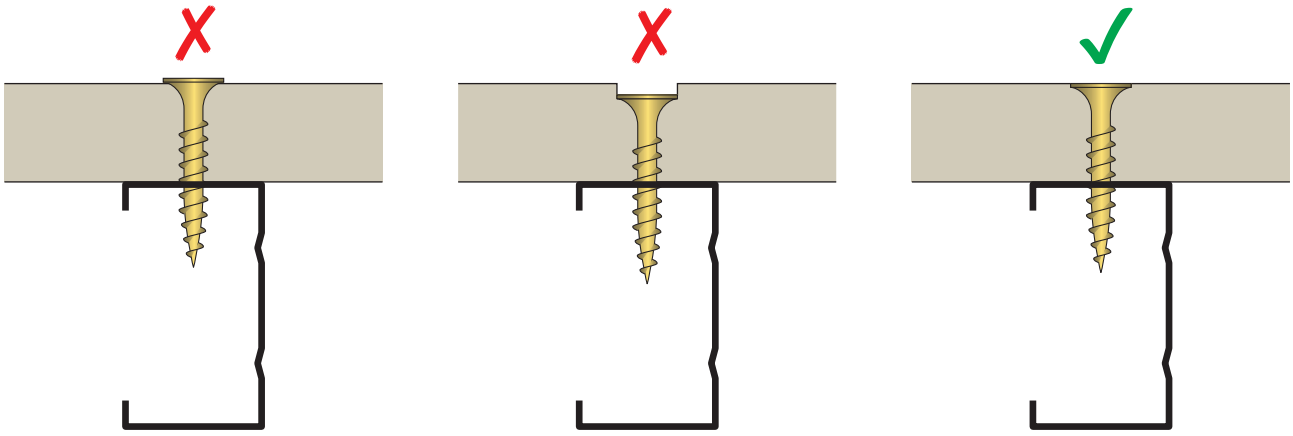


FIGURE 22 Screw Installation
Plan

The 'Screw and Adhesive Method' is recommended for non-fire rated applications. mastagrip will:

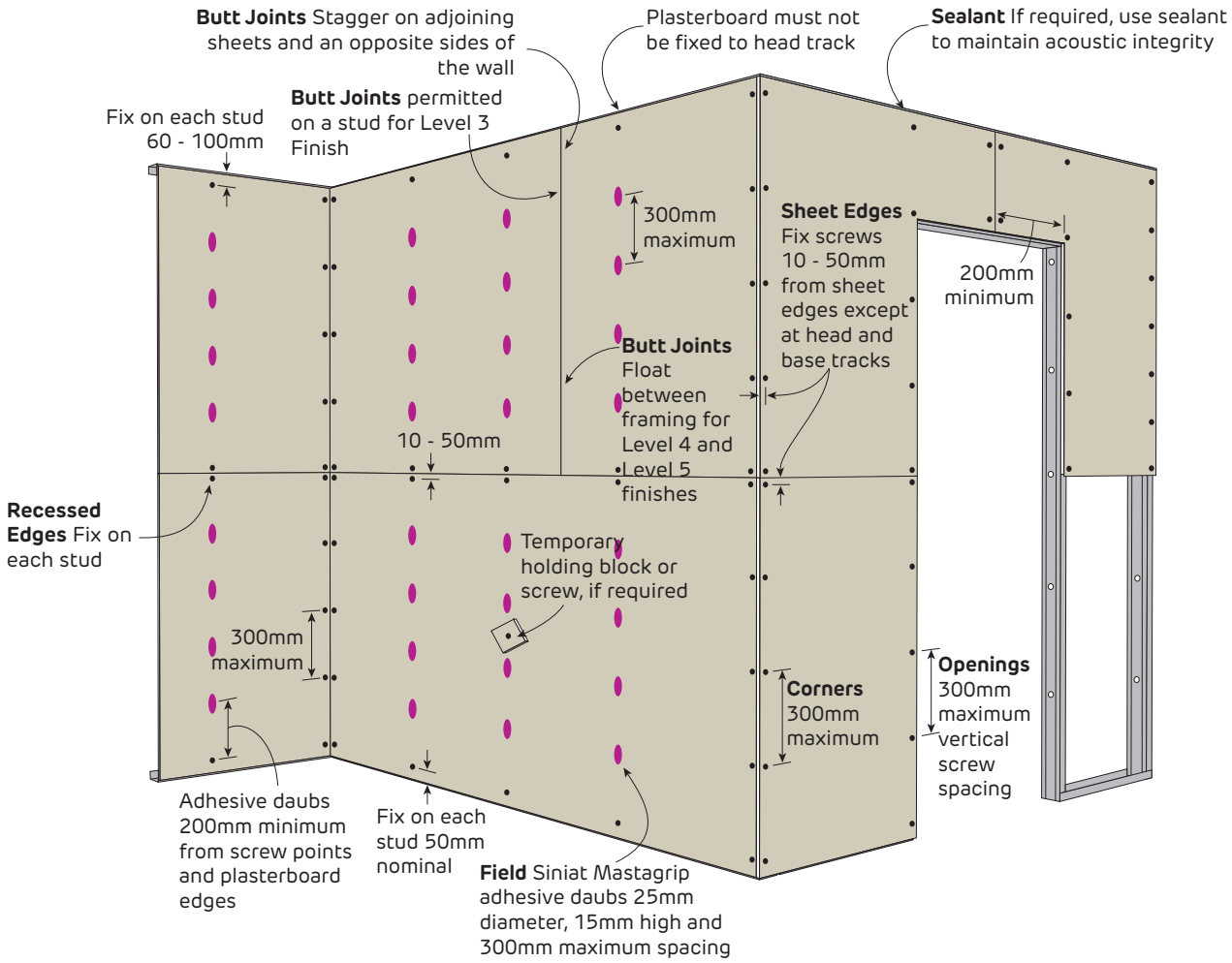
- Minimise screw popping
- Reduce the number of screw heads that may show in glancing light
- Assist in compensating for frame irregularities.

Screw Type and Minimum Size for the Installation of Plasterboard to Steel

Plasterboard Thickness	1st Layer	2nd Layer	3rd Layer	4th Layer
6.5mm	6g x 25mm screw	6g x 25mm screw	-	-
10mm	6g x 25mm screw	6g x 41mm screw *	-	-
13mm	6g x 25mm screw	6g x 41mm screw *	7g x 57mm screw *	-
16mm	6g x 32mm screw	6g x 45mm screw *	8g x 65mm screw *	10g x 38mm laminating screw
2 x 25mm + 1 x 13mm	6g x 41mm screw	8g x 65mm screw	8g x 75mm screw	-

For steel ≤ 0.75mm BMT, use fine thread needle point screws.
For steel ≥ 0.75mm BMT, use fine thread drill point screws.
*10g x 38mm Laminating screws may be used as detailed in installation diagrams.

FIGURE 23 Non-Fire Rated 1 Layer - Horizontal
Screw and Adhesive Method



Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S A A S
900mm	S A A A S
1200mm	S A A A A S
1350mm	S A A A A A S
1400mm	S A A A A A S

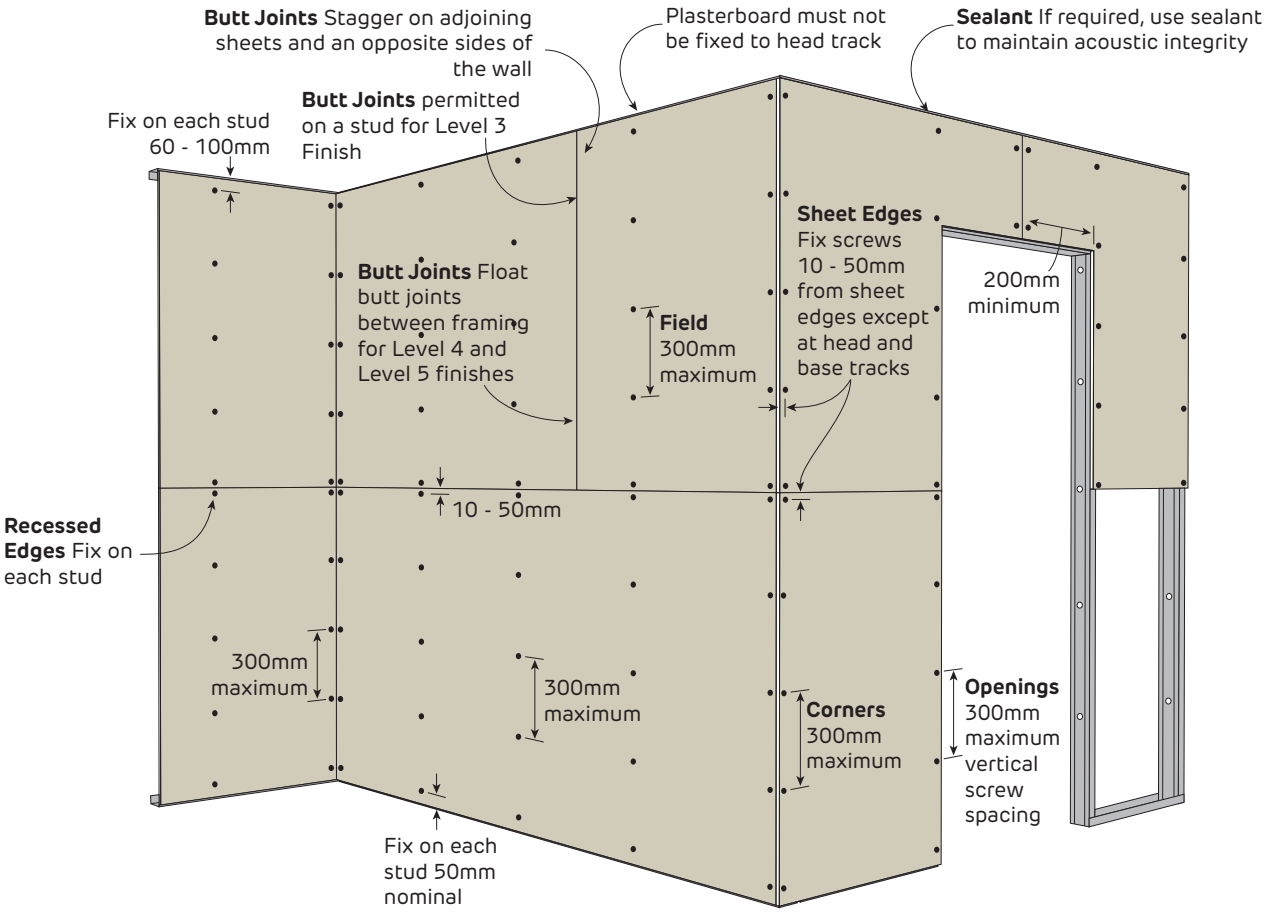
S = Screw
A = Adhesive daub

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
10mm	1.00	1.33	1.50	2.00
13mm	1.00	1.33	1.50	2.00
16mm	1.00	1.33	1.50	2.00

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 24 Non-Fire Rated 1 Layer - Horizontal
Screw Only Method



Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

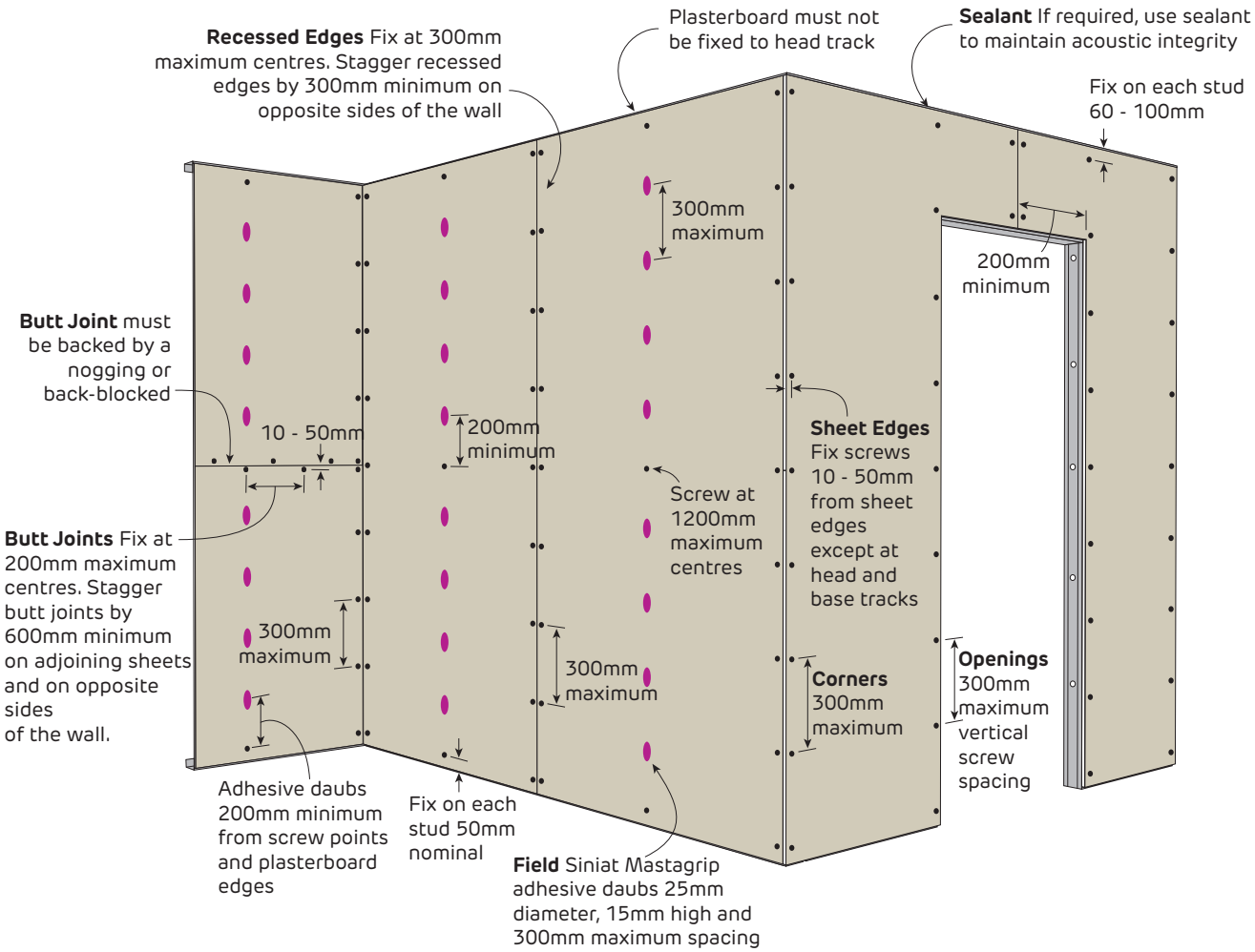
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
10mm	0.86	1.15	1.30	1.73
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

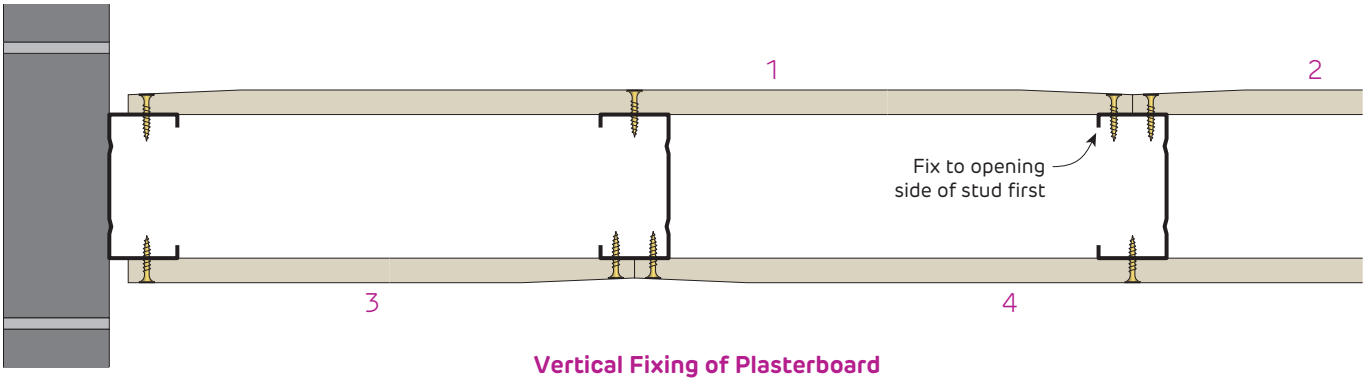
FIGURE 25 Non-Fire Rated 1 Layer - Vertical
Screw and Adhesive Method



Maximum Ultimate Limit State Wind Load Table (kPa)

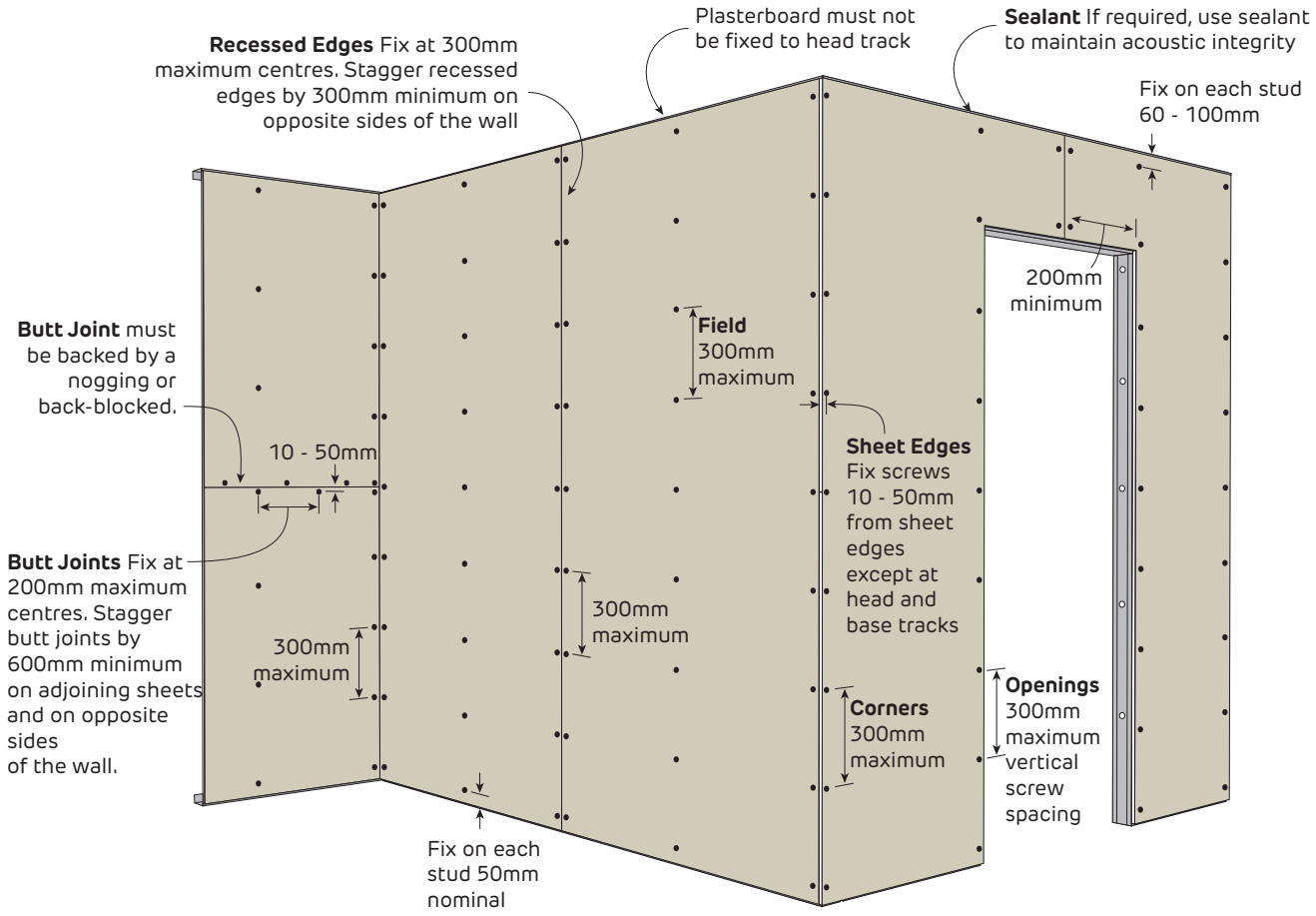
Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
10mm	0.72	0.96	1.08	1.44
13mm	0.72	0.96	1.08	1.44
16mm	0.72	0.96	1.08	1.44

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

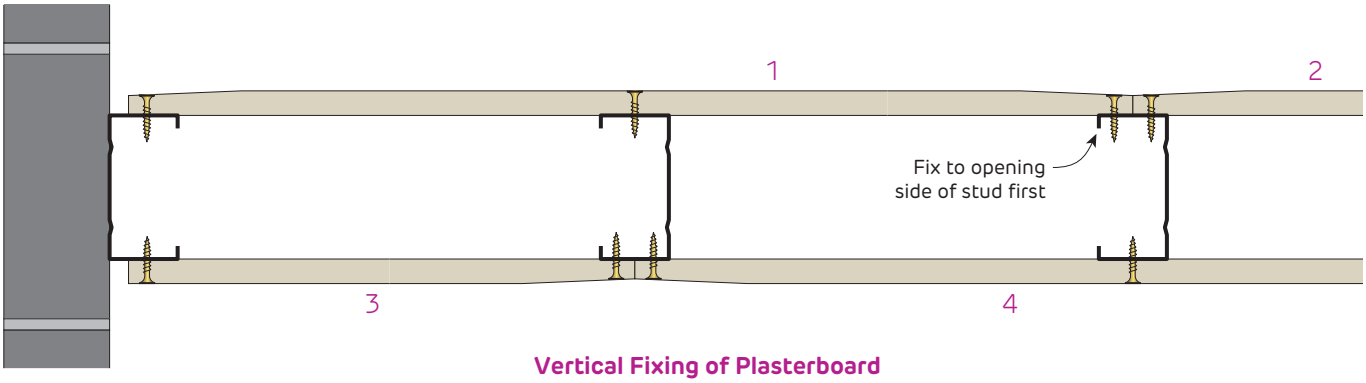
FIGURE 26 Non-Fire Rated 1 Layer - Vertical
Screw Only Method



Maximum Ultimate Limit State Wind Load Table (kPa)

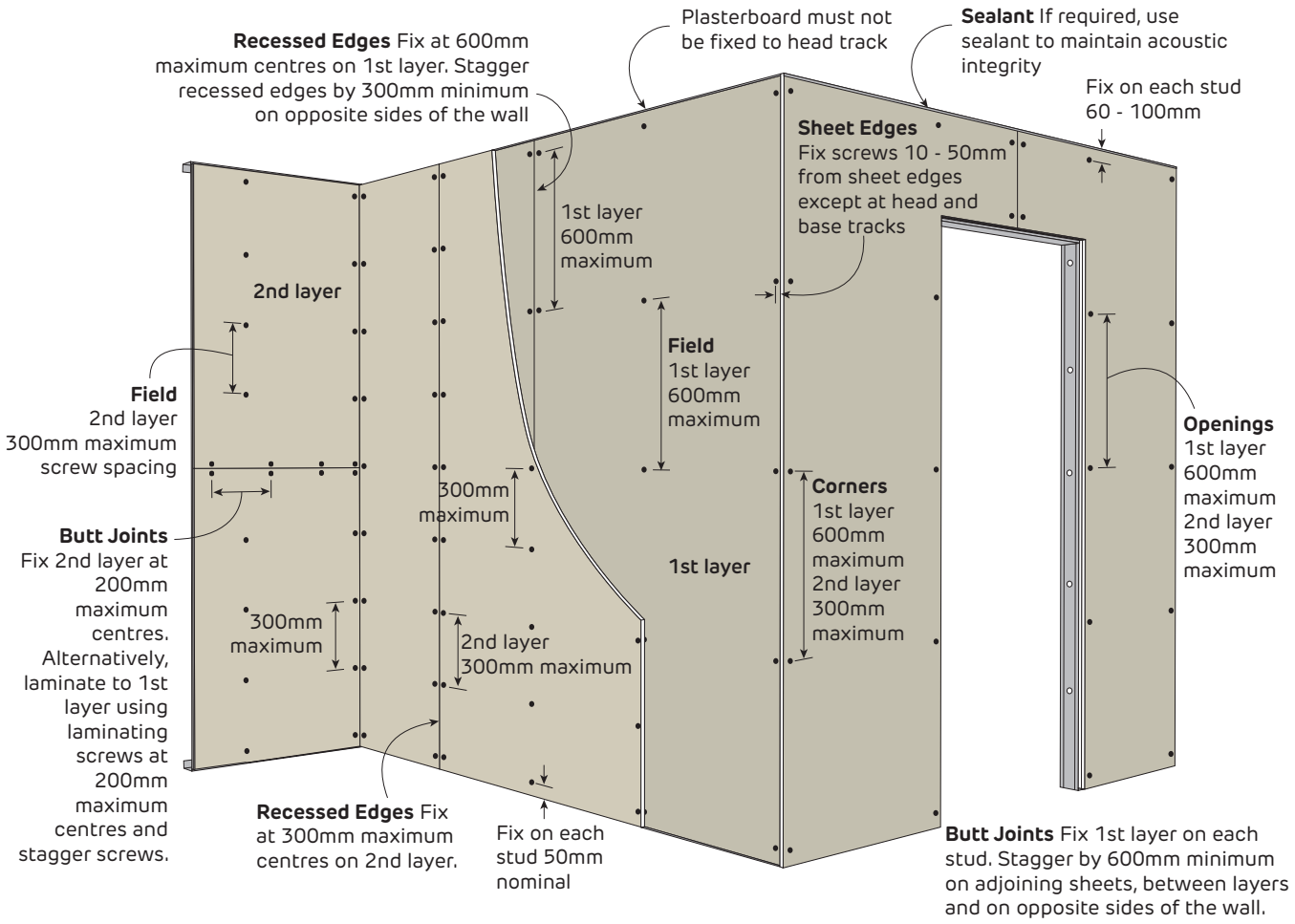
Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
10mm	0.77	1.03	1.16	1.55
13mm	0.86	1.15	1.29	1.73
16mm	0.86	1.15	1.29	1.73

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

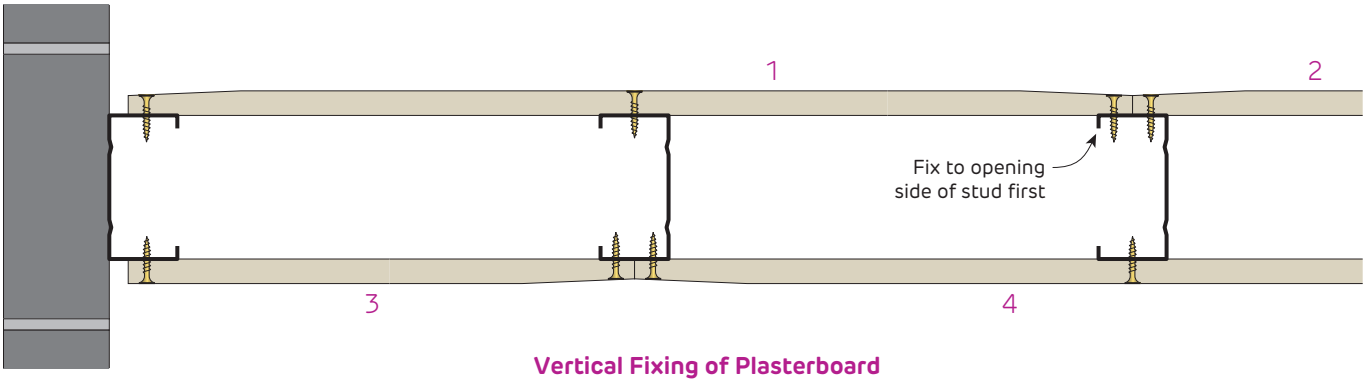
FIGURE 27 Non-Fire Rated 2 Layers - Vertical + Vertical
Screw Only Method



Maximum Ultimate Limit State Wind Load Table (kPa)

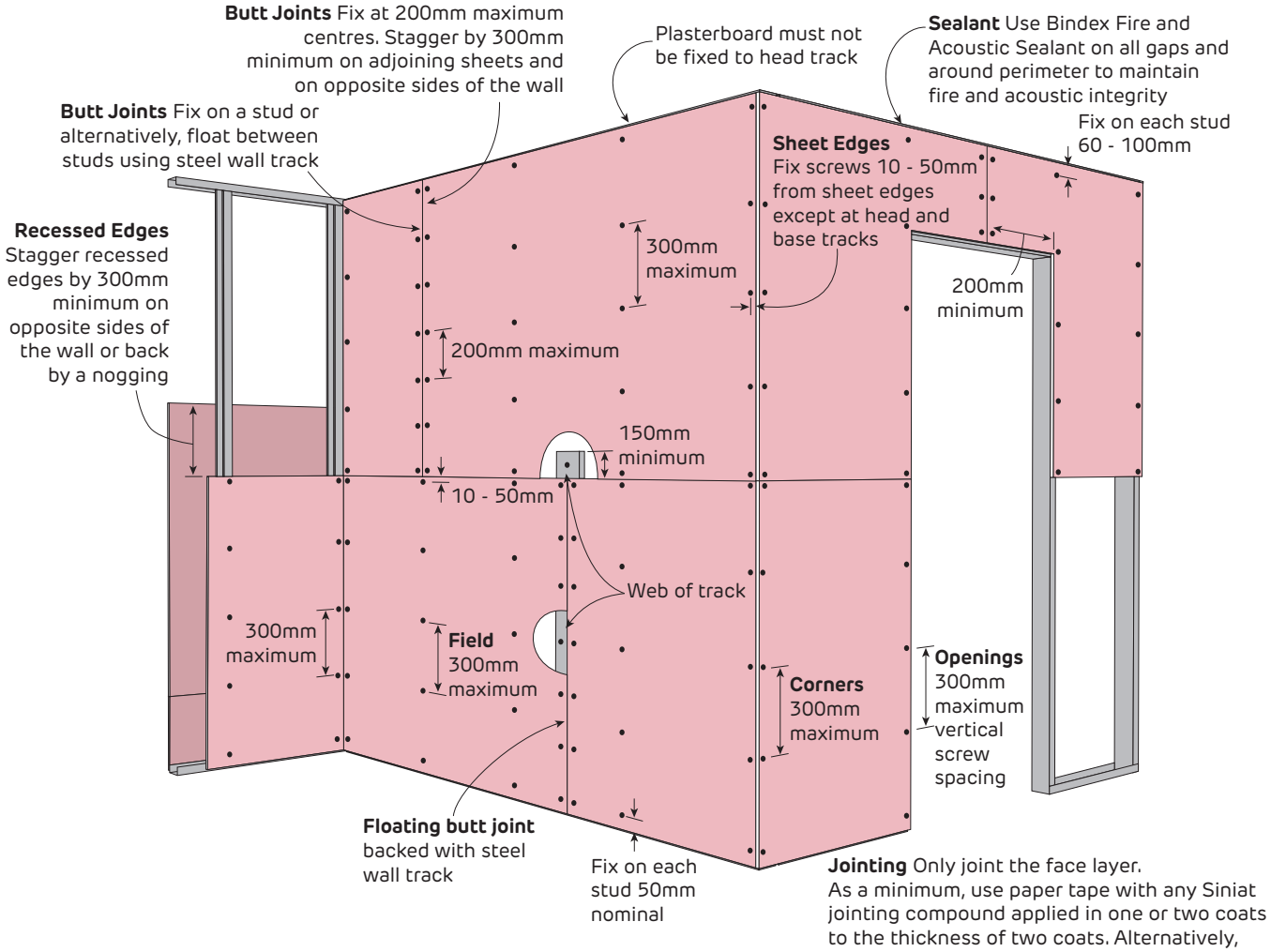
Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
10mm	0.77	1.03	1.16	1.55
13mm	0.86	1.15	1.29	1.73
16mm	0.86	1.15	1.29	1.73

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

FIGURE 28 Fire Rated 1 Layer - Horizontal
Screw Only Method



Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

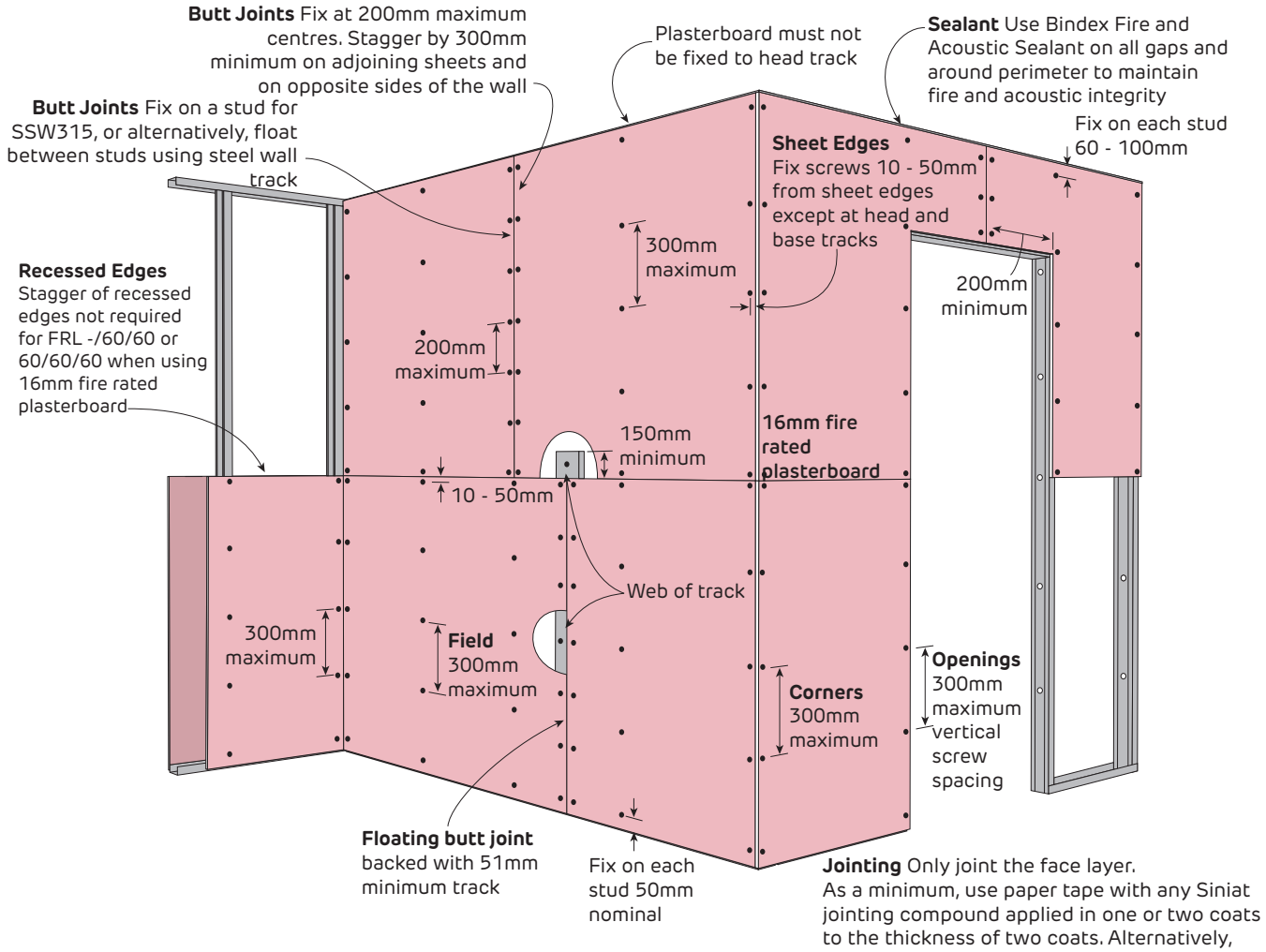
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 29 Fire Rated 1 Layer - Horizontal. FRL -/60/60 and 60/60/60 for systems SSW315 and SSW391 only
Screw Only Method



Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

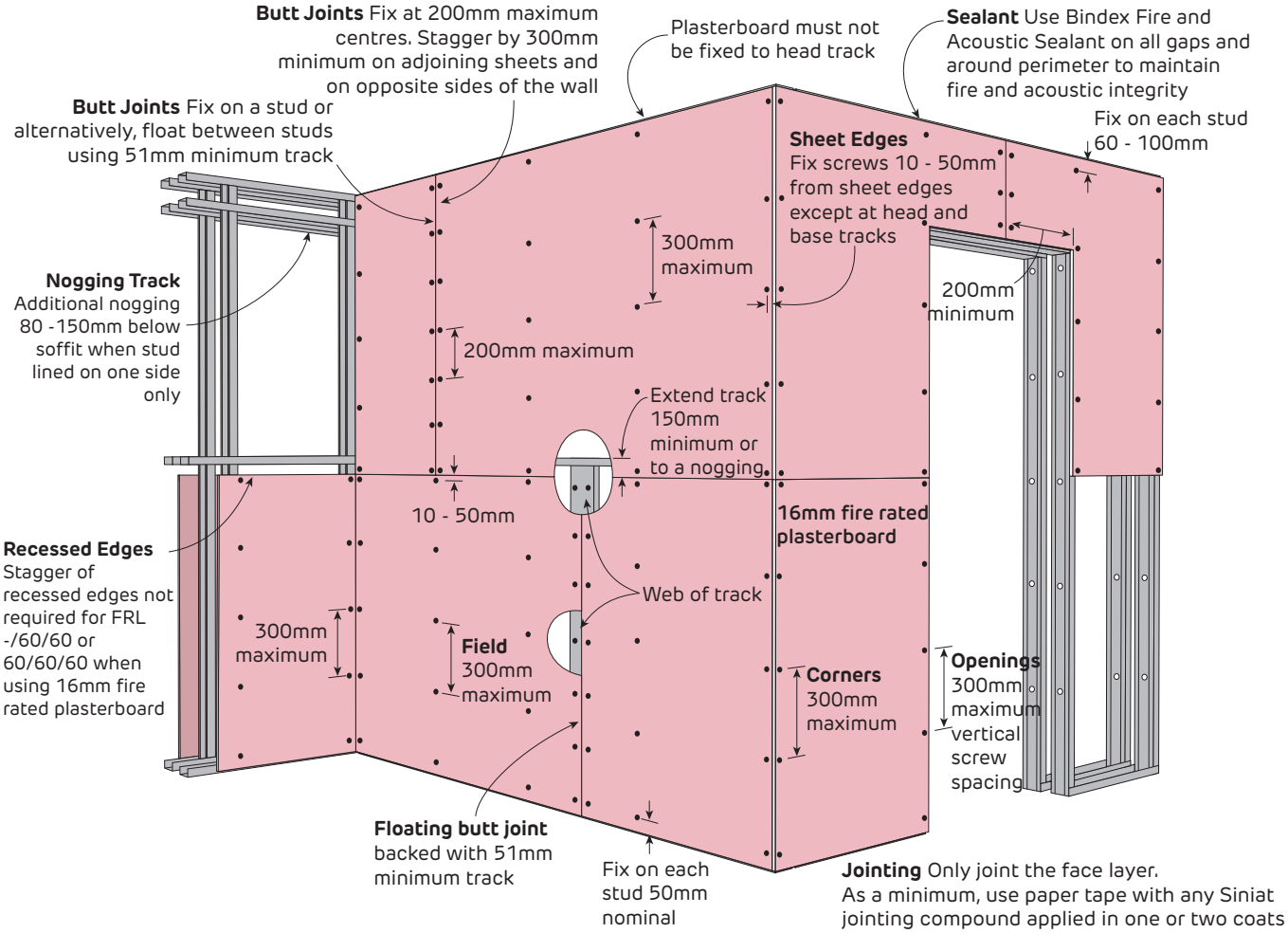
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 30 Fire Rated 1 Layer - Horizontal. FRL -/60/60 or 60/60/60 for system SSW335 only
Screw Only Method



Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

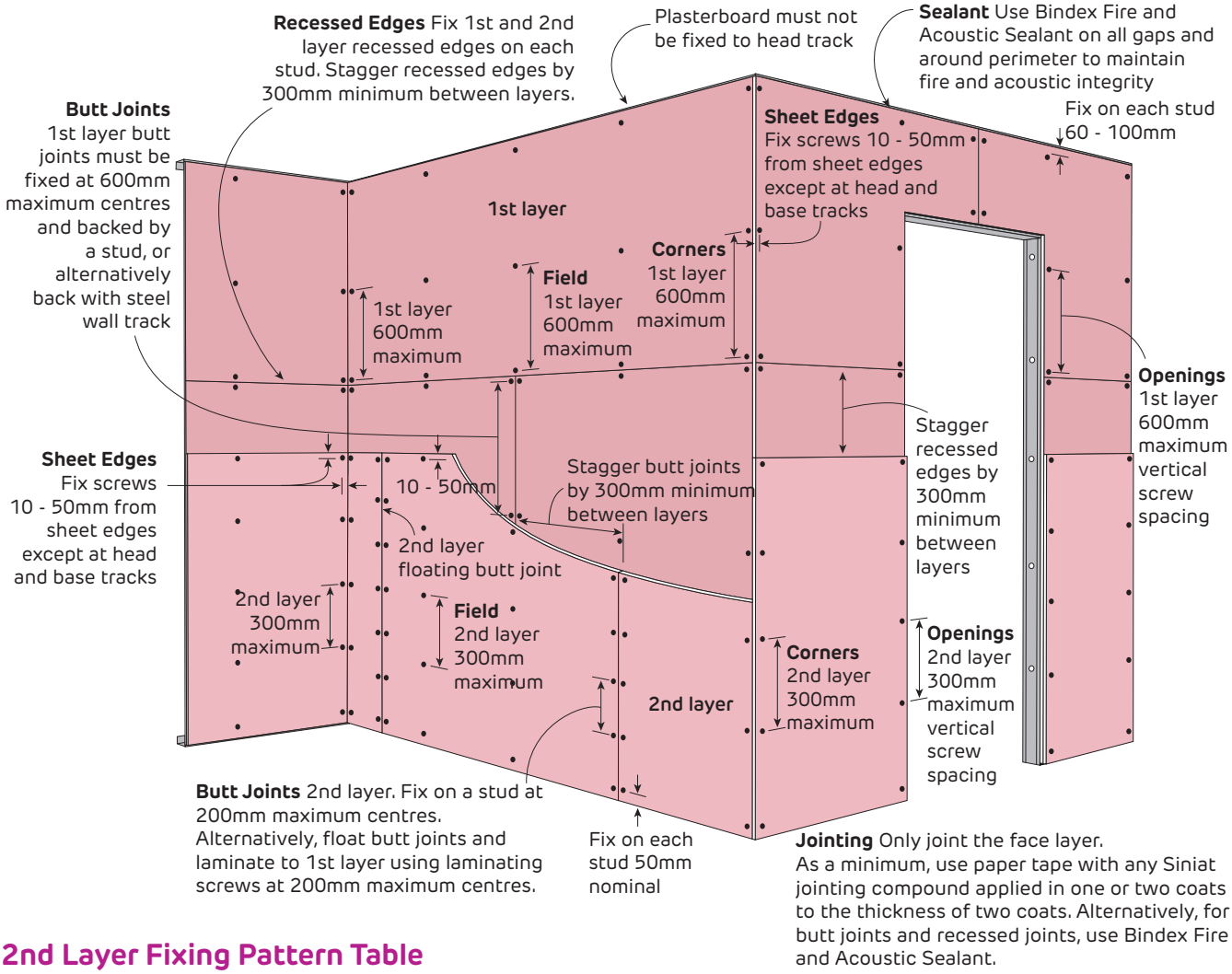
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 31 Fire Rated 2 Layers - Horizontal + Horizontal
Screw Only Method



2nd Layer Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

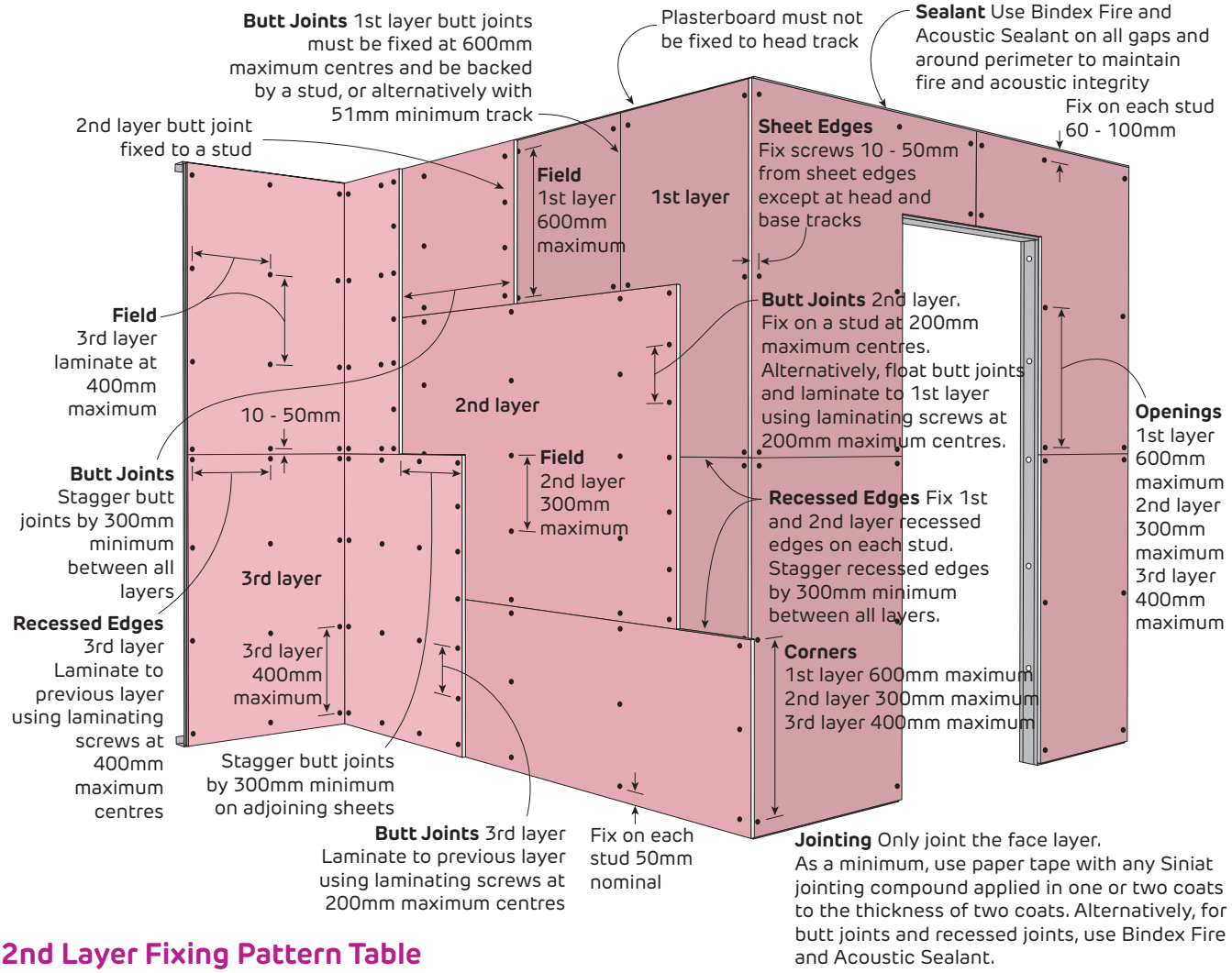
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 32 Fire Rated 3 Layers - Horizontal + Horizontal + Horizontal
Screw Only Method



2nd Layer Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

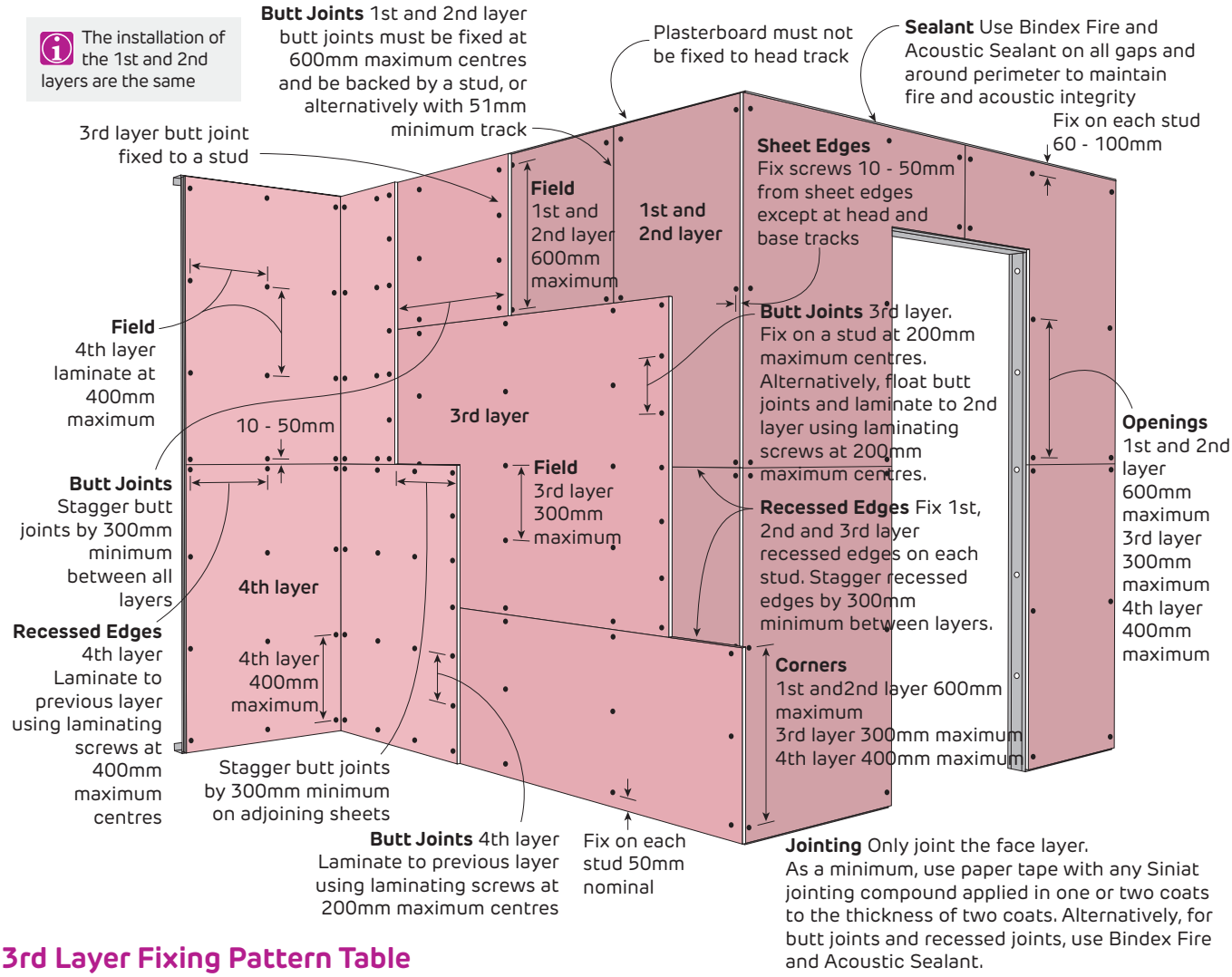
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

FIGURE 33 Fire Rated 4 Layers - Horizontal + Horizontal + Horizontal + Horizontal
Screw Only Method



3rd Layer Fixing Pattern Table

Sheet Width	Fixing Pattern
600mm	S S S (3)
900mm	S S S S (4)
1200mm	S S S S S (5)
1350mm	S S S S S S (6)
1400mm	S S S S S S (6)

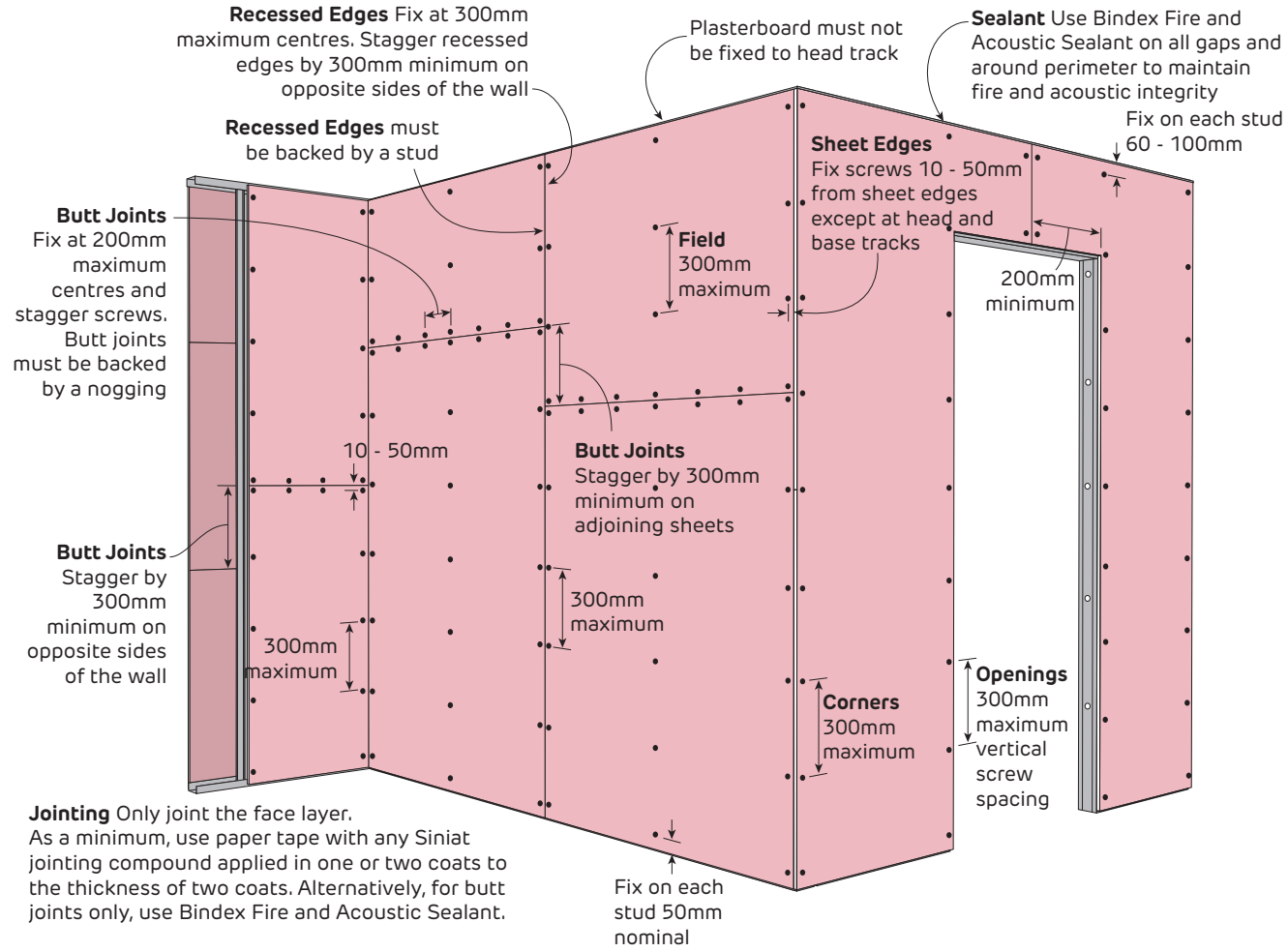
S = Screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.96	1.28	1.44	1.92
16mm	0.96	1.28	1.44	1.92

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 3-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.

