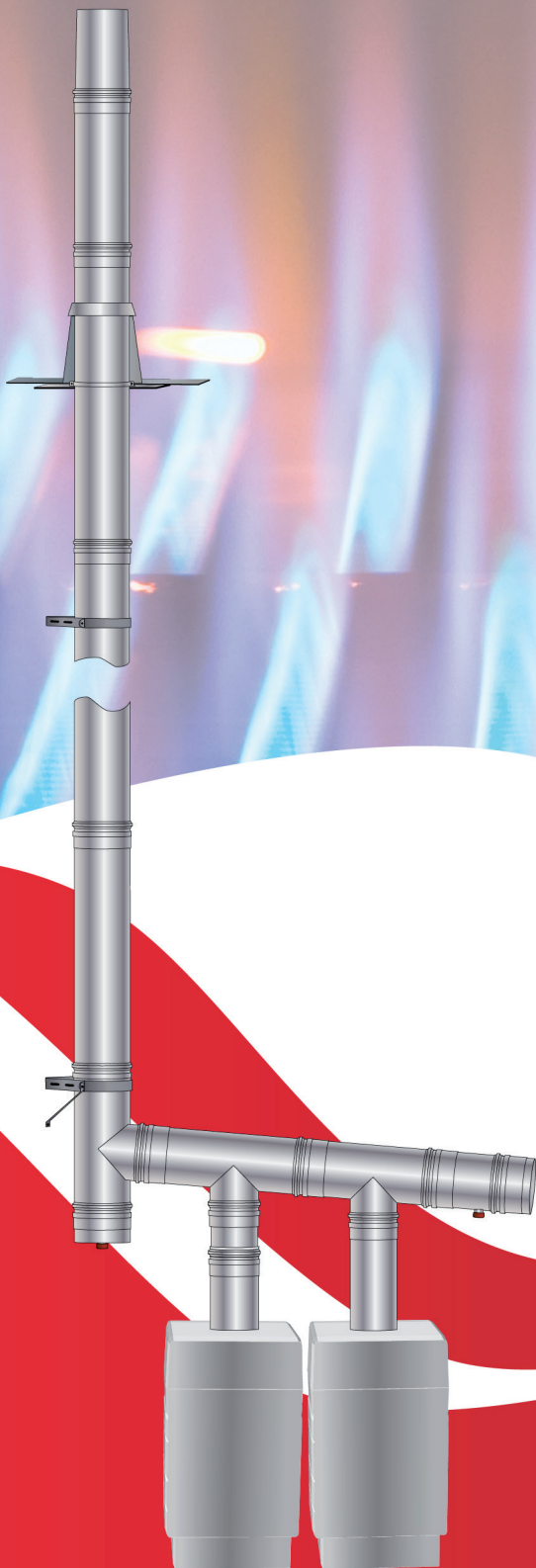


# SUPRA Plus



# SUPRA Plus

Stainless steel single  
wall chimney system for  
condensing appliances and  
positive pressure applications



Now approved for H1 positive  
pressure applications up to  
5000 Pa at 200°C.



100% Manufactured  
In the UK



# PRODUCT INFORMATION

## General

The SUPRA Plus chimney system has been specifically designed for today's 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 today's 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 are then 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 do not recommend any other system of support being used with the SUPRA Plus product, unless approved 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 it an ideal solution for today's high efficiency condensing appliances and applications that require up to 5000 Pa positive pressure at a maximum flue gas temperature of 200°C.

### 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 soot-fire 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 product designations to BS EN 1856-1/2							
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	O
(1) SUPRA Plus	BS EN 1856-2	T200	H1	W	V2	L50050	O
(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
Standard number	↑	↑	↑	↑	↑	↑	↑
Temperature class	↑	↑	↑	↑	↑	↑	↑
Pressure class	↑	↑	↑	↑	↑	↑	↑
Condensate resistance D=dry W=wet	↑	↑	↑	↑	↑	↑	↑
Corrosion class	↑	↑	↑	↑	↑	↑	↑
Material specification Liner grade 316L Liner thickness: 0.5mm	↑	↑	↑	↑	↑	↑	↑
Sootfire resistance G=yes O=no	↑	↑	↑	↑	↑	↑	↑
(1) Installed as a rigid liner within a masonry shaft (T200 P1 / H1 O) (2) Installed as a rigid liner within a masonry shaft (T450 N1 G) (3) Installed as a connecting flues where regulations permit (T450, N1, G(450)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. 0086-CPR-496040 & 0086-CPR-559419 to the performance designations as detailed in Table A below.

## 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 Directive 89/106/EEC.

## 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.

### 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 shaft. 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 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 installing condensate removal components, always ensure that sufficient protection is employed to resist the system over pressure.



**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.**

## 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. Simply complete the Specials Form on page 15 and send your requirements to SFL Technical Sales.

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

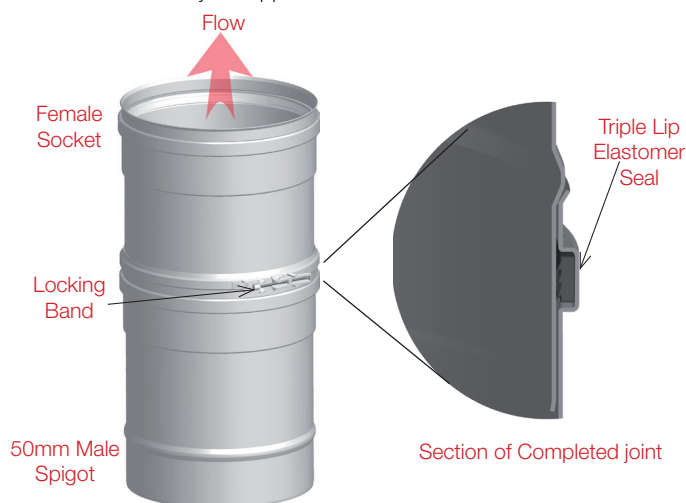
As standard, Supra Plus is available up to 350mm internal diameter; however SUPRA extends the range to include sizes 400, 500 and 600mm. For large commercial / industrial projects, SFL also offer the Europa / Europa Plus range, which is available also as a single wall solution, covering sizes up to 1.2 metre internal diameter.

