

CERTIFICATE OF APPROVAL No CF 420A

This is to certify that, in accordance with TS00 General Requirements for Certification of Fire Protection Products The undermentioned products of

PROMAT UK LTD

The Sterling Centre, Eastern Road, Bracknell, Berkshire, RG12 2TD Tel: 01344 381 300 Fax: 01344 381 301

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT

TECHNICAL SCHEDULE

Promat UK Ltd Supalux Partitions & External, Walls TS49 Vertical and Horizontal Separating Elements

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight Chairman - Management Council

Issued: 21st July 2007 Reissued: 25th July 2012 Valid: 24th July 2017

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PROMAT UK LTD – Supalux Partitions and External Walls

- This approval relates to the use of the above partitions and external wall assemblies in providing fire resistance of up to 240 minutes integrity and insulation, as defined in BS 476: Part 22: 1987. Subject to the undermentioned conditions, the partitions and external wall assemblies will meet the relevant requirements of BS 5588 for fire resisting compartment walls, for periods of up to 240 minutes (dependant upon design limitations) when used in accordance with the provisions therein.
- 2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section D of the Technical Standards (Scotland), Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.'
- 3. The partitions and external wall assemblies are approved on the basis of:
 - i) Initial type testing
 - ii) Audit testing at the frequency specified in TS49
 - iii) A design appraisal against TS49
 - iv) Inspection and surveillance of factory production control
 - iv) Production surveillance under ISO 9001:2000
- 4. The partition assemblies comprise Supalux board screwed to and supported by a timber or steel framework and, in some cases, fitted with stone wool insulation within the cavity of the partition.
- 5. The external wall assemblies comprise Supalux board fastened to a steel supporting framework that is, in turn, supported by horizontal steel sheeting rails, and with stone wool insulation within the cavity. External cladding is fitted to the outside face of the assembly.
- 6. This approval is applicable to insulated Supalux partitions and to insulated and partially insulated Supalux external wall assemblies as described within this Certificate.
- 7. The partition and external wall assemblies shall be mechanically fixed to wall and/or floor constructions or structural steel members having a fire resistance of at least the same period as the partition or external wall.
- 8. The approval relates to on going production. Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

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Promat UK Ltd – Supalux Timber Stud Partition Assemblies

This approval relates to Supalux timber stud partition assemblies in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987.

30 minutes

The minimum specification for the Supalux partition system is as follows:

- Timber
 - Studs, 63mm deep x 50mm thick, at maximum 610mm centres.
- frame Timber noggings, the same size as the studs, at horizontal board joints.
 - Perimeter timbers are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards Supalux board of nominal thickness 9mm on each face of timber framework.
 - Boards are fixed using 50mm-long round head steel nails at 300mm nominal centres. Nails adjacent to board edges are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Boards are butt jointed or flush jointed.

Stone • Not required for fire resistance but may be required for acoustic or other reasons. wool

The maximum height of the partition system is 4.0m. The length of the partition system is unrestricted.

60 minutes

The minimum specification for the Supalux partition system is as follows:

- Timber Studs, 63mm deep x 50mm thick, at maximum 610mm centres.
- frame Timber noggings, the same size as the studs, at horizontal board joints.
 - Perimeter timbers are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards Supalux board of nominal thickness 9mm on each face of timber framework.
 - Boards are fixed using 50mm-long round head steel nails or M4 x 50mm-long steel woodscrews at 300mm nominal centres. Nails or screws adjacent to board edges are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Boards are butt jointed or flush jointed.





Promat UK Ltd – Supalux Timber Stud Partition Assemblies

Stone wool

- Stone wool is fitted tightly between the studs in the cavity of the partition. The minimum specification for the stone wool is 60mm thick x 23kg/m³ density.
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height of the partition system is 4.0m. The length of the partition system is unrestricted.

90 minutes

Stone wool

The minimum specification for the Supalux partition system is as follows:

- Timber Studs, 63mm deep x 50mm thick, at maximum 610mm centres.
- frame Timber noggings, the same size as the studs, at horizontal board joints.
 - Perimeter timbers are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards Supalux board of nominal thickness 9mm on each face of timber framework.
 - Boards are fixed using 50mm-long round head steel nails at 200mm nominal centres or M4 x 50mm-long steel woodscrews at 300mm nominal centres. Nails or screws adjacent to board edges are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Boards are butt jointed or flush jointed.
 - Stone wool is fitted tightly between the studs in the cavity of the partition. The minimum specification for the stone wool is 50mm thick x 100kg/m³ density.
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height of the partition system is 4.0m. The length of the partition system is unrestricted.



Promat UK Ltd – Supalux Timber Stud Partition Assemblies

120 minutes

The minimum specification for the Supalux partition system is as follows:

- Timber frame
- er Studs, 89mm deep x 50mm thick, at maximum 610mm centres.
 Timber noggings, the same size as the studs, at horizontal board joints.
 - Perimeter timbers are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards Supalux board of nominal thickness 15mm on each face of timber framework.
 - Boards are fixed using 63mm-long round head steel nails at 200mm nominal centres or M4 x 63mm-long steel woodscrews at 300mm nominal centres. Nails or screws adjacent to board edges are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Boards are butt jointed or flush jointed.

Stone wool

- Stone wool is fitted tightly between the studs in the cavity of the partition. The minimum specification for the stone wool is 80mm thick x 100kg/m³ density. The wool is fitted in two layers with the joints between layers staggered by minimum 150mm.
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height of the partition system is 4.0m. The length of the partition system is unrestricted.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

This approval relates to Supalux steel stud partition assemblies in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987.

