



SCHIEDEL

▲ RITE-VENT

commercial systems



HP5000[®] High & Low Pressure Ducting

- Diesel Generators & Turbines
- Boilers (High & Low Temperature)
- Kitchen Extraction
- Smoke & Waste Gas Extraction
- Refuse & Laundry Chutes
- Service Trunking
- Lightweight Particle Movement



DOC/CP3/57 Issue 1, December 2009


MONIER

Application

An engineered multi purpose prefabricated ducting system suitable for high or low temperatures and fire rated applications.

HP5000® is a lightweight twin wall insulated and single wall duct system specifically designed to handle both pressure and non pressurised applications. As outlined in the product's CE designation, the system is designed to operate under pressure up to 5000Pa (European Standard Designation H1) and with continuous operating flue gas temperatures up to 600°C (European Standard Designation T600).

The system is tested for Thermal Shock at 1000°C.

HP5000® has an extensive range of twin and single wall components with 25mm and 50mm cavity insulation or air gap insulation, giving it the versatility required to meet the widest range of applications. It can be used internally and externally.

A typical range of applications would include:

- Diesel generators and turbines
- Boilers (high or low temperature)
- Kitchen extraction
- Smoke and waste extraction
- Refuse and laundry chutes
- Lightweight particle movement

Product Description

The Twin Wall System consists of:

Inner Liner 316L Stainless Steel; seam welded continuous construction with an engineered flange at each end. Available in 0.6mm and 1mm inner liner thickness.

Internal Diameters: 130, 150, 180, 200, 230, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750 & 800mm.

The 0.6mm option is available for diameters from 130 to 350mm.

25mm or 50mm cavity filled with a mineral fibre insulating blanket.
(50mm cavity insulation is only available up to 750mm internal diameter.)

Outer casing 304 stainless steel; 0.6mm for 130 to 550mm diameters and 0.7mm for 600 to 800mm diameters.

The specially designed joint between the components creates a pressure resistant and structural liner.

Forming the joint

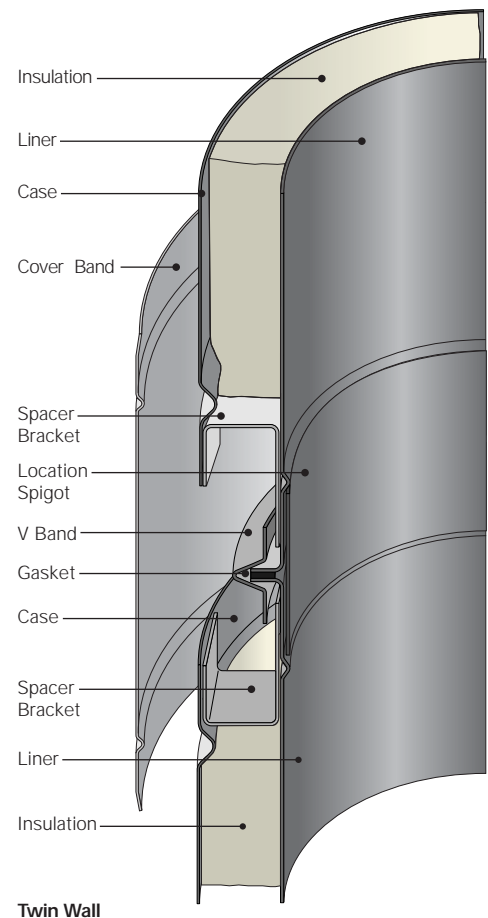
The components are flanged at both ends with a spigot at the male end. The spigot protrudes by 25mm to ensure correct alignment of the joint and seating of the gasket on the engineered flanges.

A gasket is pre-installed on the male end of the component for ease of installation.

When two components are butted together the joint is secured using a V Band.

No sealants are required as the joints come with a pre-installed gasket.

All male flanged components come complete with gasket (pre-fitted), V Band, insulation and Cover Band.



Twin Wall

The Single Wall System consists of:

316L Stainless Steel; seam welded continuous construction with an engineered flange at each end.

Available in 0.6mm and 1mm wall thickness.

The 0.6mm option is available for diameters from 130 to 350mm.

Internal Diameters: 130, 150, 180, 200, 230, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750 & 800mm.

The specially designed joint between the components creates a pressure resistant and structural liner.

Forming the joint

The components are flanged at both ends with a spigot at the male end. The spigot protrudes by 25mm to ensure correct alignment of the joint and seating of the gasket on the engineered flanges.

A gasket is pre-installed on the male end of the component for ease of installation.

When two components are butted together the joint is secured using a V Band.

No sealants are required as the joints come with a pre-installed gasket.

All male flanged components come complete with gasket (pre-fitted) and V Band.

Expansion Allowance

As the method of assembly for HP5000® provides a continuous structural inner wall, normal expansion of the duct in its entirety must be allowed for by the use of expansion components. (see page 22 & 23)

Performance

Working pressure:

With Expansion Lengths up to 40Pa

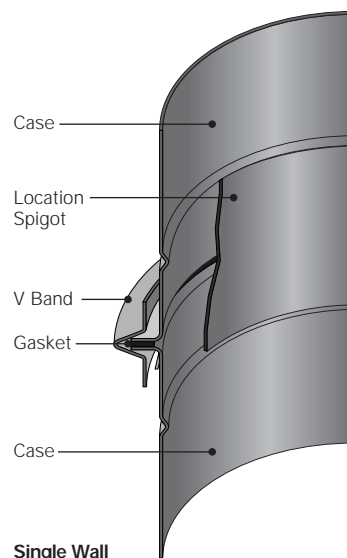
With Expansion Bellows up to 5000Pa

Maximum Temperature Rating: continuous 600°C (European Standard Designation T600)

HP5000® is available in a range of 17 internal diameters from 130mm to 800mm. The flange to flange installed straight lengths are 307, 470 and 960mm long. The external diameter is dependent on the width of the cavity – 25mm or 50mm. Specialised components can be manufactured to suit application requirements.

Supports

HP5000® must be supported using only Schiedel Rite-Vent approved components, in conjunction with suitable steel work as necessary. Care is needed to ensure that supports are capable of accommodating expansion.



Approvals 

HP5000® is manufactured under a Quality Assurance Scheme, Certificate No. FM 25918, administered by British Standards in accordance with: BS EN ISO 9001 -2008;

The Twin Wall product is tested and approved to EN 1856-1 with the following CE Designations. **Cert. No. 0036 CPD 9191026**

25mm Cavity	50mm Cavity
T600 H1 WV2 L50100 G75	T600 H1 WV2 L50060 G50
T600 H1 WV2 L50060 G75	T600 H1 WV2 L50100 G50

The Single Wall product is tested and approved to EN 1856-2 with the following CE Designations. **Cert. No. 0036 CPD 9195028**

T600 H1 WV2 L50100 G500
T600 H1 WV2 L50060 G500

Fire Rating

HP5000® has been independently certified and has achieved a 4 hour fire rating in accordance with BS476 Part 20.

Design Services

Schiedel Rite-Vent can offer a complete design and installation service. Schiedel Rite-Vent employs a policy to ensure continued improvements and reserve the right to make changes and improvements without prior notice.

Installation Guidance

Notes on the key components and examples of installation configurations are included in later sections of this document.

The on-site handling and storage is also important and thought should be given to this before delivery of the product.

One of the reasons for choosing 316L grade stainless steel for the inner liner is its corrosion resistant properties. However certain chemicals and in particular those containing derivatives of chlorine or halogen can attack stainless steel and cause premature product deterioration.

Consideration should be given to the chemical composition of the exhaust gases. This also includes any chemicals that could enter with the combustion or process air.

Examples of such substances include chlorine, chlorinated or halogenated dry cleaning and metal cleaning solvents; fluorocarbon refrigerants and aerosols; acids and in particular hydrochloric and sulphuric acids; bleach and cleaning solutions; plating and etching solutions; titanium tetrachloride.

The use or storage of such chemicals, in the vicinity of the installation can also lead to contamination.

Starting Components - Single Wall



Appliance Connector

0.6mm - HP21147
1.0mm - HP29147

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Single Wall to Twin Wall Adaptor

0.6mm - HP21045
1.0mm - HP29045

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Flanged Adaptor - SW

0.6mm - HP211E8
1.0mm - HP291E8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	670	620	670	720	770	820



Split Flange (for use with Flanged Adaptor)

HP290E8

Bespoke component, see Page 25 to specify dimensions

Pipes - Single Wall



1000mm Pipe - SW

0.6mm - HP21101
1.0mm - HP29101

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



500mm Pipe - SW

0.6mm - HP21102
1.0mm - HP29102

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



300mm Pipe - SW

0.6mm - HP21103
1.0mm - HP29103

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Adjustable Pipe 610 - 970mm - SW

0.6mm - HP21109
1.0mm - HP29109

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.



Adjustable Pipe 375 - 530mm - SW

0.6mm - HP21153
1.0mm - HP29153

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Expansion Pipe - SW

0.6mm - HP211F2
1.0mm - HP291F2

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Vertical Drain - SW

1.0mm - HP291A5

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Measure Pipe - SW

1.0mm - HP29195

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Lined Bellows - SW

1.0mm - HP29127

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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Incraser - SW*

0.6mm - HP21171
1.0mm - HP29171

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770
B Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
C Ø mm	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Decreaser - SW*

0.6mm - HP211F3
1.0mm - HP291F3

Nom Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820
B Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770

* Please note when ordering increaser/decreaser you must specify the diameters you are going to/from.

Accessories - Single Wall



V Band - SW (included with product)

HP290E9

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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Gasket - SW (included pre-fitted with product)

HP290F1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Bends - Single Wall



90° Bend - SW 0.6mm - HP21115
1.0mm - HP29115

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
A mm	236	246	261	271	286	296	341	366	365	416	441
B mm	231	241	256	266	281	291	336	361	360	412	437
C Ø mm	150	170	200	220	250	270	320	370	420	470	520

For diameters above 500mm, use two 45° bends to form a 90° bend



85° Bend - SW 0.6mm - HP211A8
1.0mm - HP291A8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
A mm	228	237	251	260	275	283	306	348	371	394	417
B mm	222	232	245	255	268	277	300	343	366	388	411
C Ø mm	180	200	230	250	280	300	350	400	450	500	550



45° Bend - SW 0.6mm - HP21117
1.0mm - HP29117

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	154	158	164	169	175	179	195	205	215	226	236	247	258	267	278	288	298
B mm	149	153	159	165	170	174	190	200	210	221	231	242	252	262	273	284	293
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



30° Bend - SW 0.6mm - HP21119
1.0mm - HP29119

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	130	133	137	140	144	146	153	160	166	173	180	186	193	200	207	213	220
B mm	125	128	132	135	139	141	148	155	161	168	175	181	185	195	202	208	215
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



15° Bend - SW 0.6mm - HP21118
1.0mm - HP29118

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	118	119	121	122	124	126	129	132	136	139	142	145	149	152	155	159	162
B mm	113	114	116	117	119	121	124	127	131	134	137	140	144	147	150	154	157
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



90° Inspection Bend - SW 0.6mm - HP211A2
1.0mm - HP291A2

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
A mm	318	355	362	407	364	365	346	374	372	397	421
B mm	273	288	310	324	306	311	331	343	368	393	417
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	196	206	221	231	246	256	281	306	331	356	381

For diameters above 500mm, inspection length to be used instead of 90° inspection

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.



