



Seldek[®]
Multi Fuel Twin Wall Chimney



Introduction

The Seldek® Twin Wall chimney system is designed to meet the requirements of multi-functional applications for a variety of fuels. The system provides a high quality and robust chimney with high thermal performance and ease of installation.

The Seldek chimney is suitable for negative pressure conditions where the maximum flue gas temperature does not exceed 600°C and is soot fire tested to 1000°C. When used with positive pressure application such as pellet stoves or condensing appliances the Seldek system can be fitted with seals at each joint. Seals must be ordered separately as required.

The system consists of straight lengths and fittings which are constructed entirely from stainless steel and a nominal 30mm mineral wool insulated annulus.

The system may be installed internally or externally and must conform to national and local building regulations. The relatively low external wall temperature permits installation with only a 50mm (2") air gap clearance to combustible materials

Key Features

- Fully welded system
- Inner liner is 0.5mm 316 grade stainless steel
- Outer skin is 0.5mm 441 grade stainless steel
- All lengths and fittings supplied with a standard locking band
- All tees supplied with a plug which incorporates a 22mm drain point
- Available in diameters 100mm, 130mm and 150mm

Seldek product designation to BSEN 1856-1

Without seals	EN1856-1	T600	N1	D	V2	L50050	G(50)
With seals	EN1856-1	T200	H1	W	V2	L50050	O(50)
Standard	↑	↑	↑	↑	↑	↑	↑
Temperature class		↑	↑	↑	↑	↑	↑
Pressure class			↑	↑	↑	↑	↑
Condensate resistance				↑	↑	↑	↑
Corrosion class					↑	↑	↑
Material spec and thickness 0.5mm						↑	↑
Sootfire resistance G yes O No							↑
Distance from combustibles 50mm							↑

Starting Components



Adaptor

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

Size	Part No.
100mm	100-CHI-A
130mm	130-CHI-A
150mm	150-CHI-A



Increasing Adaptor

80mm-100mm

Used to connect from 80mm-100mm outlet on appliance or 80mm flue pipe to 100mm Twin Wall System.

Size	Part No.
80-100mm	80/100CHI-1A

Increasing Adaptor

80mm-130mm

Used to connect from 80mm-130mm outlet on appliance or 80mm flue pipe to 130mm Twin Wall System.

Size	Part No.
80-130mm	80/130CHI-1A

Increasing Adaptor

100mm-130mm

Used to connect from 100mm-130mm outlet on appliance or 100mm flue pipe to 130mm Twin Wall System.

Size	Part No.
100-130mm	100/130CHI-1A

Increasing Adaptor

125mm-150mm

Used to connect from 125mm-150mm outlet on appliance or 125mm flue pipe to 150mm Twin Wall System.

Size	Part No.
125-150mm	125/150CHI-1A

Lengths



Available in 3 diameters and 4 lengths and can be combined to obtain the required installation height. Because of the socket/spigot joint and for extra strength each length has an effective length 65mm shorter than shown. All lengths are supplied with a locking band.

Size	Part No.
100mm	100-CHI-L-1000
100mm	100-CHI-L-500
100mm	100-CHI-L-250
100mm	100-CHI-L-150

Size	Part No.
130mm	130-CHI-L-1000
130mm	130-CHI-L-500
130mm	130-CHI-L-250
130mm	130-CHI-L-150

Size	Part No.
150mm	100-CHI-L-1000
150mm	100-CHI-L-500
150mm	100-CHI-L-250
150mm	100-CHI-L-150



Telescopic adjustable length

The adjustable length is designed to provide adjustment between two fixed points. The length will adjust from 370mm-500mm. Required adjustment is achieved by carefully removing the excess insulation and securing with self tapping screws. This component is not loadbearing and due to onsite adjustment of the insulation it should be installed 300mm from combustibles.

Size	Part No.
100mm	100-CHI-AL
130mm	130-CHI-AL
150mm	150-CHI-AL



Inspection Length

Used to provide access for inspection or cleaning.

Size	Part No.
100mm	100-CHI-IL
130mm	130-CHI-IL
150mm	150-CHI-IL

Locking Bands



Standard Locking Bands

Standard locking bands are used to join lengths and fittings together and must be used.

A standard locking band is supplied with all insulated lengths, tees and elbows.

Size	Part No.
100mm	100-CHI-LB
130mm	130-CHI-LB
150mm	150-CHI-LB



Wide Locking Band

The wide locking band can be used when an unsupported length of up to 3 metres is required provided that there are no elbows or other fittings in the final 3 metres of the chimney and that there is a minimum of 3 metres beneath the final support.

Size	Part No.
100mm	100-CHI-WLB
130mm	130-CHI-WLB
150mm	150-CHI-WLB

Insulated Tees and Plugs



135° Tee

The 135° Tee is used at the base of a vertical chimney. Each tee is supplied with a standard locking band and a tee plug. Each plug is fitted with a 22mm drain point as standard.

Size	Part No.
100mm	100-CHI-T135
130mm	130-CHI-T135
150mm	150-CHI-T135



90° Tee

The 90° allows a horizontal connection of the chimney to the appliance. The tee plug provided allows for inspection and cleaning and is supplied with a 22mm drain point as standard.

Size	Part No.
100mm	100-CHI-T90
130mm	130-CHI-T90
150mm	150-CHI-T90

Supports



Roof Support

The roof support allows the chimney to be supported on roof joists, trussed rafters etc. The support is supplied with self tapping screws to secure to the outside skin of the chimney.