30 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel frame
- Ceiling and floor channels, 50mm web x 25mm flanges x 0.5mm thick.
- C-studs, 48mm web x 32/34mm flanges x 0.5mm thick, at maximum 610mm centres.
 - Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards
- Supalux board of nominal thickness 9mm on each face of steel framework.
 - Boards are screwed to the studs and perimeter channels with M4 x 25mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Horizontal board joints are backed by a Supalux cover strip, 75mm wide x 9mm thick, fastened using M4 x 16mm-long self-tapping screws at nominal 300mm centres on both sides of the joint.
 - Boards are butt jointed or flush jointed.
- Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 60mm thick x 23kg/m³ density.
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The length of the partition system is unrestricted.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Size of C-studs - mm			าท	Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
48	32/34	6.5	0.5	4.15	4.70
50	32/34	6.5	0.5	4.30	4.90
60	32/34	6.5	0.5	4.95	5.60
70	32/34	6.5	0.5	5.60	6.35
70	32/34	6.5	0.7	6.20	7.05
73	32/34	6.5	0.5	5.80	6.55
92	32/34	6.5	0.5	6.95	7.90
146	32/34	6.5	0.5	10.00	10.00
146	32/34	6.5	0.7	10.00	10.00
48.8	47/49	6.0	0.6	4.80	5.40
48.8	47/49	6.0	0.7	5.00	5.70
48.8	47/49	6.0	1.0	5.60	6.30
58.8	47/49	6.0	0.6	5.50	6.25
73.8	47/49	6.0	0.6	6.55	7.45
73.8	47/49	6.0	0.7	6.90	7.80
73.8	47/49	6.0	1.0	7.70	8.60
98.8	47/49	6.0	0.6	8.25	9.30
98.8	47/49	6.0	0.7	8.65	9.75
98.8	47/49	6.0	1.0	9.60	10.00
123.8	47/49	6.0	0.6	9.85	10.00
148.8	47/49	6.0	0.6	10.00	10.00

Top and bottom channels The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 50mm web x 25mm flanges x 0.5mm thick. The channels have at least the same thickness as the studs. For heights above 4.5m the bottom channel has a minimum flange dimension of 40mm. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Тор	The minimum depth of the top steel channel and the minimum expansion						
and	allowance	for the studs at different partit	ion heights are as follows:				
expansion							
allowance	Height -	Minimum depth of top	Minimum expansion				
	3	40	15				
	4	40	20				
	5	50	24				
	0	50	28				
	8	60 70	30				
			42				
	The allowa	ince for expansion may be p	brovided at stud joints and/or	by the studs			
		nuo the top channel. Any joint	the of the stud that incorporates	an expansion			
Deflection		must not decrease the streng	aflaction band allows the stud	a ta alida inta			
bood	the ten che	s up to 511 the design of the d					
neau	hoards fillo	d with Promosoal mastic or	the ten channel mounted on	minimum 2 v			
	Omm Javer	s of Supalux board (Figure 1) For beights above 5m the	designs are			
	shown in F			s designs are			
		2 – the Supalux facing boards	s are stopped short of the top	channel and			
		z = the Supartix facing boards	cover papels (minimum 1 y 9	mm) screwed			
	to the t	on channel. The cover nan	els overlan the facing board	s by at least			
	50mm.	op channel. The cover par	leis overlap the lacing board	s by at least			
	• Figure 3 - An additional steel channel or two steel angles are fastened to the						
	concrete soffit. Supalux cover panels (minimum 1 x 9mm) are screwed to						
	these a	dditional steel sections so th	at they overlap the Supalux f	acing boards			
	by at least 50mm.						
	 It must 	be ensured that the screw	fixings for the boards do no	ot restrict the			
	 The sto 	ne wool extends to the top of	the partition cavity				
Stone	When the	web dimension of the studs	is increased thus increasing	the depth of			
wool	the cavity	in the partition then the	thickness of the 23 kg/m ³ s	tone wool is			
WOOI	increased t	to fill the cavity. More than c	one laver of stone wool or a h	higher density			
	may be use	ed provided that it fills the cav	ity	lighter density			
	As an alter	rnative to increasing the stor	he wool thickness the stone	wool can be			
	supported	at 3m maximum vertical ce	ntres from horizontal steel of	channels the			
	same size	as the studs, fitted between	the studs. The stone wool i	s fixed to the			
	horizontal	channels using galvanised	steel angle, minimum 25mn	$n \ge 25$ mm \ge			
	0.5mm thi	ck. fastened with M4 steel	self-tapping screws at 300m	im maximum			
	centres.						

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KMm



Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

60 minutes

The minimum specification for the Supalux partition system is as follows:

Steel frame	Ceiling and floor channels, 50mm web x 25mm flanges x 0.5mm thick. C-studs, 48mm web x 32/34mm flanges x 0.5mm thick, at maximum 610mm				
	 Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres. 				
Boards	 Supalux fillets, 50mm wide x 6mm thick, covering the studs and channels on both faces of the steel framework. Fillets fastened with M4 steel self-tapping screws at any convenient centres. 				
	 Supalux board of nominal thickness 9mm on each face of steel framework. Boards are screwed to the studs and perimeter channels, through the fillets, with M4 x 25mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces 				
	 Horizontal board joints are backed by a Supalux cover strip, 50mm wide x 6mm thick, fastened using M4 x 16mm-long self-tapping screws at nominal 300mm centres on both sides of the joint. 				
Stone wool	 Boards are butt jointed or flush jointed. Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 60mm thick x 23kg/m³ density or 50mm thick x 40kg/m³ density. Alternative thicknesses and densities of stone wool insulation may be fitted 				
	provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.				

The length of the partition system is unrestricted.

KIM



Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Size of C-studs - mm			nm	Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
48	32/34	6.5	0.5	4.15	4.70
50	32/34	6.5	0.5	4.25	4.85
60	32/34	6.5	0.5	4.90	5.55
70	32/34	6.5	0.5	5.50	6.30
70	32/34	6.5	0.7	6.15	6.95
73	32/34	6.5	0.5	5.70	6.50
92	32/34	6.5	0.5	6.85	7.80
146	32/34	6.5	0.5	10.00	10.00
146	32/34	6.5	0.7	10.00	10.00
48.8	47/49	6.0	0.6	4.75	5.40
48.8	47/49	6.0	0.7	5.00	5.65
48.8	47/49	6.0	1.0	5.55	6.25
58.8	47/49	6.0	0.6	5.45	6.20
73.8	47/49	6.0	0.6	6.50	7.35
73.8	47/49	6.0	0.7	6.80	7.70
73.8	47/49	6.0	1.0	7.60	8.55
98.8	47/49	6.0	0.6	8.15	9.25
98.8	47/49	6.0	0.7	8.55	9.65
98.8	47/49	6.0	1.0	9.50	10.00
123.8	47/49	6.0	0.6	9.75	10.00
148.8	47/49	6.0	0.6	10.00	10.00

