

**SCHIEDEL**

Ceramic



# The Schiedel Ceramic Range:

Chimney Systems & Liners



  
**MONIER**

JUNE 2008

# What does Document L mean for you?

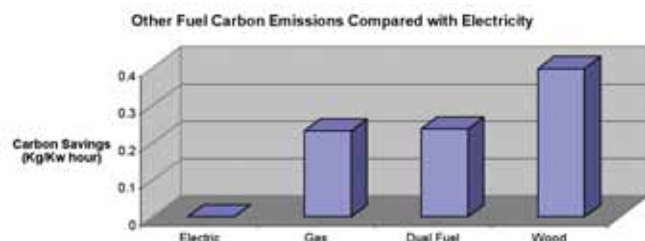
In the drive for more efficient homes the latest revision of the Document L building regulation means that all new build developments must comply with stringent new rules, aimed at reducing carbon emissions from houses by 20%. By choosing an appropriate secondary heating appliance and an efficient chimney/flue system, you can help meet the Government's target without compromising on the cosy focal point that truly makes a house a home.



## Lower your carbon count

Document L assumes two types of heating – primary central heating and secondary heating from room heaters. The SAP calculation used to determine the carbon emissions assumes the secondary heating to be electric.

Electricity is a more carbon intensive energy source than wood, dual fuel (a mix of wood and solid fuel), gas or oil. This assumption gives you the opportunity to make a carbon saving by substituting electric with another fuel and an efficient appliance, open or glass fronted. By using a carbon efficient secondary heat source you can gain carbon credits to offset against other aspects of construction like insulation or glazing.



## Chimney specification

The carbon saving can be increased further by using a chimney that has a diameter of less than 200mm or building in a damper, as this halves the assumed air flow in the chimney. Most modern appliances can work efficiently with a properly insulated chimney of less than 200mm. It is important to note that there is no benefit in using a flueless appliance, as the air flow will be assumed to be the same as a 200mm chimney.

## Choosing your appliance at the planning stage is now crucial

Both primary and secondary heating **MUST** be specified at the design stage if the required carbon savings are to be realised. This is a big change in our thinking as the choice of appliance would usually have been left until building was complete or the house occupied. If the choice is not made before the build, the SAP programme will default to the worst case scenario.

With Schiedel you can be energy efficient and enjoy a real fire. The combination of advanced chimney technology and efficient wood burning appliances can give you the best of both worlds - an energy efficient home and the enjoyment of a real fire.

The Schiedel Energy Efficient solutions are designed to work with modern efficient appliances. The superior insulation in the chimney allows flue gases to escape freely to the atmosphere even at low temperatures.

# The Schiedel Ceramic Range

Schiedel Chimney Systems is the leading supplier of chimney systems in Europe and in the UK. The Schiedel Ceramic Range consists of:

### Ceramic Chimney Systems

The Schiedel Swift chimney systems are designed for speed and ease of construction. Their consistent insulation properties mean that they keep the flue gases warm allowing them to escape to the atmosphere even at low temperatures.

The systems are also designed to work with more efficient appliances, completing an energy efficient solution. The systems have BBA and Irish Agreement approval.



### Ceramic liners

Schiedel ceramic liner systems are available with round and square liners in a range of diameters. The diameter of the liner is determined by the outlet pipe of the appliance or by the cross sectioned area of the fire opening.

For an open fire a liner system will consist of a fire back, lintel or throating unit, liners, possibly bends, insulation and a chimney pot. A high temperature sealant should be used to seal the liners in place.

Each of the chimney systems on the following pages detail the components required.

Schiedel ceramic flue liners are manufactured in accordance with BSEN1457:1999 and comply with the requirements of Document J of the building regulations.

The liners are classified as A1N1 meaning that the liners will function at a nominal working temperature of 600°C and withstand a flash temperature of 1000°C for 10 minutes. N1 indicates that they are suitable in condensing and non-condensing chimneys.



### Notice Plate & Checklist

Document J requires that the chimney installer complete an installation check list and leave a permanent notice plate detailing the type of chimney and uses to which it can be put. To make life easier Schiedel has created a check list and notice plate pack.