Size	Part No.
100mm	100-CHI-RS
130mm	130-CHI-RS
150mm	150-CHI-RS



Anchor Plate

The anchor plate is usually used for adapting the Seldek® Twin Wall System to 'brick built chimney'. Flexible flue liner can be attached to the single skin tail of the anchor plate.

Size	Part No.
100mm	100-CHI-AP
130mm	130-CHI-AP
150mm	150-CHI-AP



Ventilated Ceiling Support

Used as a support and a firestop and must be used where the weight of the chimney is to be taken at ceiling level.

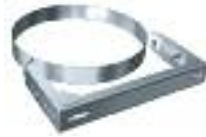
Size	Part No.
100mm	100-CHI-VCS
130mm	130-CHI-VCS
150mm	150-CHI-VCS



Adjustable Wall Support

The adjustable wall support will allow for an adjustment from 50-150mm from a vertical wall. It may be used at the base of a system or anywhere throughout its length where a support is required. Two angled brackets are supplied with the wall support and a total effective length of 160mm is incorporated into the support, top and bottom.

Size	Part No.
100mm	100-CHI-AWS
130mm	130-CHI-AWS
150mm	150-CHI-AWS



Wall Bands

The all stainless steel wall bands are used to provide lateral support where required. The bands will adjust to extend the distance between the chimney and wall surface. Two types of band are available. See chart below.

No. 1 Wall Band	
Size	Part No.
100mm-65-105	100-CHI-WB1
130mm-96-129	130-CHI-WB1
150mm-88-122	150-CHI-WB1

No. 2 Wall Band	
Size	Part No.
100mm-165-245	100-CHI-WB2
130mm-121-168	100-CHI-WB2
150mm-115-162	150-CHI-WB2

Wall bands must be installed every 4 metres

Elbows



Elbows are available in either 15°, 30° or 45° angles. They are secured to lengths or other fittings with the locking band provided.

15° Elbows	
Size	Part No.
100mm	100-CHI-E15
130mm	130-CHI-E15
150mm	150-CHI-E15

30° Elbows	
Size	Part No.
100mm	100-CHI-E30
130mm	130-CHI-E30
150mm	150-CHI-E30

45° Elbows	
Size	Part No.
100mm	100-CHI-E45
130mm	130-CHI-E45
150mm	150-CHI-E45

To determine offset dimension requirements see charts on page 6-8.

Firestop Spacers



Ventilated Firestop Spacer

Used where the chimney passes through a combustible ceiling and floor and flue gas temperatures are above 250°C typically with solid fuel or oil. This is not a load bearing component.

Size	Part No.
100mm	100-CHI-VFS
130mm	130-CHI-VFS
150mm	150-CHI-VFS



Firestop Spacer

Used on oil or gas installations where declared flue gas temperatures do not exceed 250°C and where the chimney passes through a combustible floor.

Size	Part No.
100mm	100-CHI-FS
130mm	130-CHI-FS
150mm	150-CHI-FS

Terminations



Rain Cap

The rain cap is secured with a locking band (not provided).

Size	Part No.
100mm	100-CHI-RC
130mm	130-CHI-RC
150mm	150-CHI-RC



Deflector Cowl

This cowl is suitable for use in exposed locations and improves resistance to rain ingress. For use on solid fuel or oil applications.

Size	Part No.
100mm	100-CHI-DC
130mm	130-CHI-DC
150mm	150-CHI-DC



End Cap

The end cap may be used to close the end of the chimney where the insulation is exposed, for example where a single skin termination such as a vidette cowl is required.

Size	Part No.
100mm	100-CHI-EC
130mm	130-CHI-EC
150mm	150-CHI-EC



Storm Collar

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

NOTE: Storm Collar is not required with Seldek flashings.

Size	Part No.
100mm	100-CHI-SCB
130mm	130-CHI-SCB
150mm	150-CHI-SCB

Accessories



Trim Plates

Trim plates are used as a cosmetic cover plate where the chimney penetrates a sloped wall or ceiling. Available in Flat, 30° or 45° angles.

Size	Flat	30	45
100mm	100-CHI-TPF	100-CHI-TP30	100-CHI-TP45
130mm	130-CHI-TPF	130-CHI-TP30	130-CHI-TP45
150mm	150-CHI-TPF	150-CHI-TP30	150-CHI-TP45



Seals

Should be used on pellet and condensing appliances.

Size	Part No.
100mm	100-CHI-SE
130mm	130-CHI-SE
150mm	150-CHI-SE



Flashings

The Seldek® flashing is used to form a watertight seal when the chimney penetrates a slate or tile roof. Available with a coated lead or aluminium base as shown.

Seldek® Aluminium	
Size	Part No.
100mm	SDA-101
130mm	SDA-102
150mm	SDA-103



Seldek® Nu-Lead	
Size	Part No.
100mm	SNL-101
130mm	SNL-101
150mm	SNL-103



Roof Brace Kit

A Roof Brace Kit can be used whenever there is a need to stabilise the chimney above the roof level.