### Supra Plus - Key Features & Benefits

- ✓ Factory bonded, triple lip elastomer seals fitted as standard
- ✓ Manufactured from corrosion resistant grade 316L (1.4404:X2CrNiMo 17-12-2) stainless steel
- ✓ Fully welded construction
- ✓ Heavy duty adjustable bolted Locking Bands (Optional)
- ✓ Full comprehensive range of standard 90°, 93° and 95° Reducing Tees, Increases and Reducers
- 🔥 Designed for gas & oil (28sec) fired condensing appliances
- 🌡️ T 200 Suitable for positive pressure applications up to 200°C
- 🏠 H1 5000 Pa Highest pressure class (H1) 5000 Pa
- 💧 Designed for condensing (wet) application
- 🔥 G Soot fire resistant (seals removed)
- 🌡️ T 450 Suitable for flue gas temperatures up to 450°C (seals removed)
- 🏠 N1 40Pa Suitable for negative pressure applications
- 🏠 Part 2 tested for installation as a chimney liner & connecting flue pipe where local regulations permit
- 10 YEAR 10 Year limited manufacturing defect warranty
- V2 Independently tested by TUV for Class 2 Corrosion Resistance.

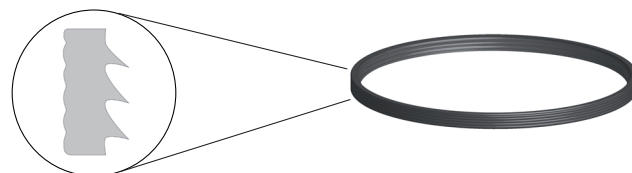
## Joining

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 necessary 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.
- ✓ Vulcanised joint for high strength
- ✓ CE Marked to EN 14241-1 T200 W 2 K2 I
- ✓ Suitable for positive pressure applications up to 5000 Pa (H1)





## Seal Lubricant

Lubricant must be applied around the circumference of the fitted seal, providing a lubricated interface between the seal and the liner when the product is used for positive pressure and wet applications. A single bottle will lubricate many seals and will be sufficient for several system installations.

Seal Lubricant (250ml)	3107500
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**Notes:** The SFL Seal Lubricant has been specifically formulated for use with SFL EPDM and Silicone Seals. Failure to use SFL Lubricant when installing seals in Supra Plus may invalidate the product warranty and limit the working life of the seal.

## Locking Bands

This component must be used to secure each joint and needs to be ordered separately. A Locking Band is required for each female socket on a component. There are two Locking Band options available, standard and heavy duty.

### Standard Locking Band

Used for the general assembly of the Supra Plus product. Features a simple sprung toggle locking device for ease of installation on site requiring no additional tooling.

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



### Heavy Duty Locking Band

Used mainly where additional bracing and strength is required at the joint, such as when installing offsets etc. This band features a lever toggle and adjustable setscrew to allow greater clamping pressure to be exerted on the joint.

Ø	Code
80mm	4117008
100mm	4117010
130mm	4117013
150mm	4117015
180mm	4117028
200mm	4117020
250mm	4117025
300mm	4117030
350mm	4117035

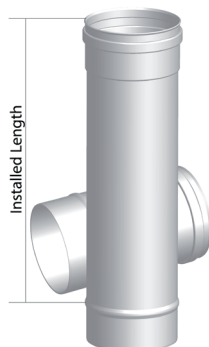


## Lengths

### Straight Lengths

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

Ø	Installed Length	
	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



Ø	Installed Length	
	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.

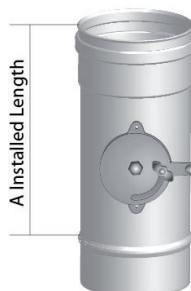
Ø	Code
80mm	4110908
100mm	4110910
130mm	4110913
150mm	4110915
180mm	4110918
200mm	4110920
250mm	4110925
300mm	4110930
350mm	4110935



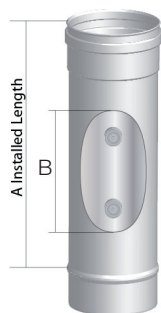
### Damper Length (P1 Only)

Used to increase resistance / reduce draught 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).

Ø	A	Code
100mm	230	4119610
130mm	230	4119613
150mm	230	4119615
180mm	230	4119618
200mm	230	4119620
250mm	230	4119625



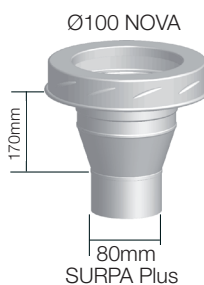




## Inspection Length (P1 Only)

Designed to be installed within the system to allow access for inspection and cleaning. The door closes on an elastomer seal to provide a condensate and pressure resistant joint and must only be used where the flue gas temperature will **not** exceed 200°C. For high temperature applications the door seal must be removed prior to installation.

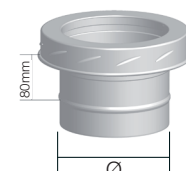
Ø	A	B	Code
80mm	475	100	4111008
100mm	475	100	4111010
130mm	475	180	4111013
150mm	475	200	4111015
180mm	475	200	4111018
200mm	475	200	4111020
250mm	475	200	4111025
300mm	475	200	4111030
350mm	475	200	4111035



## SUPRA Plus - NOVA® Adaptor

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

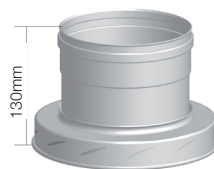
Ø	Code
80mm SUPRA Plus to 100mm NOVA®	4179608
100mm	4179610
130mm	4179613
150mm	4179615
180mm	4179618
200mm	4179620
250mm	4179625
300mm	4179630
350mm	4179635



## 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. Minimum length of adjustment is set to give an engagement of half of the flue diameter. Adjustable Lengths are also 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.

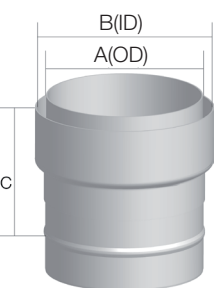
Ø	A MIN	A MAX	Code
80mm	63	306	4114408
100mm	63	296	4114410
130mm	63	281	4114413
150mm	63	271	4114415
180mm	63	243	4114418
200mm	63	233	4114420
250mm	63	208	4114425
300mm	63	183	4114430
350mm	63	158	4114435



## NOVA®- SUPRA Plus Adaptor

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

Ø	Code
100mm	4179710
130mm	4179713
150mm	4179715
180mm	4179718
200mm	4179720
250mm	4179725
300mm	4179730
350mm	4179735



## Adaptor to Flex (P1)

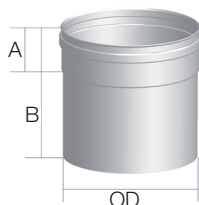
Used to connect the SUPRA Plus product to a generic liner providing it meets the dimension of the adaptor. Supplied with easy fit clamping band, see page 17.

