### Flueing Options & Accessories

#### Twin Flue Options

**L = L1+ L2**

- Maximum available combined flue length (L1 air inlet and L2 flue outlet), measured from top of boiler (not including terminals).
- Maximum flue length is 40m (L1+ L2) plus terminals.
- For each 90° or 2 x 45° bends fitted the maximum flue length must be reduced by 1m.
- Air inlet and flue outlet terminals must be installed so that they are exposed to external air.
- The flue outlet must be above the air inlet if mounted vertically.
- Horizontal sections must have a continuous fall of at least 2.5% (44mm/metre) back to the boiler.
- The minimum distance between flue and air terminals is 120mm (between terminal centres).

#### Twin Flue Adaptor

<table>
<thead>
<tr>
<th>Model</th>
<th>Description of Parts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultraflow 100sxi</td>
<td>Vertical Flue Terminal</td>
<td>A20111000</td>
</tr>
<tr>
<td>Ultraflow 100sxi</td>
<td>Twin Flue Adaptor</td>
<td>A20110000</td>
</tr>
<tr>
<td>Ultraflow 170sxi</td>
<td>Twin Flue Adaptor</td>
<td>A20111000</td>
</tr>
<tr>
<td>Ultraflow 274sxi</td>
<td>Vertical Flue Terminal</td>
<td>A20111000</td>
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<tr>
<td>Ultraflow 274sxi</td>
<td>Twin Flue Adaptor</td>
<td>A20110000</td>
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#### Option 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Description of Parts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultraflow 100sxi</td>
<td>Vertical Roof Terminal</td>
<td>2000460480</td>
</tr>
<tr>
<td>Ultraflow 170sxi</td>
<td>Vertical Roof Terminal</td>
<td>2000460480</td>
</tr>
<tr>
<td>Ultraflow 274sxi</td>
<td>Vertical Roof Terminal</td>
<td>2000460480</td>
</tr>
</tbody>
</table>

#### Option 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Description of Parts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultraflow 100sxi</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
<tr>
<td>Ultraflow 170sxi</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
<tr>
<td>Ultraflow 274sxi</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
</tbody>
</table>

#### Option 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Description of Parts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultraflow 100sxi</td>
<td>Vertical Flue Terminal</td>
<td>2000460479</td>
</tr>
<tr>
<td>Ultraflow 170sxi</td>
<td>Vertical Flue Terminal</td>
<td>2000460479</td>
</tr>
<tr>
<td>Ultraflow 274sxi</td>
<td>Vertical Flue Terminal</td>
<td>2000460479</td>
</tr>
</tbody>
</table>

#### Twin Flue Accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Description of Parts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin Flue Adapter</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
<tr>
<td>Twin Flue Adapter</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
<tr>
<td>Twin Flue Adapter</td>
<td>Vertical Flue Terminal</td>
<td>A20110000</td>
</tr>
</tbody>
</table>

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**Nottingham Road, Belper, Derbys  DE56 1JT**

Tel: (01773) 824639  Fax: (01773) 828555

www.glow-worm.co.uk
The impressive hot water performance of the Ultrapower sxi is achieved thanks to its innovative power storage system which allows the generation of endless hot water on demand.

Unlike an indirect cylinder the Ultrapower sxi heats the water stored in its cylinder directly, resulting in a much faster reheat time compared to that of a conventional indirect cylinder.

The Ultrapower sxi also utilises a much smaller hot water cylinder than a conventional system boiler, but because the boiler recharges the cylinder as the hot water is being drawn off, it means the Ultrapower sxi provides the same hot water performance as a much larger indirect cylinder.

Another major advantage is that unlike an indirect cylinder, once the hot water store of the Ultrapower sxi has been depleted the boiler operates as a normal combi, which means that the homeowner never runs out of hot water.

In addition to the impressive hot water delivery the Ultrapower sxi is very easy for the householder to use thanks to the intuitive backlit digital display, which incorporates a built in 2 channel 7 day programmer.

Fitted as standard are a built-in bypass, filling loop, 2 stage frost protection and anti seizure controls. Extensive flueing options are available, and the Ultrapower sxi is also fully compatible with both the Glow-worm Plume Management Kit and Condensate Pump.

Because the Ultrapower sxi store is heated directly the reheat time is much faster than a conventional coil cylinder.
### Dimensions & Clearances

**Dimensions (mm)**

- **131mm (100sxi)**
- **1260mm (100sxi)**
- **1591mm (170sxi)**
- **1520mm (170sxi)**

