

INSTALLATION, SAFETY & MAINTENANCE



OTHER INSTALLATION EQUIPMENT PREFABRICATED INSULATED FIREPLACE RECESS LINERS

BASIS OF HETAS LISTING

There are often no specific technical standards for assessing the design, production or performance of this type of equipment although in some cases there may exist standards for individual components from which the equipment is built up. It is therefore often not a requirement that the equipment is CE Marked.

The HETAS listing given in this Guide is based on the manufacturer demonstrating satisfactorily that their product is safe and fit for the purpose for which it is designed. Where the item might represent an installation that deviates from conventional methods it may also be able to offer some benefit(s) over the conventional installation methods. This will normally be proven by an assessment by an independent authorized competent organisation such as a Notified Body.

In the absence of any regulatory standards for the design, production or performance of the equipment listed it is not possible for HETAS to approve it. The listing is therefore simply a recognition that the manufacturer has taken all necessary steps to ensure their product is safe and fit for its purpose when installed in accordance with their instructions. Any proven benefits provided by the use of the equipment will be indicated in the remarks column.

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
<p>Unique Stove Products Ltd 298 Queensway, Scunthorpe North Lincolnshire DN16 1BH</p>		<p>01724 282556 thestovebox@btconnect.com www.thestovebox.co.uk</p>
<p>The Stove Box</p>	<p><i>A prefabricated insulated fireplace recess liner.</i> <i>Proven benefits include:</i> <i>(1) Prevents most potential heat loss through the recess surroundings reducing this heat flux value from 86W to 11W.</i> <i>(2) Where the installation is through an outside wall The Stove Box should save the homeowner approximately 1.5% in running costs.</i> <i>(3) The Stove Box creates a change in component outputs from the stove making the radiated heat component higher in relation to the convective heat output. The overall effect created is to make the user feel more comfortable and hotter (both quicker and ultimately) than compared to a conventional installation. It should be noted that the stove box does not change the efficiency or rated heat output of the installed appliance/stove.</i></p>	
<p>AUX002</p>	<p><i>No safety assessment has been made to confirm it is safe to duct convected heat from the inside of the stove box to another room and this is not approved by HETAS.</i></p>	
<p>Approval Status; Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Assessment by Kiwa Gastec at CRE ref 60427 dated 13th June 2014.</p>		

THERMAL STORAGE CYLINDERS

INTRODUCTION

With the wide range of appliance technologies available on the market today, more and more households are currently looking at ways to best utilise multiple heat sources within domestic properties for the increased efficiency of energy usage and potential reduction in annual heating costs for the occupants. An industry recognised means to achieving this link across different heating system inputs is through the installation of a thermal storage cylinder unit, which can be used across a variety of appliance technologies including solid fuel, biomass and other low carbon renewable heating sources.

Thermal Storage cylinders are designed to link a variety of heating sources within a single property, giving a means to provide instantaneous heat on demand for the primary central heating circuit and domestic hot water, which can be delivered at mains pressure. The water within the thermal store is heated via a heat exchanger that draws the heat from the surrounding store of water, and delivers this source of heat to the dwelling at the required temperature. The flexibility they offer to operate a number of different heat sources to meet the varying household demands over the changing seasons of the year makes them a popular option for consumers.

HOT WATER ASSOCIATION (HWA)

There are currently no specific technical standards for assessing the design, production or performance of this type of heating equipment. The HWA in conjunction with HETAS have developed a technical specification detailing a set of general requirements and test methods for both direct and indirect thermal storage vessel equipment. The aim of this specification is to provide a means to test for the products safety against the relevant provisions of Part G of the UK Building Regulations and to confirm that the manufacturer responsibilities are adhered to for both its safe installation and operation. The specification covers the relevant provisions relating to safety testing, installation and operating guidance, marking and quality assurance of any internal factory production control procedures in place. Along with this set of requirements, the HWA also enforce their own set of conditions for membership, in order to ensure that hot water products are supplied in a way that meet the terms set out in the HWA Charter Statement. The products listed below are only those manufactured by members of the HWA, and confirmed as adhering to all relevant requirements of the HWA charter. More information on the HWA and its Charter can be found at www.hotwater.org.uk

BASIS OF HETAS LISTING

The equipment listed below has undergone an independent review in ensuring the equipment is in compliance with the provisions of the relevant UK Building Regulations, in particular G3 of Approved Document G which requires hot water storage vessels to incorporate precautions to prevent temperature of stored water exceeding 100°C.

