

Quality single wall flue system designed and built in Britain. **The SUPRA PLUS range from SFL.** 

# SUPRA PLUS

Stainless steel single wall chimney system Condensing appliances & positive pressure applications





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#### General

The Supra Plus chimney system has been specifically designed for todays modern high efficiency appliances that operate under positive pressure and condensing conditions. Supra Plus offers a number of design advantages, including factory fitted and bonded elastomer seals, heavy and light duty Locking Bands and minimum dimensioned components for todays wall hung and modular commercial appliances.

Supra Plus is manufactured in 9 diameters ranging from 80mm to 350mm and consists of a range of lengths and fittings which simply push-fit together, and which are secured with a Locking Band. The entire system is manufactured from corrosion resistant grade 316L (1.4404:X2CrNiMo 17-12-2) stainless steel and is manufactured using a fully welded construction together with precision formed close tolerance joints. Condensate and pressure resistance is achieved by a three lip elastomer seal located in a recess within the female end.

The Supra Plus product is available with a wide range of support components that cater for both lateral and vertical structural loading of the product. SFL does not recommend any other system of support being used with the Supra Plus product, unless approved by SFL prior to installation.

#### Application

#### **Heating Appliances**

Supra Plus has a wide range of applications and is suitable for use on gas and kerosene fired appliances where the flue gas temperature does not exceed 200°C and where any positive pressure created in the chimney system does not exceed that stated in the performance designations of Table A. This makes Supra Plus an ideal solution for todays high efficiency condensing appliances and applications that require up to 5000 Pa positive pressure.

#### Chimney Liner and Connecting Flue Pipe

Supra Plus can also be used as a chimney liner within an existing masonry chimney, or as a Connecting Flue Pipe, where regulations permit. When used for flue gas temperatures greater than 200°C, the elastomer seals MUST be removed. When removed, Supra Plus is sootfire resistant and suitable for flue gas temperatures up to 450°C. With the seal removed, the chimney system must operate under negative draught conditions (N1).

#### Table A

Supra Plus	s product de	esign	ation	is to I	BS EI	V 1856	5-1/2
Supra Plus	BS EN 1856-1	T200	P1	W	V2	L50050	O(X)
Supra Plus	BS EN 1856-1	T200	H1	W	V2	L50050	O(X)
(1) Supra Plus	BS EN 1856-2	T200	P1	W	V2	L50050	0
(1) Supra Plus	BS EN 1856-2	T200	H1	W	V2	L50050	0
(2) Supra Plus (SR)	BS EN 1856-2	T450	N1	D	V2	L50050	G
(3) Supra Plus (SR)	BS EN 1856-2	T450	N1	D	V2	L50050	G(450)M
Temperature class Pressure class Condense resistance Cordense resistance Corrosion class Corrosion class							
Material specification Liner grade 316L Liner thickness: 0.5mm							
Sootfire resistance G=yes O=no							
(1) Installed as a rigid lir (2) Installed as a rigid lir							

(2) Installed as a rigid liner within a masonry shaft - 1450 N1 G
(3) Installed as a connecting flues where regulations permit -T450 N1 G450 M
(SR) Denotes Seals Removed

Diameters 80mm - 300mm X=200mm

Diameter 350mm X=300mm

#### **Approvals**

Supra Plus is CE certified to BS EN 1856-1 & 2, certificate No. 2797-CPR-496040 & 2797-CPR-559419 to the performance designations as detailed in Table A.

#### Quality

All components are manufactured under a quality management system, certificate No. FM557622, administered by British Standards in accordance with ISO 9001: 2015. In addition, SFL operate a CE approved factory production control system as required under the Construction Products Regulation.

#### **Application Guidance**

Connection to an appliance which is not connected to the fuel supply, may be carried out by a competent person. However, connection to an appliance that is connected to the fuel supply MUST be carried out by an approved and registered heating engineer, e.g. Gas Safe, HETAS (Solid Fuel) or OFTEC (Oil).

#### **Condensing (Wet) Systems**

Where Supra Plus is serving a high efficiency condensing appliance, adequate provision must be made for the removal of condensation from the system. It is important that horizontal sloping runs are angled not less than 3°, but preferably 5°. Failure to provide an adequate fall may lead to premature failure of the seals, as well as potential corrosion of the product. Various components including 93° / 95° tees and 87° / 85° elbows are available within the range to facilitate a 3° or 5° fall. Drainage components must be placed strategically within the system to facilitate the removal of condensation to a suitable drain or gully, see Fig. 1 on page 13. When sizing a Supra Plus chimney system for positive pressure applications, the maximum over pressure in the system must not exceed 5000 Pa at a maximum flue gas temperature of 200°C. Where used on positive pressure applications, drainage points should be adequately trapped to compensate for the over pressure within the chimney system.

#### **Chimney Liner**

Where Supra Plus is used to reline an existing masonry chimney, it is imperative that a Support Length is initially used as the base fixing to which the block and tackle is attached, with additional straight lengths added as it is being lowered. Location Bands must be used at intervals not exceeding 3.0 metres to provide lateral stability and to centrally brace the product within the chimney. If required, SFL can custom manufacture the Location Bands to suit the dimensions of the chimney. Please contact SFL Technical Sales for further information.

#### Accidental Human Contact

Care should be taken where there is a risk of accidental human contact with the product. Where there is this possibility and where the surface temperature is likely to exceed 70°C, either a twin wall insulated system such as the SFL Nova\* product should be used or provision is made to shield the product.

#### **External Applications**

Where Supra Plus is used externally, consideration should be given to the external environment and the possibility of sub-zero temperature, which could potentially cause freezing of condensates. SFL would recommend that an insulated product is used for external applications, such as the SFL Nova® product. Where external runs are required in Supra Plus, it should be limited to no more than 3.0 metres, before reverting to a twin wall product.

#### **Distance to Combustible Materials**

Where local regulations permit, Supra Plus can be used as a connecting flue pipe to serve both traditional solid fuel as well as modern pellet fuelled appliances. Where the flue gas temperature is greater than 200°C, the seals MUST be removed from the product before installation commences. In all cases the required distance to combustible materials as detailed in the performance designation Table A MUST be observed.

#### High Pressure (H1) Applications

Supra Plus is suitable for applications where any positive pressure created within the chimney system does not exceed 5000 Pa and where the maximum flue gas temperature does not exceed 200°C. Please note that there are certain components within the range that are not suitable for H1 applications and these are labelled as either N1 or P1. When considering positive pressure systems, consideration must be given to reflux of flue gases back through non-operational appliances. It is also important that any drainage points are adequately trapped to resists the over pressure of the system.

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#### **Commercial Applications**

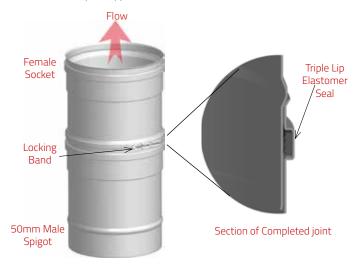
The Supra Plus product is ideally suited for commercial applications. Due to the complexity of most installations, SFL can manufacture to order bespoke components, including special angled elbows, tees and multi-inlet manifolds.