85° Inspection Bend - SW 0.6mm - HP211C3
1.0mm - HP291C3

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
A mm	338	355	356	357	358	364	365	367	369	392	415
B mm	288	301	308	312	319	332	342	341	359	381	404
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	196	206	221	231	246	256	281	306	331	356	381

Tees - Single Wall



90° Tee - SW 0.6mm - HP21120
1.0mm - HP29120

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	394	414	444	464	494	514	564	614	664	739	764	814	864	914	964	1014	1064
B mm	197	207	222	232	247	257	282	307	332	369.5	382	407	432	457	482	507	532
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



95° Tee - SW 0.6mm - HP211C1
1.0mm - HP291C1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	394	414	444	464	494	514	565	615	665	715	765	816	866	916	966	1017	1067
B mm	205	216	232	243	259	270	298	325	352	379	407	434	461	489	516	543	570
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820
D mm	204	215	231	242	258	269	296	323	350	378	405	432	459	486	514	541	568



135° Tee - SW 1.0mm - HP29121

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	468	497	539	567	610	638	709	779	850	956	994	1062	1133	1204	1274	1345	1416
B mm	325	349	385	409	445	470	530	590	651	711	774	832	892	952	1013	1073	1133
C Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Tee Plug - SW 0.6mm - HP21125
1.0mm - HP29125

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820



Drain Plug - SW 0.6mm - HP21129
1.0mm - HP29129

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770	820

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Support Components - Single Wall

0.6mm - HP21191

1.0mm - HP29191



Base Drain Section - SW

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850	900

0.6mm - HP21182

1.0mm - HP29182



Wall Support - SW

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	282	302	332	352	382	402	452	502	552	602	652	702	752	802	852	902	952
B mm	393	413	443	463	493	513	563	613	663	713	763	813	863	913	963	1013	1063

0.6mm - HP211F8

1.0mm - HP291F8



Wall Support Top Plate - SW

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	282	302	327	352	382	402	452	502	552	602	652	702	752	802	852	902	952

1.0mm - HP290F5

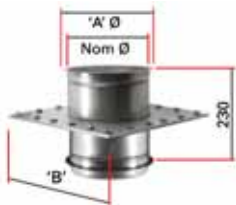


Wall Support Side Plates - SW

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	278	298	323	348	378	398	448	498	548	598	648	698	748	798	848	898	948

0.6mm - HP21189

1.0mm - HP29189



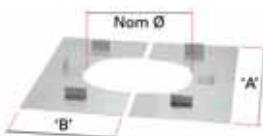
Support Plate - SW

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	270	250	320	370	420	470	520	570	620	670	720	770	820
B mm	282	302	332	352	382	402	452	502	552	602	652	702	752	802	852	902	952

For plates only (no pipe) please use part HP290F9

94670

Firestop Plate (Non Combustible Floor) - SW



Nom Ø mm	130	150	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800
A mm	450	450	450	450	450	610	610	610	610	610	800	800	800	1000	1000	1000	1000	1000
B mm	220	235	255	270	290	305	330	340	365	415	450	485	520	555	590	625	660	695

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Guides - Single Wall



Wall Guide - SW

95220 + Ext

Ext Ø mm	130	150	180	200	220	230	250	300	350	400	450	500	550	600	650
A Ø mm	137	157	187	207	227	235	254	305	355	407	457	507	557	607	657



Wall Guide - SW 95120 + Ext

Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907



Floor Guide - SW

95130 + Ext

Ext Ø mm	130	150	180	200	220	230	250	300	350	400	450	500	550	600	650
A Ø mm	137	157	187	207	227	237	257	307	357	407	457	507	557	607	657
B mm	686	686	686	686	686	686	686	686	826	826	826	826	826	826	826



Floor Guide - SW 95130 + Ext

Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907
B mm	1000	1000	1000	1000	1000



Ceiling Support - SW

95110 + Ext

Ext Ø mm	180	200	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	187	207	227	237	257	287	307	337	357	407	457	507	557	607	657
B mm	239	259	279	289	309	339	359	389	409	459	509	559	609	659	709



Ceiling Support - SW 95110 + Ext

Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907
B mm	764	814	864	914	964

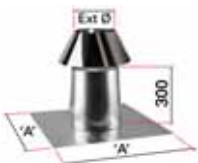
Flashings - Single Wall



Storm Collar - SW

95560 + Ext Ø

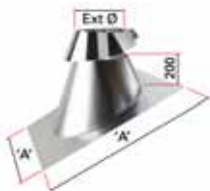
Ext Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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High Flat Flashing - SW

HP291F4

Ext Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600
A mm	610	610	610	610	610	610	610	800	800	800	800	1000	1000



High Angled Flashing 0° - 45° - SW

HP291F6

Ext Ø mm	130	150	180	200	230	250	300	350	400
A mm	720	745	805	850	875	885	975	1055	1120

High Angled Flashing 0° - 30°

HP291F6

Ext Ø mm	450	500	550	600
A	975	1035	1120	1150

Terminal - Single Wall



Exhaust Terminal - SW

0.6mm - HP21139

1.0mm - HP29139

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A mm	293	313	343	364	393	413	464	513	563	614	664	713	763	813	863	913	963

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Starting Components - Twin Wall 25mm Cavity



Appliance Connector

0.6mm - HP21047
1.0mm - HP29047

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	170	200	220	250	270	220	370	420	470	520	570	620	670	720	770	820



Single Wall to Twin Wall Adaptor - TW 25mm Cavity

0.6mm - HP21045
1.0mm - HP29045

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Twin Wall to Single Wall Adaptor - TW 25mm Cavity

0.6mm - HP21048
1.0mm - HP29048

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Flanged Adaptor - TW 25mm Cavity

0.6mm - HP210E8
1.0mm - HP291E8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Split Flange (for use with Flanged Adaptor)

Bespoke component, see Page 25 to specify dimensions

HP290E8

Pipes - Twin Wall 25mm Cavity



1000mm Pipe - TW 25mm Cavity

0.6mm - HP21001
1.0mm - HP29001

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



500mm Pipe - TW 25mm Cavity

0.6mm - HP21002
1.0mm - HP29002

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



300mm Pipe - TW 25mm Cavity

0.6mm - HP21003
1.0mm - HP29003

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Adjustable Pipe 610 - 970mm - TW 25mm Cavity

0.6mm - HP21009
1.0mm - HP29009

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.



Adjustable Pipe 375 - 530mm - TW 25mm Cavity

0.6mm - HP21053
1.0mm - HP29053

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Expansion Pipe - TW 25mm Cavity

0.6mm - HP210F2
1.0mm - HP290F2

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Vertical Drain - TW 25mm Cavity

0.6mm - HP210A5
1.0mm - HP290A5

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Measure Pipe - TW 25mm Cavity

0.6mm - HP21095
1.0mm - HP29095

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Lined Bellows - TW 25mm Cavity

1.0mm - HP29127

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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Bellows Jacket - TW 25mm Cavity

1.0mm - HP290G1 + Nom Ø

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	280	300	330	300	350	400	450	500	550	600	650	755	805	855	900	955	1005



Incraser - TW 25mm Cavity*

0.6mm - HP21071
1.0mm - HP29071

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
B Ø mm	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Decreaser - TW 25mm Cavity*

0.6mm - HP210F3
1.0mm - HP290F3

Nom Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
B Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800

* Please note when ordering increaser/decreaser you must specify the diameters you are going to/from.

Cover Band - Twin Wall 25mm Cavity



Cover Band - TW 25mm Cavity (included with product)

95610

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850

Accessories - Twin Wall 25mm Cavity



V Band - TW 25mm Cavity (included with product)

HP290E9

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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Gasket - TW 25mm Cavity (included pre-fitted with product)

HP290F1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
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HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Bends - Twin Wall 25mm Cavity



90° Bend - TW 25mm Cavity

0.6mm - HP21015

1.0mm - HP29015

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550
A mm	236	246	261	271	286	296	341	366	365	416	441
B mm	231	241	256	266	281	291	336	361	391	412	437

For diameters above 500mm, use two 45° bends to form a 90° bend



85° Bend - TW 25mm Cavity

0.6mm - HP210A8

1.0mm - HP290A8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550
A mm	228	237	251	260	275	283	306	348	371	394	417
B mm	222	232	245	255	268	277	300	343	366	388	411



45° Bend - TW 25mm Cavity

0.6mm - HP21017

1.0mm - HP29017

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	154	158	164	169	175	179	195	205	215	226	236	247	258	267	278	288	298
B mm	149	153	159	165	170	174	190	200	210	221	231	242	252	262	273	284	298



30° Bend - TW 25mm Cavity

0.6mm - HP21019

1.0mm - HP29019

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	130	133	137	140	144	146	153	160	166	173	180	186	193	200	207	213	220
B mm	125	128	132	135	139	141	148	155	161	168	175	181	185	195	202	208	215



15° Bend - TW 25mm Cavity

0.6mm - HP21018

1.0mm - HP29018

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	118	119	121	123	125	126	129	132	136	139	142	146	149	152	155	159	162
B mm	113	114	116	117	119	121	124	127	131	134	137	140	144	147	150	154	157



90° Inspection Bend - TW 25mm Cavity

1.0mm - HP290A2

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550
A mm	318	355	362	407	364	365	346	374	372	397	421
B mm	273	288	310	324	306	311	331	343	368	393	417
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	196	206	221	231	246	256	281	306	331	356	381

For diameters above 500mm, use two 45° bends to form a 90° bend

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.



85° Inspection Bend - TW 25mm Cavity 1.0mm - HP290C3

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550
A mm	338	355	356	357	358	364	365	367	369	392	415
B mm	288	301	308	312	319	332	342	341	359	381	404
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	196	206	221	231	246	256	281	306	331	356	381

Tees - Twin Wall 25mm Cavity



90° Tee - TW 25mm Cavity

0.6mm - HP21020

1.0mm - HP29020

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	394	414	444	464	494	514	564	614	664	739	764	814	864	914	964	1014	1064
B mm	197	207	222	232	247	257	282	307	332	357	382	407	432	457	482	507	532



95° Tee - TW 25mm Cavity

0.6mm - HP210C1

1.0mm - HP290C1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	394	414	444	464	494	514	565	615	665	715	765	816	866	916	966	1017	1067
B mm	205	216	232	243	259	270	298	325	352	379	407	434	461	489	516	543	570
C mm	204	215	231	242	258	269	296	323	350	378	405	432	459	486	514	541	568



135° Tee - TW 25mm Cavity

1.0mm - HP29021

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	468	497	539	567	610	638	709	779	850	956	994	1062	1133	1204	1274	1345	1416
B mm	325	349	385	409	445	470	530	590	651	711	774	832	892	952	1013	1073	1133



Tee Plug - TW 25mm Cavity

0.6mm - HP21025

1.0mm - HP29025

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850



Drain Plug - TW 25mm Cavity

0.6mm - HP21029

1.0mm - HP29029

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Support Components - Twin Wall 25mm Cavity

0.6mm - HP21091

1.0mm - HP29091



Base Drain Section - TW 25mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	280	300	330	350	380	400	450	500	550	600	650	700	750	800	850	900	950

0.6mm - HP21082

1.0mm - HP29082



Wall Support - TW 25mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	282	302	332	352	382	402	452	502	552	602	652	702	752	802	852	902	952
B mm	393	413	443	463	493	513	563	613	663	713	763	813	863	913	963	1013	1063

0.6mm - HP210F8

1.0mm - HP290F8



Wall Support Top Plate - TW 25mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	282	302	332	352	382	402	452	502	552	602	652	702	752	802	852	902	952

1.0mm - HP290F5



Wall Support Side Plates - TW 25mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	278	298	323	348	378	398	448	498	548	598	648	698	748	798	848	898	948

0.6mm - HP21089

1.0mm - HP29089

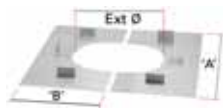


Support Plate - TW 25mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	282	302	332	352	382	402	452	502	552	602	652	702	752	802	852	902	952

