



SELKIRK

TWIN-WALL CHIMNEY



Diameter range: 127mm - 203mm (5" - 8")

- Twin Wall, insulated
- Stainless Steel
- Multi Fuel Chimney System



SELKIRK®

there is only one!

UK PRODUCT CATALOGUE

INTRODUCTION

The Selkirk Twin Wall chimney system is designed for use with oil, gas and solid fuel when used with the appropriate fire stopping components. The system is designed for gravity flow application. The Selkirk Twin Wall chimney system is available in a range of diameters and this brochure relates to the 127mm (5") – 203mm (8") range.

The system consists of straight lengths and fittings which are constructed entirely from stainless steel and a 25mm (1") insulated annulus. The external skin is manufactured from 304 grade matt finish stainless steel and carries the structural load, and the inner liner is resistant to the often corrosive products of combustion, and is free to expand or contract as flue gas temperatures change. The 316 grade inner liner heats rapidly to produce a strong draught which ensures that waste gases are exhausted and condensation of the harmful products of combustion is minimised.

The system can be used internally or externally. The relatively low external wall temperature permits installation with only a 50mm (2") air gap clearance to combustible materials.

KEY DIMENSIONS

Size (internal diameter)

127mm (5")
152mm (6")
178mm (7")
203mm (8")

Maximum outside diameter

178mm (7")
203mm (8")
230mm (9")
255mm (10")



COMPOSITION

Lengths and fittings are twin-walled with a 25mm (1") cavity. The outer casing is joined to both male and female couplers, while the inner liner is connected only to the male coupler, as flue gas temperatures vary the inner liner can expand and contract without affecting the structural performance.

Selkirk Twin Wall chimney is insulated with rockwool and this high quality insulation has an optimum and carefully controlled density which maintains a relatively high flue gas temperature throughout the chimney lengths. Lengths and fittings are twist-locked together with a one eighth turn. Locking bands fit over the two rolled seams at joints between lengths and fittings and MUST be used.

APPLICATIONS

Typical equipment includes boilers, stoves and heaters. The Selkirk chimney system must be installed in accordance with all appropriate building regulations, codes of practice and manufacturers installation instructions. Selkirk Twin Wall chimney in diameters 127mm (5") – 203mm (8") are manufactured to comply with BS4543 parts 2 and 3 and EN1856-1.

The STC product designation is: **T450 N1 D Vm L50045 G(50)**

INSTALLATION

Installation instructions can be found at www.selkirkchimney.co.uk and are provided with all support components. These should be consulted to accurately determine the components that are required to enable any installation to be correctly assembled.

Jointing

Lengths and fittings are designed to be installed with the male coupling uppermost. Joints are achieved by placing the female coupling over the male coupling and making a one-eighth turn. A Locking band must be used to secure every joint and to ensure a firm connection.

Connecting to the appliance

The Adaptor is designed to make the connection to the appliance flue gas outlet or to a section of flue pipe to building regulation requirements.

Supports

The weight of the chimney may be carried by a number of different support components depending on whether the chimney is installed internally or externally, and whether it is supported by the roof, ceiling, floor or external wall. These components include the Wall Support, Ceiling Support and Roof Support. Lateral stability is provided by Wall Bands.

Supporting free-standing chimneys

Where the chimney exceeds 1.5 metres (4.9ft) beyond the last support it must be braced with a roof brace kit. The bracket should be fitted above a locking band and as close to the joint as possible.

Roof Support

The Roof Support is designed to support the chimney on the roof timbers and is provided with adjustable gimbal plates.

Load Bearing

The weight of chimney supplied depends on the support components used. The table below provides details.

Load Bearing data

The weight of the chimney can be borne in a number of ways and this table states the maximum length of chimney that can be supported by various components.

	Chimney size (mm)			
	127	152	178	203
Ceiling Support	6m*	6m*	6m*	6m*
Wall Support				
Side Plates Up	15m	15m	15m	15m
Side Plates Down	9m	9m	9m	9m
Telescopic Floor Support	16.7m	16.7m	16.7m	16.7m
Roof Support	9m*	9m*	9m*	9m*

*part of the flue up to a maximum of 6m may be suspended beneath the roof support. NB: Wall Bands are not load-bearing and must be used at intervals not exceeding 2.5 to provide lateral stability.

Weight

The weight of each diameter per metre run installed is shown in the table below.

	Chimney size (mm)			
	127	152	178	203
TWIN-WALL CHIMNEY	6.7kg	8.2kg	9.7kg	11.2kg

Clearance

The relatively low external casing temperature experienced in normal operation permits installation with only 50mm air gap clearance to combustible materials. Where the Twin-Wall Chimney passes through a combustible floor the appropriate firestopping components must be used.

Lengths of Chimney

Standard lengths of 1219mm, 914mm, 610mm, 457mm, 305mm and 152mm and an Adjustable Length are available, and the individual tables provide details.

Elbows

Building regulations stipulate that where bends are essential, they should be angled at no more than 45° to the vertical. 15°, 30° and 45° elbows are available.

Floor and Ceiling Penetration

Where the chimney penetrates a combustible floor or ceiling a 50mm air gap clearance must be maintained from the outer skin of the chimney to any combustible materials. Components are available which cater for such requirements.

Please refer to floor penetration requirements at the rear of this brochure.

Roof Penetrations

Where the chimney penetrates the roof an appropriate flashing should be used. The Seldek range of flashings is specifically designed for this purpose. To fit, trim the E.P.D.M. cone to suit the external pipe size using sharp tin snips or scissors, slide down pipe using water as a lubricant. Dress the aluminium or lead base over the profile of the tiles. Providing the cone has been cut to the appropriate size, the use of a storm collar or sealant is not required. If the chimney has a raised seam on the outer skin a small amount of silicone sealant should be applied where the chimney penetrates the E.P.D.M. cone of the flashing.

Termination

Three types of terminations are available. All have female couplers and are fixed to the top chimney length and secured with a locking band. The rain cap is a domed stainless steel cap. The round top allows rapid exhaust of combustion products and its integral band deflects the wind. It is recommended for use with oil only. The AD cowl provides aerodynamic down-draught protection. All terminations are deemed to be sacrificial components.

LENGTHS



LENGTHS

Available in 4 sizes and 6 lengths. They are easy to assemble and can be combined to obtain the required installation height.

Each length is 38mm longer than its effective length.