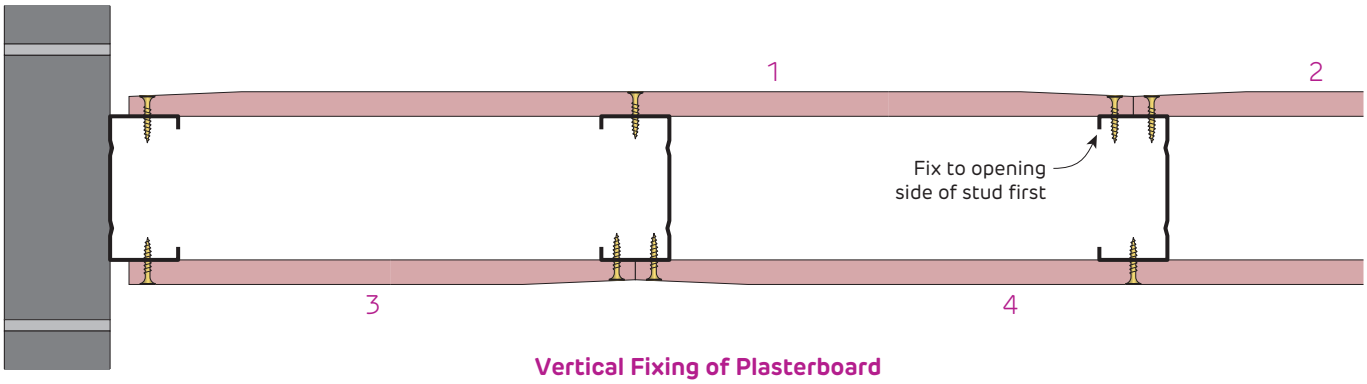
FIGURE 34 Fire Rated 1 Layer - Vertical
Screw Only Method



Maximum Ultimate Limit State Wind Load Table (kPa)

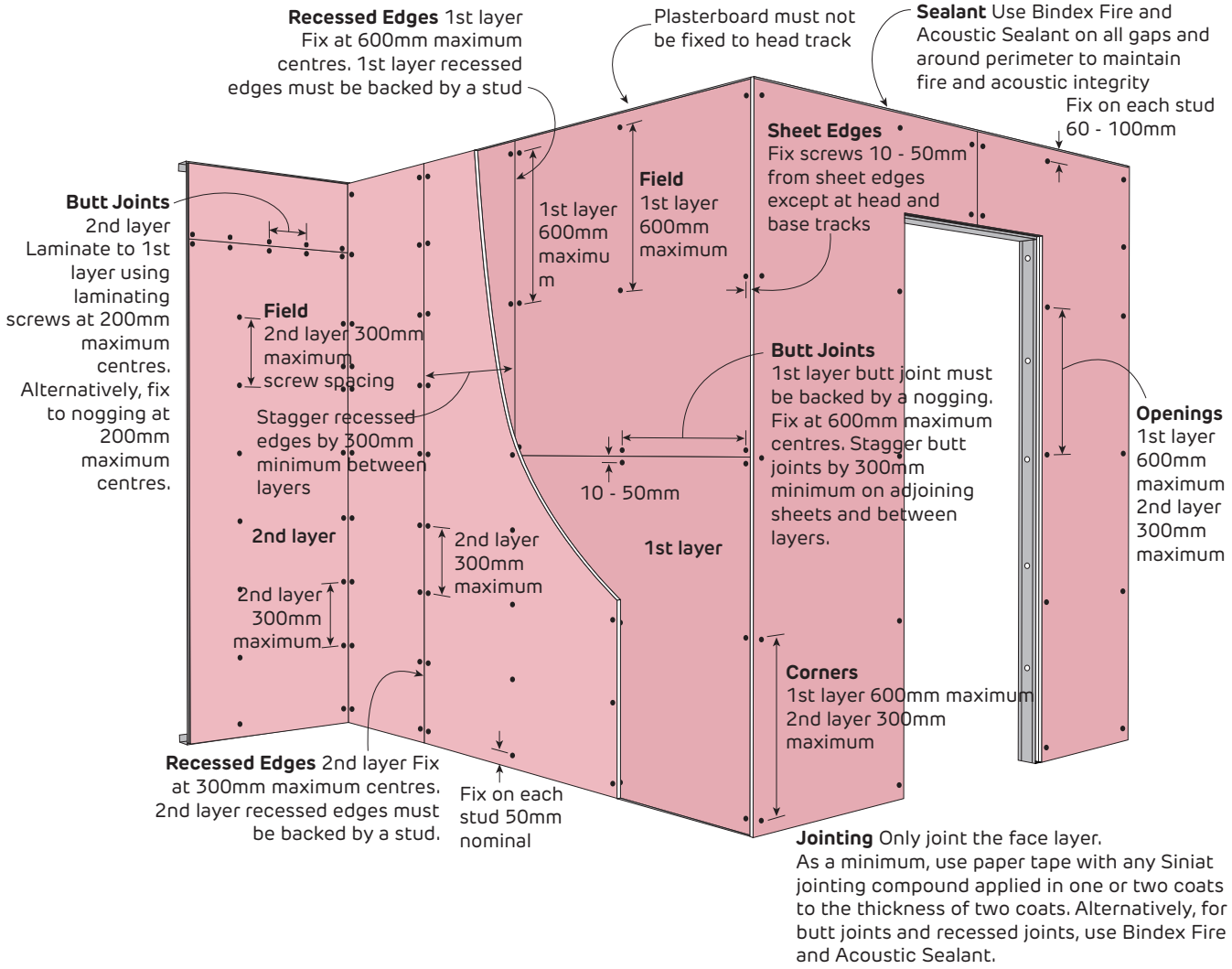
Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.86	1.15	1.29	1.73
16mm	0.86	1.15	1.29	1.73

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

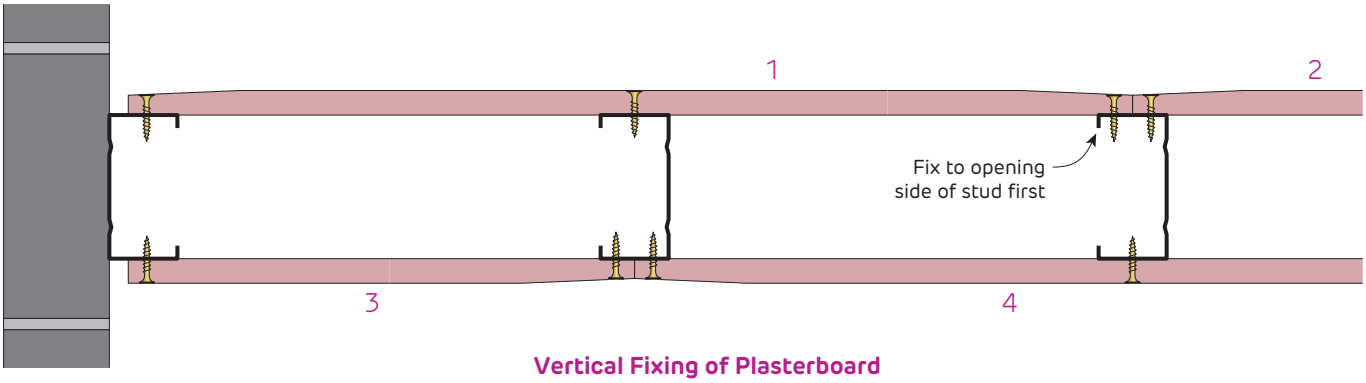
FIGURE 35 Fire Rated 2 Layers - Vertical + Vertical
Screw Only Method



Maximum Ultimate Limit State Wind Load Table (kPa)

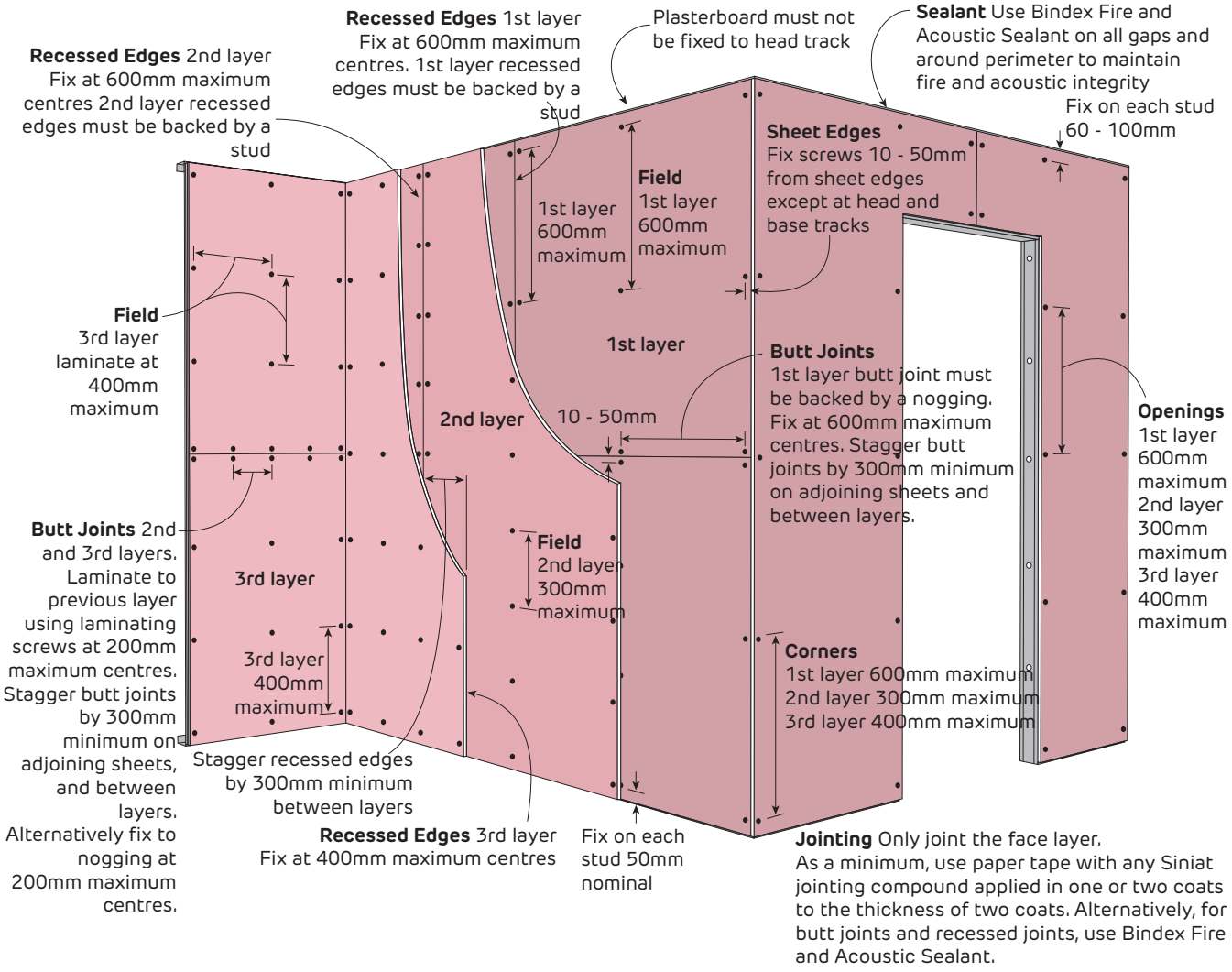
Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.86	1.15	1.29	1.73
16mm	0.86	1.15	1.29	1.73

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

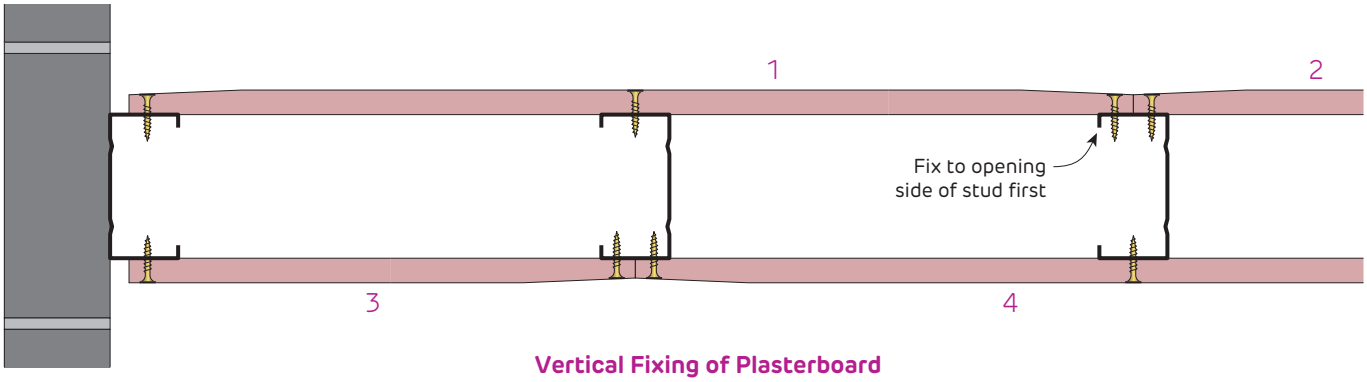
FIGURE 36 Fire Rated 3 Layers - Vertical + Vertical + Vertical
Screw Only Method



Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Wall Stud Spacing			
	600mm	450mm	400mm	300mm
13mm	0.72	0.96	1.08	1.44
16mm	0.72	0.96	1.08	1.44

1. Calculations do not include the framing which must be independently designed to suit the desired loads.
2. Calcuated over 2-or-more spans.
3. If higher internal wind pressures are expected, please contact Siniat for specific design.



Vertical Fixing of Plasterboard
Plan

Non-Fire Rated

Head and Base Details for Internal Stud Walls - Lined Full Height

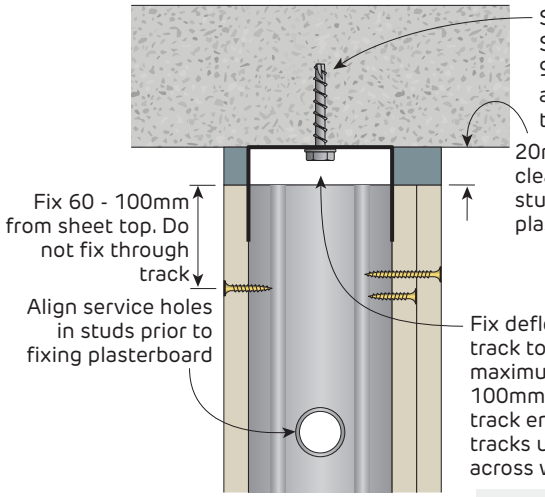


FIGURE 37 Wall Head
Deflection Head Track
Section

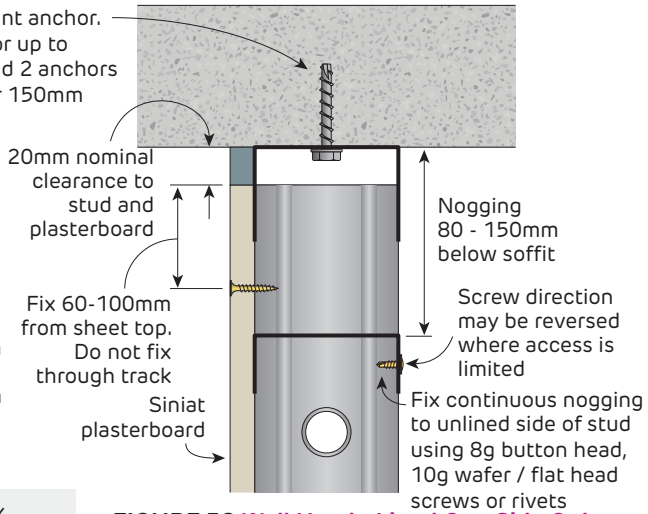


FIGURE 38 Wall Head - Lined One Side Only
Deflection Head Track
Section

Do not rigidly fix cornice to non-load bearing wall head and soffit, as slab deflection is expected

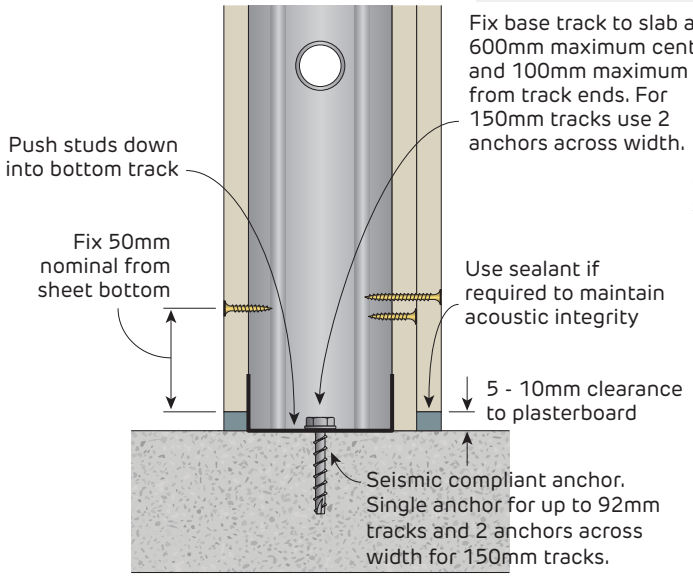


FIGURE 39 Wall Base
Section

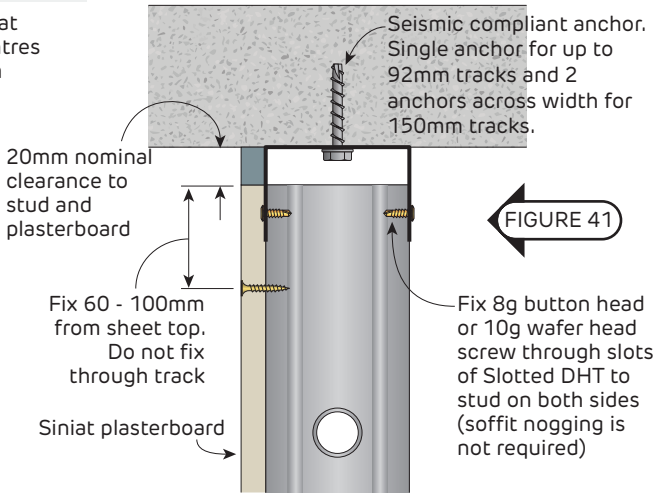


FIGURE 40 Wall Head - Lined One Side Only
Slotted Deflection Head Track
Section

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

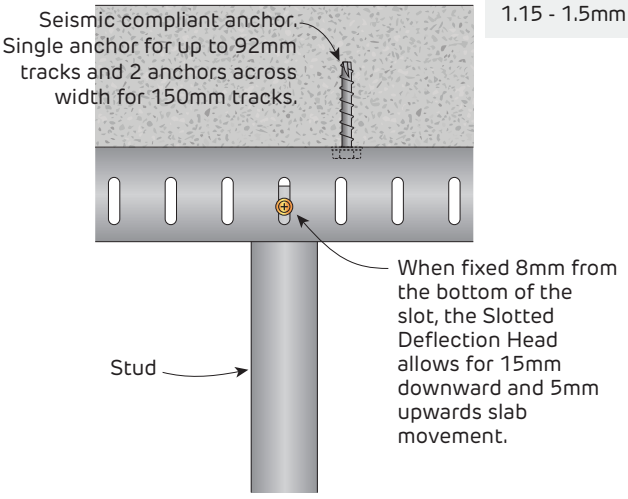


FIGURE 41 Wall Head
Slotted Deflection Head Track
Elevation

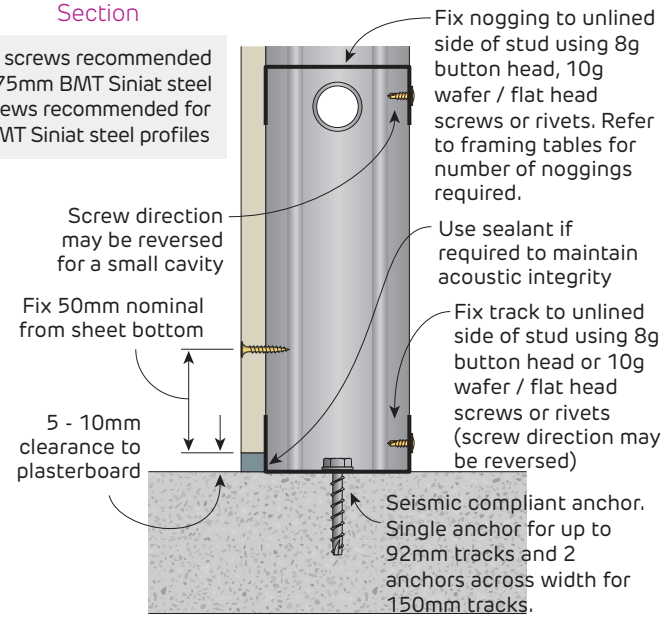


FIGURE 42 Wall Base - Lined One Side Only
Section

Non-Fire Rated

Head and Base Details for Internal Stud Walls - Partially Lined

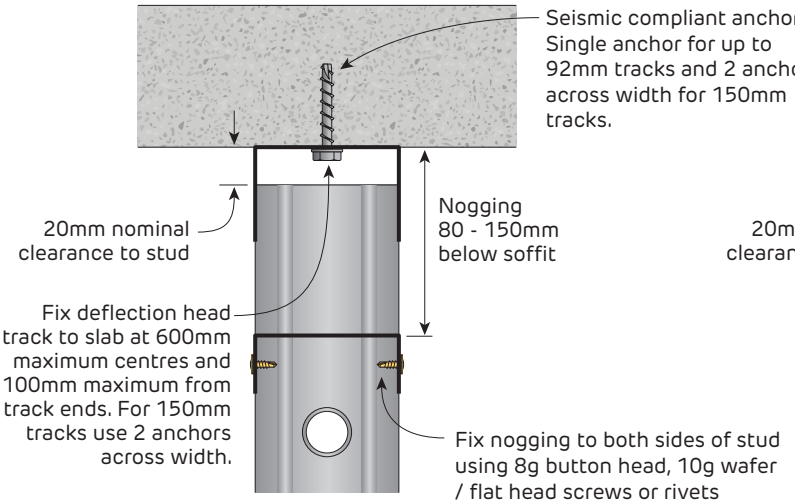


FIGURE 43 Wall Head - Partially Lined Wall
Option 1 - Deflection Head Track
Section

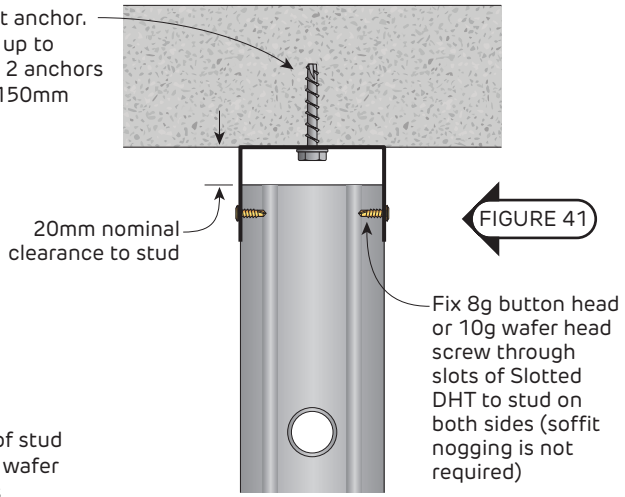


FIGURE 44 Wall Head - Partially Lined Wall
Option 2 - Slotted Deflection Head Track
Section

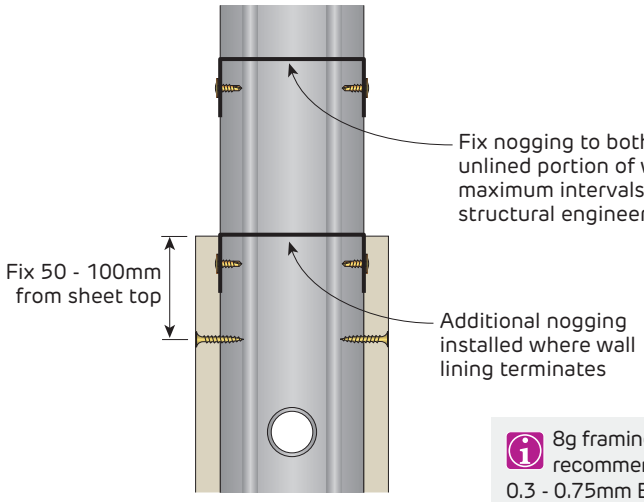


FIGURE 45 Partially Lined Wall
Lined on both sides
Section

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

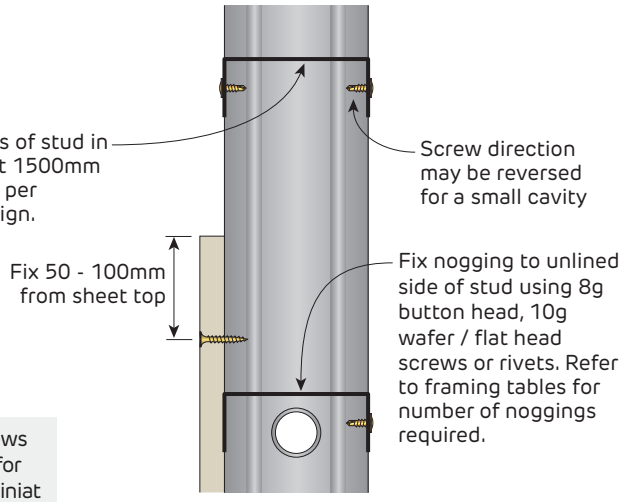


FIGURE 46 Partially Lined Wall
Lined on one side only
Section

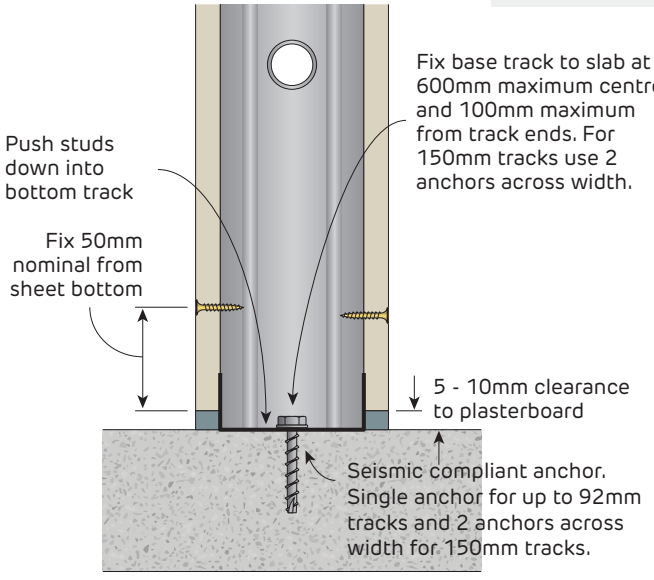


FIGURE 47 Wall Base
Section

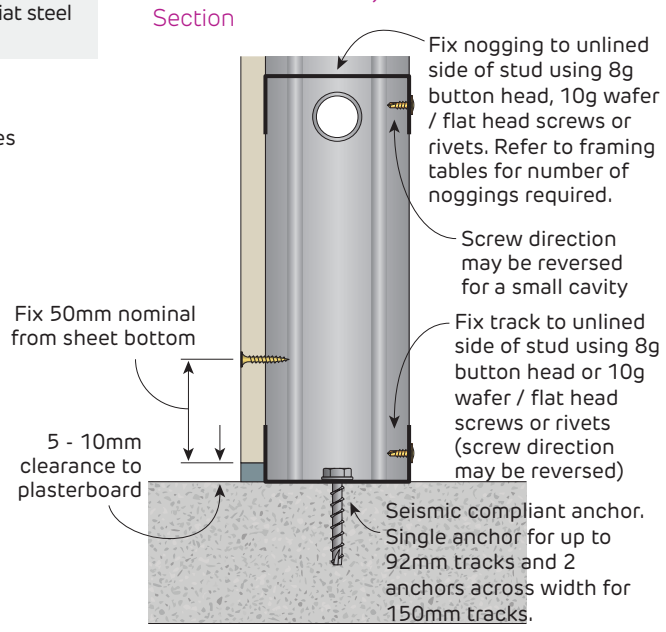


FIGURE 48 Wall Base - Lined One Side Only
Section

Non-Fire Rated
Head Finishing Details for Internal Stud Walls

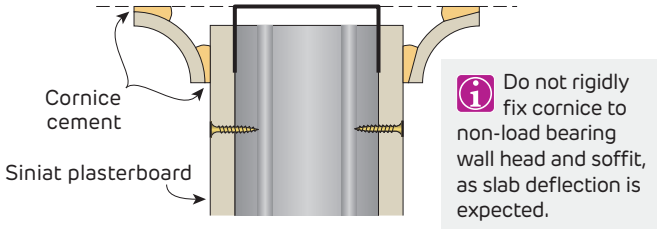


FIGURE 49 Wall Head - Cornice
Section

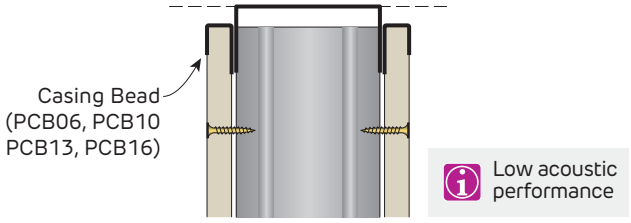


FIGURE 50 Wall Head - Casing Bead
Section

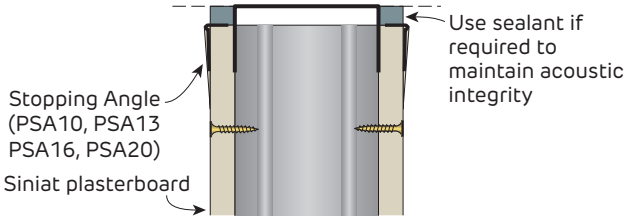


FIGURE 51 Wall Head - Stopping Angle
Section

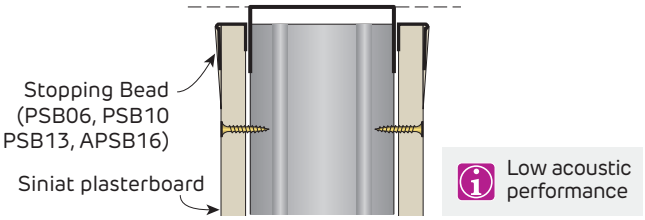


FIGURE 52 Wall Head - Stopping Bead
Section

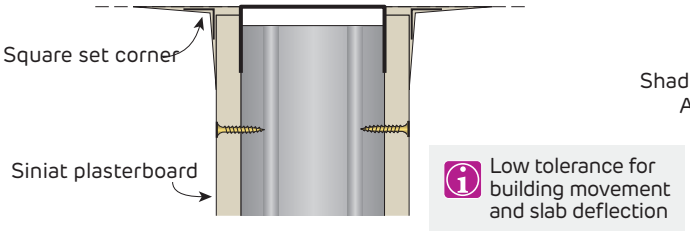


FIGURE 53 Wall Head - Square Set
Section

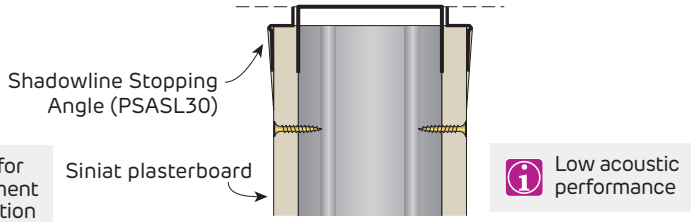


FIGURE 54 Wall Head - Shadowline Stopping Angle
Section

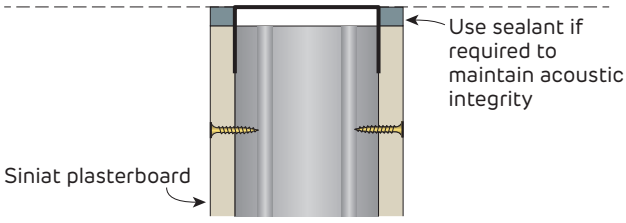


FIGURE 55 Wall Head - Bare finish with sealant
Section

Non-Fire Rated
Internal Stud Walls

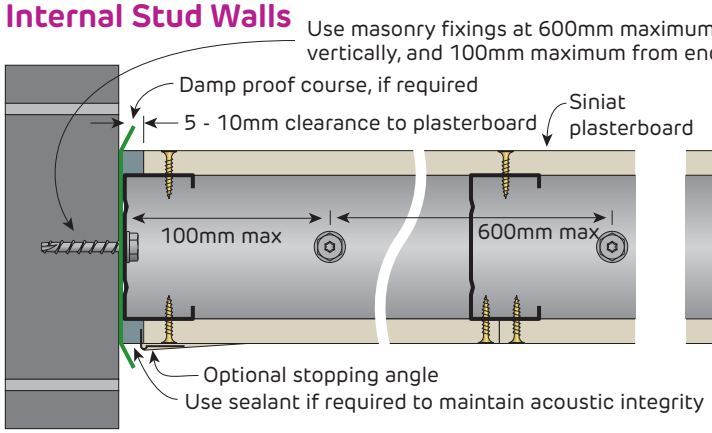


FIGURE 56 Wall End To Masonry
Plan

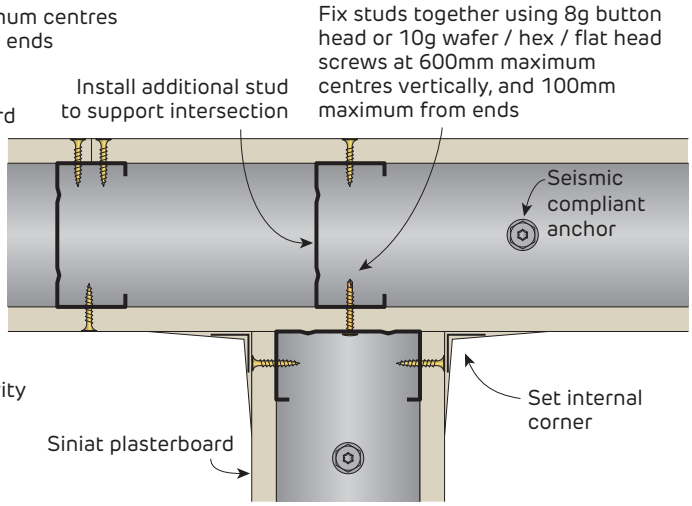


FIGURE 57 Intersecting Wall
Plan

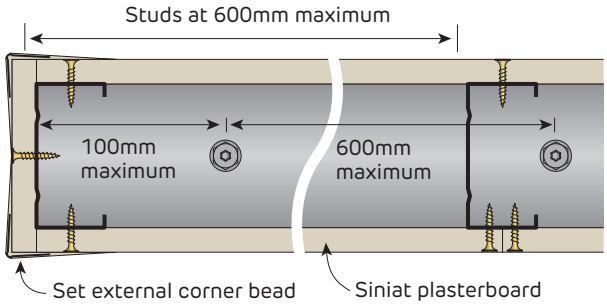


FIGURE 58 Wall End
Plan

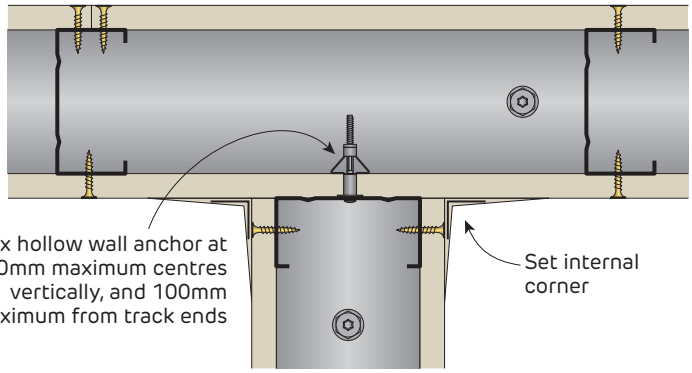


FIGURE 59 Intersecting Wall
Plan

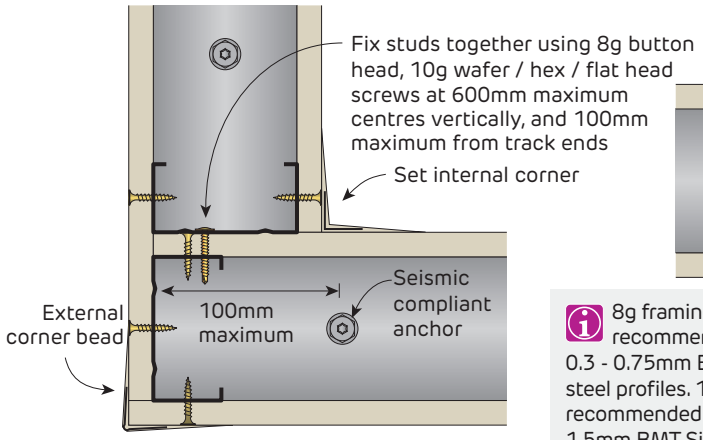


FIGURE 60 Wall Corner
Plan

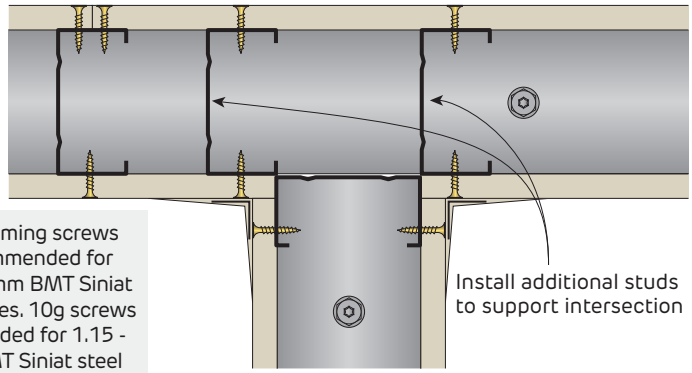


FIGURE 61 Intersecting Wall
Plan

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

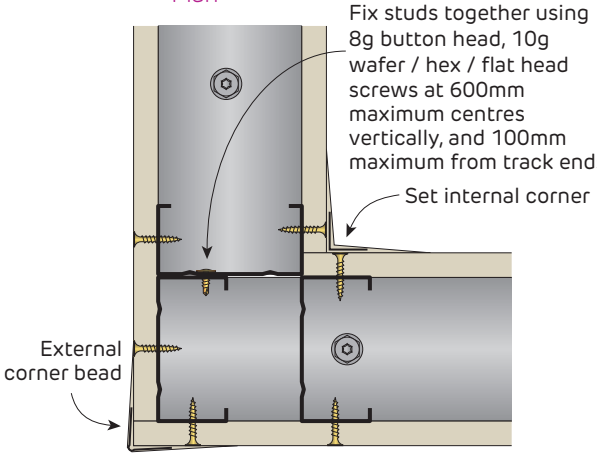


FIGURE 62 Wall Corner
Plan

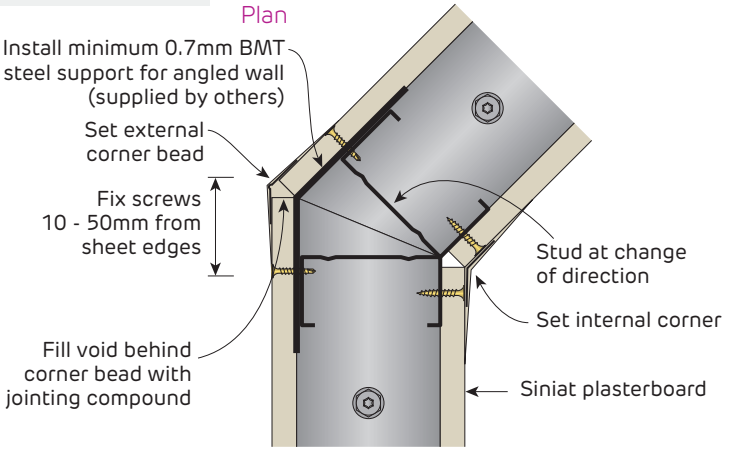


FIGURE 63 Obtuse Angle Corner
Plan

Non-Fire Rated
Sliding Connection Details for Internal Stud Walls

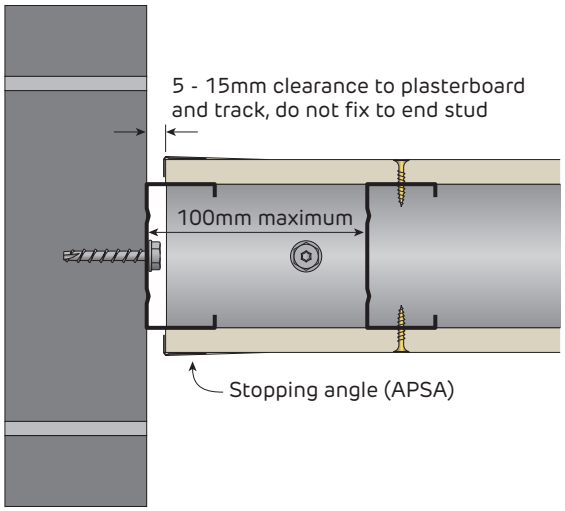


FIGURE 64 Sliding Wall End To Masonry
Plan

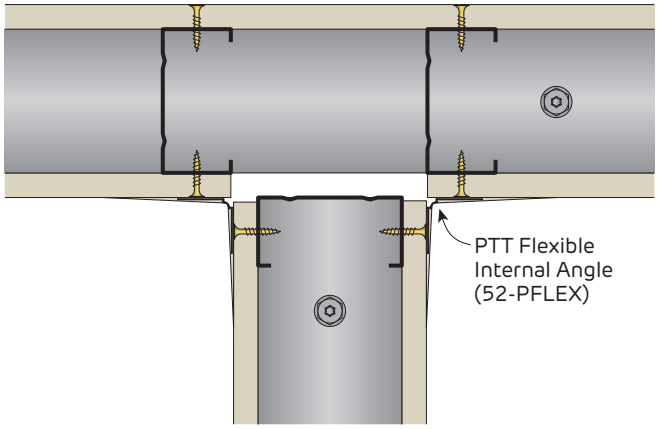


FIGURE 65 Sliding Intersecting Wall
Plan

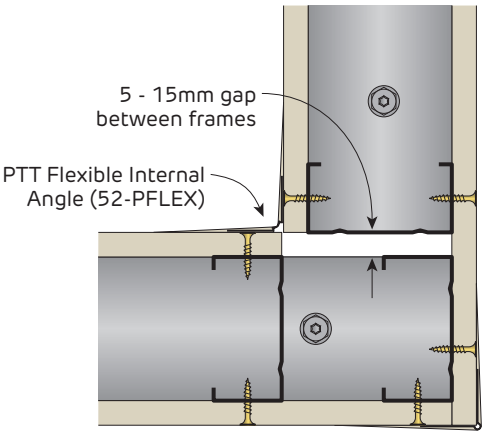


FIGURE 66 Sliding Wall Corner
Plan

Fire Rated
Head and Base Details for Internal Stud Walls - Lined Full Height - Single Layer

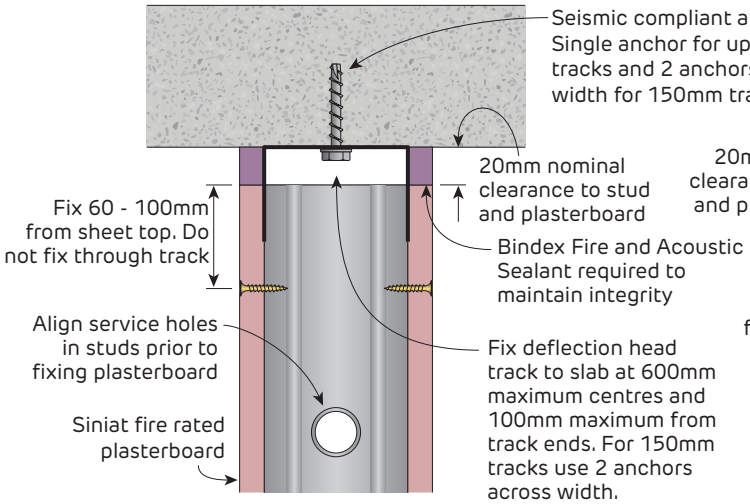


FIGURE 67 Wall Head
Deflection Head Track Section

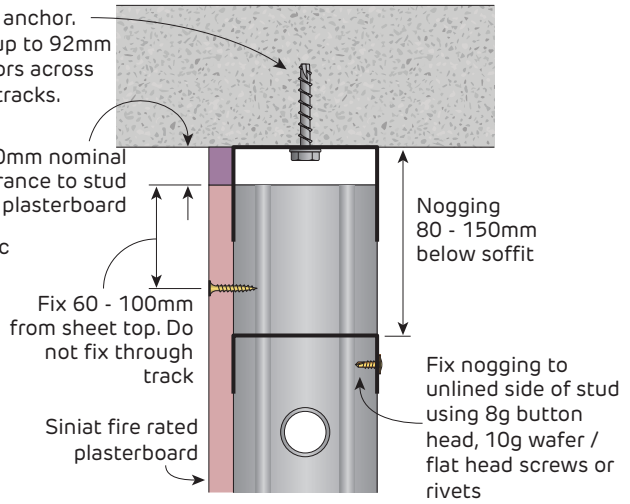


FIGURE 68 Wall Head - Lined One Side Only
Deflection Head Track Section

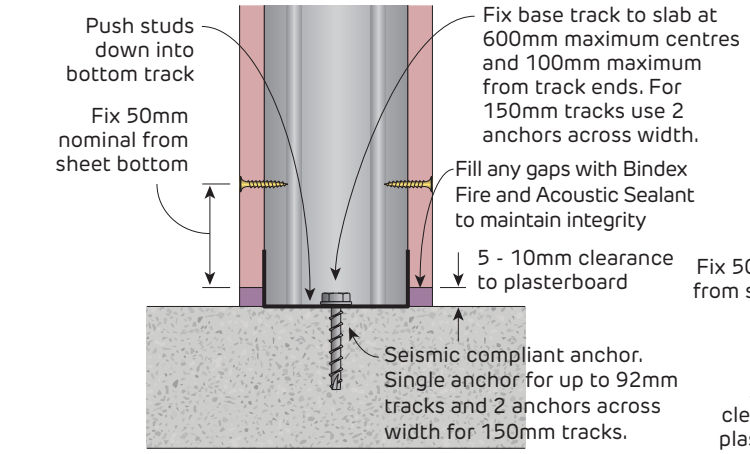


FIGURE 69 Wall Base
Section

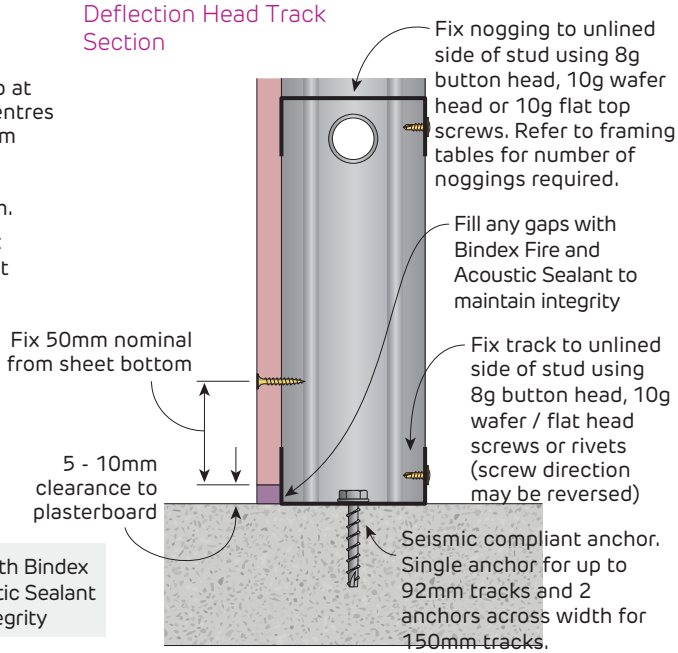


FIGURE 70 Wall Base - Lined One Side Only
Section

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

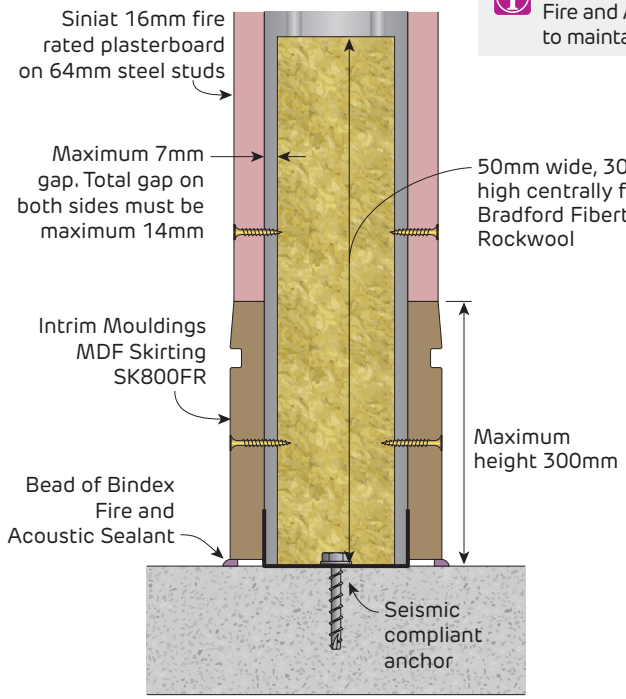


FIGURE 71 Wall Base with MDF Skirting
FRL -/60/60 FCO3351 Rev B - Section

Outermost plasterboard sheets with no gap at the base are at risk of wicking

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated
Head and Base Details for Internal Stud Walls - Lined Full Height - 2 Layers