Important Safety Information	
This plate must not be removed or covered	
1. Property address	
2. The hearth and chimney located in the	
3. Fuel suitable for	<input type="checkbox"/> Solid fuel <input type="checkbox"/> Wood <input type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> AC
4. Type of appliance	
5. (a) Type of chimney liner	5. (b) Internal flue size
<input type="checkbox"/> Clay (BS EN 12457-1) <input type="checkbox"/> Cast Iron (BS EN 12457-2) <input type="checkbox"/> Stainless Steel (BS EN 12457-3) <input type="checkbox"/> Aluminium (BS EN 12457-4) <input type="checkbox"/> Other	<input type="checkbox"/> Circular Size <input type="checkbox"/> Square Size <input type="checkbox"/> Rectangular Size <input type="checkbox"/> Twin Wall Flue 125mm dia
Suitable for condensing appliance	<input type="checkbox"/> Yes <input type="checkbox"/> No
Installation date	
Installed by	
Other information	
<small>Schiedel Chimney Systems accepts that plate fix it to the installer is responsible to ensure the correct chimney system, the correct size and use of fuel has been used and the installation complies with the Building Regulations in force at the time of installation.</small>	

# The Schiedel Chimney System

Traditionally, chimneys are completely constructed on site with separate components supplied by different manufacturers. This process is labour intensive and makes it difficult to ensure consistent insulation. By contrast the Schiedel Swift offers modular, prefabricated units to speed construction and facilitate consistent quality standards.



The purpose of a chimney is to safely convey the products of combustion to the atmosphere. The key to achieving this and a well performing chimney is consistent insulation along the height of the chimney. This is where the Schiedel 3 layer chimney concept comes in. The rock wool insulation provides consistent insulation from the fire chamber to the chimney pot.

## The concept involves a modular 3-layer insulated chimney system:

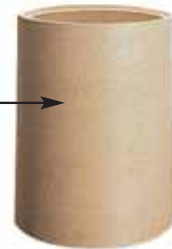
- **1st Layer:**  
a high quality flue liner, made of fireclay, tested to EN1457.
- **2nd Layer:**  
a flexible insulation board designed to maintain the temperature of the flue gases and allow them to pass freely up the chimney. It also allows the flue liner to expand and contract without damage.
- **3rd Layer:**  
a lightweight chimney block which safely encases the whole system and provides additional insulation.

## Bends & Offsets

It is recommended that a chimney be constructed as a straight chimney. Where a bend is required, for example to move the chimney into a corner in the first floor, a Schiedel Swift bend kit can be used. There are two types of bend kit - standard bend kits that can be used anywhere in the construction but require additional support, or breast bend kits that are supported within the chimney breast.

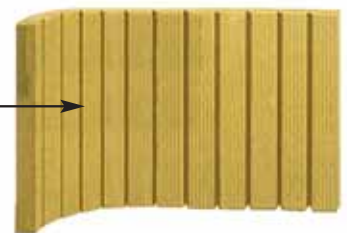
### 1st Layer

Quality flue liner



### 2nd Layer

Flexible insulation



### 3rd Layer

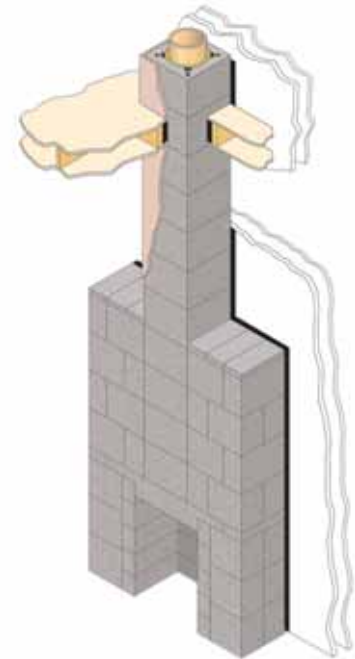
Lightweight chimney block



# Schiedel Swift

### Key features:

- Designed for speed of construction –
- Suitable for Timber Frame, Steel Frame & Masonry construction Solutions have been specifically designed to meet the requirement of timber framed construction.
- Modular units for easy assembly on site.
- Suitable for all fuels - gas, oil, wood & solid fuels.
- A high temperature ceramic sealant is provided in tubes for ease of application.
- Superior Insulation –  
The consistency of the insulation maintains the temperature of the flue gases allowing them to pass freely up the chimney. Back filling of insulation is not required.
- The use of a chimney tray is always recommended.
- The high quality fireclay flue liner complies with the European Standard EN1457.