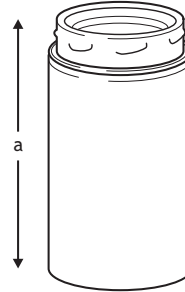
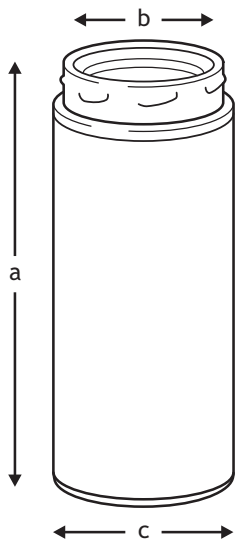
All lengths are seam welded with the exception of the 1219mm lengths which are lock seamed. When installed externally it is advisable to run a bead of silicone down the seam to prevent possible ingress of rainwater in extreme conditions.

Size	Part #	amm	bmm	cmm
127 mm	5STC-L48	1219	127	178
127 mm	5STC-L36	914	127	178
127 mm	5STC-L24	610	127	178
127 mm	5STC-L18	457	127	178
127 mm	5STC-L12	305	127	178
127 mm	5STC-L6	152	127	178

Size	Part #	amm	bmm	cmm
152 mm	6STC-L48	1219	152	203
152 mm	6STC-L36	914	152	203
152 mm	6STC-L24	610	152	203
152 mm	6STC-L18	457	152	203
152 mm	6STC-L12	305	152	203
152 mm	6STC-L6	152	152	203

Size	Part #	amm	bmm	cmm
178 mm	7STC-L48	1219	178	229
178 mm	7STC-L36	914	178	229
178 mm	7STC-L24	610	178	229
178 mm	7STC-L18	457	178	229
178 mm	7STC-L12	305	178	229
178 mm	7STC-L6	152	178	229

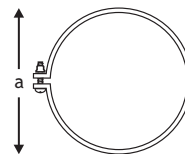
Size	Part #	amm	bmm	cmm
203 mm	8STC-L48	1219	203	254
203 mm	8STC-L36	914	203	254
203 mm	8STC-L24	610	203	254
203 mm	8STC-L18	457	203	254
203 mm	8STC-L12	305	203	254
203 mm	8STC-L6	152	203	254



ADJUSTABLE LENGTH

The Adjustable Length is designed to provide small increments in length between 2 fixed points. This length is not a load bearing component, it fits over the length below and by removing the required amount of insulation material the length will adjust from 50mm to 200mm. Because the components application and installation and therefore performance cannot be accurately controlled this component should be installed 300mm from any combustible material.

Size	Part #	amm
127 mm	5STC-AL	300
152 mm	6STC-AL	300
178 mm	7STC-AL	300
203 mm	8STC-AL	300

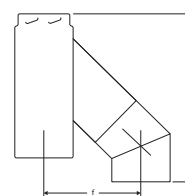
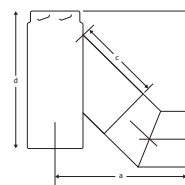
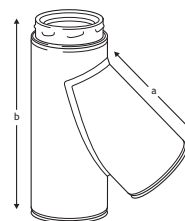


LOCKING BANDS

Inward flanges around the band fit into grooves at chimney length joints. Reinforces joints of chimney and prevents accidental uncoupling. Locking Band is included with all insulated lengths, tees and elbows.

Size	Part #	amm
127 mm	5STC-LB	178
152 mm	6STC-LB	203
178 mm	7STC-LB	229
203 mm	8STC-LB	254

TEES



135° INSULATED TEE & PLUG

The 135° Insulated Tee is used at the base of a vertical flue. Each Tee is supplied with one Locking Band and plug. Can be used on the base or branch to provide access. Each Tee has silicone sealant applied for added protection against rain ingress.

See Table 4A and diagrams for dimensions of the 135° Insulated Tee and a 45° Elbow positioned in a vertical or horizontal direction.

Size	Part #	amm	bmm
127 mm	5STC-E135	267	453
152 mm	5STC-E135	292	457
178 mm	5STC-E135	318	533
203 mm	5STC-E135	343	565

Dimension Table 4A – 135° Tee/45° Elbow

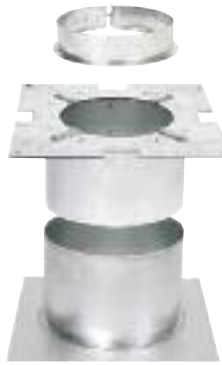
	125mm ID Chimney	150mm ID Chimney	175mm ID Chimney	200mm ID Chimney
a	368	394	432	457
b	419	445	483	533
c	267	292	318	343
d	453	457	533	565
e	502	546	584	635
f	286	298	337	356



INSULATED TEE PLUG

The insulated Tee Plug allows access for inspection and cleaning.

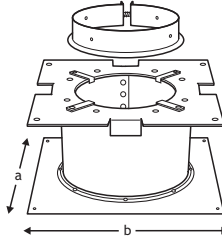
Size	Part #
127 mm	5STC-ITP
152 mm	6STC-ITP
178 mm	7STC-ITP
203 mm	8STC-ITP



CEILING SUPPORT (Galvanised)

These supports MUST be used whenever the weight of the STC chimney is to be taken at ceiling level and where it is applied with solid fuel, multi-fuel or wood burning appliances. The component incorporates a radiation shield, and is used where the chimney passes through a combustible floor. The maximum length of any sections of the chimney which can be carried by the Ceiling Support is 15ms, part of which can be suspended beneath it.

Size	Part #	amm	bmm
127 mm	5STC-CS	333	333
152 mm	6STC-CS	355	355
178 mm	7STC-CS	380	380
203 mm	8STC-CS	405	405



Please refer to floor penetration requirements at the rear of this brochure.



DRAIN TEE CAP

Provides a removable trap for condensation, rain and soot debris under an insulated tee. Incorporates a one inch BSP external thread secured with a locking band (not supplied).

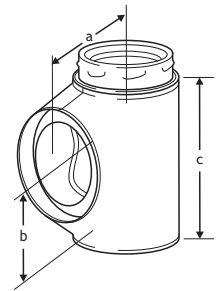
Size	Part #
127 mm	5STC-DTC
152 mm	6STC-DTC
178 mm	7STC-DTC
203 mm	8STC-DTC



90° INSULATED TEE & PLUG

The insulated Tee allows the horizontal connection of the chimney to the appliance. The Tee Cap provided allows access for inspection and cleaning.