Size	Part No.
Universal	STC-RBK



Wall Sleeve

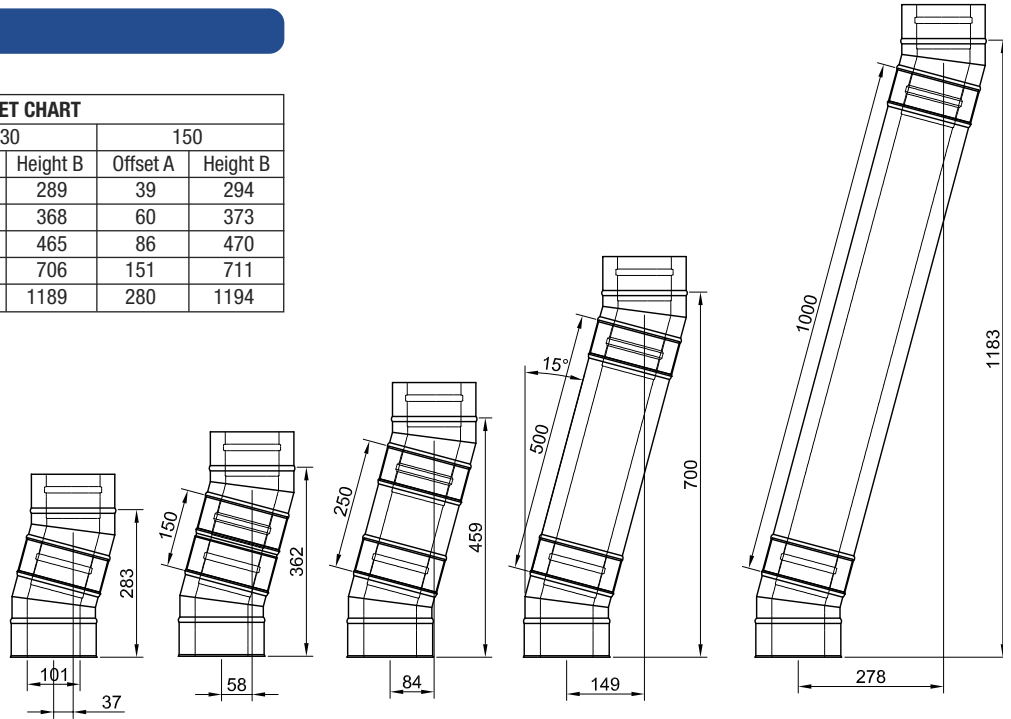
Used to allow chimney to pass through a cavity wall.

Size	Part No.
100mm	100-CHI-WS
130mm	130-CHI-WS
150mm	150-CHI-WS

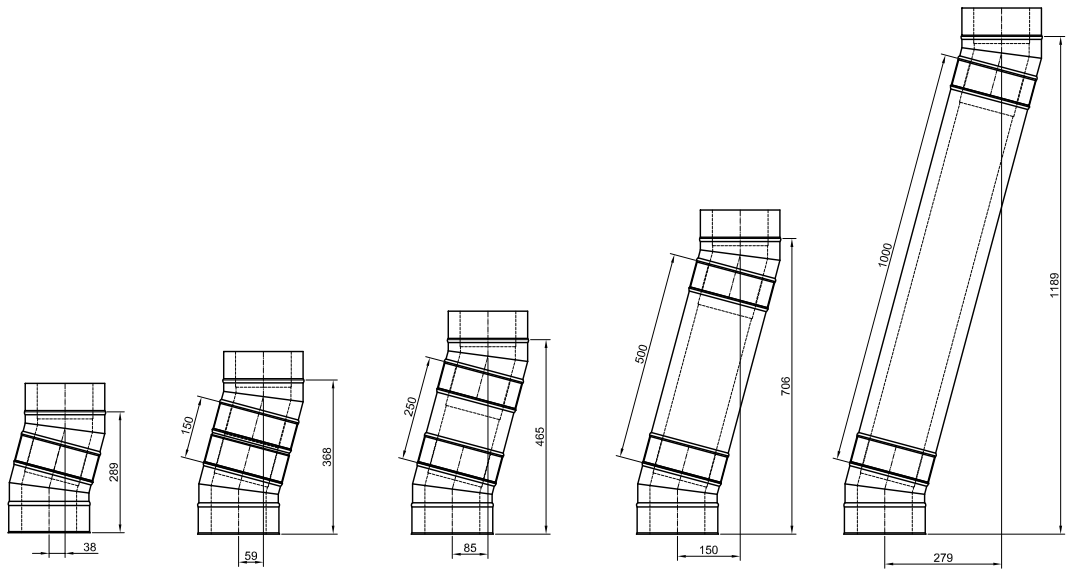
15° Elbow offset Chart

15° ELBOWS OFFSET CHART						
Chimney lengths	100		130		150	
	Offset A	Height B	Offset A	Height B	Offset A	Height B
none	37	283	38	289	39	294
150	58	362	59	368	60	373
250	84	459	85	465	86	470
500	149	700	150	706	151	711
1000	278	1183	279	1189	280	1194