For plates only (no pipe) please use part HP290F9

94670



Firestop Plate (Non Combustible Floor) - TW 25mm Cavity

Ext Ø mm	130	150	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800
A mm	450	450	450	450	450	610	610	610	610	610	800	800	800	1000	1000	1000	1000	1180
B mm	220	235	255	270	290	305	330	340	365	415	450	485	520	555	590	625	660	695

Guides - Twin Wall 25mm Cavity

95220 + Ext



Wall Guide - TW 25mm Cavity

Ext Ø mm	180	200	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	187	207	227	235	254	287	305	337	355	407	457	507	557	607	657

95120 + Ext



Wall Guide -

TW 25mm Cavity

Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907

95130 + Ext



Floor Guide - TW 25mm Cavity

Ext Ø mm	180	200	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	187	207	227	237	257	287	307	337	357	407	457	507	557	607	657
B mm	686	686	686	686	686	686	686	826	826	826	826	826	826	826	826

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Floor Guide -

TW 25mm Cavity 95130 + Ext



Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907
B mm	1000	1000	1000	1000	1000

Ceiling Support - TW 25mm Cavity

95110 + Ext



Ext Ø mm	180	200	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	187	207	227	237	257	287	307	337	357	407	457	507	557	607	657
B mm	239	259	279	289	309	339	359	389	409	459	509	559	609	659	709

Ceiling Support -

TW 25mm Cavity 95110 + Ext



Ext Ø mm	700	750	800	850	900
A Ø mm	707	757	807	857	907
B mm	764	814	864	914	964

Flashings - Twin Wall 25mm Cavity

Storm Collar - TW 25mm Cavity

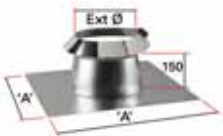
95560 + Ext Ø



Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
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Flat Flashing - TW 25mm Cavity

95530 + Ext Ø

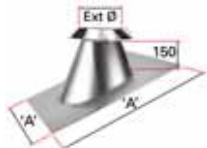


Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600
A mm	610	610	610	610	610	610	800	800	800	800	800	1000

Angled Flashing 0° - 45°

- TW 25mm Cavity

95510 + Ext Ø



Ext Ø mm	180	200	230	250	280	300	350	400
A mm	610	700	700	700	800	800	800	800

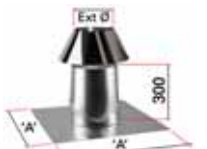
Angled Flashing 0° - 30°

95510 + Ext Ø

Ext Ø mm	450	500	550	600
A	800	900	1000	1000

High Flat Flashing - TW 25mm Cavity

95170

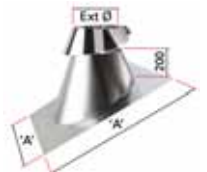


Ext Ø mm	180	200	230	250	280	300	330	350	380	400	450	500	550	600
A mm	610	610	610	610	610	610	610	800	800	800	800	800	1000	1000

High Angled Flashing 5° - 45°

- TW 25mm Cavity

95180



Ext Ø mm	180	200	230	250	280	300	330	350	400
A mm	775	805	850	875	915	955	985	1035	1100

High Angled Flashing 0° - 30°

95190

Ext Ø mm	450	500	550	600
A	955	1015	1100	1130

Terminals - Twin Wall 25mm Cavity

Tapered Terminal - TW 25mm Cavity

0.6mm - HP21038

1.0mm - HP29038



Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850

Exhaust Terminal - TW 25mm Cavity

0.6mm - HP21039

1.0mm - HP29039



Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750	800
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800	850
A mm	293	313	343	364	393	413	464	513	563	614	664	713	763	813	863	913	963

HP21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HP29 Codes.
All dimensions shown are in mm.

Starting Components - Twin Wall 50mm Cavity



Appliance Connector

0.6mm - HL21047
1.0mm - HL29047

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
A Ø mm	150	170	200	220	250	270	320	370	420	470	520	570	620	670	720	770



Single Wall to Twin Wall Adaptor - TW 50mm Cavity

0.6mm - HL21045
1.0mm - HL29045

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



Twin Wall to Single Wall Adaptor - TW 50mm Cavity

0.6mm - HL21048
1.0mm - HL29048

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



Flanged Adaptor - TW 50mm Cavity

0.6mm - HL210E8
1.0mm - HL290E8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750	800

Must be ordered with Split Flange (see Page 26)



Split Flange (for use with Flanged Adaptor)

HP290E8

Bespoke component, see Page 25 to specify dimensions

Pipes - Twin Wall 50mm Cavity



1000mm Pipe - TW 50mm Cavity

0.6mm - HL21001
1.0mm - HL29001

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



500mm Pipe - TW 50mm Cavity

0.6mm - HL21002
1.0mm - HL29002

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



300mm Pipe - TW 50mm Cavity

0.6mm - HL21003
1.0mm - HL29003

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



Adjustable Pipe 610 - 970mm - TW 50mm Cavity

0.6mm - HL21009
1.0mm - HL29009

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.

0.6mm - HL21053

1.0mm - HL29053



Adjustable Pipe 375 - 530mm - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

0.6mm - HL210F2

1.0mm - HL290F2



Expansion Pipe - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

0.6mm - HL210A5

1.0mm - HL290A5



Vertical Drain - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

0.6mm - HL21095

1.0mm - HL29095



Measure Pipe - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



Lined Bellows - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
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1.0mm - HP29127



Bellows Jacket - TW 50mm Cavity

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	330	350	350	350	400	450	500	550	600	650	700	805	855	905	955	1005

1.0mm - HL290G1 + Nom Ø

0.6mm - HL21071

1.0mm - HL29071



Increaser - TW 50mm Cavity*

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800
A Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
B Ø mm	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

0.6mm - HL210F3

1.0mm - HL290F3



Decreaser - TW 50mm Cavity*

Nom Ø mm	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700
B Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800

* Please note when ordering increaser/decreaser you must specify the diameters you are going to/from.

Cover Band - Twin Wall 50mm Cavity



Cover Band - TW 50mm Cavity (included with product)

95610

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

Accessories - Twin Wall 50mm Cavity



V Band - TW 50mm Cavity (included with product)

HP290E9

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
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Gasket - TW 50mm Cavity (included pre-fitted with product)

HP290F1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
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HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.

Bends - Twin Wall 50mm Cavity



90° Bend - TW 50mm Cavity 0.6mm - HL21015
1.0mm - HL29015

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600
A mm	261	271	286	296	311	341	366	386	416	441	466
B mm	256	266	281	291	306	336	361	391	412	437	462

For diameters above 500mm, use two 45° bends to form a 90° bend

For above 500, please use two 45° bends to form a 90° bend



85° Bend - TW 50mm Cavity 0.6mm - HL210A8
1.0mm - HL290A8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600
A mm	251	260	275	283	296	306	348	371	394	417	440
B mm	245	255	268	277	291	300	343	366	388	411	434

For above 500, please use a 45° bend and a 40° elbow to form an 85° bend



45° Bend - TW 50mm Cavity 0.6mm - HL21017
1.0mm - HL29017

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	164	169	175	179	185	195	205	215	226	236	247	258	267	278	288	298
B mm	159	165	170	174	185	190	200	210	221	231	242	252	262	273	284	293



30° Bend - TW 50mm Cavity 0.6mm - HL21019
1.0mm - HL29019

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	137	140	144	146	150	153	160	166	173	180	186	193	200	207	213	220
B mm	132	135	139	141	145	148	155	161	168	175	181	188	195	202	208	215



15° Bend - TW 50mm Cavity 0.6mm - HL21018
1.0mm - HL29018

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	121	122	124	126	128	129	132	136	139	142	145	149	152	155	159	162
B mm	116	117	119	121	123	124	127	131	134	137	140	144	147	150	154	157

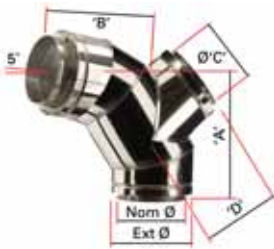


90° Inspection Bend - TW 50mm Cavity 1.0mm - HL290A2

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600
A mm	364	382	383	384	385	391	393	394	397	422	447
B mm	310	325	332	336	343	357	368	380	392	417	442
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	221	231	246	256	271	281	306	331	356	381	406

For diameters above 500mm, use two 45° bends to form a 90° bend

HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.



85° Inspection Bend - TW 50mm Cavity

1.0mm - HL290C3

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600
A mm	354	372	373	373	377	380	382	383	385	398	421
B mm	299	313	319	324	334	343	354	365	376	393	416
C Ø mm	130	150	180	200	150	150	150	150	150	150	150
D mm	221	231	246	256	271	281	306	331	356	381	406

Tees - Twin Wall 50mm Cavity



90° Tee - TW 50mm Cavity

0.6mm - HL21020

1.0mm - HL29020

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	444	464	494	514	544	564	614	664	739	764	814	864	914	964	1014	1064
B mm	222	232	247	257	272	282	307	332	369.5	382	407	432	457	482	407	532



95° Tee - TW 50mm Cavity

0.6mm - HL210C1

1.0mm - HL290C1

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	444	464	494	514	544	565	615	665	715	765	816	866	916	966	1017	1067
B mm	232	243	259	270	287	298	325	352	379	407	434	461	489	516	543	570
C mm	231	242	258	269	286	296	323	350	378	405	432	459	486	514	541	568



135° Tee - TW 50mm Cavity

1.0mm - HL29021

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	539	567	610	638	680	709	779	850	956	994	1062	1133	1204	1274	1345	1413
B mm	385	409	445	470	506	530	590	651	711	774	832	892	952	1013	1073	1133



Tee Plug - TW 50mm Cavity

0.6mm - HL21025

1.0mm - HL29025

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850



Drain Plug - TW 50mm Cavity

0.6mm - HL21029

1.0mm - HL29029

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.

Support Components - Twin Wall 50mm Cavity



Base Drain Section - TW 50mm Cavity 0.6mm - HL21091
1.0mm - HL29091

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	280	300	330	350	380	400	450	500	550	600	650	700	750	800	850	900



Wall Support - TW 50mm Cavity 0.6mm - HL21082
1.0mm - HL29082

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	332	352	382	402	432	452	502	552	602	652	702	752	802	852	902	952
B mm	443	463	493	513	543	563	613	663	713	763	813	863	913	963	1013	1063



Wall Support Top Plate - TW 50mm Cavity 0.6mm - HL210F8
1.0mm - HL290F8

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	332	352	377	402	432	452	502	552	602	652	702	752	802	852	902	952



Wall Support Side Plates - TW 50mm Cavity 1.0mm - HL290F5

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	323	348	378	398	428	448	498	548	598	648	698	748	798	848	898	948



Support Plate - TW 50mm Cavity 0.6mm - HL21089
1.0mm - HL29189

Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	332	352	377	402	432	452	502	552	602	652	702	752	802	852	902	952

For plates only (no pipe) please use part HP290F9



Firestop Plate (Non Combustible Floor) - TW 50mm Cavity 94670

Ext Ø mm	130	150	180	200	230	250	280	300	350	400	450	500	550	600	650	700	750
A mm	450	450	450	450	450	610	610	610	610	610	800	800	800	1000	1000	1000	1000
B mm	220	235	255	270	290	305	330	340	365	415	450	485	520	555	590	625	660

Guides - Twin Wall 50mm Cavity



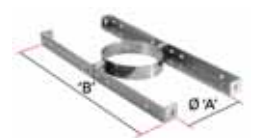
Wall Guide - TW 50mm Cavity 95220 + Ext

Ext Ø mm	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	227	235	254	287	305	337	355	407	457	507	557	607	657



Wall Guide - TW 50mm Cavity 95120 + Ext

Ext Ø mm	700	750	800	850
A Ø mm	707	757	807	857



Floor Guide - TW 50mm Cavity 95130 + Ext

Ext Ø mm	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	227	237	257	287	307	337	357	407	457	507	557	607	657
B mm	686	686	686	686	686	826	826	826	826	826	826	826	826

HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.