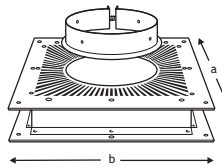
Size	Part #	amm	bmm	cmm
127 mm	5STC-E90	159	159	318
152 mm	5STC-E90	162	162	324
178 mm	5STC-E90	175	175	349
203 mm	5STC-E90	187	187	375



VENTILATED CEILING SUPPORT

These supports are used to provide load bearing support at the ceiling penetration point into the roof space where the chimney below it is enclosed to within 50mm of the outer skin of the chimney surface.

Size	Part #	amm	bmm
127 mm	5STC-VCS	370	370
152 mm	6STC-VCS	397	397
178 mm	7STC-VCS	420	420
203 mm	8STC-VCS	450	450



Please refer to floor penetration requirements at the rear of this brochure.

SUPPORTS

ROOF SUPPORT (Universal)

Provided with gimbal plates to permit a chimney to be supported on roof joists, trussed rafters etc.



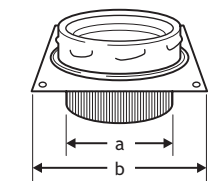
Maximum length of chimney which can be suspended below the roof support is 6.08 metres. Maximum total length (both above and below is 9.12 metres).

Size	Part #
Universal	STC-RS



ANCHOR PLATE

The Anchor Plate can be used for adapting the Selkirk Twin-Wall Chimney System to a "brick built chimney". Stainless steel and heavy gauge steel construction for long life. Retains chimney with a twist-lock connection.



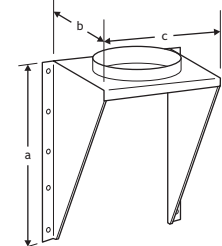
Size	Part #	amm	bmm
127 mm	5STC-AP	127	235
152 mm	6STC-AP	152	235
178 mm	7STC-AP	178	260
203 mm	8STC-AP	203	286



ADJUSTABLE WALL SUPPORT

The Adjustable Wall Support will allow for an adjustment of 51mm to 152mm from a vertical wall. For use with an insulated tee. Consists of two wall brackets, plate and hardware. Two angled brackets are supplied with the adjustable wall support to hold the T plug in place as illustrated.

For support heights refer to chart below.



Size	Part #	amm	bmm	cmm
127 mm	5STC-AWS	479	270	235
152 mm	6STC-AWS	479	270	235
178 mm	7STC-AWS	521	295	260
203 mm	8STC-AWS	556	321	286

WALL SUPPORT CHIMNEY HEIGHT CHART

Distance from Wall to Chimney	127mm dia. Max. Height m	152mm dia. Max. Height m	178mm dia. Max. Height m	203mm dia. Max. Height m
51 mm	22.50	19.15	17.02	14.90
64 mm	22.19	18.85	16.72	14.59
76 mm	21.58	18.24	16.11	14.29
89 mm	19.15	17.94	15.50	13.98
102 mm	20.06	17.02	14.90	13.38
114 mm	18.85	16.11	13.98	12.77
127 mm	17.63	15.20	13.07	11.86
140 mm	15.81	13.68	11.55	10.64
152 mm	13.68	11.86	10.34	9.12

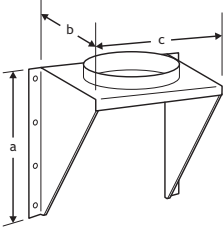


INTERMEDIATE WALL SUPPORT

Designed to provide intermediate support for the chimney at any point throughout its length. Will support chimney heights as per chart on page 3.

Chimney length is not supplied.

Size	Part #	amm	bmm	cmm
127 mm	5STC-AIWS	435	250	375
152 mm	6STC-AIWS	435	275	375
178 mm	7STC-AIWS	435	300	375
203 mm	8STC-AIWS	435	325	375



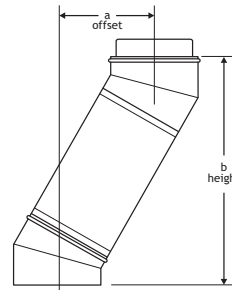
ELBOWS



ELBOW

Elbows do not have barbs on either female or male couplers. This allows 360 degree rotation and locking bands secure the components together at the exact offset required. Elbows can be used on the same 50mm air space clearance as chimney sections.

Size	15° Elbow Part #	30° Elbow Part #	45° Elbow Part #
127 mm	5STC-E15	5STC-E30	5STC-E45
152 mm	6STC-E15	6STC-E30	6STC-E45
178 mm	7SCT-E15	7STC-E30	7STC-E45
203 mm	8STC-E15	8STC-E30	8STC-E45



To determine offset dimension requirements, see chart below.

STC ELBOW OFFSET CHARTS

15° OFFSET CHART

Chimney Length mm	127 mm dia.		152 mm dia.		178 mm dia.		203 mm dia.	
	amm	bmm	amm	bmm	amm	bmm	amm	bmm
none	25	210	25	232	25	225	25	219
152	57	327	57	348	57	342	57	335
305	95	474	95	496	95	489	95	483
457	136	621	136	643	136	636	136	630
610	175	769	175	790	175	784	175	777
305 & 457	206	885	206	907	206	900	206	894
914	254	1063	254	1085	254	1078	254	1071
305 & 914	325	1327	325	1348	325	1342	325	1335
457 & 914	364	1474	364	1495	364	1489	364	1482
305 & 457 & 914	435	1738	435	1759	435	1753	435	1746
1219	333	1357	333	1379	333	1372	333	1366

30° OFFSET CHART

Chimney Length mm	127 mm dia.		152 mm dia.		178 mm dia.		203 mm dia.	
	amm	bmm	amm	bmm	amm	bmm	amm	bmm
none	90	340	90	394	105	407	105	407
152	150	444	150	499	164	511	164	524
305	228	576	228	630	241	643	241	656
457	303	708	303	762	317	775	317	788
610	379	840	379	894	395	907	395	920
305 & 457	517	953	517	1131	530	1144	530	1156
914	532	1104	532	1158	545	1171	545	1184
305 & 914	669	1341	669	1395	681	1407	681	1420
457 & 914	745	1472	745	1527	758	1539	758	1552
305 & 457 & 914	821	1605	821	1659	835	1672	835	1684
1219	679	1351	679	1405	691	1417	691	1430

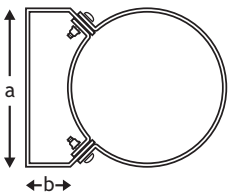
45° OFFSET CHART

Chimney Length mm	127 mm dia.		152 mm dia.		178 mm dia.		203 mm dia.	
	amm	bmm	amm	bmm	amm	bmm	amm	bmm
none	120	304	120	305	140	356	140	384
152	205	389	205	390	225	441	225	469
305	313	497	313	498	333	549	333	577
457	421	605	421	606	441	657	441	685
610	529	713	529	713	548	765	548	793
305 & 457	722	906	722	906	742	958	742	986
914	744	928	744	929	764	980	764	1008
305 & 914	937	1121	937	1122	958	1173	958	1201
457 & 914	1045	1229	1045	1230	1065	1281	1065	1309
305 & 457 & 914	1153	1337	1153	1337	1173	1388	1173	1417
1219	955	1144	955	1144	980	1196	980	1224

ANODISED WALL BAND

The Wall Band is used along the wall to provide for 50mm clearance and assure stability, required at 2.4 metres or closer intervals to stabilise the chimney. Stainless steel band, anodised back plate.