SFL's Technical Department employ specialist software to model the thermodynamic and flow characteristics of the proposed system, to ensure the most economic design. All calculations are in accordance with BS EN 13384 Parts 1 & 2. With over 50 years of experience, SFL are able to offer advice on all aspects of chimney design, including the Clean Air Act, Chimney Heights, Regulations, Standards and much more.

As standard, Supra Plus is available up to 350mm internal diameter. For larger sizes, please refer to the Supra Commercial and Europa products.

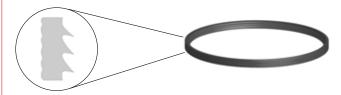
## Jointing

The joint consists of an expanded female end which incorporates a recess into which the elastomer seal is fixed and a mating male end. The joint is a push-fit design allowing the male end to engage 50mm into the female end and past the seal. The joint is then finished with a Locking Band. When making the joint, it is important that the ends of the pipe are clean / free of dirt and the surface of the seal is lubricated by the application of SFL Lubricant.



#### Upgraded Elastomer Triple Lip Seal (H1 / W Applications)

The elastomer seal plays a critical role in maintaining the positive pressure capability, condensate resistance and stability of the product. Supra Plus features an upgraded seal specification to provide greater performance and durability in the field. All Supra Plus components are supplied complete with factory fitted and bonded seals.





Superior three vane seal design for TRIPLE protection against corrosion, pressure and leakage.



50% increase in vane thickness for greater durability and corrosion resistance.





CE Marked to EN 14241-1 T200 W 2 K2 I

Suitable for positive pressure applications up to 5000 Pa (H1)



WARNING - It shall be verified that the chimney designation corresponds to the intended use during building design, installation process and possible building or appliance modifications after installation.



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#### Straight Lengths

Available in 'nominal' installed lengths as detailed in the tables below



	Installed Length		
Size	974mm	474mm	
80mm	4110108	4110208	
100mm	4110110	4110210	
130mm	4110113	4110213	
150mm	4110115	4110215	
180mm	4110118	4110218	
200mm	4110120	4110220	
250mm	4110125	4110225	
300mm	4110130	4110230	
350mm	4110135	4110235	

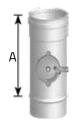
Size	Instal	led Length
JIZE	224mm	98mm
80mm	4110308	4110708
100mm	4110310	4110710
130mm	4110313	4110713
150mm	4110315	4110715
180mm	4110318	4110718
200mm	4110320	4110720
250mm	4110325	4110725
300mm	4110330	4110730
350mm	4110335	4110735

#### **Probe Length**



A 224mm installed length featuring a test point, closed via a 1/4" BSP screw.

Size	Code
80mm	4110908
100mm	4110910
130mm	4110913
150mm	4110915
180mm	4110918
200mm	4110920
250mm	4110925
300mm	4110930
350mm	4110935



В

#### Damper Length (P1 Only)

Used to increase resistance in a system or at appliance connection. This is not a reflux device and is manually set. The damper blade provides a maximum closure of 70%. Only suitable for positive pressure applications up to 200 Pa (P1).

Size	А	Code
100mm	230	4119610
130mm	230	4119613
150mm	230	4119615
180mm	230	4119618
200mm	230	4119620
250mm	230	4119625

**Inspection Length (P1 Only)** Designed to be installed within the system to allow access for inspection and cleaning. Must only be used where the flue gas temperature will not exceed 200°C. For high temperature (N1) applications the door seal must be removed prior to installation.

Size	А	В	Code
80mm	475	100	4111008
100mm	475	100	4111010
130mm	475	180	4111013
150mm	475	200	4111015
180mm	475	200	4111018
200mm	475	200	4111020
250mm	475	200	4111025
300mm	475	200	4111030
350mm	475	200	4111035

#### Adjustable Length

Designed to be used to make up a required length between two components. It should only be used with a standard length which must be ordered separately. Adjustable Lengths are supplied with a special Gasket Set which must be used for condensing and positive pressure applications. Adjustable Lengths can be cut to size on site if required.

Size	A MIN	A MAX	Code
80mm	63	306	4114408
100mm	63	296	4114410
130mm	63	281	4114413
150mm	63	271	4114415
180mm	63	243	4114418
200mm	63	233	4114420
250mm	63	208	4114425
300mm	63	183	4114430
350mm	63	158	4114435

#### All Dimensions unless stated otherwise are in mm

#### **Appliance Adaptor**

Used to connect the Supra Plus product to the appliance. The interface between the Adaptor and the appliance outlet should be sealed with silicone sealant when used on condensing appliances, unless the appliance incorporates a seal at the outlet.

Size	A(mm)	B(mm)	OD	Code
80mm	55	105	77	4119308
100mm	55	105	97	4119310
130mm	55	105	127	4119313
150mm	55	105	147	4119315
180mm	55	105	177	4119318
200mm	55	105	197	4119320
250mm	55	105	247	4119325
300mm	55	105	297	4119330
350mm	55	105	347	4119335

#### Supra Plus - Nova® Adaptor

Designed to facilitate connection from the Supra Plus to NOVA® chimney system.

Size	Code
80mm Supra Plus to 100mm Nova®	4179608
100mm	4179610
130mm	4179613
150mm	4179615
180mm	4179618
200mm	4179620
250mm	4179625
300mm	4179630
350mm	4179635

#### **NOVA<sup>®</sup> - Supra Plus Adaptor**

Designed to facilitate connection from the Nova® chimney system to Supra Plus.

Size	Code
80mm Supra Plus to 100mm Nova®	4179608
100mm	4179610
130mm	4179613
150mm	4179615
180mm	4179618
200mm	4179620
250mm	4179625
300mm	4179630
350mm	4179635



A B

В

А

#### Adaptor to Flex (P1)

Used to connect the Supra Plus product to a generic liner providing it meets the dimension of the adaptor. Supplied with easy fit clamping band.

Size	A(mm)	B(mm)	C(mm)	Code
100mm	96	113	88	4111710
130mm	121	138	88	4111713
150mm	146	163	88	4111715
180mm	171	190	88	4111718
200mm	196	213	88	4111720
250mm	246	263	88	4111725
300mm	296	313	88	4111730
350mm	346	363	88	4111735

#### Adaptor from Flex (P1)

Used to connect the Supra Plus product from a generic liner, providing it meets the dimension of the adaptor. Supplied with an easy fit clamping band, see installation instructions.

Size	A(mm)	B(mm)	C(mm)	Code
100mm	96	113	138	4112110
130mm	121	138	138	4112113
150mm	146	163	138	4112115
180mm	171	193	138	4112118
200mm	196	213	138	4112120
250mm	246	263	138	4112125
300mm	296	313	138	4112130
350mm	346	363	138	4112135

#### 80mm Supra Plus - 100mm Flex Adaptor (P1)

Used to connect from 80mm Supra Plus to 100mm generic flexible chimney liner. Supplied with easy fit clamping band.