Internal Open Fire

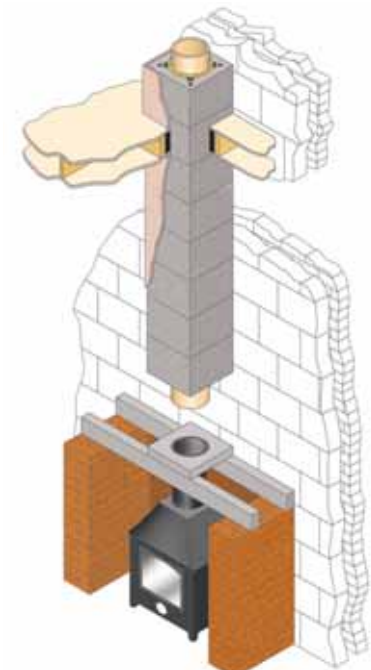
### Schiedel Swift Kits

Order and delivery of the Schiedel Swift couldn't be easier. All the materials needed to construct the chimney from the base to the chimney pot are supplied as part of the kit. This includes the blocks for the chimney breast and lintel in the open fire option.

Each system consists of a base pallet, referred to by the name of the system and an extension pack to achieve the required height of chimney.

For example, the kit for a standard 8m open fire chimney comes as a 3m base pallet and a 5m extension pack. A stove base pallet contains a 6m chimney.

Simply choose the type of chimney required and specify the height.



Stove

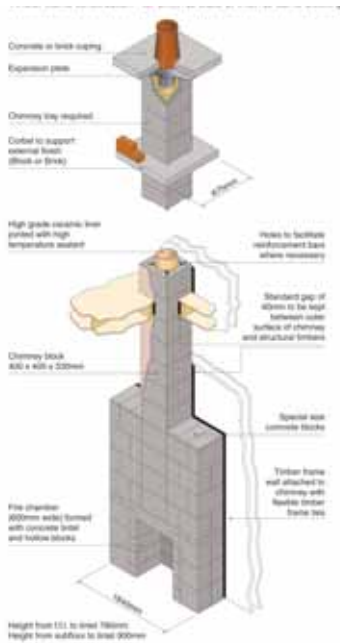


Extension pack



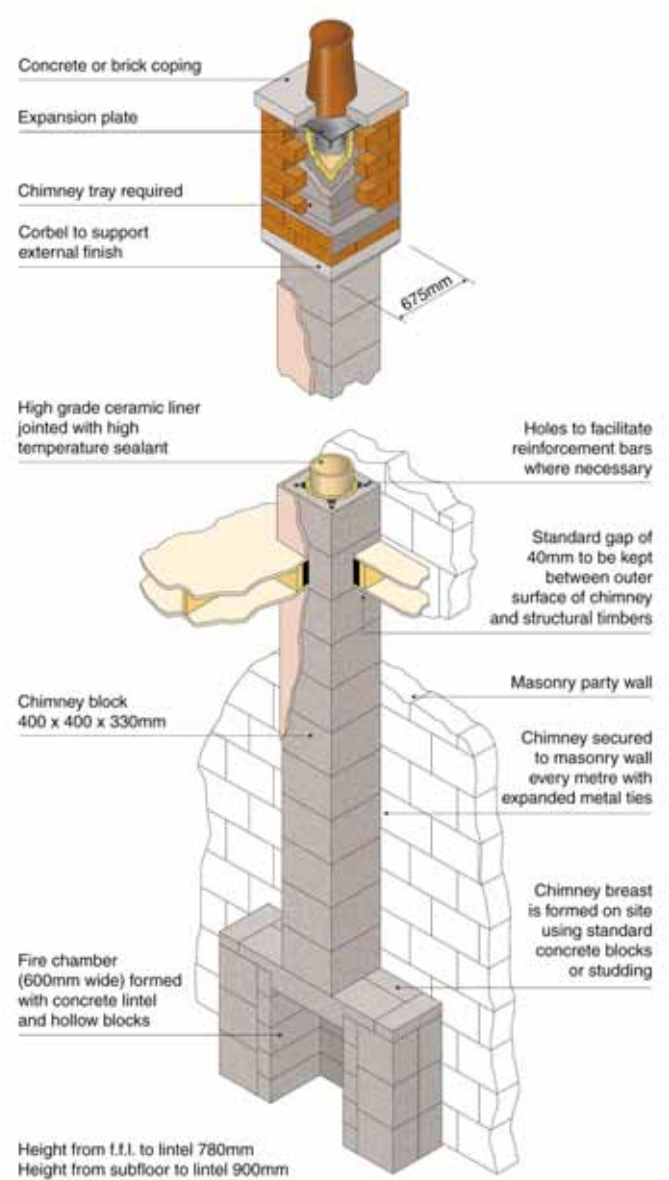
Base pallet

# Schiedel Swift Options



## Internal Open Fire

Internal Swift - Single chimney for timber frame, steel frame or masonry constructions. Available with a Corbel for 3 brick wide (675mm) brick or rendered stack or as a Plain Swift without the corbel (stack 400mm square).