Floor Guide

- TW 50mm Cavity 95130 + Ext



Ext Ø mm	700	750	800	850
A Ø mm	707	757	807	857
B mm	1000	1000	1000	1000

Ceiling Support - TW 50mm Cavity

95110 + Ext



Ext Ø mm	180	200	220	230	250	280	300	330	350	400	450	500	550	600	650
A Ø mm	187	207	227	237	257	287	307	337	357	407	457	507	557	607	657
B mm	239	259	279	289	309	339	359	389	409	459	509	559	609	659	709

Ceiling Support -

TW 50mm Cavity 95110 + Ext



Ext Ø mm	700	750	800	850
A Ø mm	707	757	807	857
B mm	764	814	864	914

Flashings - Twin Wall 50mm Cavity

Storm Collar - TW 50mm Cavity

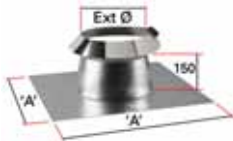
95560 + Ext Ø



Ext Ø mm	220	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
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Flat Flashing - TW 50mm Cavity

95530 + Ext Ø

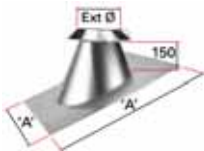


Ext Ø mm	220	230	250	280	300	330	350	400	450	500	550	600
A mm	610	610	610	610	610	610	610	800	800	800	800	800

Angled Flashing 0° - 45°

- TW 50mm Cavity

95510 + Ext Ø



Ext Ø mm	220	230	250	280	300	330	350	400
A mm	700	700	700	800	800	800	800	800

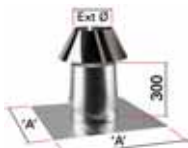
Angled Flashing 0° - 30°

95510 + Ext Ø

Ext Ø mm	450	500	550	600
A	800	900	1000	1000

High Flat Flashing - TW 50mm Cavity

95170

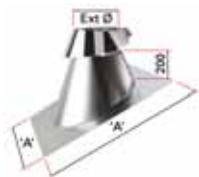


Ext Ø mm	180	200	230	250	280	300	330	350	380	400	450	500	550	600
A mm	610	610	610	610	610	610	610	800	800	800	800	800	1000	1000

High Angled Flashing 5° - 45°

- TW 50mm Cavity

95180



Ext Ø mm	180	200	230	250	280	300	330	350	400
A mm	775	805	850	875	915	955	985	1035	1100

High Angled Flashing 0° - 30°

95190

Ext Ø mm	450	500	550	600
A	955	1015	1100	1130

Terminals - Twin Wall 50mm Cavity

Tapered Terminal - TW 50mm Cavity

0.6mm - HL21038

1.0mm - HL29038



Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850

Exhaust Terminal - TW 50mm Cavity

0.6mm - HL21039

1.0mm - HL29039



Nom Ø mm	130	150	180	200	230	250	300	350	400	450	500	550	600	650	700	750
Ext Ø mm	230	250	280	300	330	350	400	450	500	550	600	650	700	750	800	850
A mm	343	364	393	413	443	464	513	563	614	664	713	763	813	863	913	963

HL21 Codes are only applicable up to 350mm Nom Ø. Above 350mm use HL29 Codes.
All dimensions shown are in mm.

PRODUCT INFORMATION

Joint Assembly

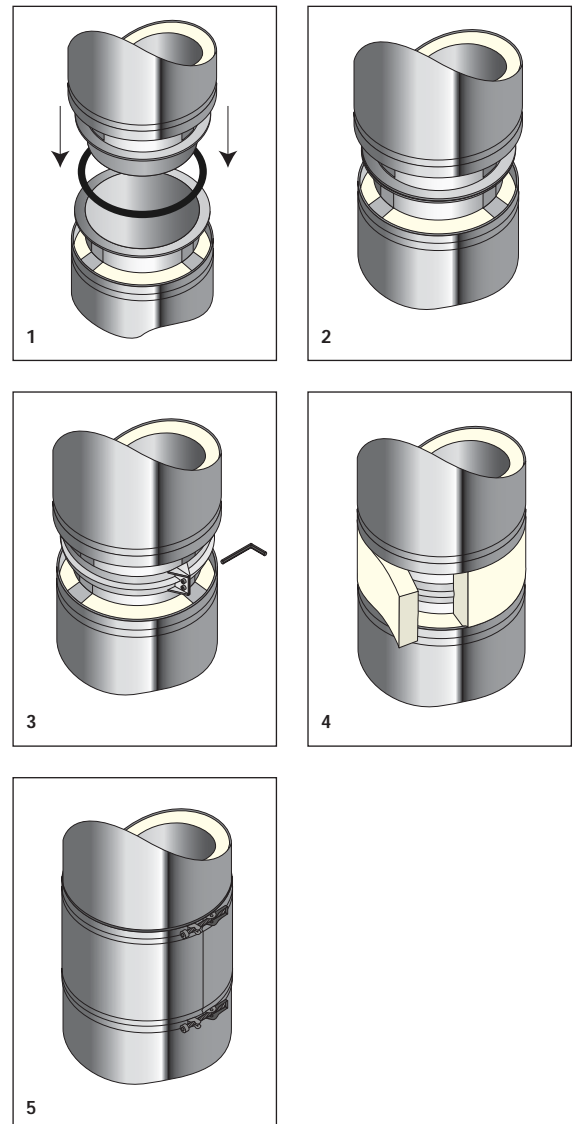
Flange to flange joints are assembled as follows.

1. Check that the flanges are not damaged and are free from grit, grease and other contaminants.
2. Align the parallel flanges of the two components making sure that the flanges are correctly seated. The male spigot must be pointing towards the heat source.
3. Loosely connect the male to female ends at one half of the V Band with the nut and bolts. Position the V band over the butted flanges and tightly clamp both joints using the nuts and bolts provided. (Note that the integrity of the joint between components is dependent upon the correct tightening of the V band. Tap V band on all sides with a soft mallet to ensure correct seating). Do not allow screws or bolts to penetrate the inner liner or outer skin at any point. On horizontal runs, locate the securing nut and bolt joints on either side of the duct; not top and bottom.
4. Place the insulation supplied in the space between the components, being careful to wrap it completely around the joint.
5. Locate the cover band over the joint so that the beads sit in the grooves and secure using the clips. The cover bands are designed to slide in their mating grooves to allow for expansion.

For outdoor installation, apply a bead of low temperature sealant in the groove at the upper edge of the cover band.

Low Temperature Sealant

Sealant is only needed on external applications to prevent water penetration of joint.



Thermal Expansion

Thermal expansion must be allowed for in the design of the system. The inner wall and outer casing can expand at different rates. As the inner liner forms a continuous pipe, specially designed expansion components need to be incorporated to compensate for thermal expansion. Expansion bellows should be added when the expansion exceeds 6mm.

When it comes to the outer casing, floor and wall guides must be located to allow for the movement of any adjacent cover bands. Guide Band assemblies will give adequate support and allow for thermal movement.

Expansion of the HP5000® can be calculated on the basis that there will be 1mm of liner expansion per metre for each 50°C rise of gas temperature above ambient temperature. Alternatively the formula below can be used to determine the expansion required.

$$\Delta t \text{ (Expansion to be allowed for in mm)} = (\text{meter run}) \times (\text{flue gas temperature above ambient temp } ^\circ\text{C}) / 50$$

So for example, a 20 metre run of HP5000® subjected to a flue gas temperature of 300°C above ambient will need to accommodate an expansion of 120mm (20*300/50)

With kitchen extraction ducts, always assume a temperature of 1000°C to cater for the expansion resulting from a grease duct fire.

The table below shows the overall thermal expansion

		Thermal Expansion (mm)																													
Flue Gas Rise (°C)	1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
	900	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198	207	216	225	234	243	252	261	270
	800	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240
	700	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	147	154	161	168	175	182	189	196	203	210
	600	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	180
	500	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
	400	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120
	300	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90
	200	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
	100	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
		0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
		Overall Installed Length (Metres)																													

Lined Expansion Bellows

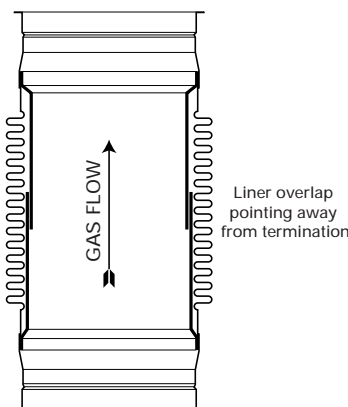
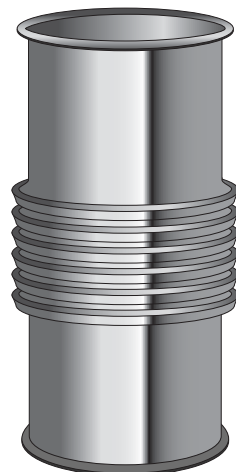
Expansion bellows are designed to allow the systems with a pressure above 40 Pa to expand and contract under thermal load. The bellows are designed to accommodate a system pressure of 5000 Pa.

Bellows must always be supported and guided. When installed between two fixed points, the bellows should be installed near the support furthest away from the appliance or heat source. To ensure axial alignment, lateral bracing support assemblies must be fitted close to and upstream of the Bellows. Do not locate a Bellows adjacent to an Elbow or fitting as the liner movement could be impeded. Bellows can handle axial and vibration movements but not lateral movement. Lateral offset and parallel misalignment should be eliminated.

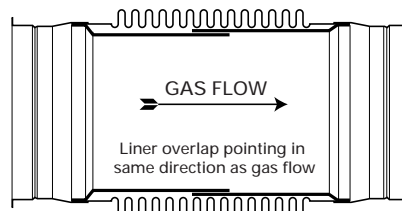
Vertical installations: This prevents water and dirt becoming trapped between it and the bellows. The support guides can inhibit thermal movement and must be placed accordingly.

Horizontal installations: Care must be taken not to pre-stress or compress the bellows during installation.

Expansion Bellows allow for a maximum expansion of 100mm/bellow.



Vertical installation

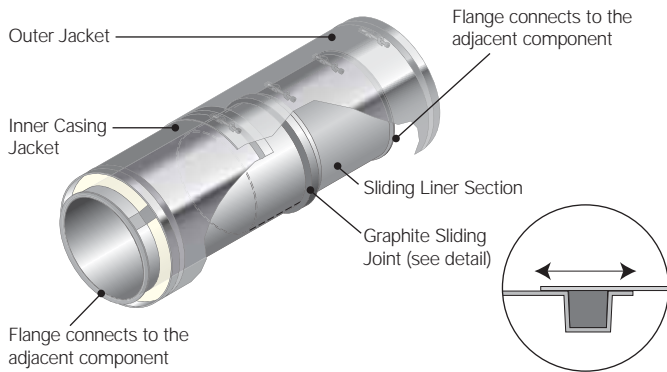


Horizontal installation

Expansion Pipe

The expansion pipe comprises a sliding inner section, flanged at one end only. This sliding section is sized to fit closely inside the 500mm length (supplied). A graphite seal, insulation and outer jacket are supplied with this component.

This component is not load bearing and can only accommodate a maximum pressure of 40Pa.