Ø	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

## Adaptors

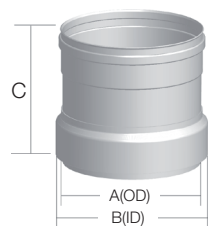
### Appliance Adaptor

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.



Ø	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

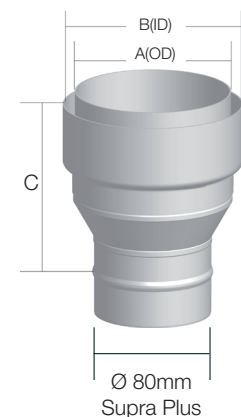
Where use for P1 applications, apply sealant around the interface of the Adaptor and Flexible Liner.



## 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 page 17.

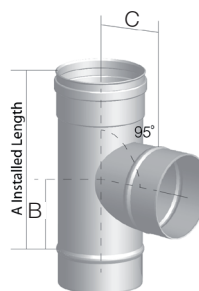
Ø	A(mm)	B(mm)	C(mm)	Code
100mm	96	113	138	4112110
130mm	121	138	138	4112113
150mm	146	163	138	4112115
180mm	171	193	138	4112118
200mm	196	213	138	4112120
250mm	246	263	138	4112125
300mm	296	313	138	4112130
350mm	346	363	138	4112135



## 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, see page 17.

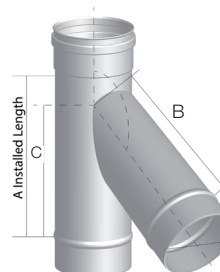
Ø	A(mm)	B(mm)	C(mm)	Code
80	96	113	117	4117908



## 95° Equal Tee

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

Ø	A	B	C	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

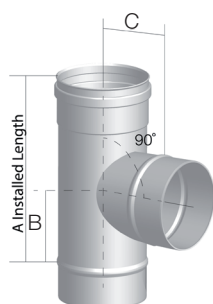


## 135° Equal Tee

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.

Ø	A	B	C	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

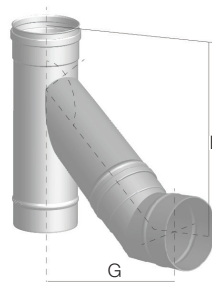
## Tees



## 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

Ø	A	B	C	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



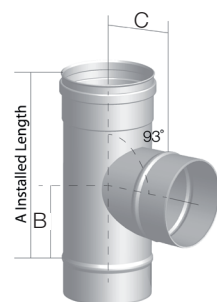
## Dimensions with 45° Elbow Added

Ø	E	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

## 93° Equal Tee

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

Ø	A	B	C	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

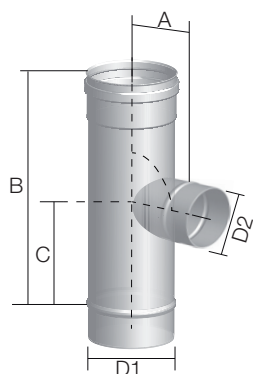


### Can't find what you need?

SFL can manufacture bespoke Tees to your specific requirements. Please see page 15 for further information.

## 90°, 93° & 95° Reducing Tees

Standard tees with a reduced size branch for use in header arrangements or as an entry point to a larger sized chimney.



Body ø D1	Branch ø D2	A	B	C	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
150	130	108	248	97	4159016N	4159316N	4159516N
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
200	80	133	198	72	4159024N	4159324N	4159524N
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



## Tee Components & Drains

### Tee Cap

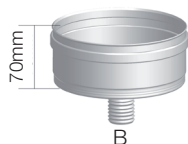
Used to close off the branch / base of a tee or the end of a header/manifold. Held in position with a Locking Band.



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

### Tee Cap with Drain

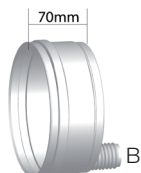
Used at the bottom of a vertical run, usually under a tee, to facilitate drainage of condensates from the system. The component includes a stainless steel BSP connection to allow drainage pipework to be connected.



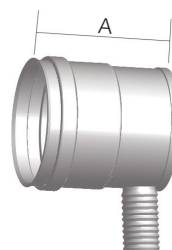
Ø	A	B	Code
80mm	70	1" BSP	4114308
100mm	70	1" BSP	4114310
130mm	70	1" BSP	4114313
150mm	70	1" BSP	4114315
180mm	70	1" BSP	4114318
200mm	70	1" BSP	4114320
250mm	70	1" BSP	4114325
300mm	70	1" BSP	4114330
350mm	70	1" BSP	4114335

### Tee Cap with Offset Drain

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



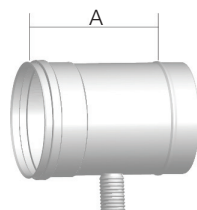
Ø	A	B	Code
80mm	70	1" BSP	4116908
100mm	70	1" BSP	4116910
130mm	70	1" BSP	4116913
150mm	70	1" BSP	4116915
180mm	70	1" BSP	4116918
200mm	70	1" BSP	4116920
250mm	70	1" BSP	4116925
300mm	70	1" BSP	4116930
350mm	70	1" BSP	4116935



### 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.

Ø	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



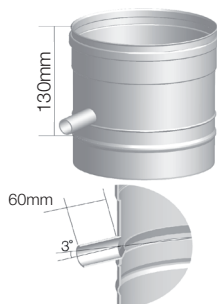
### Horizontal Duct Drain

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.

Ø	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.



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



#### Don't Forget A Locking Band

One Locking Band is required for every female socket in the system. See page 4 for further information.

# Elbows

## 15° Elbow

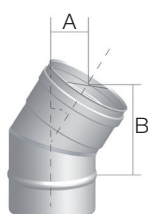
Used to provide a 15° change of direction from the vertical.



