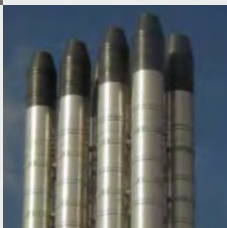
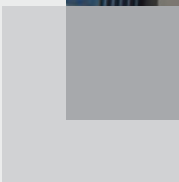
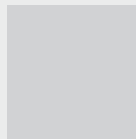
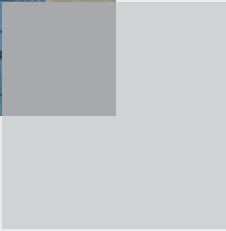


**SCHIEDEL**

▲ RITE-VENT

# commercial systems



Product  
Range



DOC/CP3/55 Issue 1

A company of **LAFARGE**  
ROOFING

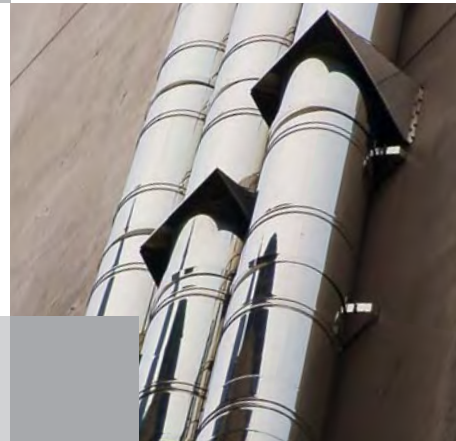
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## Schiedel Rite-Vent

**Schiedel is the leading supplier of prefabricated chimney systems in Europe with the widest choice of chimney and flue products. Part of Lafarge Roofing, Schiedel is at the forefront in product and service innovation, with systems and solutions that are reliable, innovative and cost-effective.**

Our products conform to the most stringent standards of design, manufacture and performance required world-wide, and are CE certified in accordance with EN 1856 and manufactured under BS EN ISO 9001-2000 quality control systems.



### The Clean Air Act

With government legislation aimed at improving the environment very careful consideration must be given to the siting of any chimney termination. Understanding the demands and requirements of the Clean Air Act is paramount. When designing a flue or chimney system Schiedel Rite-Vent can advise on compliance with the Act's requirements and will give guidance on siting and discharge heights. As manufacturers, Schiedel Rite-Vent will produce all the calculations on behalf of the client ensuring performance and compliance.



## Services

- **Site survey**
- **System selection for optimum cost and performance**
- **System sizing**
- **Termination siting advice to comply with the Clean Air Act**
- **Design and layout drawings**
- **On-site installation**
- **Ongoing technical support including facilities management and CCTV**

## Typical Applications

- **Chimney systems**
  - Fluing systems
  - Natural draught
  - Fan assisted/positive pressure
  - Fan dilution
  - Condensing
  - Modular Boiler
  - CLV
- **Exhaust systems**
  - Generators
  - Turbines
  - CHP
- **Other venting systems**
  - Process Plant
  - Bakery ovens
  - Smoke extraction
  - Passive ventilation
  - Fire rated service duct, cable duct
  - Rubbish chutes
- **Support systems**
  - Building supported - internal, external
  - Mast supported - free standing single, multi-leg
  - Wind shield
  - Relining existing stack

## The Complete Service

Whether it's a multi-fuel chimney, a fan dilution system or a generator exhaust, we have a product to suit every commercial or industrial application. We also offer a full CAD design service and technical support. Both in the private and public sector Schiedel Rite-Vent has unrivalled experience that you can rely on whatever the scale or nature of your project - from chimneys to exhaust and venting systems. On-site, our technical team can provide site analysis and application advice as required. We can design and manufacture for projects in the U.K. and Europe, and arrange for on-site installation from a small commercial installation to a large industrial application.

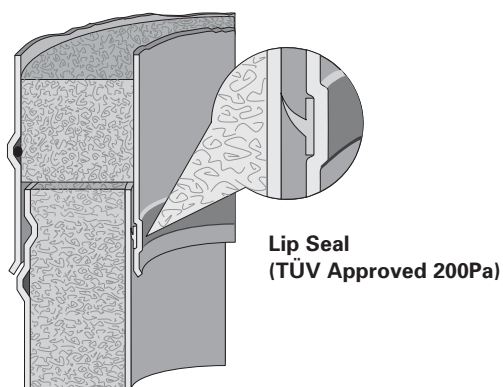
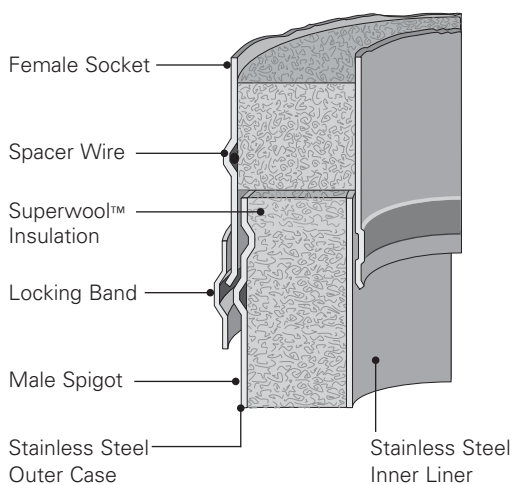


## Application

**ICS** is a twin wall insulated chimney system for use on stoves, open fires, residential and small commercial multi fuel appliances, with continuous operating temperatures up to 450°C and short firing up to 550°C.

**ICS Plus** ICS is converted into ICS Plus by adding a gasket to each component. This creates a twin wall insulated chimney system designed for the new generation of condensing gas and oil appliances, with continuous operating temperatures up to 200°C, short firing up to 250°C, and positive pressure up to 200Pa at the appliance outlet.

## Product Description



### ICS

- Simple push-fit jointing system, secured by locking band.
- Advanced corrosion resistant design and construction uses laser welded 316L stainless steel inner liners and 304 stainless steel case. The only stainless steel system to have passed the internationally recognised GASTEC corrosion test.
- The jointing system increases rigidity and ensures easy draindown of any condensate in the flue.
- Capillary break prevents moisture being drawn through the joint.
- Because of the sleeve joint, the insulation in the pipe is able to be continuous the length of the system ensuring no hot spots.
- The 25mm high efficiency Superwool™ blanket maintains flue gas temperature, maximising efficiency, improving flue draught on start up and minimising condensation.
- Low external case temperature.
- The assembly method allows the inner liner to expand and contract with temperature at the female end. The flue can withstand the temperatures of a soot fire without losing the integrity of the joints.
- Generous lead-in edges on liner and case for ease of jointing.

### ICS Plus

ICS Plus for condensing appliances is created by adding a gasket that can maintain positive pressure up to 200Pa. All the design and construction benefits of ICS apply.



ICS is CE Certified to EN1856-1 TÜV 0036 CPD 9195001 with designations T450 NI W V2 L50050 G75, T450 NI D V3 L50050 G75, T450 NI W V2 L50050 G50, T450 NI D V3 L50050 G50, T200 P1 W V2 L50050 025 (ICS Plus only). Additionally, kitemarked to BS4543 Parts 2 & 3 in diameters 80, 100, 130, 150, 180 and 200mm for gas, oil, and solid fuel applications and is manufactured under the stringent requirements of BS EN ISO 9001:2000 Quality management scheme. ICS also has a 4 Hour fire-rating issued by a NAMAS approved test house in accordance with BS476 Part 20. The liner has corrosion certification from Gastec, MPA and TÜV.

ICS is also listed by HETAS as a chimney suitable for solid fuel.

## Corrosion Resistance

Chimneys are subject to significant corrosion attack by flue gas condensates, particularly from solid fuel and condensing appliances. ICS is specifically designed and manufactured to resist this corrosion. It is the only stainless steel chimney system in the world to have passed the internationally recognised Gastec corrosion test.

## Technical Data

	ICS	ICS Plus
Fuel	Gas, oil, wood, coal	Gas, oil
Firing Temp	450° C	200° C
Short Firing Temp	550° C	250° C
Thermal Shock	1000° C	-
Mode of Operation	Zero & negative pressure	Positive pressure
Pressure Capabilities	40Pa	200Pa
Fire Rating	4 Hour Fire Rating to BS 476 Part 20	
Outer Case	304 : 1.4301 : X5CrNi 18-10	
Outer Case Thickness	0.6mm / 0.7mm above 505mm Nom Ø	
Seam	Laser or inert gas welded	
Liner	316L : 1.4404 : X2CrNiMo 17-12-2	
Liner Thickness (mm)	0.6mm	
Seam	Laser or inert gas welded	
Insulation	High performance mineral fibre	
Insulation Thickness	25mm (50mm, 75mm, 100mm available)	
Average Thermal Resistance (200°C)	0.508m <sup>2</sup> kw	

## Approx. Weight of Products (kg)

Internal Diameter (mm)	Length -	1000mm	500mm	250mm	195mm
80		4.32	2.13	1.09	0.85
100		5.14	2.53	1.29	1.01
130		6.35	3.14	1.6	1.24
150		7.18	3.54	1.86	1.41
180		8.4	4.14	2.11	1.64
200		9.22	4.55	2.31	1.8
230		10.44	5.13	2.62	2.03
250		11.24	5.53	2.81	2.19
300		13.73	6.76	3.44	2.68
355		15.59	7.7	3.93	3.06
405		17.64	8.7	4.45	3.47
455		20.35	10.32	5.59	4.56
505		22.4	11.39	6.16	5.01
555		26.07	13.24	7.13	5.79
605		28.77	14.39	7.75	6.11
655		30.34	15.32	8.14	6.58
705		32.56	16.43	8.72	7.05

## Load Bearing Data (metres of pipe)

Internal Diameter (mm)	80-300	355-455	505-705
Floor Support	18	6	4
Wall Support	10	10	6
Wall Support (Inv)	15	12	10
90° Tee	18	6	4
Ceiling Support (Adj)	15	10	4

## Dimensions

The dimensions of the flue are:

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755

## Product Ordering

To identify fully the component required it is necessary to state the product code followed by diameter as follows.

- Quote the product code followed by the internal diameter. Eg. for a 150mm Int Ø ICS 45° bend, the full code would be J2117150.
- Codes starting with a number 9 are universal accessories common to a number of Schiedel Rite-Vent ranges and therefore require definition of the external diameter. eg, to specify a wall band 50mm to suit a 150mm Int Ø system, the external diameter is 200mm therefore the full code is 92940200.