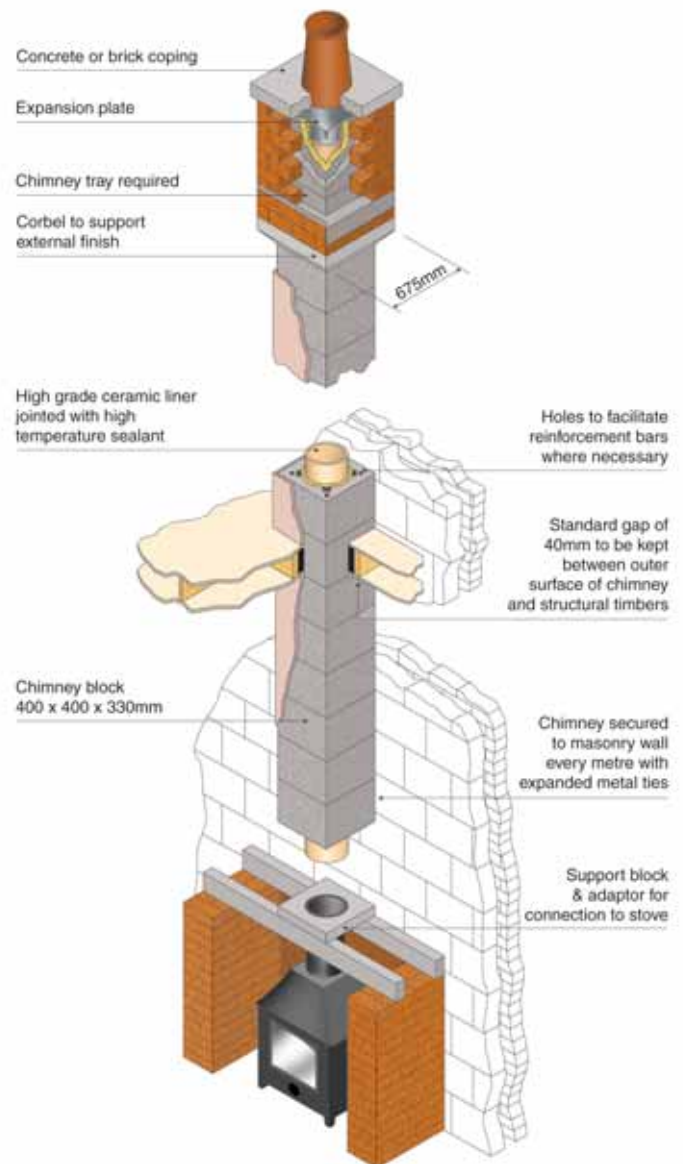
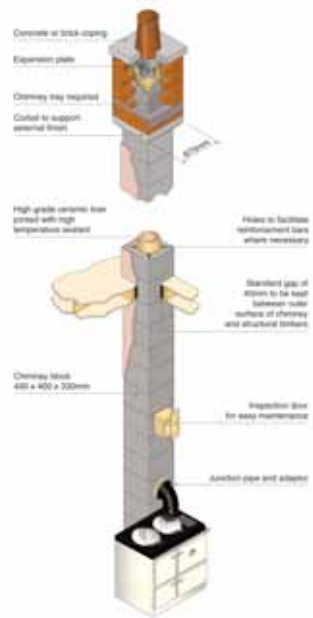


## External Open Fire

External Swift - Suitable for a single chimney where the chimney is on the outside of the building. A bend kit can be used to tumble in on one side.

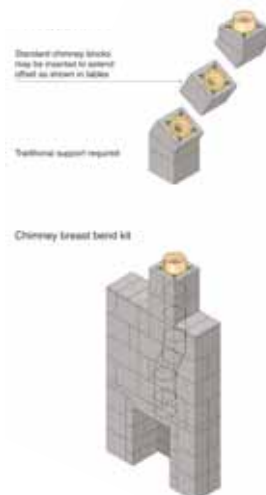
## Traditional Open Fire

Schiedel Swift offers modular, prefabricated units to speed construction and facilitate consistent quality standards. Form the firechest and chimney breast as normal, then use the traditional swift kit to build the chimney. All the chimney components from the lintel to the chimney pot are in the kit.