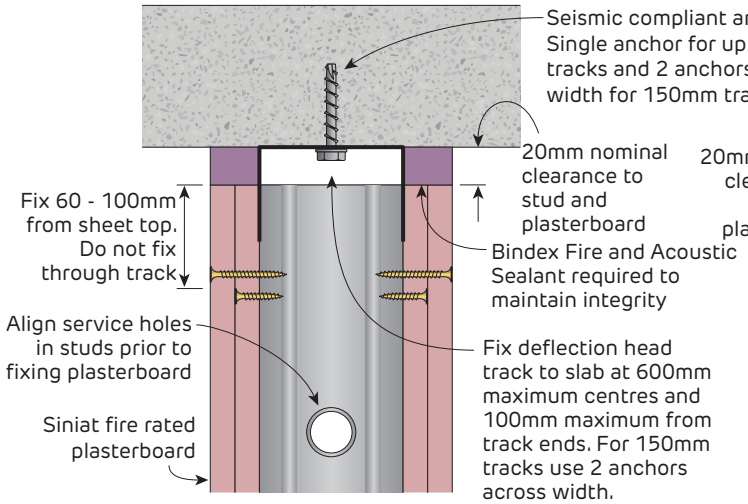


FIGURE 72 Wall Head
Deflection Head Track Section

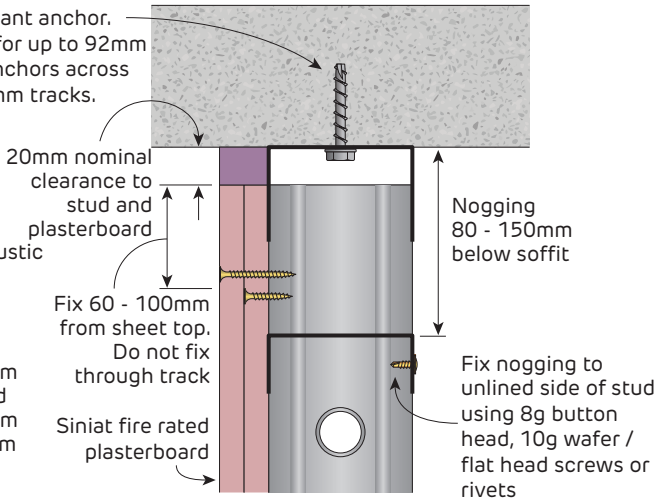


FIGURE 73 Wall Head - Lined One Side Only
Deflection Head Track Section

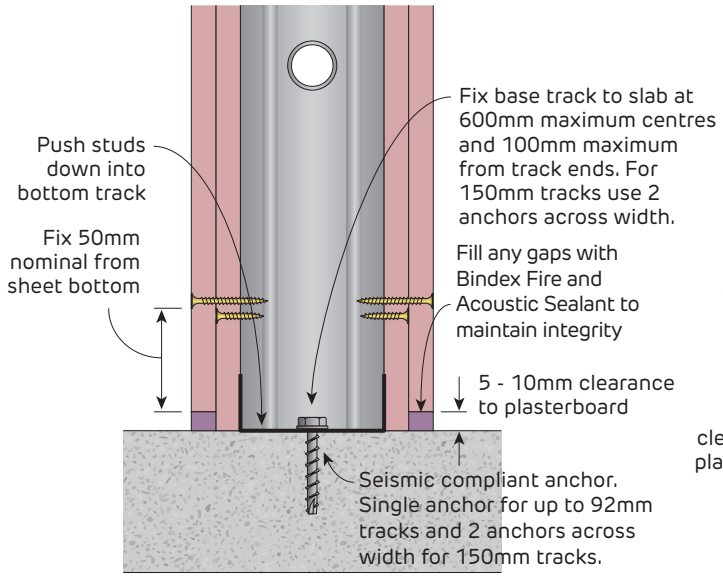


FIGURE 74 Wall Base
Section

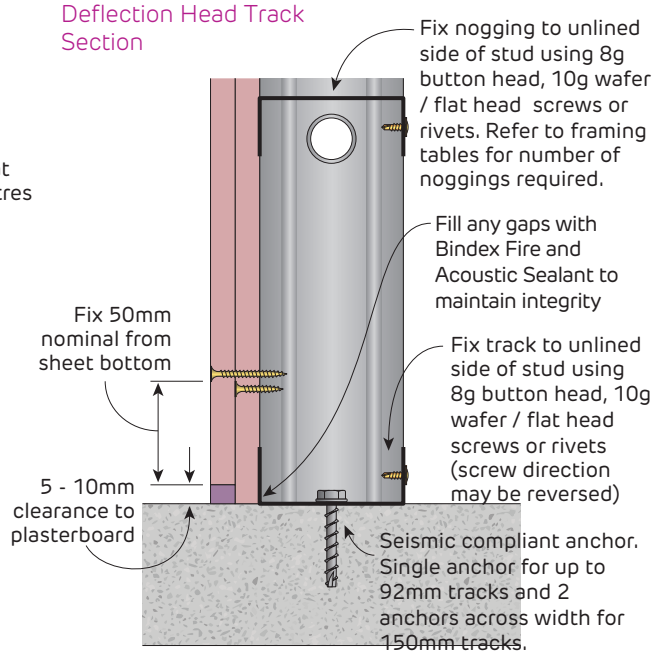


FIGURE 75 Wall Base - Lined One Side Only
Section

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

Outermost plasterboard sheets with no gap at the base are at risk of wicking

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated
Head and Base Details for Internal Stud Walls - Lined Full Height - 3 Layers

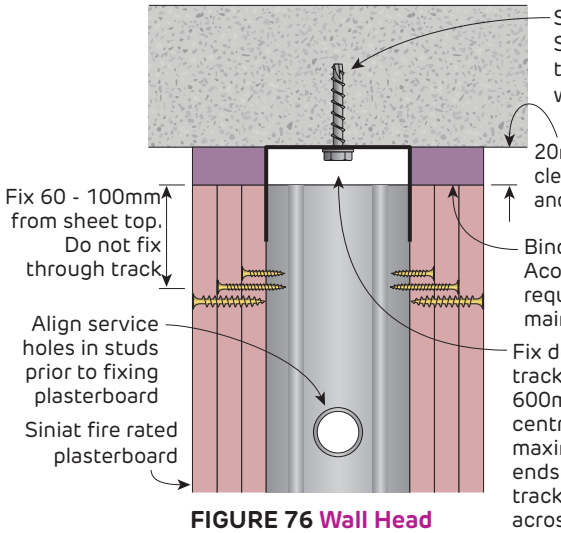


FIGURE 76 Wall Head
Deflection Head Track Section

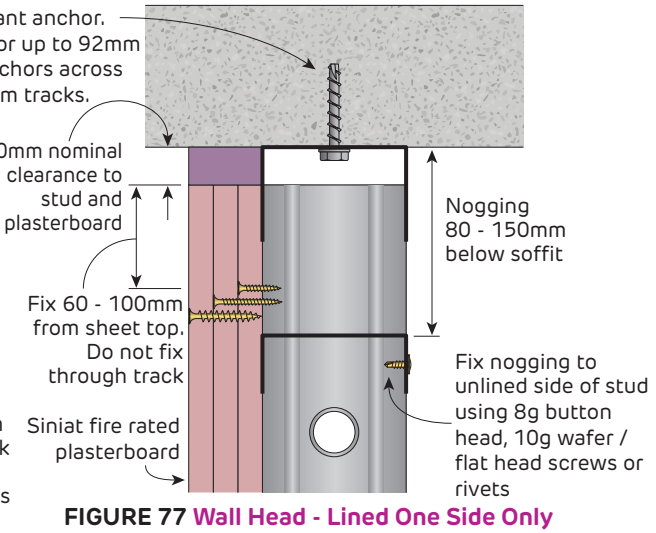


FIGURE 77 Wall Head - Lined One Side Only
Deflection Head Track Section

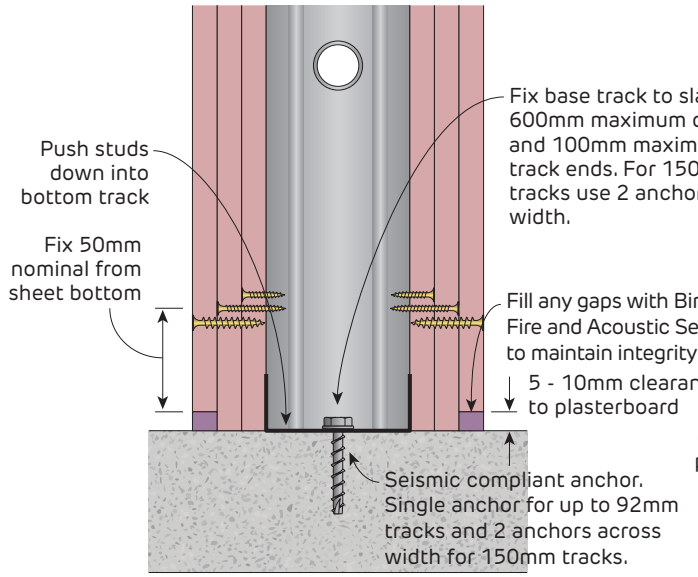


FIGURE 78 Wall Base
Section

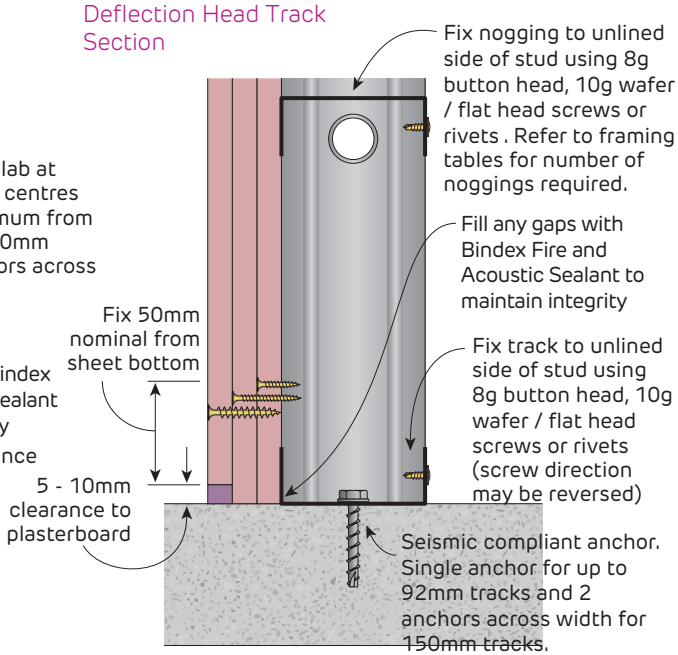


FIGURE 79 Wall Base - Lined One Side Only
Section

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

Outermost plasterboard sheets with no gap at the base are at risk of wicking

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated
Head and Base Details for Internal Stud Walls - Lined Full Height - 4 Layers

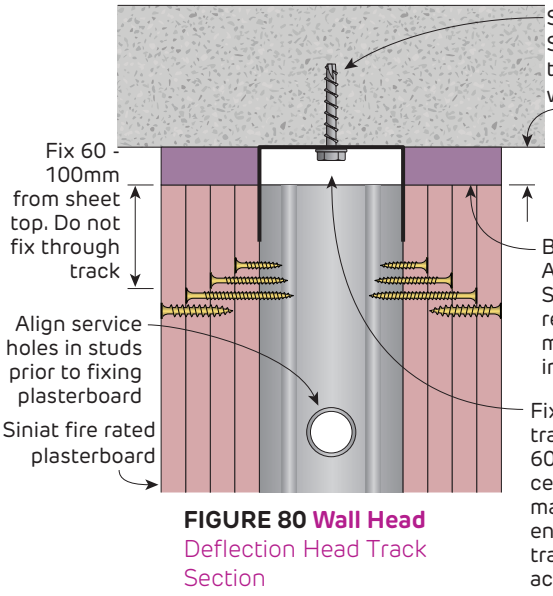


FIGURE 80 Wall Head
Deflection Head Track Section

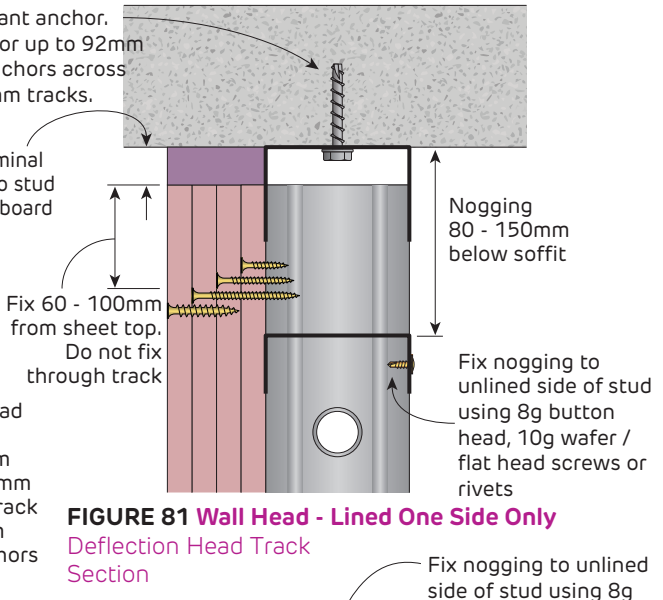


FIGURE 81 Wall Head - Lined One Side Only
Deflection Head Track Section

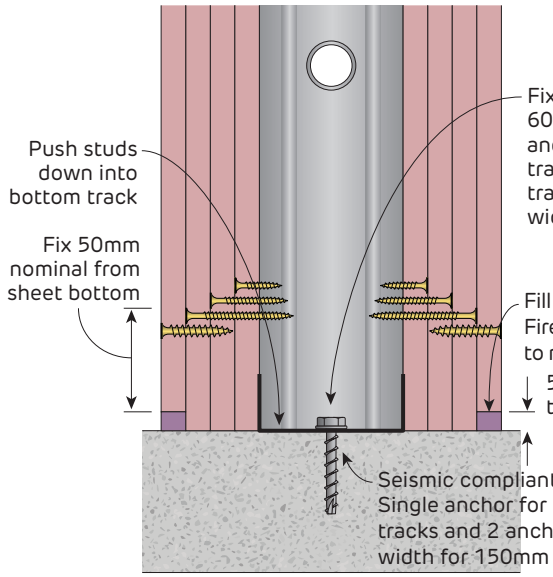


FIGURE 82 Wall Base
Section

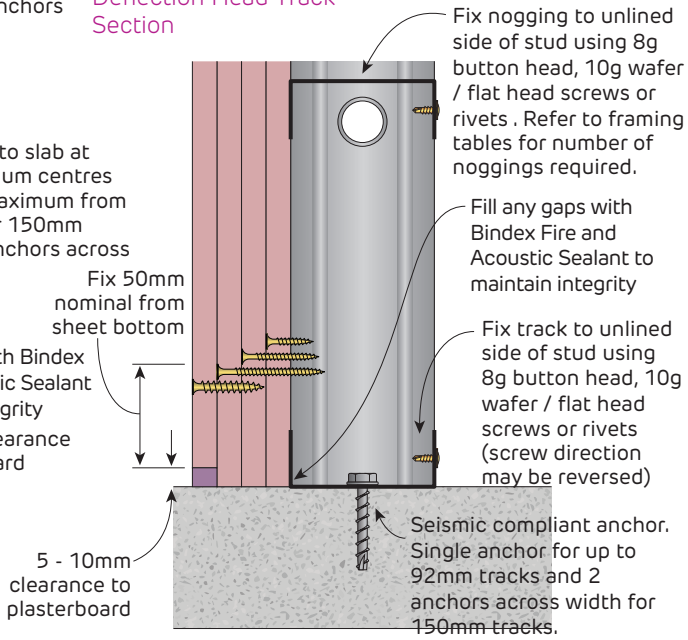


FIGURE 83 Wall Base - Lined One Side Only
Section

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

Outermost plasterboard sheets with no gap at the base are at risk of wicking

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Fire Rated
Head and Base Details for Internal Stud Walls - Lined Full Height - Up to 4 Layers

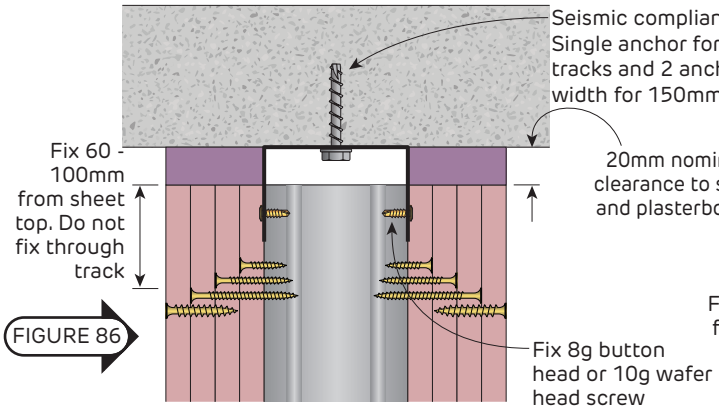


FIGURE 84 Wall Head
Slotted Deflection Head Track
Up to 4 layers on either side - Section

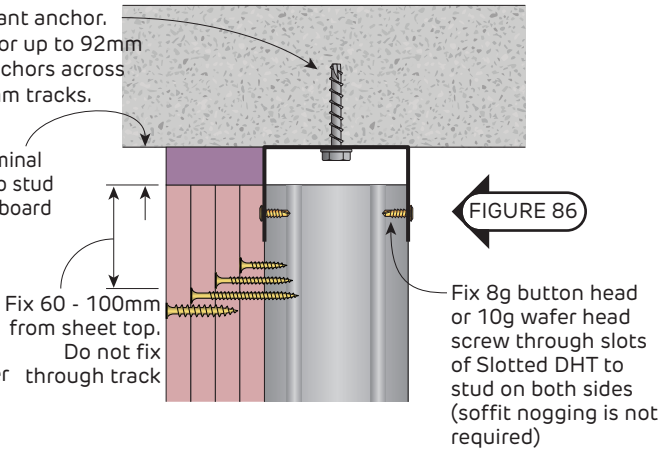


FIGURE 85 Wall Head - Lined One Side Only
Slotted Deflection Head Track
Up to 4 layers - Section

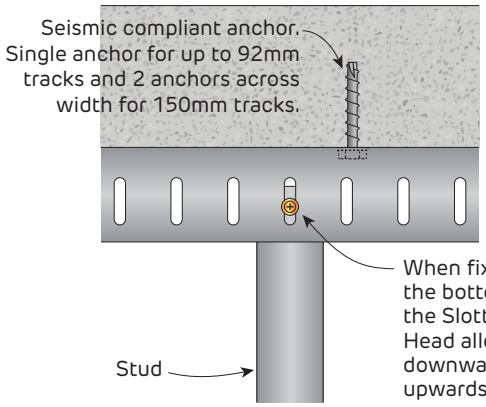
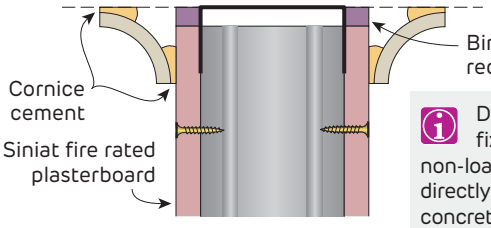


FIGURE 86 Wall Head
Slotted Deflection Head Track
Elevation

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

Head Finishing Details for Internal Stud Walls



Do not rigidly fix cornice to non-load bearing wall directly under concrete slab as deflection is expected

FIGURE 87 Wall Head - Cornice
Section

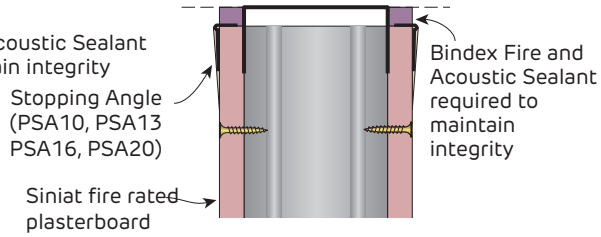
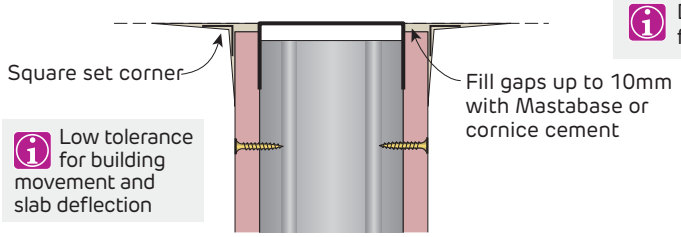


FIGURE 88 Wall Head - Stopping Angle
Section

Details apply from 1 to 4 layers



Low tolerance for building movement and slab deflection

FIGURE 89 Wall Head - Square Set
Section

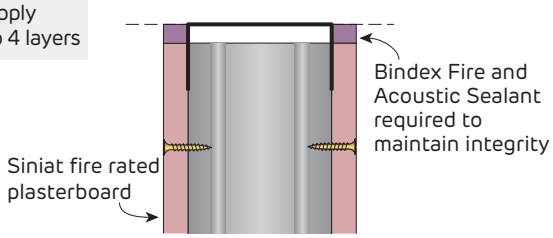


FIGURE 90 Wall Head - Bare finish with sealant
Section

Fire Rated Internal Stud Walls

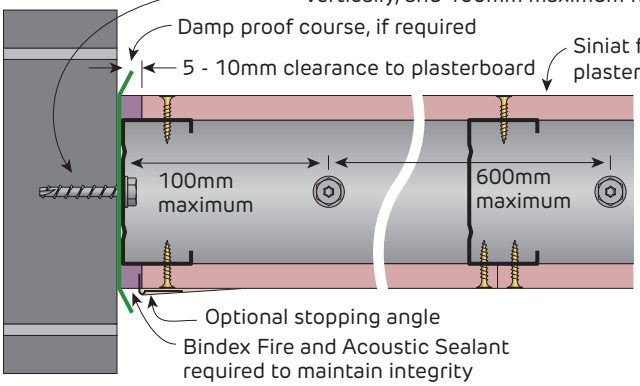


FIGURE 91 Wall End To Masonry
Plan

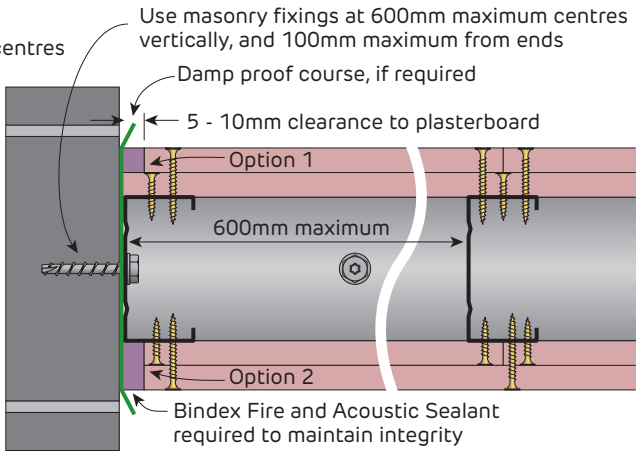


FIGURE 92 Wall End To Masonry
Plan

Details apply from 1 to 4 layers

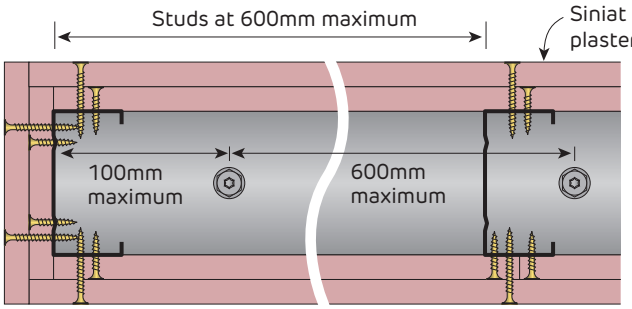


FIGURE 93 Wall End
Plan

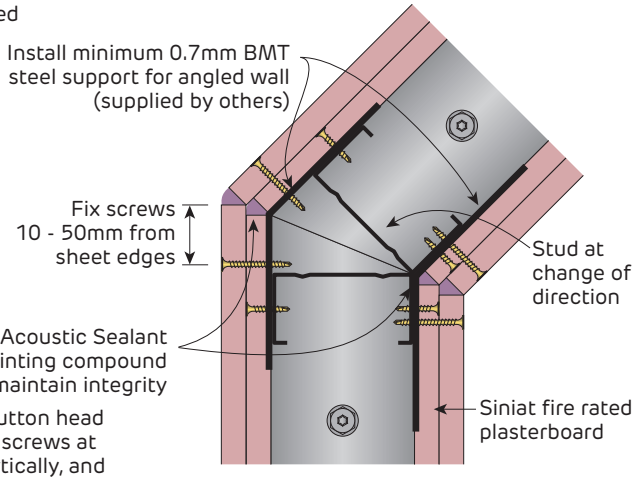


FIGURE 94 Obtuse Angle Corner
Plan

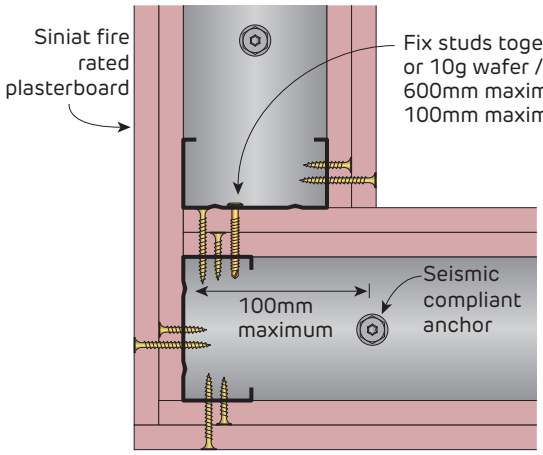


FIGURE 95 90⁰ Corner
Plan

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

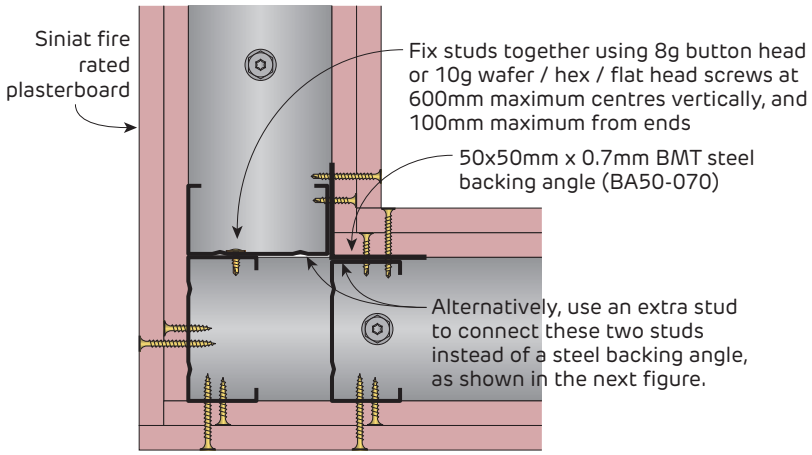


FIGURE 96 90⁰ Corner
Plan

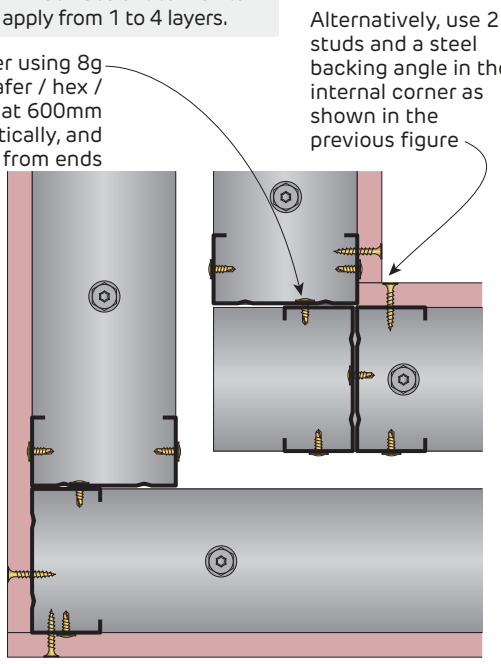
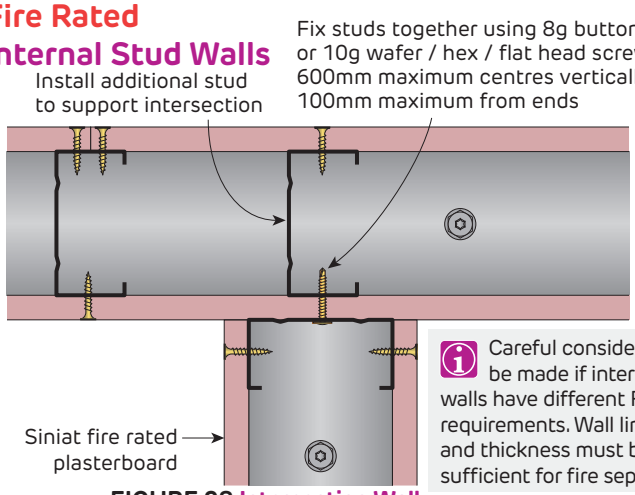


FIGURE 97 90⁰ Corner
Double stud wall
Plan

Fire Rated Internal Stud Walls



Careful consideration must be made if intersecting walls have different FRL requirements. Wall lining layers and thickness must be sufficient for fire separation.

FIGURE 98 Intersecting Wall
Plan

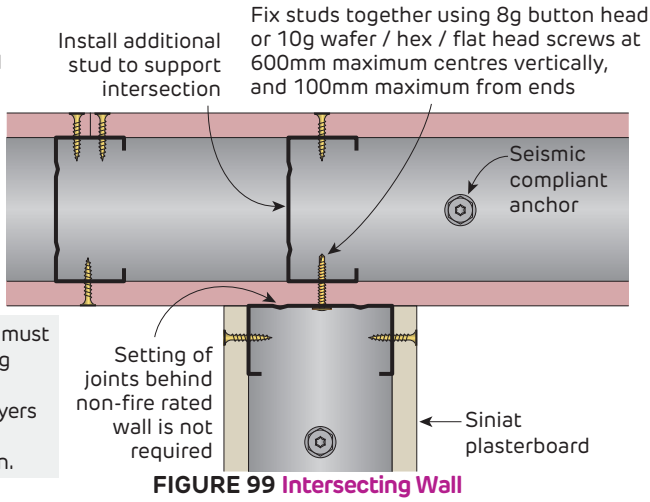
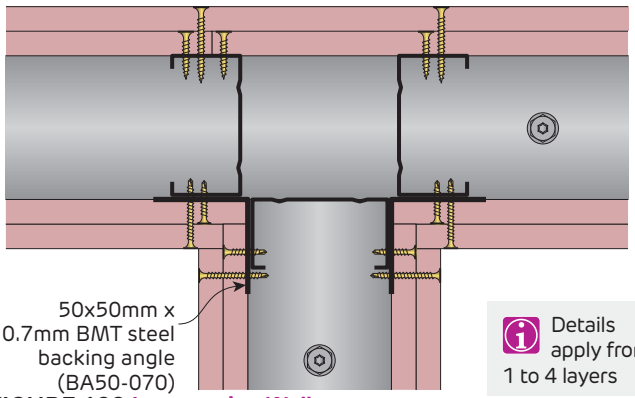


FIGURE 99 Intersecting Wall
Plan



Details apply from 1 to 4 layers

FIGURE 100 Intersecting Wall
Plan

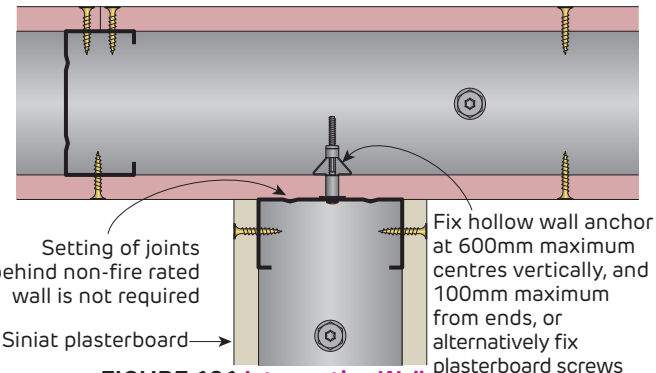


FIGURE 101 Intersecting Wall
Plan

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

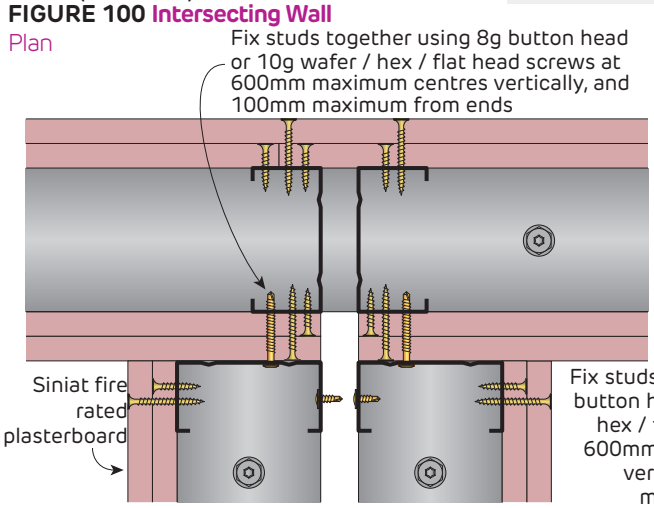


FIGURE 102 Intersecting Wall
Plan

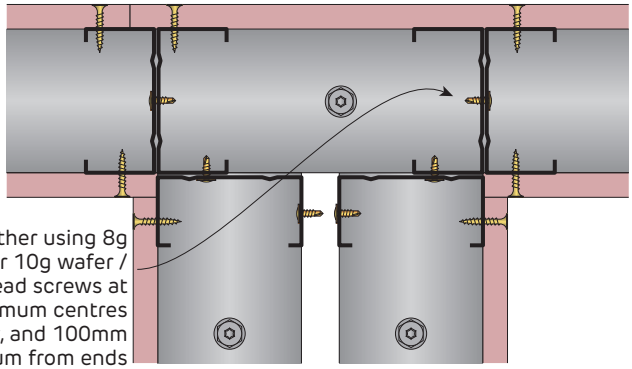


FIGURE 103 Intersecting Wall
Plan

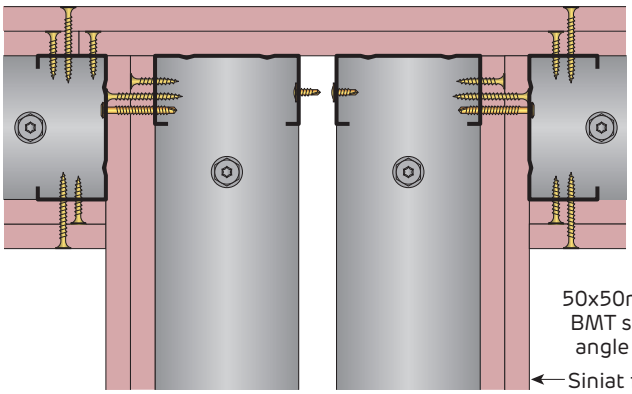


FIGURE 104 Intersecting Wall
Plan

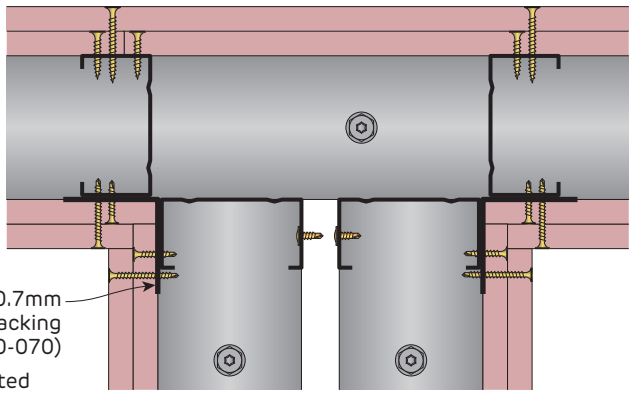


FIGURE 105 Intersecting Wall
Plan

Fire Rated Internal Stud Walls

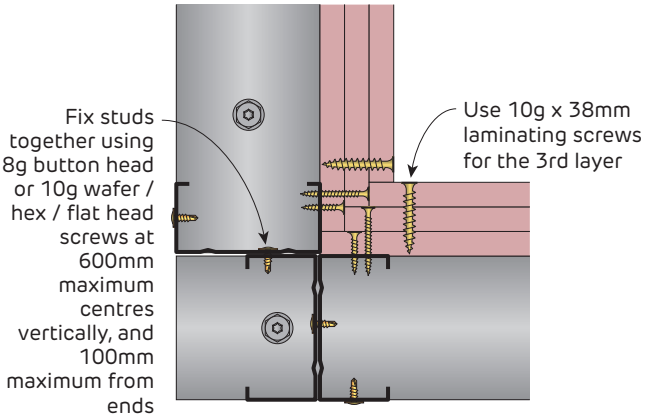


FIGURE 106 90° Internal Corner
Plan

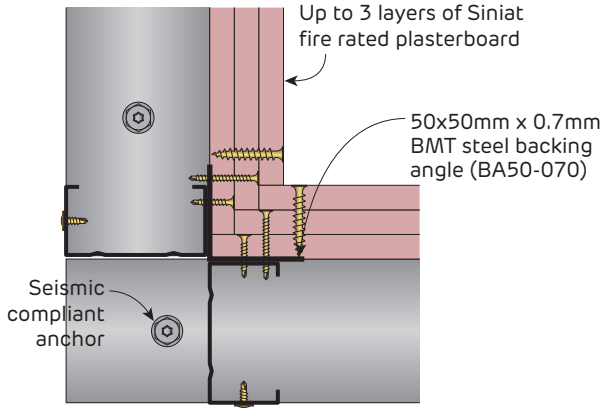


FIGURE 107 90° Internal Corner
Plan

Details apply from 1 to 4 layers

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

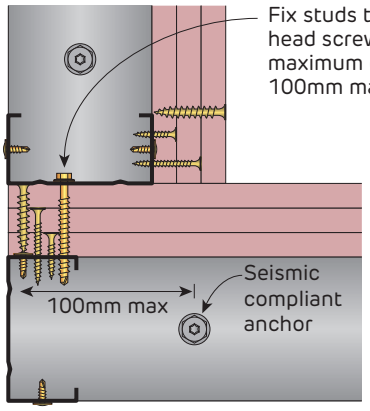


FIGURE 108 90° Internal Corner
Plan

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

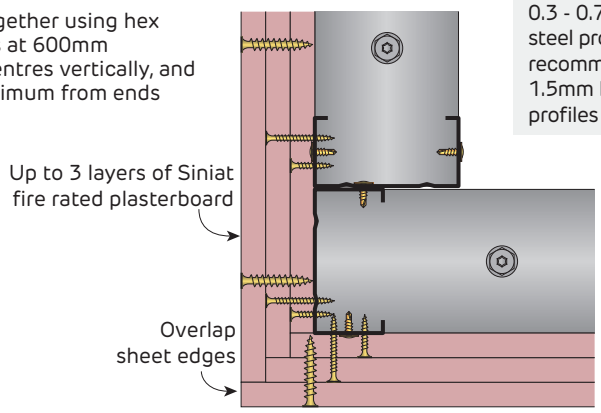


FIGURE 109 90° External Corner
Plan

Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

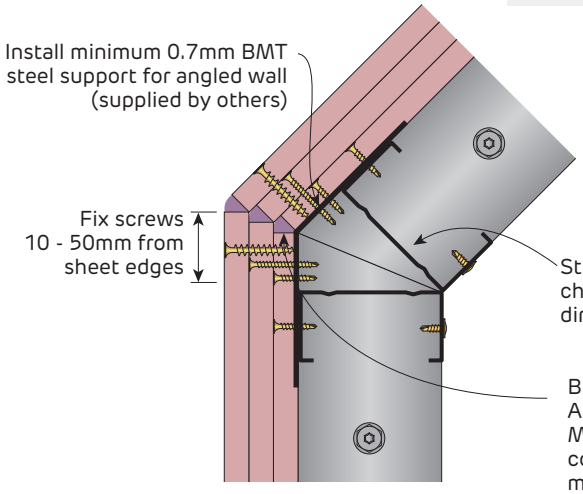


FIGURE 110 Obtuse Angle Corner
Plan

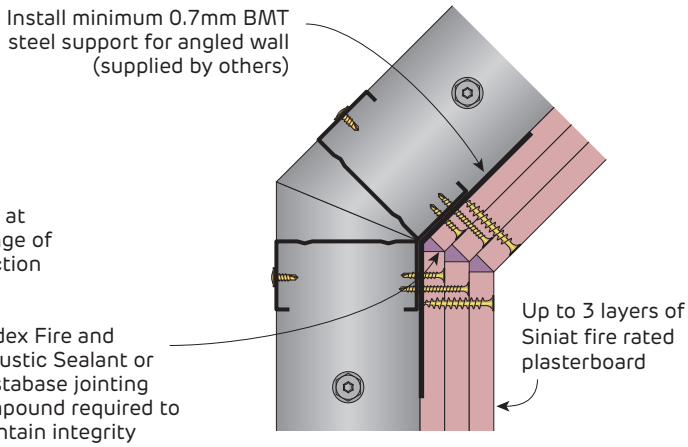
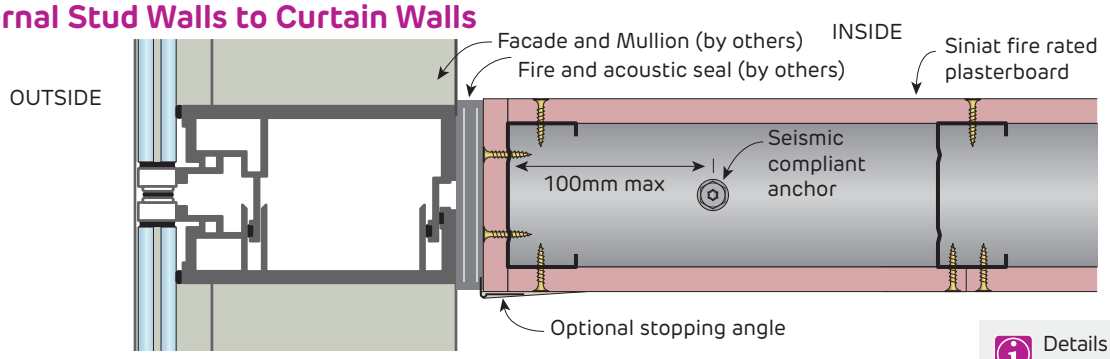


FIGURE 111 Obtuse Angle Corner
Plan

Fire Rated
Internal Stud Walls to Curtain Walls



Details apply from 1 to 4 layers

FIGURE 112 Internal Wall to Curtain Wall Mullion
Plan

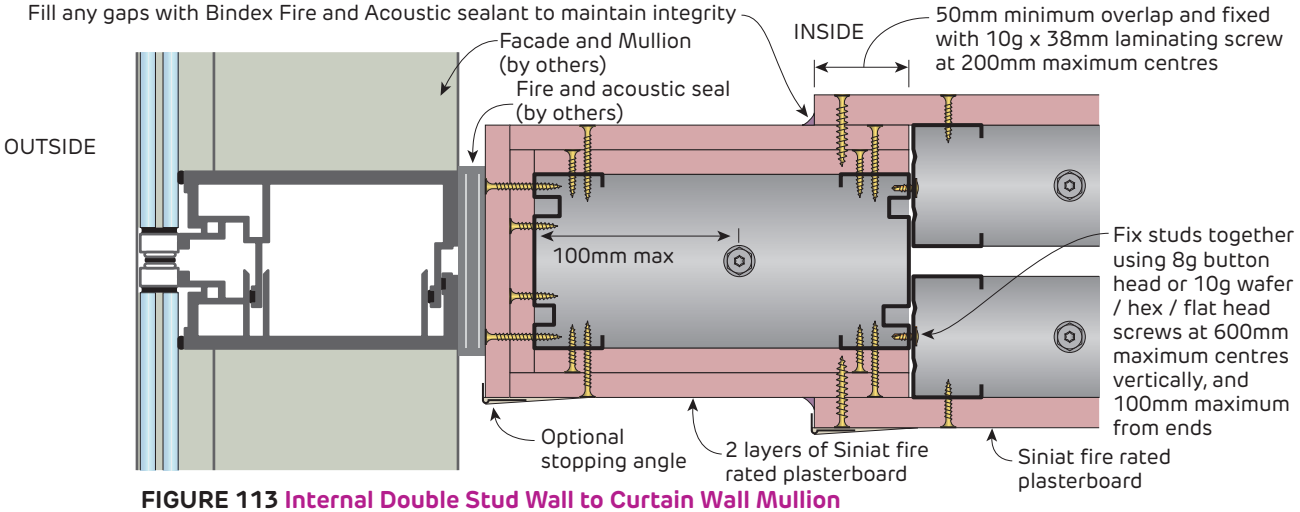
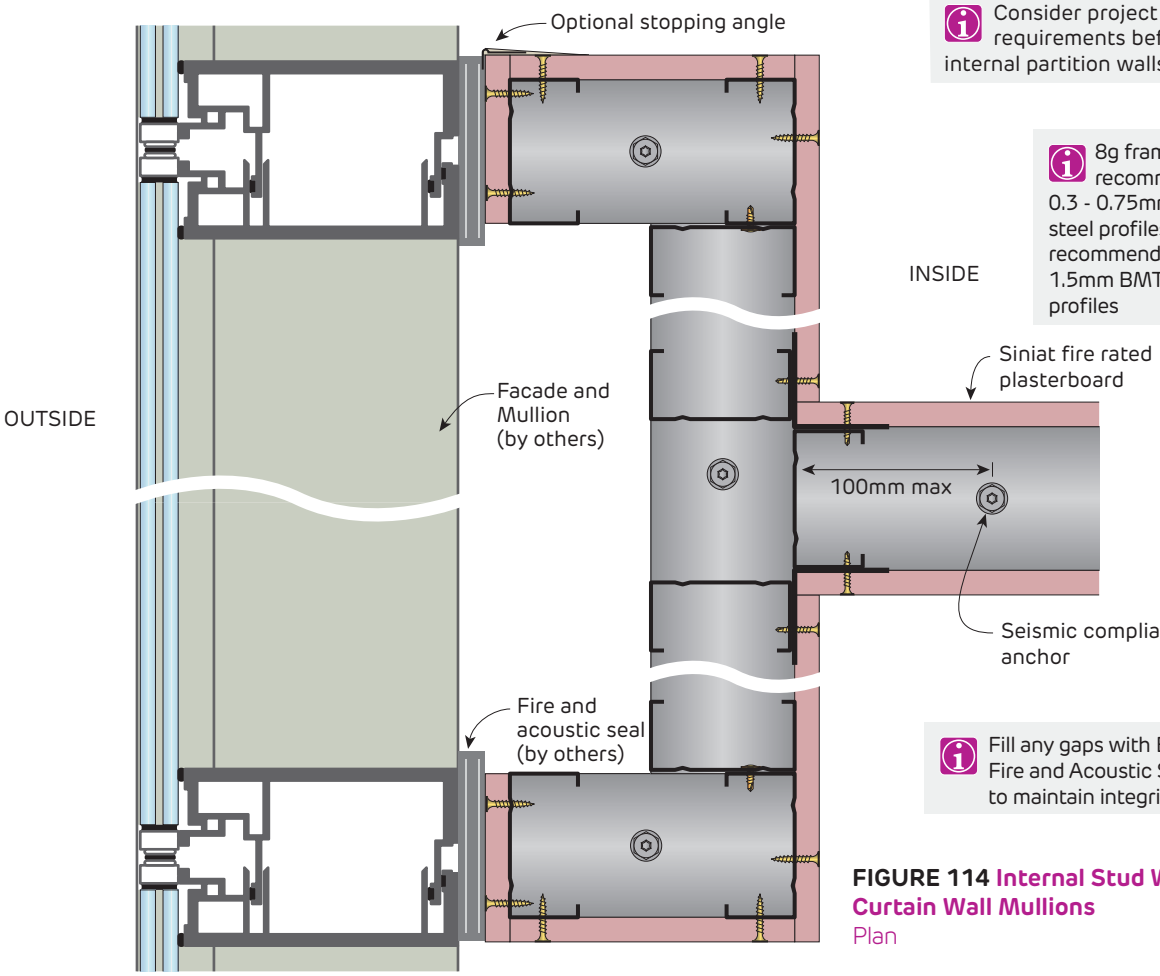


FIGURE 113 Internal Double Stud Wall to Curtain Wall Mullion
Plan

Consider project specific requirements before joining internal partition walls to facades