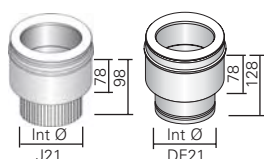
### ICS Plus

ICS components are converted to ICS Plus components by adding a gasket to each component. When ordering ICS Plus, order the internal diameter sized gasket for each component. Some components are specifically manufactured for condensing appliances. The code for these are prefixed with 'DF'.

## Finish

**Paint** ICS & ICS Plus can be supplied ready painted in any BS or RAL colour.

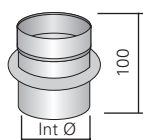
## Starting Components



### Multi-purpose Connector

ICS J2147  
ICS Plus DF21E4

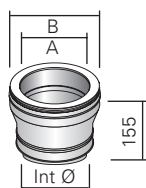
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Starter Connector

ICS J2169

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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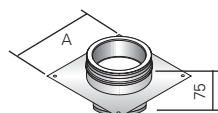


### Increaser

ICS J2171  
ICS Plus DF21E5

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655
A	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
B	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755

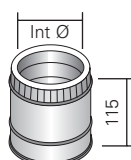
Other combinations up to A= 805 are available.  
When ordering use 'prefix' - 'Int' - 'A' i.e. J2171355505 is a 355 to 505 increaser.



### Anchor Plate

ICS J2189

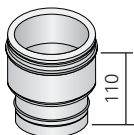
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	270	290	320	340	370	390	420	440	495	545	595	645	695	745	795	845	895



### Adaptor from ICS to SM

ICS J2180

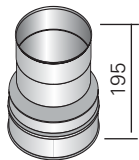
ICS Int Ø mm	130	150	180	200	250	300	355
SM Int Ø mm	127	152	178	203	254	304	359



### Connector Prima Plus to ICS

S068

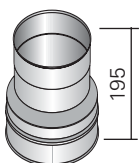
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Adaptor - ICS to Prima Plus

ICS J2178

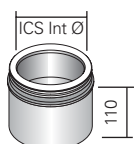
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Adaptor - ICS to TecnoFlex (Turboflex Plus)

ICS J2179

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505
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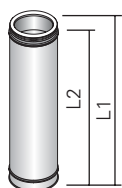


### Adaptor from SM to ICS

ICS J2155

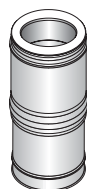
SM Int Ø mm	127	152	178	203	254	304	359
ICS Int Ø mm	130	150	180	200	250	300	355

## Pipes



<b>L1 1000mm</b>	<b>L2 955mm</b>	ICS J2101
<b>L1 500mm</b>	<b>L2 455mm</b>	ICS J2102
<b>L1 250mm</b>	<b>L2 205mm</b>	ICS J2103
<b>L1 195mm</b>	<b>L2 150mm</b>	ICS J2104

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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<b>Length 165-195mm</b>	ICS J2108
<b>Length 195-270mm</b>	ICS J2152
<b>Length 270-375mm</b>	ICS J2109
<b>Length 375-585mm</b>	ICS J2153
<b>Length 585-1005mm</b>	ICS J2154

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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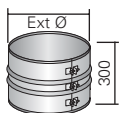
To change into ICS Plus a total of 3 gaskets are required on adjustable pipes.



### Locking Band

ICS J2183

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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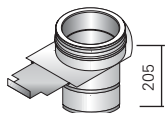


### Extended Locking Band

95840

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
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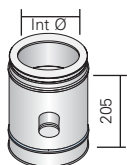
When ordering use 'ext' dia.



### Damper Pipe

ICS J2158

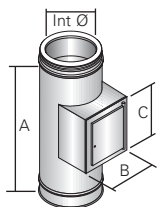
Int Ø mm	80	100	130	150	180	200	230	250	300	355
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### Measure Pipe

ICS J2195

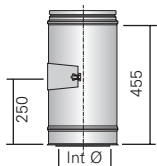
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Inspection Tee - ICS - Door

ICS J2111

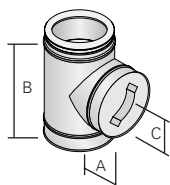
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	292	292	292	292	292	292	411	411	411	411	411	411	431	431	431	431	431
B	114	114	114	114	114	114	202	202	202	202	202	202	202	202	202	202	202
C	173	173	173	173	173	173	292	292	292	292	292	292	292	292	292	292	292



### Inspection Pipe - ICS

ICS J21A4

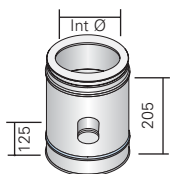
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Inspection Tee - ICS Plus - Condensing Plug

ICS Plus DF21E6

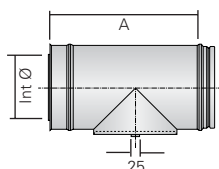
Int Ø mm	80	100	130	150	180	200	250	300	355
A	125	135	150	160	175	185	210	238	263
B	255	275	305	325	355	375	375	375	375
C	145	155	170	180	195	205	205	205	205



### Vertical Drain Pipe

ICS J21A5

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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### Horizontal Drain Pipe - ICS Plus

ICS Plus DF21E7

Int Ø mm	80	100	130	150	180	200	250
A	288	288	455	455	455	455	455



## Gasket to convert ICS to ICS Plus

Fit into the groove form on all female socket (liners) and into grooves on adjustable pipe liner.



### Silicone Gasket

S000

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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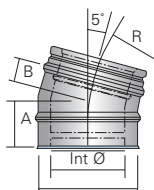
### Viton Gasket

V000

Int Ø mm	80	100	130	150	180	200	230	250	300	355
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For use on oil applications. To comply with the requirements of EN1856-1 will become effective on installations from April 2006.

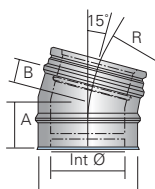
## Bends



### 5° Bend

ICS J21B1

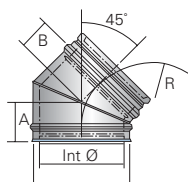
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455
A	83	83	84	84	85	85	86	87	88	89	90	91
B	43	44	45	45	46	46	47	48	49	50	51	52
R	1008	1011	973	978	985	990	998	1003	1016	1029	1041	1054



### 15° Bend

ICS J2118

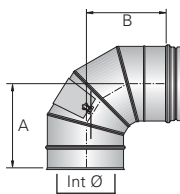
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	89	90	92	93	95	96	98	100	103	107	110	113	137	140	143	146	150
B	49	51	53	54	56	57	59	61	64	68	71	74	97	100	103	106	110
R	364	345	353	358	365	370	378	383	396	409	421	434	519	531	544	556	569



### 45° Bend

ICS J2117

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	118	122	117	121	128	132	138	142	154	164	174	185	253	260	273	284	294
B	77	82	78	82	89	93	99	103	115	125	135	146	213	220	233	244	254
R	154	159	143	148	155	160	168	173	186	199	211	224	410	426	460	485	510

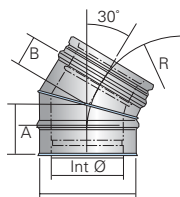


### 90° Inspection Bend - ICS

ICS J21A2

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	172	182	184	194	209	219	234	244	279	304	329	354	493	510	543	568	583
B	133	143	139	149	164	174	189	199	227	252	277	302	453	470	503	528	543

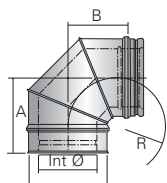
Please note the radius for the above omitted. Has not been calculated.



**30° Bend**

ICS J2119

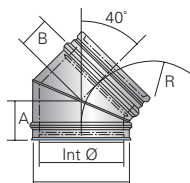
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	97	100	104	107	111	113	118	120	128	134	141	148	192	198	206	213	219
B	57	61	65	68	72	74	79	81	89	95	102	109	152	158	166	173	179
R	195	189	196	201	209	214	221	226	240	252	265	277	410	426	460	485	510



**90° Bend**

ICS J2115

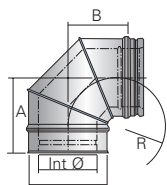
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	172	182	184	194	209	219	234	244	279	304	329	354	493	510	543	568	583
B	146	143	145	155	170	180	195	205	240	265	290	315	453	470	503	528	543
R	129	141	115	124	139	150	164	174	214	239	264	293	410	426	460	485	499



**40° Bend**

ICS J21A9

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505
A	114	118	113	116	122	125	131	135	145	154	163	172	181
B	74	79	74	77	83	86	92	96	106	115	124	133	141
R	168	174	156	161	169	174	181	186	200	212	225	237	250

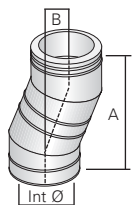


**85° Bend**

ICS J21A8

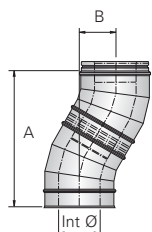
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505
A	165	175	176	185	199	208	222	231	263	286	309	332	355
B	140	136	137	146	160	169	183	192	224	247	270	293	316
R	105	115	116	126	141	151	166	176	216	241	266	295	306

**Offsets**



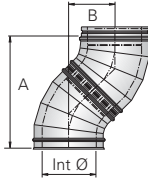
**Offsets for Double 15° Bend**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	299	277	285	289	297	301	309	317	328	344	356	368	460	472	484	495	511
B	39	36	38	38	39	40	41	42	43	45	47	48	61	62	64	65	67



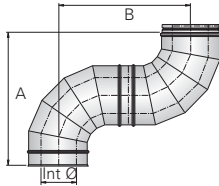
**Offsets for Double 30° Bend**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	313	300	315	327	341	349	368	375	405	427	453	480	642	664	694	720	743
B	84	81	85	88	92	94	99	101	109	115	122	129	172	178	186	193	199



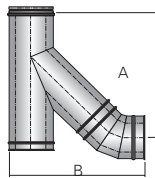
**Offsets for Double 45° Bend**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	358	358	333	347	370	384	405	418	459	493	527	565	796	899	864	901	935
B	148	148	138	144	153	159	168	173	190	204	218	234	330	339	358	373	387