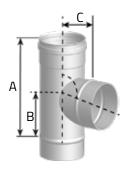
Size	A(mm)	B(mm)	C(mm)	Code
80	96	113	117	4117908



С





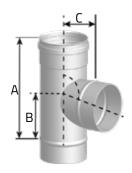


#### 90° Tee

Used to provide a 90° connection in a system or can be used as an access / inspection point when used with a Tee Cap

Size	А	В	С	Code
80mm	285	131	90	4110508
100mm	285	131	90	4110510
130mm	315	146	105	4110513
150mm	335	156	115	4110515
180mm	365	171	130	4110518
200mm	387	183	142	4110520
250mm	437	208	167	4110525
300mm	484	215	190	4110530
350mm	534	255	215	4110535

## 93° Equal Tee



The tee is provided with a 3° connection on the branch to allow for condensate drainage.

Size	А	В	С	Code
80mm	285	131	90	4110608
100mm	285	131	90	4110610
130mm	315	146	105	4110613
150mm	335	156	115	4110615
180mm	365	171	130	4110618
200mm	387	183	142	4110620
250mm	437	208	167	4110625
300mm	484	215	190	4110630
350mm	534	255	215	4110635

# A B

#### 95° Equal Tee

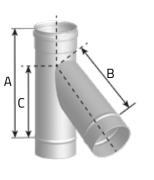
The tee is provided with a 5° connection on the branch to allow for condensate drainage.

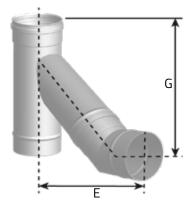
Size	А	В	С	Code
80mm	285	131	90	4119108
100mm	285	131	90	4119110
130mm	315	146	105	4119113
150mm	335	156	115	4119115
180mm	365	171	130	4119118
200mm	387	183	142	4119120
250mm	437	208	167	4119125
300mm	484	215	190	4119130
350mm	534	255	215	4119135

## 135° Equal Tee

Used to provide a 45° connection in a system or as a chimney entry point. Can be used as an access / inspection point when used with a Tee Cap, or as a drain when fitted with a Tee Cap with Drain.

Size	А	В	С	Code
80mm	226	129	129	4112208N
100mm	253	153	153	4112210N
130mm	296	189	189	4112213N
150mm	325	213	213	4112215N
180mm	367	249	249	4112218N
200mm	395	274	274	4112220N
250mm	465	334	334	4112225N
300mm	536	393	393	4112230N
350mm	607	455	455	4112235N



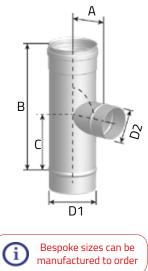


#### Dimensions with 45° Elbow Added

Size	Е	G
80mm	250	193
100mm	274	214
130mm	311	250
150mm	335	273
180mm	371	310
200mm	395	335
250mm	455	395
300mm	523	475
350mm	583	536

## Reducing Tees Supra Plus

	Body Size D1	Branch Size D2	А	В	С	90°	93°	95°
	100	80	83	198	72	4159001N	4159301N	4159501N
	130	80	98	198	72	4159004N	4159304N	4159504N
	130	100	98	218	82	4159005N	4159305N	4159505N
	150	80	108	198	72	4159009N	4159309N	4159509N
	150	100	108	218	83	4159012N	4159312N	4159512N
Tai	150	130	108	248	97	4159016N	4159316N	4159516N
22	180	80	123	198	72	4159017N	4159317N	4159517N
	180	100	123	218	82	4159019N	4159319N	4159519N
	180	130	123	248	97	4159022N	4159322N	4159522N
	180	150	123	268	107	4159023N	4159323N	4159523N
be	200	80	133	198	72	4159024N	4159324N	4159524N
der	200	100	133	218	82	4159026N	4159326N	4159526N
	200	130	133	248	97	4159028N	4159328N	4159528N
	200	150	133	268	107	4159029N	4159329N	4159529N
	200	180	133	298	122	4159031N	4159331N	4159531N
	250	80	158	198	72	4159032N	4159332N	4159532N
	250	100	158	218	82	4159033N	4159333N	4159533N
	250	130	158	248	97	4159036N	4159336N	4159536N
	250	150	158	268	107	4159037N	4159337N	4159537N
	250	180	158	298	122	4159038N	4159338N	4159538N
	250	200	158	318	132	4159039N	4159339N	4159539N
	300	80	183	198	72	4159041N	4159341N	4159541N
	300	100	183	218	82	4159042N	4159342N	4159542N
	300	130	183	248	97	4159043N	4159343N	4159543N
	300	150	183	268	107	4159046N	4159346N	4159546N
	300	180	183	298	122	4159047N	4159347N	4159547N
	300	200	183	318	132	4159048N	4159348N	4159548N
	300	250	183	368	157	4159049N	4159349N	4159549N
	350	80	208	198	72	4159051N	4159351N	4159551N
	350	100	208	218	82	4159052N	4159352N	4159552N
	350	130	208	248	97	4159054N	4159354N	4159554N
	350	150	208	268	107	4159056N	4159356N	4159556N
	350	180	208	298	122	4159057N	4159357N	4159557N
	350	200	208	318	132	4159058N	4159358N	4159558N
	350	250	208	368	157	4159059N	4159359N	4159559N
	350	300	208	418	182	4159061N	4159361N	4159561N



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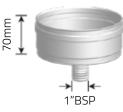
## **Tee Components & Drains** Supra Plus

#### Tee Cap

Used to close off the branch / base of a tee or the end of a header/manifold. Held in position with a Locking Band.



#### Size A(mm) Code 70 4114908 80mm 100mm 70 4114910 130mm 70 4114913 150mm 70 4114915 180mm 70 4114918 200mm 70 4114920 250mm 70 4114925 70 300mm 4114930 350mm 70 4114935



#### Tee Cap with Drain

Used at the bottom of a vertical run, usually under a tee, to facilitate drainage from the system. The component includes a stainless steel BSP connection to allow drainage pipework to be connected.

Size	В	Code
80mm	1" BSP	4114308
100mm	1" BSP	4114310
130mm	1" BSP	4114313
150mm	1" BSP	4114315
180mm	1" BSP	4114318
200mm	1" BSP	4114320
250mm	1" BSP	4114325
300mm	1" BSP	4114330
350mm	1" BSP	4114335

#### Tee Cap with Offset Drain

As the previous item, but with a drain on the rim.



	Size	В	Code
	80mm	1" BSP	4116908
	100mm	1" BSP	4116910
	130mm	1" BSP	4116913
	150mm	1" BSP	4116915
Ľ R	180mm	1" BSP	4116918
	200mm	1" BSP	4116920
1	250mm	1" BSP	4116925
	300mm	1" BSP	4116930
	350mm	1" BSP	4116935



#### Horizontal Duct Drain c/w Cap

Used as a drainage point on the end of an inclined manifold or inclined run. Incorporates a 1" BSP stainless steel externally threaded drain connection and cap. The end cap is not removable.