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles



Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

FIGURE 114 Internal Stud Wall to Curtain Wall Mullions
Plan

Fire Rated
Internal Stud Walls to External Walls

Details apply from 1 to 4 layers

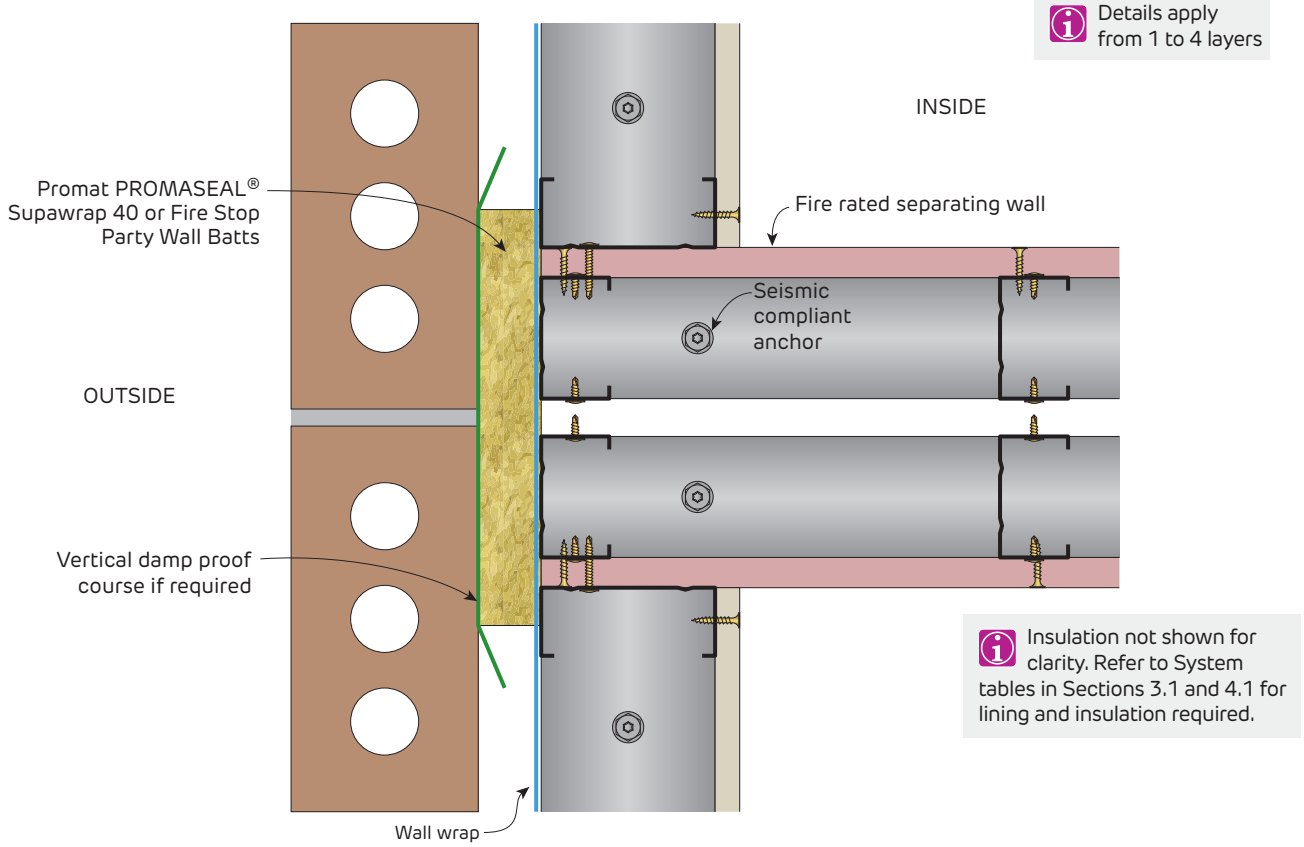


FIGURE 115 Internal Stud Wall to Brick Veneer
Plan

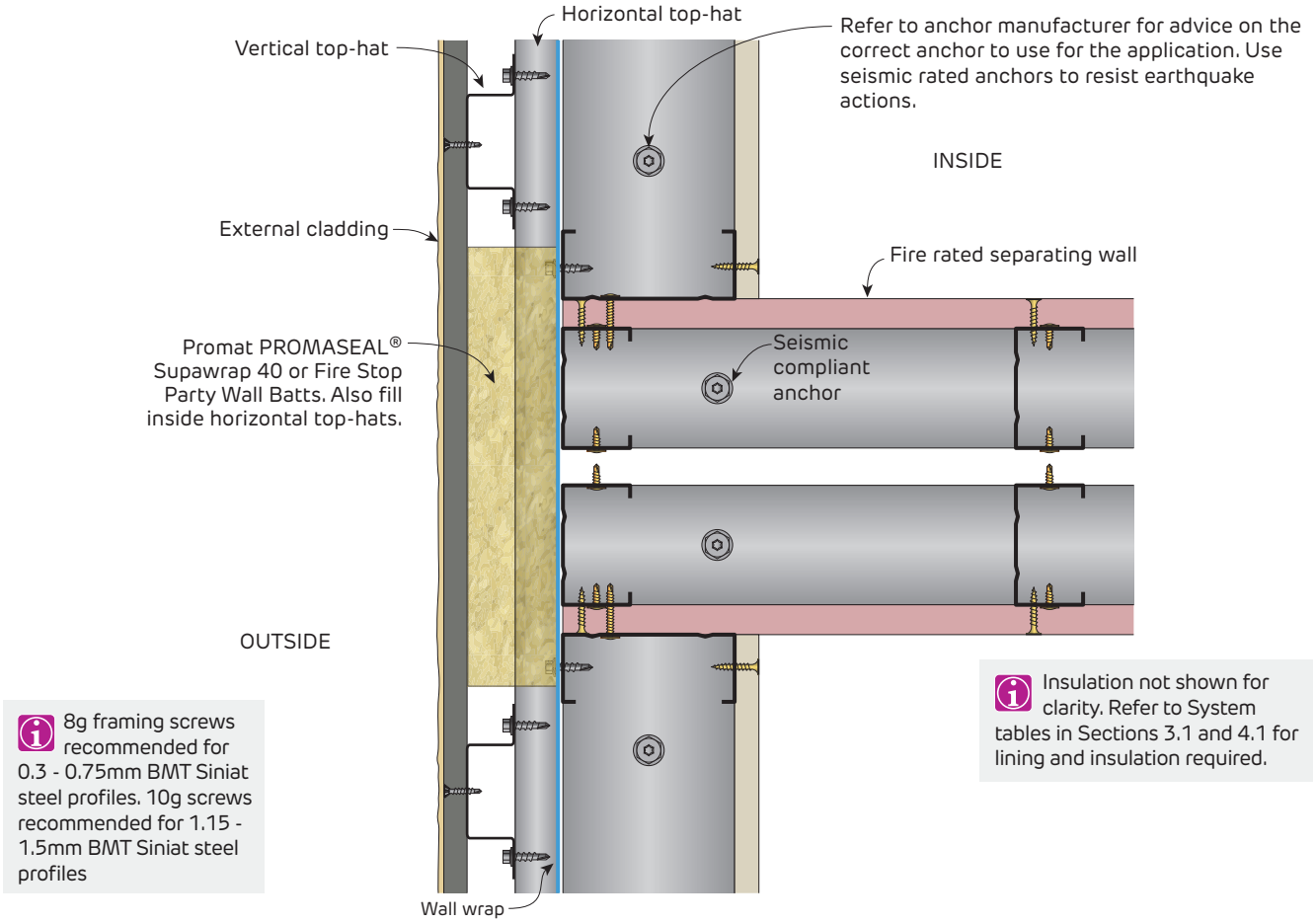


FIGURE 116 Internal Stud Wall to External Clad Wall
Plan

Fire Rated
Internal Stud Wall Built From One Side Only

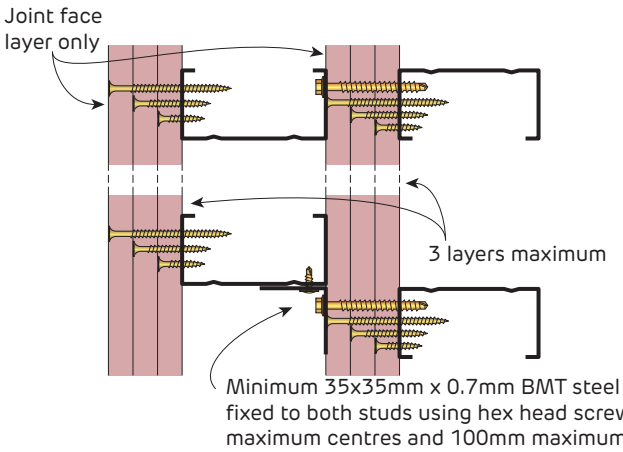


FIGURE 117 Fire Rated Wall Configuration
Fire rated from both directions
Built from one side only - Plan

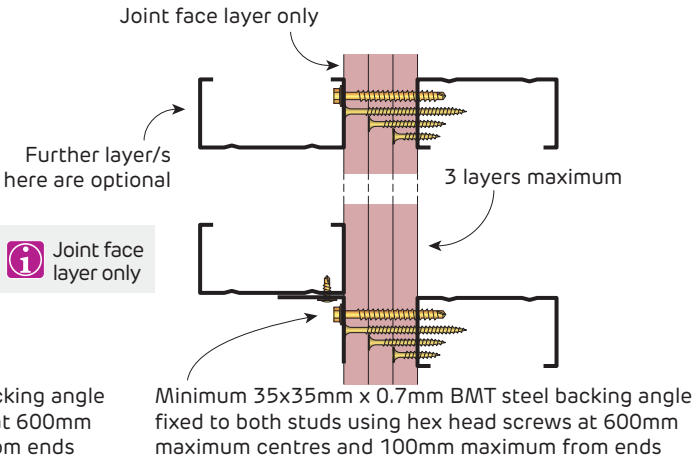


FIGURE 118 Fire Rated Wall Configuration
Fire rated from both directions
Built from one side only - Plan

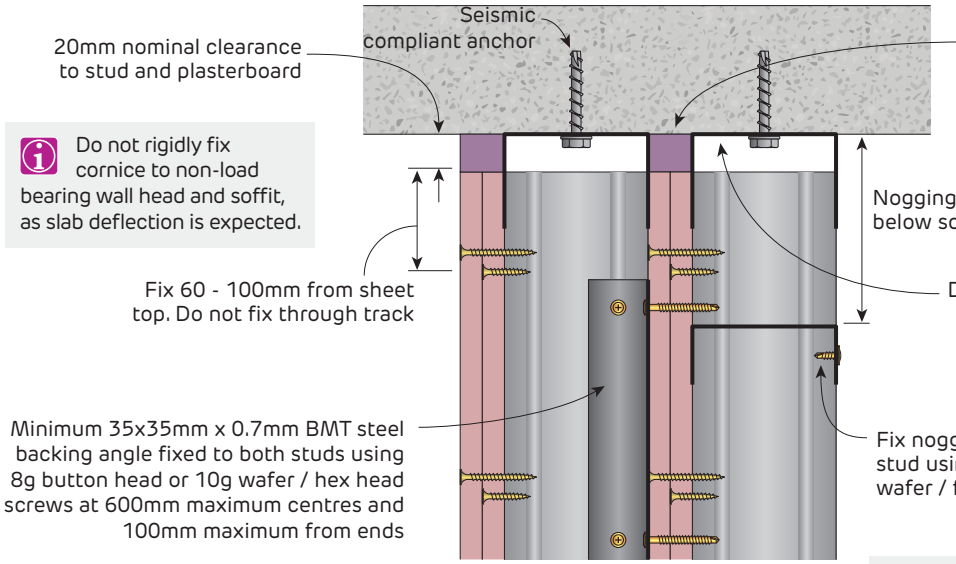


FIGURE 119 Wall Head
Fire rated from both directions
Built from one side only - Section

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

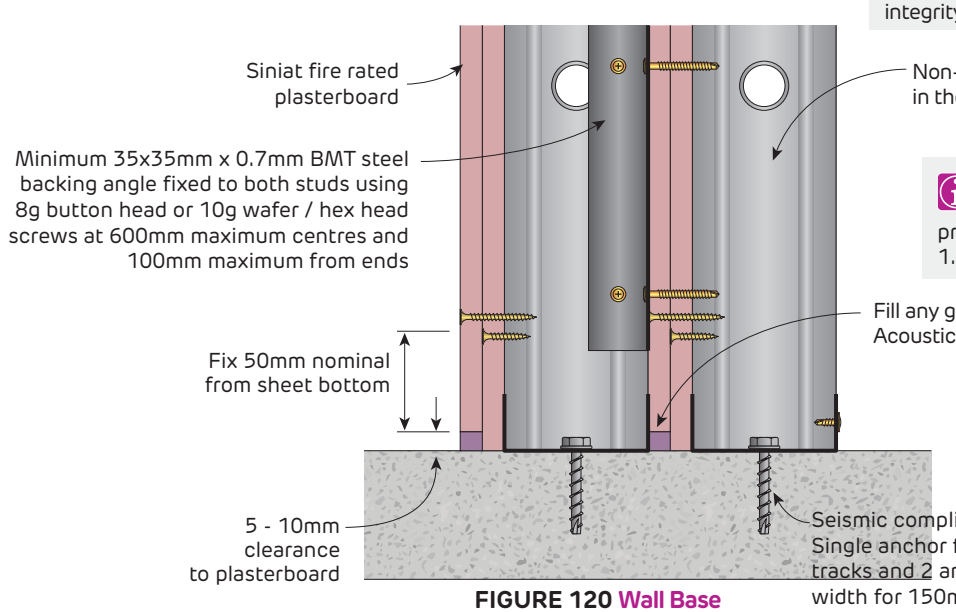
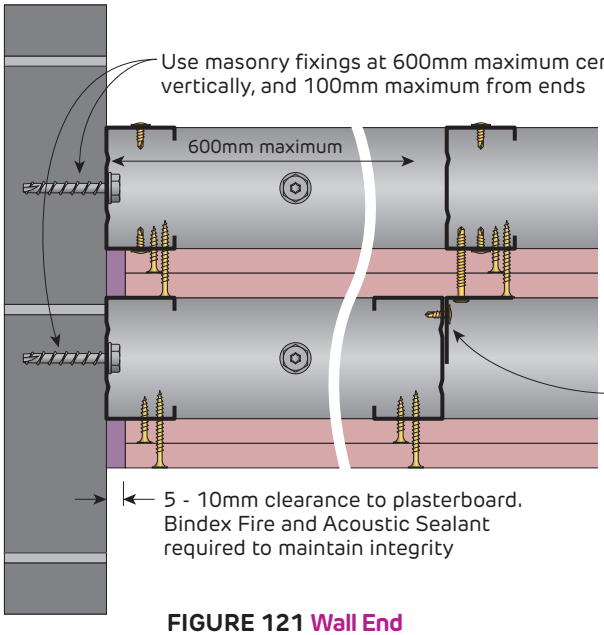


FIGURE 120 Wall Base
Fire rated from both directions
Built from one side only - Section

Fire Rated
Internal Stud Wall Built From One Side Only



Set the face layer of both sets of fire rated plasterboard layers

8g framing screws recommended for 0.3 - 0.75mm BMT Siniat steel profiles. 10g screws recommended for 1.15 - 1.5mm BMT Siniat steel profiles

FIGURE 121 Wall End
Fire rated from both directions
Built from one side only - Plan

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

Details apply from 1 to 4 layers

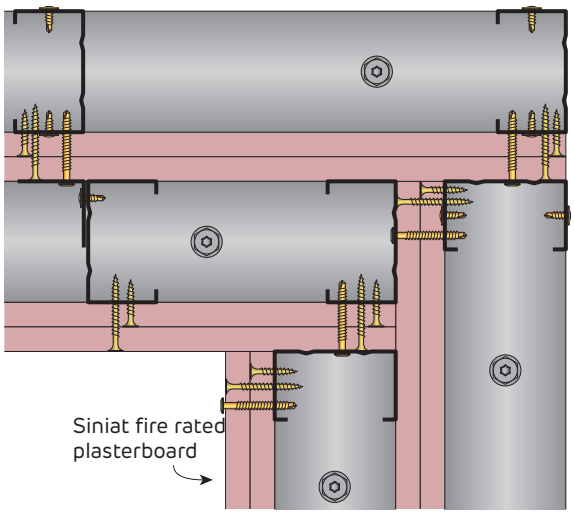


FIGURE 122 Wall Internal Corner
Fire rated from both directions
Built from one side only - Plan

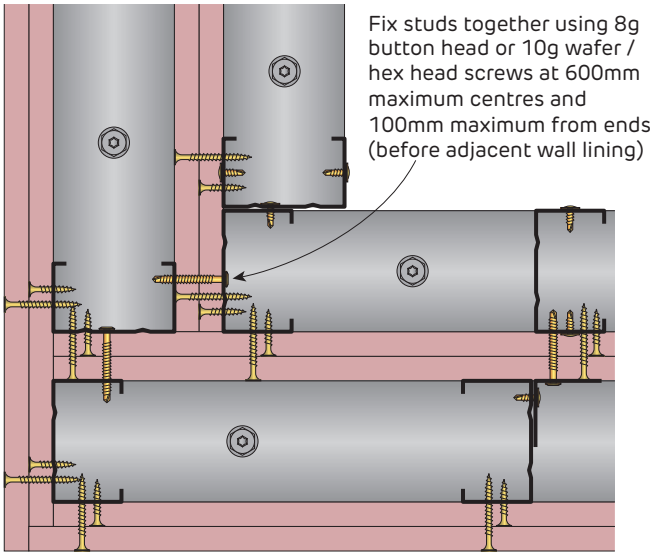


FIGURE 123 Wall External Corner
Fire rated from both directions
Built from one side only - Plan

Fire Rated and Non-Fire Rated
Head and Base Details for Internal Staggered Stud Walls - Lined Full Height

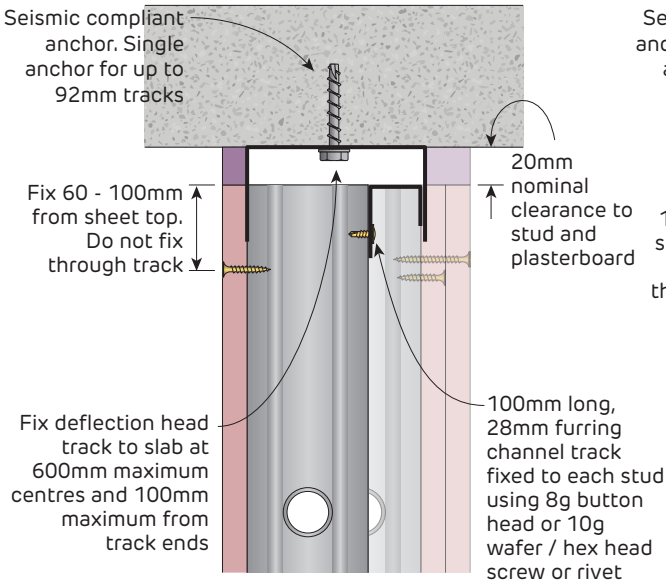


FIGURE 124 Wall Head - Staggered Stud
64mm Studs in 92mm Deflection Head Track Section

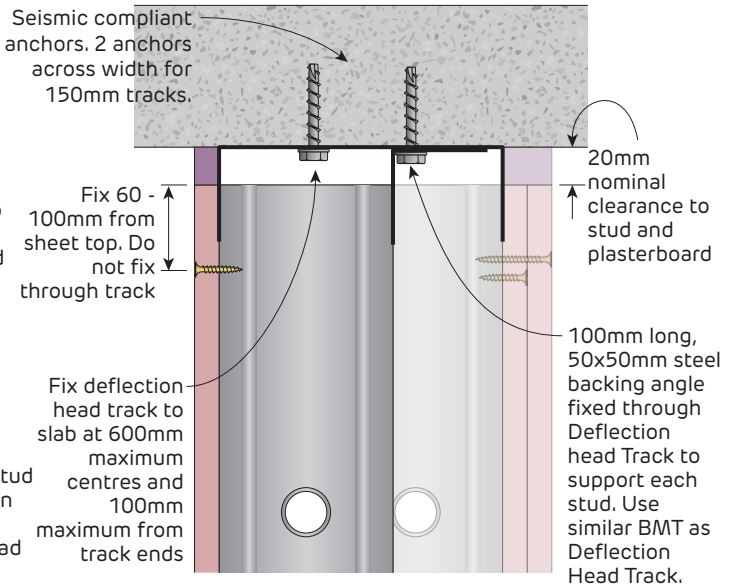


FIGURE 125 Wall Head - Staggered Stud
92mm Studs in 150mm Deflection Head Track Section

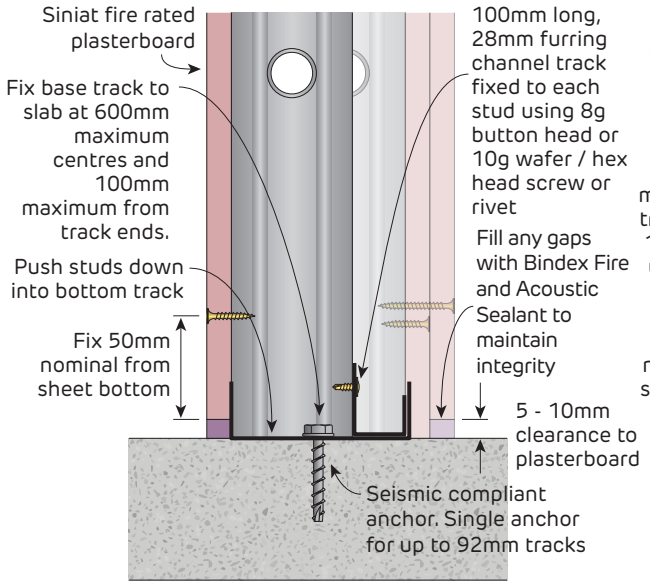


FIGURE 126 Wall Base - Staggered Stud
64mm Studs in 92mm Base Track Section

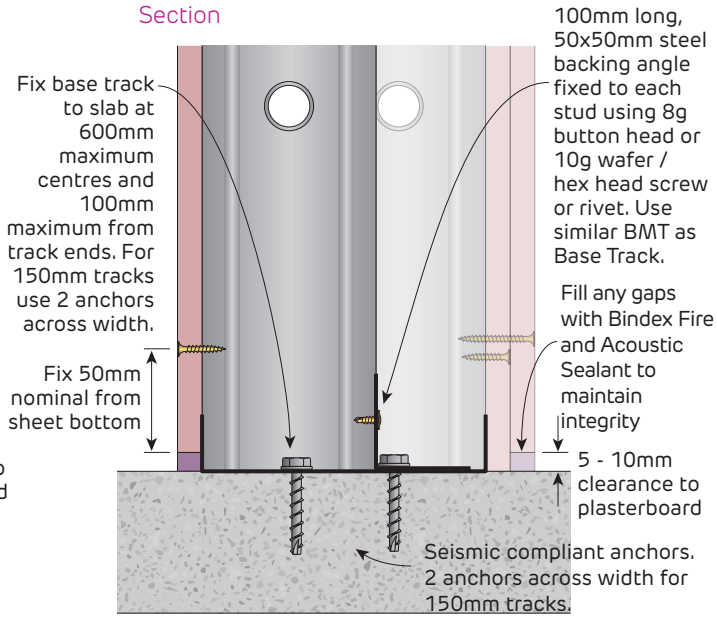


FIGURE 127 Wall Base - Staggered Stud
92mm Studs in 150mm Base Track Section

Do not rigidly fix cornice to non-load bearing wall head and soffit, as slab deflection is expected.

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

Details apply from 1 to 4 layers

Fire Rated
Internal Staggered Stud Walls

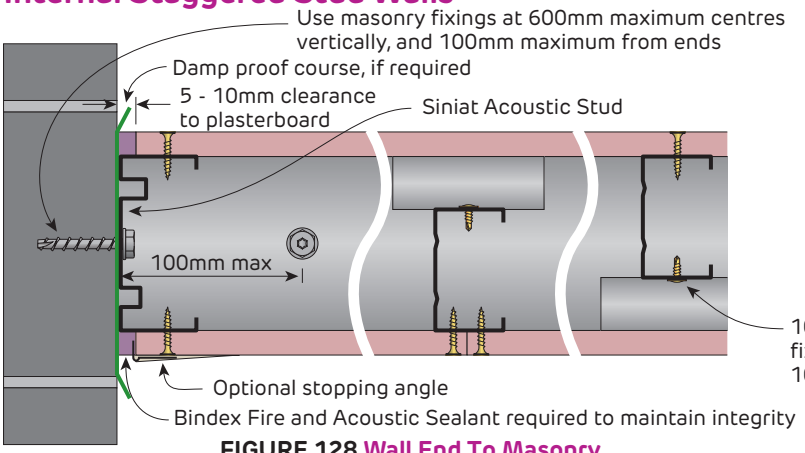


FIGURE 128 Wall End To Masonry
Plan

For internal and external corners, fill gaps with either Bindex Fire and Acoustic Sealant or Mastabase jointing compound. Fill any other gaps with Bindex Sealant to maintain integrity. All details apply from 1 to 4 layers.

Details apply from 1 to 4 layers

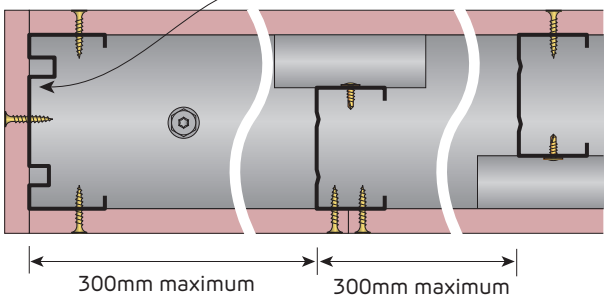


FIGURE 129 Wall End
Plan

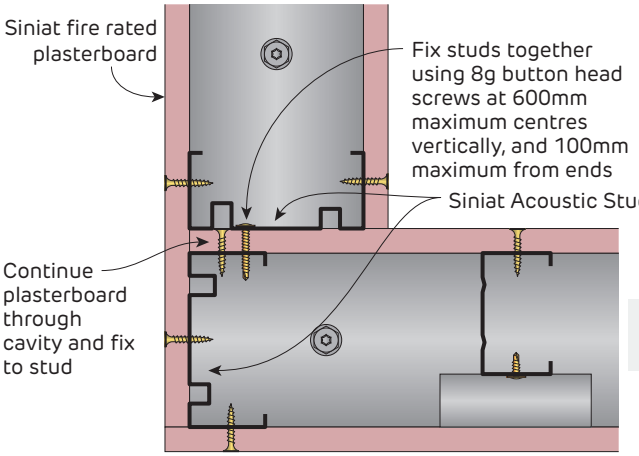


FIGURE 131 90⁰ Corner
Plan

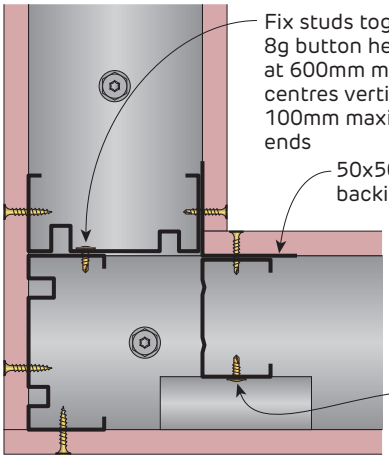
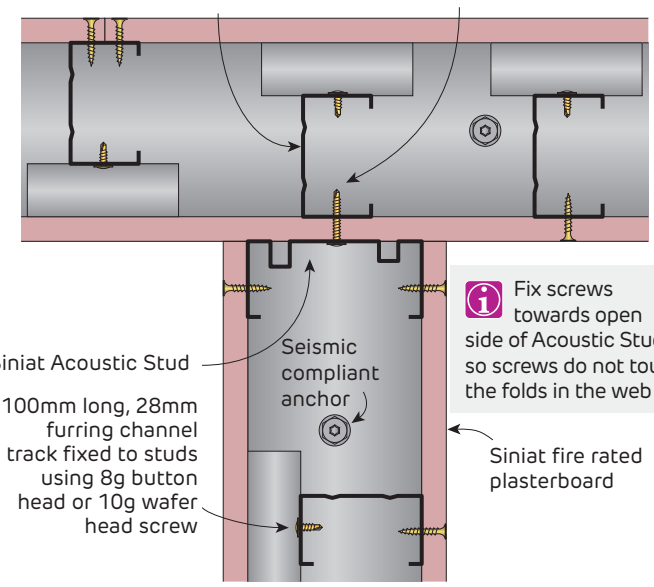


FIGURE 132 90⁰ Corner
Plan



Fix screws towards open side of Acoustic Stud so screws do not touch the folds in the web

FIGURE 130 Intersecting Wall
Plan

Details on this page refer to 64mm studs in a 92mm track only

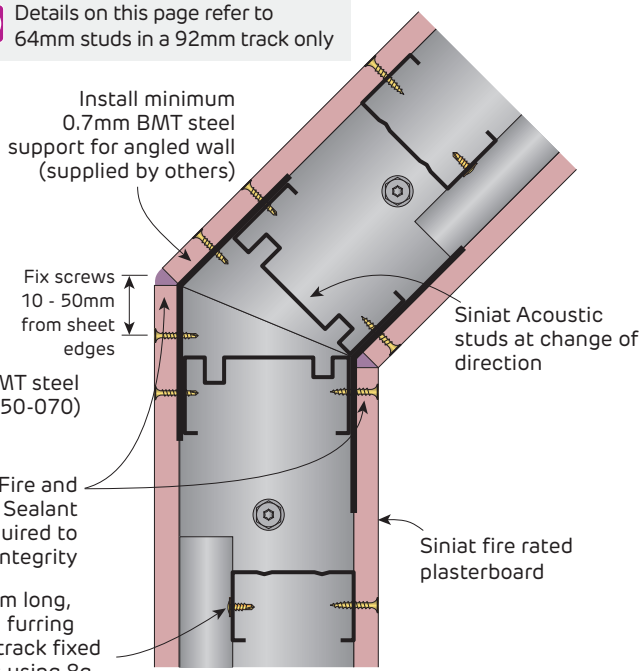


FIGURE 133 Obtuse Angle Corner
Plan

Fire Rated and Non-Fire Rated
Head and Base Details for Internal Acoustic Stud Walls - Lined Full Height

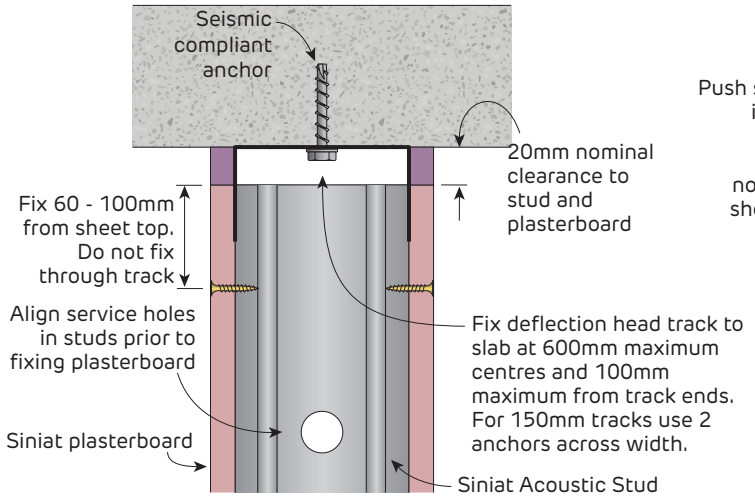


FIGURE 134 Wall Head
Acoustic Stud with Deflection Head Track
Section

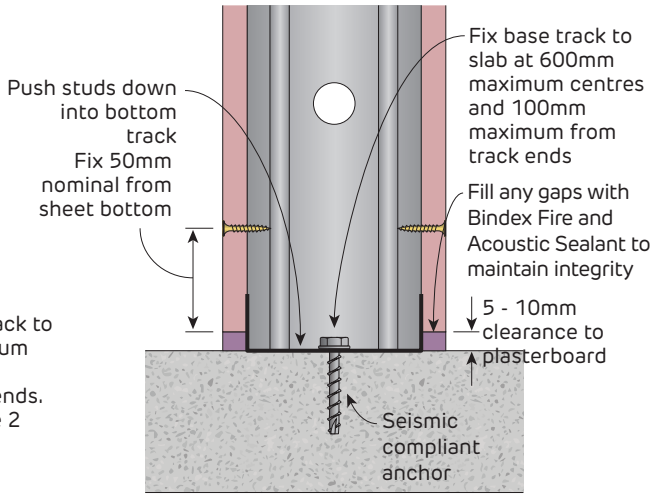
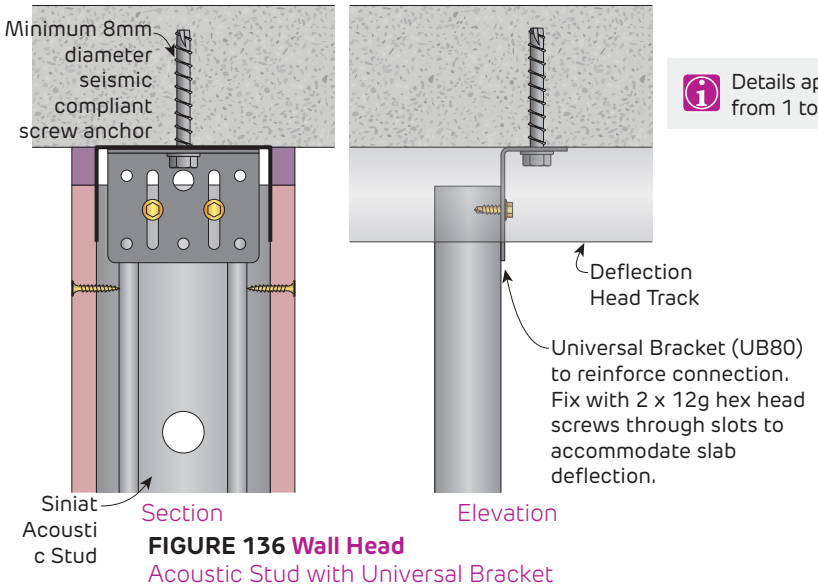


FIGURE 135 Wall Base
Acoustic Stud
Section

Details apply from 1 to 4 layers



Details apply from 1 to 4 layers

FIGURE 136 Wall Head
Acoustic Stud with Universal Bracket
Section

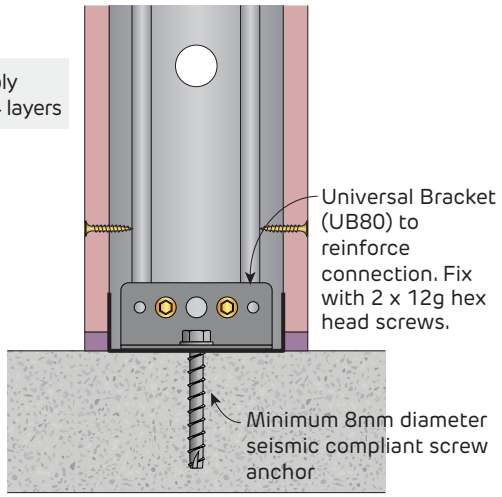


FIGURE 137 Wall Base
Acoustic Stud with Universal Bracket
Section

Fire Rated
Step in Concrete Slab Detail for Internal Stud Walls

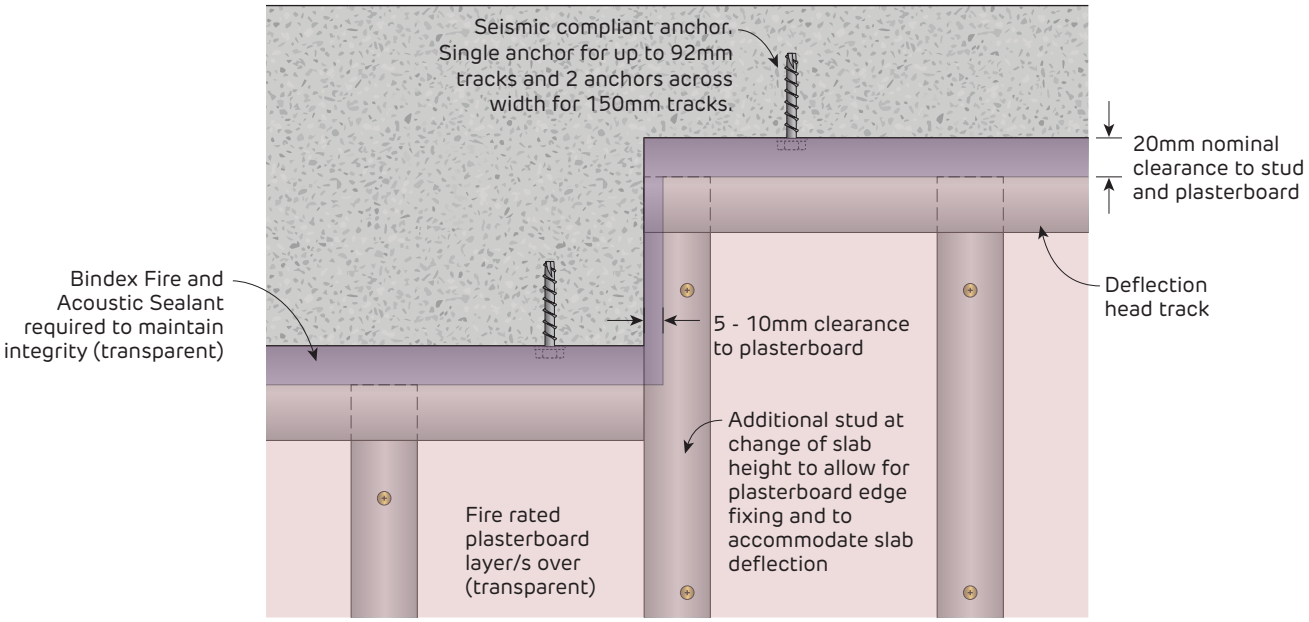


FIGURE 138 Step in Concrete Slab
Elevation

Details apply from 1 to 4 layers

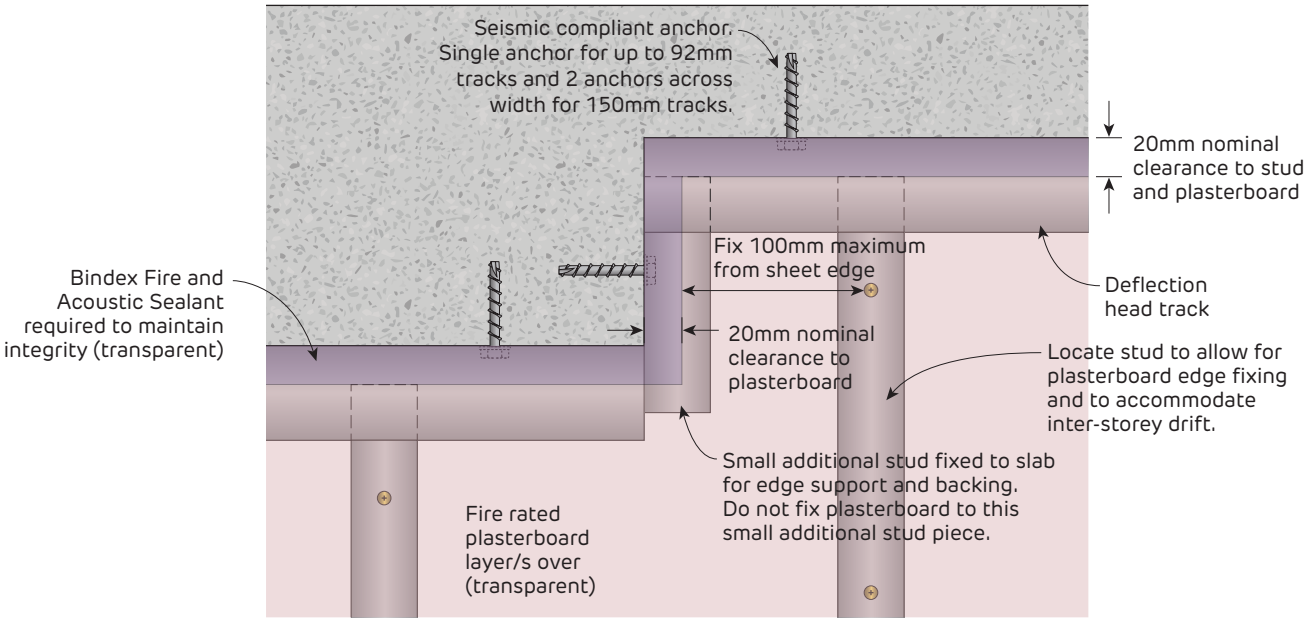


FIGURE 139 Step in Concrete Slab with 20mm allowance for Inter-Storey Drift
Elevation

Fire Rated
Sliding Connection Details for Internal Stud Walls

Do not rigidly fix cornice to non-load bearing wall head and soffit, as slab deflection is expected.

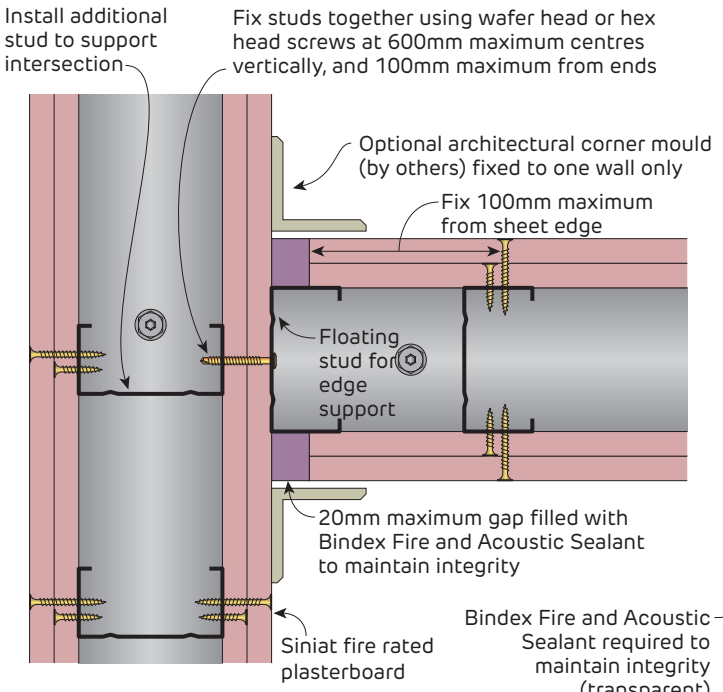
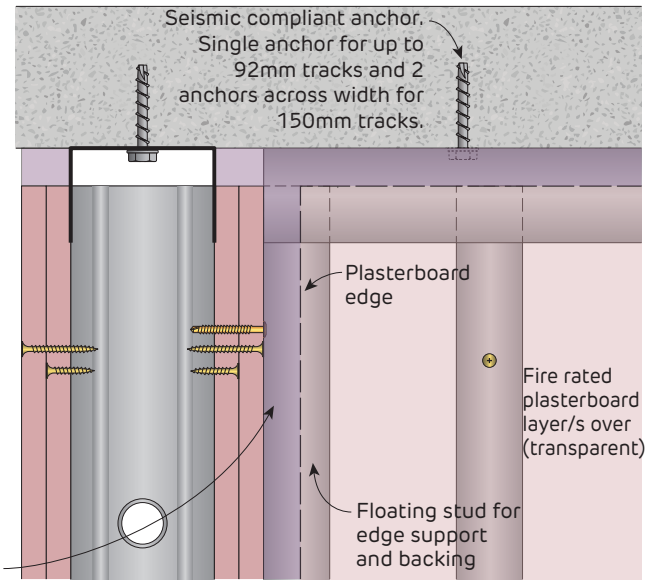


FIGURE 140 Sliding Wall End To Plasterboard
Plan



Note: Optional architectural corner mould not shown for clarity

FIGURE 141 Sliding Wall End To Plasterboard
Elevation

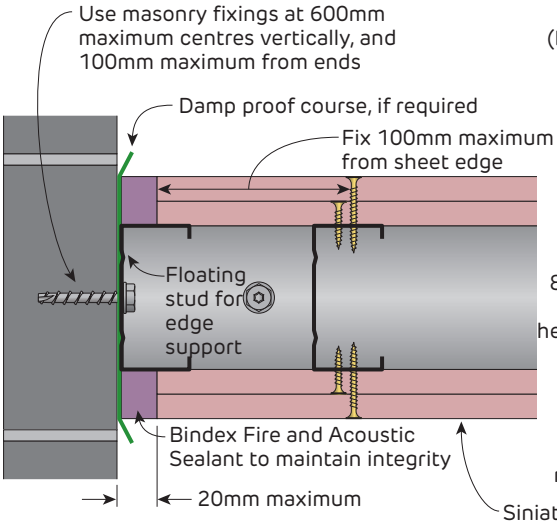


FIGURE 142 Sliding Wall End To Masonry
Plan

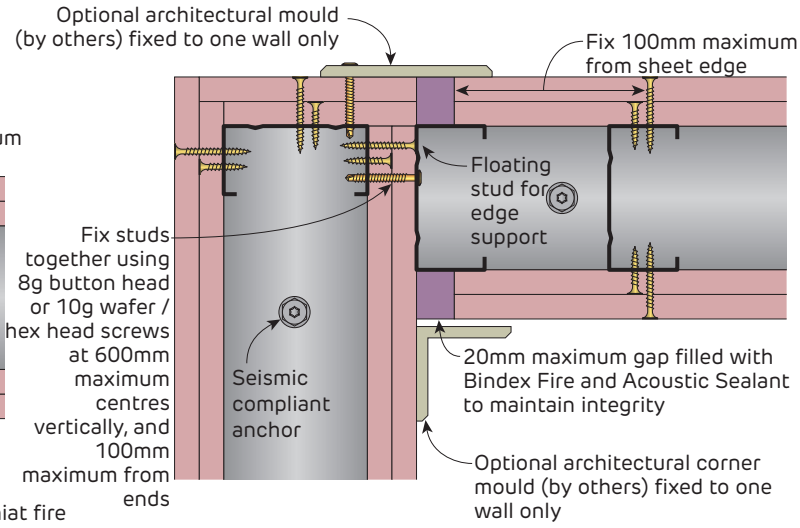


FIGURE 143 90° Sliding Corner
Plan

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

Details apply from 1 to 4 layers

Fire Rated
Sliding Connection Details for Internal Stud Walls

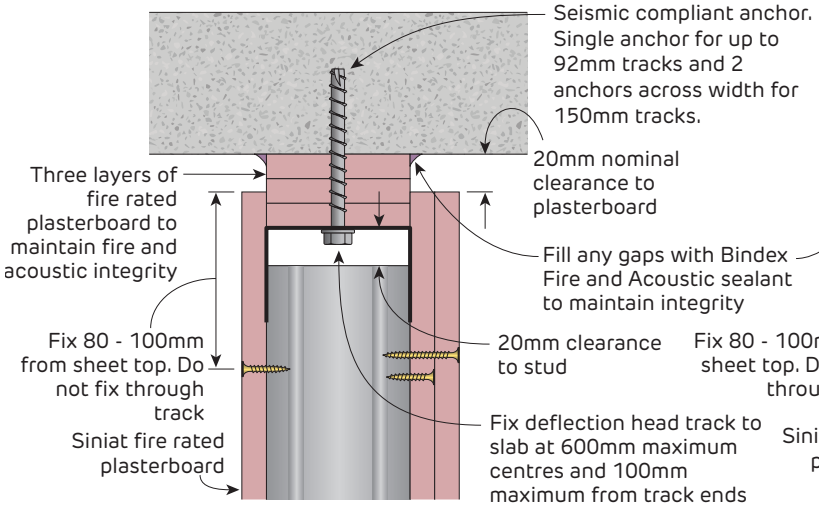


FIGURE 144 Sliding Head
Deflection Head Track
Section

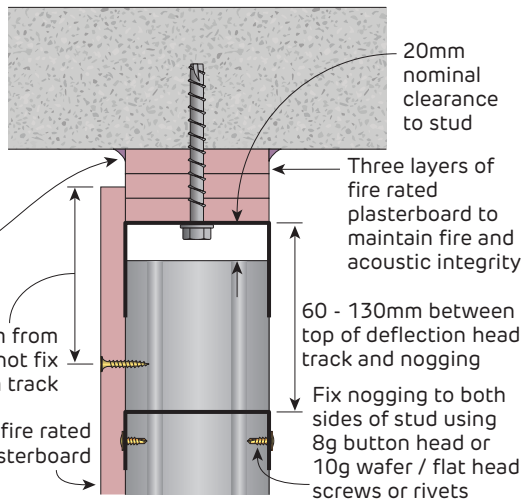


FIGURE 145 Sliding Head - Lined One Side Only
Deflection Head Track
Section

Do not rigidly fix cornice to non-load bearing wall head and soffit, as slab deflection is expected.