Top and bottom channels The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 50mm web x 25mm flanges x 0.5mm thick. The channels have at least the same thickness as the studs. For heights above 4.5m the bottom channel has a minimum flange dimension of 40mm. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Top The minimum depth of the top steel channel and the minimum expansion channel allowance for the studs at different partition heights are as follows: and expansion Minimum depth of top Heiaht -Minimum expansion allowance channel - mm allowance - mm m 40 15 3 4 40 20 5 50 24 50 28 6 8 60 35 10 70 42 The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud. Deflection For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (10mm maximum) above the Supalux facing head boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1). For heights above 5m the designs are shown in Figures 2 & 3. Figure 2 – the Supalux facing boards and fillets are stopped short of the top channel and Supalux cover fillets (1 x 6mm + 1 x 9mm) and cover panels (minimum 1 x 9mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm. Figure 3 - An additional steel channel or two steel angles are fastened to the concrete soffit. Supalux cover panels (minimum 1 x 6mm + 1 x 9mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm. It must be ensured that the screw fixings for the boards do not restrict the expansion allowance. The stone wool extends to the top of the partition cavity. When the web dimension of the studs is increased, thus increasing the depth of Stone the cavity in the partition, then the thickness of the 23kg/m³ stone wool is wool increased to fill the cavity. More than one layer of stone wool or a higher density may be used provided that it fills the cavity. As an alternative to increasing the stone wool thickness, the stone wool can be supported at 3m maximum vertical centres from horizontal steel channels, the same size as the studs, fitted between the studs. The stone wool is fixed to the horizontal channels using galvanised steel angle, minimum 25mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

90 minutes

The minimum specification for the Supalux partition system is as follows:

Steel	 Ceiling and floor channels, 50mm web x 25mm flanges x 0.5mm thick.
frame	 C-studs, 48mm web x 32/34mm flanges x 0.5mm thick, at maximum 610mm centres.
	• Perimeter channels are bedded on stone wool or intumescent sealant and
	fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
Boards	 Supalux fillets, 75mm wide x 9mm thick, covering the studs and channels on both faces of the steel framework. Fillets fastened with M4 steel self-tapping
	 Supality board of nominal thickness 12mm on each face of steel framework
	 Boards are screwed to the studs and perimeter channels, through the fillets, with M4 x 32mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
	 Horizontal board joints are backed by a Supalux cover strip. 75mm wide x 9mm
	thick, fastened using M4 x 25mm-long self-tapping screws at nominal 300mm centres on both sides of the joint.
	 Boards are butt jointed or flush jointed.
Stone wool	 Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 60mm thick x 60kg/m³ density. The wool is fitted in two layers with the joints between layers staggered by minimum 150mm.
	 Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.
The length	of the partition system is unrestricted.

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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Size of C-studs - mm			าท	Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
48	32/34	6.5	0.5	3.20	3.60
50	32/34	6.5	0.5	3.30	3.75
60	32/34	6.5	0.5	3.80	4.30
70	32/34	6.5	0.5	4.30	4.90
70	32/34	6.5	0.7	4.80	5.45
73	32/34	6.5	0.5	4.45	5.10
92	32/34	6.5	0.5	5.40	6.15
146	32/34	6.5	0.5	8.00	9.05
146	32/34	6.5	0.7	8.85	10.00
48.8	47/49	6.0	0.6	3.60	4.10
48.8	47/49	6.0	0.7	3.80	4.30
48.8	47/49	6.0	1.0	4.25	4.85
58.8	47/49	6.0	0.6	4.20	4.80
73.8	47/49	6.0	0.6	5.05	5.75
73.8	47/49	6.0	0.7	5.30	6.00
73.8	47/49	6.0	1.0	5.90	6.70
98.8	47/49	6.0	0.6	6.35	7.25
98.8	47/49	6.0	0.7	6.70	7.60
98.8	47/49	6.0	1.0	7.50	8.45
123.8	47/49	6.0	0.6	7.70	8.75
148.8	47/49	6.0	0.6	9.00	10.00

Top and bottom channels The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 50mm web x 25mm flanges x 0.5mm thick. The channels have at least the same thickness as the studs. For heights above 4.5m the bottom channel has a minimum flange dimension of 40mm. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Top The minimum depth of the top steel channel and the minimum expansion channel allowance for the studs at different partition heights are as follows: and expansion Minimum depth of top Heiaht -Minimum expansion allowance channel - mm allowance - mm m 40 15 3 4 40 20 5 50 24 6 50 28 8 60 35 10 70 42 The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud. Deflection For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (10mm maximum) above the Supalux facing head boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1). For heights above 5m the designs are shown in Figures 2 & 3. Figure 2 – the Supalux facing boards and fillets are stopped short of the top channel and Supalux cover fillets (1 x 9mm + 1 x 12mm) and cover panels (minimum 1 x 12mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm. Figure 3 - An additional steel channel or two steel angles are fastened to the concrete soffit. Supalux cover panels (minimum 1 x 9mm + 1 x 12mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm. It must be ensured that the screw fixings for the boards do not restrict the expansion allowance. The stone wool extends to the top of the partition cavity. When the web dimension of the studs is increased, thus increasing the depth of Stone the cavity in the partition, then the thickness of the stone wool is increased to fill wool the cavity. Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.



Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

120 minutes

The minimum specification for the Supalux partition system is as follows:

Steel frame	 Ceiling and floor channels, 75mm web x 40mm flanges x 0.6mm thick. C-studs, 73.8mm web x 47/49mm flanges x 0.6mm thick, at maximum 610mm centres.
	 Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
Boards	 Supalux board of nominal thickness 15mm on each face of steel framework. Boards are screwed to the studs and perimeter channels with M4 x 32mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical beam initiated and an atomicated battered are stored and an atomicated battered are stored.
	 Horizontal board joints are backed by a Supalux cover strip, 100mm wide x 9mm thick, fastened using M4 x 25mm-long self-tapping screws at nominal 300mm centres on both sides of the joint. Boards are butt jointed or flush jointed.
Stone wool	• Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 70mm thick x 128kg/m ³ density. The wool is fitted in two layers with the joints between layers staggered by minimum 150mm.
	 Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The length of the partition system is unrestricted.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Size of C-studs - mm				Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
73.8	47/49	6.0	0.6	3.80	4.35
73.8	47/49	6.0	0.7	4.00	4.60
73.8	47/49	6.0	1.0	4.50	5.10
98.8	47/49	6.0	0.6	4.90	5.60
98.8	47/49	6.0	0.7	5.20	5.90
98.8	47/49	6.0	1.0	5.80	6.60
123.8	47/49	6.0	0.6	6.00	6.85
148.8	47/49	6.0	0.6	7.05	8.00
97	49/52	0	1.5	6.40	7.25
97	49/52	0	2.0	7.00	7.85
147	49/52	0	1.5	9.15	10.00
147	49/52	0	2.0	10.00	10.00

Top and bottom channels

The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 75mm web x 40mm flanges x 0.6mm thick. The channels have at least the same thickness as the studs. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.