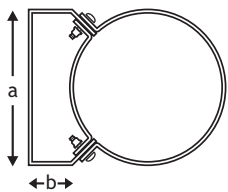
Size	Part #	amm	bmm
127 mm	5STC-WB	125	50
152 mm	6STC-WB	145	50
178 mm	7STC-WB	175	50
203 mm	8STC-WB	200	50



STAINLESS STEEL WALL BAND

All stainless steel construction provides 50mm clearance from the wall and lateral stability.

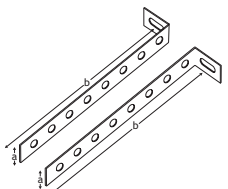
Size	Part #	amm	bmm
127 mm	5STC-WBSS	175	50
152mm	6STC-WBSS	190	50
178 mm	7STC-WBSS	210	50
203 mm	8STC-WBSS	220	50



STAINLESS STEEL WALL BAND EXTENSION BRACKETS

Attaches to external wall band (as shown) to extend clearance between chimney and wall surface as shown.

Part #	amm	bmm
STC-WBEB	40	300

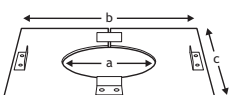


FIRESTOPS



FIRESTOP SPACER

Firestop Spacers are non-load bearing and provide lateral bracing. They may be provided in two alternative formats. A) Either having tags which are bent into position to provide the minimum clearance or with B) a dished profile in 6" only for the same purpose. They can be used where the chimney passes through a non-combustible floor or where the chimney below is not enclosed. If an enclosure is applied to within 50mm of the outside skin, four grilles must be used, two each side, top and bottom.



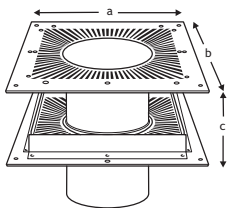
Size	Part #	amm	bmm	cmm
127 mm	5STC-FS	191	343	279
152 mm	6STC-FS	206	356	305
178 mm	7STC-FS	232	381	330
203 mm	8STC-FS	257	406	356

Please refer to floor penetration requirements at the rear of this brochure.



VENTILATED FIRESTOP JOIST SHIELD

These non-load bearing supports are used to provide lateral bracing at the ceiling penetration point into the roof space where the chimney below it is enclosed to within 50mm of the outer skin of the chimney surface.



Size	Part#	amm	bmm	cmm
127 mm	5STC-FJS	370	370	450
152 mm	6STC-FJS	397	397	450
178 mm	7STC-FJS	420	420	450
203 mm	8STC-FJS	450	450	450

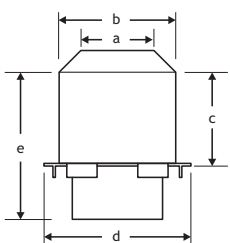
Please refer to floor penetration requirements at the rear of this brochure.



ATTIC INSULATION SHIELD

The Attic Insulation Shield is used wherever the chimney enters an open attic. A Joist Shield is included for use when the chimney is enclosed below the ceiling. Refer to installation instructions for full details.

The Attic Insulation Shield acts as an insulation shield to keep blown in or blanket insulation from filling in any framed opening or contacting the chimney.



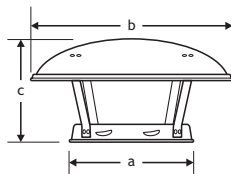
DIAMETER OF CHIMNEY	5STC-AIS 127 mm	6STC-AIS 152 mm	7STC-AIS 178 mm	8STC-AIS 203 mm
FRAMED OPENING	11 x 11 280 x 280	12 x 12 305 x 305	13 x 13 330 x 330	14 x 14 358 x 358
amm	180.8 mm	180.8 mm	231.6 mm	257 mm
bmm	279.4 mm	304.5 mm	330.2 mm	355.6 mm
cmm	250 mm	250 mm	250 mm	250 mm
dmm	330.2 mm	355.6 mm	381 mm	406.4 mm
emm	516 mm	516 mm	516 mm	516 mm

TERMINATIONS



RAIN CAP

Secured with Locking Band (not supplied).

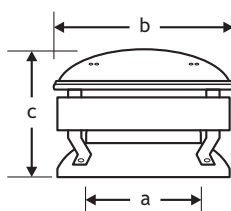


Size	Part #	amm	bmm	cmm
127 mm	5STC-RC	127	254	160
152 mm	6STC-RC	152	305	160
178 mm	7STC-RC	178	356	190
203 mm	8STC-RC	203	406	190



ROUND TOP

The Round Top is designed with a dome to exclude rain and leaves and a lower skirt to deflect wind. Secured with Locking Band (not supplied). For use with oil only.

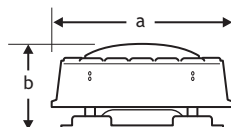


Size	Part #	amm	bmm	cmm
127 mm	5STC-RT	127	254	160
152 mm	6STC-RT	152	305	160
178 mm	7STC-RT	178	356	190
203 mm	8STC-RT	203	406	190



ANTI-DOWNDRAUGHT COWL

This Anti-downdraught Cowl provides aerodynamic downdraught protection whilst being compact and incorporating a coupler which allows the cowl to be connected to a Selkirk Twin-Wall chimney with use of a Locking Band (not supplied).



This product is tested to BS715 and against BS EN1856 Part 2 as being suitable for all types of fuel.