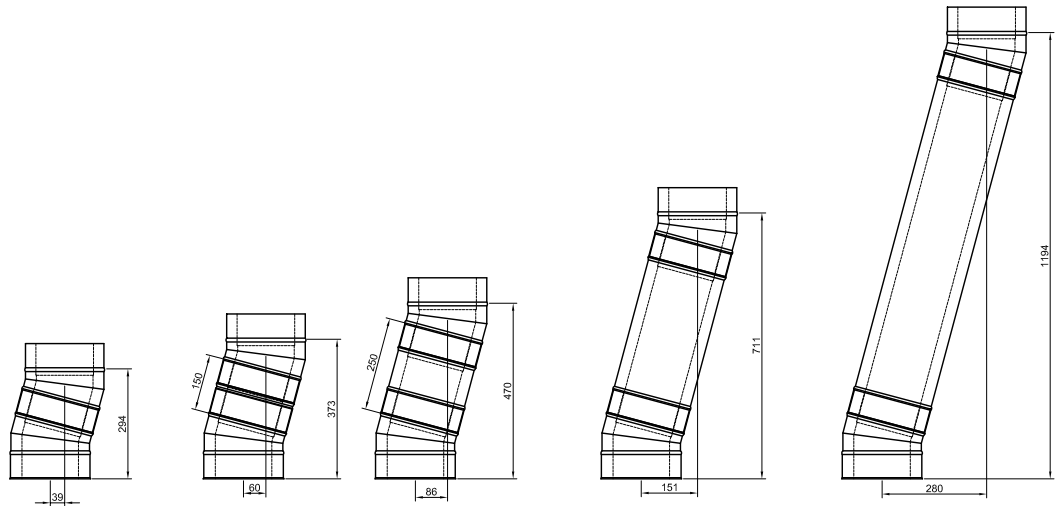
Ø100



Ø130



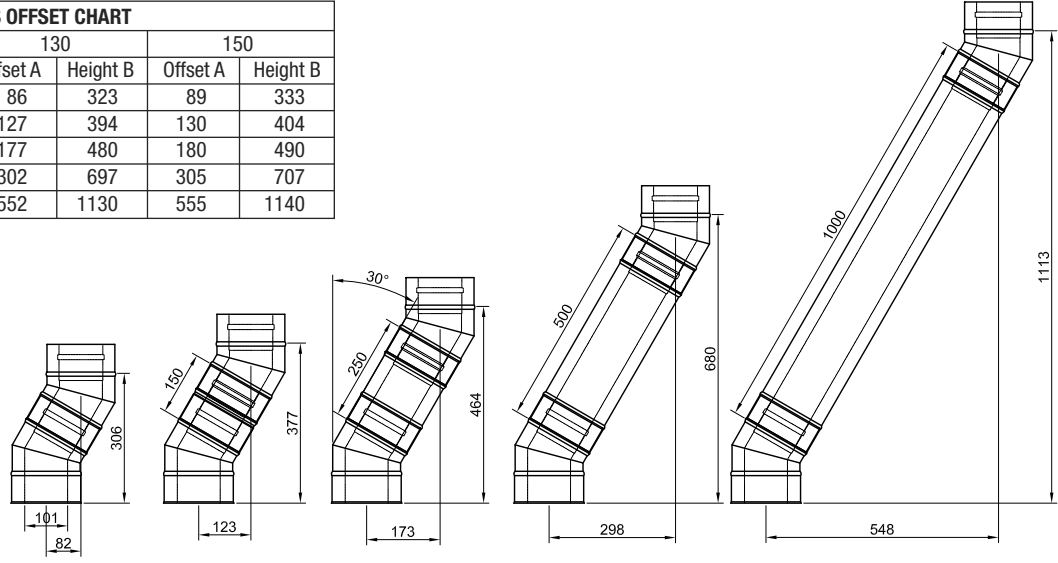
Ø150



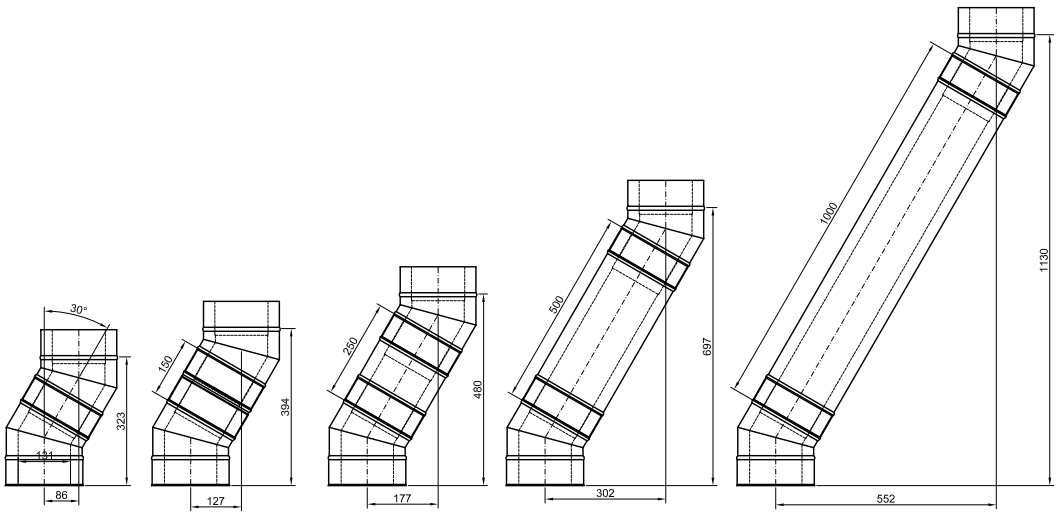
30° Elbow offset Chart

30° ELBOWS OFFSET CHART						
Chimney lengths	100		130		150	
	Offset A	Height B	Offset A	Height B	Offset A	Height B
none	82	306	86	323	89	333
150	123	377	127	394	130	404
250	173	464	177	480	180	490
500	298	680	302	697	305	707
1000	548	1113	552	1130	555	1140