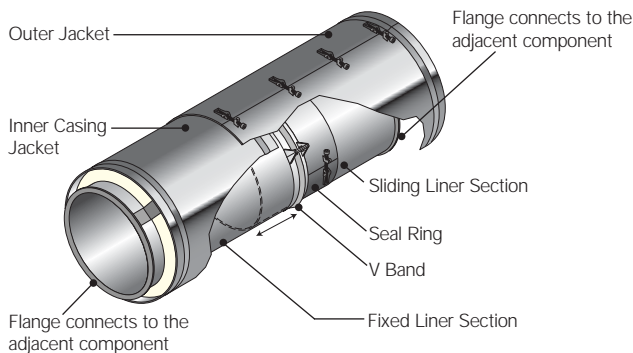


1. Fit the pipe to the duct system.
2. Ensure the sliding flange is in place and slide into the pipe length supplied.
3. Once installed to the desired length wrap the insulation around the sliding flange.
4. Fit the outer jacket.

Adjustable Length

The adjustable length comprises a sliding inner section, flanged at one end only. This sliding section is sized to fit closely inside the 500mm length (supplied). A sliding flange and cover band is supplied with the adjustable liner. The component also comes with insulation and an outer jacket that can fit across the desired length. When fixed the length cannot be adjusted.

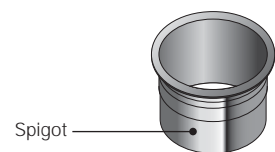
This component is not load bearing and must not be used to accommodate thermal expansion.



1. Fit the pipe to the duct system.
2. Ensure the sliding flange is in place and slide adjustable pipe length into standard pipe length.
3. When the desired length is achieved clamp the flanged joint as per standard instructions.
4. Apply high temperature sealant behind the sliding section.
5. Fit the seal ring over the sealed joint and secure using the clip.
6. Apply high temperature sealant around the seal ring.
7. Wrap open liner with insulation and fit outer jacket.

Appliance Connector

The standard appliance connector is 150mm long and flanged at one end only. Fit the protruding spigot to the appliance as required.



Bends and Offsets

Bends are designed to allow changes in direction through 15°, 30°, 45°, 85° and 90°. They must be protected from thermal expansion and bending forces. Offsets of different lengths are achieved by adding straight lengths. For offset lengths see table on page 25.

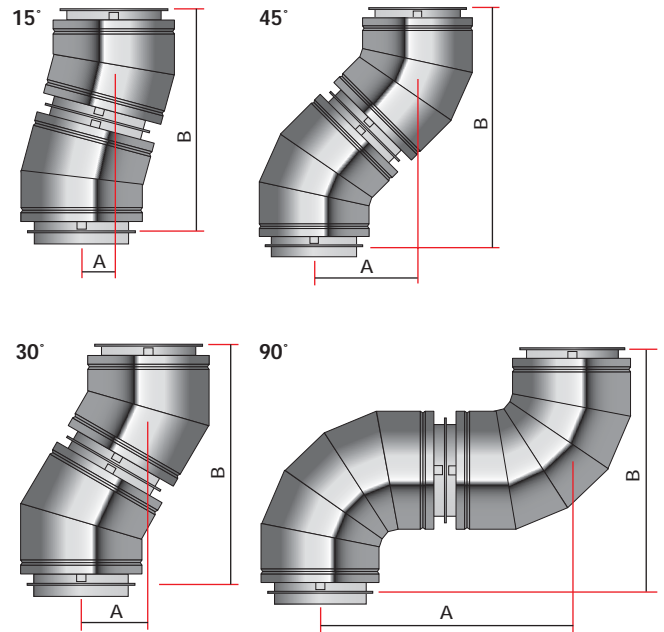
Sloped or horizontal offsets in the vertical portion of a duct above the breaching should be avoided except where absolutely necessary. Sloped offsets require more expansion joints and secure bracing above and below bends. It is essential that an adequate number of supports are used at close intervals. Additional support can be provided by using an additional support plate located at the other end of the bend, or fitting and bolting lateral braces across the corners using angle iron bracing (example on page 25).

The length of an offset is determined by the ability to support the weight of the system. The maximum length between bends is 4 meters. The maximum height above the last point of lateral support is 3 meters. With frequent support, there is no structural or operating limit to the distance covered by an offset provided the system meets the capacity, pressure drop and available draught requirements of the appliance.

The ends of any sloped or horizontal offset must be anchored to prevent over-stressing the bends, and to ensure proper operation of expansion joints. The vertical section of duct above the offset must also be supported or anchored, and guided where necessary. Supports suspended by threaded rods or from small sized angle bars or straps are not satisfactory to resist bending moments in the offsets.

Offset Dimensions

	15° Offset		30° Offset		45° Offset		90° Offset	
Dia.	A	B	A	B	A	B	A	B
130	60	456	129	478	216	519	470	468
150	61	461	131	488	222	533	490	488
180	62	468	135	503	230	554	520	518
200	63	474	151	536	236	569	540	538
230	64	481	142	528	245	590	570	568
250	64	487	145	538	251	604	590	588
300	66	500	151	563	273	658	680	678
350	68	512	158	588	288	693	730	728
400	69	525	165	613	303	728	780	778
450	71	538	172	638	317	764	830	828
500	73	551	178	663	332	799	880	878
550	75	564	185	688	346	834	1183*	1181*
600	76	577	192	713	361	870	1233*	1231*
650	78	590	198	738	376	905	1283*	1281*
700	80	603	205	763	390	941	1333*	1331*
750	81	616	212	788	405	976	1383*	1381*
800	83	629	218	813	420	1011	1433*	1431*

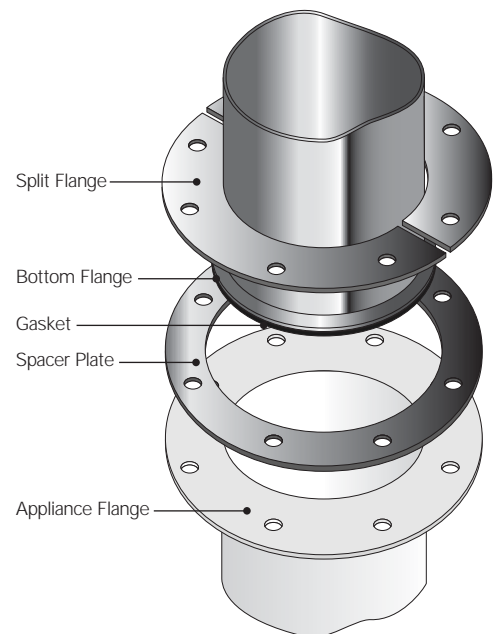


Please note: 90° Bends are manufactured up to 500 diameter, dimensions given for 90° Offsets above 500 diameter are representative of using 2 x 45° Bends to create the 90° angle. These are indicated by *

Flange and Split Flange Adaptor

A purpose made flange can be made to order. Photocopy the drawing below filling in the dimensions and other details. Forward to the Sales office at Schiedel Rite-Vent.

Thickness of Flange <input style="width: 90%; height: 20px;" type="text"/> mm	
Material <input style="width: 90%; height: 20px;" type="text"/>	
No. of holes <input style="width: 40px;" type="text"/> x Dia. <input style="width: 40px;" type="text"/> mm	
Name: _____	
Company: _____	
Tel: _____	Int Ø <input style="width: 80%; height: 20px;" type="text"/> mm
Fax: _____	Ext Ø <input style="width: 80%; height: 20px;" type="text"/> mm
Date: _____	
Signed: _____	



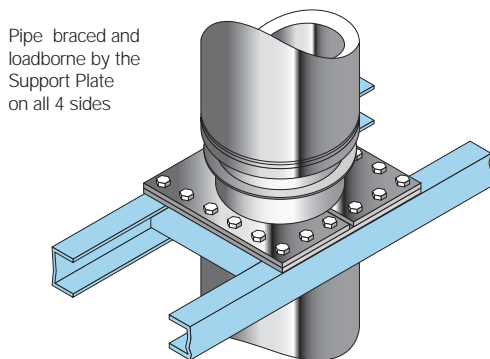
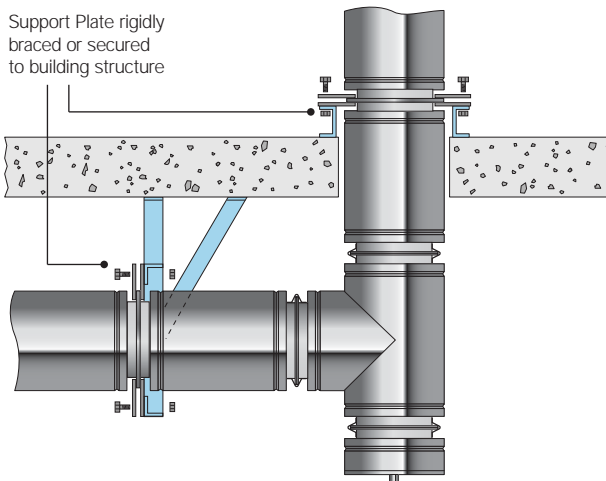
Support Plate Assembly

The Support Plate Assembly is designed to brace and support a vertical flue or duct and to maintain positive joint alignment and support for expansion joints. In both horizontal and vertical applications. Structural ties should be used to support plates to the building. This may require supports both upstream and downstream of a tee, which would then be protected from excessive expansion stresses. (If the support plate is not supplied by Schiedel Rite-Vent we can not guarantee the system)

See the table weights of lengths and support components on page 30.

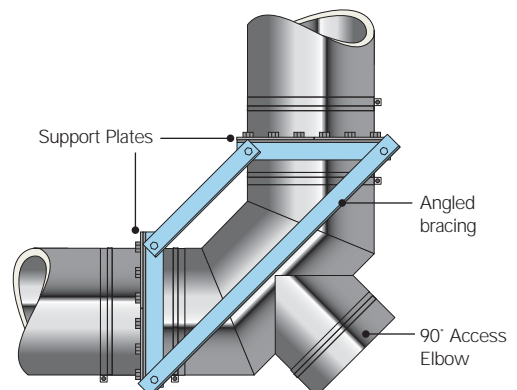
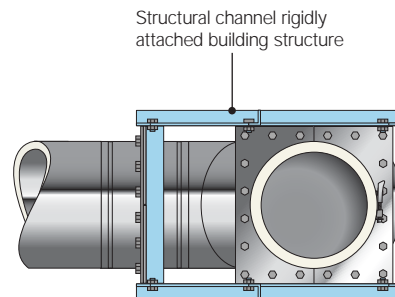
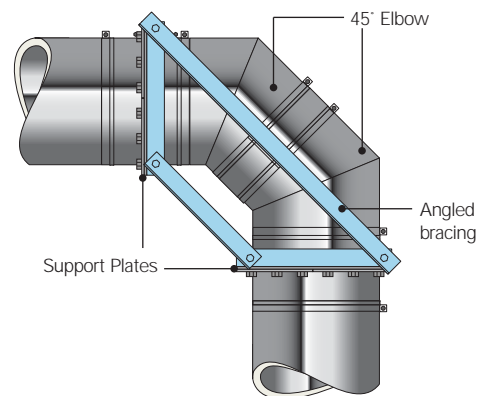
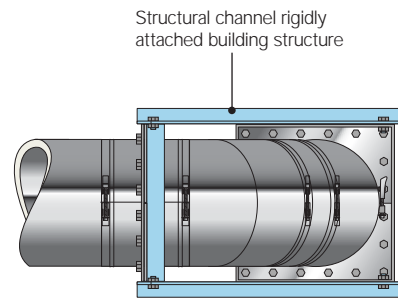
The Support Plate Assembly consists of an installed length of liner flanged at both ends, and with a centrally located inner welded flange. Pairs of plates (4 plates in total) are assembled with half sections aligned at 90° to each other. The plates are located on each side of a central flange. The plates are secured with bolts to adjacent steel framework.