Size	Part #	amm	bmm
127 mm	5STC-DADT	330	130
152 mm	6STC-DADT	330	130
178 mm	7STC-DADT	330	130
203 mm	8STC-DADT	330	130

FLASHINGS



STORM COLLAR

The Storm Collar is designed to fit around the chimney pipe just above the upstand of a standard roof flashing. The upper edge of the Storm Collar should be waterproofed with non-hardening silicone caulking to prevent any water from leaking between the Storm Collar and chimney pipe.

NOTE: Storm Collar is not required with Seldek flashings.

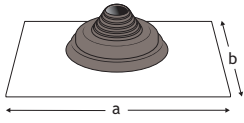
Size	Part #
127 mm	5STC-SC
152 mm	6STC-SC
178 mm	7STC-SC
203 mm	8STC-SC



SELDEK No 1 (50mm – 170mm)

The Seldek Flashing is used to form a watertight seal when the chimney penetrates a slate or tiled roof. For external pipe diameters from 50mm to 170mm.

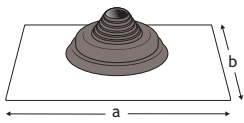
Part #	amm	bmm
SDA 101	500	500



SELDEK No 2 (110mm – 200mm)

The Seldek Flashing is used to form a watertight seal when the chimney penetrates a slate or tiled roof. For external pipe diameters from 110mm to 200mm.

Part #	amm	bmm
SDA 102	600	600



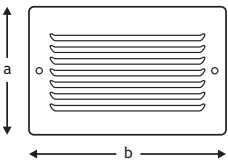
MISCELLANEOUS ACCESSORIES



VENTILATION GRILLE

Ventilation Grilles are required when the chimney is enclosed and non-ventilated firestops are used.

Please refer to floor penetration requirements at the rear of this brochure.

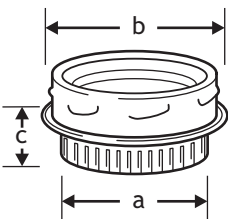


Part #	amm	bmm
VG	140	240



ADAPTOR

Used as a vertical or horizontal connection between chimney lengths and connector pipe or to connect directly to an appliance.



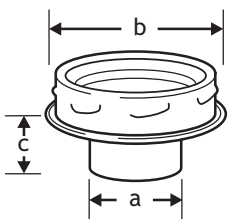
Size	Part #	amm	bmm	cmm
127 mm	5STC-A	127	178	40
152 mm	6STC-A	152	203	40
178 mm	7STC-A	178	229	40
203 mm	8STC-A	203	254	40



4" – 5" INCREASER

Used to connect from 4" outlet on appliance or 4" flue pipe to 5" Twin-Wall chimney.

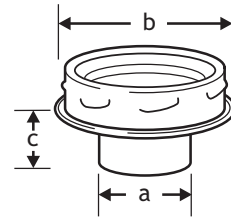
Part #	amm	bmm	cmm
05STC-IA	100	178	40



5" – 6" INCREASER

Used to connect from 5" outlet on appliance or 5" flue pipe to 6" Twin-Wall chimney.

Part #	amm	bmm	cmm
06STC-IA	125	200	40



ROOF BRACE KIT

A Roof Brace Kit can be used whenever there is a need to stabilise the chimney above the roof level. The roof brace kit must be used if the chimney extends 1.5 + metres above the roof. The arms can be adjusted from 1.5 metres to 2.9 metres in length.

Size	Part #
Universal	STC-RBK



ROOF BRACE KIT REQUIREMENTS

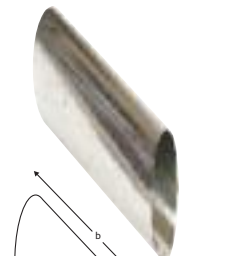
Up to 1.2 metres	None
1.5 metres to 3 metres	1
over 3 metres	1 every 1.5 metres



TRIM PLATES

Used as a cosmetic cover plate where the chimney penetrates a sloped ceiling available for 30° or 45° angles.

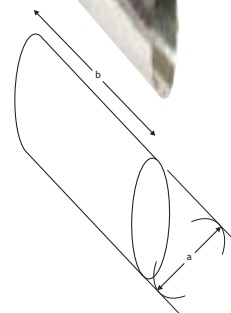
Part #	Part #
05STC-TP30	05STC-TP45
06STC-TP30	06STC-TP45
07STC-TP30	07STC-TR45
08STC-TP30	08STC-PT45



WALL SLEEVE

Used to allow chimney to pass through a cavity wall.

Part #	amm	bmm
WS05F	195	400
WS06F	225	400
WS07F	280	400
WS08F	300	400



Floor penetration and chimney enclosure requirements for the Selkirk STC Chimney System assessed to BS EN 1856-1 at T450.

Building Regulations as well as the approval procedure to which all prefabricated system chimneys are required to be certificated, dictate that an adequate air gap clearance **MUST** be maintained between the outside skin of the chimney and any combustible material. Clearances becomes more crucial if the chimney is enclosed. The increase in temperature within any enclosure must be dissipated for safety reasons. The approval process for the Selkirk STC Chimney system requires the air gap distance to be not less than 50mm. Where the chimney passes through a room or cupboard and is enclosed, the correct

floor penetration components must be used. The options as well as the appropriate components to be used and how they are applied are described in these illustrations and related text and must be followed to ensure that the STC system is applied in accordance with its certificated approval.

Figures 5 to 10 illustrate the basic enclosure arrangements and figures 14 to 26 depict the variations in application.

These four illustrations represent typical configurations over a freestanding solid fuel or wood burning appliance. NOTE. If the STC Chimney System serves an appliance which is located within a false chimney breast, it is good practice to provide an air gap clearance of at least 100mm between any combustible material located within the false chimney breast and the outer surface of the chimney.

Ventilated Ceiling Support B **Fig. 1**

These supports are used to provide load bearing support at the ceiling penetration point into the roof space where the chimney below it is enclosed to within 50mm of the outer skin of the chimney surface. See Figures 7, 8, 16 and 22 for installation details.

Fig. 2 **Firestop Spacers D**

These non-load bearing supports provide the alternative method for bracing the chimney at the ceiling penetration point into the roof space where the chimney below it is enclosed to within 50mm of the outer skin of the chimney surface **AND THE ENCLOSURE IS VENTILATED TOP AND BOTTOM WITH PURPOSE DESIGNED GRILLES**. They are also used where the chimney penetrates a non-combustible floor. See Figures 11, 12, 14 and 15 for installation details.