Ø	A(mm)	B(mm)	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

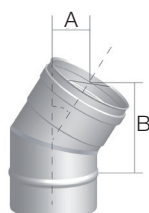
Provides a 30° change of direction from the vertical.



Ø	A(mm)	B(mm)	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

## 40° Elbow

Provides a 40° change of direction from the vertical.



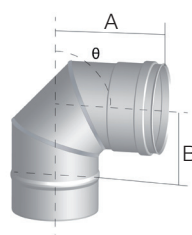
Ø	A(mm)	B(mm)	Code
80mm	53	101	4119808N
100mm	56	104	4119810N
130mm	59	113	4119813N
150mm	61	120	4119815N
180mm	65	129	4119818N
200mm	67	136	4119820N
250mm	73	152	4119825N
300mm	85	189	4119830N
350mm	91	205	4119835N

## 45° Elbow

Provides a 45° change of direction from the vertical.



Ø	A(mm)	B(mm)	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



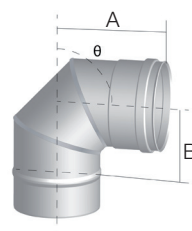
## 85° Elbow

Provides an 85° change of direction from the vertical. Also for use on condensing systems, allowing a 5° incline to aid drainage of condensate back through the system.

Ø	A(mm)	B(mm)	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

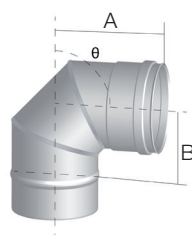
Provides an 87° change of direction from the vertical. Also for use on condensing systems, allowing a 3° incline to aid drainage of condensate back through the system.



Ø	A(mm)	B(mm)	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

Provides a 90° change of direction from the vertical.



Ø	A(mm)	B(mm)	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

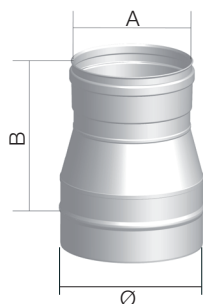


### Part Numbers Ending in 'N'

'N' signifies that this component is a **new design** and therefore the dimensions may vary from the previous original part number.

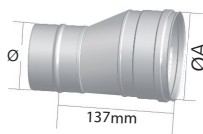
## Increaser & Reducers

### Reducers



Reduces the diameter of the system from the base of the appliance upwards towards the terminal.

Ø	Flue ø A	B(mm)	Code
100mm	80mm	157	4112608
130mm	100mm	157	4112610
150mm	130mm	157	4112613
180mm	150mm	157	4112615
200mm	150mm	157	4112915
200mm	180mm	157	4112618
250mm	200mm	157	4112620
300mm	200mm	157	4112920
300mm	250mm	157	4112625
350mm	300mm	157	4112630



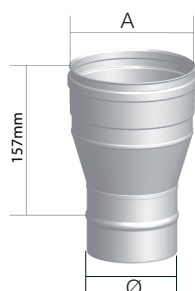
### Eccentric Increasers

Used to increase the diameter of the flue in a horizontal section whilst reducing the possibility of condensate pooling. It can also be used to maintain clearance on vertical runs.

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

### Increases

Increases the diameter of the system from the base of the appliance upwards towards the terminal.



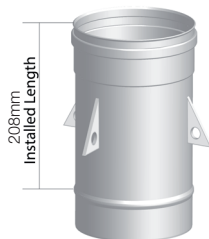
Ø	Flue ø A	B(mm)	Code
80mm	100mm	157	4113008
80mm	130mm	157	4113108
80mm	150mm	157	4113308
100mm	130mm	157	4113010
100mm	150mm	157	4113110
130mm	150mm	157	4113013
130mm	180mm	157	4113113
150mm	180mm	157	4113015
150mm	200mm	157	4113115
150mm	250mm	157	4113315
180mm	200mm	157	4113018
180mm	250mm	157	4113318
200mm	250mm	157	4113020
200mm	300mm	157	4113120
200mm	350mm	173	4113320
250mm	300mm	157	4113025
250mm	350mm	157	4113125
300mm	350mm	157	4113030

## Support Components

### Support Length

The Support Length can serve two applications, firstly allowing a SUPRA Plus liner to be lowered down a 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 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.



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



#### Can't find what you need?

SFL can manufacture bespoke Tees to your specific requirements. Please see page 15 for further information.



#### Don't Forget A Locking Band

One Locking Band is required for every female socket in the system. See page 4 for further information.



## Bracing Bracket



Used to provide lateral stability back to a support structure. This component must only be used with rigid stays and can be fitted anywhere on the pipe other than between the swages. Structural calculations must be made for each application. Rigid stays must be connected to the three fixing points of this three part component. The hole diameters for the M6 nuts and bolts are 7mm. Constructed from stainless steel.

Ø	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 bead/swage at a joint between components. The three fixing points of the collar rest on the plate, the hole in which being large enough to permit the passage of the swages of the SUPRA Plus construction.

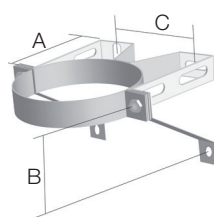
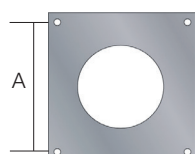
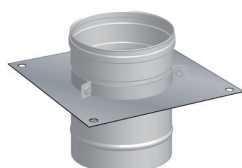
The plate must be adequately supported and secured to an adjacent structure. This component can also be used in conjunction with a Support Length, but the collar would be discarded for this application.



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.

Ø	A(mm)	Code
80mm	147	4051108
100mm	260	4051110
130mm	275	4051113
150mm	300	4051115
180mm	325	4051118
200mm	350	4051120
250mm	400	4051125
300mm	450	4051130
350mm	500	4051135

(Length not supplied)



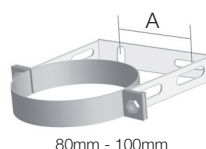
## Wall Support Bracket

This 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 bead/swage at a joint between the components. Provides 50mm clearance from the wall. The maximum length which can be supported by this component is 30 metres. Constructed from stainless steel.