Typical boiler installation



Structural members by others to suit load and building design

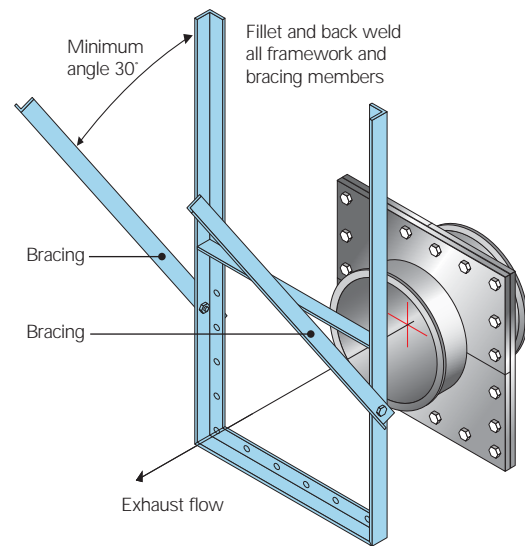
Typical bracing of elbows



All structural channels and members supplied by client.

Recommended Framework and Bracing Dimensions

Size	Framework (minimum dimensions)	Bracing (minimum dimensions)
130 - 550mm	50 x 25 x 5mm	50 x 50 x 5mm
600 - 800mm	125 x 45 x 6mm	75 x 75 x 6mm



Lateral bracing frame work required when used for horizontal runs.

All structural channels and members supplied by client.

Wall Support Assembly

There are 2 versions to cover internal diameters 130mm to 650mm and 700 to 800mm.

130mm to 650mm; The support plates have one set with flanged edges, a pair of triangular side plates and a 170mm integral length with a central flange.

700mm to 800mm; The support plates have a pair of steel triangular side frames, two cross members, two spacers and the integral 230mm length.

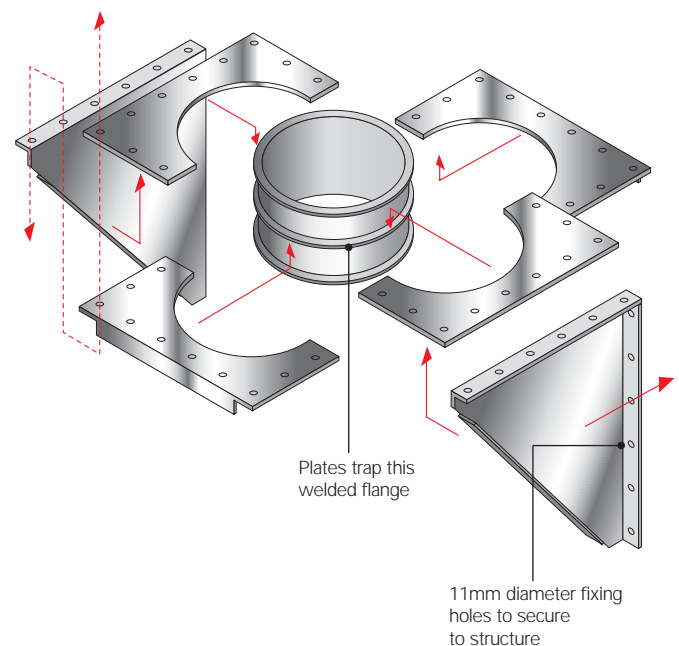
On both versions the side support must be orientated so that they are on the load bearing side of the encased welded liner joint.

The load bearing on the system can be mechanical (weight) or thermal (expansion) or both. The greater of these forces will determine the orientation of the construction. The support assembly must be tightly bolted using all the nuts and bolts provided.

The Wall Support forms a fixed point in the system so expansion movement must be allowed for during system design. As the Wall Support interrupts the annulus of the HP5000® construction, a Cover Jacket Set should be used to close the annulus on each side of the Plate Joint.

With freestanding chimneys the wall support can be used up to the point where a chimney becomes freestanding. A wall guide should be installed 2 - 3 meters below the wall support to stabilise the exposed end against wind loading. See the table weights of lengths and support components on page 30.

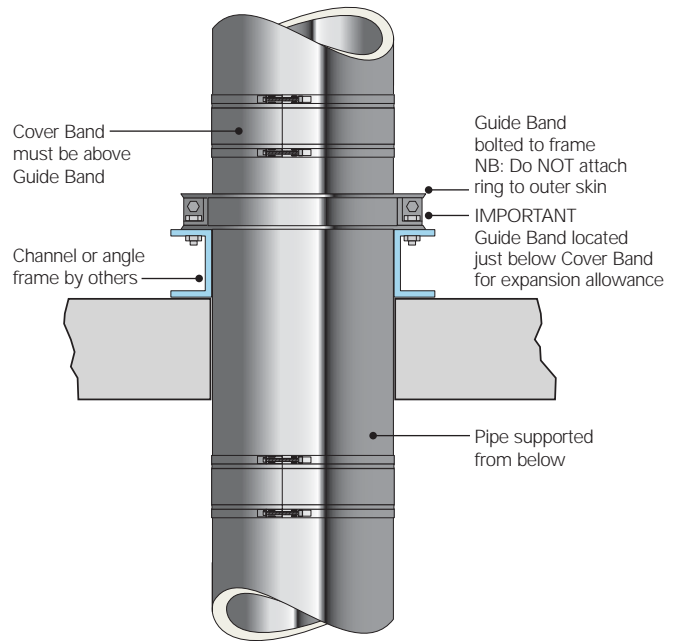
When attached to a masonry wall or suitable non-combustible structure the Wall Support must be secured with adequate fixings.



Guide Band and Support Cradle

The guide band is used as an expansion guide.

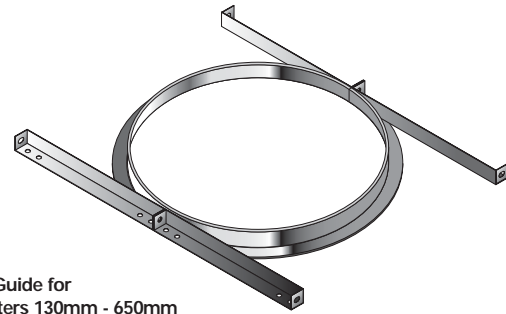
For horizontal applications, either a Guide Band or a Support Cradle may be suspended by rods or other types of rigid brace. The guide band inside diameter is 5mm larger than the outside diameter of the liner to allow for sliding movement during thermal expansion.



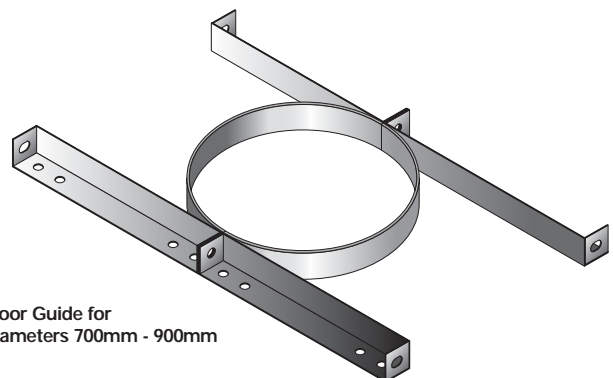
Floor Guide

This consists of a guide band, four short angle sections and associated nuts and bolts. The guide band inside diameter is 5mm larger than the outside diameter of the liner to allow for sliding movement during thermal expansion.

Bands: Stainless steel
Angle Sections: Painted steel



Floor Guide for diameters 130mm - 650mm



Floor Guide for diameters 700mm - 900mm

Wall Guide

There are 2 versions to cover internal diameters 130mm to 650mm and 700mm to 800mm.

The guide band inside diameter is 5mm larger than the outside diameter of the casing to allow for sliding movement during thermal expansion.

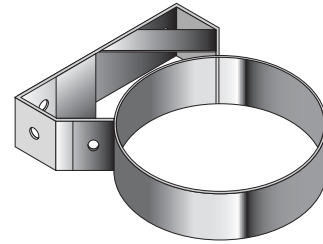
Both versions are designed to provide 55mm clearance from the outer casing of HP5000® to a non-combustible structure only. The assembly is intended to resist lateral movement and is not weight bearing.

The wall guide consists of a guide band, bracket and nuts and bolts for assembly but not the fixings for attachment to the structure. These must be provided by the installer and should be of sufficient and suitable strength to ensure adequate attachment.

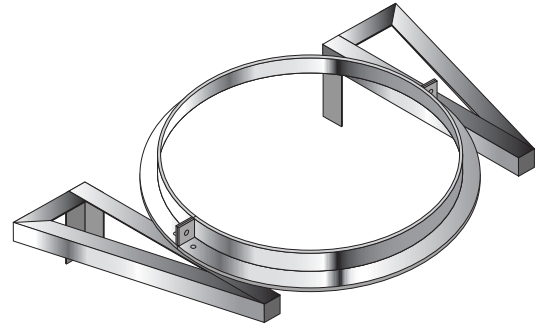
If the system must be attached to a combustible wall spacers should be used to maintain the minimum clearance required and minimise heat conduction through supporting metal parts. The minimum distance to combustibles for 25mm cavity is 75mm and 50mm for 50mm cavity. See CE designations.

Wall Guides should be installed at a maximum distance of 4 metre centres.

Bands: Stainless steel
Angle Sections: Painted steel



Wall Guide for external diameters 130mm - 650mm



Wall Guide for external diameters 700mm - 900mm

90° and 95° Tees

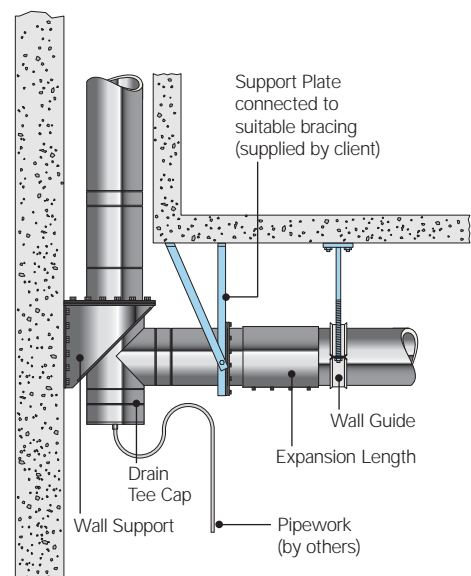
90° and 95° tees are designed to move the duct through 90° and 95° from the horizontal to the vertical and provide a drain or inspection point. When used as a drain the drain tee cap is installed at the base of the tee and piped to a suitable drain as required.

If the drain cap is used on a pressure system a trap is required to accommodate the pressure.

If placed on top of a supporting framework or flat plate, the tee cap closure becomes inaccessible and cannot be removed. Access can be achieved in one of two ways:

1. Use a Support Plate or wall support at the upper tee joint, as shown.
2. Support the tee from its lower joint with a support plate or wall support and use an additional 500mm standard pipe length below the support beneath which a drain tee cap can be located.

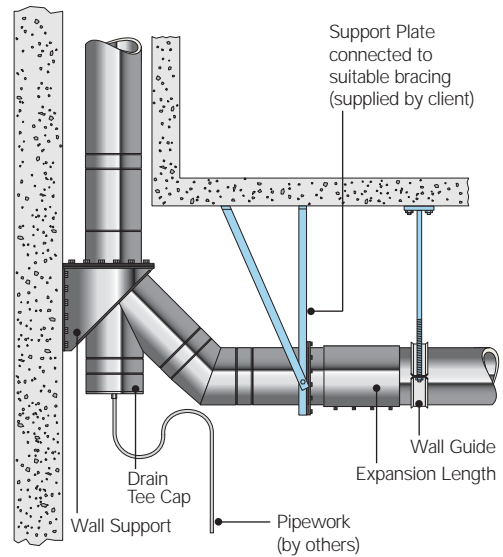
All tees must be protected from expansion greater than 6mm.