Ceiling Support A **Fig. 3**

These supports **MUST** be used whenever the weight of the STC chimney is to be taken at ceiling level and where it is applied with solid fuel, multi-fuel or wood burning appliances. The component incorporates a radiation shield, and is used where the chimney passes through a combustible floor. The maximum length of any sections of the chimney which can be carried by the Ceiling Support is 50ft, part of which can be suspended beneath it. See Figures 5 and 6 for installation details.

Fig. 4 **Ventilated Firestop Joist Shield C**

These non-load bearing supports are used to provide lateral bracing at the ceiling penetration point into the roof space where the chimney below it is enclosed to within 50mm of the outer skin of the chimney surface. See Figures 10, 19, 20, 22 and 23 for installation details.

NOTE. The illustrations in this section are Copyright protected and are representative of support components. They are not drawn to scale, and details may vary from those illustrated where design improvements are made.

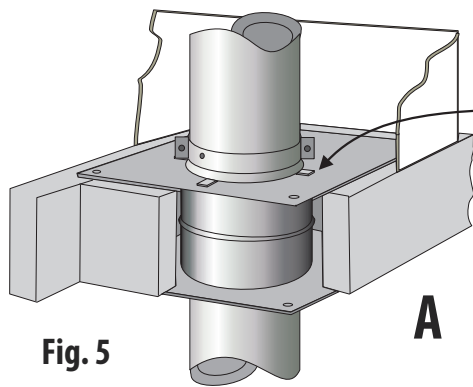


Fig. 5

A

1 The integrity and structural performance of the fire stopping arrangement of the Ceiling Support is dependent upon a four-sided enclosure within the floor depth. The integral telescopic radiation shield will accommodate floor thickness of between 150 and 275mm. Frame a level square opening within the joists using timber stringers where necessary according to the chimney diameter.

2 Screw or nail the trim plate to the underside of the frame, so that the lower half of the integral radiation shield is centrally located.

3 Locate the Support Plate in position so that the upper half of the radiation shield locates over the lower half of the radiation shield projecting from the lower trim plate. Push down until the two halves of the radiation shield telescope together and the Support Plate rests on top of the frame. Screw or nail into position.

4 Lower the chimney through the Support Plate with the support clamping ring loosely positioned.

Ceiling Support

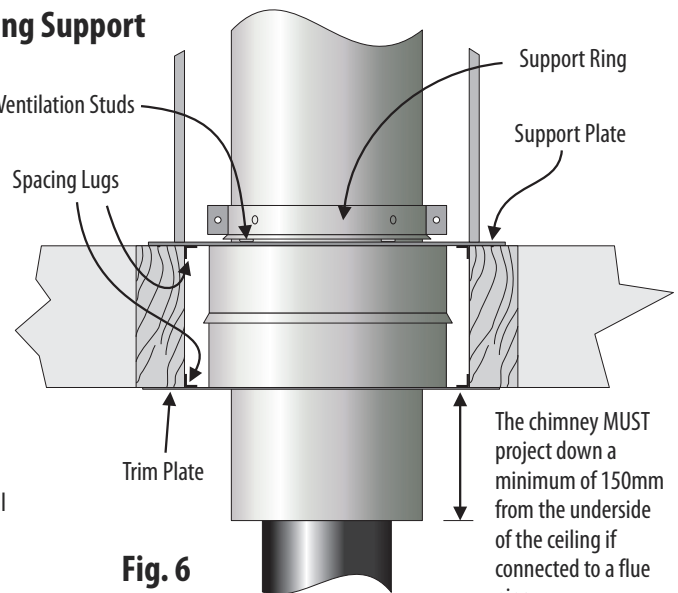


Fig. 6

The chimney **MUST** project down a minimum of 150mm from the underside of the ceiling if connected to a flue pipe.

5 Once the known position of the chimney is determined, tighten the clamp support ring to the chimney so that the flares edge rests on the ventilating studs of the Support Plate.

6 Using four holes in the clamping support ring as a guide, drill four 3mm holes through the outer wall of the chimney taking care not to pierce the inner skin of the chimney. Using the self-tapping screws provided secure the clamping ring to the chimney wall.

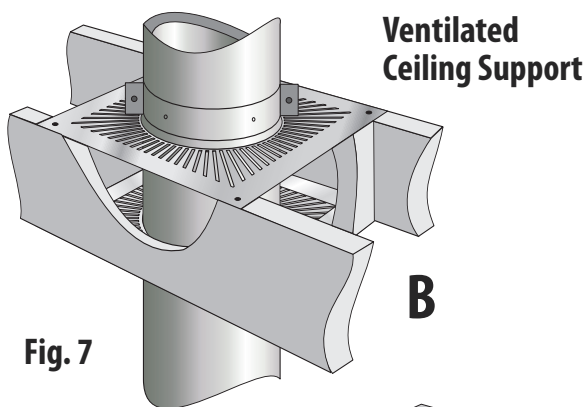


Fig. 7

Ventilated Ceiling Support

B

7 The Ventilated Ceiling Support **MUST** be used where the chimney beneath or above it is enclosed to within 50mm from the outside skin and the enclosure below is only ventilated with grilles at the bottom of the enclosure as shown in Figs. 1, 16 and 17.

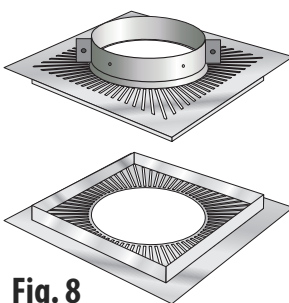


Fig. 8

8 The device is load bearing, and supports the chimney where the system penetrates the floor. It **MUST** be used within a four sided timber frame within the thickness of the floor.

9 The lower section is passed up through the prepared frame and screwed to the underside of the ceiling. The upper section is then lowered from above and screwed or nailed to the top side of the joists, after which the chimney can be passed through it.

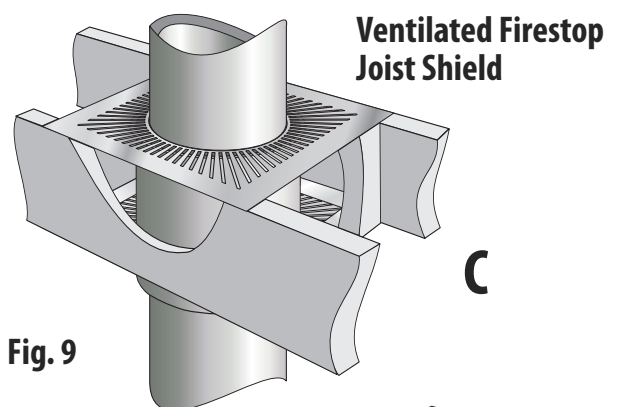


Fig. 9

Ventilated Firestop Joist Shield

C

10 The Ventilated Firestop Joist Shield **MUST** be used where the chimney beneath it is enclosed to within 50mm from the outside skin and **where no ventilation grilles have been inserted in the enclosure**. See the text for Fig. 4 and also Figure 22.