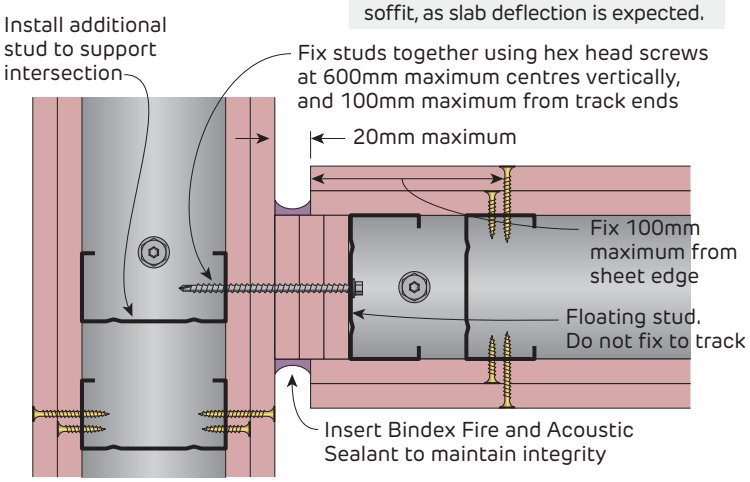


FIGURE 146 Sliding Wall End To Plasterboard
Plan

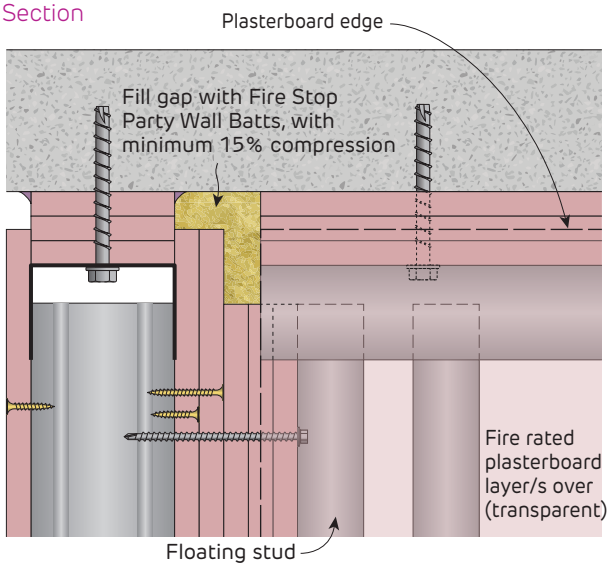


FIGURE 147 Sliding Wall End To Plasterboard
Elevation

Details apply from 1 to 4 layers

Fill any gaps with Bindex Fire and Acoustic Sealant to maintain integrity

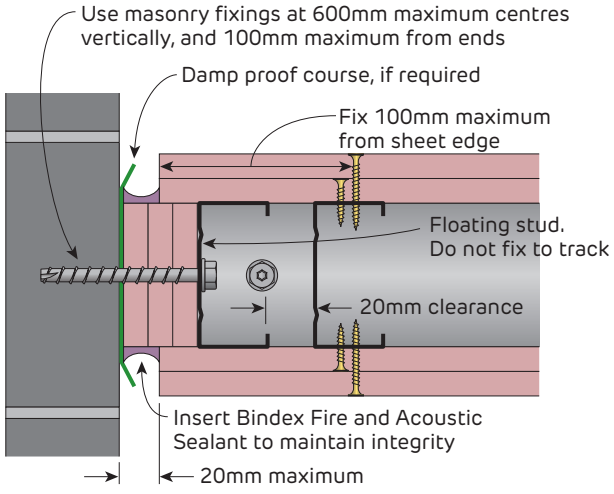


FIGURE 148 Sliding Wall End To Masonry
Plan

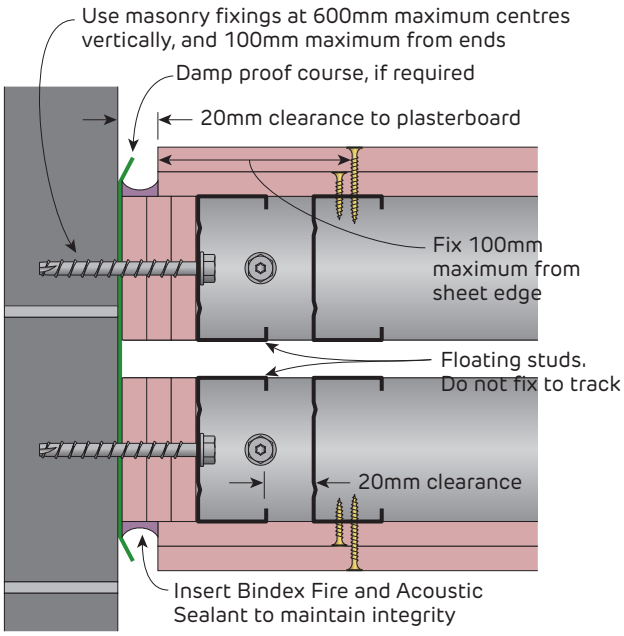


FIGURE 149 Sliding Wall End To Masonry
Plan

Fire Rated
Internal Stud Walls with Integrated Structural Beams to Extend Wall Heights

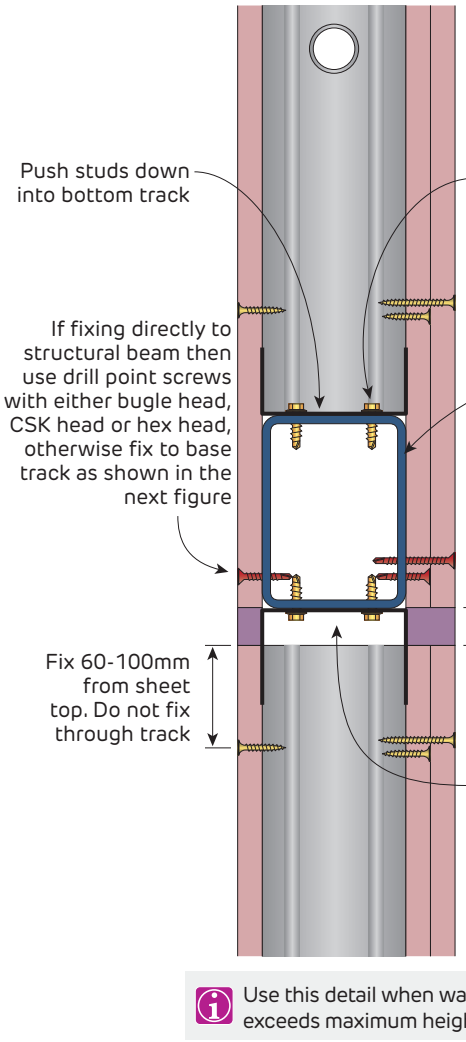


FIGURE 150 Wall Head to Supporting Beam
With integrated load bearing structural members
Section

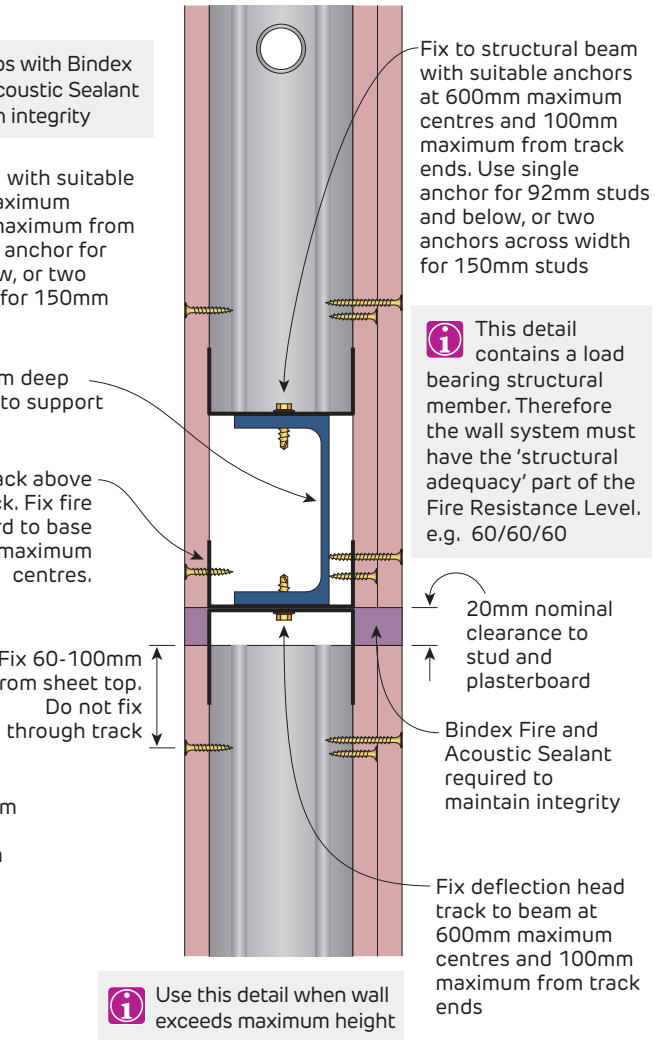


FIGURE 151 Wall Head to Supporting Beam
With integrated load bearing structural members
Section

Details apply from 1 to 4 layers

Table 16 Suggested Sizing of Structural Members in Steel Stud Plasterboard Walls

Stud Size (mm)	Structural Members		
	RHS	SHS	PFC
51	75x50 RHS 100x50 RHS 127x51 RHS 150x50 RHS	50x50 SHS	75PFC5.92 100PFC8.33
64	75x50 RHS 100x50 RHS 127x51 RHS 150x50 RHS	50x50 SHS	100PFC8.33
76	125x75 RHS 102x76 RHS 152x76 RHS	65x65 SHS 75x75 SHS	150PFC17.7 180PFC20.9 200PFC22.9 230PFC25.1
92	125x75 RHS 102x76 RHS 152x76 RHS	75x75 SHS 89x89 SHS 90x90 SHS	-
150	250x150 RHS	150x150 SHS	-

Fire Rated
Internal Stud Walls to Structural Members

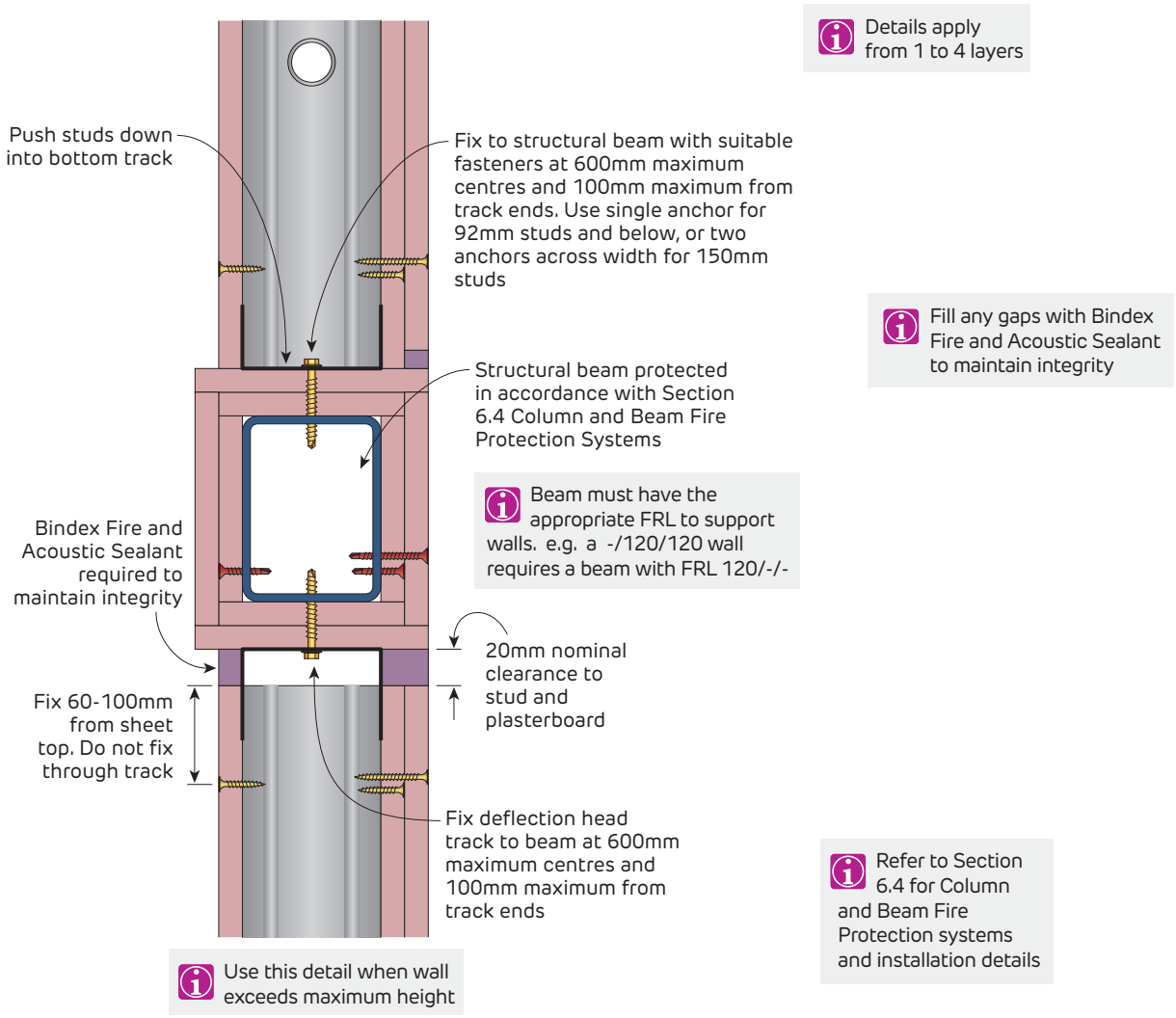


FIGURE 152 Wall Head to Supporting Beam
Section

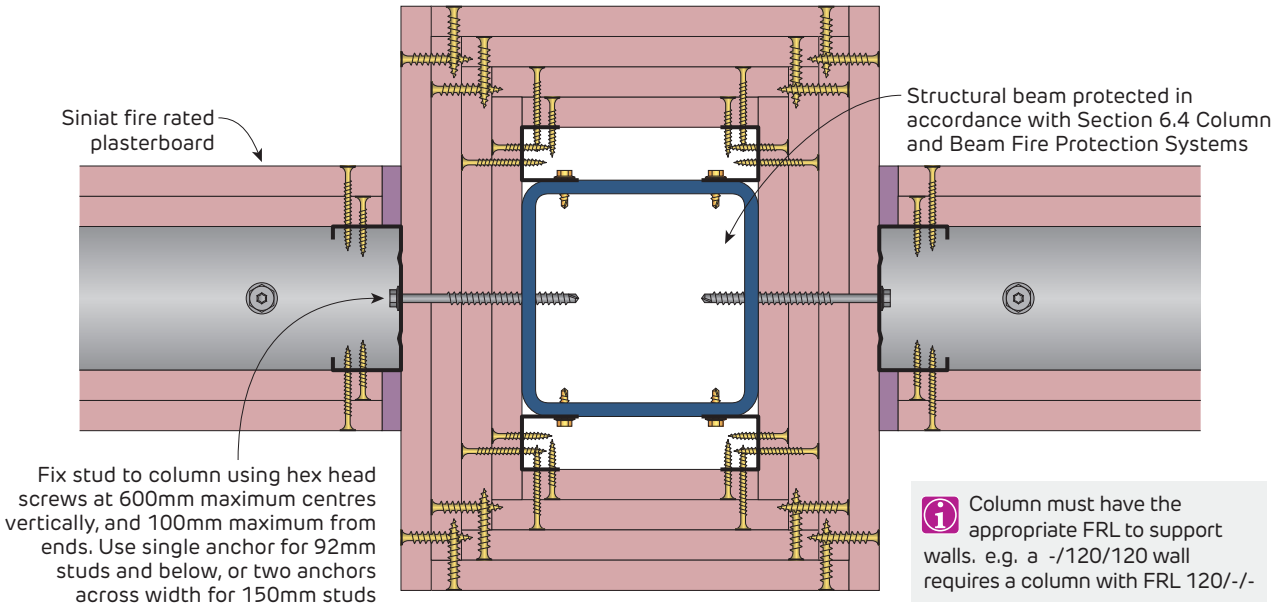


FIGURE 153 Wall to Structural Column
Plan

Fire Rated
Internal Stud Walls to Structural Members

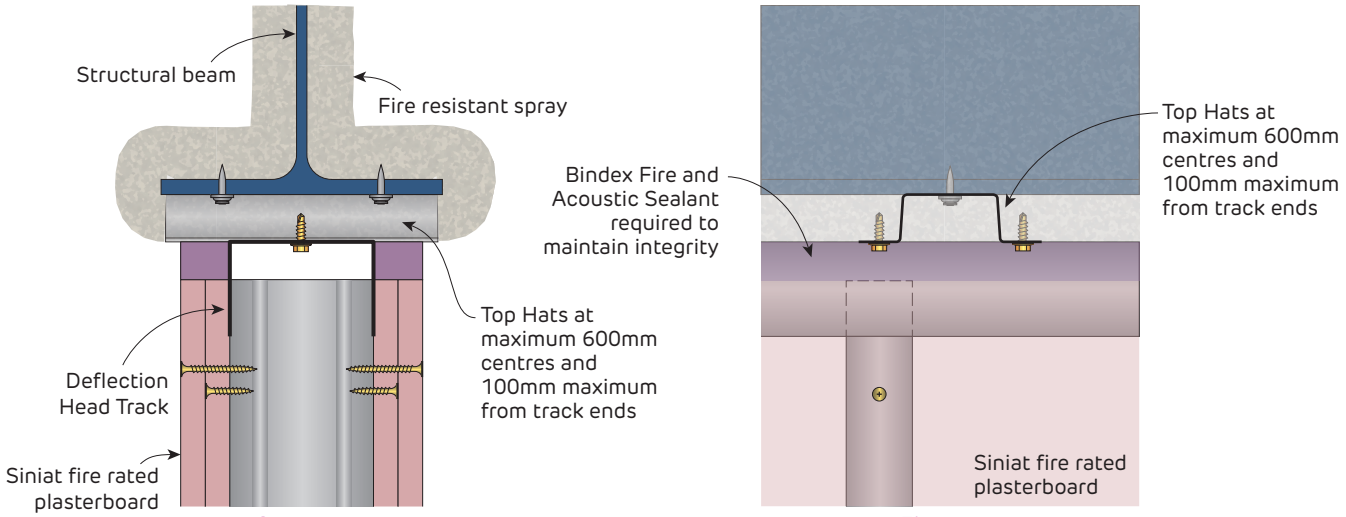
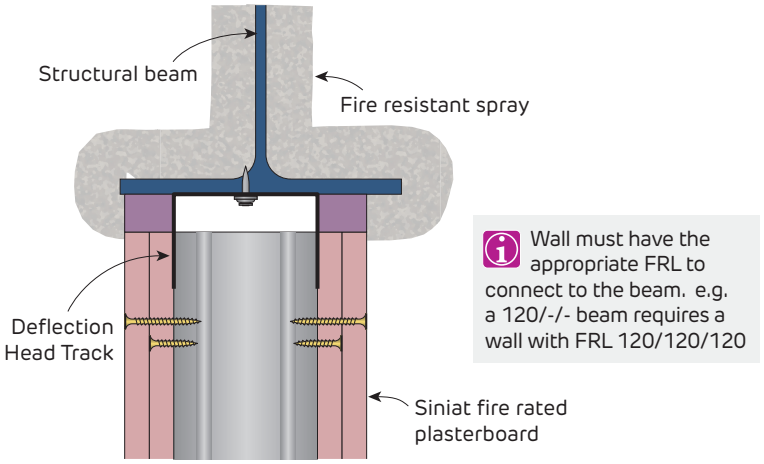


FIGURE 154 Internal Wall to Structural Beam



Details apply from 1 to 4 layers

Wall must have the appropriate FRL to connect to the beam. e.g. a 120/-/- beam requires a wall with FRL 120/120/120

FIGURE 155 Internal Wall to Structural Beam
Section

Fire Rated
Internal Wall Built Around Columns

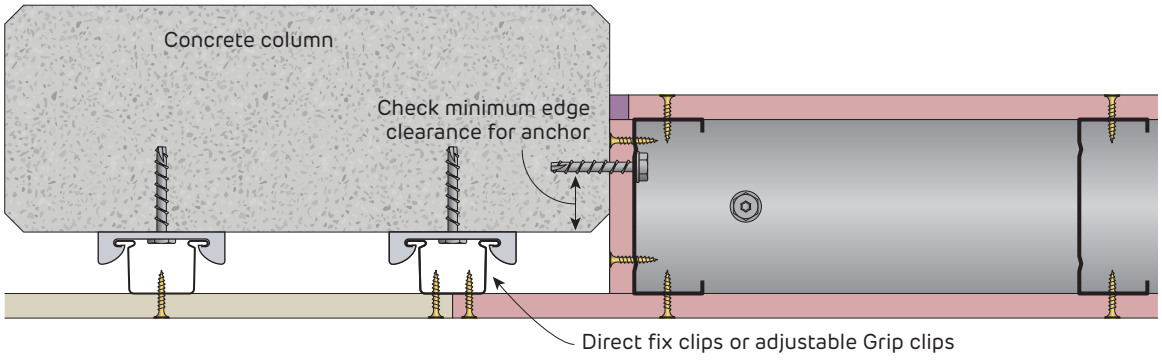


FIGURE 156 Fire rated Partition Wall to Concrete Column
Plan

Fire Rated
Internal Wall Built Around Columns

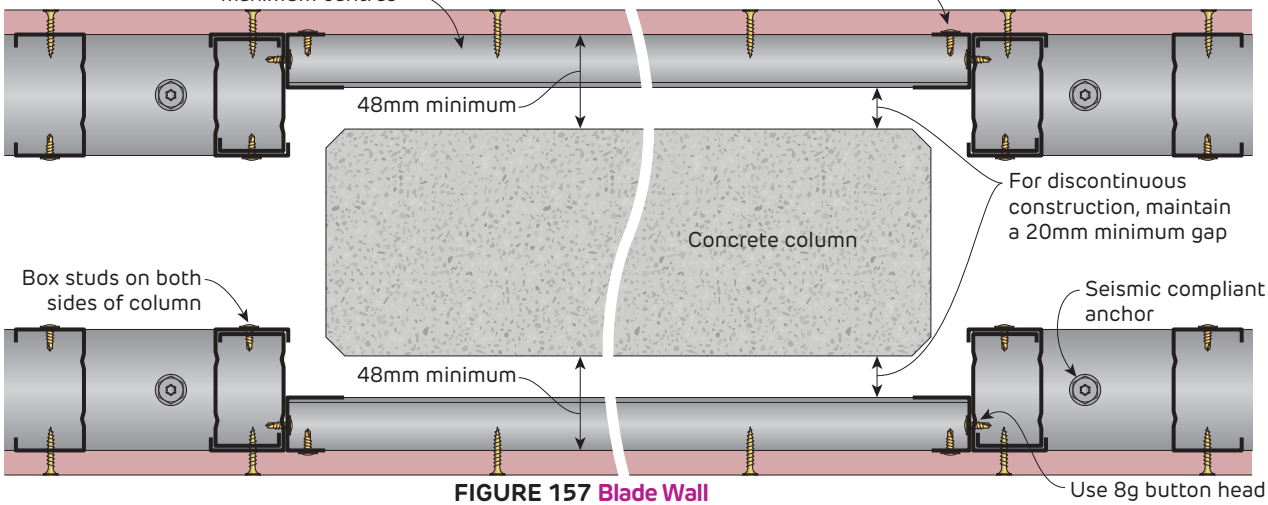
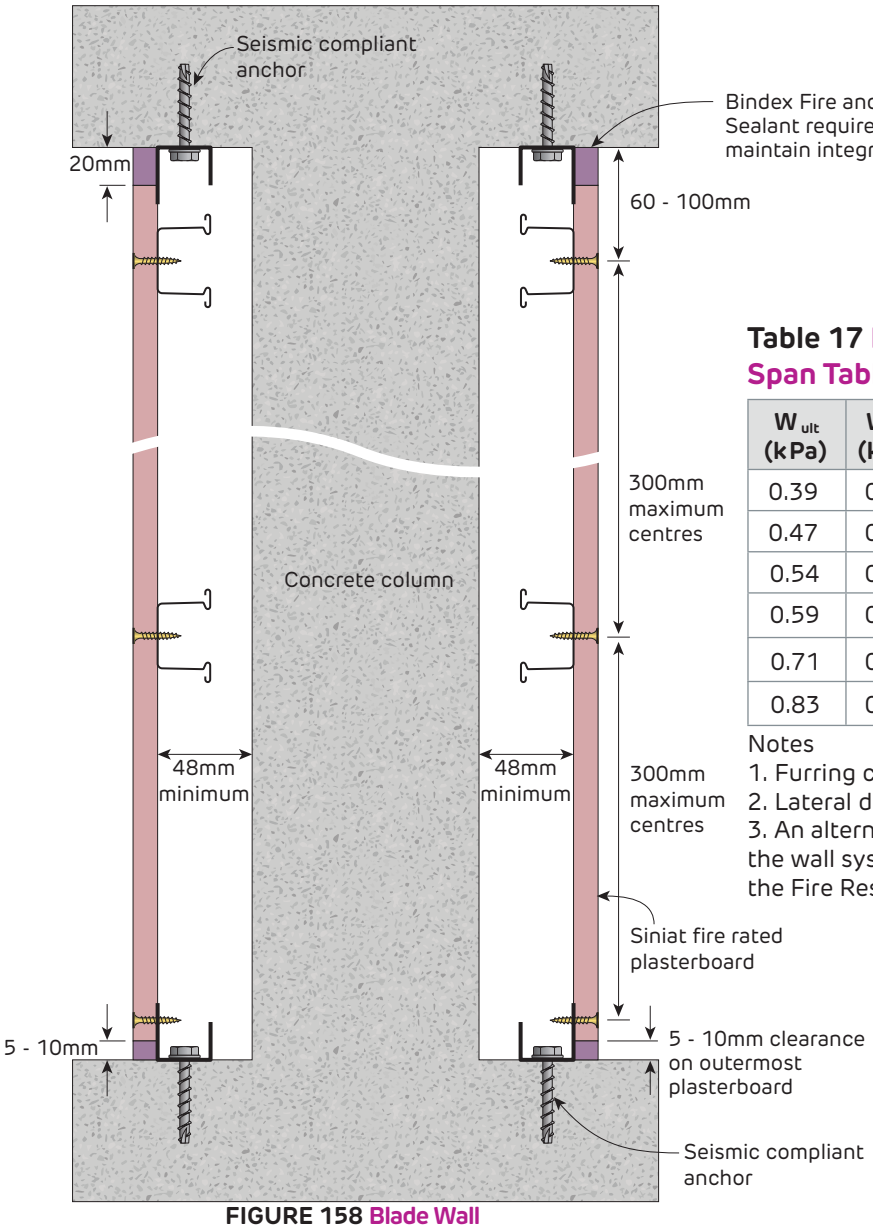


FIGURE 157 Blade Wall
Discontinuous Construction Plan



Insulation not shown for clarity. Refer to System PMW101 in Section 3.5 for lining and insulation required.

FIGURE 158 Blade Wall
Discontinuous Construction Section

Table 17 Horizontal Furring Channel Span Table over Column

W_{ult} (kPa)	W_{ser} (kPa)	28mm Furring Channel (mm)
0.39	0.25	1350
0.47	0.3	1280
0.54	0.35	1240
0.59	0.25	1210
0.71	0.3	1150
0.83	0.35	1100

Notes
1. Furring channels at 300mm maximum centres
2. Lateral deflection limited to span/240
3. An alternative framing design may be used provided the wall system has the 'structural adequacy' part to the Fire Resistance Level for the time period required.

Outermost plasterboard sheets with no gap at the base are at risk of moisture wicking

Fire Rated
Internal Wall Built Around Columns

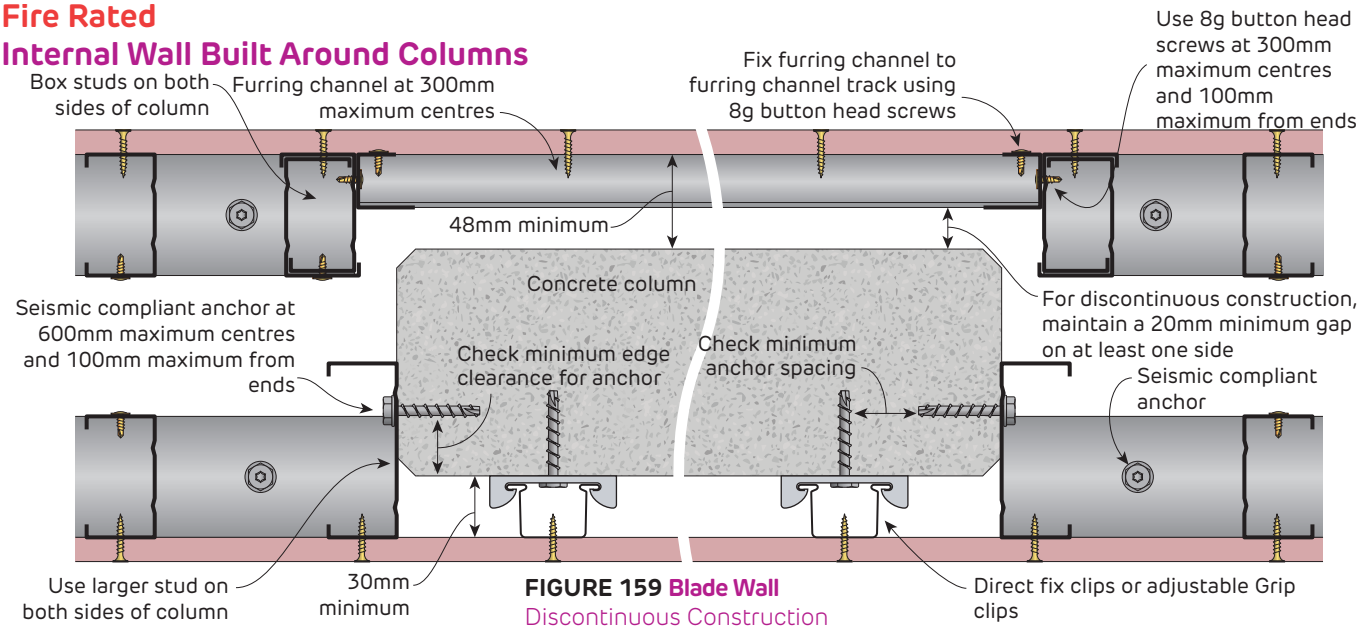


FIGURE 159 Blade Wall Discontinuous Construction Plan

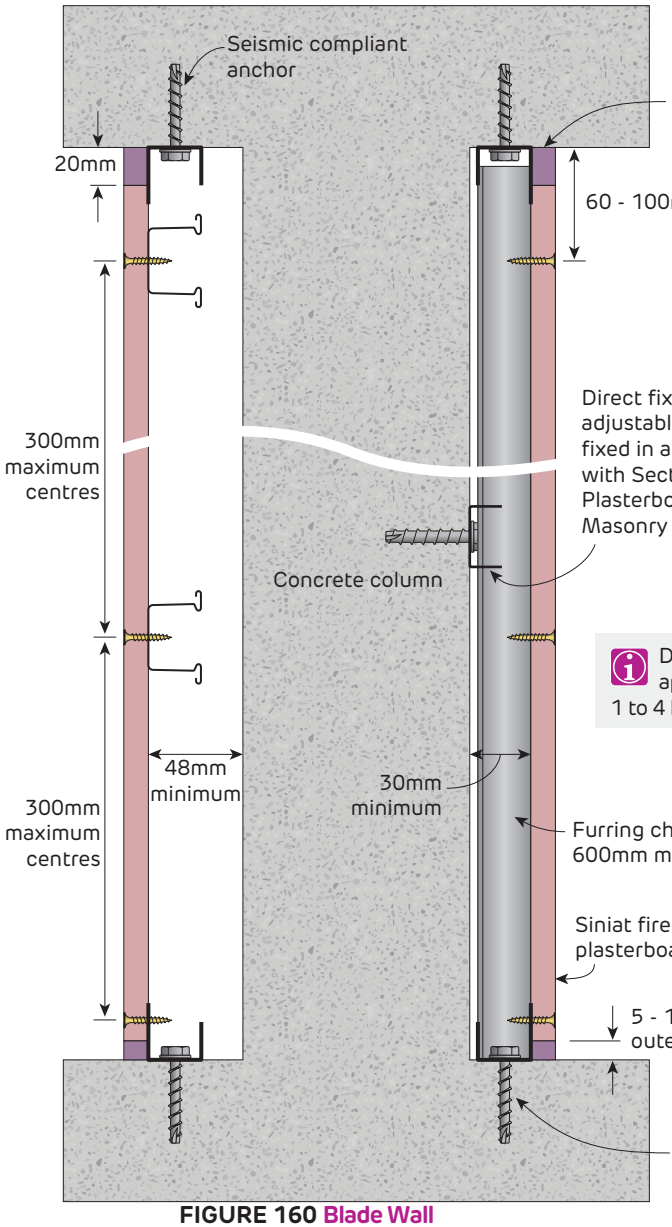


FIGURE 160 Blade Wall Discontinuous Construction Section

Insulation not shown for clarity. Refer to System PMW101 in Section 3.5 for lining and insulation required.

Table 18 Horizontal Furring Channel Span Table over Column

W_{ult} (kPa)	W_{ser} (kPa)	28mm Furring Channel (mm)
0.39	0.25	1350
0.47	0.3	1280
0.54	0.35	1240
0.59	0.25	1210
0.71	0.3	1150
0.83	0.35	1100

Notes
1. Furring channels at 300mm maximum centres
2. Lateral deflection limited to span/240
3. An alternative framing design may be used provided the wall system has the 'structural adequacy' part to the Fire Resistance Level for the time period required.

Details apply from 1 to 4 layers

If a discontinuous wall (Separating Wall) is required, then Direct fix clips or adjustable Grip clips may only be used on one side of the concrete column, and the other side must be separated with a minimum 20mm gap.

Outermost plasterboard sheets with no gap at the base are at risk of moisture wicking

Fire Rated
Internal Wall Built Around Columns

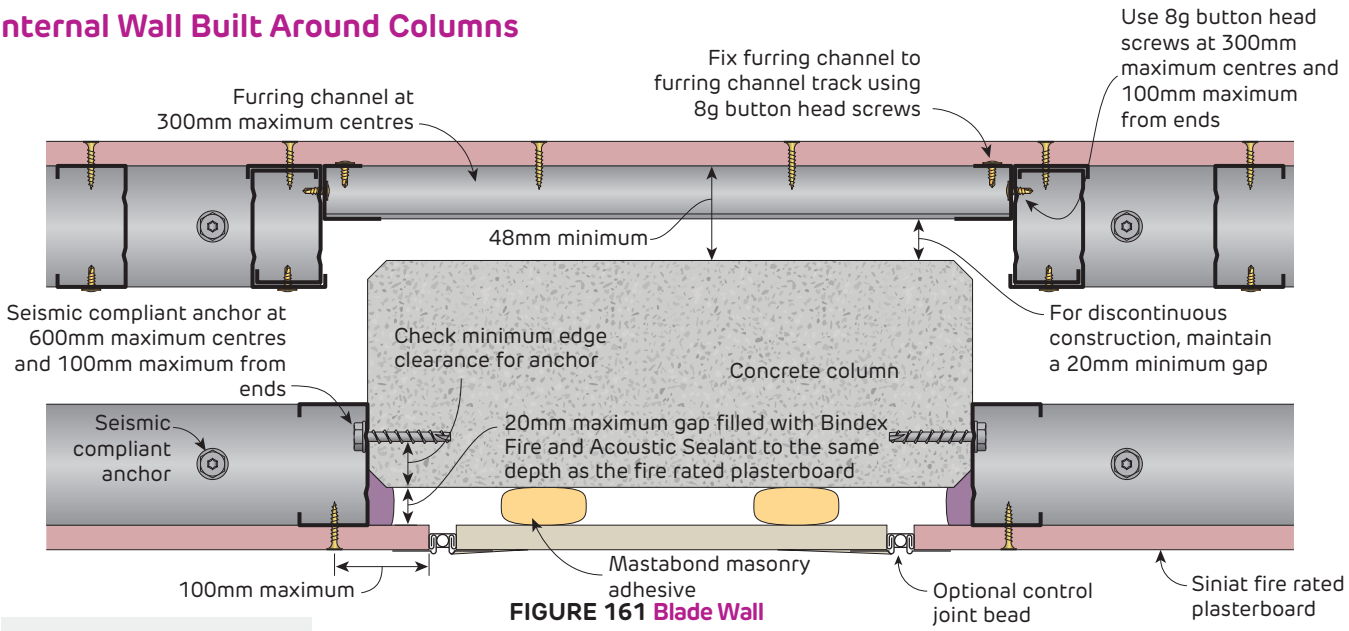


FIGURE 161 Blade Wall Discontinuous Construction Plan

Insulation not shown for clarity. Refer to System PMW103 in Section 3.5 for lining and insulation required.

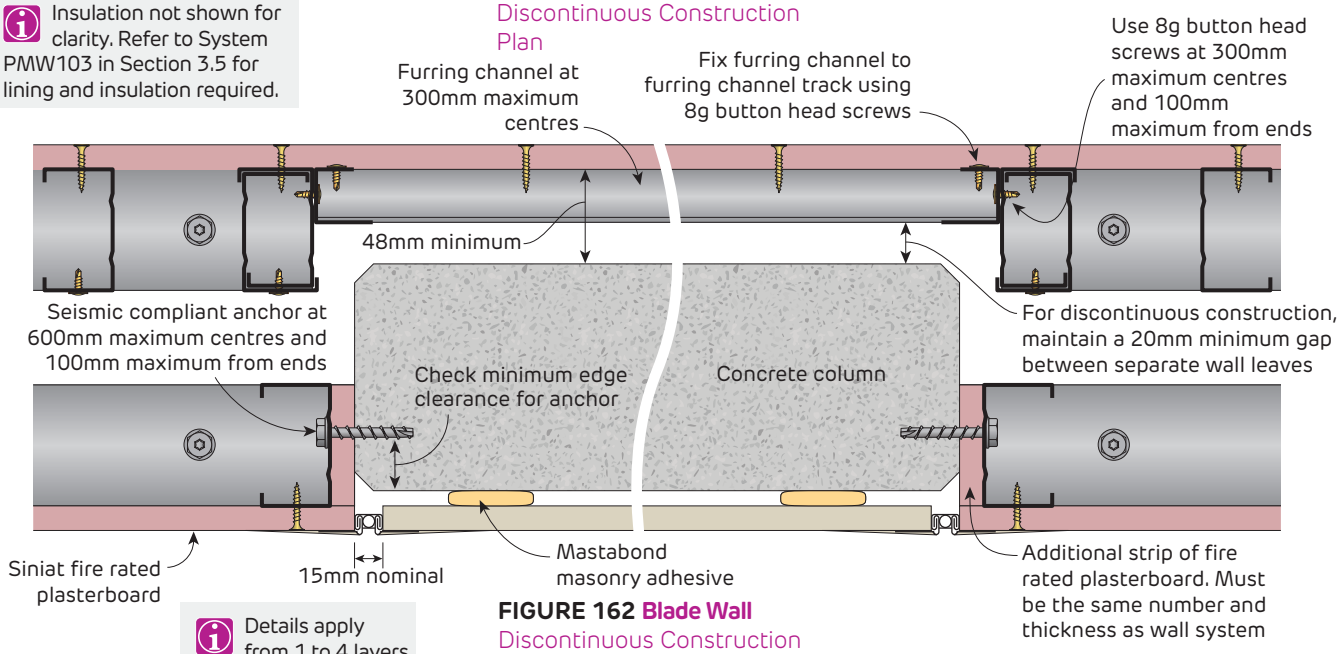


FIGURE 162 Blade Wall Discontinuous Construction Plan

Details apply from 1 to 4 layers

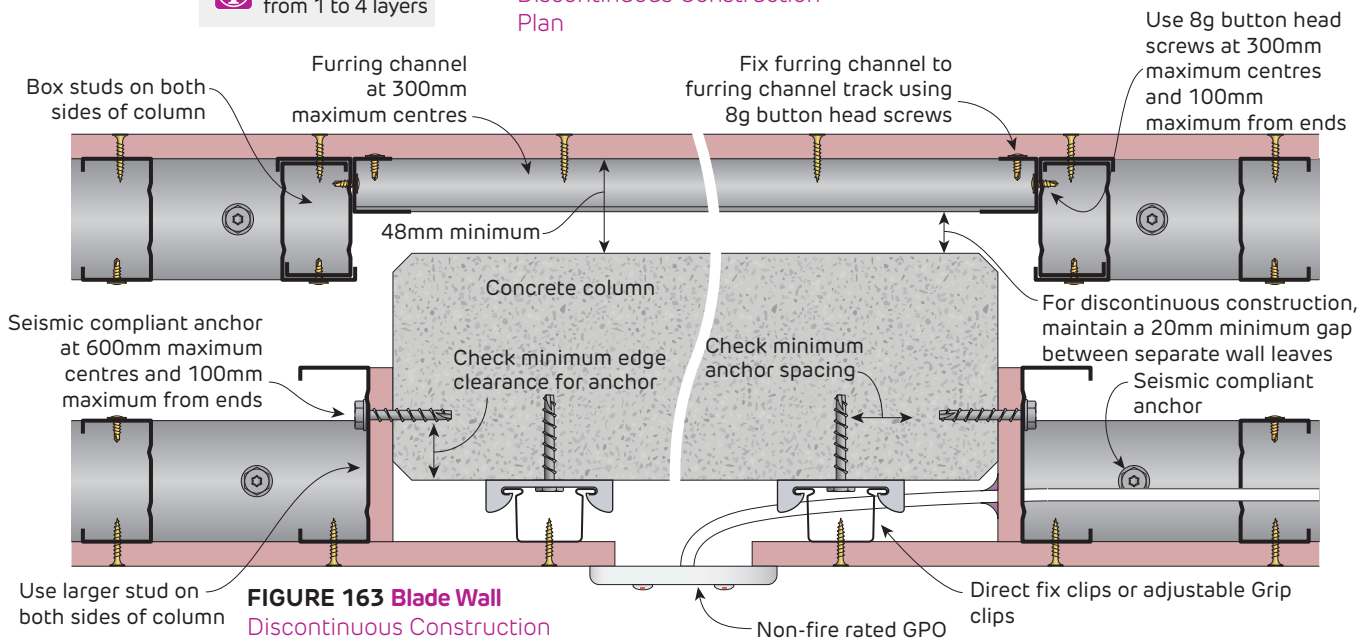
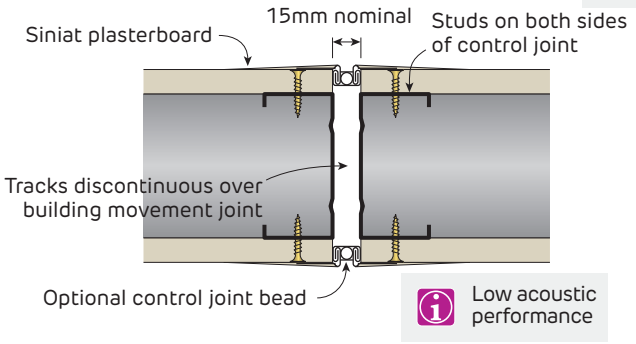


FIGURE 163 Blade Wall Discontinuous Construction Plan

Fire Rated and Non-Fire Rated Control Joints in Stud Walls

All control joint details apply from 1 to 4 layers



Low acoustic performance

FIGURE 164 Control Joint
Plan

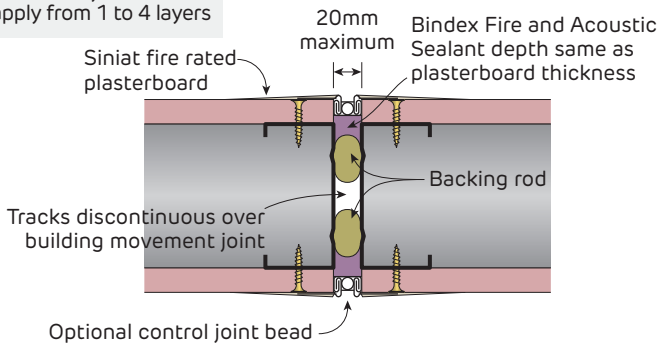


FIGURE 165 Control Joint
Fire rated - 1 layer with control joint bead
Plan

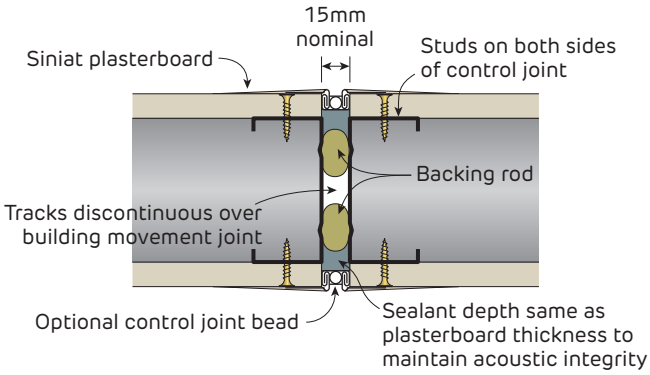


FIGURE 166 Control Joint
Plan

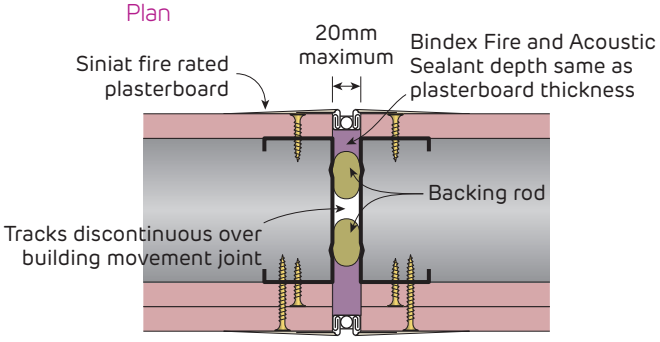


FIGURE 167 Control Joint
Fire rated - 1 layer on side side and 2 layers on the other side - Plan

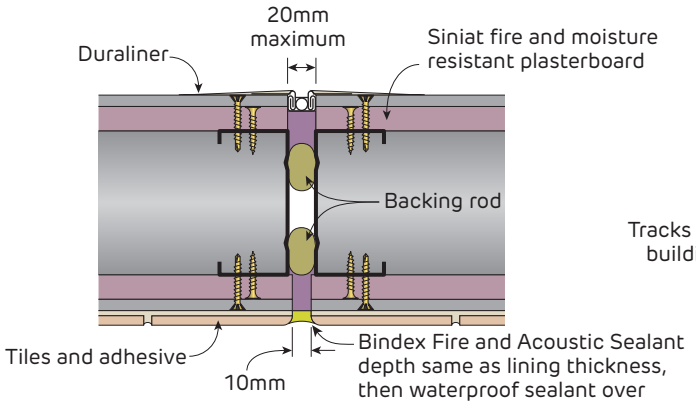
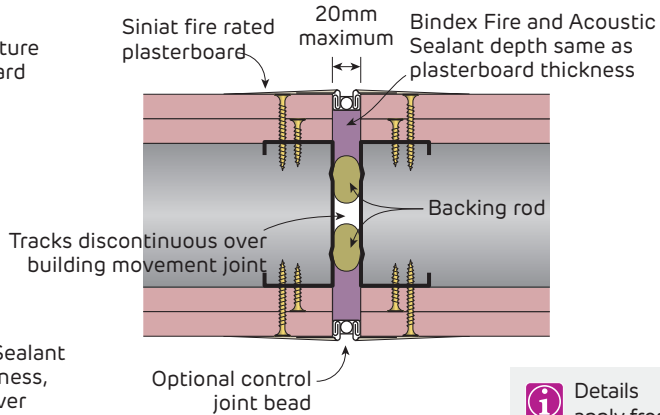


FIGURE 168 Control Joint
Fire rated for wet area
Plan



Details apply from 1 to 4 layers

FIGURE 169 Control Joint
Fire rated - 2 layers
Plan

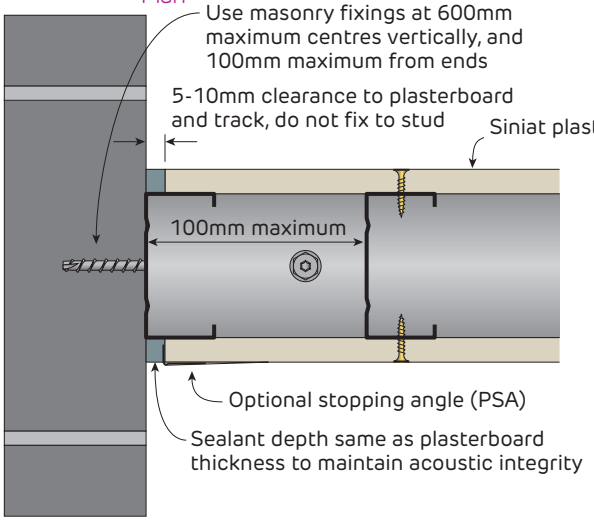


FIGURE 170 Sliding Wall End to Intersecting Wall
Plan

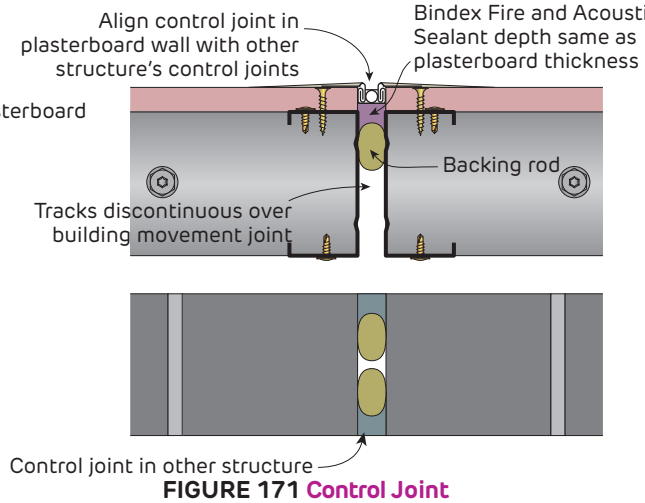
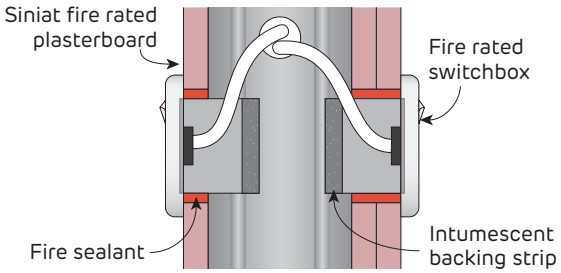


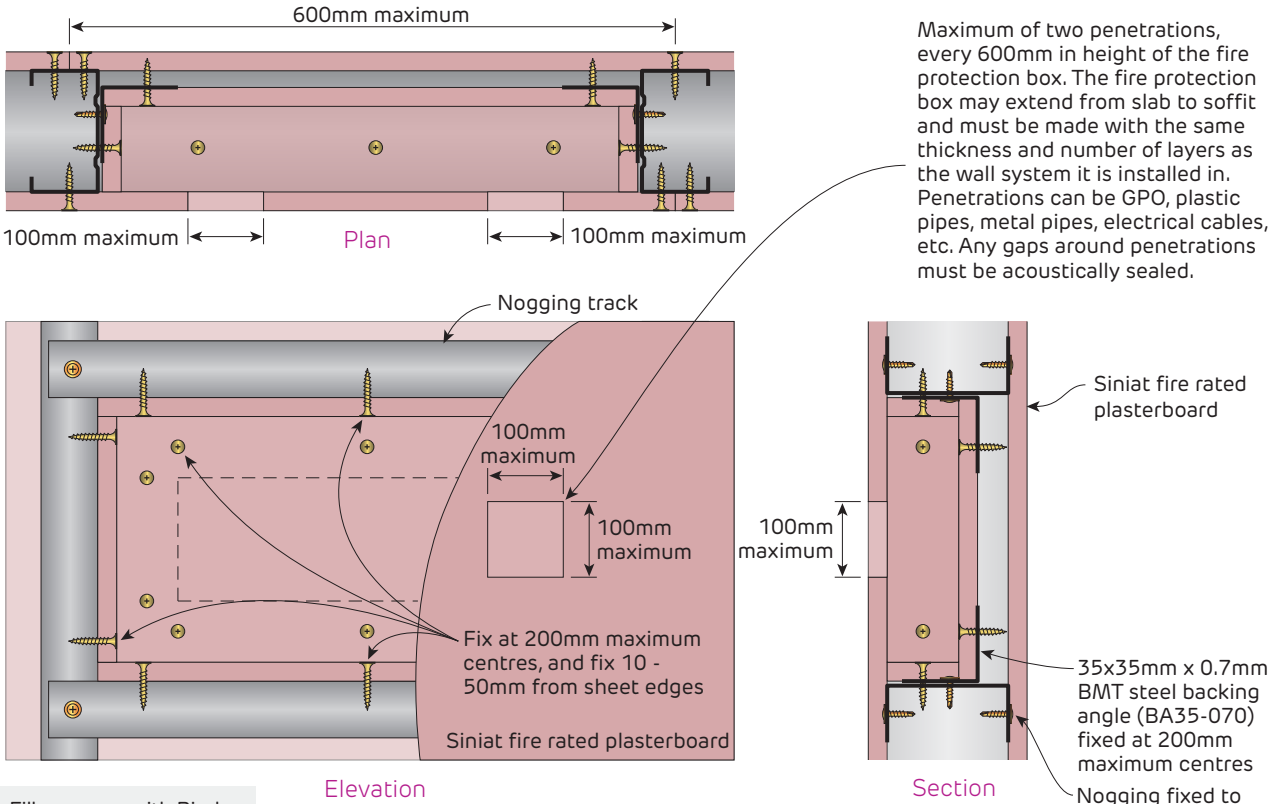
FIGURE 171 Control Joint
Fire rated
Plan

Fire Rated
Fire Penetration Details for Internal Stud Walls



Refer to proprietary fire product manufacturer for performance and specific installation detail as well as approval for use in the selected building element.

