What is a downdraught?

A flue draught is the movement of air through a chimney or flue. This is caused by the “buoyancy” of hot gases rising up the chimney or the pressure differential between the chimney base opening and the flue terminal. Therefore the hotter the flue and gases, the more buoyancy or draw in the chimney. It is generally recommended that the chimney height should be at least 4.8 meters high (16 foot).

Adequate chimney draught is necessary to induce sufficient air for combustion through the flue and to clear the products of combustion from the appliance up the flue and disperse them into the atmosphere.

Poor draught causes

The most common cause of poor draught is a lack of air supply to the fire or appliance. This in many cases is due to a lack of free air “ventilation” to the room where the appliance is installed. The size of the room has no bearing on this; large rooms still need correct ventilation.

Appliance manufacturers generally indicate the required free air requirements in their installation instructions. Permanent room air vents should be installed in the room where the fire or appliance is positioned.

For further information refer to the Building Regulations Part J.

You can check to see if your room is properly ventilated. Open a window in the room and leave it slightly open. If the draw improves then ventilation is at least part of the problem.

Poor draught can also be caused when the fire opening is too large in relation to the chimney’s internal diameter. (Chimneys should be designed in accordance with Building Regulations).

Any mechanical extraction from a dwelling can cause down draught. Cooker hoods, fan assisted boilers, oil & gas ranges, clothes dryers, bathroom fans and air handling units are all examples of this. All of the above can cause negative pressure in a house which creates a demand for more air in a house. Air will enter a house through the route of least resistance which can often be down a chimney, bringing with it smoke and fumes - “Down draught”.

Mi-Flues Solutions

Correctly installed flues are essential. Avoid horizontal runs. Minimise the amount of offsets in a run. Improve air supply by inserting permanent air vents into the room as per the Building Regulations Part J. If you have a twin wall insulated flue check if it has been installed correctly. Refuel the appliance at intervals as recommended by appliance manufacturer guidelines.
CLAY POT CHIMNEY COWLS

H Cowl

A H Cowl is a simple yet effective solution for helping to reduce a down draught problem. It ensures the flue gases are released into the atmosphere. In non problematic weather conditions the flow of gases simply exhaust outwards through the top of both vertical uprights. However in down draught conditions the problematic down draught will enter from the top of the vertical sections of the H cowl and blow downwards towards the base where they meet the exhaust gases and exit through the base helping to reduce the chimney down draught problem.

The H Cowl is available for standard 200mm and 225mm Clay pots.

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<tr>
<th>Diameter (A)</th>
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<tr>
<td>(8”) 200mm</td>
<td>755</td>
<td>560</td>
<td>640</td>
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<tr>
<td>(9”) 225mm</td>
<td>820</td>
<td>590</td>
<td>690</td>
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8” 200mm and 9” 225mm diameters are tapered

Anti down draught cowl

An Anti down draught cowl works on the exact same principle as the H cowl. The actual H design is incorporated fully inside a cylindrical cover. It ensures the flue gases are released into the atmosphere. In non problematic weather conditions the flow of gases simply exhaust outwards through the top of the cowl hidden within a cylindrical cover. However in down draught conditions the problematic down draught will enter from the top of the unit and blow downwards towards the base where they meet the exhaust gases and exit through the base helping to reduce the chimney down draught problem. Mi-Flues Anti Down draught cowls are designed to fit inside your chimney pot. They also incorporate a stainless steel band system to further stabilize the cowl. The cowl can be easily removed when required prior to chimney cleaning.

The Anti Downdraught Cowl is available for standard 200mm and 225mm Clay pots.

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<tr>
<td>(8”) 200mm</td>
<td>372</td>
<td>150</td>
<td>158</td>
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Storm Cowl

A storm cowl is a rain cap which is used in exposed areas subject to high wind conditions. It reduces the possibility of the wind affecting the appliance. It is popular for use with wood pellet and chip applications. To install, you simply slide the base of the cowl firmly inside the chimney pot then bend the three adjustable stainless steel leg bands around the outer diameter of the chimney pot. To finish the installation simply tighten the adjustable jubilee type locking system with a screw driver. The storm cowl can be easily removed prior to chimney cleaning.

The Storm Cowl is available for standard 200mm and 225mm Clay pots.

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<tr>
<td>(9”) 225mm</td>
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Adjustable Cowl for Clay Pot

Mi-Flues Adjustable Cowl for Clay Pot is a cost effective rain cap. This cowl can also be obtained with mesh which eliminates the need for difficult unblocking of the chimney due to accumulation of nesting materials. It will not impede the performance of the chimney.

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<td>405</td>
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<tr>
<td>(9”) 225mm</td>
<td>390</td>
<td>460</td>
<td>630</td>
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Mitre Cowl

Mi-Flues Mitre cowl is designed to reduce over excessive draught on a flue or chimney system. It is not recommended to use this cowl as a simple rain cap on an adequately performing chimney. The unit is manufactured from a high quality 316 grade stainless steel and is also available in a black coloured finish. Mi-Flues Mitre cowl is designed with a quick and easy fit base and clamping section which together ensure the cowl is adequately fitted and firmly secured to the chimney pot. The Mitre cowl is available in two diameters. The first to suit the common 200mm (8") chimney pot. The second is to suit the 225mm (9") chimney pot. To install you simply slide the base of the cowl firmly inside the chimney pot then bend the three adjustable stainless steel leg bands around the outer diameter of the chimney pot. The adjustable legs ensure that the cowl is adequately fitted and securely in position. The Mitre cowl is manufactured from a high quality 316 grade stainless steel and is available in a black coloured finish. The chimney extension cowl is available to suit the common 200mm (8") and 225mm (9") chimney pot. To install you simply slide the base of the cowl firmly inside the chimney pot then bend the three adjustable stainless steel leg bands around the outer diameter of the chimney pot. The adjustable legs ensure that the chimney extension can be fitted to any of the wide range / decorative finished chimney pots on the market today.

To finish the installation simply tighten the adjustable jubilee type locking system with a screw driver. The Mitre Cowl will help increase the overall chimney draw by adding an additional metre to the existing height.

Safety / Installation / Regulations

Handling and Storage
All System 11 Cowls are individually boxed, packaged or labelled. Product should be stored in a dry suitable storage location. The product is easy to handle, but care should be taken when holding, fitting or assembling any part of the system. Users are advised to use suitable precautions such as gloves, eye/face protection, protective clothing etc to avoid injury.

Safety / Installation / Regulations

Handling and Storage

Installers should be aware of the Safety, Health and Welfare at Work Act 2005 and Safety, Health and Welfare at Work (general application) regulations 2007. Installers should be aware of the possibility of disturbing asbestos when working in older properties. This should be dealt with in accordance with the strict guidance documents. Particular attention should be taken to ensure suitable PPE is used when applying certain fireclays which can be of a caustic nature, as well as when using any other substances which may be harmful.

Cleaning / Maintenance

Adequate provision should be made for inspecting and cleaning all chimney systems. The chimney should be inspected regularly and cleaned at least twice a year, depending on usage and type of fuel used. The chimney should be maintained to ensure that the construction remains in good condition. Cowls should be removed prior to cleaning and refitted once cleaning is complete ensuring stainless steel band system is structurally secure. The cowl and stainless steel band system should be inspected after abnormal high wind conditions and after a chimney fire.

The overall height of the chimney extension is 1250mm with 190mm disappearing inside the chimney pot. Mi-Flues chimney extension is designed to increase the overall height of a pot lined masonry chimney when it is not possible to add additional masonry work due to load factors.