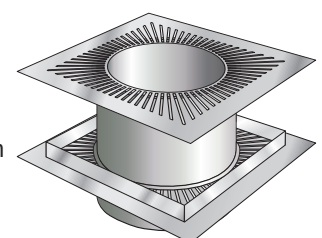


Fig. 10

11 The device is **not load bearing**, it just provides lateral support where the system penetrates the floor and **MUST** be used within a four sided timber frame within the thickness of the floor.

12 The upper section to which the radiation shield is attached, is passed down through the prepared frame and screwed or nailed to the top side of the joists. The lower section is then passed from below and screwed or nailed to the underside of the ceiling, after which the chimney can be passed through it.

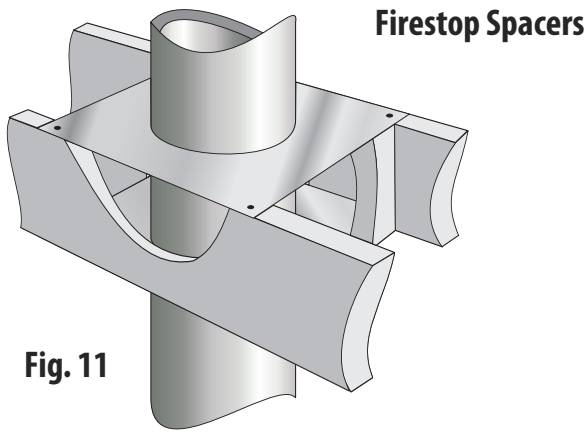


Fig. 11

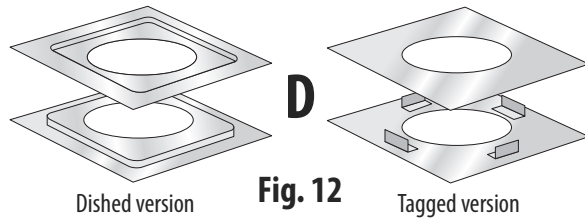


Fig. 12

Dished version

Tagged version

15 These figures are the first of six which illustrate how the Ceiling Penetration Components, enclosures and grilles should be used. In these two illustrations, Firestop Spacers and a Ceiling Support have been shown at the top and at the bottom of the floor penetration enclosure respectively. The remaining figures 14 to 26 provide details of alternative arrangements which can be applied using the other ceiling penetration components. Figure 13 applies to any application where grilles are to be used in the enclosure walls, whether at the top, bottom or both.

13 Firestop Spacers are non-load bearing and provide lateral bracing. They may be provided in two alternative formats, either having tags which are bent into position to provide the minimum clearance or in 6" diameter with a dished profile for the same purpose. They can be used where the chimney passes through a non-combustible floor **or where the chimney below is not enclosed**. If an enclosure is applied to within 50mm of the outside skin, four grilles must be used, two each side, top and bottom as shown in Figure 14.

14 Locate the plates into square openings, dimensions for which can be found in Table A in the main installation instructions. Secure with screws or nails as appropriate.