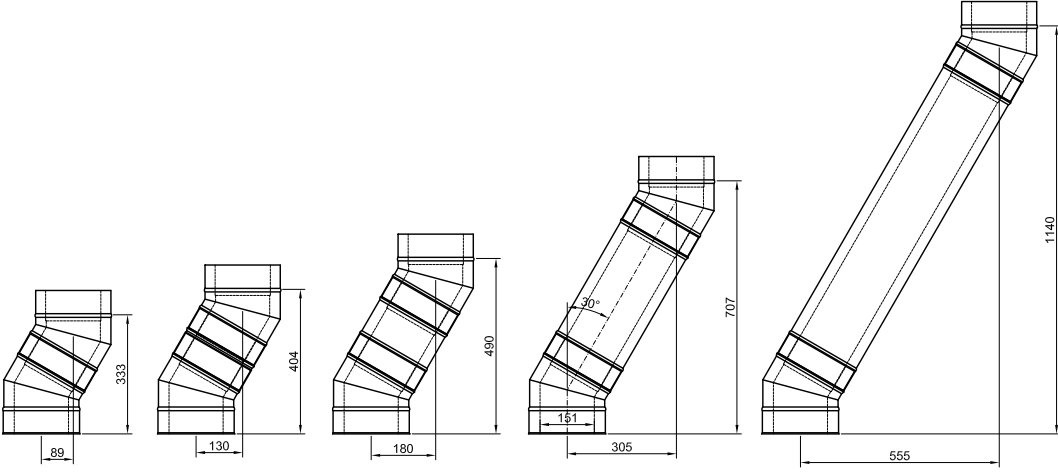
Ø100



Ø130



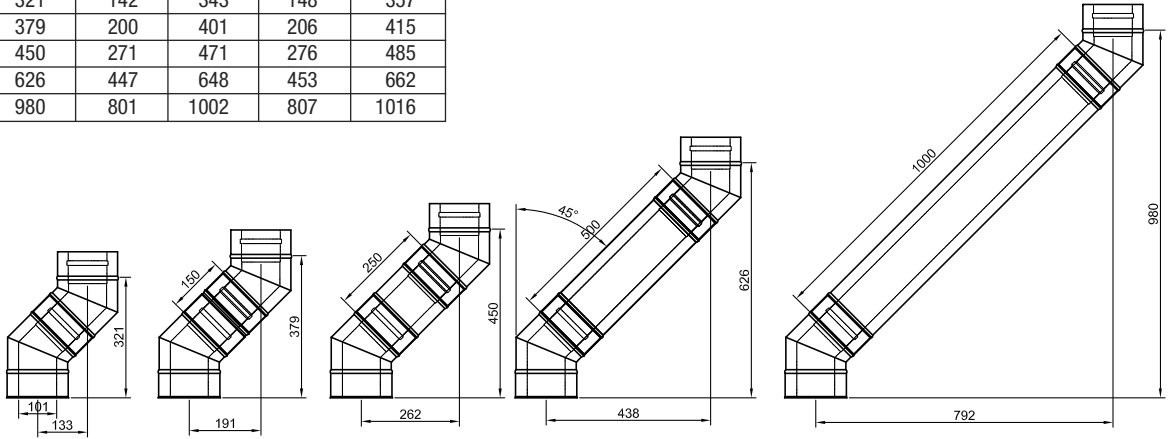
Ø150



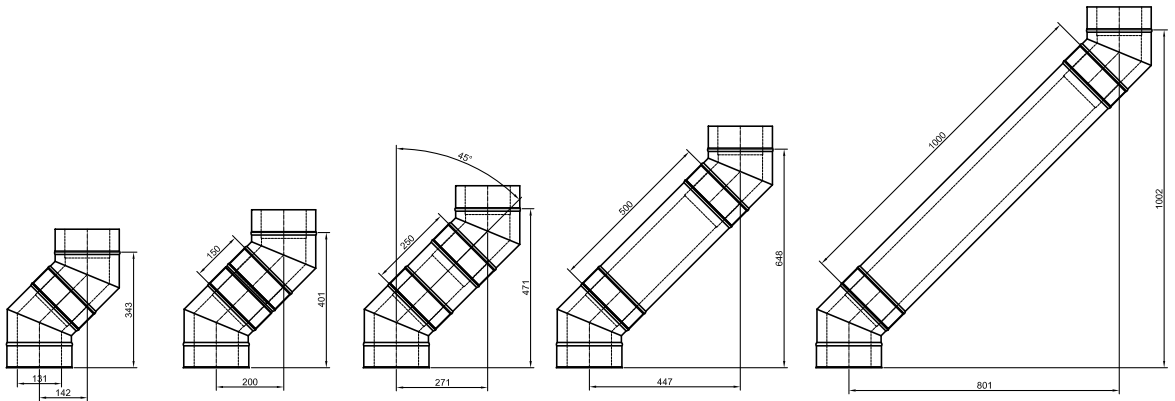
45° Elbow offset Chart

45° ELBOWS OFFSET CHART						
Chimney lengths	100		130		150	
	Offset A	Height B	Offset A	Height B	Offset A	Height B
none	133	321	142	343	148	357
150	191	379	200	401	206	415
250	262	450	271	471	276	485
500	438	626	447	648	453	662
1000	792	980	801	1002	807	1016