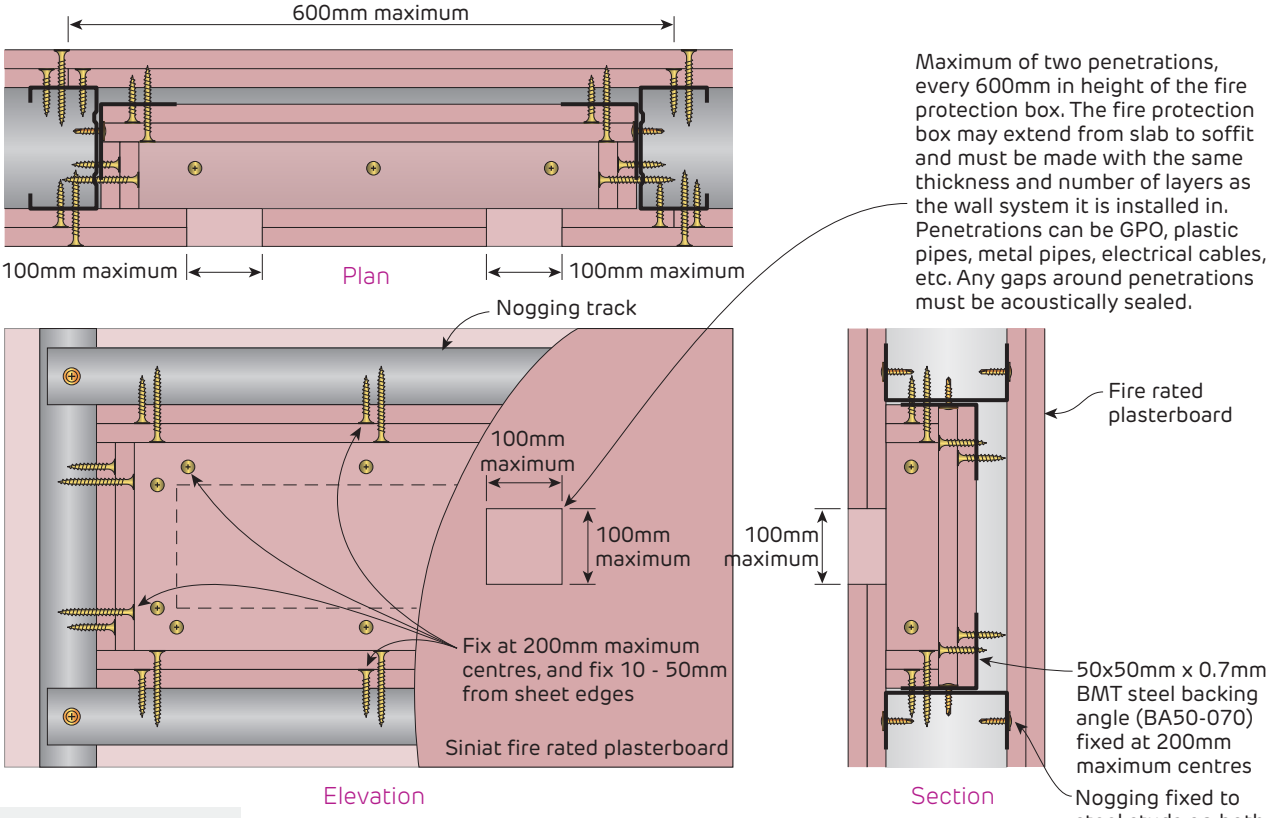
FIGURE 200 Fire Rated Power-point GPO
Example only
Section



Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

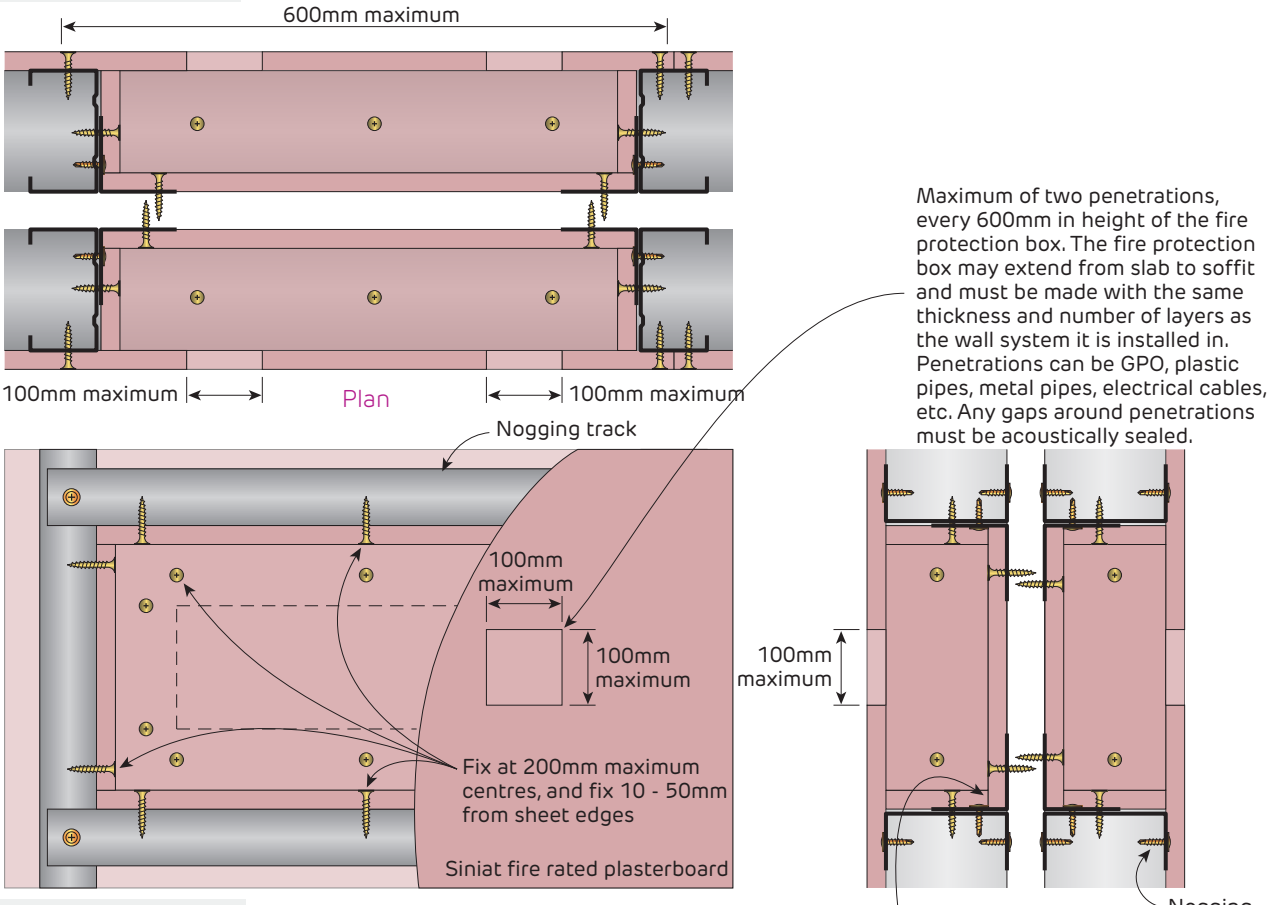
FIGURE 201 Fire protection box for services
Maintains FRL of system - Single layer system

Fire Rated
Fire Penetration Details for Internal Stud Walls



Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

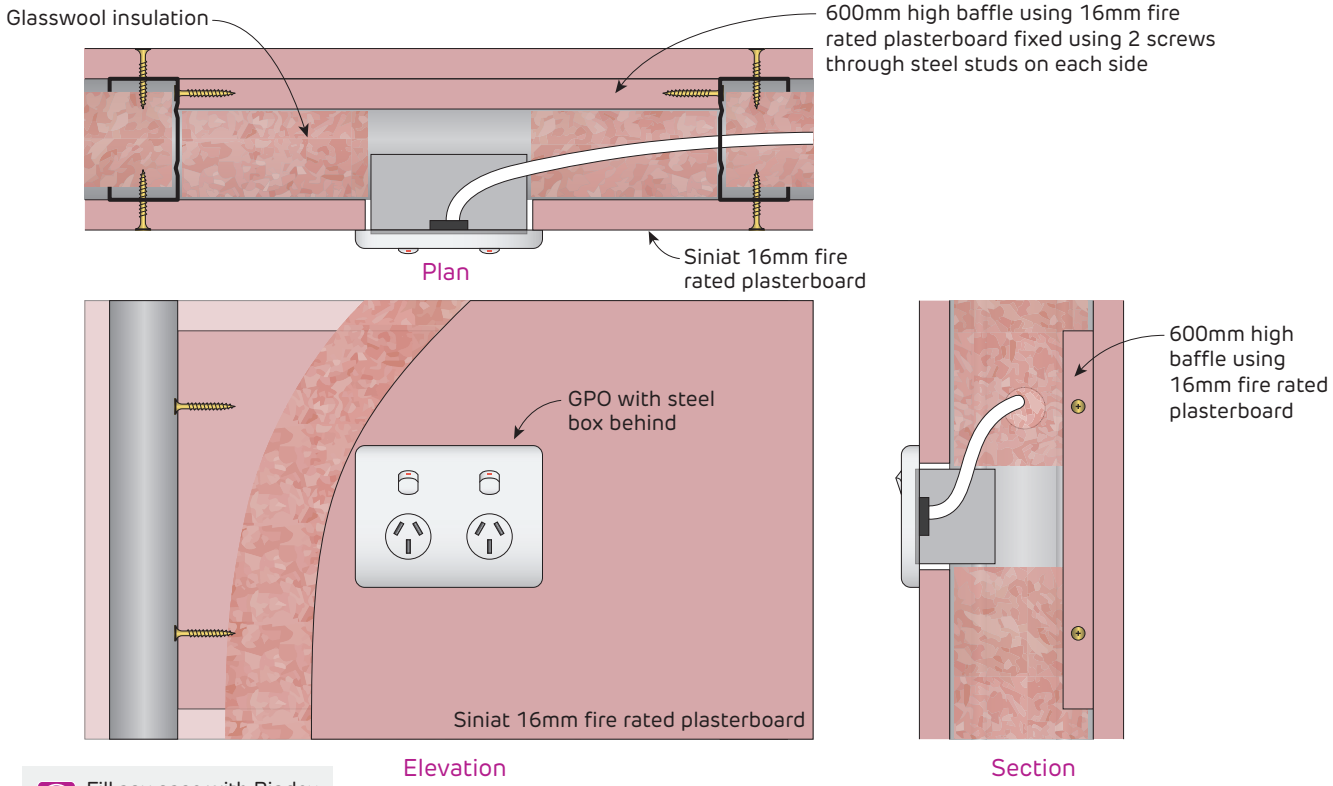
FIGURE 202 Fire protection box for services
Maintains FRL of system - Double layer system



Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

FIGURE 203 Fire protection box for services
Maintains FRL of system - Double stud system

Fire Rated
Fire Penetration Details for Internal Stud Walls



Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

FIGURE 204 Fire Rated Plasterboard Baffle
Single layer system using 16mm fire rated plasterboard
FRL -/60/60 - Single stud wall

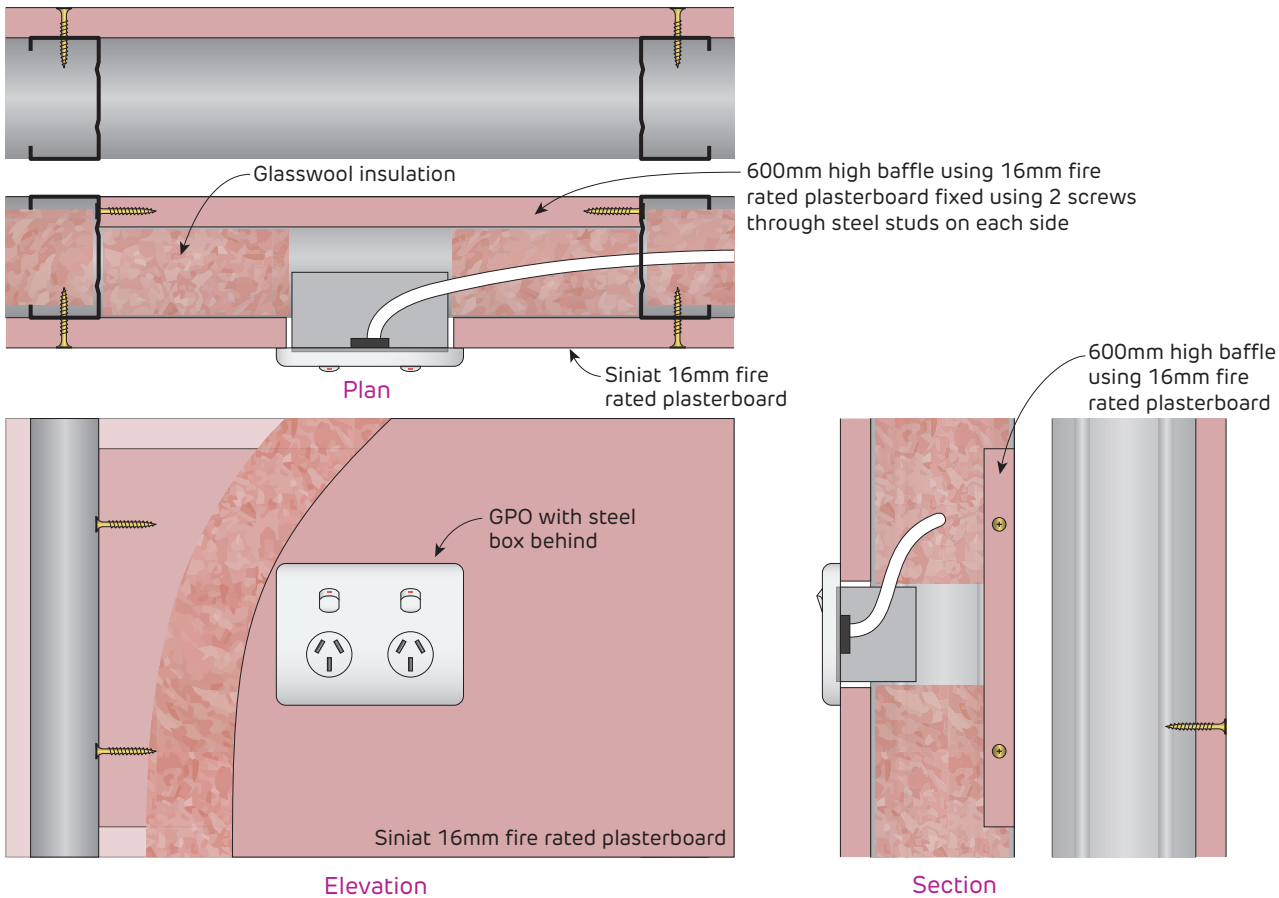


FIGURE 205 Fire Rated Plasterboard Baffle
Single layer system using 16mm fire rated plasterboard
FRL -/60/60 - Double stud wall

Fire Rated
TPS Power Cable Penetration Details for Stud Walls

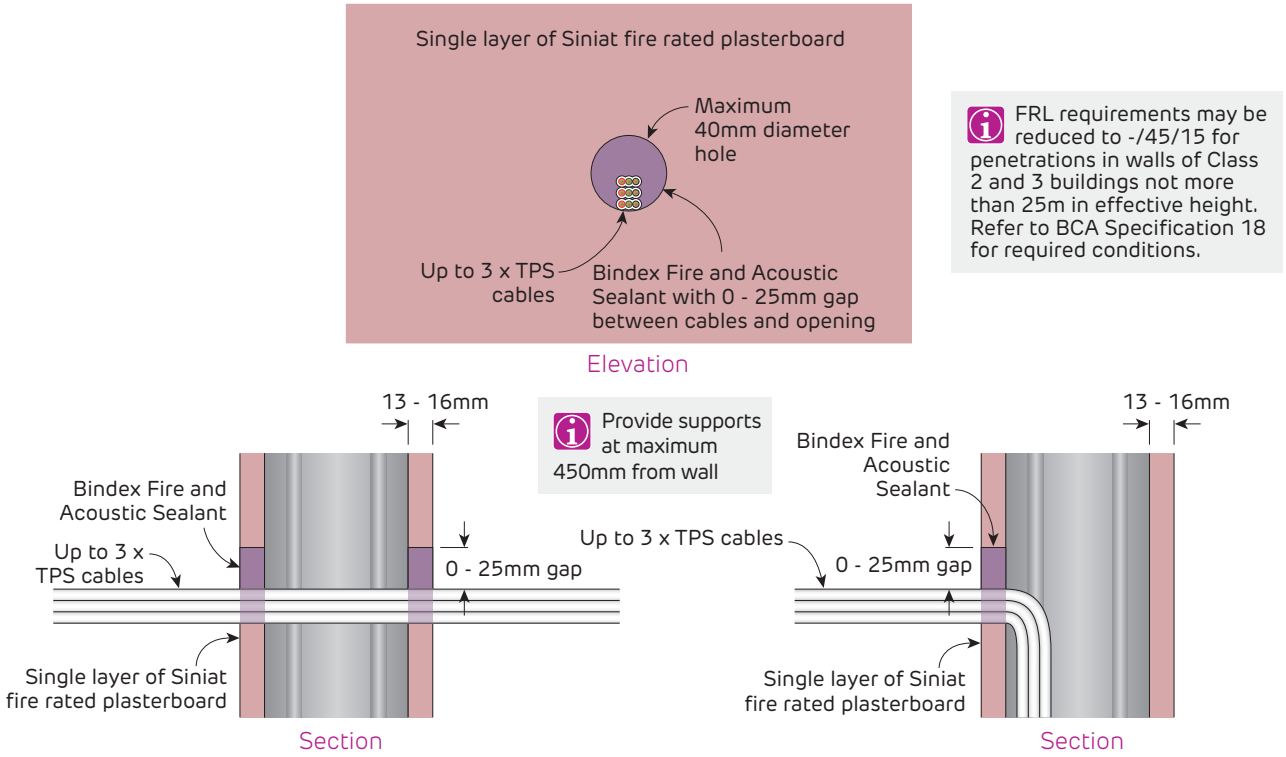
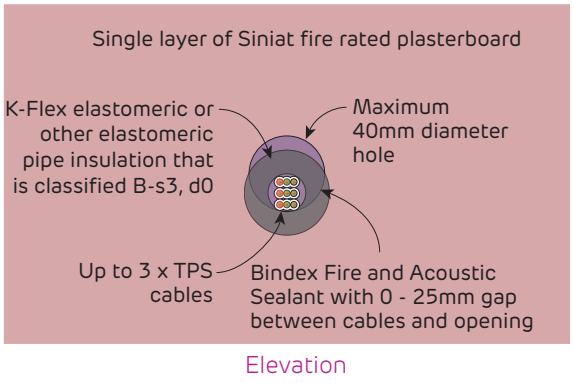
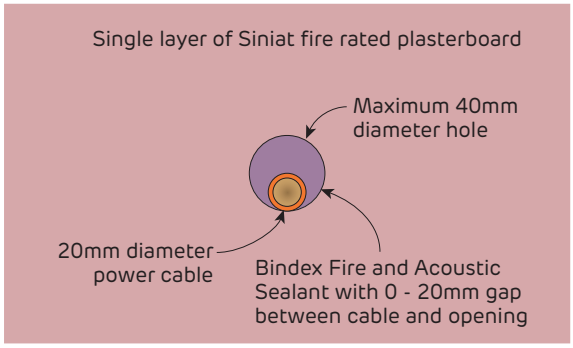


FIGURE 206 TPS Cable Penetration
Single layer system
FRL -/60/30

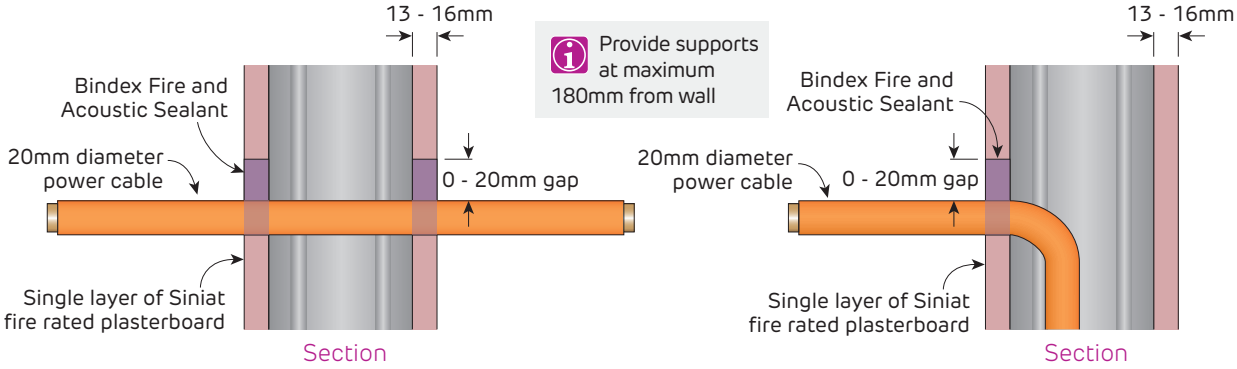


Fire Rated
Power Cable Penetration Details for Stud Walls



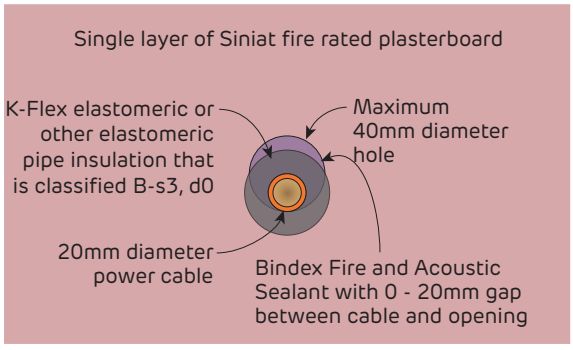
Elevation

FRL requirements may be reduced to -/45/15 for penetrations in walls of Class 2 and 3 buildings not more than 25m in effective height. Refer to BCA Specification 18 for required conditions.

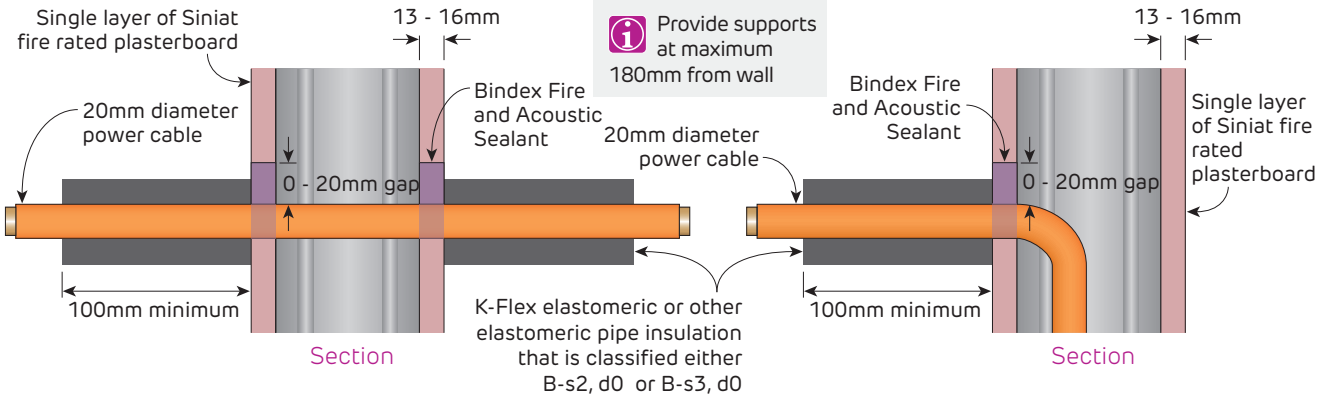


Section Section

FIGURE 207 Power Cable Penetration
Single layer system
FRL -/60/30



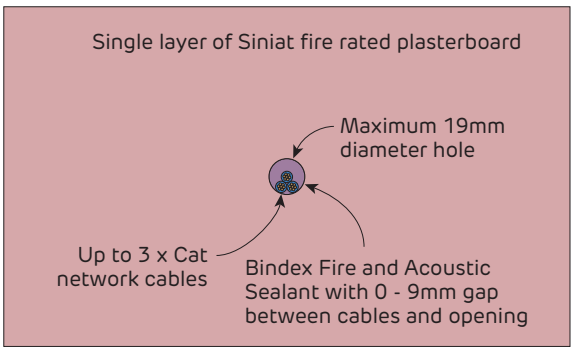
Elevation



Section Section

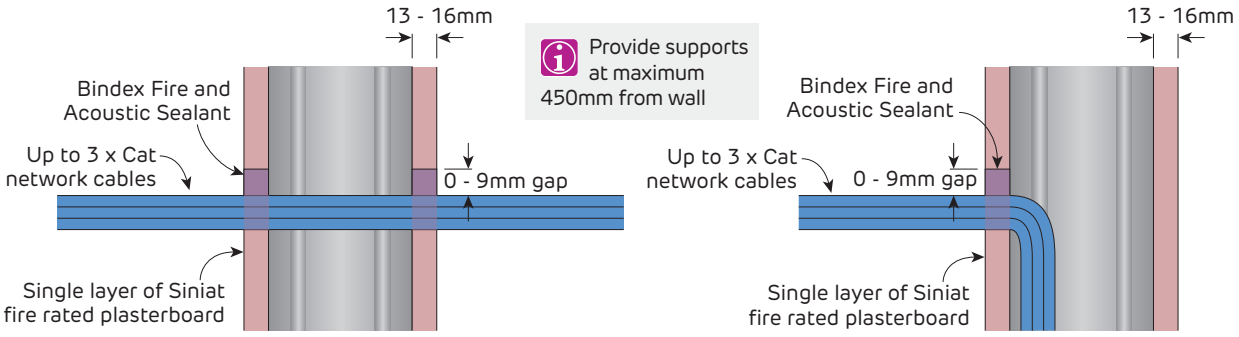
FIGURE 208 Power Cable Penetration
Single layer system
FRL -/60/60

Fire Rated
Cat Network Cable Penetration Details for Stud Walls



Elevation

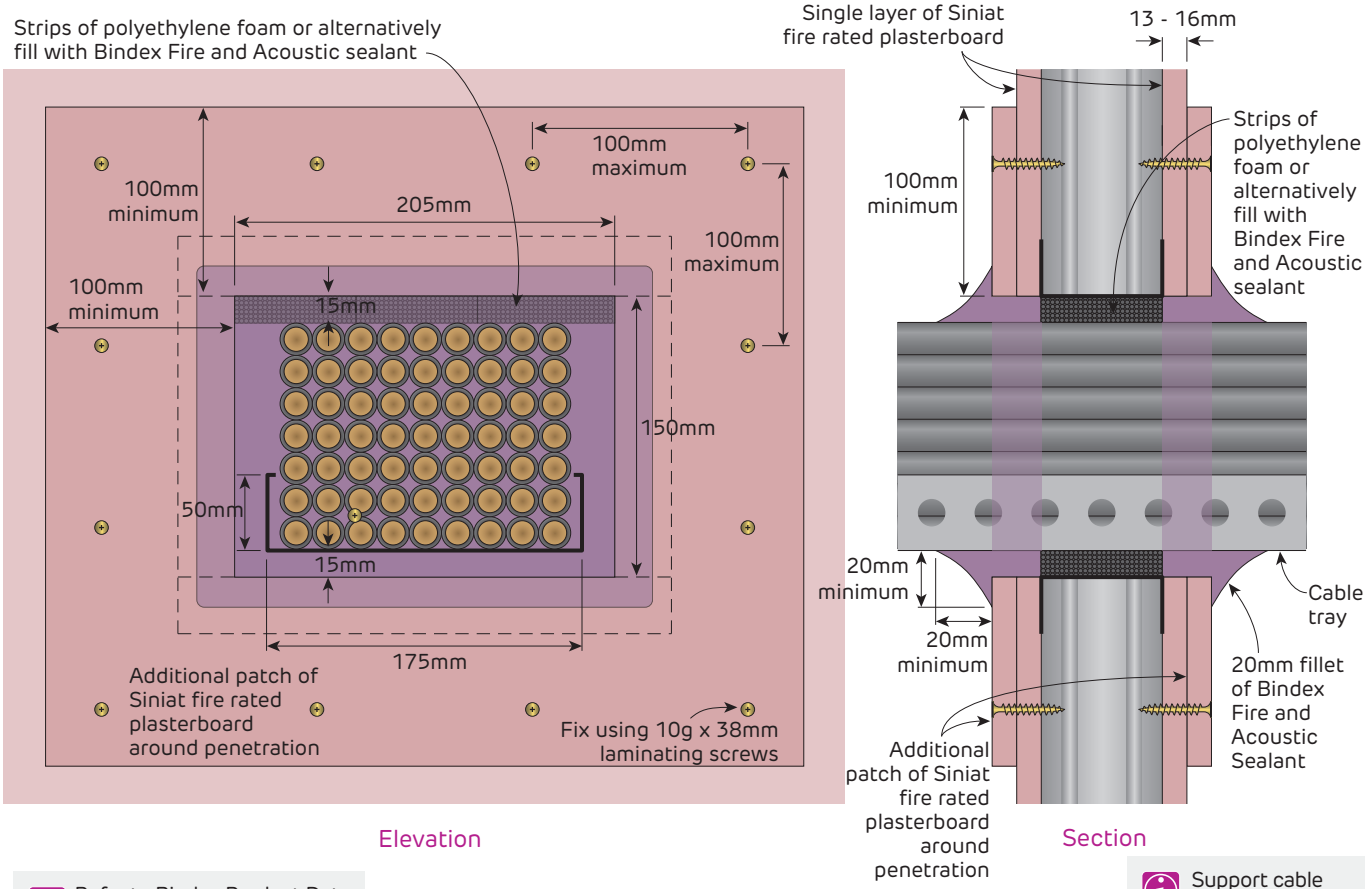
FRL requirements may be reduced to -/45/15 for penetrations in walls of Class 2 and 3 buildings not more than 25m in effective height. Refer to BCA Specification 18 for required conditions.



Section Section

FIGURE 209 Cat Network Cable Penetration
Single layer system
FRL -/60/60

Power and Telecommunication Cable Penetration Details for Stud Walls



Elevation Section

Refer to Bindex Product Data Sheet for more information

FIGURE 210 Telecommunication Cable Tray Penetration
FRL -/90/60 limited by wall FRL

Support cable trays 100mm and 400mm from wall

Fire Rated
Metal Pipe Penetration Details for Stud Walls

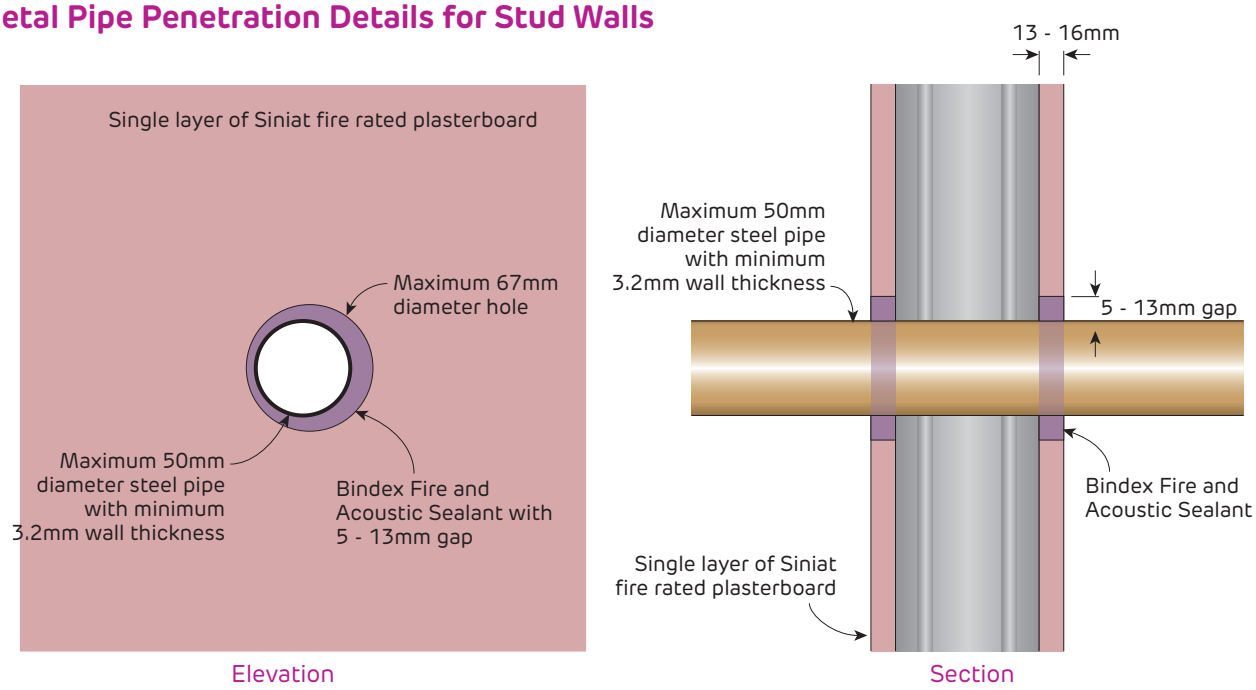


FIGURE 211 50mm diameter Steel Pipe Penetration
Single layer wall system
FRL -/60/30

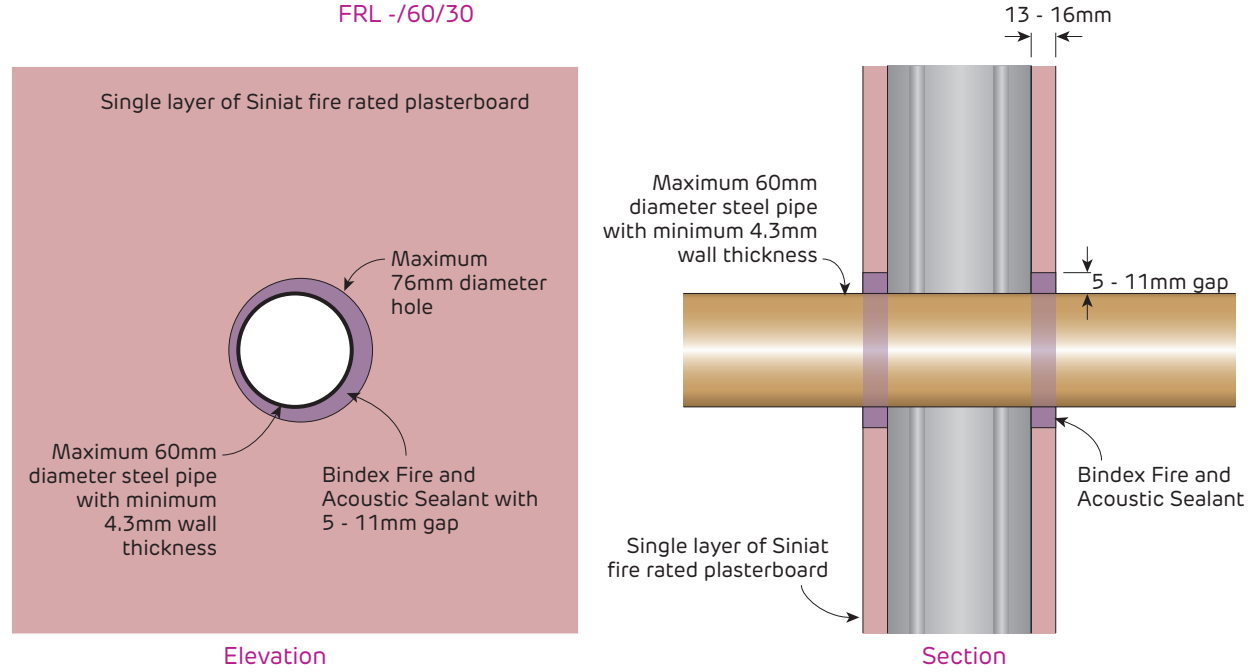
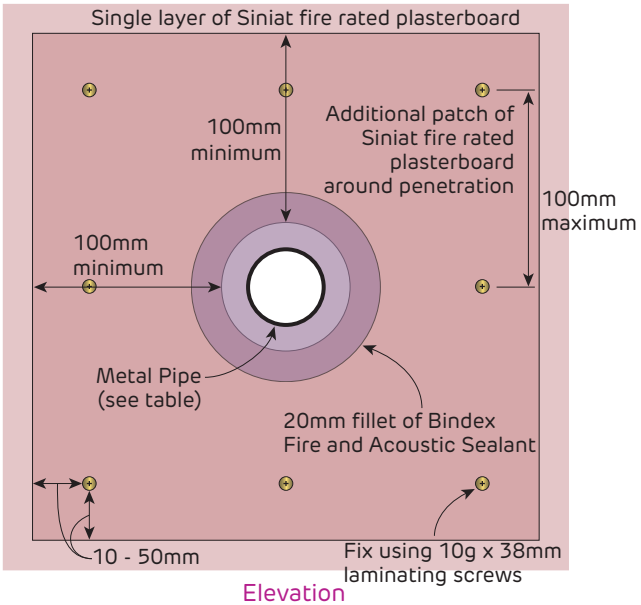


FIGURE 212 60mm diameter Steel Pipe Penetration
Single layer wall system
FRL -/60/30

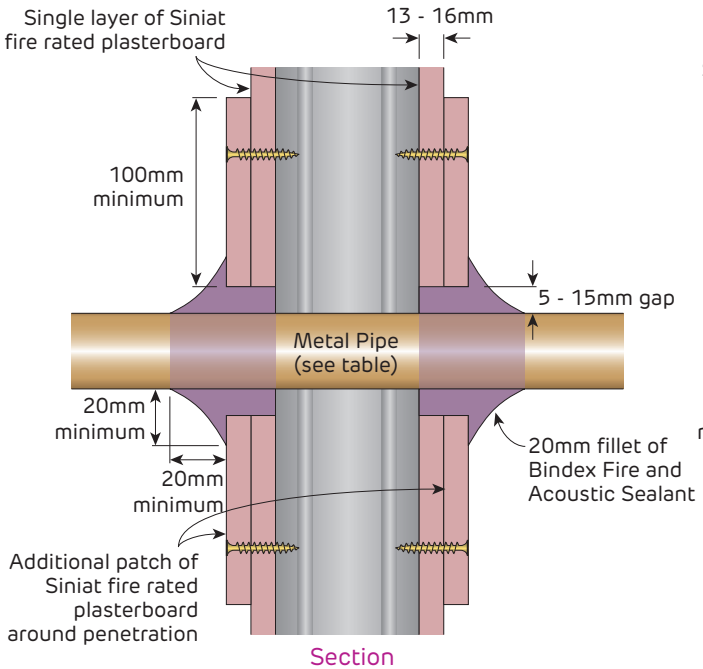
The insulation criteria for the metal pipe penetration may not be needed. Refer to NCC Volume One, C4D15 (2) (a) (ii)

FRL requirements may be reduced to -/45/15 for penetrations in walls of Class 2 and 3 buildings not more than 25m in effective height. Refer to BCA Specification 18 for required conditions.

Fire Rated
Metal Pipe Penetration Details for Stud Walls

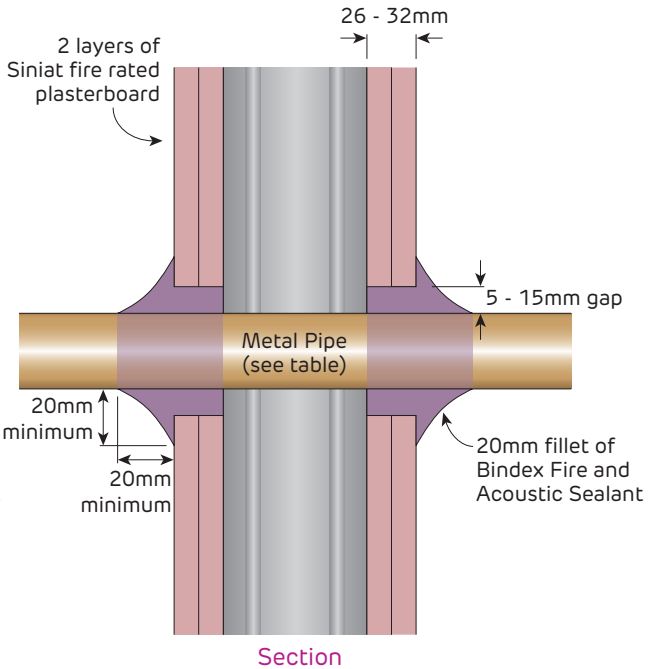


Elevation



Section

FIGURE 213 Metal Pipe Penetration
Single layer wall system with patches
FRL -/90/- limited by wall FRL



Section

FIGURE 214 Metal Pipe Penetration
Double layer wall system
FRL -/180/- limited by wall FRL - Section

*Refer to Bindex Product Data Sheet for more information

Fire Rated
Metal Pipe Penetration Details for Stud Walls

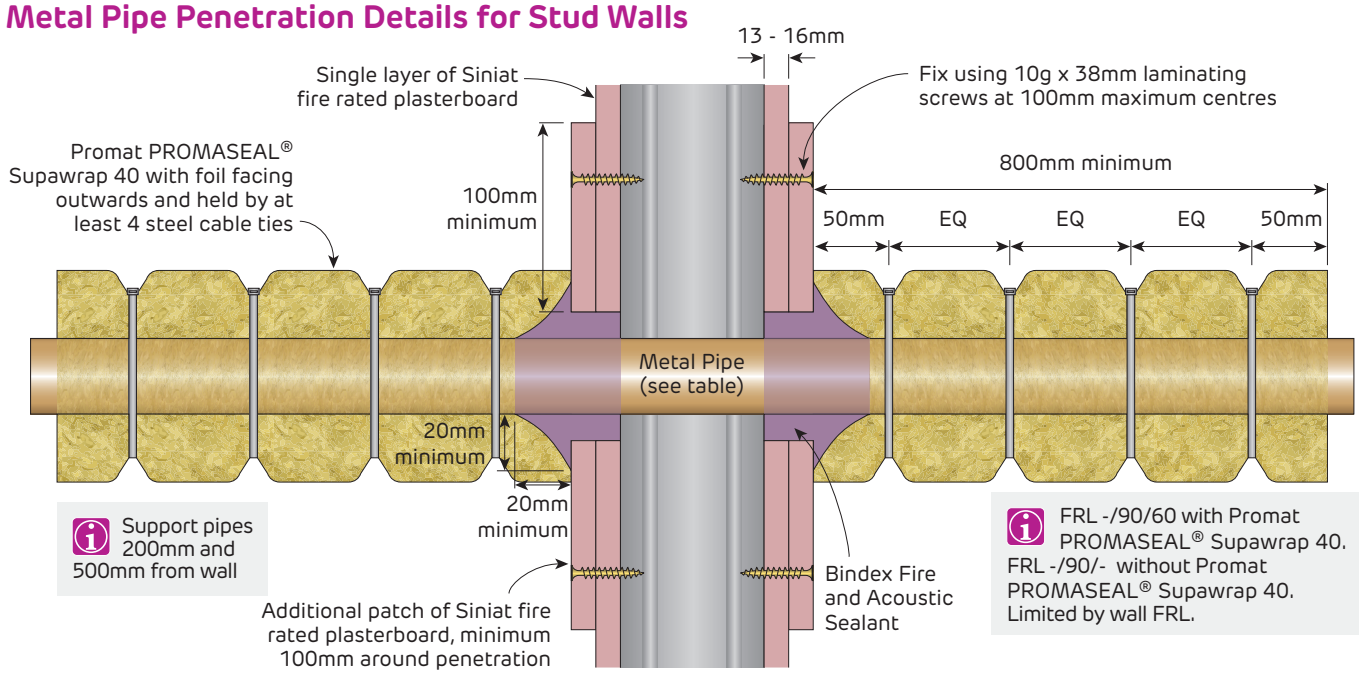


FIGURE 215 Metal Pipe Penetration wrapped with Supawrap 40
FRL -/90/60 limited by wall FRL
Section

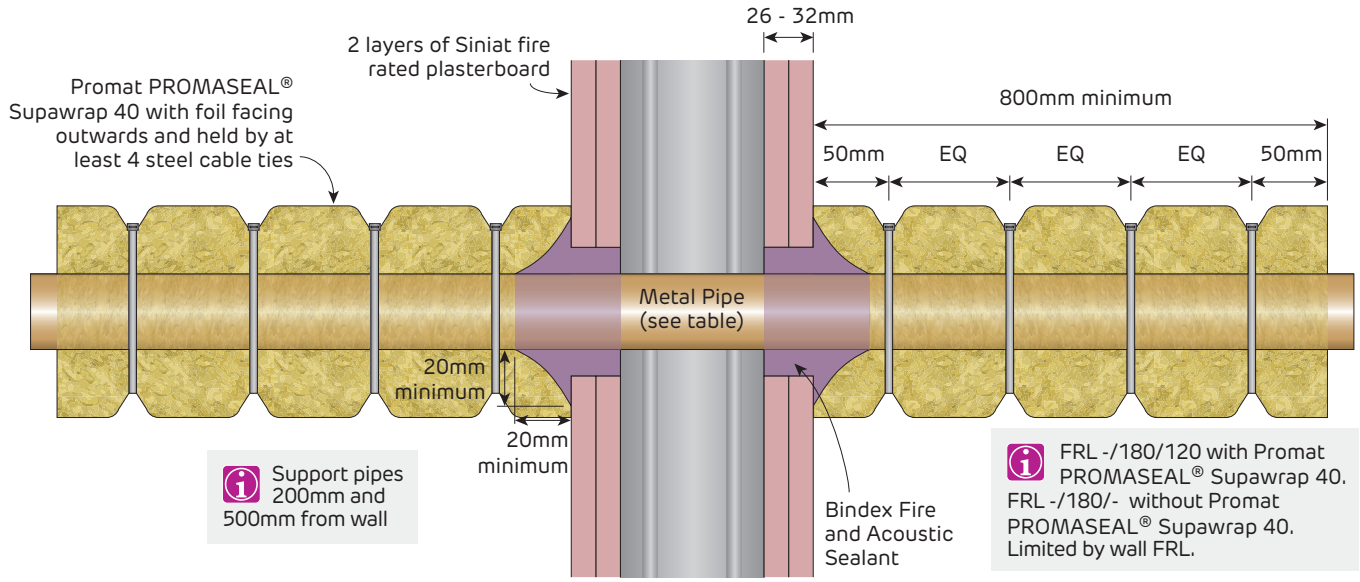


FIGURE 216 Metal Pipe Penetration wrapped with Supawrap 40
FRL -/180/120 limited by wall FRL
Section

Table 19 Sizes for Copper, Brass or Ferrous Pipes

Pipe Nominal Size (mm)	Maximum Pipe Diameter (mm)	Minimum Wall Thickness (mm)
32	31.75	0.91
40	38.1	0.91
50	50.8	0.91
65	63.5	0.91
80	76.2	1.22
90	88.9	1.22
100	101.6	1.22
125	127	1.42
150	152.4	1.63

Fire Rated
Flush Patching of Fire Rated Wall Systems - Maximum 150mm Metal Pipe

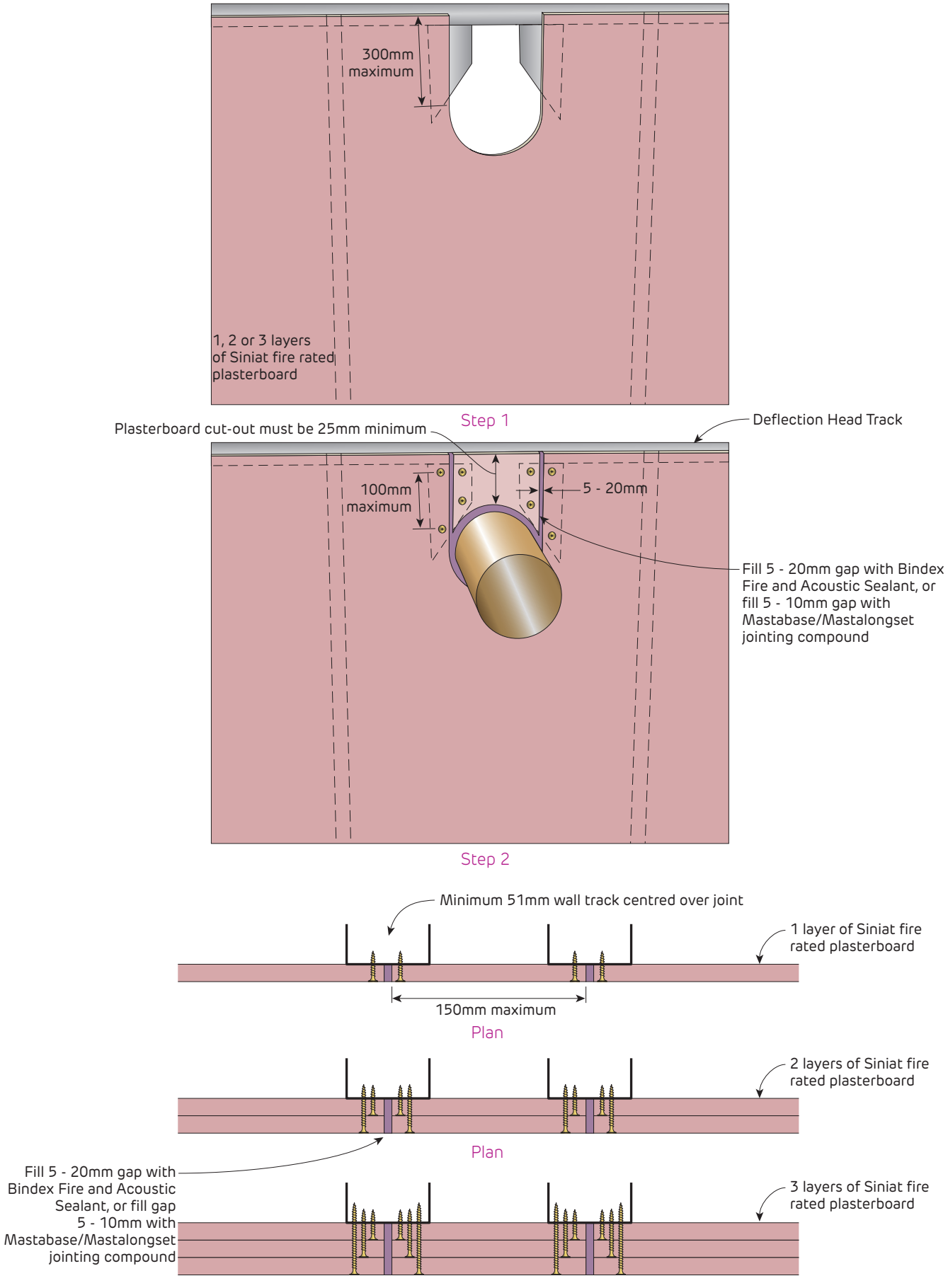


FIGURE 217 Flush patch with the lining with pipe penetration
Maximum 150mm pipes as per Table 19 - Refer to previous pages for FRL