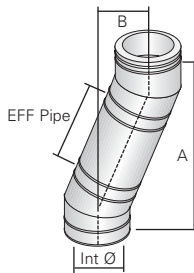
**Offsets for Double 90° Bend**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	318	325	329	349	379	399	429	449	519	569	619	669	946	980	646	1096	1126
B	318	325	329	349	379	399	429	449	519	569	619	669	946	980	1046	1096	1126



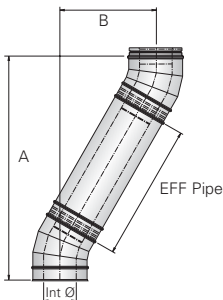
**Offsets for 135° Tee and 45° Elbow**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	299	317	343	367	403	428	463	487	554	615	674	749	850	908	970	1031	1091
B	416	444	473	507	559	593	644	678	773	857	942	1043	1226	1306	1395	1482	1567



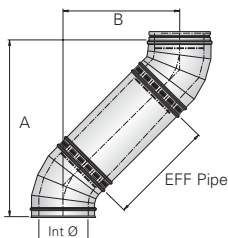
**Double 15° Bend C/W Pipe Length**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	
955 EFF Pipe	A	1221	1200	1208	1211	1219	1223	1231	1239	1251	1266	1278	1290	1382	1394	1406	1418	1434
	B	287	284	285	285	286	287	288	289	290	292	294	296	308	309	311	312	314
455 EFF Pipe	A	738	717	725	728	736	740	748	756	768	784	795	807	900	911	923	935	951
	B	157	154	155	156	157	157	158	159	161	163	165	166	178	180	181	183	185
205 EFF Pipe	A	497	475	483	487	495	499	507	515	526	542	554	566	658	670	682	693	709
	B	92	90	91	91	92	93	94	95	96	98	100	101	114	115	117	118	120



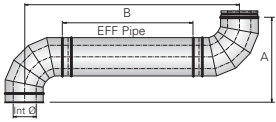
**Double 30° Bend C/W Pipe Length**

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	
955 EFF Pipe	A	1140	1127	1142	1153	1168	1176	1195	1202	1232	1254	1280	1307	1469	1491	1521	1547	1570
	B	562	558	562	565	569	571	576	578	586	592	599	606	650	656	664	671	677
455 EFF Pipe	A	707	694	709	721	735	743	762	769	799	821	847	874	1036	1058	1088	1114	1137
	B	312	308	312	315	319	321	326	328	336	342	349	356	400	406	414	421	427
205 EFF Pipe	A	491	478	493	504	519	526	545	553	582	605	631	657	819	842	872	898	920
	B	187	183	187	190	194	196	201	203	211	217	224	231	275	281	289	296	302



**Double 45° Bend C/W Pipe Length**

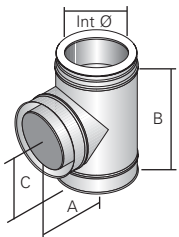
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	
955 EFF Pipe	A	1034	1034	1009	1022	1046	1060	1080	1094	1135	1169	1203	1241	1471	1495	1539	1577	1611
	B	824	824	814	819	829	835	843	849	866	880	894	910	1005	1015	1033	1049	1063
455 EFF Pipe	A	680	680	655	668	692	706	726	740	781	815	849	887	1117	1141	1186	1223	1257
	B	470	470	460	465	475	481	489	495	512	526	540	556	651	661	680	695	709
205 EFF Pipe	A	503	503	478	491	515	529	550	563	604	638	672	710	940	964	1009	1046	1080
	B	293	293	293	288	298	304	313	318	335	349	363	379	474	484	503	518	532



**Double 90° Bend C/W Pipe Length**

Int Ø mm		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655
955 EFF Pipe	A	299	319	323	343	373	393	423	443	499	549	599	649	946	980	1046	1096
	B	1254	1274	1278	1298	1328	1348	1378	1398	1454	1504	1554	1604	1901	1935	2001	2051
455 EFF Pipe	A	299	319	323	343	373	393	423	443	499	549	599	649	946	980	1046	1096
	B	754	774	778	798	828	848	878	898	954	1004	1054	1104	1401	1435	1501	1551
205 EFF Pipe	A	299	319	323	343	373	393	423	443	499	549	599	649	946	980	1046	1096
	B	504	524	528	548	578	598	628	648	704	754	804	854	1151	1185	1251	1301

**Tees**

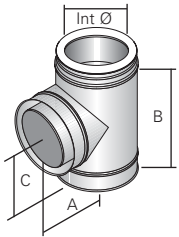


**90° Tee**

ICS J2120  
ICS Plus DF2120

Int Ø mm		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A		145	155	170	180	195	205	220	230	258	283	308	353	378	403	428	453	478
B		255	275	305	325	355	375	405	425	480	530	580	650	700	750	800	850	900
C		145	155	170	180	195	205	220	230	258	283	308	353	378	403	428	453	478

To change into ICS Plus a total of 2 gaskets are required on tee sections.

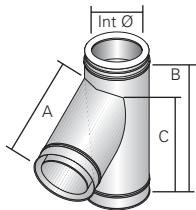


**95° Tee**

ICS Plus DF21C1

Int Ø mm		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A		151	166	178	189	206	216	233	257	274	301	328	376	403	430	457	485	512
B		249	278	309	329	359	379	405	455	480	530	580	650	700	750	800	850	900
C		151	166	178	189	206	216	233	244	274	301	328	376	403	430	457	485	512

To change into ICS Plus a total of 2 gaskets are required on tee sections.

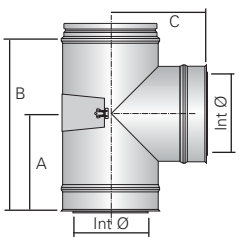


**135° Tee**

ICS J2121  
ICS Plus DF2121

Int Ø mm		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A		238	262	298	322	358	382	419	443	509	569	630	710	771	831	891	952	1012
B		299	327	375	403	445	474	516	544	622	693	763	854	925	998	1066	1137	1208
C		238	262	298	322	358	382	419	443	509	569	630	710	771	831	891	952	1012

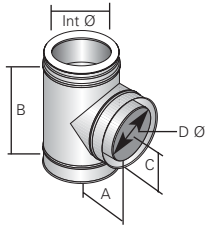
To change into ICS Plus a total of 2 gaskets are required on tee sections.



**90° Tee C/W Inspection Point - ICS**

ICS J21A3

Int Ø mm		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A		162	162	245	245	245	245	265	275	303	328	353	378	403	428	453	478	503
B		278	278	455	455	455	455	480	500	555	605	655	705	755	805	855	905	955
C		145	155	170	180	195	205	265	275	303	328	353	378	403	428	453	478	503



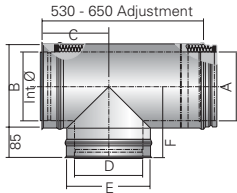
**90° Reducing Tee** ICS J2131

Int Ø	DØ	A	B	C
200	130	205	305	170
	150	205	325	180
	180	205	355	195
250	130	230	305	170
	150	230	325	180
	180	230	355	195
	200	230	375	205
300	130	258	305	170
	150	258	325	180
	180	258	355	195
	200	258	375	205
	250	258	425	230

Int Ø	DØ	A	B	C
355	130	283	305	170
	150	283	325	180
	180	283	355	195
	200	283	375	205
	250	283	425	230
	300	283	480	258
405	130	308	305	170
	150	308	325	180
	180	308	355	195
	200	308	375	205
	250	308	425	230

Int Ø	DØ	A	B	C
455	130	333	325	190
	150	333	345	200
	180	333	375	215
	200	333	395	225
	250	333	445	250
	300	333	500	278
505	150	358	345	200
	250	358	445	250
555	250	383	445	250

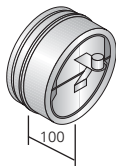
To order quote J2131 followed by main mm Ø followed by branch mm Ø



**Telescopic Tee - ICS**

ICS J2151

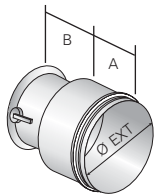
Part Number	Int Ø	Ext Ø	OL	A	B	C	D	E	F
J2151200200	200	250	199	249	190	200	249	210	
J2151250250	250	300	249	299	215	250	299	235	
J2151300200	300	355	299	354	190	200	250	262	
J2151355200	355	405	354	404	215	200	250	287	
J2151355250	355	405	354	404	215	250	300	287	



**Draught Stabiliser Section up to 250 dia.**

ICS J2126

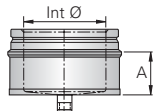
Int Ø mm	80	100	130	150	180	200	230	250
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**Draught Stabiliser Section 300 dia. and over**

J2126

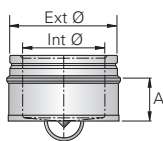
Int Ø (mm)	300	355	405	455	505	555	605	655	705
Ext Ø (mm)	355	405	455	505	555	605	655	705	755
A	146	181	213	210	245	315	315	334	334
B	121	130	143	188	197	219	314	333	333



**Tee Plug with Drain**

ICS J2129

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	35	13	27	28	32	33	105	48	115	55	61	105	105	105	105	105	105

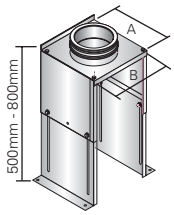


**Tee Plug**

ICS J2125

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	40	40	40	41	45	46	78	78	78	78	78	78	78	78	78	78	78

## Support Components

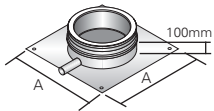


### Telescopic Floor Support

ICS J2177

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	230	250	280	300	330	350	380	400	456	506	556	606	656	706	756	806	856
B	200	220	250	270	300	320	350	370	425	475	525	575	625	675	725	775	825

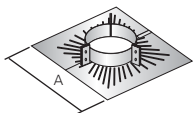
500mm minimum. Adjustable to 800mm maximum.



### Base Support Plate with Drain

ICS J2191

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	230	250	280	300	330	350	380	400	455	505	555	605	655	705	755	805	855

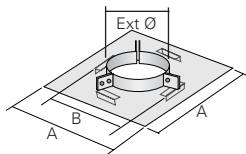


### Support Plate 2 Piece

95740

Ext Ø mm	130	150	180	200	230	250	280	300	355	405
A	380	400	430	450	480	500	530	550	605	655

When ordering use ext dia.