### Cooker

Chimney system for range style cookers. The system contains a special junction pipe and adaptor to simplify the connection of the cooker outlet to the chimney. An inspection door can be added as an accessory if desired. The same stack options are available as the open fire.



### Bend Kits (Two bend kits are available)

The Breast Bend Kit allows the flue to be moved from 200mm - 400mm in the chimney breast.

The Standard Bend Kit allows the flue to be moved horizontally as far as required, so long as it is supported in the traditional manner.

### Stove

Chimney system to suit oil and solid fuel stoves. As the height of the stove recess depends on the room style and the size of the appliance the stove system starts with the lintels. The system incorporates a starter unit to connect with the outlet pipe of the stove. The same stack options are available as the open fire.

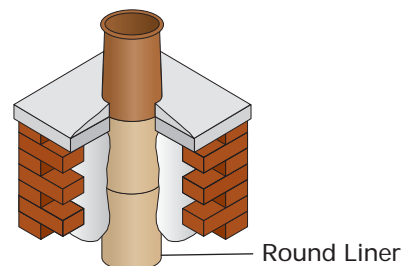
# Circular Ceramic Flue Liners

Manufactured to EN1457: 1999 Clay Ceramic Flue Liners - A1 N1 CE

## 150mm Round Liner System

Suitable for use with closed appliances with a flue outlet not exceeding 150mm internal diameter.

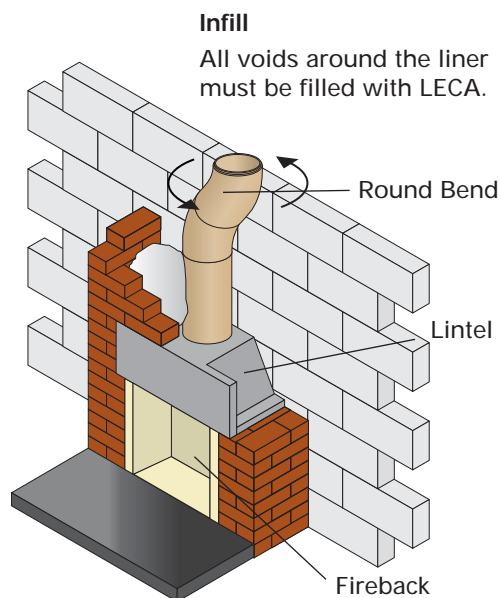
Code	Description	Pallet Pack
A03	400 High x 150mm id Liner	147
B03	22.5° x 150mm id Bends	75
B40	30° x 150mm id Bends	75
B05	37.5° x 150mm id Bends	75



## 180mm Round Liner System

Suitable for use with closed appliances with a larger outlet up to 180mm internal diameter.

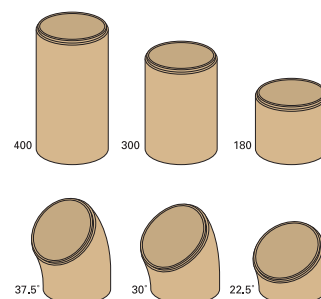
Code	Description	Pallet Pack
CR14	Gather - 800w x 440d x 215mm h Max Clear Span 600mm	-
A04	400 High x 180mm id Liner	90
B21	22.5° x 180mm id Bends	52
B41	30° x 180mm id Bends	52
B22	37.5° x 180mm id Bends	52



## 200mm Round Liner System

Suitable for use with large closed appliances and open fires with a fire opening of 450mm wide x 550 mm high.

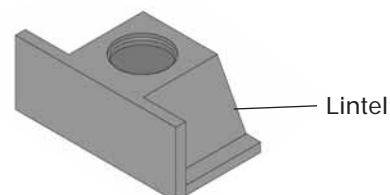
Code	Description	Pallet Pack
CS + R15	Gather - 800w x 440d x 215mm h Max Clear Span 600mm	-
A05	400 High x 200mm id Liner	90
A30	180 High x 200mm id Liner	90
B08	22.5° x 200mm id Bends	52
B42	30° x 200mm id Bends	52
B10	37.5° x 200mm id Bends	52



## 225mm Round Liner System

Suitable for large closed appliances and open fires with a fire opening of 450mm wide x 550 mm high.