Fire Rated

Flush Patching of Fire Rated Wall Systems - Maximum 250mm Metal or PVC Pipe

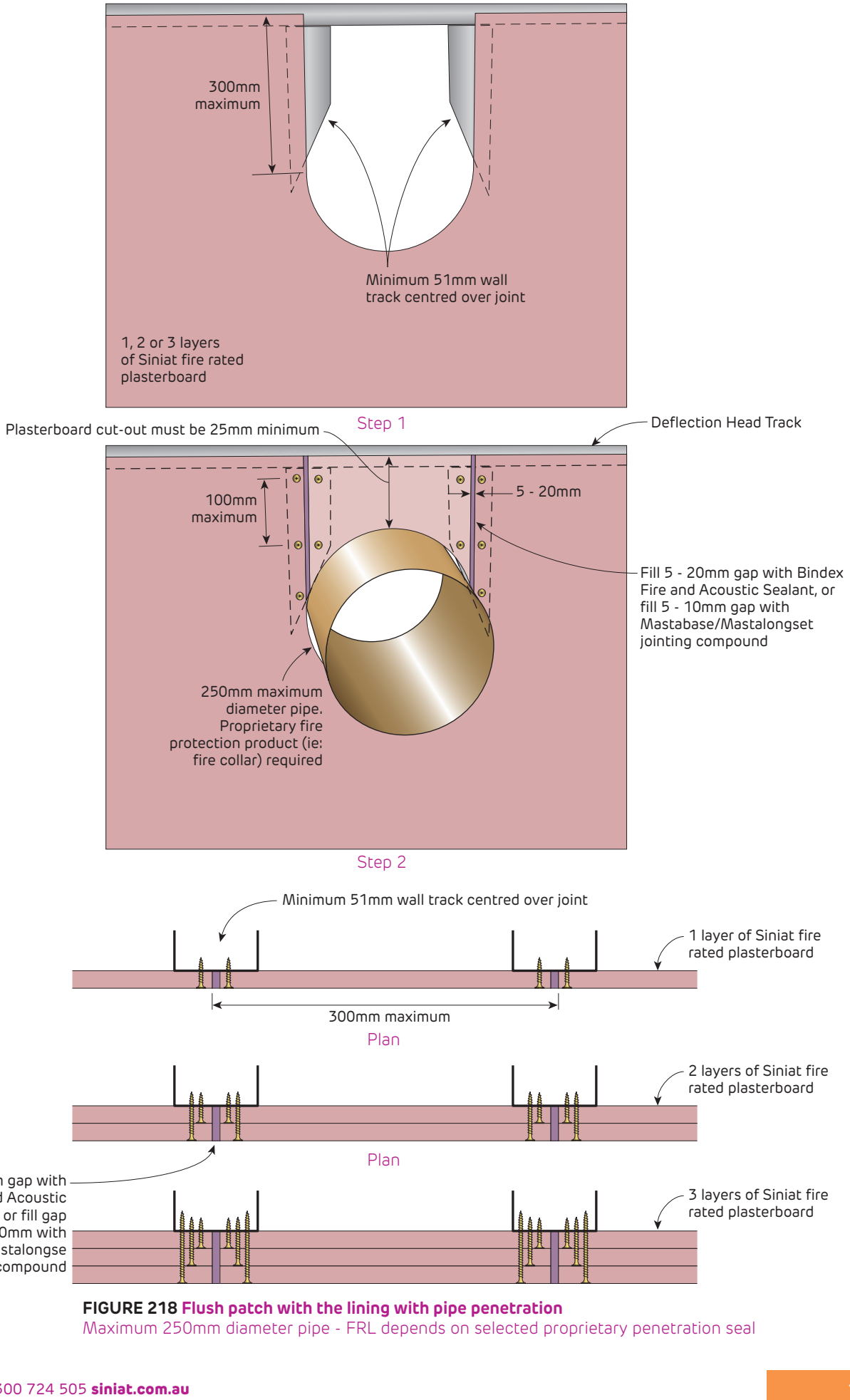
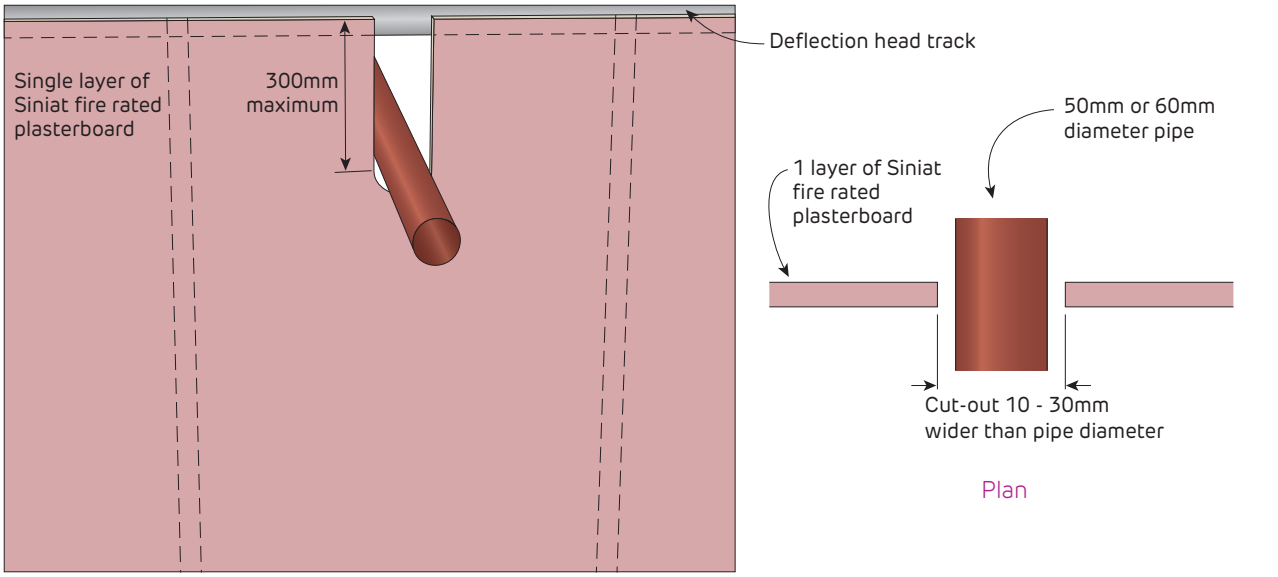
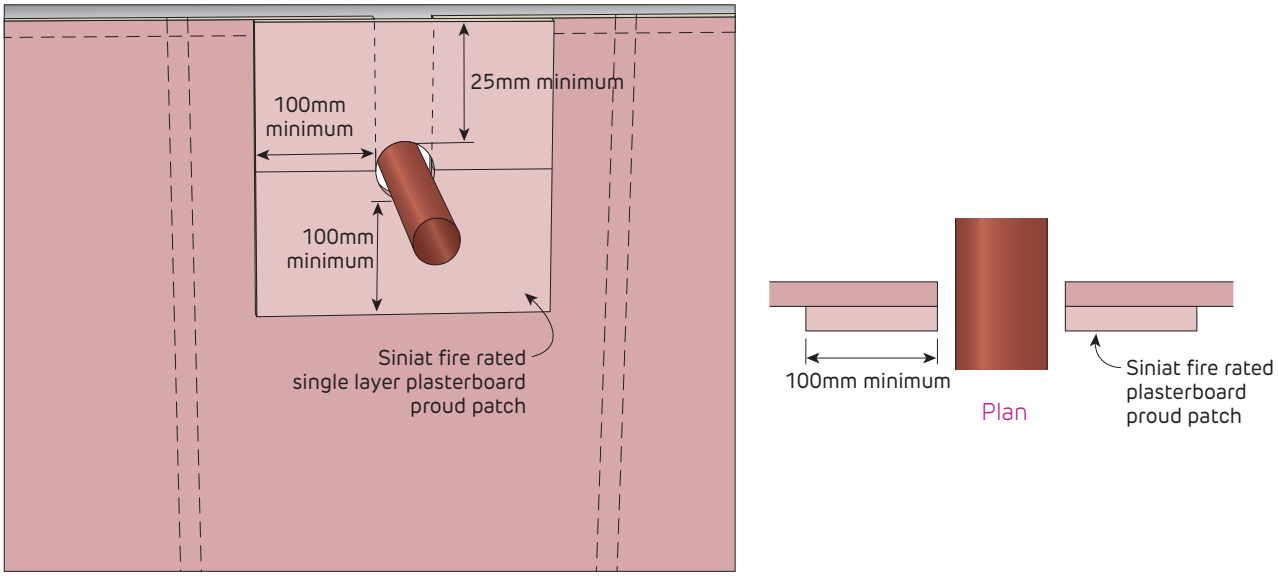


FIGURE 218 Flush patch with the lining with pipe penetration
Maximum 250mm diameter pipe - FRL depends on selected proprietary penetration seal

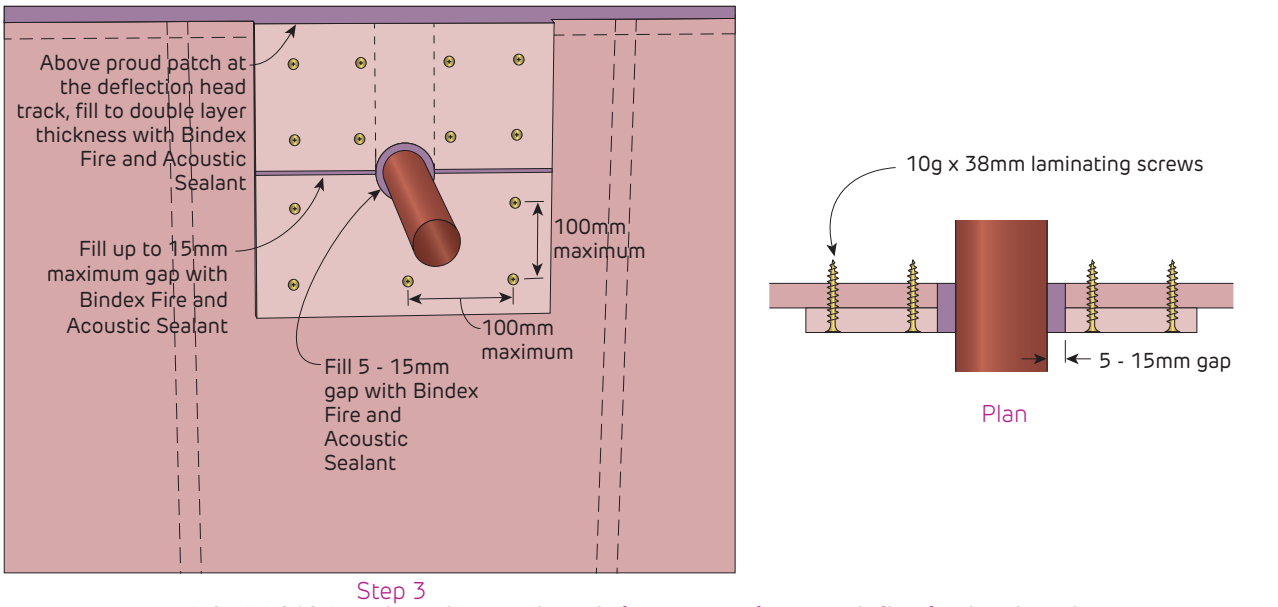
Fire Rated
Patching of Pipe Near Deflection Head Track - Single Layer - 50mm or 60mm dia Steel Pipe



Step 1



Step 2

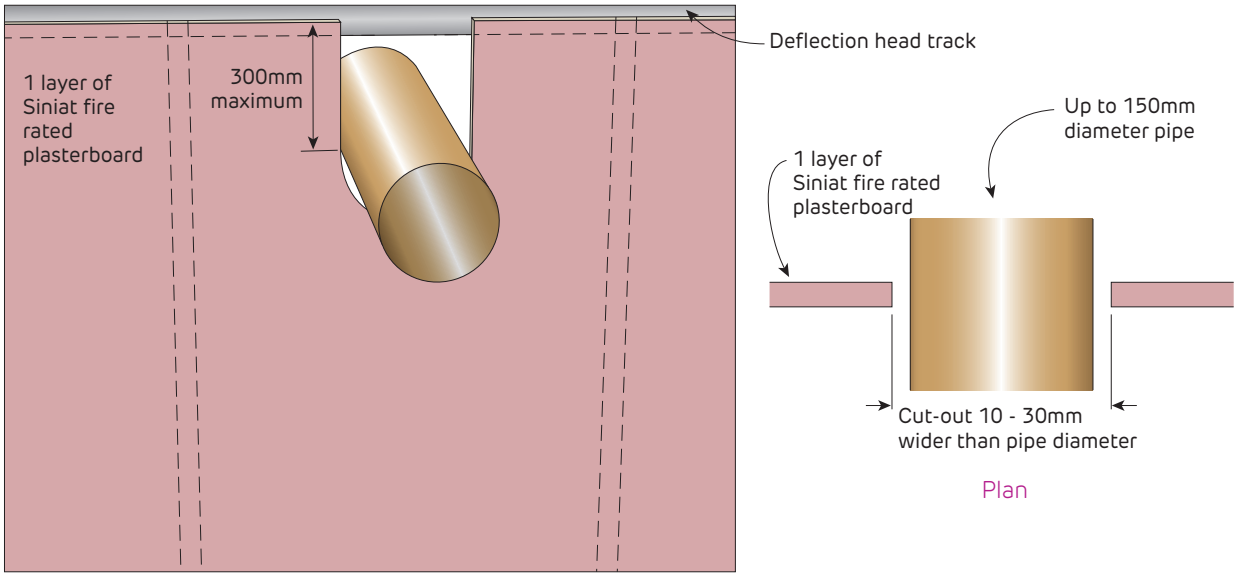


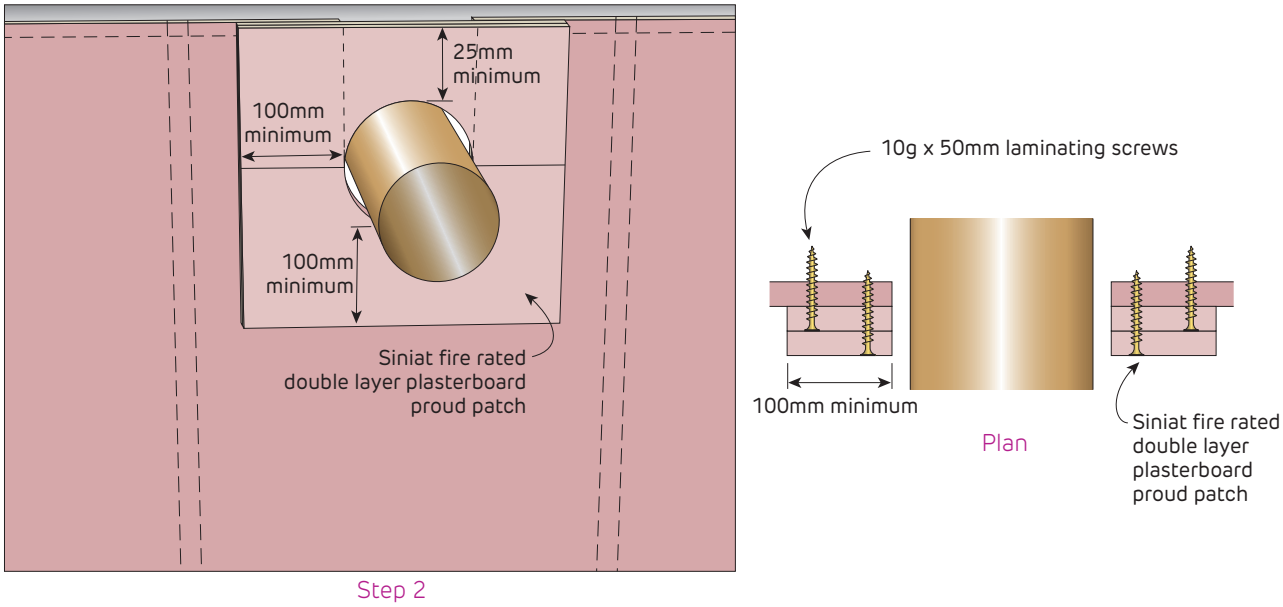
Step 3

FIGURE 219 **Proud patch around steel pipe penetration near deflection head track**
Maximum 60mm diameter pipe - FRL -/60/30

Fire Rated

Patching of Pipe Near Deflection Head Track - Single Layer - Maximum 150mm Metal Pipe





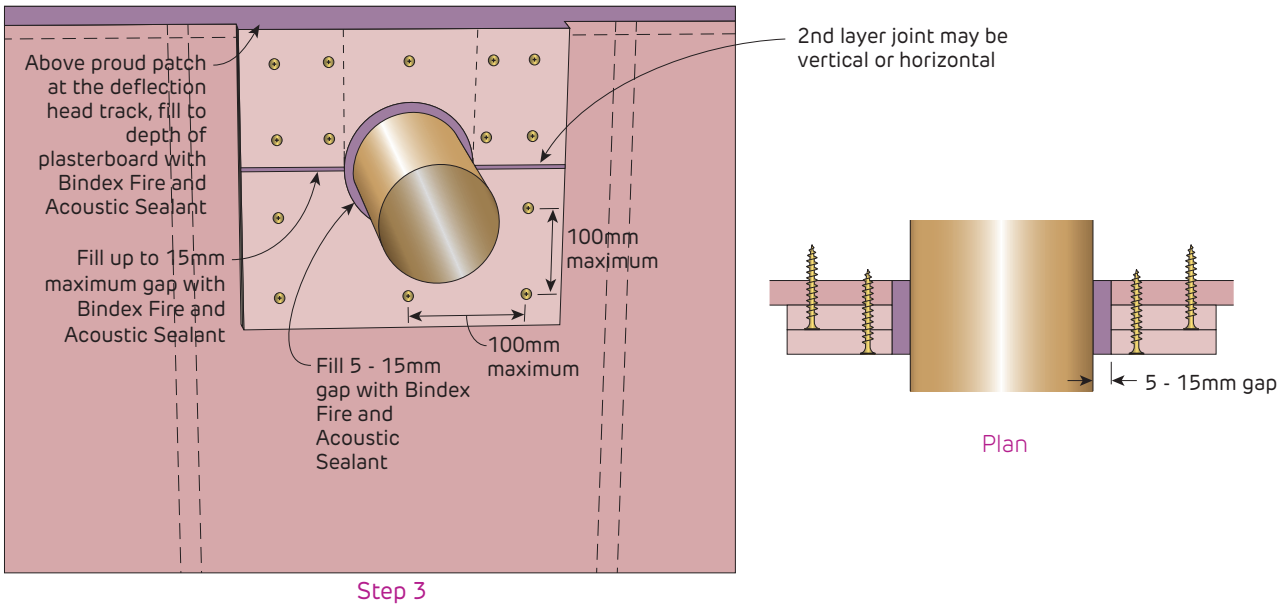


FIGURE 220 **Proud patch around metal pipe penetration near deflection head track**
Maximum 150mm pipes as per Table 19, FRL -/180/- or -/180/120 with Supawrap 40 as previously shown, with FRL limited by wall FRL

Fire Rated
Patching of Pipe Near Deflection Head Track - 2 Layers - Maximum 150mm Metal Pipe

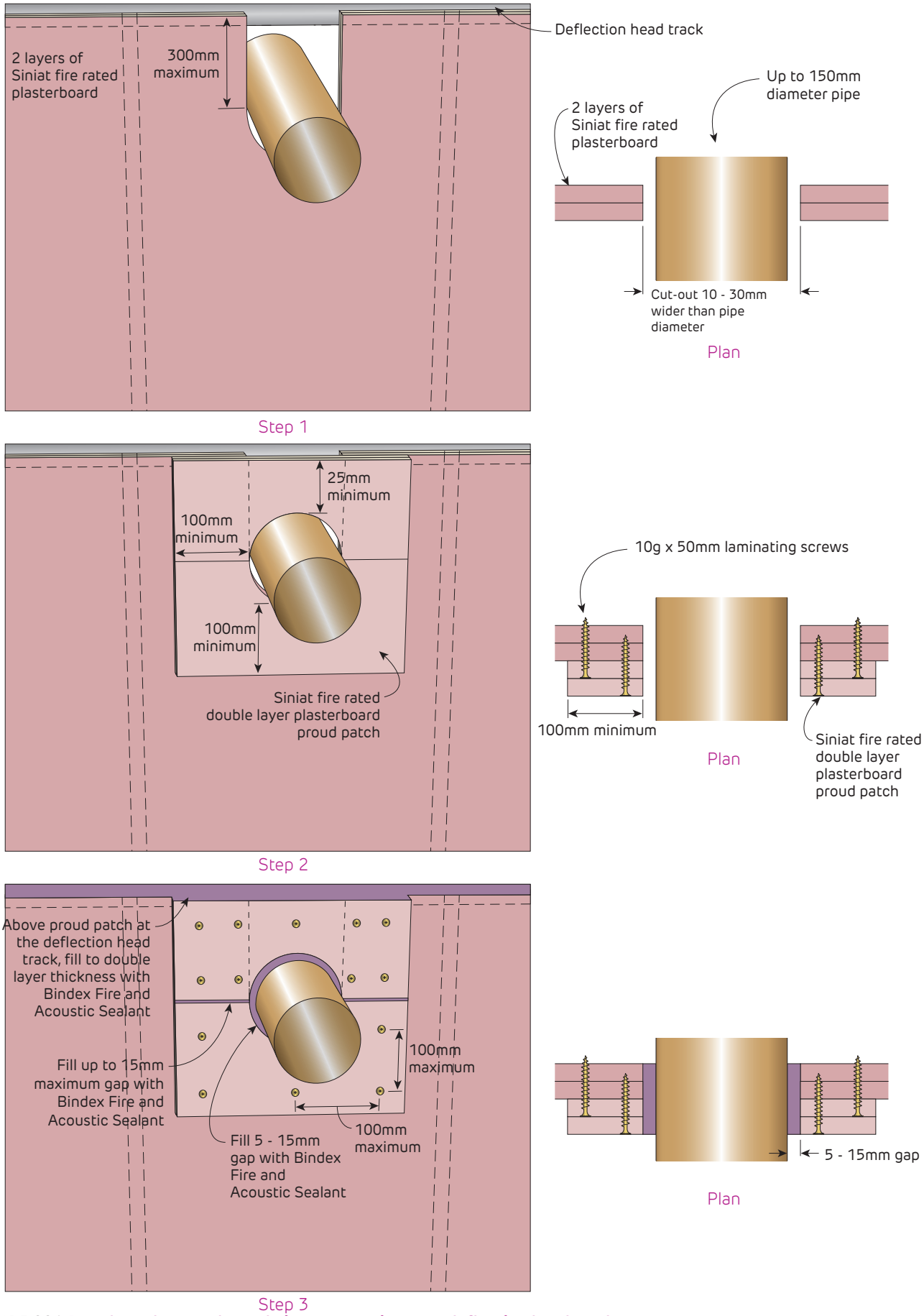


FIGURE 221 **Proud patch around metal pipe penetration near deflection head track**
Maximum 150mm pipes as per Table 19, FRL -/180/- or -/180/120 with Supawrap 40 as previously shown, with FRL limited by wall FRL

Fire Rated
PVC Pipe Penetration Detail for Stud Walls

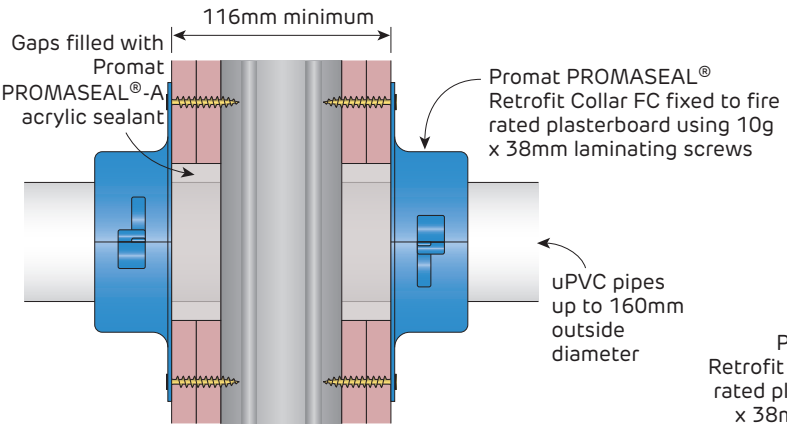


FIGURE 222 Fire Collar for Plastic Pipes
Promat Promaseal FC Retrofit Collar
Up to FRL -/120/120 - Section

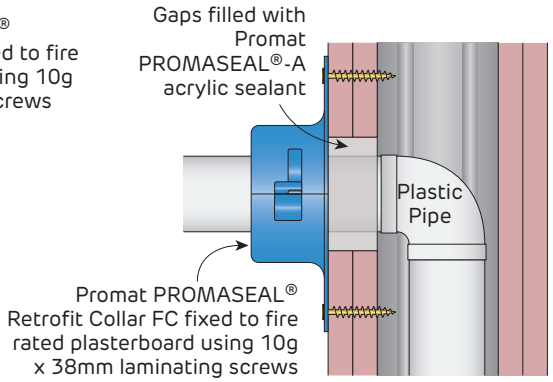


FIGURE 223 Fire Collar for Plastic Pipes
Promat Promaseal FC Retrofit Collar
Up to FRL -/120/120 - Section

Refer to Promat for specific performance and installation instructions

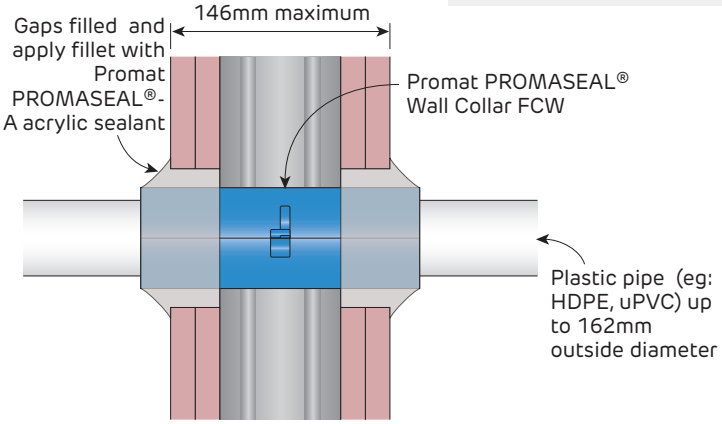


FIGURE 224 Fire Collar for Plastic Pipes
Promat Promaseal Wall Collar
Up to FRL -/120/120 - Section

Refer to proprietary fire product manufacturer for performance and installation detail as well as approval for use in the selected building element

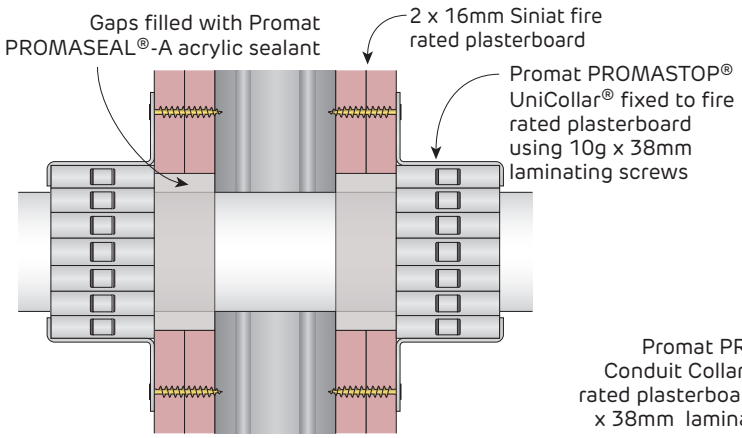


FIGURE 225 Fire Collar for Plastic Pipes
Promat Promastop UniCollar
Up to FRL -/120/120 - Section

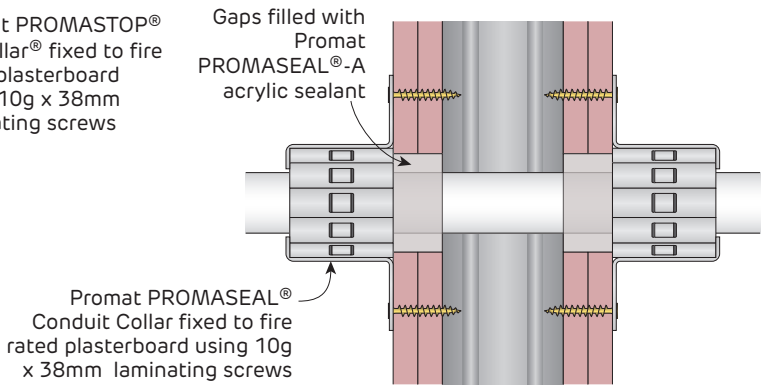


FIGURE 226 Fire Collar for Plastic Conduit
Promat Promaseal Conduit Collar
Up to FRL -/120/120 - Section

PVC pipe size limited to 100mm maximum diameter using Promastop UniCollar in FRL -/60/60 walls

Fire Rated
PVC Pipe Clash with Stud Walls

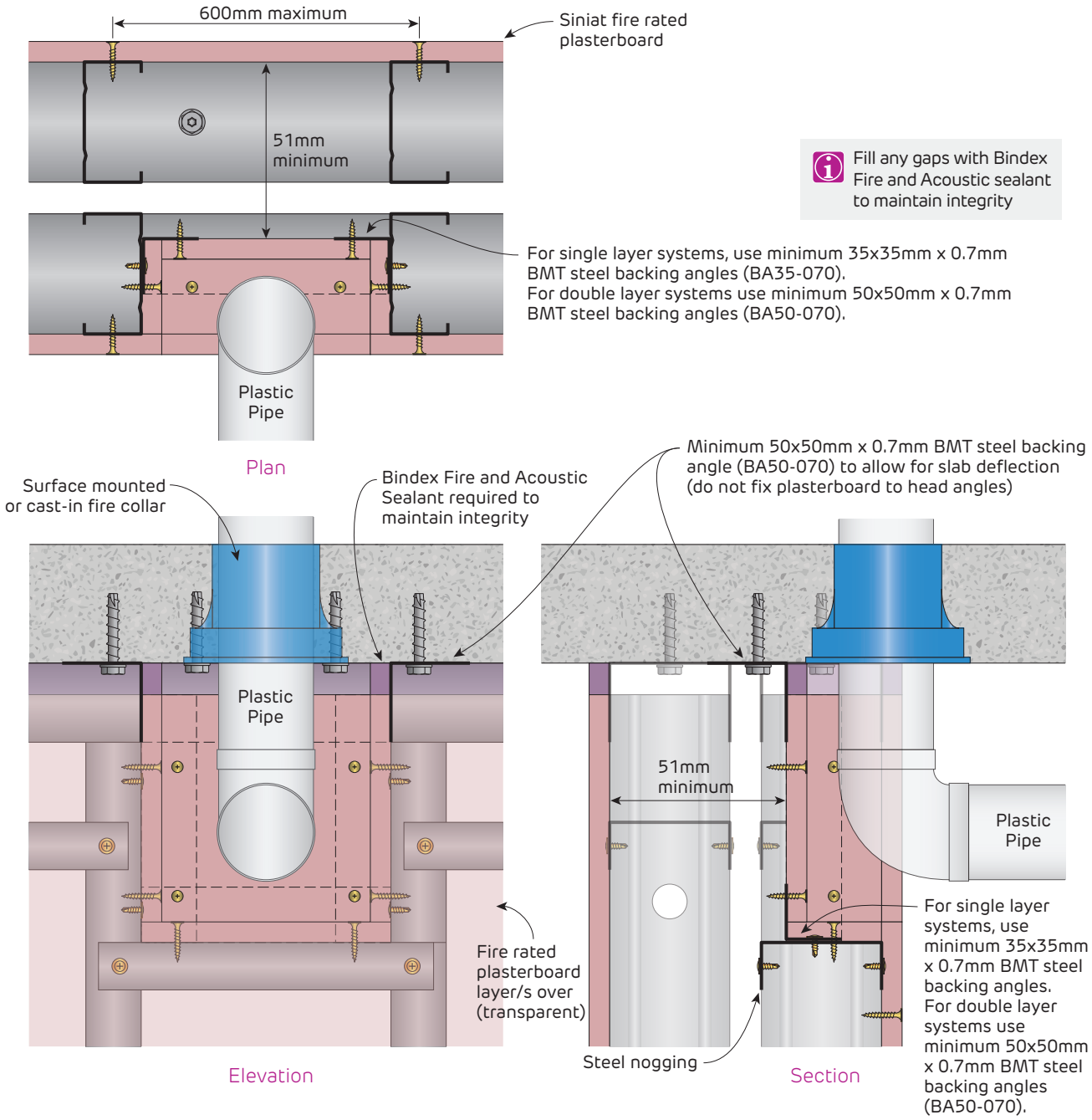


FIGURE 227 Alcove for Plastic Pipe clash through Head Track
Wall FRL 60/60/60 with 16mm fire rated plasterboard on both sides
Wall FRL 90/90/90 with 2 x 13mm fire rated plasterboard on both sides
Wall FRL 120/120/120 with 2 x 16mm fire rated plasterboard on both sides
Section

Fire Rated
PVC Pipe Clash with Stud Walls

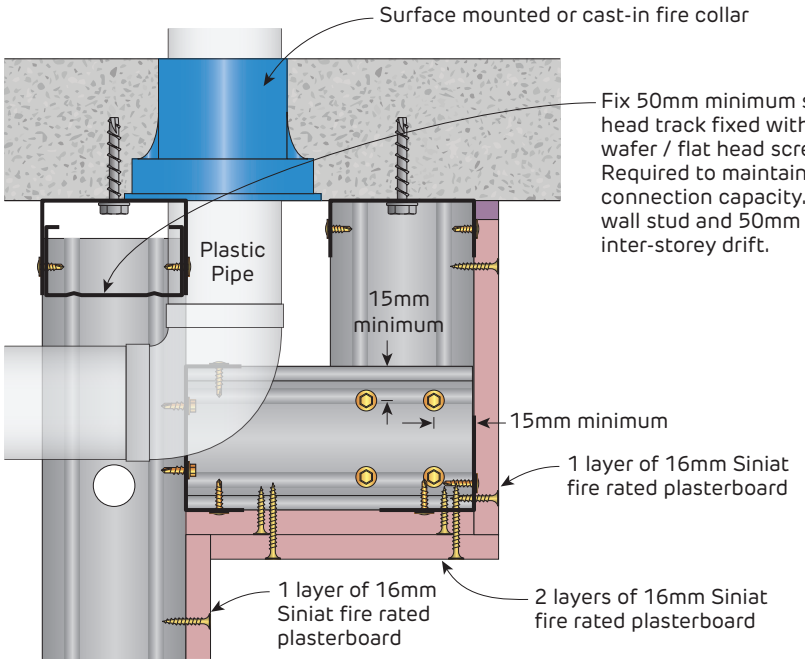


FIGURE 228 Bulkhead for Plastic Pipe clash
FRL -/60/60
Section

Refer to proprietary fire product manufacturer for performance and installation detail as well as approval for use in the selected building element

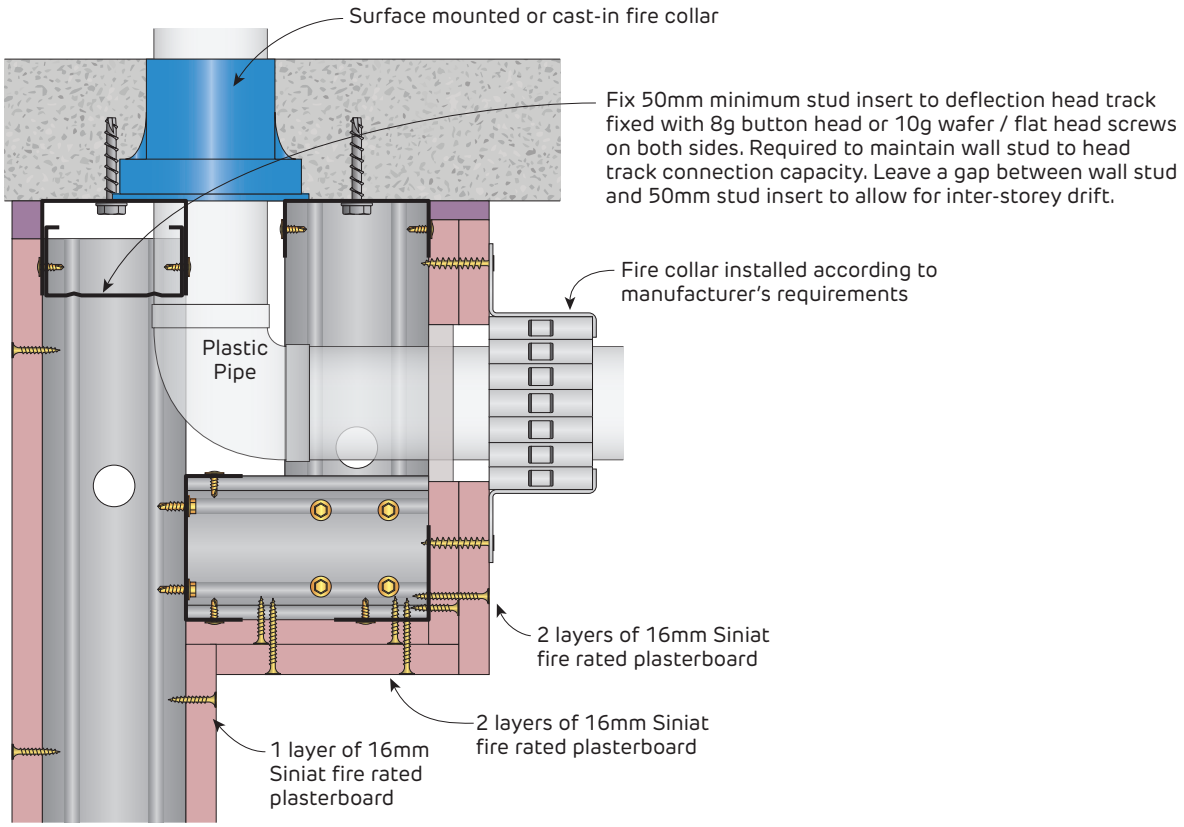


FIGURE 229 Fire Rated Bulkhead under Plastic Pipe Slab Penetration
FRL -/60/60
Section

Fire Rated
PVC Pipe Penetration Detail for Stud Walls

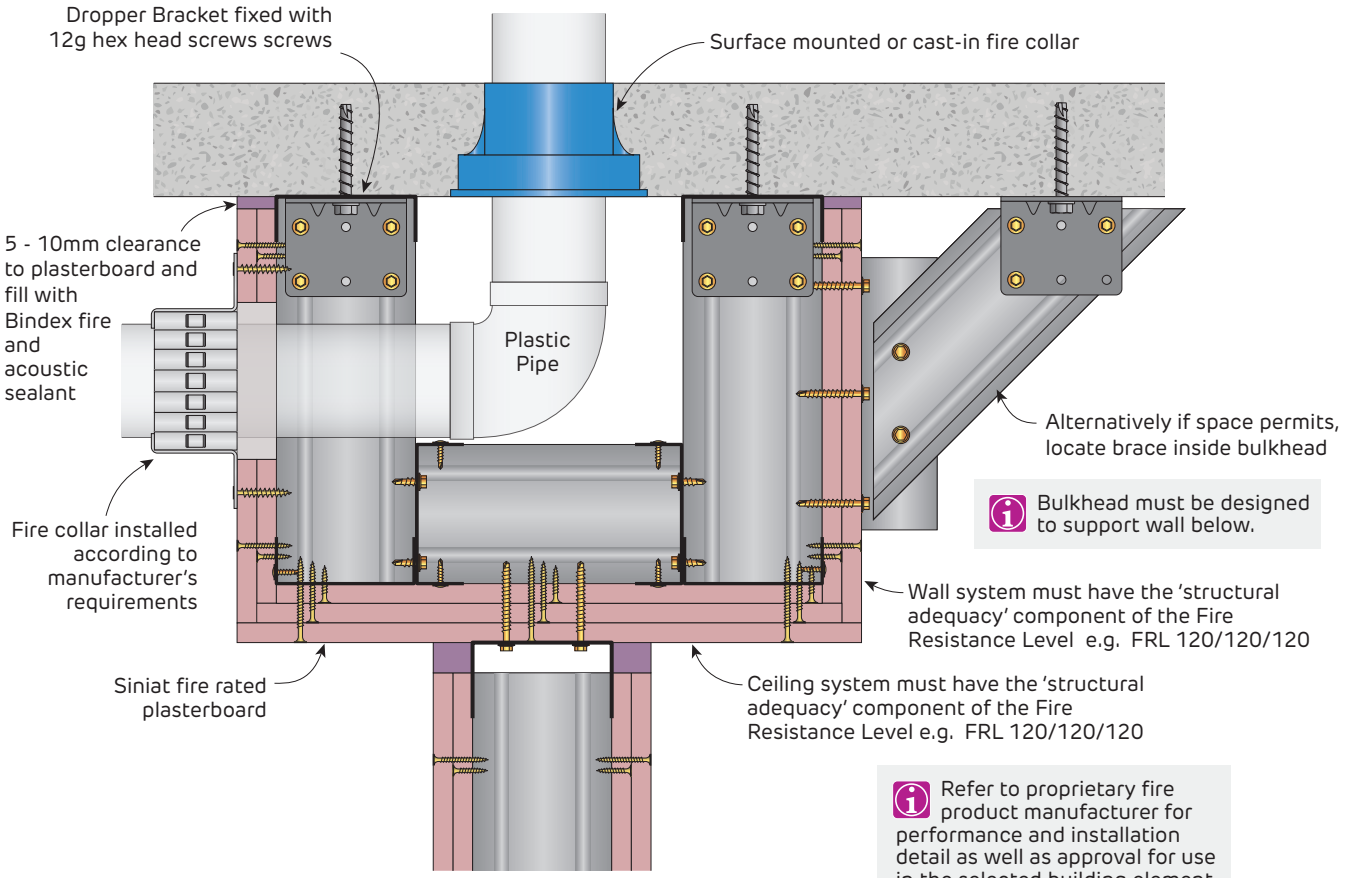


FIGURE 230 Fire Rated Bulkhead under Plastic Pipe Slab Penetration
Section

Fire Rated
Plasterboard Joints with Bindex Fire and Acoustic Sealant

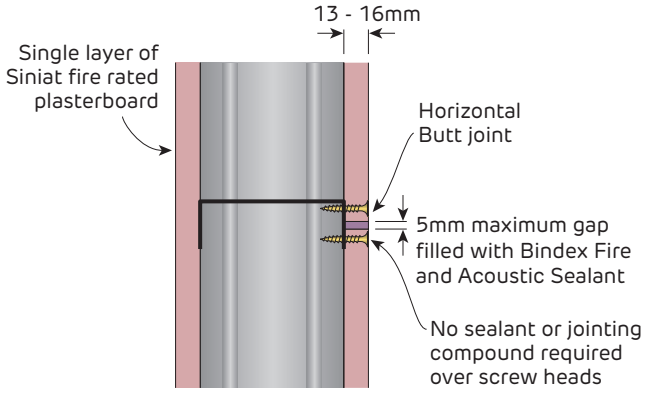


FIGURE 231 Horizontal Joints in Single Layer Wall Systems
Butt Joints Only
Section

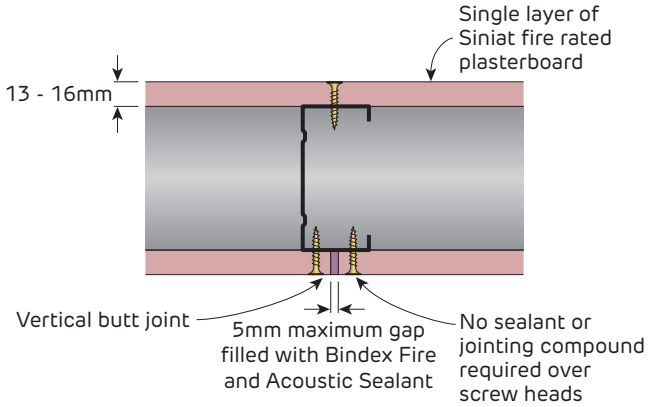


FIGURE 232 Vertical Joints in Single Layer Wall Systems
Butt Joints Only
Plan

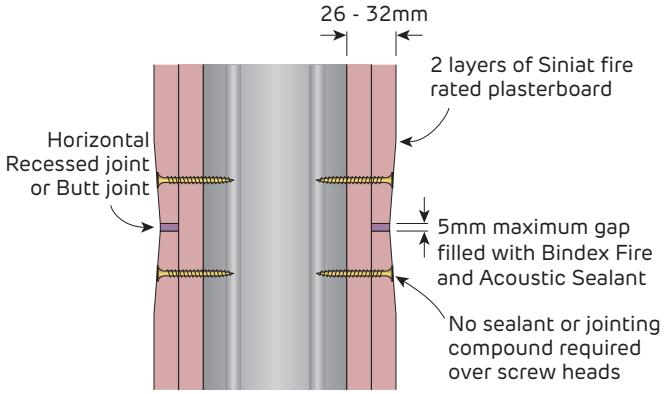


FIGURE 233 Horizontal Joints in Double Layer Wall Systems
Recessed and Butt Joints
Section

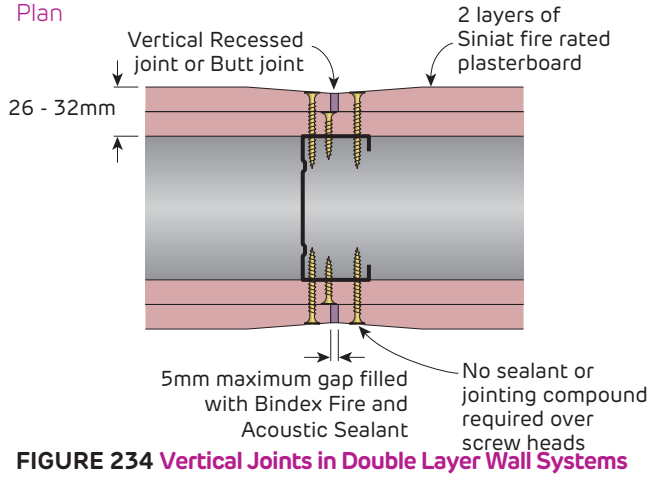


FIGURE 234 Vertical Joints in Double Layer Wall Systems
Recessed and Butt Joints
Plan

Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

Fire Rated
Fire Damper or Access Panel Opening Detail for Stud Walls

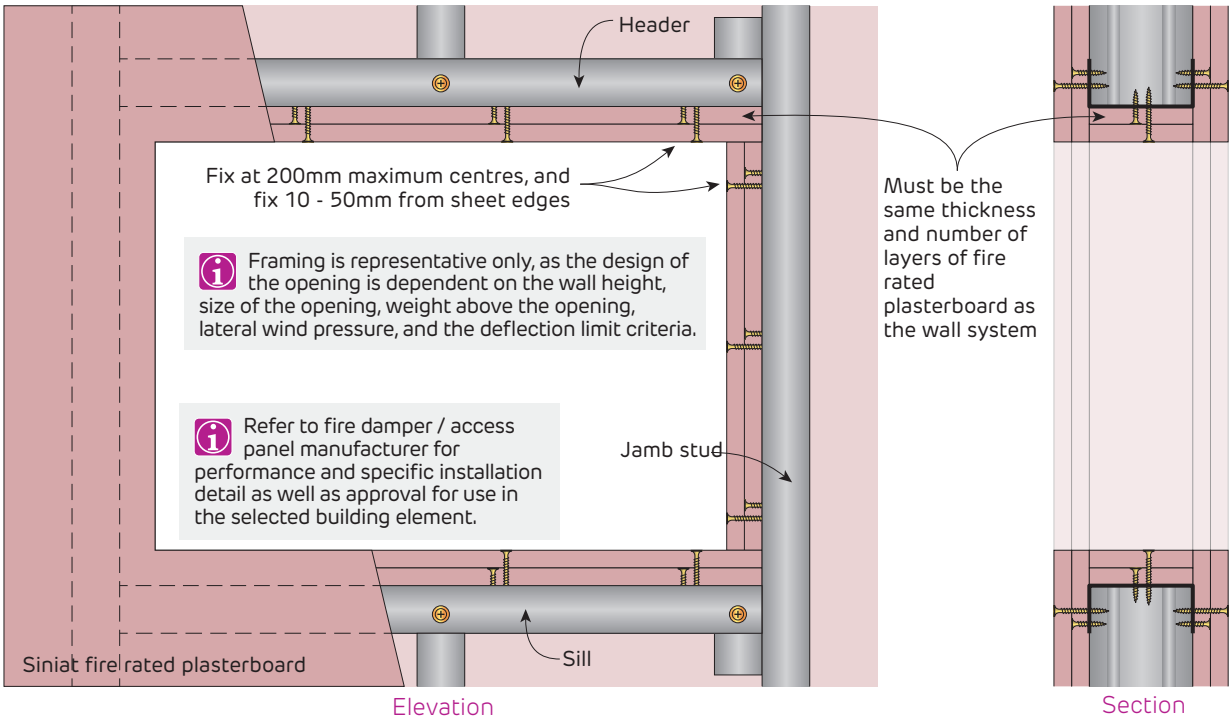


FIGURE 235 Typical Opening Detail for Fire Damper or Access Panel

Fire Rated and Non-Fire Rated
Plumbing Penetration Details for Stud Walls

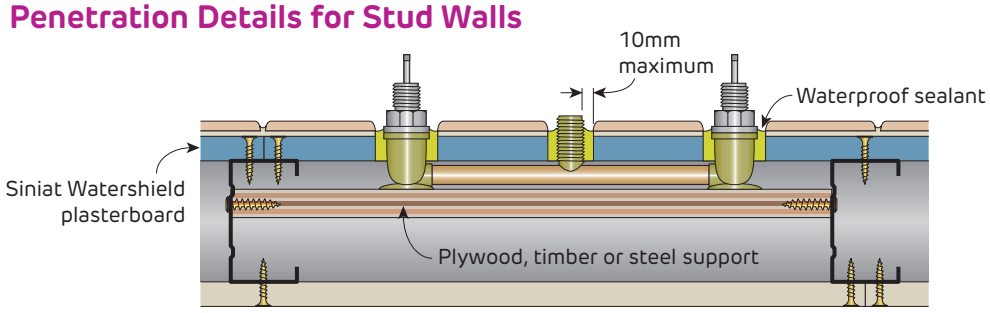


FIGURE 236 Plumbing Penetrations
Plan

Isolate copper and brass fitting from steel framing

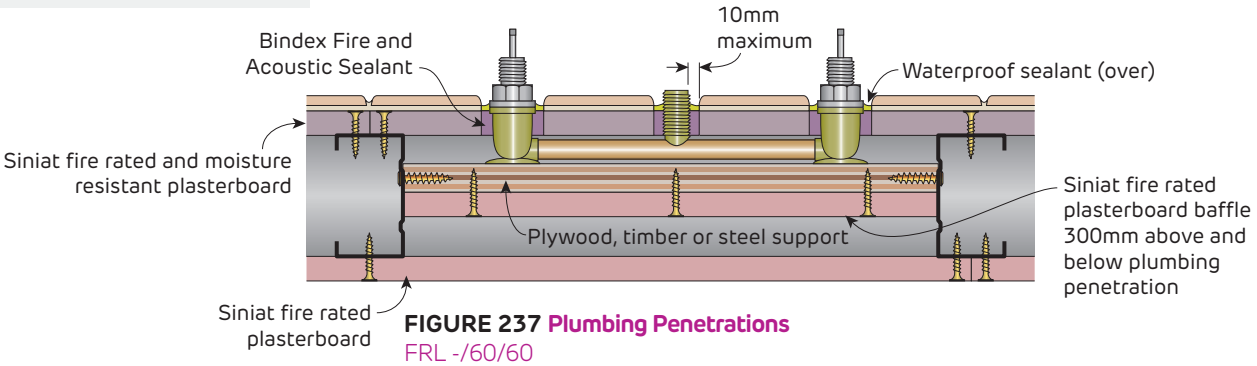


FIGURE 237 Plumbing Penetrations
FRL -/60/60
Fire rated single layer systems - Plan

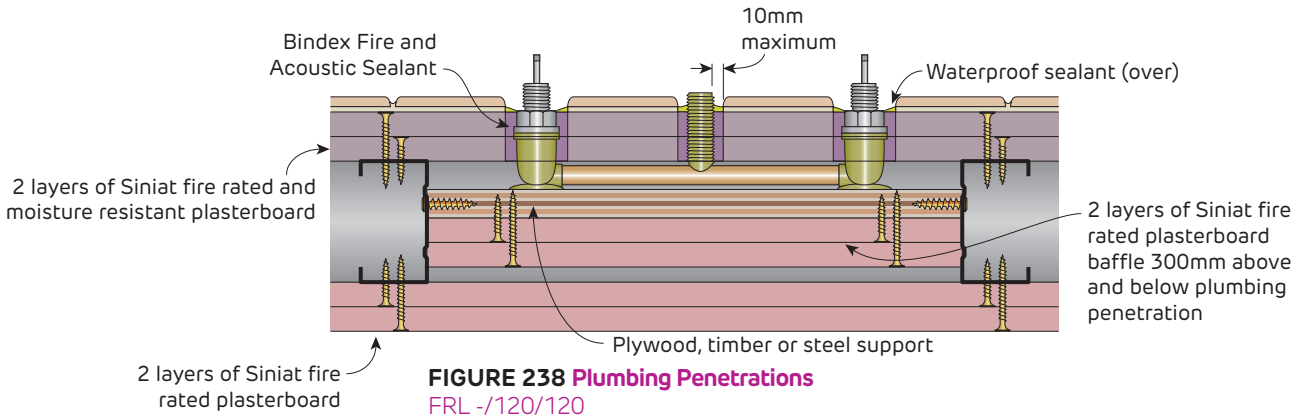


FIGURE 238 Plumbing Penetrations
FRL -/120/120
Fire rated double layer system - Plan

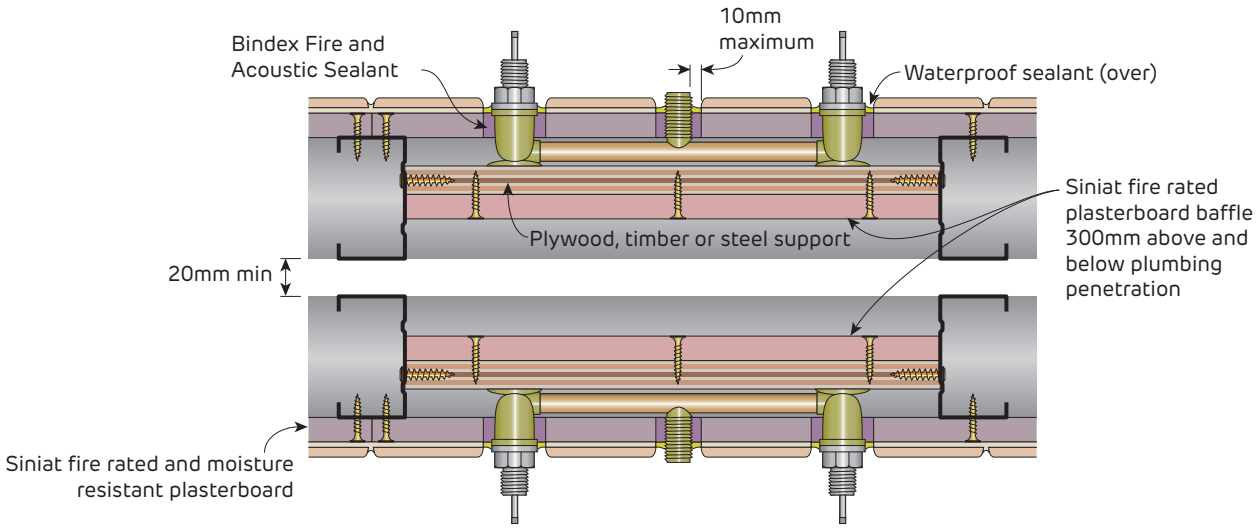


FIGURE 239 Plumbing Penetrations
FRL -/60/60
Fire rated single layer systems - Plan

Fire Rated
Plumbing Penetration Details for Stud Walls

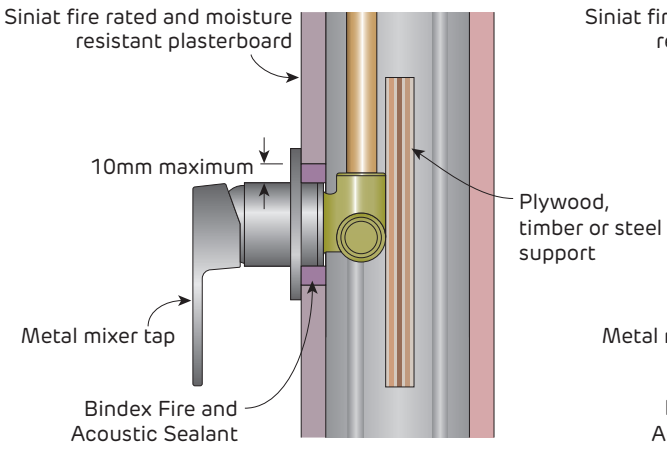


FIGURE 240 Plumbing Penetration
FRL -/60/-
Fire rated single layer systems - Section

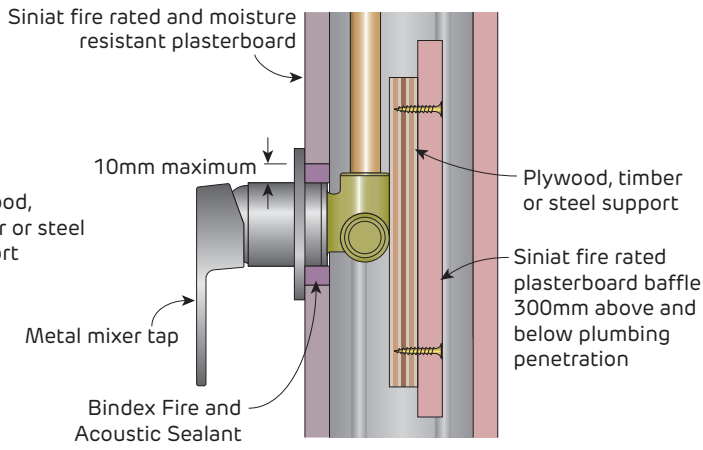


FIGURE 241 Plumbing Penetration
FRL -/60/60
Fire rated single layer systems - Section

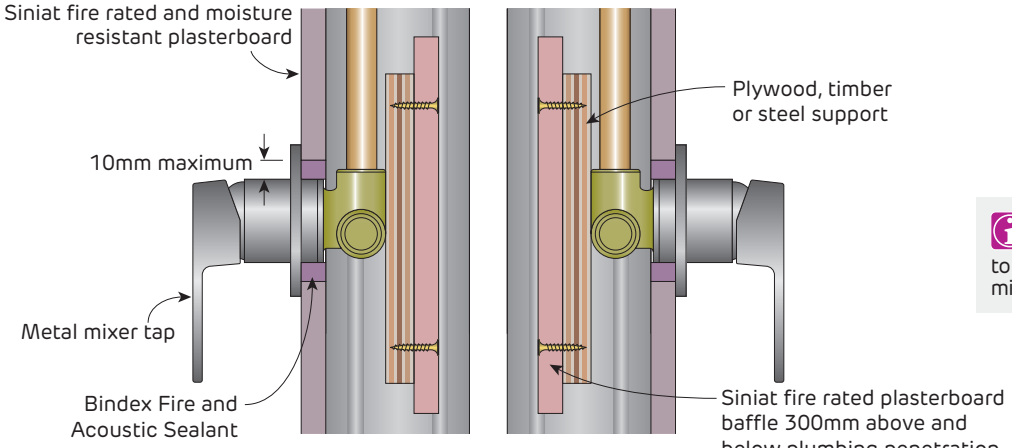


FIGURE 242 Back-to-back Plumbing Penetration
FRL -/60/60
Fire rated single layer systems - Section

Fire rated details on this page only apply to brass, copper, and steel mixer taps and tap sets.