The minimum depth of the top steel channel and the minimum expansion allowance for the studs at different partition heights are as follows:

Top channel and expansion allowance

Height - m	Minimum depth of top channel - mm	Minimum expansion allowance - mm
3	40	15
4	40	20
5	50	24
6	50	28
8	60	35
10	70	42

The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud.

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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Deflection head

on For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (15mm maximum) above the Supalux facing boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1). For heights above 5m the designs are shown in Figures 2 & 3.

- Figure 2 the Supalux facing boards are stopped short of the top channel and Supalux cover fillets (1 x 15mm) and cover panels (minimum 1 x 15mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm.
- Figure 3 An additional steel channel or two steel angles are fastened to the concrete soffit. Supalux cover panels (minimum 1 x 15mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm.
- It must be ensured that the screw fixings for the boards do not restrict the expansion allowance.
- The stone wool extends to the top of the partition cavity.

When the web dimension of the studs is increased, thus increasing the depth of the cavity in the partition, then the thickness of the stone wool is increased to fill the cavity. Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

Stone wool

Kylm

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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

180 minutes

The minimum specification for the Supalux partition system is as follows:

Steel frame	 Ceiling and floor channels, 100mm web x 40mm flanges x 0.6mm thick. C-studs, 98.8mm web x 47/49mm flanges x 0.6mm thick, at maximum 610mm centres.
	 Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
Boards	 Two layers of Supalux board of nominal thickness 9mm on each face of steel framework.
	 Boards are screwed to the studs and perimeter channels with M4 x 32mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between layers.
	 Horizontal board joints are staggered between layers by at least 600mm. The outer layer board joints are fastened to the inner layer of Supalux using M4 x 25mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
	 Inner layer boards are butt jointed. Outer layer boards are butt jointed or flush jointed.
Stone wool	• Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 100mm thick x 128kg/m ³ density. The wool is fitted in two layers with the joints between layers staggered by minimum 150mm.
	 Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The length of the partition system is unrestricted.

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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Size of C-studs - mm				Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
98.8	47/49	6.0	0.6	4.55	5.20
98.8	47/49	6.0	0.7	4.80	5.45
98.8	47/49	6.0	1.0	5.35	6.10
123.8	47/49	6.0	0.6	5.55	6.30
148.8	47/49	6.0	0.6	6.50	7.40
97	49/52	0	1.5	5.95	6.75
97	49/52	0	2.0	6.50	7.30
147	49/52	0	1.5	8.50	9.60
147	49/52	0	2.0	9.30	10.00

Top and bottom channels The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 100mm web x 40mm flanges x 0.6mm thick. The channels have at least the same thickness as the studs. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.

The minimum depth of the top steel channel and the minimum expansion allowance for the studs at different partition heights are as follows:

Top channel and expansion allowance

Height - m	Minimum depth of top channel - mm	Minimum expansion allowance - mm
3	40	15
4	40	20
5	50	24
6	50	28
8	60	35
10	70	42

The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Deflection head

ion For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (15mm maximum) above the Supalux facing boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1). For heights above 5m the designs are shown in Figures 2 & 3.

- Figure 2 the Supalux facing boards are stopped short of the top channel and Supalux cover fillets (2 x 9mm) and cover panels (minimum 2 x 9mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm.
- Figure 3 An additional steel channel or two steel angles are fastened to the concrete soffit. Supalux cover panels (minimum 2 x 9mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm.
- It must be ensured that the screw fixings for the boards do not restrict the expansion allowance.
- The stone wool extends to the top of the partition cavity.

When the web dimension of the studs is increased, thus increasing the depth of the cavity in the partition, then the thickness of the stone wool is increased to fill the cavity. Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

Stone wool

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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

240 minutes

The minimum specification for the Supalux partition system is as follows:

Steel frame	 Ceiling and floor channels, 100mm web x 40mm flanges x 1.5mm thick. C-studs, 97mm web x 49/52mm flanges x 1.5mm thick, at maximum 610mm centres.
	 Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
Boards	 Two layers of Supalux board of nominal thickness 12mm on each face of steel framework.
	 Boards are screwed to the studs and perimeter channels with M4 x 38mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between layers.
	 Horizontal board joints are staggered between layers by at least 600mm. The outer layer board joints are fastened to the inner layer of Supalux using M4 x 25mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
	 Inner layer boards are butt jointed. Outer layer boards are butt jointed or flush jointed.
Stone wool	 Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 100mm thick x 128kg/m³ density. The wool is fitted in two layers with the joints between layers staggered by minimum 150mm.
	 Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The length of the partition system is unrestricted.

KM



Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

Тор

and expansion allowance

channel

Size of C-studs - mm				Maximum he studs ce	eight (m) with entres of:
Web	Flange	Lip	Gauge	610mm	407mm
123.8	47/49	6.0	0.6	5.10	5.80
148.8	47/49	6.0	0.6	5.95	6.80
97	49/52	0	1.5	5.50	6.20
97	49/52	0	2.0	6.00	6.80
147	49/52	0	1.5	7.85	8.85
147	49/52	0	2.0	8.55	9.60
197	48	0	1.5	10.00	10.00
197	48	0	2.0	10.00	10.00

Top and bottom channels The steel top and bottom channel sections have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 100mm web x 40mm flanges x 1.5mm thick. The channels have at least the same thickness as the studs. For heights above 6m the bottom channel has a minimum flange dimension of 50mm.

The minimum depth of the top steel channel and the minimum expansion allowance for the studs at different partition heights are as follows:

Height - m	Minimum depth of top channel - mm	Minimum expansion allowance - mm
3	40	15
4	40	20
5	50	24
6	50	28
8	60	35
10	70	42

The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Deflection head

For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (15mm maximum) above the Supalux facing boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1). For heights above 5m the designs are shown in Figures 2 & 3.