Size	A(mm)	Code
80mm	107	4111808
100mm	107	4111810
130mm	107	4111813
150mm	107	4111815
180mm	107	4111818
200mm	107	4111820
250mm	107	4111825
300mm	107	4111830
350mm	107	4111835

#### Horizontal Duct Drain

Used as a drainage connection within an inclined manifold or inclined run. Incorporates a 1" BSP stainless steel externally threaded drain connection and internal dam.

Size	A(mm)	Code
80mm	132	4110808
100mm	132	4110810
130mm	132	4110813
150mm	132	4110815
180mm	132	4110818
200mm	132	4110820
250mm	132	4110825
300mm	143	4110830
350mm	143	4110835

#### Vertical In-line Drain

Used either vertically in line or with the Appliance Adaptor. The design helps to divert condensates through an external connection, preventing excessive quantities of condensates from entering back into the appliance. The drain connection is provided with a standard 1" BSP externally threaded pipe to facilitate connection to suitable drainage pipe work.

Size	Code
80mm	4119008
100mm	4119010
130mm	4119013
150mm	4119015
180mm	4119018
200mm	4119020
250mm	4119025
300mm	4119030
350mm	4119035

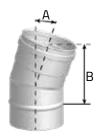




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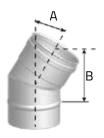




#### 15° Elbow

Used to provide a 15° change of direction from the vertical.

Size	А	В	Code
80mm	20	103	4112508N
100mm	20	106	4112510N
130mm	21	109	4112513N
150mm	21	112	4112515N
180mm	21	116	4112518N
200mm	22	119	4112520N
250mm	23	125	4112525N
300mm	26	150	4112530N
350mm	27	157	4112535N

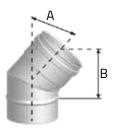


#### 30° Elbow

Used to provide a 30° change of direction from the vertical.

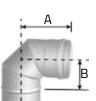
Size	А	В	Code
80mm	41	106	4112408N
100mm	43	111	4112410N
130mm	45	118	4112413N
150mm	46	123	4112415N
180mm	48	131	4112418N
200mm	49	136	4112420N
250mm	53	148	4112425N
300mm	61	178	4112430N
350mm	64	191	4112435N

#### 45° Elbow



Used to provide a 45° change of direction from the vertical.

Size	А	В	Code
80mm	62	102	4112308N
100mm	66	106	4112310N
130mm	70	116	4112313N
150mm	73	123	4112315N
180mm	77	134	4112318N
200mm	80	141	4112320N
250mm	88	159	4112325N
300mm	102	197	4112330N
350mm	109	214	4112335N



Δ

В

#### 85° Elbow

Provides an 85° change of direction from the vertical. Also used on wet systems to allow a 5° fall to aid drainage back through the system.

Size	А	В	Code
80mm	150	115	4112708N
100mm	158	125	4112710N
130mm	171	142	4112713N
150mm	182	151	4112715N
180mm	196	166	4112718N
200mm	205	176	4112720N
250mm	228	202	4112725N
300mm	252	227	4112730N
350mm	275	253	4112735N

#### 87° Elbow

Provides an 87° change of direction from the vertical. Also used on wet systems to allow a 3° fall to aid drainage back through the system.

Size	А	В	Code
80mm	150	111	4113208N
100mm	160	121	4113210N
130mm	174	136	4113213N
150mm	183	146	4113215N
180mm	198	211	4113218N
200mm	207	171	4113220N
250mm	231	196	4113225N
300mm	255	211	4113230N
350mm	278	246	4113235N

#### 90° Elbow

Used to provide a 90° change of direction from the vertical.

Size	А	В	Code
80mm	155	105	4112808N
100mm	160	110	4112810N
130mm	175	125	4112813N
150mm	185	135	4112815N
180mm	200	150	4112818N
200mm	210	160	4112820N
250mm	235	185	4112825N
300mm	260	210	4112830N
350mm	285	235	4112835N



8

#### Reducers

Reducers are used to reduce the diameter of the preceeding system, e.g. 150ID to 130ID.



D2	В	Code
80mm	157	4112608
100mm	157	4112610
130mm	157	4112613
150mm	157	4112615
150mm	157	4112918
180mm	157	4112618
200mm	157	4112620
200mm	157	4112920
250mm	157	4112625
300mm	157	4112630
	80mm 100mm 130mm 150mm 150mm 180mm 200mm 250mm	80mm     157       100mm     157       130mm     157       150mm     157       150mm     157       180mm     157       200mm     157       200mm     157       250mm     157

5

#### Increaser

Increasers are used to increase the diameter of the preceeding system, e.g. 130ID to 150ID.



D1	D2	В	Code
80mm	100mm	157	4113008
80mm	130mm	157	4113108
80mm	150mm	157	4113308
100mm	130mm	157	4113010
100mm	150mm	157	4113110
130mm	150mm	157	4113013
130mm	180mm	157	4113113
150mm	180mm	157	4113015
150mm	200mm	157	4113115
150mm	250mm	157	4113315
180mm	200mm	157	4113018
180mm	250mm	157	4113318
200mm	250mm	157	4113020
200mm	300mm	157	4113120
200mm	350mm	157	4113320
250mm	300mm	157	4113025
250mm	350mm	157	4113125
300mm	350mm	157	4113030

#### **Eccentric Increaser**

D2

В

Used mainly in an inclined run to increase the system diameter whilst preventing potential condensate pooling.

D1	D2	В	Code
80mm	100mm	100	4170808N
80mm	130mm	130	4170508N
80mm	150mm	150	4170608N
100mm	130mm	130	4170810N
100mm	150mm	150	4170610N
100mm	180mm	180	4170910N
100mm	200mm	200	4170710N
130mm	150mm	150	4170813N
130mm	180mm	180	4170613N
130mm	200mm	200	4170713N
150mm	180mm	180	4170715N
150mm	200mm	200	4170615N
150mm	250mm	250	4170815N
180mm	200mm	200	4170818N
200mm	250mm	250	4170720N
200mm	300mm	300	4170620N
250mm	300mm	300	4170725N
250mm	350mm	350	4170625N
300mm	350mm	350	4170630N

## Support Components Supra Plus

#### Support Length



The Support Length can serve two applications, firstly allowing a Supra Plus liner to be lowered down a masonry chimney and secondly as a Support Length when used with the Support Plate (with collar removed).

When used to lower a liner down an existing masonry chimney, all the lugs on the Support Length must be used. The maximum length of product that can be supported by the component is 30 metres.

Size	Code	
80mm	4110408	
100mm	4110410	
130mm	4110413	
150mm	4110415	
180mm	4110418	
200mm	4110420	
250mm	4110425	
300mm	4110430	
350mm	4110435	

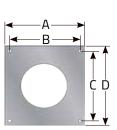
#### **Bracing Bracket**

Used to provide lateral stability back to a support structure. This component is design for use with rigid stays or as a guy wire attachement bracket. The hole diameters for the M6 nuts and bolts are 7mm. Constructed from stainless steel.