The listings given in this section of the guide are based on the manufacturer demonstrating satisfactorily that their product is safe and fit for the purpose with at least two levels of over temperature control being present. This will normally be an assessment by an independent authorised organisation such as a Notified Body or equivalent who are deemed competent under the relevant category of authorisation for the product. In the absence of any regulatory standards for the design, production or performance of the equipment listed it is not possible for HETAS to approve it. The listing is therefore simply a recognition that the manufacturer has taken all necessary steps to ensure their product is safe and fit for its purpose during operation, when installed and operated in accordance with the manufacturer's instructions.

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
Advance Appliances Ltd Unit 4, Coppice Side Industrial Estate, Brownhills, Walsall, WS8 7EX		01543 377723 sales@advanceappliances.co.uk www.advanceappliances.co.uk
SFUTS Thermal Store AUX006	<i>Available in 210, 250 & 300 litre capacities The manufacturer's assembly procedures, installation instructions and relevant regulations must be complied with.</i>	
Approval Status; Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Product demonstrates at least two levels of over temperature control protection for each possible heat source satisfying compliance with regulation G3 of the UK Building Regulations. Assessment was made against TS 2015-12-HWATS by Martyn Griffiths of the HWA, ref: Universal Thermal Store Overheat Test dated February 2015.		

LINK-UP SYSTEMS FOR HEATING & HOT WATER

INTRODUCTION

It is sometimes desirable to have two different types of heating appliance in the home especially where a solid fuel or biomass appliance incorporating a boiler is used on an occasional or seasonal basis and the main heating and hot water service is provided by a gas or an oil fired boiler. Gas and/or oil fired boilers are often installed on sealed systems but in any case it is either necessary or preferable that their water circulation system is kept completely separate from the system serving the solid fuel appliance.






Link-Up systems are designed so that the heat generated by a solid fuel or biomass boiler can be transferred to the main central heating system served by the gas or oil fired appliance without the water systems of the two heat sources becoming mixed. There are basically two types of systems that are able to provide this function. Either heat exchanger based systems that pass heat directly from the primary appliance circuit to the secondary heating circuit via a plate heat-exchanger or heat storage type systems that have a central heat store (usually water) with separate coils from the different heat sources.

BASIS OF HETAS LISTING

There are no specific technical standards for assessing the design, production or performance of this type of equipment although there do exist standards for the individual components from which the devices are built up, e.g. plate heat exchangers, pipes and fittings and electrical components. It is therefore not a requirement that the equipment is CE Marked.

The listings given in this Guide are based on the manufacturer demonstrating satisfactorily that their product is safe and fit for the purpose of serving a boiler fired by biomass or solid mineral fuel. This will normally be an assessment by an independent authorised competent organisation such as a Notified Body.

In the absence of any regulatory standards for the design, production or performance of the equipment listed it is not possible for HETAS to approve it. The listing is therefore simply a recognition that the manufacturer has taken all necessary steps to ensure their product is safe and fit for its purpose when installed in accordance with their instructions.

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
Smart Innovation Products Ltd t/a Heat Hero Shercock Road, Carrickmacross Co. Monaghan, Ireland A81 HK09		+353 42 9673732 info@heathero.ie www.heathero.ie
Heat Hero Gravity AUX007	<p><i>This is a unique system based on manifold injectors in two installed units that enable circulation around a solid fuel fired heating system to be maximized as well as gravity circulation around the hot water storage cylinder when the heating/radiator system is not energized. It contains no moving parts or any electrical components. Where required, it enables a secondary heat source, such as a gas or oil fired boiler, to be linked into the system with the solid fuel boiler.</i></p>	
<p>Approval Status; Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Assessment by Kiwa Gastec ref 30731 dated 12th September 2016.</p>		
Heat Hero Direct AUX035	<p><i>This is a unique system based on manifold injectors that enable circulation around a solid fuel fired heating system to be maximized. It contains no moving parts or any electrical components. Where required, it enables a secondary heat source, such as a gas or oil-fired boiler and a pressurised or open vented cylinder, to be linked into the system with the solid fuel boiler. The product comes with the option of gravity if required to circulate around the hot water storage cylinder when the heating/radiator system is not energized. It also has an in-built 44 KW safety cooling loop, providing two levels of heat protection to avoid temperatures from the solid fuel appliance exceeding 100°C..</i></p>	
<p>Approval Status; Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Assessment by Kiwa Gastec ref 30731 dated 12th September 2016</p>		
Zonealone Ltd Rathgar, Dublin 6, Ireland		+44 1244457818 info@systemlink.eu www.heatgenie.co.uk
Heat Genie AUX001	<p><i>Heat exchanger based device, available in three rating sizes 15 kW, 20 kW and 30 kW. The manufacturer's assembly procedures, installation instructions and relevant regulations must be complied with.</i></p>	
<p>Approval Status; Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Assessment by Kiwa Gastec at CRE ref 4357 dated 25th November 2013.</p>		

PRE-INSULATED PIPEWORK FOR EXTERNAL BOILER HOUSES

INTRODUCTION

It is sometimes required for a solid fuel independent boiler appliance to be situated in an external boiler house, detached garage or outbuilding due to space or other constraints within the dwelling. In these cases, an external pipework system is required to connect the boiler appliance to the central heating circuit, normally by means of an above ground or buried set of pipework. It is important in meeting heating incentives, and to improve the overall energy performance of the dwelling, for any pipework to be appropriately insulated, as to ensure the minimal amount of heat is lost during transfer of the water into the heating or storage system.