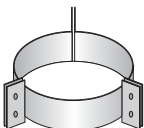


### Support Plate - Non Combustible Floor

95680

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
A	300	300	330	350	380	400	430	450	505	555	605	655	705	755	805	855	905
B	230	250	280	300	330	350	380	400	455	505	555	605	655	705	755	805	855

When ordering use ext dia.

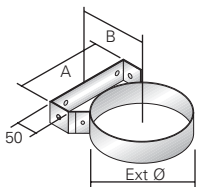


### Guy Wire Bracket

95900

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
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When ordering use ext dia.

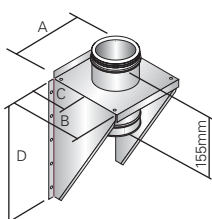


### Wall Bracket 50mm

92940

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
A	142	148	178	198	228	248	278	298	353	403	453	503	551	601	651	701	751
B	115	125	140	150	165	175	190	200	228	253	278	303	328	353	378	403	428

When ordering use ext dia.

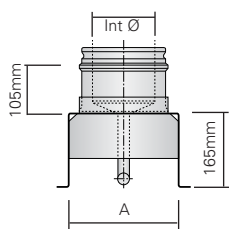


### Wall Support

J2182

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	200	220	250	270	300	320	350	370	425	475	525	575	625	675	725	775	825
B	230	250	280	300	330	350	380	400	456	506	556	606	656	706	756	806	856
C	115	125	140	150	165	175	190	200	228	253	278	303	328	353	378	403	428
D	470	470	470	470	470	470	470	470	470	670	670	670	870	870	870	870	870

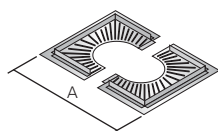
For Top Plate only order: J2182.Ø 01



### Drain Plug & Support

ICS J2130

Ext Ø mm	80	100	130	150	180	200	230	250	300	355
A	180	200	230	250	280	300	330	350	400	455

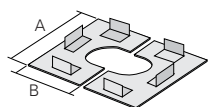


### Firestop

94730

Ext Ø mm	130	150	180	200	230	250	280	300	355	405
A	380	400	430	450	480	500	530	550	605	655

When ordering use ext dia.

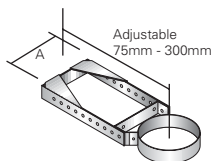


### Fire Stop Plate - Non Combustible Floor

94670

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
A	450	450	450	450	450	610	610	610	610	610	800	800	800	1000	1000	1000	1000
B	220	235	255	270	290	305	330	340	380	415	450	485	520	555	590	625	660

When ordering use ext dia.

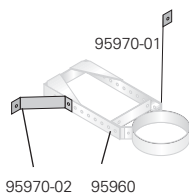


### Wall Bracket 300mm Adjustable

95960

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
A	148	158	188	208	238	258	284	308	363	413	463	513	563	613	663	713	763

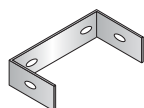
When ordering use ext dia.



### Anti-Swing Stay (pair)

Short - 95970-02

Long - 95970-01



### Wall Bracket Extension 50-100mm

95920

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
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To be used with 92940 for solid fuel application.

When ordering use ext dia.

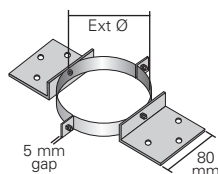


### Ceiling Hanger

95750

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
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When ordering use ext dia.

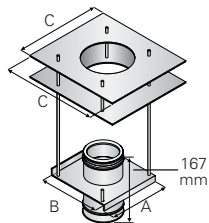


### Roof Support

94640

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605
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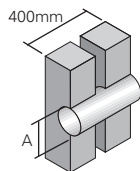
When ordering use ext dia.



**Adjustable Ceiling Support**

ICS J2192

Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	200	220	250	270	300	320	350	370	425	475	525	575	625	675	725	775	825
B	230	250	280	300	330	350	380	400	456	506	556	606	656	706	756	806	856
C	530	550	580	600	630	650	680	700	755	805	855	905	955	1005	1055	1105	1155



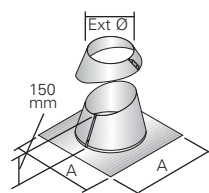
**Wall Sleeve**

94980

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
A	180	200	230	250	280	300	330	350	405	455	505	555	605	655	705	755	805

When ordering use ext dia.

**Flashings**

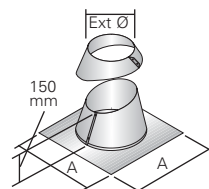


**Angled Flashing Kit 5° - 45°**

95510

Ext Ø mm	130	150	180	200	230	250	280	300	355
A	610	610	610	700	700	700	800	800	860

When ordering use ext dia.

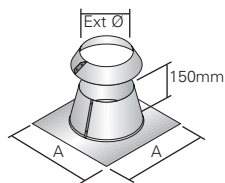


**Angled Flashing Kit 5° - 30°**

95520

Ext Ø mm	380	405	455	505	555	605	655	705	755
A	800	800	800	900	1000	1000	1100	1100	1200

When ordering use ext dia.

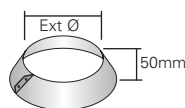


**Flat Flashing Kit**

95530

Ext Ø mm	80	100	113	120	125	130	140	150	155	160	180	200	230	250	256	280
A	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610
Ext Ø mm	300	308	325	330	355	358	380	405	455	505	555	605	655	705	755	
A	610	610	610	610	800	800	800	800	800	1000	1000	1000	1000	1000	1000	

When ordering use ext dia.

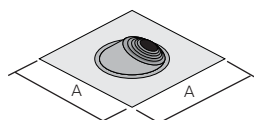


**Storm Collar**

95560

Ext Ø mm	130	150	180	200	230	250	280	300	355	405	455	505	555	605	655	705	755
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When ordering use ext dia.



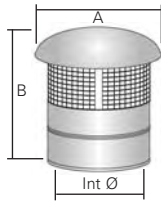
**Uniflash**

Product Code	94540001	94540002	94540003
Ext Ø (mm)	80-200	150-300	250-450
A	500	685	800

Universal EPDM rubber/aluminium flashing.  
Just pull the required diameter tab on the rubber seal.



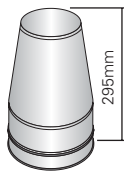
Terminals



**Raincap**

with mesh ICS J2137  
without mesh ICS J2156

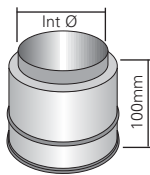
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
A	266	266	266	362	362	362	362	362	490	570	660	740	825	905	1000	1080	1165
B	230	233	239	233	237	240	245	249	271	277	282	288	445	485	525	565	605



**Insulated Tapered Terminal**

ICS J2138

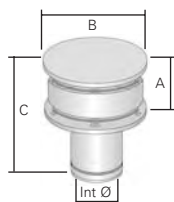
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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**Stub Terminal**

ICS J2172

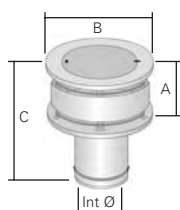
Int Ø mm	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705
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**Anti-Splash Anti-Downdraught Terminal (Gastec Approved)**

with mesh ICS J2144  
without mesh ICS J2143

Int Ø mm	130	150	180	200	230	250	300	355	405
A	130	175	200	200	250	275	330	385	440
B	254	304	359	409	459	509	609	709	809
C	220	265	290	290	340	365	420	475	530



**Cleanout Terminal Swing Open Top**

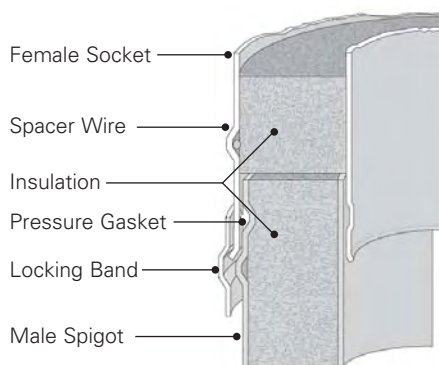
with mesh ICS J2181  
without mesh ICS J2199

Int Ø mm	130	150	180	200	230	250	300	355	405
A	130	175	200	200	250	275	330	385	440
B	254	304	359	409	459	509	609	709	809
C	220	265	290	290	340	365	420	475	530

## Application

ICS 5000 is a multi-functional twin wall insulated venting system for use on a wide range of heating appliances, stand-by power engines, CHP and service ducting.

## Product Description



- Sleeve joint with pressure-retaining locking band for:-
  - Quick and sure assembly
  - Lateral strength
  - Assured insulation continuity
  - Easy condensate draindown
- Pressure seal on outer case protected by insulation for longest life
- Additional gasket can be fitted under locking band increasing joint security in arduous operating conditions and raising pressure capability towards 7500Pa
- Inner liner free to expand  
No need for expansion joints

## Corrosion Resistance

Chimneys are subject to significant corrosion attack by flue gas condensates, particularly from solid fuel and condensing appliances. ICS is specifically designed and manufactured to resist this corrosion. It is the only stainless steel chimney system in the world to have passed the internationally recognised Gastec corrosion test.