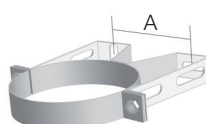
Ø	A	B	C	Code
80mm	91	114	63.5	4051208
100mm	104	124	83.5	4051210
130mm	118	158	92	4051213
150mm	128	168	112	4051215
180mm	143	183	142	4051218
200mm	153	193	162	4051220
250mm	178	218	212	4051225
300mm	202	252	266	4051230
350mm	227	277	316	4051235

## Wall Band

To be used at intervals not exceeding 2.5 metres to provide lateral stability for both vertical and horizontal applications within the system. Manufactured from stainless steel and suitable for both internal and external applications. Provides 50mm clearance from the wall. Maximum free-standing height above last support is 1.5m.



80mm - 100mm



130mm - 350mm

Ø	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

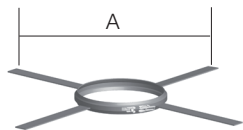
Offers support to the chimney system when suspending from the ceiling. The Split Band has adjustable brackets to allow the support of angled inclines runs. Designed for use with M10 Drop Rods.

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

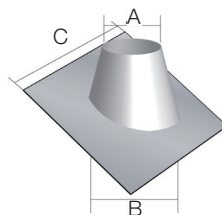


## Location Band

This component consists of a strap which must be secured underneath a joint. It has four equally located stainless steel "spokes" designed to centrally locate and brace the system when lowered into an existing chimney or shaft, and should be used at intervals not exceeding 3 metres. Bespoke Location Bands can be manufactured to order.



Ø	A(mm)	Code
80mm	340	4117108
100mm	375	4117110
130mm	390	4117113
150mm	410	4117115
180mm	540	4117118
200mm	560	4117120
250mm	610	4117125
300mm	660	4117130
350mm	850	4117135

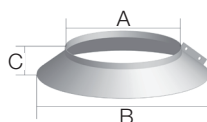


## 32° - 45° Angled Flashing

Ø	A	B	C	Code
80mm	90	251	495	70324500
100mm	110	261	495	70324501
130mm	140	303	660	70324505
150mm	160	332	660	70324506
180mm	190	375	660	70324507
200mm	210	403	660	70324509
250mm	260	475	820	70324511
300mm	310	546	820	70324512
350mm	360	617	820	70324513

## Storm Collar

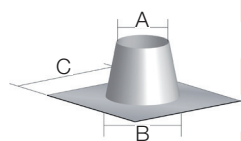
Ø	A	B	C	Code
80mm	82	195	70	70123400
100mm	102	201	70	70123401
130mm	132	231	70	70123405
150mm	152	251	70	70123406
180mm	182	281	70	70123407
200mm	202	301	70	70123409
250mm	252	330	70	70123411
300mm	302	351	70	70123412
350mm	352	401	70	70123413



## Flashings & Weathering

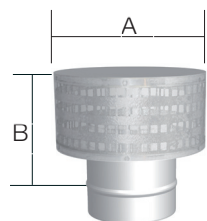
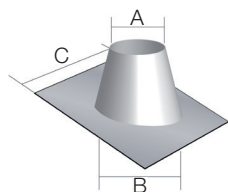
### Flat Flashing

Ø	A	B	C	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

Ø	A	B	C	Code
80mm	90	180	495	70053000
100mm	110	200	495	70053001
130mm	140	230	495	70053005
150mm	160	250	495	70053006
180mm	190	280	495	70053007
200mm	210	300	660	70053009
250mm	260	350	660	70053011
300mm	310	400	660	70053012
350mm	360	450	820	70053013



Not suitable for solid fuel applications

## Gas Terminal

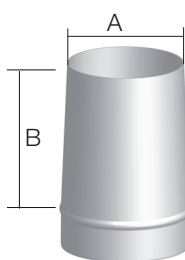
A terminal designed for use where SUPRA Plus serves conventional gas fired equipment. Incorporates a bird screen/mesh. For condensing and positive pressure applications, a Tapered Top Stub with Mesh is recommended.

Ø	B(mm)	A(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

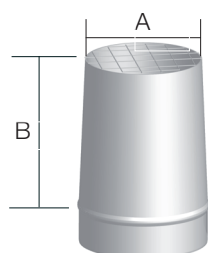
## Tapered Top Stub

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

Ø	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 and Mesh

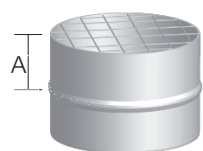


As above with the addition of 10mm welded mesh.  
Not suitable for solid fuel applications.

Ø	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

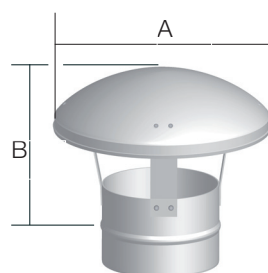
Suitable for gas condensing appliances. Parallel flow to minimise back pressure on appliance and maintain system velocity. Fitted with 10mm welded stainless steel mesh.



Ø	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

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



Ø	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

Fig. 1 - Typical Installation

Top Stub with Mesh (4116020)

Storm Collar (70123409)

Flat Flashing (70000009)

Wall Band (3115205)

974mm Length (4110120)

Wall Support Bracket (4051220)

93° Tee (4110620)

Tee Cap with Drain (4114320)  
Condensate Removal Component

200ID x 150ID 93° Reducing Tee (4159329)

Horizontal Duct Drain (4110820)  
Condensate Removal Component

Tee Cap (4114920)

Adjustable Length (4114415)

474mm Length (4110215)

\* Drain connection pipework

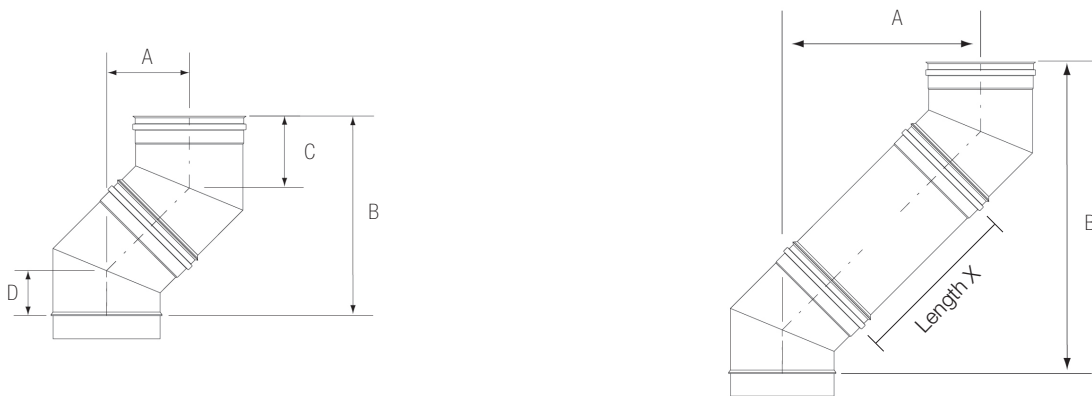


### Don't Forget A Locking Band

One Locking Band is required for every female socket in the system. (Page 4)