Size	I.D. (mm)	Code
80mm	82	4069208
100mm	102	4069210
130mm	132	4069213
150mm	152	4069215
180mm	182	4069218
200mm	202	4069220
250mm	252	4069225
300mm	302	4069230
350mm	352	4069235







Support Plate

Consists of a stainless steel plate with a three part support collar. The collar rests on the plate and is located under the female end form of the joint. The three fixing points of the collar rest on the plate, the hole in which being large enough to permit the passage of the male end.

The plate must be adequately supported and secured to a suitable bracket. This component can also be used in conjunction with a Support Length, but the collar would be discarded for this application.

A support must always be used above an Adjustable Length where applied in a vertical application, or where the Adjustable Length would be otherwise liable to load. The maximum length which can be supported by this component is 30 metres.

Fixing holes: M10

Size	А	В	С	D	Code
80mm	147	117	161	191	4051108
100mm	260	230	191	221	4051110
130mm	275	245	208	238	4051113
150mm	300	270	228	258	4051115
180mm	325	295	258	288	4051118
200mm	350	320	278	308	4051120
250mm	400	370	328	358	4051125
300mm	450	420	378	408	4051130
350mm	500	470	428	458	4051135



#### Wall Support Bracket

The wall band incorporates additional side support struts which can be located below or above the band. In either case the band is located under the female form at a joint between the components. Provides 50mm clearance from the wall. The maximum length which can be supported is 30 metres. Constructed from stainless steel.

Size	А	В	С	Code
80mm	91	114	63.5	4051208
100mm	104	124	83.5	4051210
130mm	118	158	92	4051213
150mm	128	168	112	4051215
180mm	143	183	142	4051218
200mm	153	193	162	4051220
250mm	178	218	212	4051225
300mm	202	252	266	4051230
350mm	227	277	316	4051235

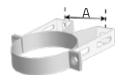


## Support Components Supra Plus

## Ancillaries Supra Plus

#### 80mm-100mm

#### 130mm-350mm



Provides 50mm clearance to structure

#### Wall Band (Stainless Steel)

To be used at intervals not exceeding 2.5 metres to provide lateral stability for both vertical and horizontal installations. Suitable for both internal and external applications.

Size	A(mm)	Code
80mm	63.5	3115084
100mm	83.5	3115104
130mm	92	3115134
150mm	112	3115154
180mm	142	3115185
200mm	162	3115205
250mm	212	3115255
300mm	266	3115305
350mm	316	3115355

#### Adjustable Split Band

Offers support to the chimney system when suspending from the ceiling. The Split Band has adjustable brackets to allow for adjustment for inclines runs. Designed for use with M10 Drop Rods.



Size	Code
80mm	3123008
100mm	3123100
130mm	3123130
150mm	3123150
180mm	3123180
200mm	3123200
250mm	3123250
300mm	3123300
350mm	3123350

#### Location Band

Size

80mm

100mm

130mm

150mm

180mm

200mm

250mm

300mm

350mm

This component consists of a strap which must be secured underneath a joint. Designed to centrally locate and brace a system within an existing chimney or shaft.

A(mm)

340

375

390

410

540

560

610

660

850

Code

4117108

4117110

4117113

4117115

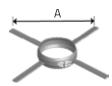
4117118

4117120

4117125

4117130

4117135



Bespoke sizes can be manufactured to order







Size	Code
80mm	4117008
100mm	4117010
130mm	4117013
150mm	4117015
180mm	4117028
200mm	4117020

4117025 250mm 300mm 4117030 350mm 4117035

Note: Locking Bands must be ordered separately

#### **Replacement Seals**

The replacement seals are only suitable for use with the Supra Plus product. Please refer to installation instructions on removing and installing replacement seals. Seals are classed as sacrificial and therefore covered by a 12 month manufacturing defects warranty.

Size	Code
80mm	4006308
100mm	4006310
130mm	4006313
150mm	4006315
180mm	4006318
200mm	4006320
250mm	4006325
300mm	4006330
350mm	4006335

#### Sprung Locking Band (Standard)

Used for the general assembly of the Supra Plus product. Features a simple sprung toggle locking device for ease of installation.

Size	Code
80mm	4117308
100mm	4117310
130mm	4117313
150mm	4117315
180mm	4117328
200mm	4117320
250mm	4117325
300mm	4117330
350mm	4117335

#### Heavy Duty Bolted Locking Band

Used mainly where additional bracing and strength is required at the joint, such as when installing offsets etc.

## **Terminals** Supra Plus

#### Seal Lubricant

Lubricant must be applied both around the face of the seal and also around the circumference of the male end. Failure to use lubricant could result in damage of the seal when making the joint.

Seal Lubricant (250ml) 3107500

Notes: The SFL Seal Lubricant has been specifically formulated for use with SFL EPDM and Silicone Seals. The use of alternative lubricant is not recommended and may invalidate the product warranty and reduce the working life of the seal.

#### **Gas Terminal**

A terminal designed for use where Supra Plus serves conventional gas fired equipment. Incorporates a bird screen/mesh. For condensing and positive pressure applications, a Tapered Top Stub with Mesh is recommended.

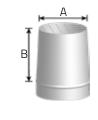
Size	A(mm)	B(mm)	Code
80mm	90	210	4116108
100mm	90	210	4116110
130mm	115	235	4116113
150mm	115	235	4116115
180mm	220	293	4116118
200mm	220	320	4116120
250mm	198	365	4116125
300mm	234	416	4116130
350mm	288	468	4116135

#### **Tapered Top Stub**



This terminal offers minimal resistance to the evacuation of flue gases and helps to minimise the effects of pluming by slightly increasing the exit velocity.

Size	A(mm)	B(mm)	Code
80mm	70	241	4115808
100mm	90	241	4115810
130mm	120	241	4115813
150mm	140	241	4115815
180mm	170	241	4115818
200mm	190	241	4115820
250mm	240	241	4115825
300mm	290	241	4115830
350mm	340	241	4115835



#### **Tapered Top Stub with Mesh**

As above but with a 10mm gas mesh.

Size	A(mm)	B(mm)	Code
80mm	70	241	4116008
100mm	90	241	4116010
130mm	120	241	4116013
150mm	140	241	4116015
180mm	170	241	4116018
200mm	190	241	4116020
250mm	240	241	4116025
300mm	290	241	4116030
350mm	340	241	4116035

#### Parallel Top Stub and Mesh

Suitable for gas condensing appliances. Parallel flow to minimise back pressure on appliance and maintain system velocity. Fitted with 10mm welded stainless steel mesh.