135° Tee

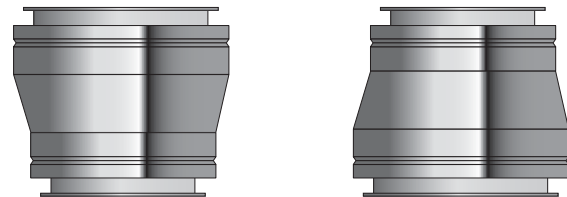
The 135° tee allows a 45° entry to the vertical duct and provides a drain or inspection fitting. When used as a drain the drain tee cap is installed at the base of the tee and piped to a suitable drain as required. In a horizontal breaching configuration use of a 135° tee necessitates the use of a 45° elbow. If the drain cap is used on a pressure system a trap is required to accommodate the pressure.

All tees must be protected from expansion greater than 6mm.



Increasesers/Decreasers

Tapered increasers and decreaseers provide for changes in diameter and have an installed length of 307mm.



Weight (kg) of Pipe Lengths and Support Components

Diameter	Single Wall						Twin Wall 25 Cavity						Twin Wall 50 Cavity					
	0.6mm Material			1.0mm Material			0.6mm Material			1.0mm Material			0.6mm Material			1.0mm Material		
	1000 Pipe	500 Pipe	300 Pipe	1000 Pipe	500 Pipe	300 Pipe	1000 Pipe	500 Pipe	300 Pipe	1000 Pipe	500 Pipe	300 Pipe	1000 Pipe	500 Pipe	300 Pipe	1000 Pipe	500 Pipe	300 Pipe
130	2.31	1.3	0.97	3.45	1.97	1.41	6.99	3.85	2.81	8.33	4.29	3.04	9.81	5.44	3.79	10.87	6.11	4.24
150	2.65	1.49	1.11	3.87	2.27	1.62	7.85	4.31	3.14	9.95	5.37	3.96	10.87	6.01	4.18	12.42	6.78	4.69
180	3.16	1.77	1.3	5.69	3.35	2.17	9.13	4.99	3.59	11.54	6.17	4.13	12.45	6.85	4.73	14.31	7.78	5.35
200	3.49	2.02	1.51	6.3	3.58	2.45	10.24	5.41	3.88	14.07	7.07	5.72	13.49	7.42	5.12	15.55	8.45	5.81
230	3.99	2.22	1.62	6.59	4.07	3.08	11.29	6.24	4.43	13.97	7.69	5.6	15.07	8.25	5.7	17.44	9.43	6.49
250	4.34	2.41	1.76	7.19	4.44	3.37	12.16	6.6	4.75	15.08	8.29	6.04	16.15	8.85	6.11	18.73	10.15	7.26
300	5.2	2.88	2.1	9.25	5.03	3.68	14.66	7.66	5.6	16.6	10.6	6.07	18.84	10.31	7.12	21.91	11.85	8.14
350	6.02	3.32	2.42	9.3	5.09	4.15	16.96	9.39	6.43	22.45	12.48	9.16	21.45	11.74	8.08	25.02	13.51	9.25
400				10.38	5.81	4.09				19.81	11.24	6.79				28.33	15.23	10.42
450				11.68	6.54	4.56				23.85	13.35	8.1				30.14	16.99	11.65
500				12.96	7.25	5.1				26.34	13.4	8.93				36.17	19.31	13.16
550				14.18	7.96	5.57				32.17	16.44	11.21				40.07	21.4	14.54
600				15.47	8.69	6.12				35.07	18.44	12.27				42.61	22.79	15.48
650				16.75	9.41	6.59				37.9	19.42	13.28				45.95	24.57	16.73
700				18.04	10.14	7.13				40.74	20.89	14.28				49.22	26.38	17.97
750				19.33	10.86	7.64				43.52	22.29	15.23				52.49	28.11	19.14
800				20.62	11.65	8.22				46.31	23.7	16.18						

Loadbearing Capacity (kg) of Support Components

Diameter	Support plate	Wall supports	Tees supported on support plate
130	400	400	100
150	450	450	100
180	500	495	125
200	600	550	125
230	645	600	150
250	750	625	150
300	900	700	175
350	1050	800	200
400	1250	875	225
450	1350	950	250
500	1500	1050	275
550	1650	1125	350
600	1800	1200	350
650	1880	1287	400
700	1975	1375	400
750	2055	1462	450
800	2150	1550	450

Applications

Smoke Extraction

HP5000® can be used as the duct for mechanical smoke extraction systems. The light weight, modular components simplify insulation and the circular pipes require a smaller cross sectional area than square ducting. Circular pipes are also more efficient than square ducts for moving high volumes of air. Twin & single wall can be used.

Process & Waste Gas Extraction

HP5000® can be used with both diesel generators & boilers in low and high pressure situations. It is ideal for both condensing and semi-condensing boilers. The fact that it is pressure resistant means that the duct diameter can be reduced (subject to allowable back pressures on the appliance). The duct is suitable for all fuels.

From an installation point of view the big benefit is that on-site welding is not required. Twin wall ducting should be used.

Kitchen Extraction

The HP5000® can be used to extract fumes from commercial kitchen fat fryers and open cooking equipment. The potential danger with these fumes is that they can condense leaving fatty deposits that can ignite. The Schiedel HP5000® is able to withstand temperatures up to 1000°C. Twin wall ducting should be used.

Lightweight Particle Movement

The HP5000® can be used to extract lightweight dust particles and other particles in a wide variety of substances on industries as diverse as the chemical industry and agriculture. HP5000® bends have flanges for ease of replacement should wear and tear become an issue. Single wall installations are more common. Twin wall should be used where the temperature of the particles is a consideration and heat loss needs to be minimised.

Service Trunking

The highly insulated nature of the HP5000® makes it ideal to protect important cables & wires. Access points can be added as required. The light weight, modular components simplify insulation and the circular pipes require a smaller cross sectional area than square ducting. Twin wall ducting should be used.

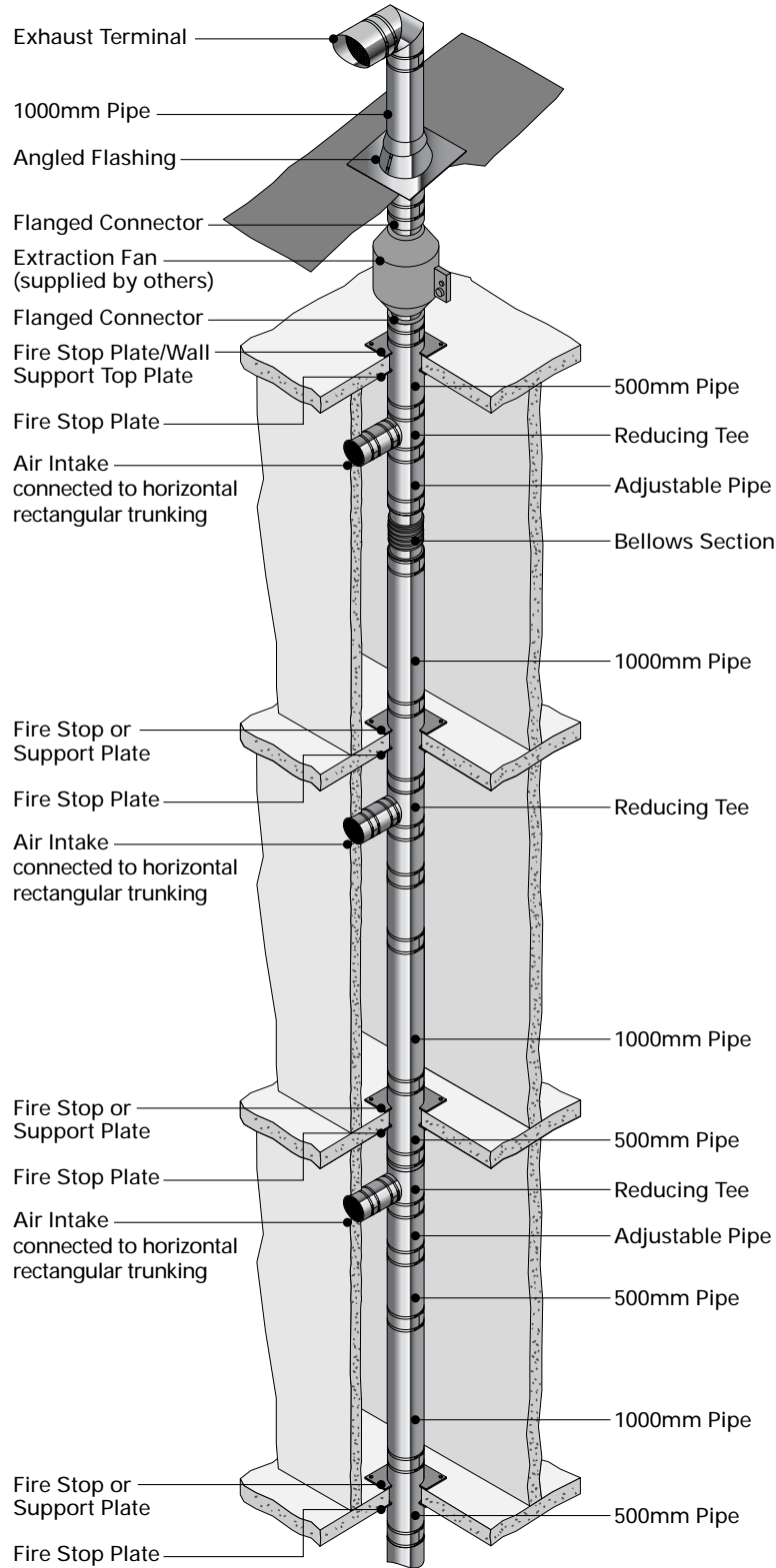
Refuse & Laundry Chutes

Two of the key points in the design of Refuse & Laundry Chutes are that they should be water tight and the inner surface should have a low friction coefficient. The HP5000® scores well on both points. Single skin is generally applicable but twin wall should be used when sound proofing is required.