## Technical Data

	ICS 5000
Fuel	Diesel generators, gas, oil
Continuous Firing Temp	540° C
Short Firing Temp	760° C
Thermal Shock	1100° C
Mode of Operation	Positive, zero & negative pressure
Pressure Capabilities	5000Pa (for higher pressure applications consult Rite-Vent Technical Department)
Fire Rating	4 Hour Fire Rating to BS 476 Part 20
Outer Case	304 : 1.4301 : X5CrNi 18-10
Outer Case Thickness	0.6mm (150 - 455mm dia.) 0.7mm (505 - 605mm dia.)
Seam	Laser or inert gas welded
Liner	316L : 1.4404 : X2CrNiMo 17-12-2
Liner Thickness (mm)	0.6mm
Seam	Laser or inert gas welded
Insulation	High performance mineral fibre
Insulation Thickness	25mm
Average Thermal Resistance (200°C)	0.508m <sup>2</sup> kw

## Load Bearing Data (metres of pipe)

Internal Diameter (mm)	150-300	355-455	505-605
Floor Support	18	6	4
Wall Support (A)	15	12	10
Wall Support (B)	10	10	6
90° Tee	18	6	4
Adj. Ceiling Support	15	10	4

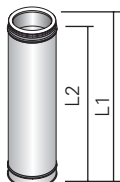
## Approximate Weights of Finished Goods (Kg) 25mm Cavity

Internal Diameter mm	150	180	200	230	250	300	355	405	455	505	555	605
1000mm Pipe	6.41	7.48	8.19	9.26	9.96	13.78	15.59	17.64	19.98	21.71	25.32	27.50
500mm Pipe	3.15	3.68	4.03	4.54	4.89	6.75	7.70	8.70	9.70	10.70	12.50	13.58
250mm Pipe	1.61	1.88	2.05	2.32	2.49	3.44	3.93	4.45	4.97	5.47	6.38	6.93
90° Tee	3.72	4.31	4.70	6.00	6.64	8.56	11.56	13.87	16.36	23.65	28.65	32.63

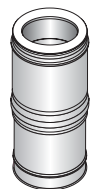
## Dimensions

Diameter Code	150	180	200	230	250	300	355	405	455	505	555	605
Internal Diameter mm	150	180	200	230	250	300	355	405	455	505	555	605
External Diameter mm	200	230	250	280	300	355	405	455	505	555	605	655
Internal Cross Section (area m <sup>2</sup> )	0.017	0.025	0.031	0.041	0.049	0.070	0.099	0.129	0.163	0.200	0.242	0.288

## Pipes



Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Part ref. ICS	Length L1		Length L2									
J2401	1000mm		955mm									
J2402	500mm		455mm									
J2403	250mm		205mm									
J2404	195mm		150mm									



### Adjustable Pipe

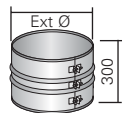
Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Part ref. ICS	Length											
J2409	270 - 375mm											
J2453	375 - 585mm											
J2454	585 - 1005mm											



### Locking Band

ICS J2483

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
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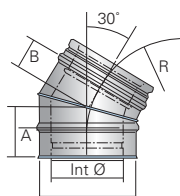


### Extended Locking Band

95840

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655

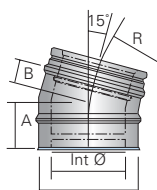
## Bends



### 30° Bend

ICS J2419

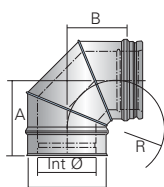
Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	107	111	113	118	120	128	134	141	148	192	198	206
B Ø mm	68	72	74	79	81	89	89	102	109	152	158	166
R Ø mm	201	209	214	221	226	240	252	265	277	410	426	460



### 15° Bend

ICS J2418

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	93	95	96	98	100	103	107	110	113	137	140	143
B Ø mm	54	56	57	59	61	64	68	71	74	97	100	103
R Ø mm	358	365	370	378	383	396	409	421	434	519	531	544

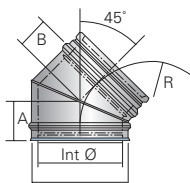


### 90° Bend

ICS J2415

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	194	209	219	234	244	279	304	329	354	493	510	543
B Ø mm	155	170	180	195	205	240	265	290	315	453	470	503
R Ø mm	124	139	150	164	174	214	239	264	293	410	426	460

## Bends (contd.)

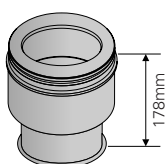


### 45° Bend

ICS J2417

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	121	128	132	138	142	154	164	174	185	253	260	273
B Ø mm	82	89	93	99	103	115	125	135	146	213	220	233
R Ø mm	148	155	160	168	173	186	199	211	224	410	426	460

## Pressure Components

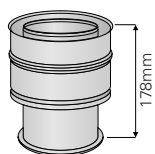


### Flanged Adaptor to ICS 5000

J2445

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655

This component is used to connect to boilers, flanged pipes, bellows and special size flanges which are available on request.

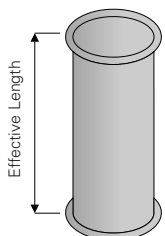


### ICS 5000 to Flanged Adaptor

J2448

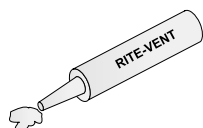
Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655

This component is used to connect from ICS 5000 to a flanged pipe or bellows.



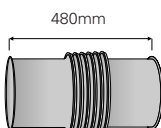
### Three Standard Lengths of Flanged Pipe are available:

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Part ref.	Effective Length											
J2405	988mm											
J2406	488mm											
J2407	238mm											



62

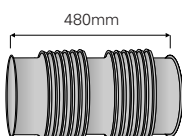
This component MUST be used in conjunction with the flanged pipe and 'V' band. This sealant MUST be used at every flanged joint and secured with a 'V' band provided.



### Single Bellows

J2427

Int Ø mm	405	455	505	555	605
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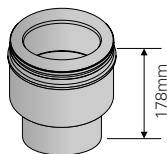


### Double Bellows

J2428

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
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## Starting Components

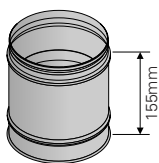


**Appliance Connector**

J2446

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655

## Terminals

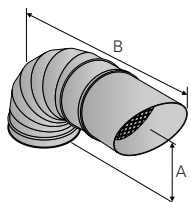


**Terminal Section**

J2435

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655

This component **MUST** be used in conjunction with a pressure system, and **MUST** be fitted directly below the terminal chosen for the application.

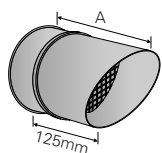


**Exhaust Terminal (Vertical)**

ICS J2414

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
A Ø mm	270	285	295	310	320	393	418	443	468	493	510	543
B Ø mm	555	600	630	675	705	833	908	983	1058	1133	1200	1283

This terminal is designed for all pressure applications where the termination discharges in a vertical run, and is fitted with a bird guard.



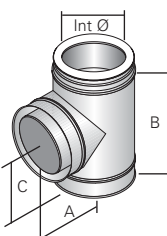
**Exhaust Terminal (Horizontal)**

J2439

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
A Ø mm	325	355	375	405	425	480	530	580	630	680	730	780

This terminal is designed for all pressure applications where the termination discharges in a horizontal run, and is fitted with a bird guard.

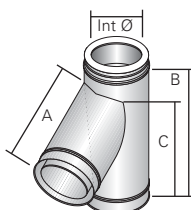
## Tees



**90° Tee**

ICS J2420

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	180	195	205	220	230	258	283	308	353	378	403	428
B Ø mm	325	355	375	405	425	480	530	580	650	700	750	800
C Ø mm	180	195	205	220	230	258	283	308	353	378	403	428

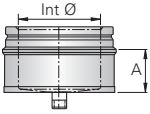


**135° Tee**

ICS J2421

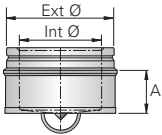
Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	322	358	382	419	443	509	569	630	710	771	831	891
B Ø mm	403	445	474	516	544	622	693	763	854	925	998	1066
C Ø mm	322	358	382	419	443	509	569	630	710	771	831	891

## Tees (contd.)


**Tee Plug with Drain**

ICS J2429

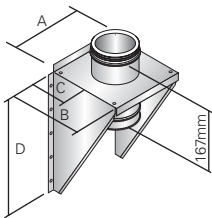
Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	28	32	33	105	48	115	55	61	105	105	105	105


**Tee Plug**

ICS J2425

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	41	45	46	78	78	78	78	78	78	78	78	78

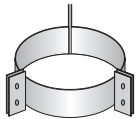
## Support Components


**Wall Support**

J2482

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
A Ø mm	270	300	320	350	370	425	475	525	575	625	675	725
B Ø mm	300	330	350	380	400	456	506	556	606	656	706	756
C Ø mm	150	165	175	190	200	228	253	278	303	328	353	378
D Ø mm	470	470	470	470	470	470	670	670	670	870	870	870

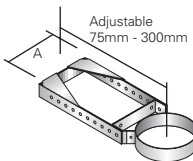
For Top Plate only order: ICS J2482 Ø 01


**Guy Wire Bracket**

95900

Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
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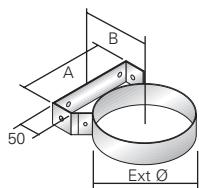
When ordering use ext dia.


**Wall Bracket 300mm Adjustable**

95960

Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
A Ø mm	208	238	258	284	308	363	413	463	513	563	613	663

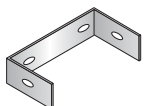
When ordering use ext dia.


**Wall Bracket 50mm**

92940

Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
A Ø mm	198	228	248	278	298	353	403	453	503	551	601	651
B Ø mm	150	165	175	190	200	228	253	278	303	328	353	378

When ordering use ext dia.


**Wall Bracket Extension 50-100mm**

95920

Ext Ø mm	200	230	250	280	300
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To be used with 92940 for solid fuel application.  
When ordering use ext dia.

## Support Components (contd.)



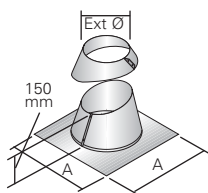
### Ceiling Hanger

95750

Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
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When ordering use ext dia.

## Flashings

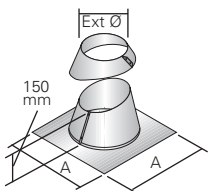


### Angled Flashing Kit 5° - 45°

95510

Ext Ø mm	130	150	180	200	230	250	280	300	355
A	610	610	610	700	700	700	800	800	860

When ordering use ext dia.

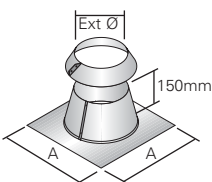


### Angled Flashing Kit 5° - 30°

95520

Ext Ø mm	380	405	455	505	555	605	655	705	755
A	800	800	800	900	1000	1000	1100	1100	1200

When ordering use ext dia.

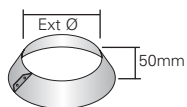


### Flat Flashing Kit

95530

Ext Ø mm	80	100	113	120	125	130	140	150	155	160	180	200	230	250	256	280
A	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610	610
Ext Ø mm	300	308	325	330	355	358	380	405	455	505	555	605	655	705	755	
A	610	610	610	610	800	800	800	800	800	800	1000	1000	1000	1000	1000	

When ordering use ext dia.



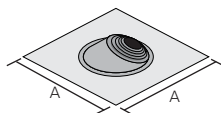
### Storm Collar

95560

Ext Ø mm	200	230	250	280	300	355	405	455	505	555	605	655
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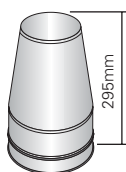
When ordering use ext dia.