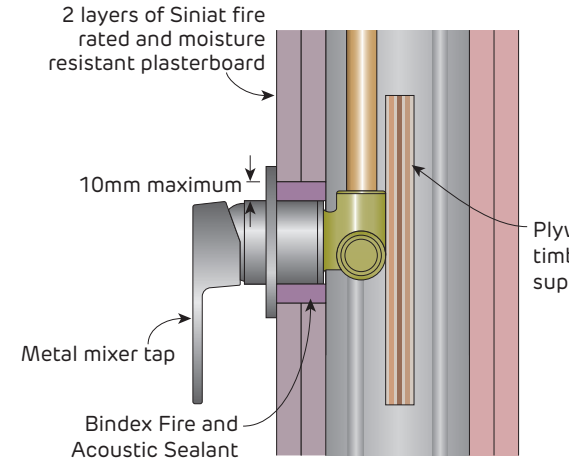


FIGURE 243 Plumbing Penetration
FRL -/120/-
Fire rated double layer systems - Section

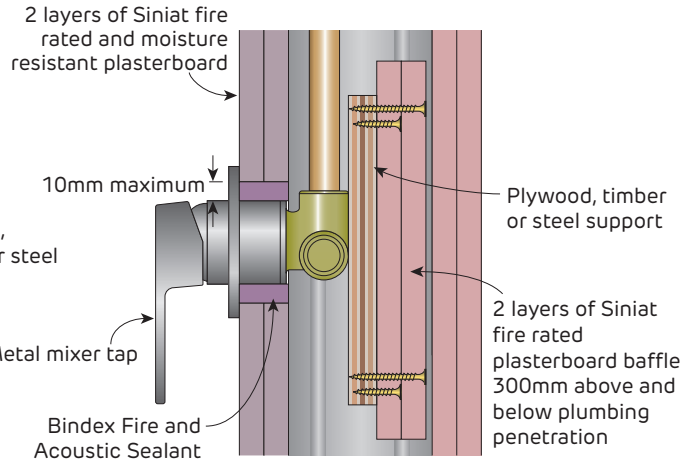
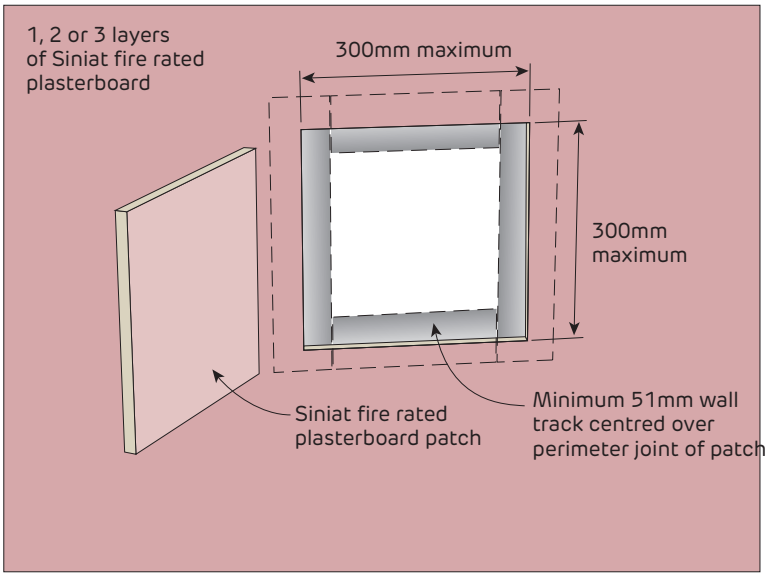
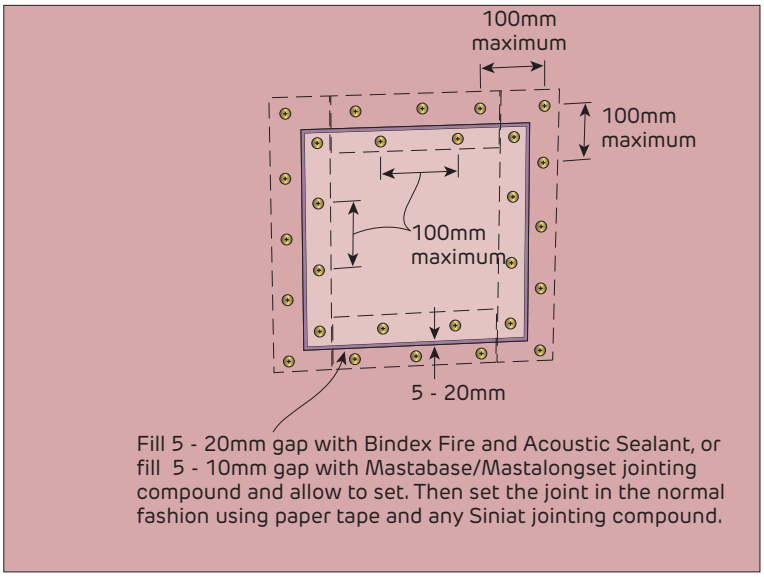


FIGURE 244 Plumbing Penetration
FRL -/120/120
Fire rated double layer systems - Section

Fire Rated
Flush Patching of Fire Rated Wall Systems - Maximum 300x300mm Opening



Step 1



Step 2

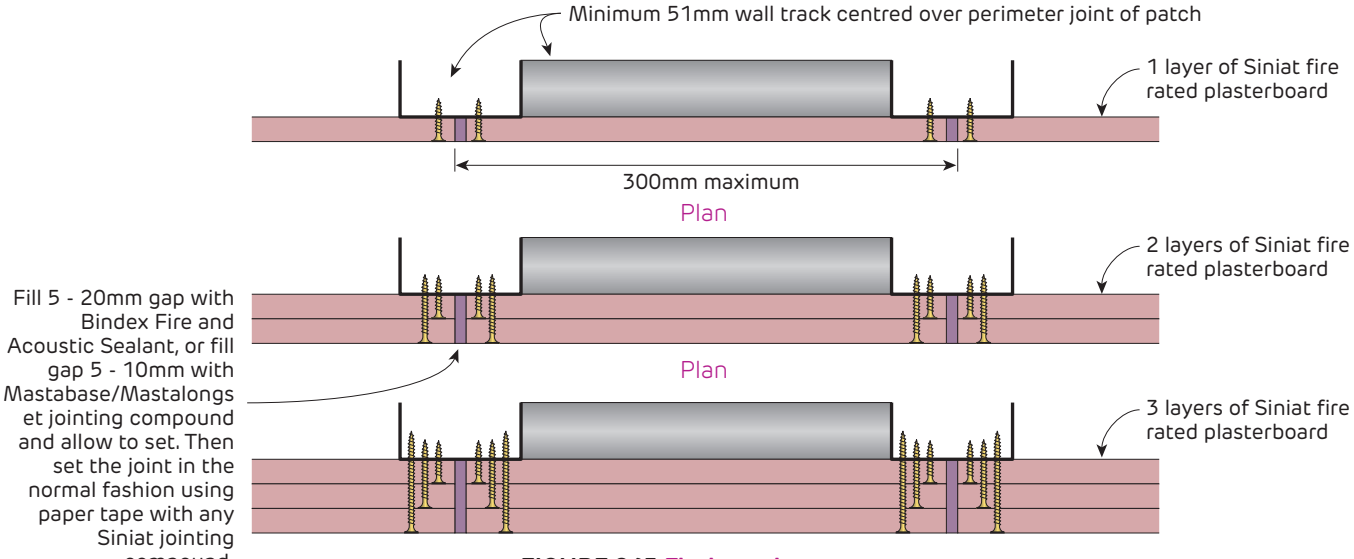
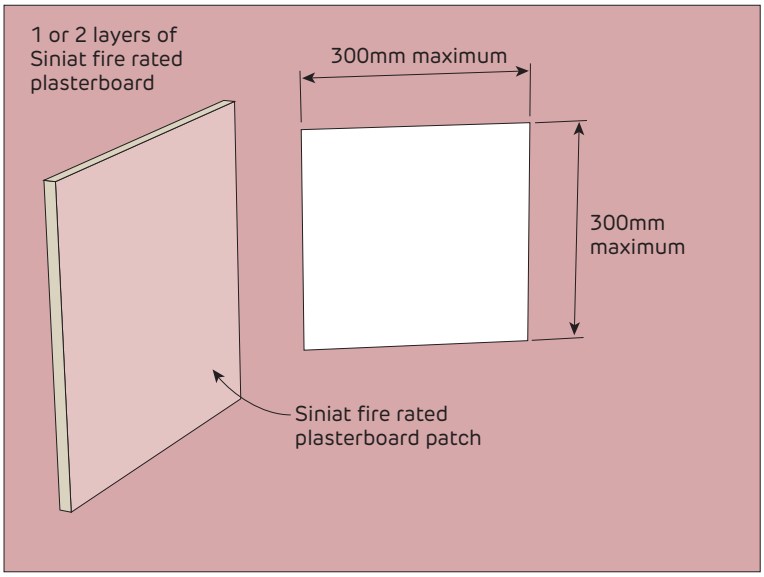
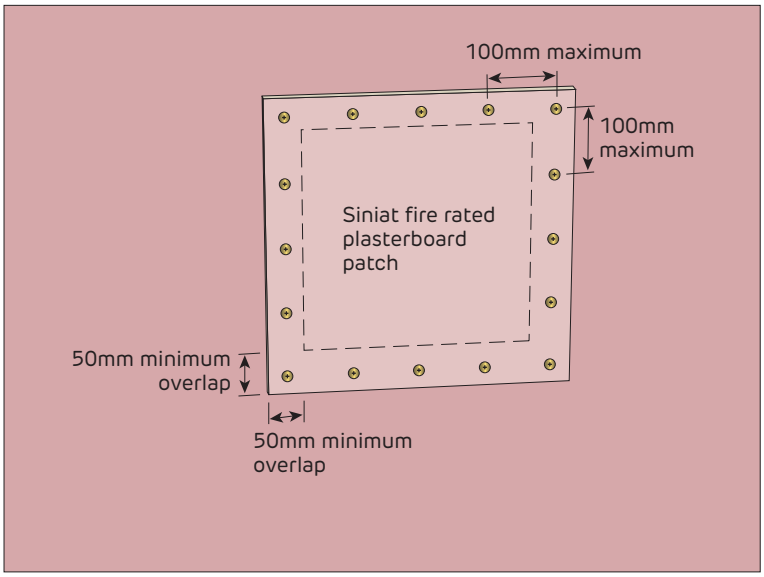


FIGURE 245 Flush patch
Maximum 300x300mm opening
Maintains FRL of system

Fire Rated
Proud Patching of Fire Rated Wall Systems - Maximum 300x300mm Opening

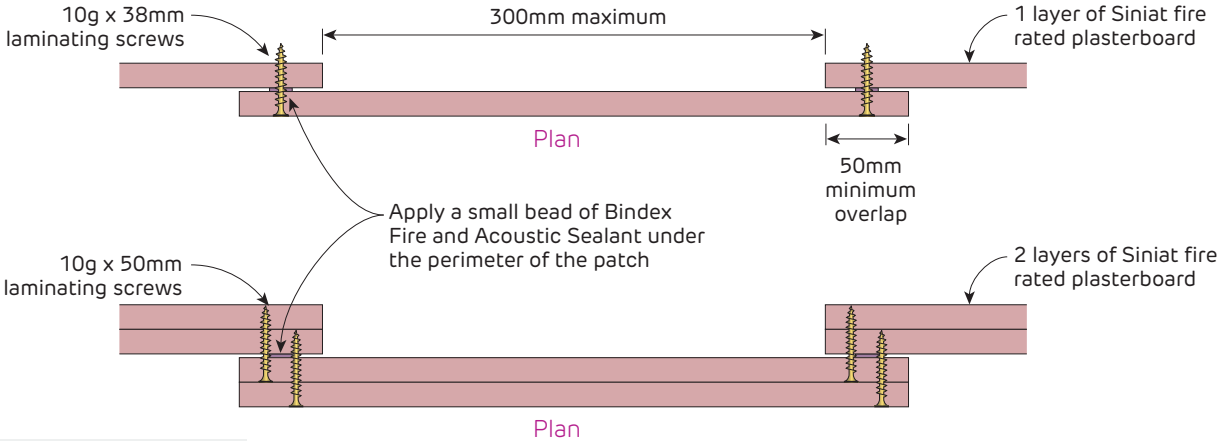


Step 1



Step 2

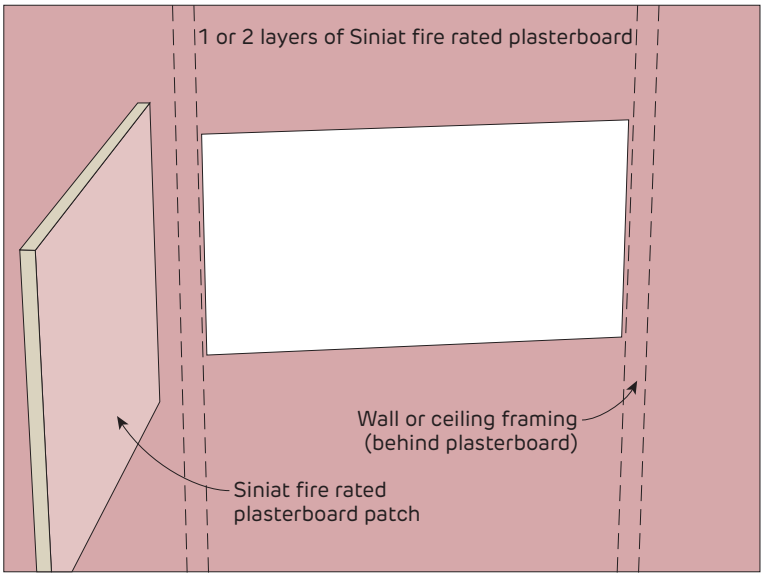
Fire rated plasterboard patch must be the same thickness and number of layers as the base fire rated system



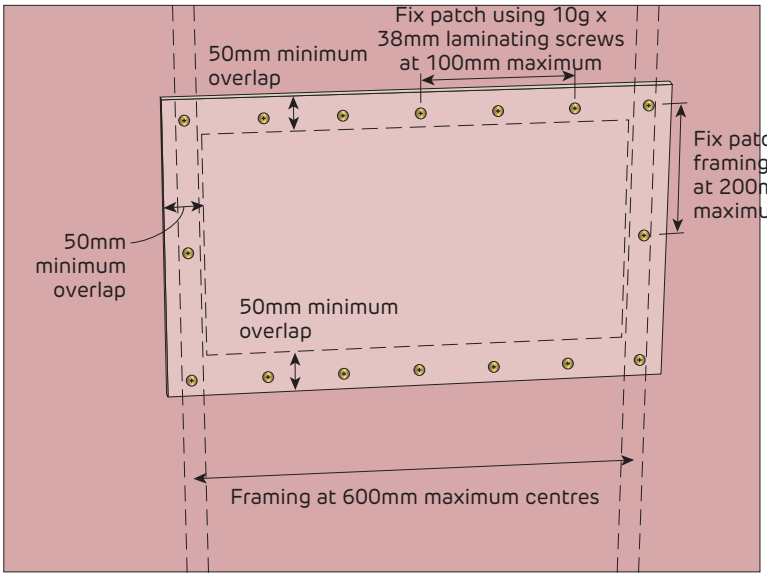
Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

FIGURE 246 Proud patch
Maximum 300x300mm opening

Fire Rated
Proud Patching of Fire Rated Wall Systems - Larger Openings



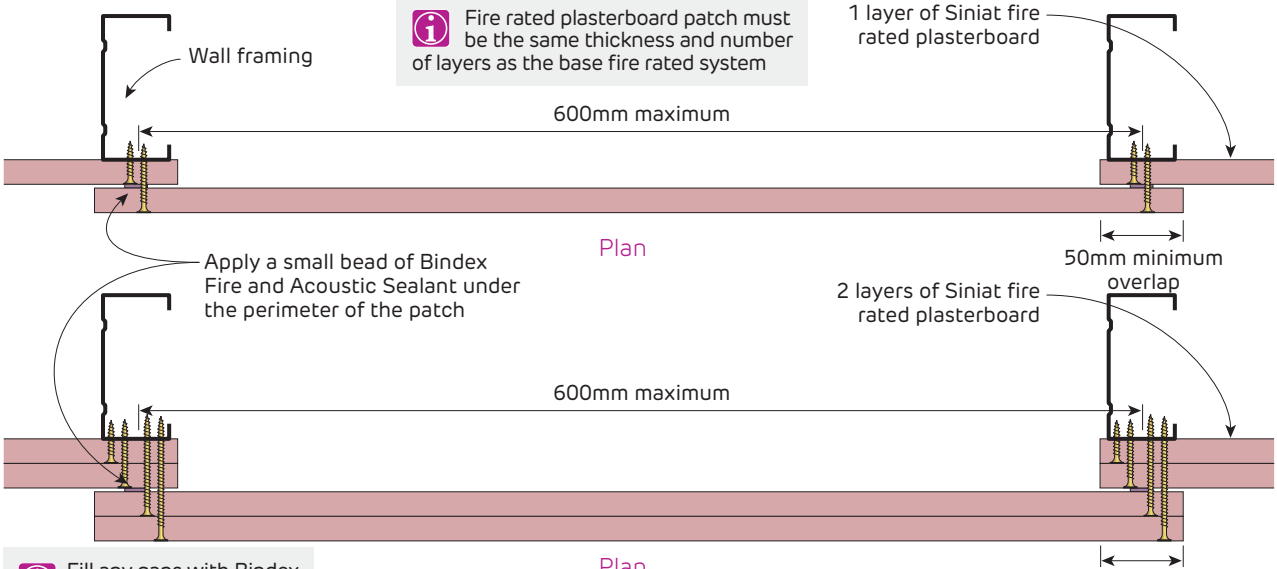
Step 1



Step 2

To repair a fire rated wall with holes larger than 300mm x 300mm and achieve a flush finish; follow the normal installation instructions to re-instate the system.

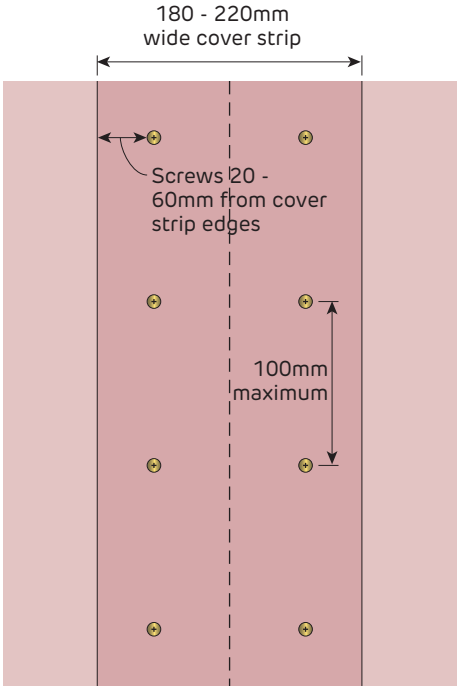
Fire rated plasterboard patch must be the same thickness and number of layers as the base fire rated system



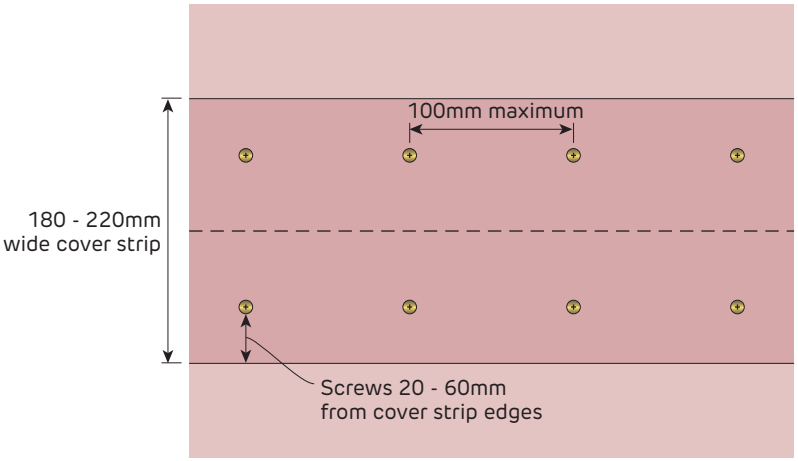
Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

FIGURE 247 Proud patch for larger openings
For openings larger than 300x300mm

Fire Rated
Patching of Fire Rated Wall Systems

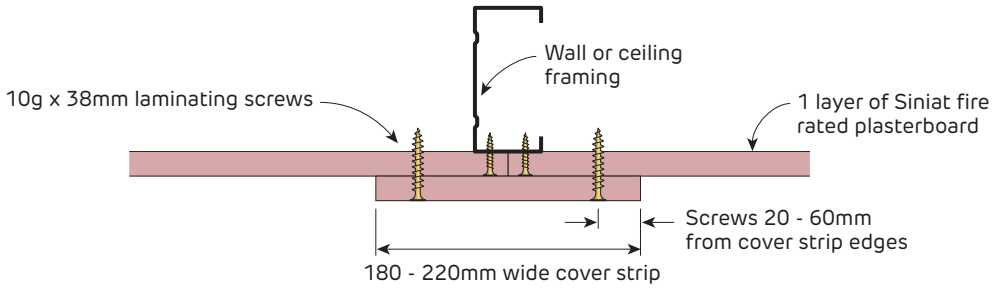


Vertical Joint - Elevation

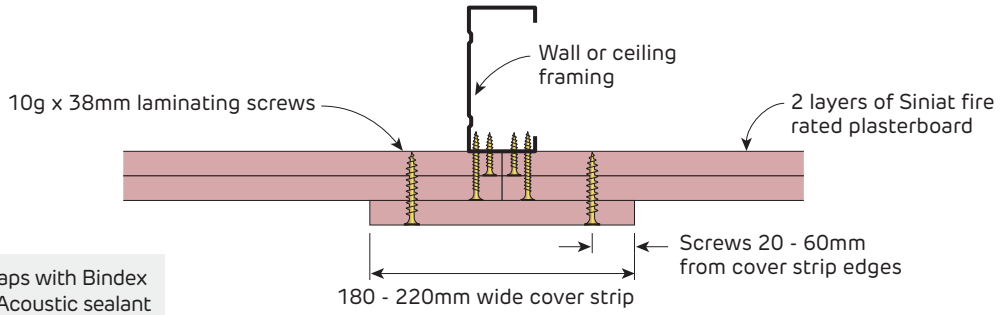


Horizontal Joint - Elevation

Cover strip over a fire rated plasterboard joint can compensate for:
- Joints not staggered in accordance with Siniat Technical Literature
- Use of fibre glass tape
- Incorrect jointing or no jointing material used.



Plan

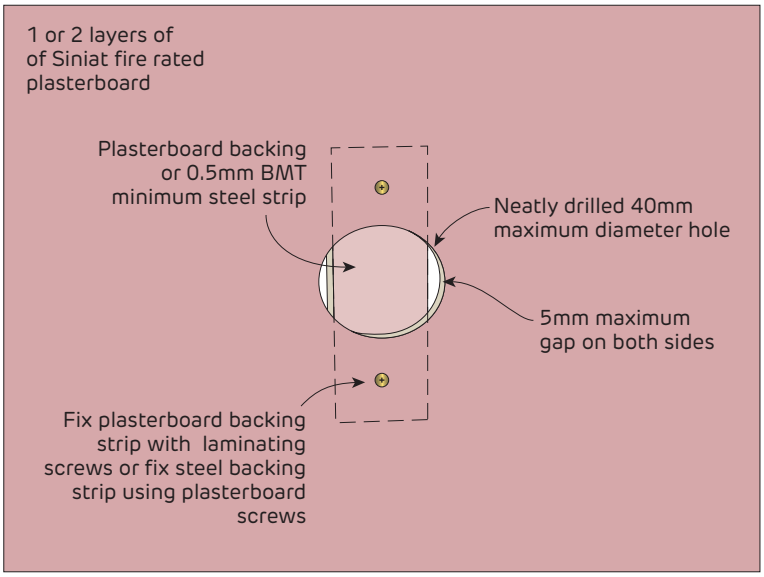


Plan

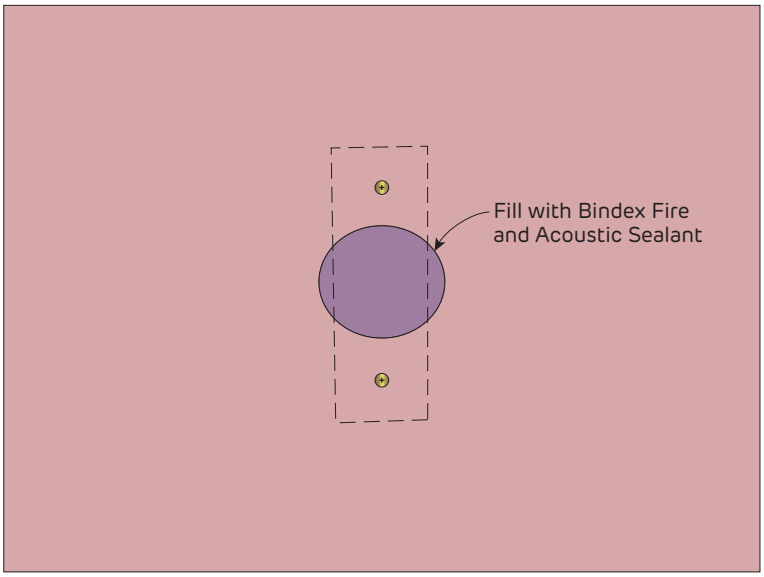
Fill any gaps with Bindex Fire and Acoustic sealant to maintain integrity

FIGURE 248 Cover Strip

Fire Rated
Sealing Fire Rated Wall Systems - Maximum 40mm Diameter Hole



Step 1



Step 2

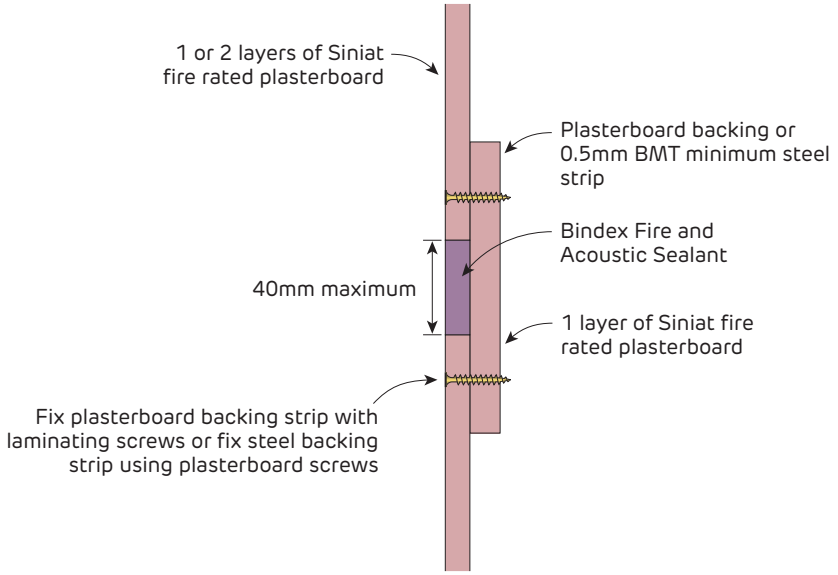


FIGURE 249 Sealing Hole in Fire Rated Plasterboard
Maintains FRL of wall system
Section

Fire Rated
Bulkhead Sealer System

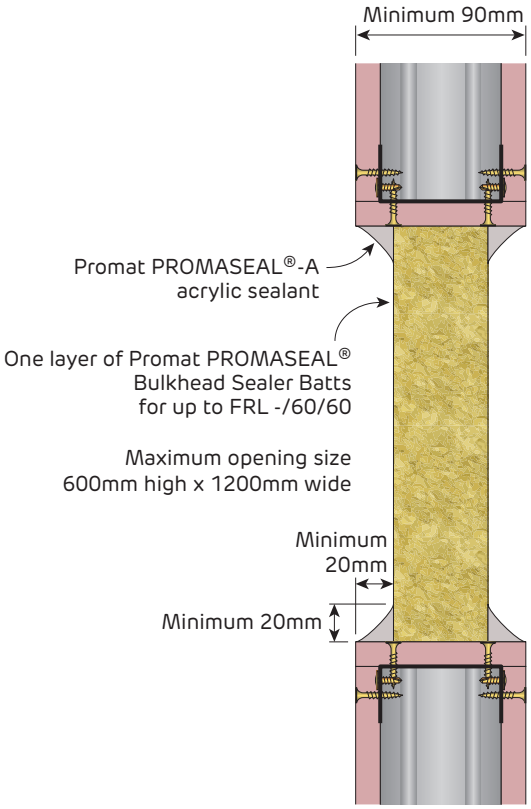


FIGURE 250
Bulkhead Sealer Batt One Layer
Section

Refer to Promat for allowable penetrations through Bulkhead Sealer Batt

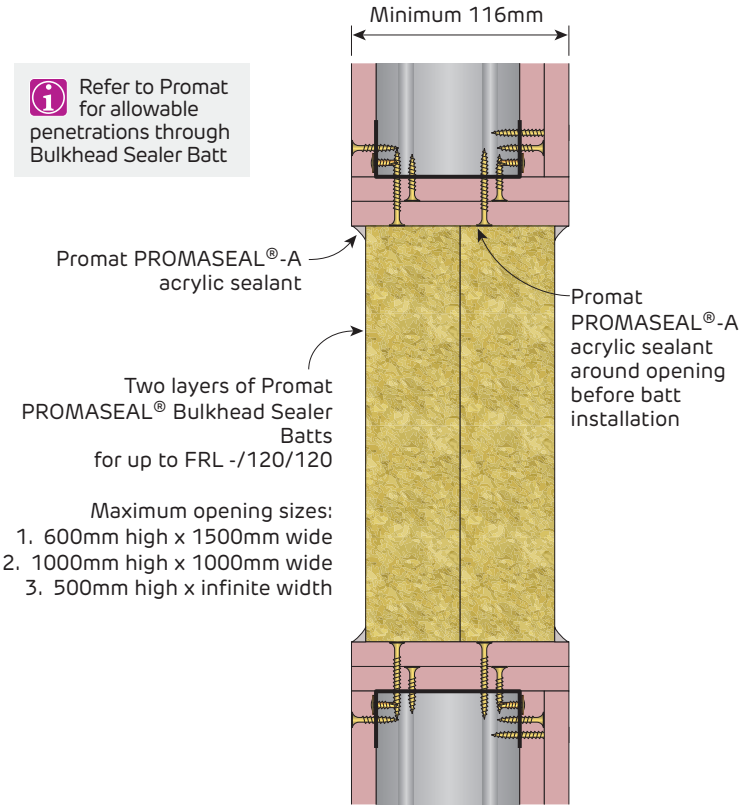


FIGURE 251
Bulkhead Sealer Batt Two Layers
Section

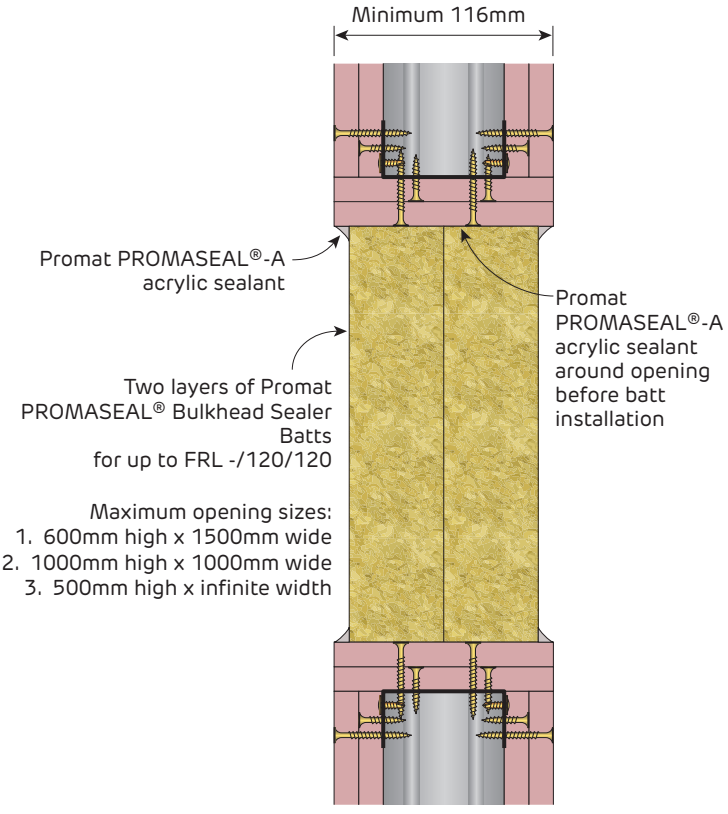


FIGURE 252
Bulkhead Sealer Batt Two Layers
Section

Fire Rated
Bulkhead Sealer System

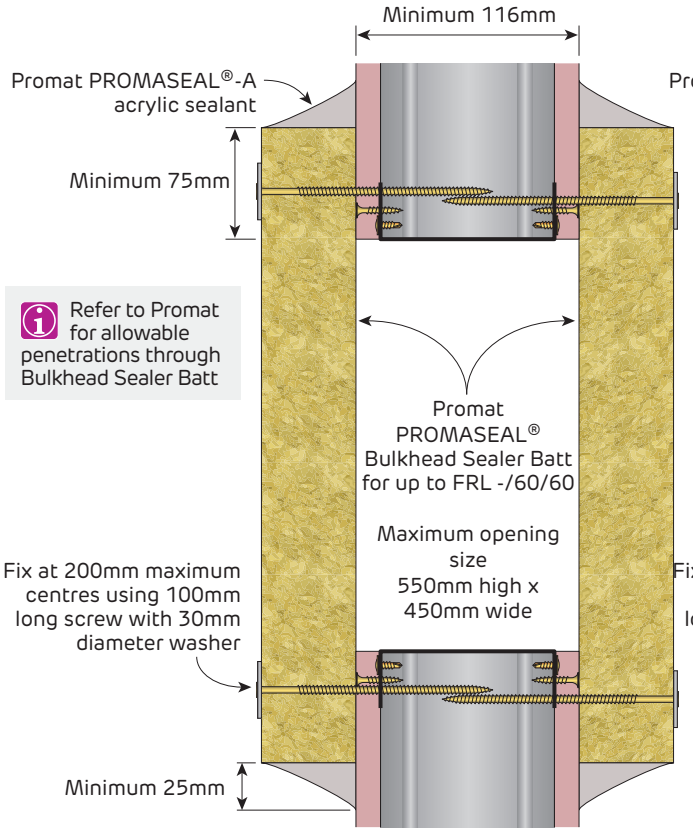


FIGURE 253
Bulkhead Sealer Batt Two Layers
Section

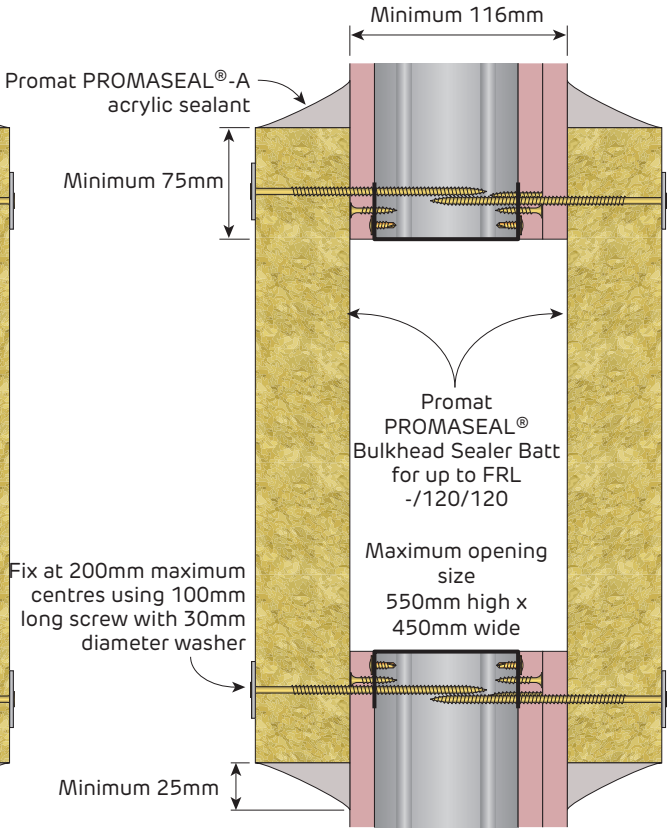


FIGURE 254
Bulkhead Sealer Batt Two Layers
Section

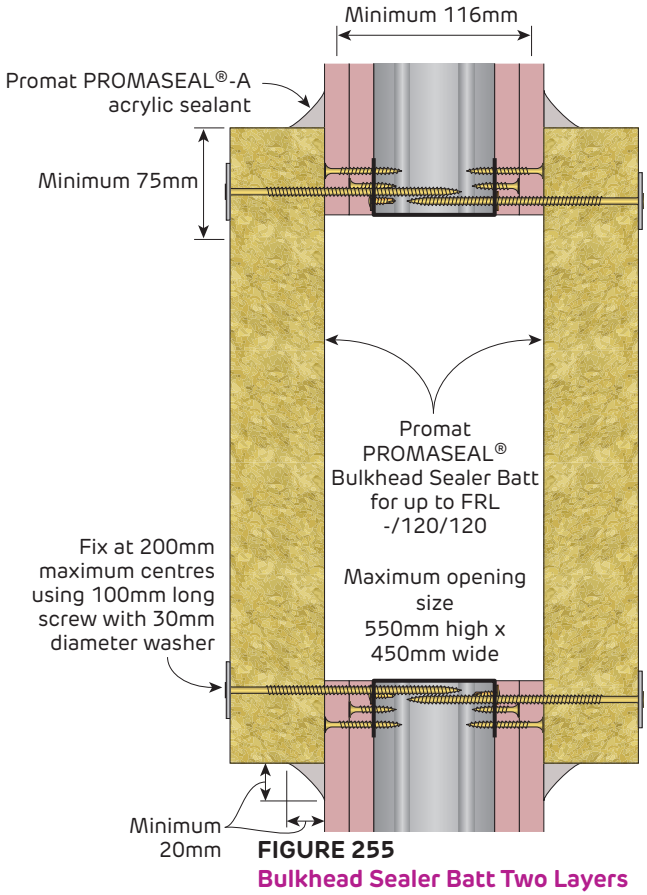


FIGURE 255
Bulkhead Sealer Batt Two Layers
Section

Non-Fire Rated
Light Duty Fixings to Plasterboard

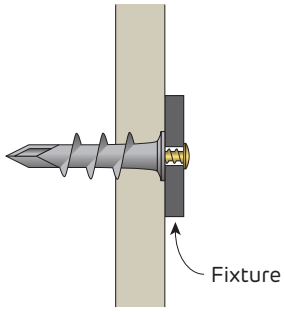


FIGURE 256
Plasterboard Screw
Section

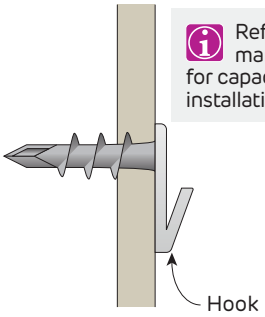


FIGURE 257
Plasterboard Screw
Section

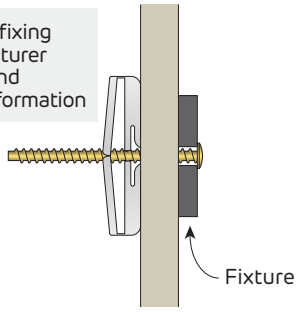


FIGURE 258
Nylon Toggle
Section

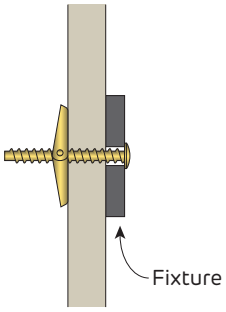


FIGURE 259
Toggle Bolt
Section

Fire Rated or Non-Fire Rated
Medium Duty Fixings to Wall Framing

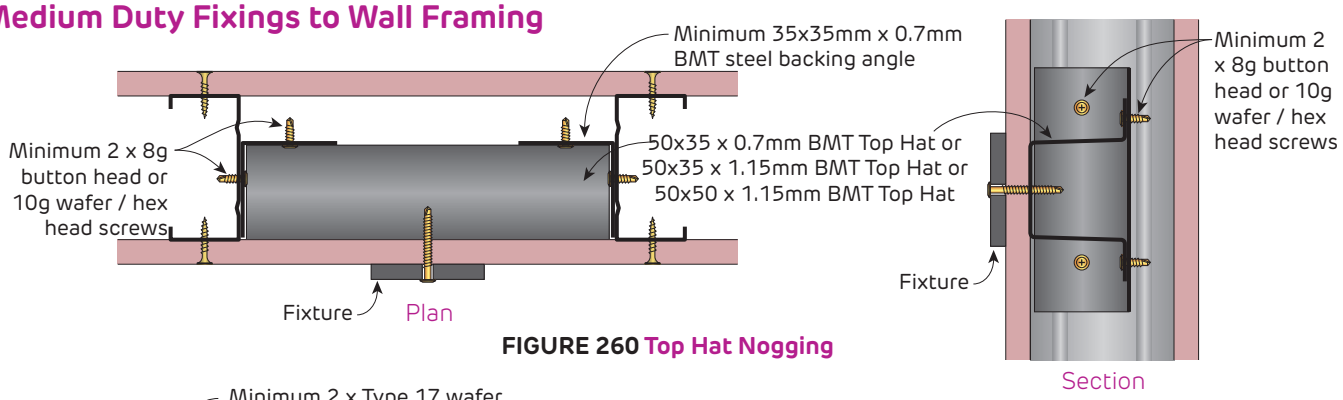


FIGURE 260 Top Hat Nogging

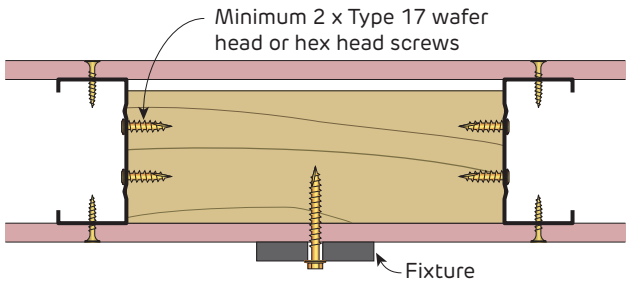


FIGURE 261 Timber Nogging
Plan

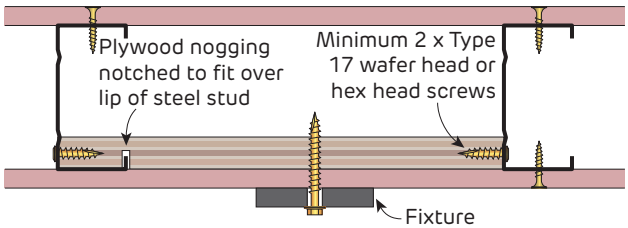


FIGURE 262 Plywood Nogging
Plan

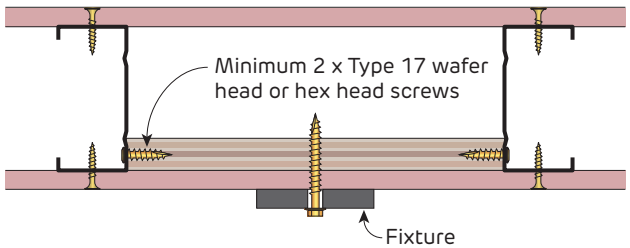


FIGURE 263 Plywood Nogging
Plan

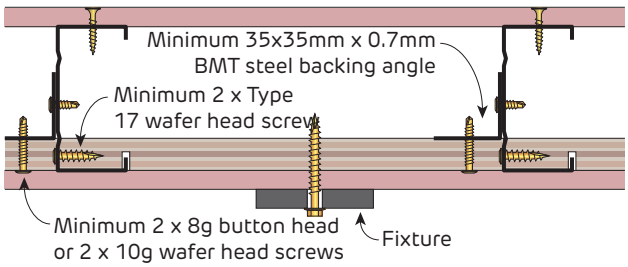


FIGURE 264 Continuous Plywood Nogging
Plan

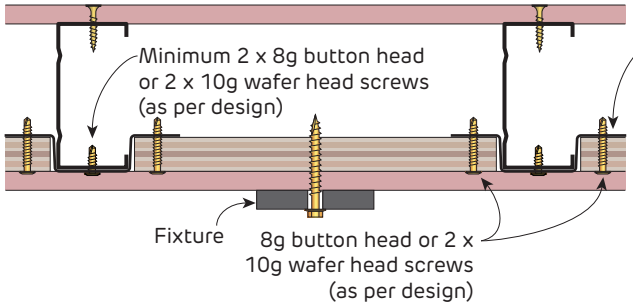


FIGURE 265 Timber Nogging Bracket
Plan

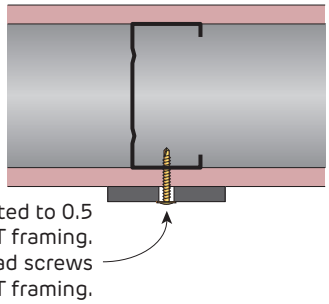


FIGURE 266 Stud Fixing
Plan