Code	Description	Pallet Pack
CR16	Gather - 800w x 440d x 215mm h Max Clear Span 600mm	-
A06	400 High x 225mm id Liner	90
A31	180 High x 225mm id Liner	90
B19	22.5° x 225mm id Bends	52
B43	30° x 225mm id Bends	52
B20	37.5° x 225mm id Bends	52



### 250mm Round Liner System

Suitable for use with fire opening 600mm wide x 550mm high.

Code	Description	Pallet Pack
CR17	Gather - 1000w x 550d x 300mm h Max Clear Span 800mm	-
A07	300 High x 250mm id Liner	80
A32	180 High x 250mm id Liner	80
B18	22.5° x 250mm id Bends	31
B44	30° x 250mm id Bends	31
B23	37.5° x 250mm id Bends	31

### 300mm Round Components

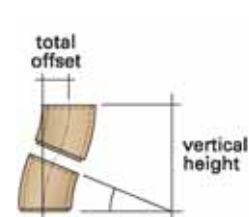
Suitable for use with fire opening 800mm wide x 600mm high.

Code	Description	Pallet Pack
CR18	1000w x 550 x 300mm h Max Clear Span 800mm	-
A08	300 High x 250mm id Liner	48
A33	180 High x 250mm id Liner	48
B12	22.5° x 300mm id Bends	20
B45	30° x 300mm id Bends	20
B24	37.5° x 300mm id Bends	20

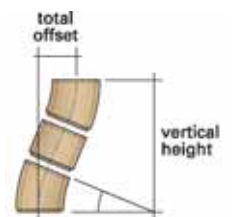
### Offset Table for 150, 180, 200, 225 and 250mm id Round Ceramic Bends

Total Offset (mm)	Bends			Straight Lengths		Combined Height
	22.5	30	37.5	180	400	
113	2					604
139		2				563
179	2			1		762
190			2			572
224		2		1		721
255	2			2		945
270	2				1	983
300			2	1		715
314		2		2		888
322	2			3		1111
328		2			1	915
338	2			1	1	1148
391	2			4		1277
402		2		3		1044
409			2	2		858
421	2				2	1352
422		2		1	1	1079
434			2		1	889
459	2			5		1444

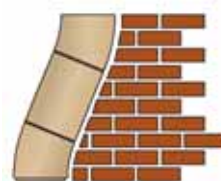
Tolerance of ±10mm



Offset with 2 bends



Offset with bends and liner



#### Supporting an Offset

The bends and liners that make up an offset must be supported adequately

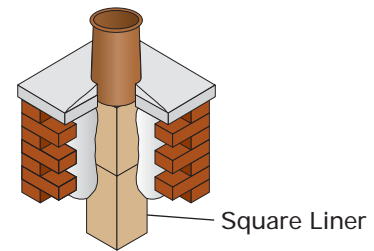
# Square Ceramic Flue Liners

Manufactured to EN1457: 1999 Clay Ceramic Flue Liners - A1 N1 CE

## 180 x 180mm Square Liner System

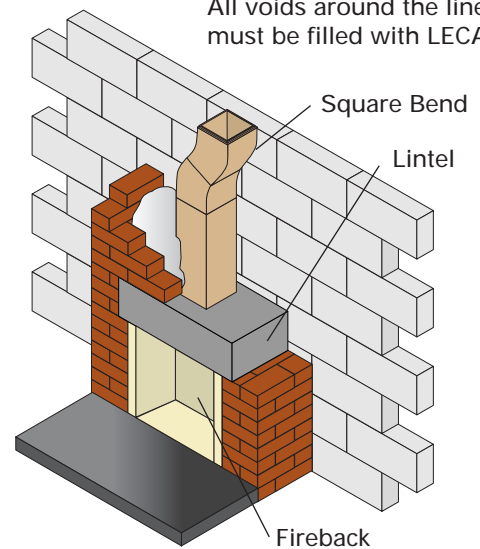
Suitable for use with fire openings  
450mm wide x 550mm high

Code	Description	Pallet Pack
CS14	Gather - 800w x 440d x 215mm h Max Clear Span 600mm	-
A16	500 High x 180 x 180mm int Liner	56
A24	300 High x 180 x 180mm int Liner	56
A20	180 High x 180 x 180mm int Liner	56
B46	22.5° x 180 x 180mm int Bends	26
B35	30° x 180 x 180mm int Bends	26
B28	37.5° x 180 x 180mm int Bends	26



### Infill

All voids around the liner must be filled with LECA.