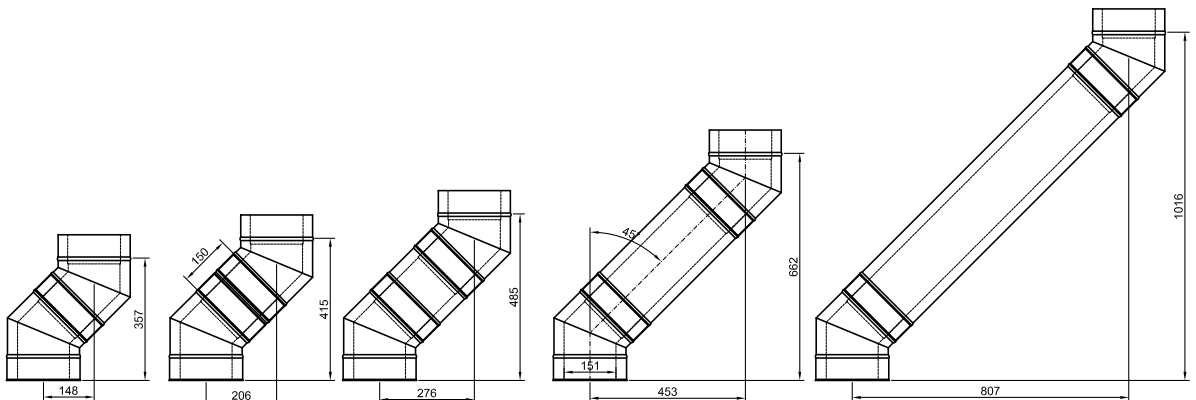
Ø100



Ø130



Ø150



General guidance for the Installation of the Seldek® Chimney System

Chimney Route and Diameter

The chimney should preferably rise vertically from the appliance to the termination outlet. However, as that is not always practical, changes of direction can be made, provided that no part of the chimney route exceeds an angle greater than 45° from the vertical. To ensure adequate performance, we recommend that any inclined sections do not exceed 20% of the total length of the chimney run. No joint between chimney sections is permitted within the thickness of a wall or floor. An exception would be where a short length and the branch of a 45° Tee connect within an external wall thickness. The use of a metal Wall Sleeve encasing the joint at this point is usually acceptable, particularly as it also eases installation and maintenance.

To prevent soot or fly ash dangerously blocking a flue ways, Building regulations will not permit any part of the flue system, including a connecting flue pipe, to run horizontally for a distance greater than 150mm. Whatever the configuration, a minimum 600mm vertical rise of the flue or chimney from the appliance outlet is advised so to avoid initial draught restriction. the appliance manufacturer may also dictate minimum requirements in this respect.

The chimney diameter should never be less than the diameter of the exit spigot on the the appliance. The appliance manufacturer's instructions may dictate a larger diameter.

Proximity to combustible materials

A minimum air gap distance of 50mm MUST be maintained from the outside surface of the chimney to any combustible material by using the dedicated supports and components provided for the Seldek® Chimney System. The use of any additional insulation to avoid this requirement can be dangerous as the heat radiation characteristics will alter. Where passing through a cupboard or roof space, an enclosure may be constructed to surround the chimney providing there is a 50mm minimum air gap clearance to any combustible material.

Building Regulations dictate that flue pipes connecting the appliance to the chimney MUST do so within the room containing the appliance. Flue pipes MUST also have their external surfaces clear of any combustible material by a minimum distance of at least three times the diameter of the flue pipe. That clearance can be halved if a heat shield is used which is at least 12mm clear of the combustible material being protected.

Support

The chimney must be adequately supported and braced using the dedicated supports and components provided for the Seldek® Chimney System and applied in accordance with the instructions provided. The full weight of the chimney must be borne by these dedicated components and no weight should be taken by the appliance it serves. The use of any other support process will result in non-compliance with Building Regulations and the Seldek® Chimney's approval status.

Combustion Air Provision

Building Regulations require that all combustion appliances with an output exceeding 5KW are provided with a permanent dedicated opening through which air for combustion can freely pass. It is incumbent on the chimney and appliance installer to check with current legislation to ensure that the requirements are met. Failure to provide combustion air is not only dangerous, its inadequate provision can, via the process of incomplete combustion, result in excessive soot production and subsequent operation and maintenance problems.

Maintenance Facilities

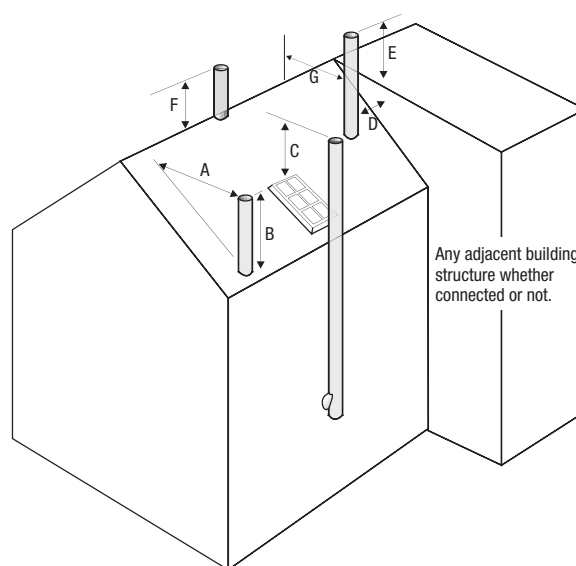
Provision must be made for cleaning and maintenance of the flue pipe and the chimney. An inspection length or the insulated Tee Plug provide access as would access cover plates in connecting flue pipes.