### Uniflash



Product Code	94540001	94540002	94540003
Ext Ø (mm)	80-200	150-300	250-450
A	500	685	800

Universal EPDM rubber/aluminium flashing.  
Just pull the required diameter tab on the rubber seal.



### Insulated Tapered Terminal

ICS J2138

Int Ø mm	150	180	200	230	250	300	355	405	455	505	555	605
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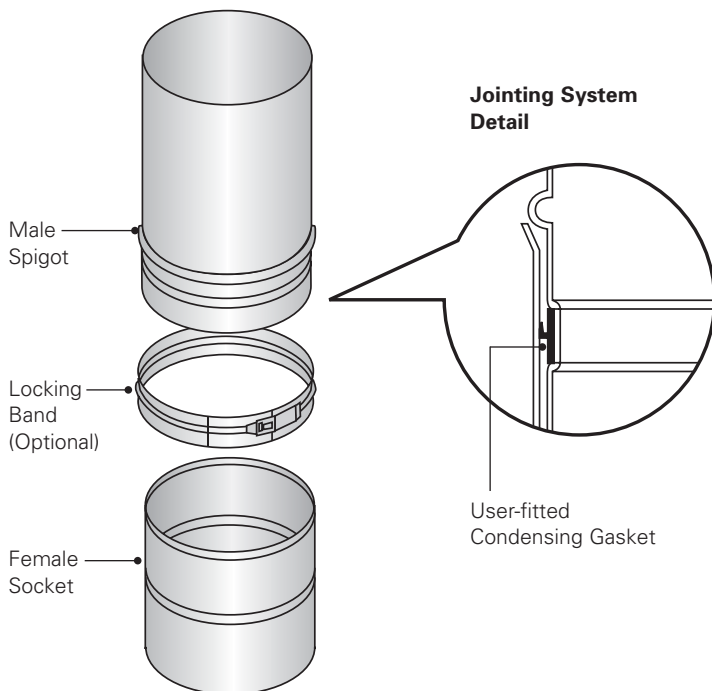
## Application

**Prima Plus** is a high quality 316L stainless steel single wall flue system with a wall thickness of 0.6mm. It is designed for use on gas and oil burning stoves and boilers with continuous operating temperatures up to 450°C and short firing up to 600°C. With the addition of a gasket to the joint, Prima Plus is designed for fluing condensing gas and oil appliances with positive pressures up to 200Pa, continuous operating temperatures up to 200°C and short firing up to 250°C.

It can also be used for lining brick stacks for gas, oil, multi-fuel appliances and open fires as an alternative to flexible liner. (The exception is in England where Building Regulations now disallow the use of 0.6mm as a liner in domestic installations).

**Prima Plus 1mm** can be used for the same applications as Prima Plus. Additionally it is specifically designed for connecting solid fuel appliances to existing brick stacks or a twin wall chimney. It provides internal fluing of domestic woodburning, coal and multi-fuel stoves and boilers with normal operating temperatures up to 540°C and short firing up to 760°C.

## Product Description



### Prima Plus

- Advanced corrosion-resistant design and construction using 0.6mm 316L continuously-welded stainless steel. The only stainless steel system to have passed the internationally-recognised GASTEC corrosion test.
- Engineered-tolerance joint simply push-fits together giving exceptional load bearing capacity. Optionally, a locking band can be fitted for extra joint security.
- Inward bead on the male joint spigot acts as a capillary break preventing moisture being drawn through the joint.
- Adjustable 0-90° elbows quickly solve alignment problems on installation of flue runs.
- Can be painted if required.
- For condensing appliances a gasket is fitted to the inward bead of the male joint.

### Prima Plus 1mm

- Identical construction and features to Prima Plus but made from 1.0mm 316L stainless steel.
- Use as an alternative to vitreous enamelled flue pipe, painted if required.





Prima Plus Connecting Flue Pipe is CE Certified to EN 1856-2 TÜV 0036 CPD 9195 017 with designations T600 N1 W V2 L50060 G(400), T200 H1 W V2 L50060 O(200), T200 P1 W V2 L50060 O(200) and T200 N1 W V2 L50060 O(200).

Single Wall System Chimney according to EN 1856-1 TÜV 0036 CPD 9195 018, T600 N1 W V2 L50060 G(70).

Chimney Liner according to EN 1856-2 TÜV 0036 CPD 9195 019, T600 N1 W V2 L50060 G and T200 P1 W V2 L50060 O.

The Prima Plus range is manufactured under the strict requirements of BS EN ISO 9001:2000 Quality management scheme.

Prima Plus has corrosion certification from Gastec, MPA and TÜV.

Prima Plus 1mm is listed by HETAS as a chimney suitable for solid fuel.

## Corrosion Resistance

Chimneys are subject to significant corrosion attack by flue gas condensates, particularly from solid fuel heavy oils and condensing appliances. Prima Plus and Prima Plus 1mm are specifically designed and manufactured to resist this corrosion. It is the only stainless steel single wall chimney system in the world to have passed the internationally recognised Gastec corrosion test.

## Technical Data

	Prima Plus	Prima Plus (Condensing)
Fuel	Gas, oil, wood, coal	Gas, oil
Continuous Firing Temp	600° C	200° C
Short Firing Temp	700° C	-
Thermal Shock	1000° C	-
Mode of Operation	Zero & Negative Pressure	Zero, Negative & Positive Pressure
Pressure Capabilities	100Pa	200Pa
Seam	Laser or Inert Gas Welded	
Liner Thickness (mm)	P+ 0.6mm P+1 1.0mm	P+ 0.6mm P+1 1.0mm
Liner Material	316L : 1.4404 : X2CrNiMo 17-12-2	

## Load Bearing Data (metres of pipe)

Internal Diameter (mm)	80-130	150-180	200-300
Drain Support	20	20	15
Wall Support	20	20	15
Wall Support (Inv)	25	25	20
90° Tee	15	15	10
135° Tee	10	10	7

## Approx. Weight of Products (kg)

Internal Diameter (mm)	Length -	1000mm	500mm	250mm
80		1.24	0.62	0.31
100		1.56	0.78	0.39
130		2.01	1.00	0.50
150		2.31	1.16	0.58
180		2.77	1.39	0.69
200		3.08	1.54	0.77
230		3.55	1.77	0.89
250		3.85	1.93	0.96
300		4.63	2.31	1.16
355		5.47	2.74	1.37
405		6.25	3.13	1.56
455		7.02	3.51	1.76
505		7.79	3.9	1.95
555		14.28	7.14	3.57
605		15.56	7.78	3.89
655		16.85	8.43	4.21
705		18.13	9.07	4.54
755		19.42	9.71	4.86

NOTE: 555 Dia. and above is 1mm thick

Wall brackets and roof brackets are not load bearing and mainly provide lateral support. Wall brackets should be fitted every 3m and at any offset. In domestic situations, a wall bracket or wall support MUST be used to support a tee when connected to a rear outlet appliance.

Horizontal runs should be supported every 1.5m. This can be increased to 4m with use of the extended locking band. Where the flue is free standing above the roof and its height exceeds 1.5m beyond the last support or the roof, a guy wire bracket must be used, and every 1.5m thereafter. Alternatively, a height of up to 3m can be achieved unsupported with the use of an extended locking band at the joint immediately below the last support and every joint above the roof level.

## Diameters

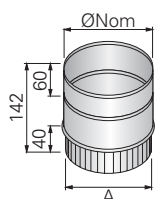
The diameters (mm) of the flue are:

Int Ø	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
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## Product Ordering

To identify fully the component required, it is necessary to state the product code followed by diameter e.g. for a 150mm diameter 0-90° Prima Plus 1mm bend the full code would be S105150.

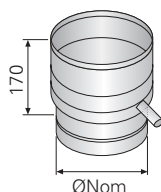
## Starting Components



### Appliance Connector

P+	S013	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S113	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

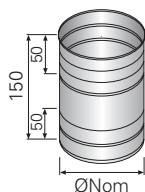
'A' is 6mm less than nom



### Vertical Drain

P+	S394	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S494	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

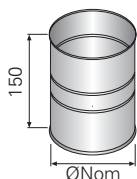
## Adaptors/Increases



### Double Male Adaptor

P+	S331	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S431	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

70mm effective length

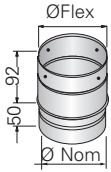


### Double Female Adaptor

P+	S325	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S425	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

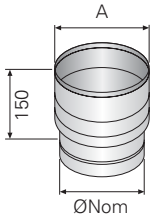
30mm effective length

## Adaptors/Inceasers (contd.)



### Adaptor to Flex/Turboflex

P+	S065	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
P+1	S165	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-

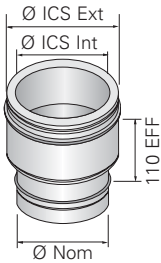


### Increaser

P+	S091	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
P+1	S191	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

To order state Code Prefix + Nom + A

A is normally the next size in the range but other sizes can be ordered.



### Adaptor to ICS

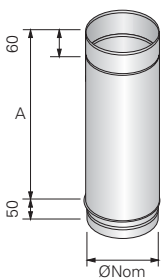
P+	S068	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
P+1	S168	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

To order state Code Prefix + Nom + ICS Internal

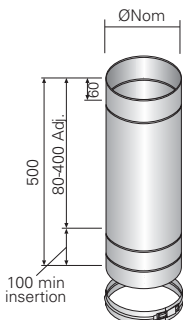
ICS Internal can be the same as the Prima Nom or larger.

## Pipes

### Effective Pipe



	Dim A	Nom																		
P+	S001	950	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
	S002	450	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
	S003	200	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+1	S101	950	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
	S102	450	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
	S103	200	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755



### Adjustable Pipe

P+	S085	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
P+1	S185	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

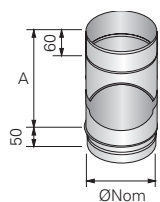
Slides inside pipe below - complete with locking band.

For condensing situation, fit gasket S000 to the two grooves provided.

This component is not loadbearing.

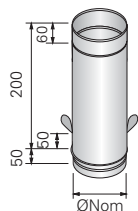
Pipes (contd.)