RENEWABLE HEAT INCENTIVE

For the appliance to be granted status on the Renewable Heat Incentive scheme, the administrators of the scheme Ofgem, require all installations where external piping is used, to have undergone an appropriate "Heat Loss Assessment", to determine suitable energy efficiency measures are in place at the time of commissioning.

To aid installers in completing these assessments, the RHI allow for any permitted heat losses from external pipework to be disregarded in cases whereby an appropriately assessed "properly insulated" pipe is used for the point to point connection from the appliance to the heating system. For external pipework that is buried underground, the RHI requires pipework to be insulated, and in conformance to the appropriate standards:

- BS EN 253:2009;
- BS EN 15632-2 and -3:2010 and BS EN 15632-4:2009 or
- BS EN 15698-1:2009



Where pre-insulated pipes are recognised as "properly insulated", the associated heat loss can be disregarded in the following circumstances;

- For each individual external pipe that is 10m or less in length
- Where the annual average heat loss in kWhth from all external pipes is less than 3% of the projected annual output of the appliance

BASIS OF HETAS LISTING

There are no specific technical standards for assessing the design, production or performance of this type of equipment for use with solid fuel appliances, although there do exist measures in assessing these products and confirming their insulation properties for use as district heating pipes. The equipment listed below has undergone an independent review in ensuring the product is in compliance with the applicable performance standards in support of government heat incentives and is safe and fit for purpose during solid fuel operation.

The listings given in this guide are recognition that the manufacturer has taken all necessary steps to ensure their product is safe and performs appropriately when operated in accordance with the instructions. These listings therefore do not constitute a full approval, but a listing that confirms that HETAS have undertaken the relevant checks to ensure the manufacturer has carried out the relevant steps regarding safety and that HETAS recognizes its effectiveness as an aid in ensuring heat losses are minimized during specification, installation and use with solid fuel boiler appliances.

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
Maincor Ltd Elizabeth Way, Lutterworth, Leicestershire LE17 4NJ		01455 555930 info@maincor.co.uk www.maincor.co.uk
AustroPUR AUX004	<i>PrPre-Insulated Pipe for use as connection from external independent boiler to dwelling heating system. The manufacturer's assembly procedures, installation instructions and relevant regulations must be complied with.</i> <i>Thermal conductivity verified as 0.0219 W/(m*K)</i>	
Approval Status: Listing only based on its suitability for use with solid fuel and/or solid biomass burning equipment. Assessment against BS EN 15632-1:2009; EN 253:2015 and ISO 8497 by IMA Laboratories in Dresden ref B006/15.1 dated 12th October 2015 and ref V025/17.2 dated 2nd February 2016.		

POWER SWEEPING EQUIPMENT FOR CHIMNEY SWEEPING & MAINTENANCE IN DOMESTIC PROPERTIES

INTRODUCTION

A sound and clean chimney is essential for the continued efficient and safe operation of all solid fuel and wood burning appliances to ensure products of combustion can emit safely and efficiently from the appliance to the outside air. There are a wide variety of sweeping techniques and equipment available within the UK for maintaining a solid fuel chimney/flue, and it is important that the appropriate means of sweeping is used dependent on the type and material of chimney installed, especially the chimney lining.

It is advised that any solid fuel chimney be swept at least twice a year. Once before the start of the heating season and/or following any prolonged shutdown to ensure any birds' or other nests are removed and any soot or debris falls are cleared. A second clean directly after the end of the burning season is recommended to remove deposits of soot, formed during solid fuel appliance operation, that might cause deterioration of the chimney lining while the chimney is not in use.

It is also important that any existing chimney is clear of obstruction and has been swept clean before any new appliance is installed. If a closed appliance, such as a stove, is fitted in place of an open fire, then it is advisable the chimney is swept after one month of continuous operation to clear away any softer soot deposits that are often loosened by the higher flue gas temperatures generated by the closed appliance.




Chimney sweeping equipment is designed for ease of use and versatility in carrying out the required tasks given above and the maintenance of solid fuel chimney systems is fundamental to the safety of solid fuel use. The sweeping of any chimney should be undertaken by a qualified professional who has the appropriate training and skills. HETAS recommends that chimney sweeping is best carried out by a HETAS approved chimney sweep.