Flue termination requirements for solid fuel and wood burning appliances

The table and illustration below detail the minimum requirements for termination as required by building regulations. In each case, "termination" refers to the point at the top of the chimney flue outlet from which products of combustion are discharged from the flue. Any rain cap or other termination device is not included. It must be stressed that these are minimum discharge heights and relate to safety relative to potential human or fire hazard. The discharge requirements do not guarantee that the chimney will perform as required. There are many other factors which can have a detrimental impact on the way the chimney performs. Taller nearby structures - buildings and trees, local topography and even other operating chimneys in the same building can all influence and sometimes interfere with the way a chimney operates.

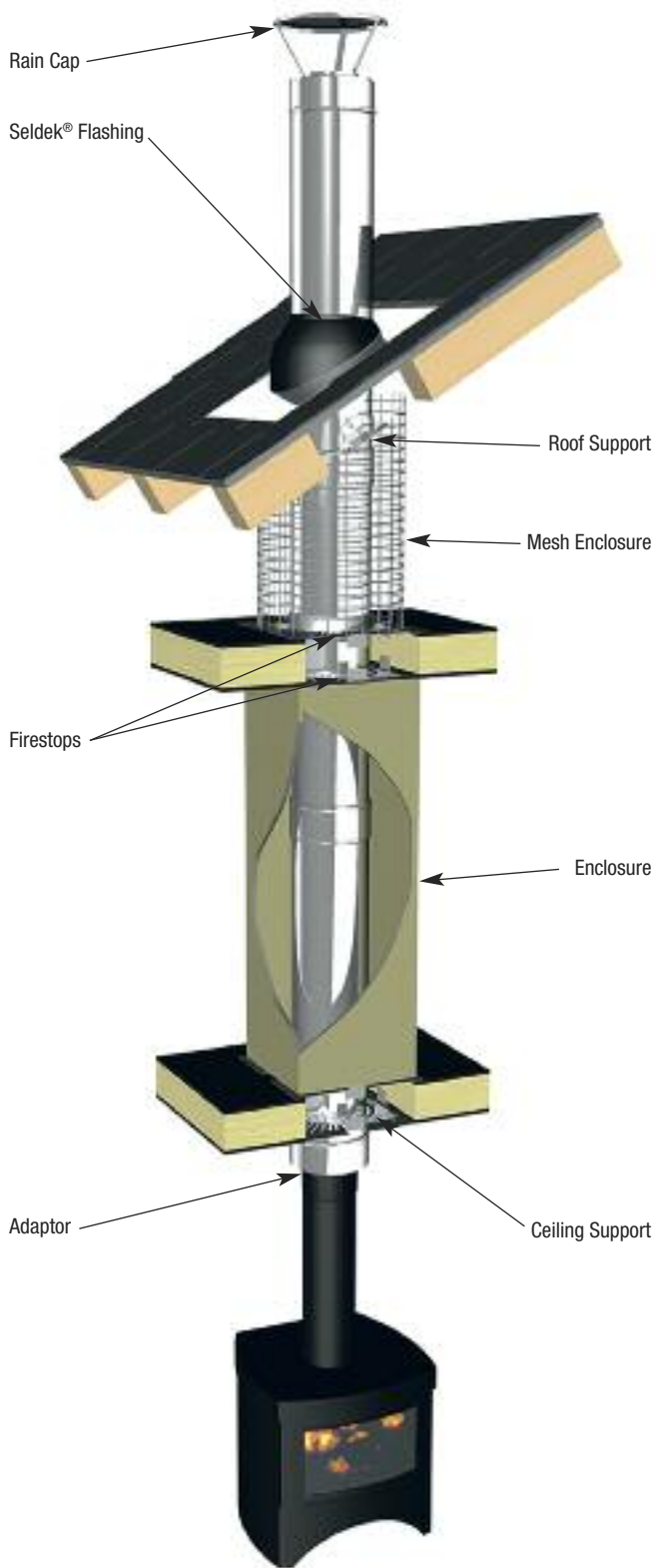
Notification Plate

On completion of the installation, Building Regulations require that a "Notice plate for hearths and flues" must be completed and dated and be permanently "fixed" in the building in a convenient location where it can be seen by interested persons relative to flue/appliance suitability and maintenance. Close to service meter or the heating appliance is considered to be a convenient location. **Deks can provide notice plates on request.**