# ELBOW OFFSET DIMENSIONS



	Elbow-Elbow				Elbow With Standard Length X							
15°					98mm		224mm		474mm		974mm	
Ø	A	B	C	D	A	B	A	B	A	B	A	B
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

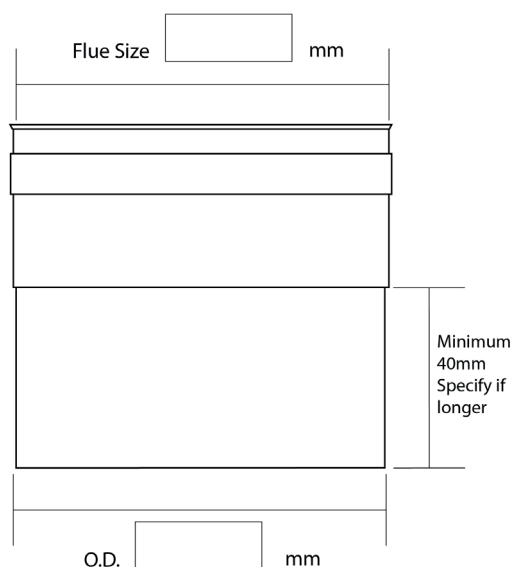
30°					98mm		224mm		474mm		974mm	
Ø	A	B	C	D	A	B	A	B	A	B	A	B
80mm	59	218	83	34	109	305	171	412	296	629	546	1062
100mm	62	230	86	37	112	316	174	424	299	640	549	1073
130mm	66	244	90	41	116	331	178	438	303	655	553	1088
150mm	68	252	92	43	118	339	180	446	305	662	555	1095
180mm	72	267	96	47	122	353	184	461	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	
Ø	A	B	C	D	A	B	A	B	A	B	A	B
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

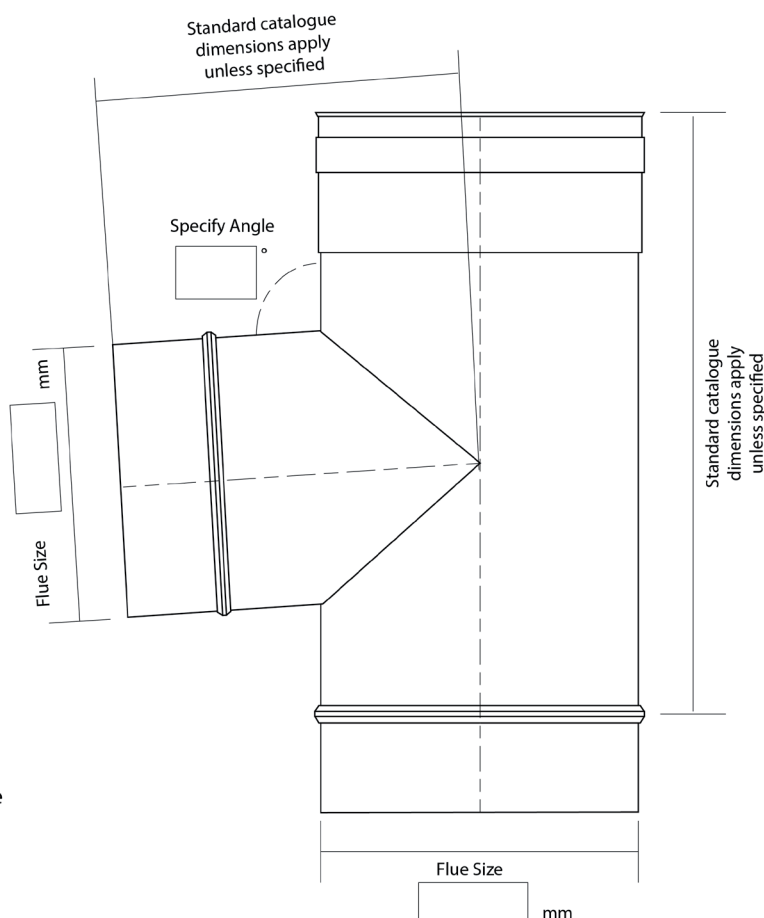
## SPECIAL & BESPOKE COMPONENTS

Although Supra Plus offers an extensive range of components, there are times when a standard component will simply not work for the intended installation. Being a UK manufacturer, SFL are ideally placed to manufacture bespoke and special components in a timely and competitive manner. Please photocopy and complete the required dimensional information for the required special component and fax, or email your requirements to SFL Technical Sales, who will be happy to offer a quotation and lead time. **More specials templates now available to download from our website.**

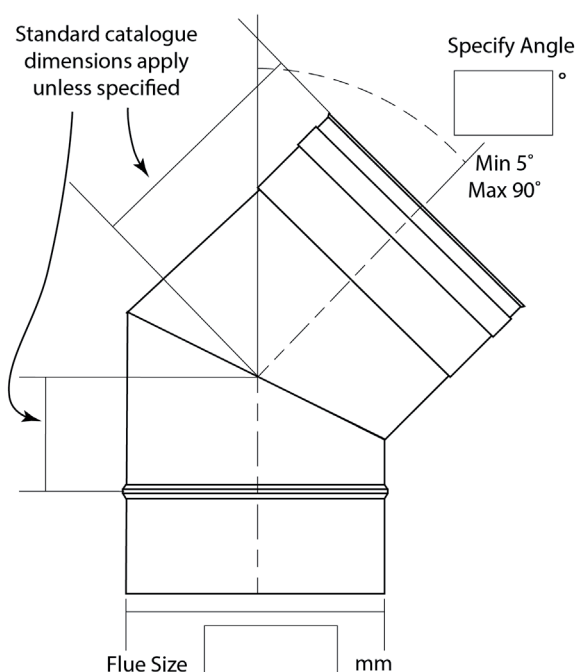
### Appliance Adaptors



### Reducing and Equal Tees



### Elbows



#### Standard Reducing Tees

SFL manufacture over 36 different sized reducing tees in both 90° and 93° variants. Please refer to pages 6-7 for further information.