- Figure 2 the Supalux facing boards are stopped short of the top channel and Supalux cover fillets (2 x 12mm) and cover panels (minimum 2 x 12mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm.
- Figure 3 An additional steel channel or two steel angles are fastened to the concrete soffit. Supalux cover panels (minimum 2 x 12mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm.
- It must be ensured that the screw fixings for the boards do not restrict the expansion allowance.
- The stone wool extends to the top of the partition cavity.

When the web dimension of the studs is increased, thus increasing the depth of the cavity in the partition, then the thickness of the stone wool is increased to fill the cavity. Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.



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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Figure 1 Deflection head – 15mm



Stone wool not shown for clarity.

head – 25mm

Figure 2 Deflection



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Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity and Insulation

Figure 3 Deflection head – 42mm



Stone wool not shown for clarity.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity only

This approval relates to Supalux steel stud partition assemblies in terms of the integrity performance criteria of BS 476: Part 22: 1987. Fire exposure from board side only.

Up to 120 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel Ceiling and floor channels, 50mm web x 25mm flanges x 0.5mm thick.
- frame C-studs, 48mm web x 32/34mm flanges x 0.5mm thick, at maximum 610mm centres.
 - Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 600mm nominal centres.
- Boards Supalux fillets, 75mm wide x 9mm thick, covering the studs and channels on the fire face of the steel framework. Fillets fastened with M4 x 25mm-long steel self-tapping screws at any convenient centres.
 - Supalux board of nominal thickness 9mm on the fire face of steel framework.
 - Boards are screwed to the studs and perimeter channels, through the fillets, with M4 x 25mm-long steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs and are staggered between faces.
 - Horizontal board joints are backed by a Supalux cover strip, 75mm wide x 9mm thick, fastened using M4 x 25mm-long self-tapping screws at nominal 300mm centres on both sides of the joint.
 - Boards are butt jointed or flush jointed.
 - None.

Stone wool

The length of the partition system is unrestricted.







Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity only

For partitions with a height greater than 3m, up to 10m, the specification of the partition is changed as follows:

Partition height

	Size of C-s	tuds - n	าท	Maximum height (m) with studs centres of:	
Web	Flange	Lip	Gauge	610mm	407mm
48	32/34	6.5	0.5	5.60	6.35
50	32/34	6.5	0.5	5.80	6.55
60	32/34	6.5	0.5	6.60	7.45
70	32/34	6.5	0.5	7.40	8.40
70	32/34	6.5	0.7	8.20	9.20
73	32/34	6.5	0.5	7.65	8.65
92	32/34	6.5	0.5	9.10	10.00
146	32/34	6.5	0.5	10.00	10.00
146	32/34	6.5	0.7	10.00	10.00
48.8	47/49	6.0	0.6	6.45	7.25
48.8	47/49	6.0	0.7	6.75	7.55
48.8	47/49	6.0	1.0	7.50	8.35
58.8	47/49	6.0	0.6	7.35	8.25
73.8	47/49	6.0	0.6	8.70	9.80
73.8	47/49	6.0	0.7	9.10	10.00
73.8	47/49	6.0	1.0	10.00	10.00
98.8	47/49	6.0	0.6	10.00	10.00
98.8	47/49	6.0	0.7	10.00	10.00
98.8	47/49	6.0	1.0	10.00	10.00
123.8	47/49	6.0	0.6	10.00	10.00
148.8	47/49	6.0	0.6	10.00	10.00

Top and bottom channels The steel top and bottom channel sections must have approximately the same web dimension as the studs so that the studs are a sliding fit in the channels. The minimum size of the top and bottom channel sections is 50mm web x 25mm flanges x 0.5mm thick. The channels must have at least the same thickness as the studs. For heights above 4.5m the bottom channel must have a minimum flange dimension of 40mm. For heights above 6m the bottom channel must have a minimum flange dimension of 50mm.





Promat UK Ltd – Supalux Steel Stud Partition Assemblies – Integrity only

Top channel and	The minimum depth of the top steel channel and the minimum expansion allowance for the studs at different partition heights are as follows:					
expansion allowance	Height - m	Minimum depth of top channel - mm	Minimum expansion allowance - mm			
	3	40	15			
	4	40	20			
	5	50	24			
	6	50	28			
	8	60	35			
	10	70	42			
Deflection head Stone wool	8 60 35 10 70 42 The allowance for expansion may be provided at stud joints and/or by the studs sliding up into the top channel. Any joint in the stud that incorporates an expansion allowance must not decrease the strength of the stud. For heights up to 5m the design of the deflection head allows the studs to slide into the top channel, either with the space (10mm maximum) above the Supalux facing boards filled with Promaseal mastic or the top channel mounted on minimum 2 x 9mm layers of Supalux board (Figure 1 – board on fire face only). For heights above 5m the designs are shown in Figures 2 & 3. • Figure 2 (board on fire face only) – the Supalux facing boards and fillets are stopped short of the top channel and Supalux cover fillets (2 x 9mm) and cover panels (minimum 1 x 9mm) screwed to the top channel. The cover panels overlap the facing boards by at least 50mm. • Figure 3 (board on fire face only) - An additional steel channel or steel angle is fastened to the concrete soffit. Supalux cover panels (minimum 2 x 9mm) are screwed to these additional steel sections so that they overlap the Supalux facing boards by at least 50mm. • It must be ensured that the screw fixings for the boards do not restrict the expansion allowance.					

KMm



Promat UK Ltd – Supalux Solid Partition Assemblies – Integrity and Insulation

This approval relates to Supalux solid partition assemblies in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987.

30 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel
- Perimeter angles, 30mm x 30mm x 0.6mm thick.
- angles Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 500mm nominal centres.
- Boards Supalux boards 15mm + 15mm nominal thickness. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face.
 - The two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners.
 - Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with M4 x 30mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
 - Boards are butt jointed.
- Stone None.

wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

60 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel Perimeter angles, 30mm x 30mm x 0.6mm thick.
- Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 500mm nominal centres.
- Boards Supalux boards 20mm + 15mm nominal thickness. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face.
 - The two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners.





Promat UK Ltd – Supalux Solid Partition Assemblies – Integrity and Insulation

- Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with M4 x 30mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
- Boards are butt jointed.
- None.

Stone wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

90 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel Perimeter angles, 30mm x 30mm x 0.8mm thick.
- angles Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 500mm nominal centres.
- Boards Supalux boards 25mm + 20mm nominal thickness. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face.
 - The two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners.
 - Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with M4 x 35mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
 - Boards are butt jointed.