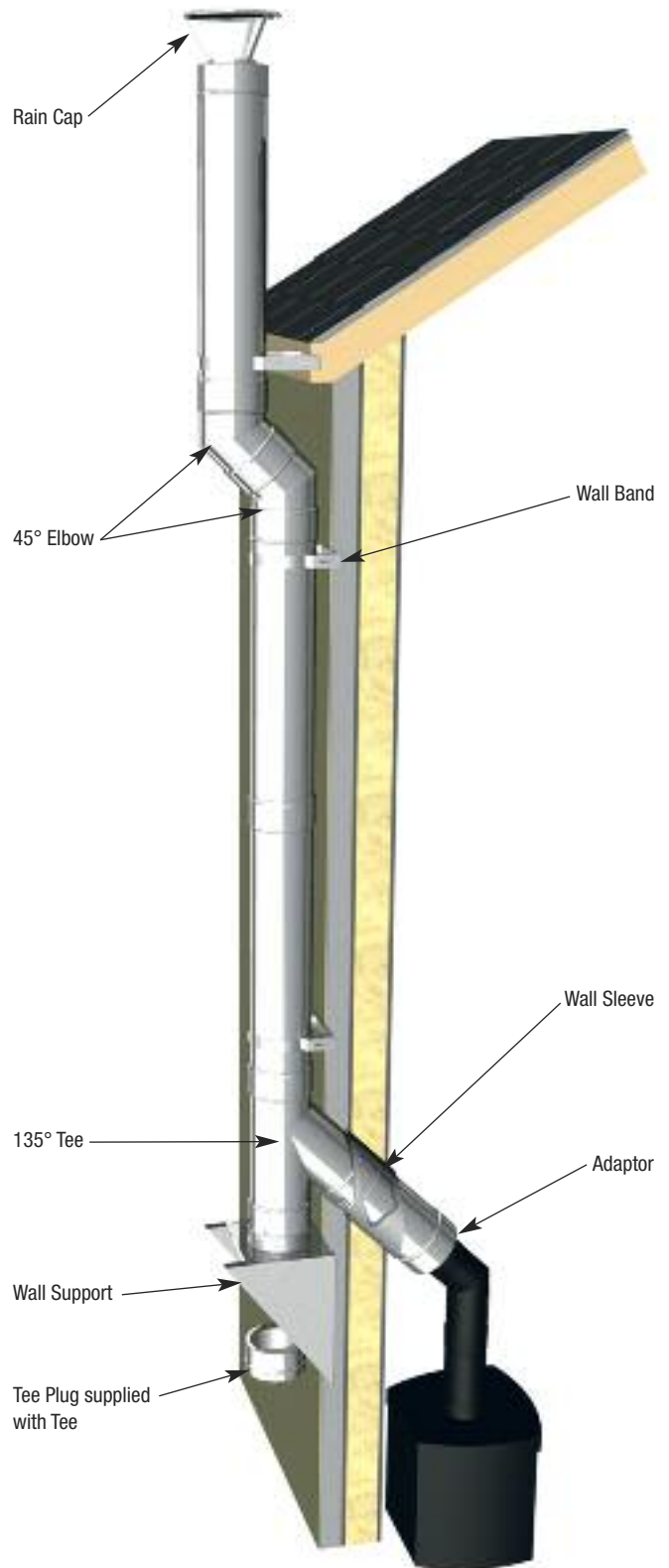


Distance	Minimum distance measured from the top of the chimney construction, excluding any pot or terminal.
A	2.3 metres horizontally clear of the roof surface, eg. if the roof pitch is 45°, then the chimney should project 2.3 metres above it.
B	1 metre, provided A is satisfied, or 600mm above the ridge if G is less than 600mm.
C	1 metre above the top of any flat roof, and top of any openable roof light, former window or ventilator, etc., if it is located within 2.3 metres.
D/E	If D is less than 2.3 metres, E shall be not less than 600mm.
F	600mm above the ridge.

Typical Internal Application

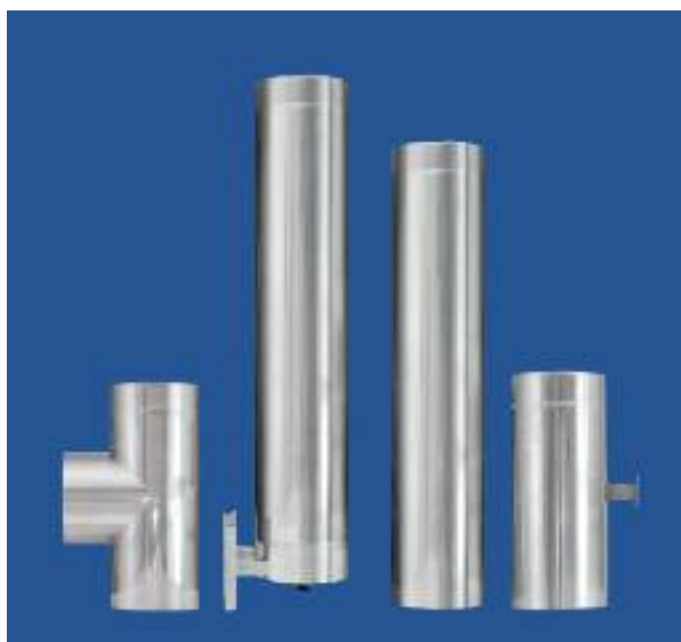


Typical External Application



DESIGN YOUR SYSTEM HERE





Zen - The ultimate in
chimney design
Call Deks for more details

October 2012 S-TWC
UK

Deks UK, West End Trading Estate, Blackfriars Road, Nailsea, Bristol BS48 4DJ
Tel: 01275 858866 Fax: 01275 855887 sales@deks.co.uk www.deks.co.uk
© 2006 DEKS Industries Pty Ltd A Skellerup Industries Company
© Dekite and DEKS are registered trademarks of DEKS Industries Pty Ltd

DEKS
A Skellerup Industries Company
01275 858866
sales@deks.co.uk