Customer Name

Customer Address

Telephone Number

Email Address

Comments

**Fax to 01271 334303 or Email: [salesorders@sflchimneys.com](mailto:salesorders@sflchimneys.com)**

# INSTALLATION INSTRUCTIONS

## 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 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 EN15287-1:2007 + A1:2010**

**Domestic Gas Installations: BS5440: Part 1: 2008**

**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 within 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

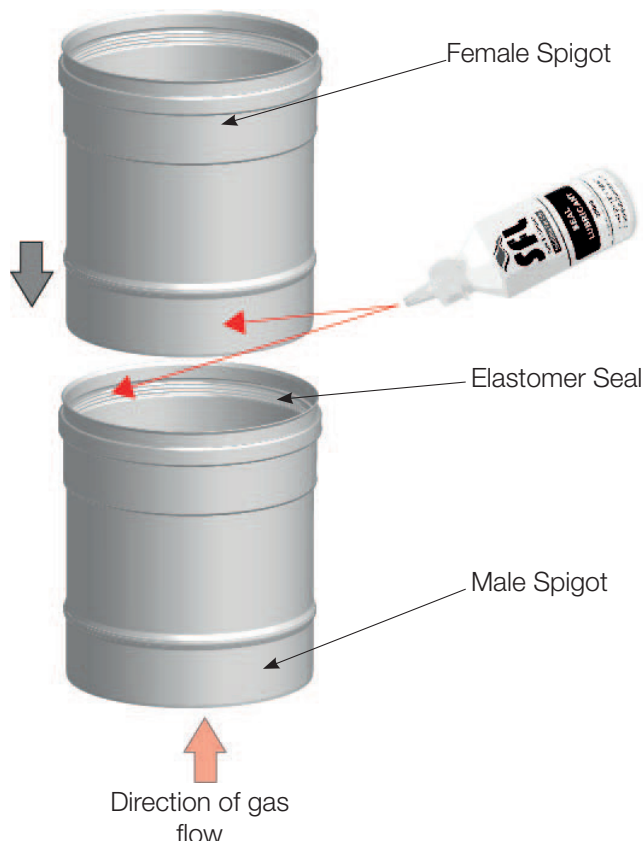
All Supra Plus components feature a simple push-fit joint design, allowing ease and speed of installation, while maintaining a secure and pressure tight joint. To assemble the joint, simply follow the steps below.

### 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 any potential dirt and grit.

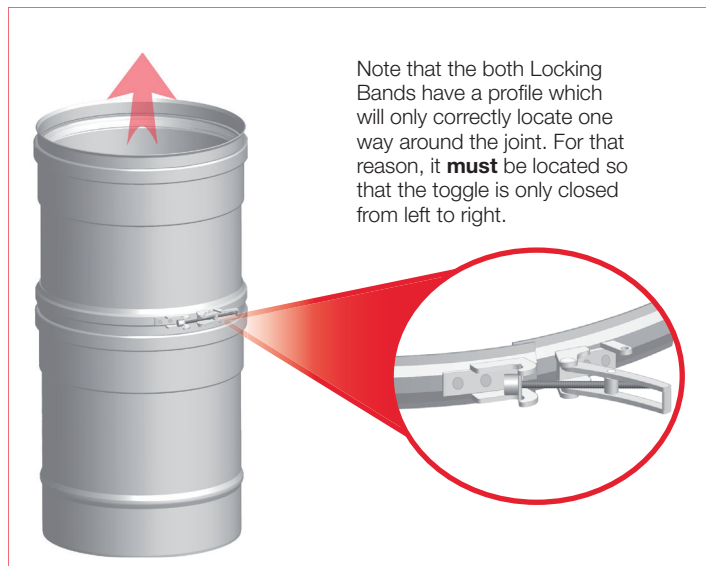
Apply a generous amount of SFL Seal Lubricant around the outer circumference of the male end. Do the same around the inner circumference of the Elastomer Seal, while also checking the seal for any potential signs of damage.

Once the SFL Lubricant has been applied, align the male end into the female and push the joint together.

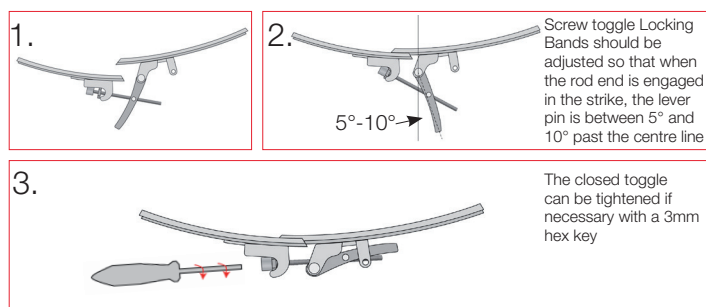


### Step 2:

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, whereas the Standard is used generally throughout the installation. Either way a Locking Band **must** always be used to finish the joint.



## 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 replacing.

### 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

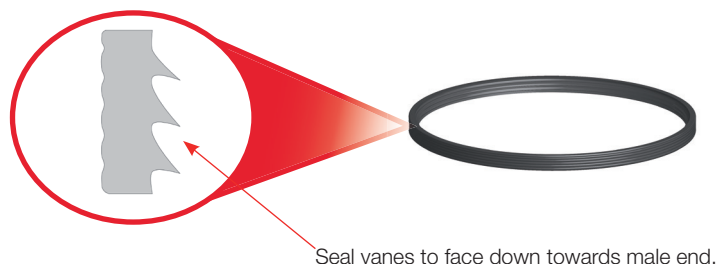
Apply a small thin run of silicone sealant around the internal circumference of the seal groove, making sure that there is just enough to bond the seal to the product.

**Note: Too 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.





## 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 non-beaded end is designed 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.