Stone None.

wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

120 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel Perimeter angles, 30mm x 30mm x 0.8mm thick.
- angles Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 500mm nominal centres.

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Promat UK Ltd – Supalux Solid Partition Assemblies – Integrity and Insulation

Boards, option A	 Supalux boards 25mm + 25mm nominal thickness. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face. The two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with M4 x 45mm-long self-tapping screws at nominal 300mm centres on both sides of each joint.
Boards,	 Supalux boards 20mm + 15mm + 15mm nominal thickness. The protruding leg of
option B	the perimeter angles is sandwiched between the 20mm layer and the first 15mm layer.
	• The three layers of Supalux board are independently fixed to the perimeter angles
	with M4 steel self-tapping screws at 300mm nominal centres. All screws are
	 Both vertical and horizontal board ioints are staggered by at least 600mm between
	layers. The 20mm layer is installed first. When the first 15mm layer is installed
	the edges of the Supalux boards are fastened to the opposite layer with M4 x
	30mm-long self-tapping screws at nominal 300mm centres on both sides of each
	joint. The second roman layer is fastened to the other two layers, around the

- screws at nominal 300mm centres.Boards are butt jointed.
- Stone None.

wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

perimeter and down the centre of each panel, with M4 x 45mm-long self-tapping

240 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel Perimeter angles, 50mm x 32mm x 1.2mm thick.
- angles Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction, through the 32mm leg, with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 400mm nominal centres.
- Boards Four layers of Supalux board each 25mm nominal thickness. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face.
 - The first two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners.

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Promat UK Ltd – Supalux Solid Partition Assemblies – Integrity and Insulation

- Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with 13mm wide x 45mm-long steel staples at nominal 150mm centres on both sides of each joint.
- The third and fourth layers are fastened to the adjacent layer, around the perimeter and down the centre of each panel, with 13mm wide x 45mm-long steel staples at nominal 150mm centres.
- Boards are butt jointed.
- None.

Stone wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

240 minutes partially insulated

The minimum specification for the Supalux partition system is as follows:

- Steel Perimeter angles, 50mm x 50mm x 1.0mm thick.
- angles Perimeter angles are bedded on intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit the type of surrounding construction) at 500mm nominal centres.
- Boards
 Supalux boards 25mm + 20mm nominal thickness for 90 minutes insulation and 25mm + 25mm nominal thickness for 120 minutes insulation. The layers either sandwich the protruding leg of the perimeter angles or are fastened to one face.
 - The two layers of Supalux board are independently fixed to the perimeter angles with M4 steel self-tapping screws at 300mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners.
 - Both vertical and horizontal board joints are staggered by at least 600mm between layers. The edges of the Supalux boards are fastened to the opposite layer with M4 x 35mm-long (90 minutes) or 45mm-long (120 minutes) self-tapping screws at nominal 300mm centres on both sides of each joint.
 - Boards are butt jointed.
- Stone None.

wool

The maximum height of the partition system is 5.0m. The length of the partition system is unrestricted.

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Promat UK Ltd – Supalux Shaft Wall Partition Assemblies – Integrity and Insulation

This approval relates to Supalux steel stud shaft wall partition assemblies in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987.

60 or 120 minutes

The minimum specification for the Supalux partition system is as follows:

- Steel frame
- Bottom channel, 88mm web x 40mm flanges x 1.2mm thick.
 - Head channel, 88mm web x 70mm flanges x 1.2mm thick.
 - Side perimeter channels, 85mm web x 40mm flanges x 1.2mm thick.
 - I-studs formed from two channels, each 85mm web x 40mm flanges x 1.2mm thick, at maximum 610mm centres. Channels are fastened together with M5 steel self-tapping screws at 300mm nominal centres.
 - Perimeter channels are bedded on stone wool or intumescent sealant and fastened to the surrounding construction with M6 all-steel anchor bolts (or equivalent to suit type of surrounding construction) at 600mm nominal centres.
- Boards Supalux board, of nominal thickness 9mm, tightly fitted between studs and held in place with steel securing channels, 72mm web x 25mm flanges x 0.7mm thick, fixed to the stud web with M5 self-tapping screws at nominal 300mm centres.
- face
 Horizontal board joints are backed by a Supalux cover strip, 100mm wide x 9mm thick, fastened using M4 x 16mm-long self-tapping screws at nominal 200mm centres on both sides of the joint.
- Boards A Supalux fillet, 100mm wide x 20mm thick (60 minutes) or 25mm thick (120 minutes), covering the studs and channels of the steel framework. Fillets fastened with M4 steel self-tapping screws at any convenient centres.
 - Supalux board, 9mm nominal thickness, is screwed to the studs and perimeter channels, through the fillets, with M4 x 38mm-long steel self-tapping screws at 200mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the studs.
 - Horizontal board joints are backed by a Supalux cover strip, 100mm wide x 9mm thick, fastened using M4 x 16mm-long self-tapping screws at nominal 200mm centres on both sides of the joint.
- Stone wool

face

- Stone wool is fitted tightly between and filling the studs in the cavity of the partition. The minimum specification for the stone wool is 75mm thick x 45kg/m³ density (60 minutes) or 75mm thick x 100kg/m³ density (120 minutes).
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height of the partition system is 7.0m (60 minutes) or 6.4m (120 minutes). The length of the partition system is unrestricted.





Promat UK Ltd – Supalux External Wall Assemblies within 1m from the Relevant Boundary - Integrity and Insulation

This approval relates to Supalux external wall assemblies within 1m from the relevant boundary in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987 with fire attack from either face.