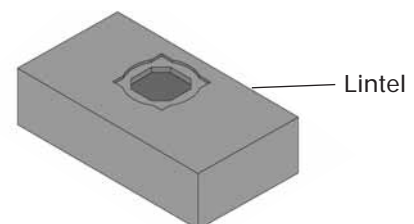
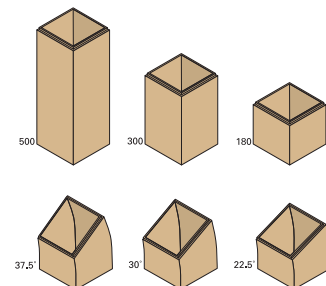
## 200 x 200mm Square Liner System

Suitable for use with fire openings 500mm wide  
x 550mm high

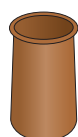
Code	Description	Pallet Pack
CS+R15	Gather - 800w x 440d x 215mm h Max Clear Span 600mm	-
A17	500 High x 200 x 200mm int Liner	56
A25	300 High x 200 x 200mm int Liner	56
A21	180 High x 200 x 200mm int Liner	56
B25	22.5° x 200 x 200mm int Bends	26
B36	30° x 200 x 200mm int Bends	26
B29	37.5° x 200 x 200mm int Bends	26

## Offset Table for 180, 200mm Square Ceramic Bends

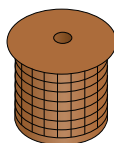
Total Offset (mm)	Bends			Straight Lengths			Combined Height
	22.5	30	37.5	180	300	500	
86	2						435
155	2			1			599
169		2					631
201	2				1		709
225			2				664
259		2		1			786
270	2			1	1		873
278	2					1	897
334			2	1			806
349		2		2			941
385	2			1	2		1147
407			2		1		901
419		2				1	1064
447			2	2			882
507			2	1	1		1043
530			2			1	1064



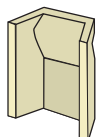
### Ceramic Chimney Pots & Accessories



Product Code	Description
<b>TERRACOTTA CHIMNEY POTS</b>	
CP150	150mm i/d 450mm high roll top
CP200	200mm i/d 450mm high roll top
CP220	225mm i/d 300mm high roll top
CP225	225mm i/d 450mm high roll top
CP250	250mm i/d 450mm high roll top
CP300	300mm i/d 450mm high roll top
CP350	350mm i/d 450mm high roll top
CP400	400mm i/d 450mm high roll top
CPS200	450mm high roll top with 200mm square base



<b>CHIMNEY TOP GUARDS</b>	
RGC1	Chimney Topguard Buff 150-250mm i/d
RGT1	Chimney Topguard Terracotta 150-250mm i/d
RGTL300	Chimney Topguard Terracotta 300mm i/d
RGTL350	Chimney Topguard Terracotta 350mm i/d



<b>FIRECHEST &amp; GATHERS</b>	
FB450	450mm milner scored clay fireback

50301	50 litre Leca (0.05m <sup>3</sup> )
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C Plate	Chimney data plate
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Pellet	Smoke Pellets (6per tube)
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### Isokern Products

Isokern Chimney Systems are made with volcanic pumice, a natural product that is also a natural insulator.



### The Schiedel Swift Chimney System

The Schiedel Swift Chimney System combines speed and ease of assembly with consistently high insulation properties.



### Ceramic liners

Schiedel also offers a competitive range of ceramic flue liners & accessories.



### Gas Flue Block System

The Schiedel Gas Flue Block System provides the solution for living flame gas effect fires when space is an issue.



### Rite Vent Steel Chimneys

Schiedel Rite-Vent is a comprehensive range of twin wall, single wall and flexible steel flues.

visit [www.schiedel.co.uk](http://www.schiedel.co.uk) for more information

**Schiedel Isokern**  
14 Haviland Road  
Ferndown Industrial Estate  
Wimborne, Dorset, BH21 7RF

**Phone:** 01202 861650  
**Fax:** 01202 861632  
**Web:** [www.schiedel.co.uk](http://www.schiedel.co.uk)  
**E-mail:** [sales@isokern.co.uk](mailto:sales@isokern.co.uk)