**Effective Pipe**



		Dim A	Nom																	
P+1	S112	450	80	100	130	150	180	200	230	250	300	355	405	455	-	-	-	-	-	
P+	S004	200	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S104	200	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

**Lowering Pipe**



P+	S333	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	S433	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

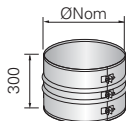
Used as the first pipe when lowering a liner into a masonry stack.

**Locking Band**



P+	S030	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+1	S030	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

**Extended Locking Band**



P+	95840	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	
P+1	95840	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755

Use on horizontal runs to achieve 4M between supports. Also use to avoid guy wires and to achieve 3M unsupported above roof level by fitting to the joint immediately below and every joint immediately above roof level.

**Silicon Gasket**



S000	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
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Gasket to convert Prima Plus to Prima Plus Condensing fits into the groove form on all male spigots and into grooves in Adjustable Pipes.

**Viton Gasket**

V000

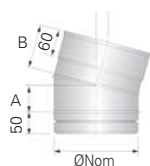


Int Ø mm	80	100	130	150	180	200	230	250	300	355

For use on oil applications. To comply with the requirements of EN1856-1 will become effective on installations from April 2006.

Bends

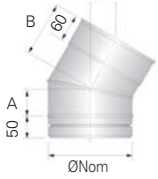
**15° Fixed Bend**



			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S018	Dim A	30	32	34	35	37	38	40	41	45	48	62	65	-	-	-	-	-	-
		Dim B	85	87	89	90	92	93	95	96	100	103	107	110	-	-	-	-	-	-
P+1	S118	Dim A	30	32	34	35	37	38	40	41	45	48	62	65	68	97	100	103	106	110
		Dim B	85	87	89	90	92	93	95	96	100	103	107	110	113	137	140	143	146	150

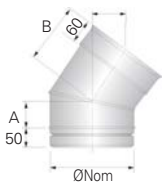
Bends (contd.)

**30° Fixed Bend**



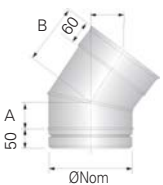
		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S019 DimA	36	38	42	45	49	52	56	58	65	73	94	101	108	-	-	-	-	-
	DimB	91	93	97	100	104	107	111	113	120	128	134	141	148	-	-	-	-	-
P+1	S119 DimA	36	38	42	45	49	52	56	58	65	73	94	101	108	152	158	166	173	179
	DimB	91	93	97	100	104	107	111	113	120	128	134	141	148	192	198	206	213	219

**40° Fixed Bend**



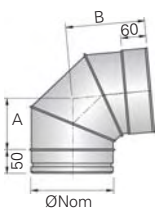
		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S0B6 DimA	49	53	49	52	58	61	67	70	80	95	104	113	122	-	-	-	-	-
	DimB	105	109	104	107	113	116	122	125	135	139	148	157	167	-	-	-	-	-
P+1	S452 DimA	49	53	49	52	58	61	67	70	80	95	104	113	122	-	-	-	-	-
	DimB	105	109	104	107	113	116	122	125	135	139	148	157	167	-	-	-	-	-

**45° Fixed Bend**



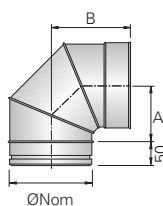
		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S015 DimA	52	56	52	56	62	66	73	77	87	99	119	129	140	-	-	-	-	-
	DimB	107	111	107	111	117	121	128	132	142	154	164	174	185	-	-	-	-	-
P+1	S115 DimA	52	56	52	56	62	66	73	77	87	99	119	129	140	224	234	244	255	265
	DimB	107	111	107	111	117	121	128	132	142	154	164	174	185	259	269	279	290	300

**85° Fixed Bend**



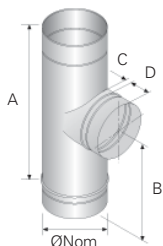
		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S0C4 DimA	88	97	166	176	177	186	199	208	232	201	224	247	270	-	-	-	-	-
	DimB	143	152	115	126	126	135	150	159	181	256	279	302	342	-	-	-	-	-
P+1	S1C4 DimA	88	97	166	176	177	186	199	208	232	201	224	247	270	-	-	-	-	-
	DimB	143	152	115	126	126	135	150	159	181	256	279	302	342	-	-	-	-	-

**90° Fixed Bend**



		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S051 DimA	92	102	104	114	129	139	154	164	189	234	265	290	315	-	-	-	-	-
	DimB	147	157	159	169	184	194	209	219	244	280	304	329	354	-	-	-	-	-
P+1	S151 DimA	92	102	104	114	129	139	154	164	189	234	265	290	315	453	470	503	528	543
	DimB	147	157	159	169	184	194	209	219	244	280	304	329	354	493	510	543	568	583

Tees

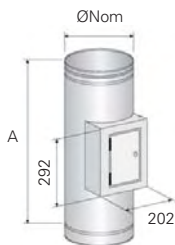


90° Tee

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S014	Dim A	195	215	245	265	295	315	345	365	415	470	530	580	630	680	730	780	830	880
P+1	S114	Dim B	120	130	145	155	170	180	195	205	230	208	248	273	298	323	348	373	398	423
		Dim C	30	30	30	30	30	30	30	30	30	30	45	45	45	45	45	45	45	45
		Dim D	50	50	50	50	50	50	50	50	50	50	40	40	40	40	40	40	40	40

95° Tee

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S0A4	Dim A	195	215	245	265	295	315	345	365	415	470	530	580	630	680	730	780	830	880
P+1	S417	Dim B	120	130	145	155	170	180	195	205	230	208	248	273	298	323	348	373	398	423
		Dim C	30	30	30	30	30	30	30	30	30	30	45	45	45	45	45	45	45	45
		Dim D	50	50	50	50	50	50	50	50	50	50	40	40	40	40	40	40	40	40

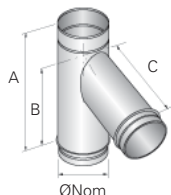


Inspection Tee

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S010	Dim A	282	282	282	282	282	282	401	401	401	401	406	406	406	406	406	406	406	406
P+1	S110																			

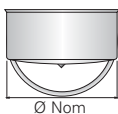
135° Tee

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S016	Dim A	223	251	294	322	365	393	435	464	534	612	693	763	854	925	996	1066	1137	1208
P+1	S116	Dim B	127	151	188	212	248	272	308	332	393	459	529	590	670	731	791	851	912	972
		Dim C	127	151	188	212	248	272	308	332	393	459	529	590	670	731	791	851	912	972



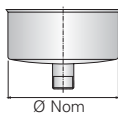
Tee Plug

P+	S017	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+1	S017	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755



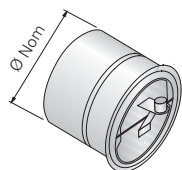
Tee Plug with Drain

P+	S019	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+1	S019	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755



Draught Stabiliser

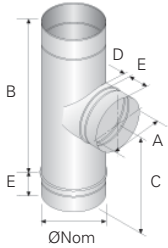
P+	S078	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+1	S078	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755



## Reducing Tees

### 90° Tee

P+	S008 + Nom + A
P+1	S108 + Nom + A



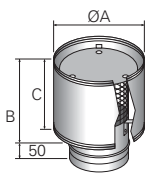
### 95° Tee

P+	S0B2 + Nom + A
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Up to 455 Dia Nom			505 Dia Nom and over		
Dia A	B	C	Dia A	B	C
80	250	125	80	270	145
100	250	125	100	270	145
130	295	145	130	315	165
150	315	155	150	335	175
180	245	170	180	365	190
200	365	180	200	385	200
230	395	185	230	415	215
250	415	205	250	435	225
300	465	230	300	485	250
355	520	258	355	540	278
405	570	283	405	590	303
455	620	308	455	640	328
			505	690	353
			555	740	378
			605	790	403
			655	840	428
			705	890	453

Dimn A up to 405 Dia		Dimn A = 455 Dia		Dimn A = 505 Dia and over	
D	E	D	E	D	E
30	50	40	40	60	40

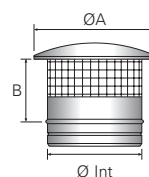
## Terminals



### Universal Terminal

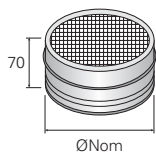
		80	100	125	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S007 DimA	-	265	290	315	345	365	395	415	505	555	605	735	785	915	956	1115	1165	1215
	DimB	-	300	300	300	300	300	300	300	300	325	331	391	391	451	451	541	541	541
	DimC	-	220	220	220	220	220	220	220	225	250	250	310	310	370	370	460	460	460

### Raincap



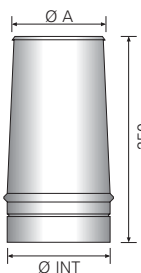
		80	100	125	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S036 DimA	-	266	266	266	362	362	362	362	440	244	296	332	370	-	-	-	-	-
	DimB	-	170	170	170	190	200	210	230	490	570	660	740	-	-	-	-	-	
P+1	S136 DimA	-	266	266	266	362	362	362	362	440	244	296	332	370	406	443	480	527	564
	DimB	-	170	170	170	190	200	210	230	490	570	660	740	825	905	1000	1080	1165	

Terminals (contd.)



Open Terminal

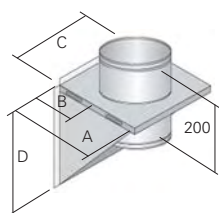
P+	S387	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	-	-	-	-	-
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Taper Terminal

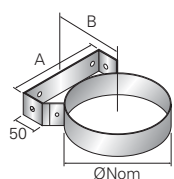
P+	S337	Int	-	-	130	150	180	200	-	250	300	355	405	455	505	555	605	-	-	-
		Dim A	-	-	120	140	170	190	-	240	290	345	395	445	495	545	595	-	-	-
P+1	S437	Int	-	-	130	150	180	200	-	250	300	355	405	455	505	555	605	655	705	755
		Dim A	-	-	120	140	170	190	-	240	290	345	395	445	495	545	595	645	695	745

Support Components



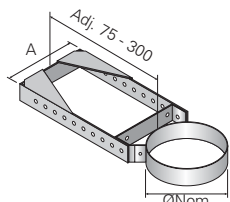
Wall Support

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	S060	Dim A										435	490	535	585	635	685	735	785	835
P+1	S160	Dim B										228	253	278	303	328	353	378	403	428
		Dim C	180	200	230	250	280	300	330	350	400	415	470	515	565	615	665	715	765	815
		Dim D										470	670	670	670	670	870	870	870	870



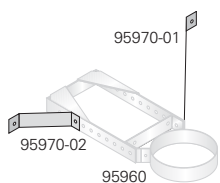
Wall Bracket 50mm

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	92940	Dim A	88	108	142	148	178	198	228	248	298	353	403	453	503	551	601	651	701	751
P+1	92940	Dim B	90	100	115	125	140	150	165	175	200	228	253	278	303	328	353	378	403	428



Wall Bracket 300mm Adjustable

			80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
P+	92960	Dim A	98	118	148	158	188	208	238	258	308	363	413	463	513	563	613	663	713	763
P+1	92960	Dim A	98	118	148	158	188	208	238	258	308	363	413	463	513	563	613	663	713	763

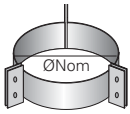


Anti Swing Stay (Pair)

Short	95970-02
Long	95970-01



Support Components (contd.)