Size	A(mm)	Code
80mm	50	4155408
100mm	50	4155410
130mm	50	4155413
150mm	50	4155415
180mm	50	4155418
200mm	50	4155420
250mm	50	4155425
300mm	50	4155430
350mm	50	4155435

## Rain Cap

A basic terminal that offers a degree of protection against rainwater ingress. Not suitable for gas appliances.

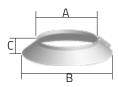
Size	A (mm)	B(mm)	Code
80mm	200	183	4155208
100mm	200	186	4155210
130mm	255	174	4155213
150mm	305	221	4155215
180mm	365	221	4155218
200mm	406	264	4155220
250mm	507	276	4155225
300mm	614	354	4155230
350mm	716	419	4155235

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## Flashings & Weathering Supra Plus

Supra Plus uses the standard SFL Flashing range. All flashings are manufactured from maluable aluminium and must be finished with a Storm collar. Where weathering an industrial profiled roof, it is recommended that a brand such as Dektite is used.



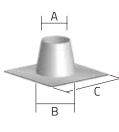
#### Storm Collar

The Storm Collar sits on top of the flashing cone to provide weather protection. Each Storm Collar is provided with a tube of silicone sealent. A bead of sealant must be applied around the top of the Storm Collar where it interfaces with the outside of the chimney to ensure weather protection.

Size	А	В	С	Code
80mm	82	195	70	70123400
100mm	102	201	70	70123401
130mm	132	231	70	70123405
150mm	152	251	70	70123406
180mm	182	281	70	70123407
200mm	202	301	70	70123409
250mm	252	330	70	70123411
300mm	302	351	70	70123412
350mm	352	401	70	70123413

#### **Flat Flashing**

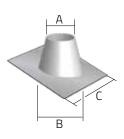
Used for weathering flat roofs.



Size	А	В	С	Code
80mm	90	180	495	70000000
100mm	110	200	495	70000001
130mm	140	230	495	70000005
150mm	160	250	495	70000006
180mm	190	280	495	70000007
200mm	210	300	495	70000009
250mm	260	350	660	70000011
300mm	310	400	660	70000012
350mm	360	450	660	70000013

#### 5° - 30° Angled Flashing

Used for weathering angled roofs.



#### Size Code 80mm 495 90 180 70053000 100mm 110 200 495 70053001 130mm 140 230 495 70053005 150mm 160 250 495 70053006 180mm 190 70053007 280 495 200mm 210 300 495 70053009 250mm 260 350 70053011 660 310 660 300mm 400 70053012 360 350mm 450 660 70053013

#### 30° - 45° Angled Flashing

Used for weathering angled roofs.



Size	А	В	С	Code
80mm	90	180	495	70324500
100mm	110	200	495	70324501
130mm	140	230	495	70324505
150mm	160	250	495	70324506
180mm	190	280	495	70324507
200mm	0mm 210		495	70324509
250mm	50mm 260		660	70324511
300mm	310	400	660	70324512
350mm	360	450	660	70324513

## Installation Instructions Supra Plus

#### **Mandatory Requirements**

In all instances the requirements of the Building Regulations must be complied with and the appropriate references are: Document J of the DOE Building Regulations, Section F of the Building Standards (Scotland), Section L of the Building Regulations (Northern Ireland). Reference should also be made to the current relevant British and European Standards governing the installation of flue and chimney products for the associated fuel and appliance types as detailed:

Solid Fuel and Oil Fired Applications: BS EN15287-1 Domestic Gas Installations: BS5440: Part 1 Commercial Gas Installation: BS 6644 IGEM UP10

#### General

Supra Plus is design for used as a System Chimney or Rigid Liner and is suitable for use on gas and kerosene fired condensing appliances where the flue gas temperature does not exceed 200°C and the maximum positive pressure withir the system does not exceed 5000 Pa (H1). With the seals removed, Supra Plus is also CE Marked for used as a T450 N1 D Connecting Flue, subject to local and national regulations, as well as a Rigid Liner.

#### **Joint Assembly**

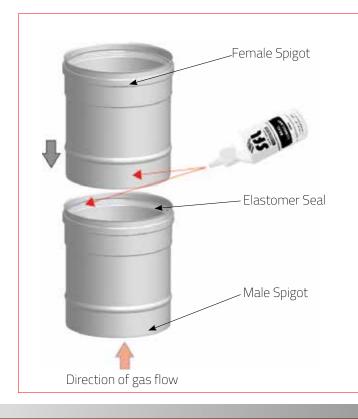
All Supra Plus components feature a simple push-fit joint design, allowing ease and speed of installation, while maintaining a secure and pressure tight joint. Te assemble the joint, simply follow the steps below.

#### Step 1:

Supra Plus is always installed with the female spigot facing up towards the terminal and the male end facing towards the appliance. Having checked the correct orientation of the product, clean both the male and female ends with a suitable cloth to ensure they are free from dirt and grit.

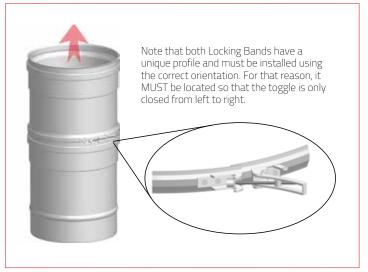
Apply a generous amount of SFL Seal Lubricant around the outer circumference of the male end. Do the same around the inner circumference of the Elastomer Seal, while also checking the seal for any potential signs of damage.

Once the SFL Lubricant has been applied, align the male end into the female and push the joint together using a slight twisting action.

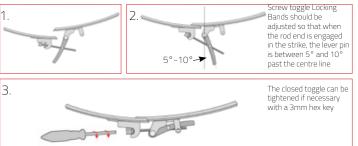


#### Step 2:

With the joint assembled, locate the Locking Band around the joint as detailed below. The Locking Band must be installed so that the toggle is only closed from left to right. SFL offer two types of Locking Bands, the Heavy Duty can be used where additional strength is required, for example on offsets etc., whereas the Standard is generally used throughout the installation. A Locking Band MUST always be used to finish the joint and MUST be ordered separately.



#### Assembly of the Heavy Duty Locking Band



#### Installing Replacement Seals

As standard, Supra Plus is supplied complete with factory fitted and bonded seals. Although the design of the seal should offer many years of trouble free service, they are classed as sacrificial, and like most gaskets, may, over time need to be replaced.

#### Step 1

When fitting a replacement seal, it is important that the old seal is fully removed and the seal location groove in the product is fully cleaned to remove any residue.

#### Step 2

Apply a small thin run of silicone sealant around the internal circumference of the seal groove, making sure that there is just enough to bond the seal to the product. Note: To much sealant may result in the joint being extremely tight when trying to assemble.

#### Step 3

Position the new seal in the seal groove of the female end, ensuring that the vanes of the seal are facing down towards the male end as detailed in the following image.