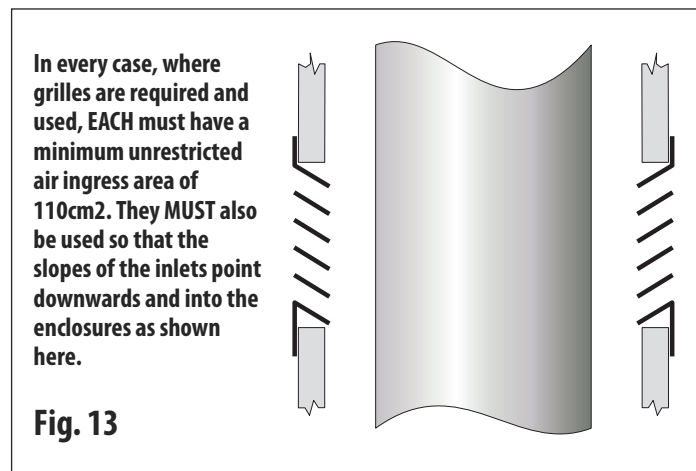


Fig. 13

Firestop Spacers used where the chimney beneath is enclosed

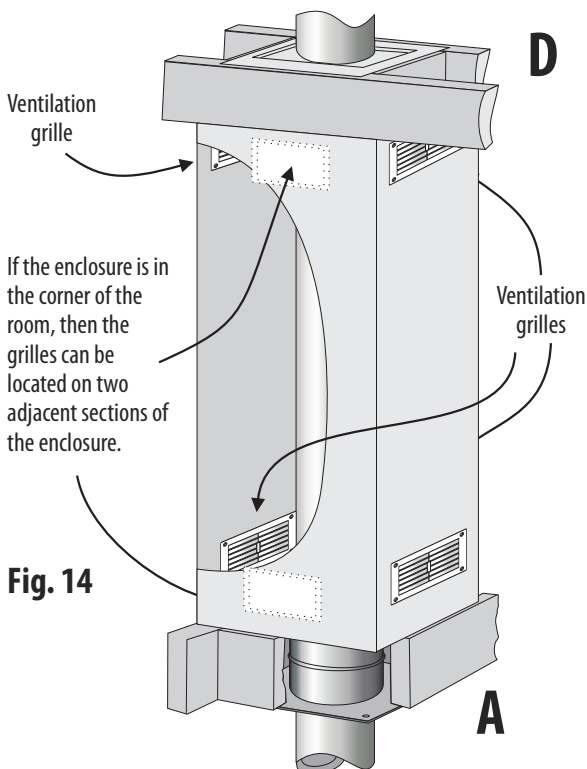


Fig. 14

Firestop Spacers used where the chimney beneath is exposed

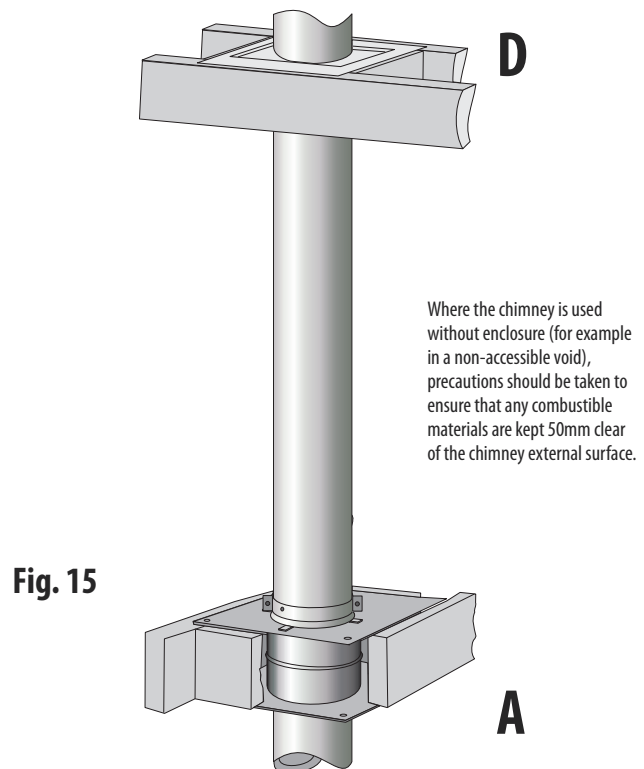
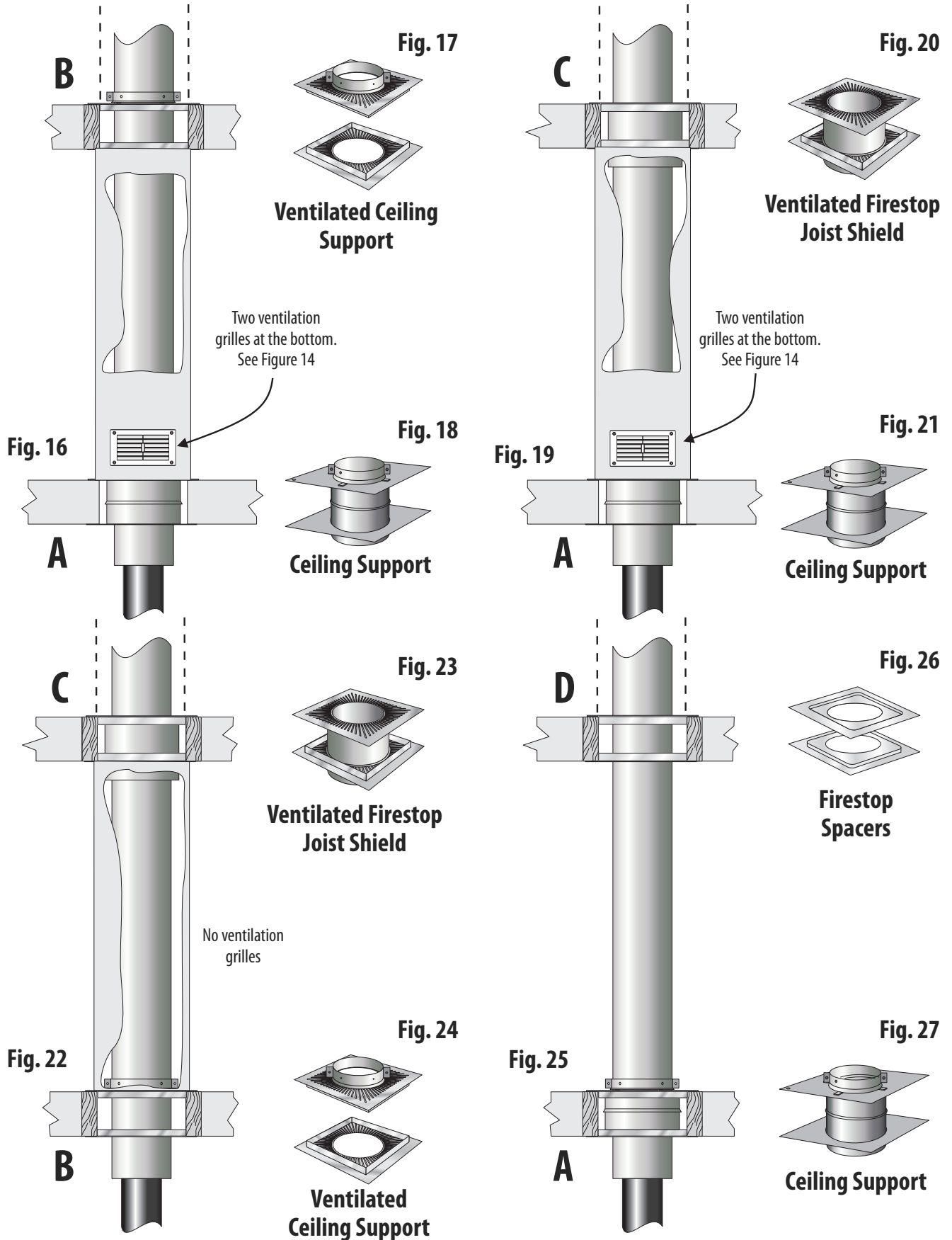


Fig. 15

THE IMPORTANCE OF VENTILATION

16 These instructions identify the need to ensure that the chimney is allowed to be cooled where it passes through parts of the building and is enclosed. Figure 14 illustrates the basic installation requirements dictated by the assessment procedures of BS EN1856 and BS EN1859, to which the STC Chimney System has been subjected and certificated. **ALL** factory made System Chimneys will require similar assessment procedures and use of dictated floor penetration components, without the use of which the chimney would be illegally applied.

17 Figures 16 to 26 illustrate four further methods of applying the STC Chimney System where it is enclosed to within 50mm of the chimney surface. It should be noted that applying any insulation material around the chimney does not negate these requirements and can be potentially dangerous.





Insta-Lock Gas Vent
also available from
Deks Distribution

DEKS
Distribution
A Skellerup Industries Company

Unit 14, Garanor Way
Gordano 19 Industrial Estate
PORTBURY, Bristol BS20 7XE

Tel: 01275 373300
Fax: 01275 373399
sales@deks.org.uk
www.selkirkchimney.co.uk



375 Green Road
Stoney Creek, Ontario, Canada
L8E 4A5

Tel: 1 905 662 6600
Fax: 1 905 662 5352
info@selkirkcanada.com
www.selkirkcanada.com