30, 60 or 120 minutes

The minimum specification for the Supalux external wall system is as follows:

- Horizontal steel sheeting rails at 2.2m maximum vertical centres. Support
- frame Sheeting rails supported by structural steel columns that are clad with a proprietary fire protection system to the required fire resistance rating.
 - Supalux board cover fillets, 9mm thick x depth of sheeting rail, are fitted to both faces of the sheeting rails, fixed with M4 steel self-tapping screws at nominal 300mm centres.
- Grid
- Flamebraker T-section system or equivalent. The main T's and cross T's have a minimum depth and table width of 35mm x 35mm and minimum thickness of 0.55mm.
 - Main T's are positioned vertically at 603mm nominal centres on both sides of the . sheeting rails and suspended from the sheeting rails with minimum 18mm wide x 0.8mm thick galvanised steel straps that pass over the sheeting rails.
 - The webs of the main T's on the external face are cut away around the sheeting rails.
 - Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to the surrounding construction on the internal face with minimum M5 steel screws (into noncombustible plugs for masonry/concrete constructions) at nominal 500mm centres.
- Supalux board, of nominal thickness 9mm, is screwed to the main T's with M4 steel self-tapping screws at 200mm nominal centres. All screws are positioned nominal 12mm from board edges and 40mm from board corners. Vertical board joints coincide with the main T's.
 - Horizontal board joints are backed by Flamebraker cross T. The board edges are fastened to the cross T's using M4 steel self-tapping screws at nominal 200mm centres on both sides of the joint.
 - External cladding, a single skin of steel, aluminium or fibre cement sheeting, is fastened to the sheeting rails, through the Supalux boards, with steel fixings. The profiled cladding must have a Class 0 rating in terms of the national building regulations.
- **Boards** Supalux board, 600mm wide x 9mm thick, is fitted into the main T's and retained by spring steel wedges fitted into pre-punched holes in the stems of the main T's. The internal wedges are fitted at 150mm nominal centres.
 - Flamebraker cross T's are fitted at horizontal board joints, with spring steel wedges retaining the Supalux boards.

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Boards on external face

on

face



Promat UK Ltd – Supalux External Wall Assemblies within 1m from the Relevant Boundary – Integrity and Insulation

Stone • Stone wool is not required for a fire resistance rating of 30 minutes.

- For a fire resistance rating of 60 minutes, stone wool, minimum 80mm thick x 23kg/m³ density, is suspended in the cavity of the external wall by fixing to the underside of the sheeting rails, extending down past lower rails behind the internal lining. The stone wool is fixed to the sheeting rails using galvanised steel angle, minimum 50mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.
 - For a fire resistance rating of 120 minutes, wired stone wool, minimum 50mm thick x 128kg/m³ density or 80mm thick x 90kg/m³ density, is suspended in the cavity of the external wall by fixing to the underside of the sheeting rails. The stone wool is fixed to the sheeting rails using galvanised steel angle, minimum 50mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.
 - Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height and length of the external wall systems is unrestricted.



wool





Promat UK Ltd – Supalux External Wall Assemblies further than 1m from the Relevant Boundary – Integrity and Partial Insulation

This approval relates to Supalux external wall assemblies further than 1m from the relevant boundary in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987 with fire exposure from the internal face only.

120 or 240 minutes integrity and 15 minutes insulation

The minimum specification for the Supalux external wall system is as follows:

Support	 Horizontal steel sheeting rails at 2.2m maximum vertical centres.
frame	· Sheeting rails supported by structural steel columns that are clad with a
	proprietary fire protection system to the required fire resistance rating.
Exposed	Flamebraker T-section system or equivalent. The main T's and cross T's have a
grid	minimum depth and table width of 35mm x 35mm and minimum thickness of
0	0.55mm.
	 Main T's are positioned vertically at 603mm nominal centres on the internal face
	of the sheeting rails and suspended from the sheeting rails with minimum 18mm
	wide x 0.8mm thick galvanised steel straps that pass over the sheeting rails and
	are fastened to them with minimum M4 steel rivets or self-tapping screws
	 Perimeter steel angles minimum 25mm x 25mm x 0.6mm thick are fastened to
	the surrounding construction on the internal face with minimum M5 steel screws
	(into non-combustible pluge for maconsu/concrete constructions) at nominal
	500mm centres
Boards on	 Supality board 600mm wide x 6mm thick (up to 120 minutes) or 9mm thick (240
evposed	minutes) is fitted into the main T's and retained by spring steel wedges fitted into
arid	nro purched helps in the store of the main T's. The wedges are fitted at 150mm
gnu	pre-puricileu noies in the sterns of the main 1.5. The wedges are filled at 150mm
	Elemetrator cross T's are fitted at herizental heard joints with spring steel
	 Flamebraker cross is are med at nonzonial board joints, with spring steel wedges retaining the Supplux boards
Consolad	Calvaniand steel ten het aastiene, minimum 26mm daap v 50mm wab v 15mm
Concealed	 Galvanised steel top hat sections, minimum zomm deep x somm web x romm line x 0 cmm thick
gna	iips x 0.0mm mick.
	• Top nat sections are positioned vertically at 600mm nominal centres on the internal face of the chapting mile and factor and to the mile with minimum Que M4
	internal face of the sheeting rails and fastened to the rails with minimum 2 x M4
	steel self-tapping screws, through the lips of the section, at each junction.
	Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to
	the surrounding construction on the internal face with minimum M5 steel screws
	(into non-combustible plugs for masonry/concrete constructions) at nominal
-	500mm centres.
Boards on	 Supalux board, of nominal thickness 6mm (up to 120 minutes) or 9mm (240
concealed	minutes), is screwed to the top hat sections with M4 steel self-tapping screws at
grid	300mm nominal centres. Screws are positioned nominal 12mm from board
	edges and 40mm from board corners and down centre of boards. Vertical board
	joints coincide with the top hat sections.
	sued: 21 st June 2007

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Promat UK Ltd – Supalux External Wall Assemblies within 1m from the Relevant Boundary - Integrity and Insulation

- Horizontal board joints are backed by a Supalux cover strip, 100mm wide x same thickness as main boards, fastened with M4 steel self-tapping screws at nominal 300mm centres on both sides of the joint.
- External cladding, a single skin of steel or fibre cement sheeting, is fastened to the External sheeting rails with steel fixings. The profiled cladding must have a Class 0 rating in cladding terms of the national building regulations.

Stone wool

Support

- Stone wool is not required if 9mm-thick Supalux board is used or if the external cladding is a fibre cement product.
- For other options stone wool, minimum 60mm thick x 23kg/m³ density, is suspended in the cavity of the external wall by fixing to the underside of the sheeting rails. The stone wool is fixed to the sheeting rails using galvanised steel angle, minimum 50mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.
- Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height and length of the external wall systems is unrestricted.