## www.sflchimneys.com

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# **Installation Instructions**

Supra Plus



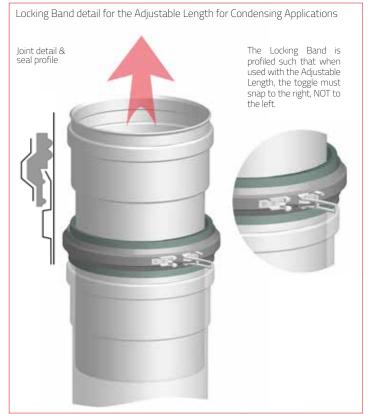
#### Step 4

Once in position, ensure the rear of the seal is firmly located back against the rear of the seal groove. Make sure that any excess silicone sealant is removed from the vanes, as failure to do so could impact the pressure and condensate resistance of the joint. Once complete, allow approximately 24 hours to cure or as advised on the manufacturers installation instructions.

#### **Adjustable Length**

The Adjustable Length consists of a slip section of Supra Plus, the lower nonbeaded end of which is designed preferably to be located into a standard length and must engage to a depth equivalent to at least half of the diameter of the Supra Plus being used.

Where pressure and moisture resistance are required a special Locking Band & Seal is required to make the joint. These are supplied as standard with the Adjustable Length.



The illustration above shows the joint detail. Locate the Seal over the female end of the length before inserting the male end and then pull the seal up so that the angled notch on its inside locates over the turned end of the female socket as shown. To facilitate easier assembly, apply SFL Seal Lubricant to the seal prior to installation. The profile of the Locking Band is such that it must only be applied one way round. If it is located incorrectly, the joint will be both insecure and inadequately sealed.



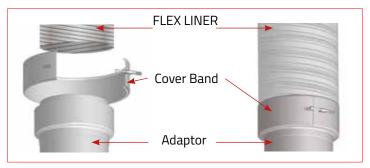
<u>WARNING:</u> Adjustable Lengths are only to be used on standard lengths. Under no circumstances should they be used to engage into Elbows and Tees.

#### **IMPORTANT - Adjustable Lengths**

Adjustable Lengths are not load bearing and must be supported from above. Always ensure that either a Support Plate or Wall Support Bracket is used directly above the Adjustable Length to support the chimney products above.

#### **Flexible Liner Adaptors**

To assemble the Flex Adaptor, push the flex all the way into the cup on the adaptor body, then fit the cover band over the cup, tightening the screw toggle as required to prevent the flexible liner from escaping. The cover band is designed to grip into the convolutions of the flexible liner without the need for additional mechanical fixings.



#### Support

Supra Plus must only be supported with the components in the system range. The maximum length of product run that can be supported by any component is 30 metres. Where lowered into an existing chimney or shaft, under no circumstances should the product be suspended from the top. A Support Length must always be used at the base of the chimney to attach lowering equipment. The Wall Band and Bracing Bracket provide lateral stability only and should be used at centres not exceeding 2.5 metres. The Location Band, used to centralise Supra Plus where lowered into a chimney or shaft, should be used at intervals not exceeding 3 metres and secured immediately underneath a joint. Where used as a liner, either a Support Plate or Wall Support Bracket must be used at the base to take the vertical load of the stack. Where the Supra Plus product is free standing above the roof and its height exceeds 1.5 metres above the last support, a Bracing Bracket must be used and braced back to the structure.

#### Data Plate

It is a regulatory requirement that a data plate is to be completed, positioned and secured by the installer where a hearth, fireplace, flue or chimney is provided or extended. The Data Plate provides essential information regarding the performance, specification, designation and installation for the chimney system. The Data Plate is to be completed by the installer using an indelible ink and securely fixed in an unobtrusive but obvious position. Acceptable fixing positions would be next to the electricity consumer unit, water supply stop cock or gas meter within the building or by the chimney / hearth.

Some Data Plates contain more or less information; however it is a requirement that all data plates have to provide the essential information deemed necessary under the regulatory requirement, as follows:-

- Property address.
- Where the chimney / hearth is installed.
- What fuels the chimney is suitable for (firing capacity).
- Is the chimney suitable for condensing appliances / applications.
- Chimney internal diameter.
- Installers name and address.
- Date of installation.
- Distance to combustible material.
- Product designation of the chimney to EN 1443, if relevant.

## **Installation Instructions** Supra Plus

#### Provision for Inspection, sweeping and cleaning

Adequate provision should be made for inspecting and cleaning the chimney system. Components are provided within the range to allow access for cleaning and inspection and should be incorporated strategically within the system to facilitate this requirement. It is important as part of the routine maintenence of the system, that a visual inspection of the chimney is undertaken at the same time to ensure all joints are sound. Elastome Joint Seals are sacrificial and may need replacing over time as part of the routine maintenence of the chimney.

#### **Terminal Types**

The Supra Plus range offers a number of different terminal types to suit various applications. Where used on condensing appliances, the Tapered Top Stub with Mesh would be preferable, as this offers little additional resistance to the flue gases. The same Top Stub but without the mesh would also be the preferred option for solid fuel, providing there is a drainage point at the base of the chimney. As an alternative for solid fuel, the Rain Cap could also be used to help reduce rain ingress into the chimney system. For natural draught gas fired appliances the Gas Terminal should be used.

#### Pressure / Leakage Testing

Where required, this is achieved by means of a flue flow test as detailed in BS5440: Part 1. This can be summarised as follows:

After completing a visual and physical check of the system and joints, and ensuring adequate air supply for combustion has been provided in accordance with the appliance requirements, close all doors and windows in the room in which the appliance is installed.

Carry out a flow visualization check using a smoke pellet that generates at least 5m<sup>3</sup> of smoke in 30s by placing the smoke pellet in the intended location of the appliance. Ensure that there is discharge of smoke from the correct terminal only and no leakage into the room. When the chimney is tested, there should be:

- No significant escape of smoke from the appliance position.
- No seepage of smoke over the length of the chimney.
- A discharge of smoke from only the correct terminal.

If these conditions are not met, then the test has failed and all faults must be rectified and the system re-tested and passed before connection of the appliance to the fuel supply is undertaken. For further information please refer to the relevant standards and publications.

Note: A smoke test is subjective and by the nature of the product standards a chimney is allowed a degree of leakage as defined in BS EN 1856-1. For this reasons some wisps of smoke may be seen over the length of the chimney and this should not necessarily constitute a failure. It is therefore a matter of expert judgement as to the level of leakage that constitutes a failure in these circumstances. A product with a performance designation under EN 1856-1 with a leakage classification of N1 is allowed a maximum leakage rate of up to 2.0 l/s/m<sup>2</sup> at a positive pressure of 40 Pa.

For further information and guidance please refer to Appendix E of the Building Regulations Part J.

Alternative leakage tests may be undertaken depending on the site requirements. Alternatives include BS EN 15287-1 and IGEM-UP-10.

#### Handling

The product is relatively easy to handle, but care should be taken when holding, fitting or assembling any part of the system. Users are advised to take suitable precautions, gloves etc. to avoid injury on any sharp exposed edges.