Key Benefits

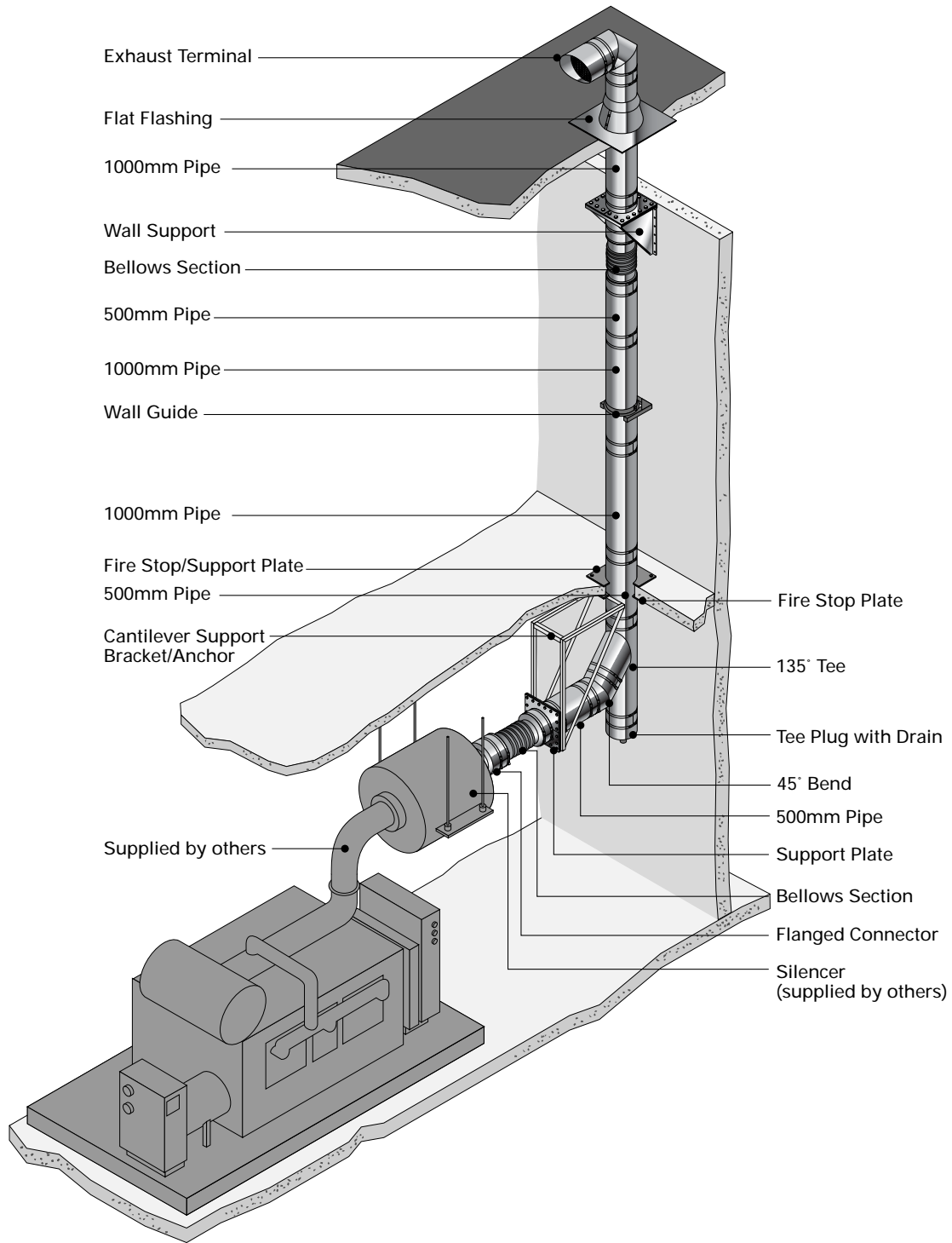
- Multi-purpose, High Temperature, Pressure Resistant Ducting.
- Temperatures up to 600°C on constant firing, tested to 1000°C.
- 17 Diameters from 130mm to 800mm.
- Inner liner 0.6mm, grade 316L stainless steel option for 130mm to 350mm diameters or 1mm inner liner for all diameters.
- Outer casing stainless steel grade 304, diameters 130 - 550mm 0.6mm, 600 to 800mm 0.7mm.
- Available in 25mm or 50 insulation.
- Lightweight approx. 1/4 of the weight of mild steel.
- Pressure resistant to 5000Pa.
- Moisture tight.
- Bends can be replaced.
- No welding on site.
- No staining of building (rust) on high temperature applications.
- Speed of installation.

HP5000 Applications - Smoke Extraction



This drawing is for illustration purpose only and does not necessarily represent an actual installation.

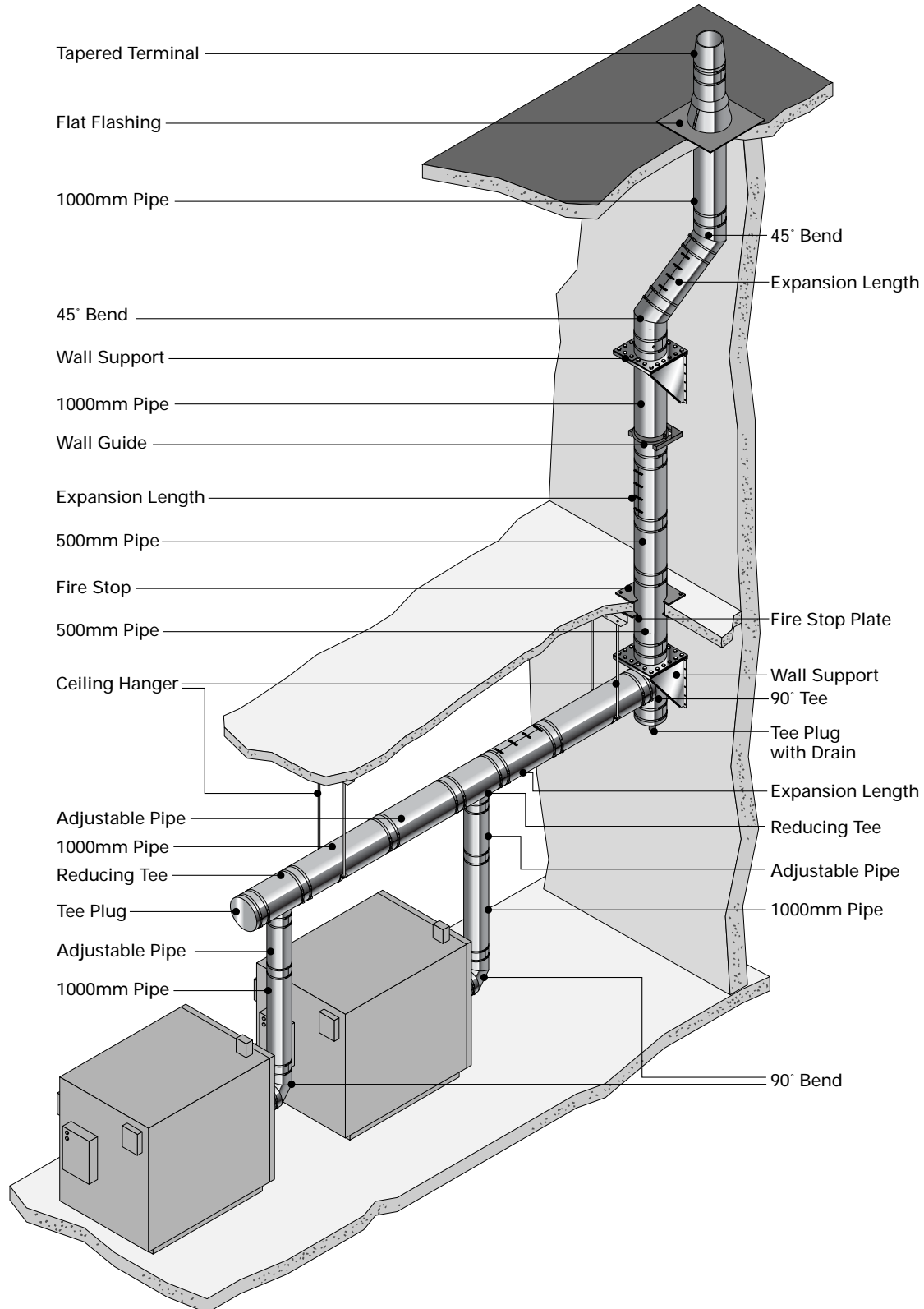
HP5000 Applications - Generator Exhaust



This drawing is for illustration purpose only and does not necessarily represent an actual installation.

HP5000 Applications

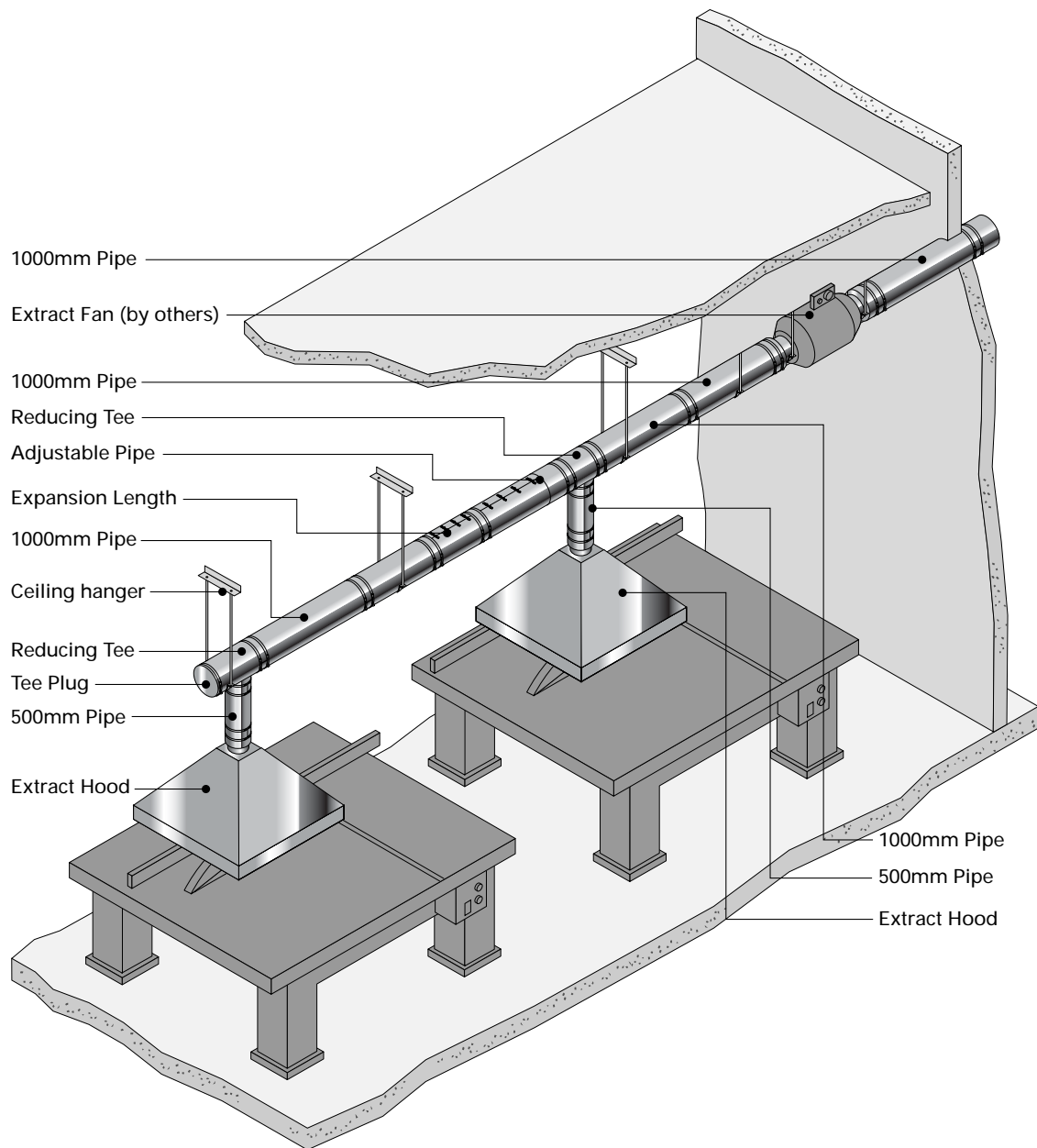
- Boiler Exhaust



This drawing is for illustration purpose only and does not necessarily represent an actual installation.

HP5000 Applications

- Industrial Process/Particle Extraction/Waste Gas Extraction



This drawing is for illustration purpose only and does not necessarily represent an actual installation.



Schiedel Chimney Systems
Crowther Estate
Washington
Tyne & Wear NE38 0AQ
Tel. +44 (0)191 416 1150
Fax. +44 (0)191 415 1263
sales@schiedel.co.uk
www.schiedel.co.uk