240 minutes integrity and 30 minutes insulation

The minimum specification for the Supalux external wall system is as follows:

frame	•	Sheeting rails supported by structural steel columns that are clad with a proprietary fire protection system to the required fire resistance rating.
Exposed grid	•	Flamebraker T-section system or equivalent. The main T's and cross T's have a minimum depth and table width of 35mm x 35mm and minimum thickness of 0.55mm. Main T's are positioned vertically at 603mm nominal centres on the internal face of the sheeting rails and suspended from the sheeting rails with minimum 18mm wide x 0.8mm thick galvanised steel straps that pass over the sheeting rails and are fastened to them with minimum M4 steel rivets or self-tapping screws. Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to the surrounding construction on the internal face with minimum M5 steel screws (into non-combustible plugs for masonry/concrete constructions) at nominal 500mm centres.
Boards on exposed grid	•	Supalux board, 600mm wide x 9mm thick, is fitted into the main T's and retained by spring steel wedges fitted into pre-punched holes in the stems of the main T's. The wedges are fitted at 150mm nominal centres. Flamebraker cross T's are fitted at horizontal board joints, with spring steel wedges retaining the Supalux boards.

Horizontal steel sheeting rails at 2.2m maximum vertical centres.



Promat UK Ltd – Supalux External Wall Assemblies within 1m from the Relevant Boundary – Integrity and Insulation

Concealed grid	•	Galvanised steel top hat sections, minimum 26mm deep x 50mm web x 15mm lips x 0.6mm thick.
9	•	Top hat sections are positioned vertically at 600mm nominal centres on the internal face of the sheeting rails and fastened to the rails with minimum $2 \times M4$
	•	Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to
		the surrounding construction on the internal face with minimum M5 steel screws (into non-combustible plugs for masonry/concrete constructions) at nominal
Boards on		Supalux board of nominal thickness 0mm is screwed to the top bat sections with
concealed grid	-	M4 steel self-tapping screws at 300mm nominal centres. Screws are positioned nominal 12mm from board edges and 40mm from board corners and down centre
		of boards. Vertical board joints coincide with the top hat sections.
	•	Horizontal board joints are backed by a Supalux cover strip, 100mm wide x same thickness as main boards, fastened with M4 steel self-tapping screws at nominal 300mm centres on both sides of the joint
External		External cladding, a single skin of steel or fibre cement sheeting, is fastened to
cladding		the sheeting rails with steel fixings. The profiled cladding must have a Class 0 rating in terms of the national building regulations.
Stone wool	•	Stone wool is not required if the external cladding is a fibre cement product, minimum 6mm thick.
	•	For other options stone wool, minimum 60mm thick x 23 kg/m ³ density, is suspended in the cavity of the external wall by fixing to the underside of the sheeting rails. The stone wool is fixed to the sheeting rails using galvanised steel angle, minimum 50mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.
	•	Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.
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The maximum height and length of the external wall systems is unrestricted.

KM



Promat UK Ltd – Conversion of Supalux External Wall Assemblies to Internal Partition Assemblies – Integrity and Insulation

This approval relates to Supalux internal partition assemblies, converted from external wall assemblies, in terms of the integrity and insulation performance criteria of BS 476: Part 22: 1987 with fire attack from either face.

30, 60 or 120 minutes integrity and insulation

The minimum specification for the Supalux internal partition system is as follows:

Support frame	 Horizontal steel sheeting rails at 2.2m maximum vertical centres. Sheeting rails supported by structural steel columns that are clad with a proprietary fire protection system to the required fire resistance rating. Supalux board cover fillets, 9mm thick x depth of sheeting rail, are fitted to both faces of the sheeting rails, fixed with M4 steel self-tapping screws at nominal 300mm centres.
Exposed grid	 Flamebraker T-section system or equivalent. The main T's and cross T's have a minimum depth and table width of 35mm x 35mm and minimum thickness of 0.55mm.
	 Main T's are positioned vertically at 603mm nominal centres on both sides of the sheeting rails and suspended from the sheeting rails with minimum 18mm wide x 0.8mm thick galvanised steel straps that pass over the sheeting rails.
	 Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to the surrounding construction on the internal face with minimum M5 steel screws (into non-combustible plugs for masonry/concrete constructions) at nominal 500mm centres.
Boards on exposed grid	 Supalux board, 600mm wide x 9mm thick, is fitted into the main T's and retained by spring steel wedges fitted into pre-punched holes in the stems of the main T's. The wedges are fitted at 150mm nominal centres.
	 Flamebraker cross T's are fitted at horizontal board joints, with spring steel wedges retaining the Supalux boards.
Concealed grid	 Galvanised steel top hat sections, minimum 26mm deep x 50mm web x 15mm lips x 0.6mm thick.
	• Top hat sections are positioned vertically at 600mm nominal centres on both sides of the sheeting rails and fastened to the rails, through the Supalux fillets, with minimum 2 x M4 steel self-tapping screws, through the lips of the section, at each junction.
	 Perimeter steel angles, minimum 25mm x 25mm x 0.6mm thick, are fastened to the surrounding construction on the internal face with minimum M5 steel screws (into non-combustible plugs for masonry/concrete constructions) at nominal 500mm centres.

KIM



Promat UK Ltd – Conversion of Supalux External Wall Assemblies to Internal Partition Assemblies – Integrity and Insulation

Boards on Supalux board, of nominal thickness 9mm, is screwed to the top hat sections with M4 steel self-tapping screws at 300mm nominal centres. Screws are positioned nominal 12mm from board edges and 40mm from board corners and down centre of boards. Vertical board joints coincide with the top hat sections.

 Horizontal board joints are backed by a Supalux cover strip, 100mm wide x 9mm thick, fastened with M4 steel self-tapping screws at nominal 300mm centres on both sides of the joint.

Stone wool

- Stone wool is not required for a 30 minute rating.
- For other options stone wool, minimum 100mm thick x 23kg/m³ density or 80mm thick x 30kg/m³ density (60 minutes) or minimum 80mm thick x 100kg/m³ density (120 minutes), is suspended in the cavity of the external wall by fixing to the underside of the sheeting rails. The stone wool is fixed to the sheeting rails using galvanised steel angle, minimum 50mm x 25mm x 0.5mm thick, fastened with M4 steel self-tapping screws at 300mm maximum centres.
- Alternative thicknesses and densities of stone wool insulation may be fitted provided that the weight per square metre is at least that specified and that the percentage of binder content by weight does not exceed that of the insulation fitted in the tested constructions.

The maximum height and length of the external wall systems is unrestricted.