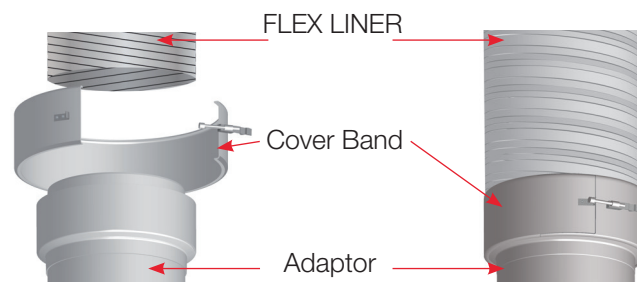
Where pressure and moisture resistance are required, a special Locking Band & Seal is required to make the joint. These are supplied as standard with the Adjustable Length.

## 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 beyond the last support or the roof, a Bracing Bracket must be used and braced back to the structure.

## Data Plate

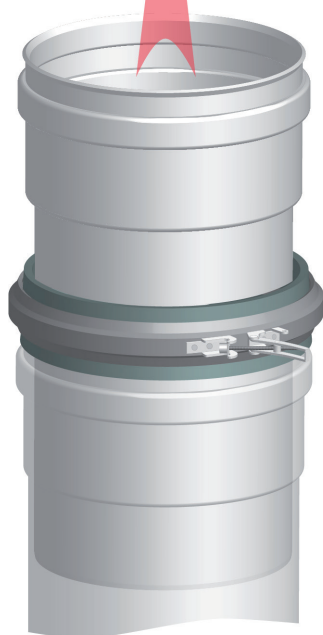
It is a regulatory requirement that a data plate is to be completed, positioned and secured by the installer where a hearth, fireplace, flue or chimney is provided or extended. The Data Plate provides essential information regarding the performance, specification, designation and installation for the 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:-

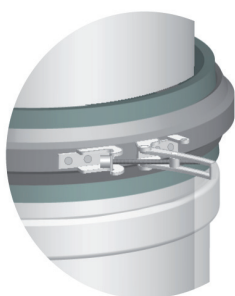
- Property address.
- Where the chimney / hearth is installed.
- What fuels the chimney is suitable for (firing capacity).
- Is the chimney suitable for condensing appliances / applications.
- Chimney internal diameter.
- Installers name and address.
- Date of installation.
- Distance to combustible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

## Locking Band detail for the Adjustable Length for Condensing Applications

Joint detail & seal profile



The Locking Band is profiled such that when used with the Adjustable Length, the toggle **must** snap to the right.



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.



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

## Provision for sweeping and cleaning

Adequate provision should be made for inspecting and cleaning the chimney system. This is particularly important for solid fuel applications. SFL would recommend that chimneys serving solid fuel appliances are swept as frequently as necessary but at least twice a year and possibly three times a year if the appliance is subject to long periods of slumbering. Access components are made available within the range and should be installed to suit the installation, unless sweeping can be undertaken through the appliance.

It is important that a visual inspection of the chimney is undertaken at the same time to ensure all joints are sound and there is no evidence of a chimney fire having occurred.

## 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.

## Testing

This is achieved by means of a flue flow test as detailed in BS5440: Part 1: 2009. 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 reason 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.

## 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. Special consideration should also be given to leisure centres with swimming pools where Chlorine is used or any process using halogen based chemicals.

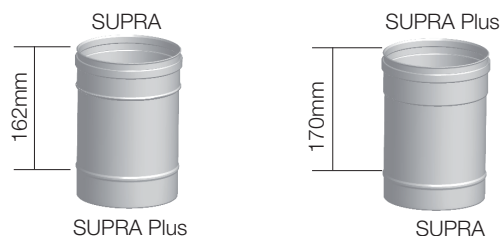
## Warranty

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 Standard Terms and Conditions of Sale for further information.

## Spares / Conversion Adaptors

### Supra / Supra Plus Conversion Adaptors

Supra Plus is the latest iteration of our single wall system for positive pressure condensing applications and supersedes the original Supra product. SFL offer conversion adaptors to convert to and from existing Supra installations.



Ø	SUPRA Plus-SUPRA	SUPRA-SUPRA Plus
80mm	4111508	4111608
100mm	4111510	4111610
130mm	4111513	4111613
150mm	4111515	4111615
180mm	4111518	4111618
200mm	4111520	4111620
250mm	4111525	4111625
300mm	4111530	4111630
350mm	4111535	4111635

## Replacement Seals

The replacement seals are only suitable for use with the Supra Plus product. Please refer to page 16 for installation instructions on removing and installing replacement seals. Seals are classed as sacrificial and therefore covered by a 12 month manufacturing defects warranty.



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

**NOVA**



### Twin wall insulated stainless steel multi-fuel chimney system

- Rapid 16 Barb Twist Lock jointing system for ease and speed of installation
- Diameter Range: 100mm - 600mm
- 25mm High Density (250Kg/m<sup>3</sup>) insulated annulus for maximum thermal performance
- 0.5/0.6mm 316L (1.4404) stainless steel liner for optimum corrosion resistance
- 304 (1.4301) stainless steel outer case
- 3m free-standing capability
- Suitable for condensing and positive pressure systems up to 5000 Pa using elastomer seals
- Suitable also for use on biomass and mini/micro CHP appliances
- 120min Fire Resistance as tested to the integrity and stability criteria of BS 476: Part 20

**BS EN 1856-1 T450 N1 D V2 L50050 O(XX)**

**BS EN 1856-1 T160 H1 W V2 L50050 O(XX)**

XX - Refer to product literature

**NOVA<sup>®</sup> H1** **CE**

0086 - CPD - 496040

**Nova is now H1 approved!**

**EUROPA<sup>Plus</sup>**



### High pressure twin wall stainless steel multi-purpose exhaust vent and chimney system.

- Flanged jointing system utilising a high temperature composite gasket and Patented 'U' Band clamping system for high temperature / pressure applications
- 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

**BS EN 1856-1 T600 H1 W V2 L50060 G(XX)**

XX - Refer to product literature

**CE**

0086 - CPD - 496040

**UL**  
**LISTED**  
MH49940

**UL**  
**LISTED**  
MH49940



# SUPRA Plus



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#### UK Sales and Customer & Export Services

SFL, Pottington Business Park, Barnstaple,  
Devon EX31 1LZ  
Tel: 01271 326633 Fax: 01271 334303  
[www.sflchimneys.com](http://www.sflchimneys.com) [info@sflchimneys.com](mailto:info@sflchimneys.com)