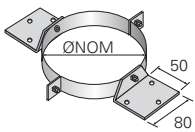
**Guy Wire Bracket**

95900	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
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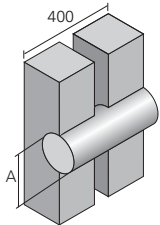
**Ceiling Hanger**

95750	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
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**Roof Support**

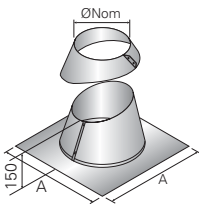
94640	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	-	-	-
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**Wall Sleeve**

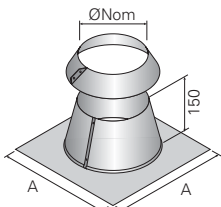
		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
94980	DimA	130	150	180	200	230	250	280	300	350	405	455	505	555	605	655	705	755	805

Flashings



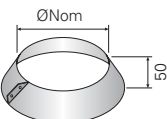
**Angled Flashing 0 - 30°**

		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
95520	DimA	610	610	610	610	610	700	700	700	800	-	800	800	900	1000	1000	1100	1100	1200



**Flat Flashing**

		80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
95530	DimA	610	610	610	610	610	610	610	610	610	800	800	800	800	1000	1000	1000	1000	1000



**Storm Collar**

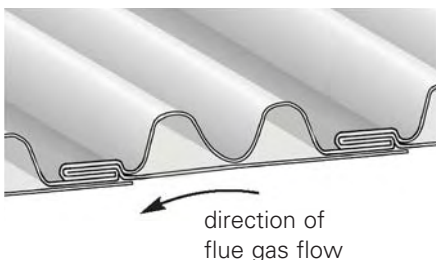
95560	Nom	80	100	130	150	180	200	230	250	300	355	405	455	505	555	605	655	705	755
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## Application

Flexible flue and chimney liners designed for lining an existing flue or chimney.

**TecnoFlex** (Turboflex Plus) is a twin skin flexible chimney liner designed for gas, oil and multifuel, where the maximum flue gas temperature does not exceed 600°C. Diameter range 80 - 400mm.

## Product Description



### Twin Wall Liner

- Both inner and outer layers made from corrosion-resistant 316L stainless steel. 904L stainless steel is also available as an option for the extreme conditions found with appliances like slumbering stoves.
- Corrugated outer skin for high crush resistance.
- Smooth inner skin resists corrosive attack due to easy drain down of condensate, less opportunity for soot collection and smooth surface for ease of sweeping.
- Inner skin remains overlapping to protect the joint from corrosion penetration even at maximum bending radius.
- Inner skin remains smooth and protective even after the rigours of installation.



TecnoFlex (Turboflex Plus) is approved by HETAS and by CSTB (France) in diameters 125 to 200mm. Rite-Vent flexible liners are manufactured under stringent requirements of BS.EN ISO 9001 - 2000 Quality Management Scheme and are tested and approved by TÜV to EN 1856-2.

## Flue Sizing

This information and sizes are provided as a nominal guide only. Flue sizing for appliances, particularly commercial/industrial applications will vary depending on siting details and appliance manufacturer's instructions and design criteria. These will override the sizing guide below and reference must be made to appliance manufacturer.

	100 mm	130 mm	150 mm	180 mm	200 mm	230 mm	250 to 400mm
<b>Gas Boiler - Forced Draught</b>							
Input up to 25kw	•						
Input 25kw to 45kw		•					
Input 45kw to 50kw			•				
Input 50kw to 75kw				•			
Input 75kw to 100kw					•		
Input over to 100kw						•	•2
<b>Gas Fires</b>							
'Inset' to BS7977-1 2002				•1			
'Decorative' BSEN 509:2000				•			
<b>Gas Oil (35sec Class D) Heating Boiler</b>							
Output up to 25kw	•						
Input 25kw to 45kw		•					
Input 45kw to 70kw			•				
Input 70kw to 100kw				•			
Output over 100kw					•3	•3	•3

1 Subject to appliance manufacturer's testing criteria.  
 2 Subject to manufacturer's input rating and chimney height.  
 3 Subject to manufacturer's output rating and chimney height.

	100 mm	130 mm	150 mm	180 mm	200 mm	230 mm	250 to 400mm
<b>Solid Fuel Heating Boiler</b>							
Output up to 20kw			•S	•SC			
Output 20kw to 30kw				•S	•SC	•SC	
Output 30kw to 60kw					•SC	•SC	•SC
<b>Open Fires (standard opening)</b>							
500mm x 550mm					•200 min		
<b>Avant Garde Feature Open Fires</b>							•4
<b>Room Heaters</b>							
Wood burning stoves/cookers. Use only seasoned wood which has been stored 1/2 years in dry conditions.			•S				
Inglenook or non-standard opening. The cross-sectional area of the chimney liner must be a minimum of 15% of the total cross sectional area of the fireplace opening.			•	•180 min			
						•230 min	

4 Min 300mm depending on opening, chimney size and height.  
 S Smokeless fuel only.  
 SC Smokeless fuel or coal.

## Installation

### Connection to Appliance

Always use an appliance connector, sealed using fire rope and fire cement or high temperature sealant. Connection to a condensing appliance the correct sealant must be used.

### Appliance Removal

Use of an adjustable length immediately above the appliance enables removal of the appliance later without dismantling the full system.

### Painting

If required to be painted, simply clean the surface with a solvent cleaner (White Spirit), apply a coat of primer and a top coat of high temperature paint that can withstand 550°C. Extreme care must be taken when cleaning with solvent to ensure that it does not come into contact with the gasket if fitted.

### Recommended distances to combustibles

In accordance with building regulations it is essential that the required distance to combustible materials is maintained throughout the chimney system. For gas and oil this is 50mm and for solid fuel 75mm. ICS support components provide this as standard.

### Room Ventilation

The room carrying the appliance should have an air vent either direct to an external air source or vented into a room that has an external vent direct to an air source. This is required to provide adequate air supply to allow the appliance and flue to operate efficiently. These requirements are specified in the Building Regulations (Document J) also by CIBSE and BS5440.

### Provision for condensate disposal

(subject to appliance manufacturer recommendations)

Normally solid fuel and atmospheric gas and oil appliances will not need a drain unless rain ingress is significant. Most condensing appliances however need provision for drainage. As a rule of thumb a condensing boiler produces 1 to 1.5 litres of condensate per hour per 10kw of input. This is a significant amount of acidic liquid which must be drained from the system. Choose appropriate flue drainage components, normally fitted at the base of the stack and close to the appliance outlet.

A 5° slope on horizontal runs is advised, using the appropriate 85° or 40° bend and 95° tee.

## After Installation

### Testing before use

This is done by means of flue flow test as described in BS5440:Part 1-2000. It can be summarised as follows:- After a visual and physical check of the joints in the system, and ensuring an adequate air supply for combustion has been provided, close all doors and windows in the room in which the appliance is to be installed. It will be necessary to introduce heat to the flue system for a minimum of 10 mins. and possibly up to 30 mins. using a blow torch or similar. Position a smoke pellet (providing a performance of 5m<sup>3</sup> of smoke in 30 secs. burn time) at the intended of the appliance. The test is satisfactory if there is no significant spillage from the appliance position, no seepage over the length of the system, and discharge only from the terminal. If these conditions are not met, the test has failed and all faults must be rectified and the system retested before connection of the appliance to the fuel supply. In the event of any further problems, reference to BS5440:Part 1-2000 must be made.

### Life Expectancy

Under normal operating conditions and providing the system is installed correctly, it should last the lifetime of the appliance which is normally 10 to 12 years. ICS carries a 10 year conditional warranty.

The conditions are that the chimney is:

- correctly sized + installed
- properly maintained
- burning only approved fuels in accordance with the Schiedel Rite-Vent and appliance manufacturer's instructions.

For recommended fuels listings, please refer to the HETAS guide, or by contacting the Solid Fuel Association (Tel: 0845 601 4406) or appliance manufacturer's instructions. Warranty registration details are provided with installation instructions for completion and registration with Schiedel Rite-Vent.

### Maintenance

It is essential that the flue way be kept clear at all times in the interest of good practice and health, safety and appliance performance. The system should be checked regularly during the appliance maintenance. (Refer appliance manufacturer's instructions).



**INSTALLER HELPLINE**  
**+44 (0) 191 416 6666**

More information on  
[www.schiedelrite-vent.co.uk](http://www.schiedelrite-vent.co.uk)

Every effort is made to ensure accuracy at time of going to press. However, as part of our policy of continual product development, we reserve the right to alter specifications without prior notice.

All installation drawings are graphical representations. National building regulations must be adhered to.

**ICS**

A twin wall insulated chimney system for use on multi-fuel appliances.

**ICS Plus**

A twin wall insulated chimney system designed for condensing gas and oil appliances.

**ICS 5000**

A multi-functional twin wall insulated venting system for use on a wide range of heating appliances, stand-by power engines, CHP and service ducting.

**TecnoFlex**

Stainless steel flexible flue for relining existing chimneys and suitable for use with multi-fuel appliances, including condensing systems.



# The Commercial Range

**Prima Plus Non-condensing**

High performance multipurpose single wall for multi-fuel applications and chimney linings.

**Prima Plus Condensing**

High performance multipurpose single wall for atmospheric, and condensing applications and chimney linings.



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