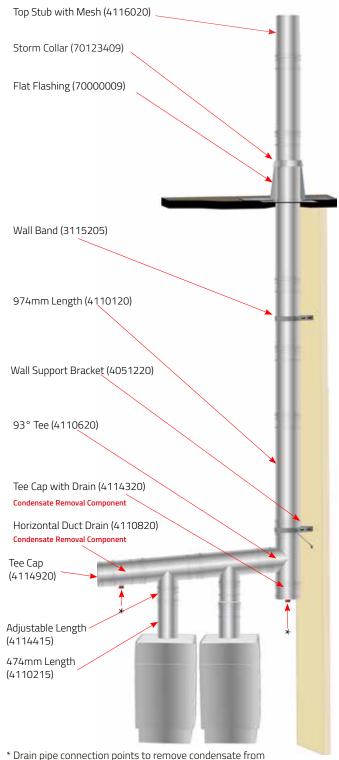
#### **Chemical Contamination of Combustion Air**

Under no circumstances should Supra Plus be used where there is the possibility of chemical contamination of the combustion air. Environments where processes such as de-greasing and dry cleaning should be avoided as well as any other environment where low level contamination of the combustion air supply is possible. Such environment can lead to accelerated corrosion of the Supra Plus system and premature failure of the product and associated seals. Special consideration should also be given to leisure centres with swimming pools where Chlorine is used or any processes using halogen based chemicals.

#### Warranty

Supra Plus benefits from a 10 year limited manufacturing defect warranty which should be registered with SFL as soon as the product has been installed. Components such as Seals, Terminals, Tee Caps and Drains are considered sacrificial and are subject to a 12 month manufacturing defect warranty. Please refer to the SFL Terms and Conditions of Sale for further information.

#### **Typical Installation**

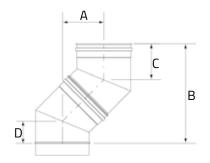


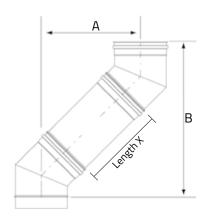
system to suitable drain.

## **Installation Instructions**

Supra+

## **Elbow Offset Dimensions**





		Elbow	-Elbow		Elbow With Standard Length X								
15°					98r	98mm 224mm		474mm		974mm			
Size	А	В	С	D	А	В	А	В	А	В	А	В	
80mm	27	206	77	28	53	303	85	423	150	664	279	1147	
100mm	28	212	78	30	54	309	86	429	151	670	280	1153	
130mm	29	222	81	32	55	319	87	439	152	680	281	1163	
150mm	30	226	82	33	56	323	88	442	152	684	282	1167	
180mm	31	234	84	35	57	331	89	450	153	692	283	1175	
200mm	31	238	85	36	57	334	89	454	154	696	283	1179	
250mm	33	252	88	40	59	348	91	468	156	709	285	1192	
300mm	40	303	100	54	66	399	98	519	163	761	292	1244	
350mm	42	317	105	56	68	413	100	533	164	774	294	1257	

30°					98mm		224mm		474mm		974mm	
Size	А	В	С	D	А	В	А	В	А	В	А	В
80mm	59	218	83	34	109	305	171	412	296	629	546	1062
100mm	62	230	86	37	112	316	174	424	299	640	549	1073
130mm	66	244	90	41	116	331	178	438	303	655	553	1088
150mm	68	252	92	43	118	339	180	446	305	662	555	1095
180mm	72	267	96	47	122	353	184	461	309	677	559	1110
200mm	75	278	99	50	125	365	187	472	312	689	562	1122
250mm	82	300	106	57	132	391	194	498	319	715	569	1148
300mm	98	364	122	73	148	450	210	558	335	774	585	1207
350mm	105	390	129	80	155	477	217	584	342	800	592	1234

45°					98mm		224mm		474mm		974mm	
Size	А	В	С	D	А	В	А	В	А	В	А	В
80mm	91	219	88	40	161	289	249	377	426	554	779	907
100mm	94	227	93	40	165	298	252	385	429	562	783	916
130mm	103	248	99	46	173	318	261	406	438	583	791	936
150mm	108	261	103	50	179	332	267	420	443	596	797	950
180mm	117	283	109	57	188	354	276	442	453	619	806	972
200mm	123	297	113	61	194	368	281	455	458	632	812	986
250mm	138	333	124	71	209	404	296	491	473	668	827	1022
300mm	169	408	144	95	240	479	327	566	504	743	858	1097
350mm	183	442	154	105	254	513	342	601	518	777	872	1131

## **Complementory Products**

# NOVA



#### Twin Wall Multi-Application System Chimney

- Twin Wall Multi-Application System Chimney
- 16 Barb Twist Locking Jointing System for ease and speed of installation
- Diameter Range: 100mm 350mm
- 25mm High density (250Kg/m3) insulation for optimum thermal performance
- Liner: 0.5mm 316L (1.4404) stainless steel for optimum corrosion resistance
- Outer case: 304BA (1.4301) stainless steel
- 3 metre free-standing capability
- Suitable for condensing and positive pressure systems (P1) up to 200Pa at 200°C
- Sizes 100mm to 200mm also suitable for high pressure applications (H1) up to 5000Pa at 160°C
- 120min Fire Resistance to BS 476: Part 20 for integrity and stability

# EUROPA+



#### Europa Plus High Pressure Exhaust System

- Flanged jointing system utilising a high performance composite graphite gasket and Patented 'U' Band clamping system for high temperature / pressure applications
- Diameter Range: 100mm 600mm
- Europa Industrial extends diameter range to 1200mm
- Location spigots fitted as standard to allow easy alignment of flanges for fast installation
- No requirement for high or low temperature sealant for joint construction
- Tested to H1 (5000 Pa) under EN1856-1 and 16KPa under UL 103, 2561 and 1978
- Suitable for wet and dry operation
- Ideal for Generators and CHP plant
- Available with 25mm, 50mm or 100mm insulated annulus
- 0.6mm 316L (1.4404) stainless steel liner for optimum corrosion resistance
- 304 (1.4301) stainless steel outer case
- Fire resistance of 240min Assessed and tested to the integrity and stability requirements of BS476: Part 20 for break in / break out

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# **About Us**

Since 1969 we have provided expertise in system design and innovation for commercial, domestic and industrial applications, with uncompromised customer service. Our portfolio of trusted brands are known throughout the world for their engineering excellence.

We are proud of our British built heritage at SFL. All our products are fabricated at our manufacturing centre in Barnstaple, Devon, UK. As well as investment in the latest manufacturing system, we also have an extensive R&D centre ensuring continuous product development and testing to the latest European Standards.

# **Our Brands**

SFL branded products are synonymous with the highest quality – it is this reputation that enables specifiers, contractors and house-holders to use our products with total confidence.



SFL pursues a policy of continues improvement in both design and performance of its products and therefore reserves the right to change, amend or vary specifications without notice. Whilst the details contained herein are believed to be correct they do not form the basis of any contract and interested parties should contact the Company to confirm whether any material alterations have been made since publication of this brochure.