**Minimum Clearances (mm)**

- **Top:** 150 mm
- **Side:** 5 mm
- **Front:** 600 mm

### Product Specifications

#### Models

<table>
<thead>
<tr>
<th>Models</th>
<th>100sxi</th>
<th>170sxi</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Casing dimensions (H x W x D) (mm)</strong></td>
<td>1260 x 575 x 600</td>
<td>1520 x 575 x 600</td>
</tr>
<tr>
<td><strong>Weight (boiler module lift) (kg)</strong></td>
<td>50.5</td>
<td>50.5</td>
</tr>
<tr>
<td><strong>Weight (tank module lift) (kg)</strong></td>
<td>39.0</td>
<td>48.0</td>
</tr>
<tr>
<td><strong>Clearances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Top (mm)</strong></td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td><strong>Side (mm)</strong></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Front (mm)</strong></td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CH output (kW) Min/Max</strong></td>
<td>8.7 / 31.0</td>
<td>8.7 / 31.0</td>
</tr>
<tr>
<td><strong>DHW output (kW) Min/Max</strong></td>
<td>8.7 / 31.0</td>
<td>8.7 / 31.0</td>
</tr>
<tr>
<td><strong>DHW flow rate (l/min, 35° C rise)</strong></td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Volume of DHW produced (l)</strong></td>
<td>100</td>
<td>170</td>
</tr>
<tr>
<td><strong>DHW response</strong></td>
<td>5 seconds</td>
<td>5 seconds</td>
</tr>
<tr>
<td><strong>SEDBUK rating</strong></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td><strong>SEDBUK %</strong></td>
<td>91.1</td>
<td>91.1</td>
</tr>
<tr>
<td><strong>NOx class 5 (natural gas)</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Adjustable to LPG</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Main heat exchanger type</strong></td>
<td>Coiled tube</td>
<td>Coiled tube</td>
</tr>
<tr>
<td><strong>Heat exchanger material</strong></td>
<td>Stainless steel</td>
<td>Stainless steel</td>
</tr>
<tr>
<td><strong>Burner type</strong></td>
<td>Pre-mixed</td>
<td>Pre-mixed</td>
</tr>
<tr>
<td><strong>Fully modulating</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>DHW plate heat exchanger</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Integrated hydronic</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Performance Notes

- This boiler must be installed by a competent person in accordance with the rules in force in the United Kingdom.
- No secondary domestic hot water storage is needed.
- When domestic hot water is required, the heat exchanger heats the mains cold water directly, ensuring a rapid response time turning on a tap and a continuous flow of hot water.
- In areas where the water hardness is more than 200mg/L, it is recommended that a proprietary water conditioner be fitted in the cold water supply to the boiler. A non-return valve must be fitted to precede the water conditioner supply.

Visit [www.glow-worm.co.uk](http://www.glow-worm.co.uk) to view and download technical data.

#### Plume Management Kit

A specifically designed Plume Management Kit is now available from Glow-worm to solve the problem of pluming and make installing a condensing boiler easier. It is possible to use them on any and every domestic boiler site where a high efficiency boiler is installed.

### Flue Options

- **Max Horizontal Flue**
- **Max Vertical Flue**
- **Max Twin Flue**

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*This can be reduced to 5mm for a removable panel.*

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*Increase to 25mm clearance from combustible material.*

*A removable compartment door can be placed at least 5mm in front of the appliance.*
**Flueing Options & Accessories**

**Horizontal Flue Options: Top Rear**

- **L** = Flue length, measured from outside wall face to centre line of flue outlet.
- If **L** is less than 589mm then only the horizontal flue is required.
- If **L** is greater than 589mm then extensions are required. If **L** is less than 384mm then use horizontal top flue A2043400, which can be cut to suit a minimum wall thickness of 75mm.
- **X** = wall thickness.
- **Z** = distance from centre line of flue outlet to inside wall face.

The horizontal flue can be extended by up to 8m. The maximum flue length with extensions must not be exceeded (refer to **L** in table to the right).

For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m.

The vertical flue adaptor **E** is required for vertical flue connections to the boiler.

**Horizontal Flue Accessories**

- **Model**
- **Flue Length (mm)**
- **Horizontal Flue Options**
- **Vertical Flue Options**

**Vertical Flue Options**

- **L** = Flue length, measured from the top of the boiler to the underside of the roof flashing. Maximum flue length is 12m plus vertical roof terminal.
- The maximum flue length must not be exceeded (refer to **L** in table opposite).
- For each 90° or 2 x 45° bends fitted the maximum flue length must be reduced by 1m.
- Vertical flue options use the same 100mm diameter flue components as the horizontal flue options.
- The vertical flue adapter **E** is required for vertical flue connections to the boiler.

**Vertical Flue Accessories**

- **Model**
- **Flue Length (mm)**
- **Vertical Flue Options**
- **Horizontal Flue Options**

Horizontal sections must have a continuous fall of at least 2.5° (44mm/metre) back to the boiler.

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**Notes:**

- The horizontal flue can be extended by up to 8m. The maximum flue length with extensions must not be exceeded (refer to **L** in table below).
- For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m.
- The vertical flue adapter **E** is required for vertical flue connections to the boiler.

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**Horizontal Flue Options: Top Side**

- **L** = Flue length, measured from outside wall face to centre line of flue outlet.
- If **L** is less than 589mm then only the horizontal flue is required.
- If **L** is greater than 589mm then extensions are required. If **L** is less than 384mm then use horizontal top flue A2043400, which can be cut to suit a minimum wall thickness of 75mm.
- **X** = wall thickness.
- **Z** = distance from centre line of flue outlet to side of boiler.

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**Vertical Flue Options**

- **L** = Flue length, measured from the top of the boiler to the underside of the roof flashing. Maximum flue length is 12m plus vertical roof terminal.
- The maximum flue length must not be exceeded (refer to **L** in table opposite).
- For each 90° or 2 x 45° bends fitted the maximum flue length must be reduced by 1m.
- Vertical flue options use the same 100mm diameter flue components as the horizontal flue options.
- The vertical flue adapter **E** is required for vertical flue connections to the boiler.

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**Vertical Flue Accessories**

- **Model**
- **Flue Length (mm)**
- **Vertical Flue Options**
- **Horizontal Flue Options**

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**Horizontal Flue Options**

- **L** = Flue length, measured from outside wall face to centre line of flue outlet.
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- **X** = wall thickness.
- **Z** = distance from centre line of flue outlet to the side of the boiler.

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**Vertical Flue Accessories**

- **Model**
- **Flue Length (mm)**
- **Vertical Flue Options**
- **Horizontal Flue Options**

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**Notes:**

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