BASIS OF HETAS LISTING

There are no applicable technical standards or regulations associated with the design, production or performance of this type of equipment. We must stress that certain attachments available for use with the rotary sweeping kits provide a very vigorous or aggressive cleaning process that might cause damage to certain types of chimney lining. It is the operator's responsibility to be able to ascertain the correct and most suitable equipment to use for the chimney being cleaned. This expertise can only be attained following appropriate training and so it is recommended that the equipment listed below is only used by trained and competent persons. HETAS understands that the manufacturer provides the appropriate training, as well as a set of in-depth operating instructions.

In the absence of any specific regulatory standards covering this type of product HETAS is not able to provide an approval. The listing is therefore simply a recognition that the manufacturer has carried out all necessary steps regarding safety, training and operating guidance to ensure their product is safe and fit for purpose.

By entering this equipment listing in the HETAS Guide we are confirming that this equipment provides an effective means of cleaning a chimney serving a solid fuel combustion appliance. This confirmation is made by HETAS under the understanding that operators of the equipment are competent to do so having taken part in a training course provided by the manufacturer.

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
Rotary Power Sweeping Snaplok House, Unit 3 Tiverton Way, Tiverton, Devon, EX16 6TG		01884 675075 info@rotarypowersweeping.co.uk www.rps-snaplok.co.uk
Snaplok 8mm Biomass/Pellet/Aga/Rayburn Kit PSLK08-B	10x 8mm/90cm Snaplok Stainless Steel Solid Nylon Rods 1x 4" Stainless Steel Propeller Brush 1x 5" Stainless Steel Propeller Brush 1x 6" Stainless Steel Propeller Brush 1x 5" Rapid Light Loader Whip Head 1x Snaplok Stainless Steel Jr Drill Adaptor 1x Snaplok 3ft Rod Caddy Bag	
AUX036		
Snaplok 12mm Liner Power Sweep Kit PSLK10-B	11x 12mmx90cm Stainless Steel & Solid Nylon Rod(10m) 1x 9"/230mm Aluminum Bullet Whip Head 1x Snaplok Large Drill Adaptor 1x Snaplok Hex Key 1x Snaplok 3ft Rod Caddy Bag	
AUX037		

PRODUCT NAME	REMARKS	PRODUCT IMAGE
HETAS ID		
Rotary Power Sweeping Snaplok House, Unit 3 Tiverton Way, Tiverton, Devon, EX16 6TG		01884 675075 info@rotarypowersweeping.co.uk www.rps-snaplok.co.uk
Snaplok Stove Shop & Installer Kit STI-KIT	13x 12mm Solid Nylon Liner Rods – Stainless Steel Ferrules-SNR12 2x 15mm Solid Nylon Rods – Steel Ferrules-SNR15 10x 18mm Solid Nylon Rods-Steel Ferrules-SNR18 1x 9"/230mm Bullet Whip Head-BW09 1x 5" Mini Mole Rotary Liner Brush-MMOLE-5 1x 6" Mini Mole Rotary Brush-MMOLE-6 1x 24"/600mm Death Star with Scrub Shaft-DSW24 1x Snaplok Large Drill Adaptor-DA800 1x Snaplok Large Quick Release Drill Adaptor-DQ800 1x Snaplok Chain Whip-Adjustable 9"/18"-CHW12 1x Snaplok Chain Whip Double – Adjustable 9"/12"-CHW-DBL 1x RPS Clay Breaker Small-CLAY-SML 1x Snaplok Hex Key 2x Snaplok 3ft Rod Bag-RCAD03 1x Snaplok Steel Wire Cable Nest Whip 450mm-CW450	
AUX038		
Snaplok Open Fire Kit OFIRE-KIT	4x 15mmx1m Solid Nylon Rods-Steel Ferrules 8x 18mmx1m Solid Nylon Rods – Steel Ferrules 1x 18"/450mm Power Whip Head 1x 24"/600mm Power Whip Head 1x 14" RPS Mole Brush – Soft 1x 17" RPS Mole Brush – Soft 1x Snaplok Large Drill Adaptor 1x Snaplok 4ft Zipped Rod Bag 1x Snaplok Hex Key 1x RPS/Snaplok Van Sticker	
AUX039		

PERMANENT VENTILATORS (FOR SUPPLY OF COMBUSTION AIR)

ESSENTIALS

All heating appliances that produce heat from the combustion of carbon based fuels such as gas, oil and solid fuels including wood, require enough fresh air from outside for complete combustion and to enable the flue/chimney to function correctly to remove the combustion products safely to the outside. Solid Fuel, Wood and Biomass burning Appliances that draw their combustion air from within the dwelling are required by Building Regulations to have installed a fixed permanently open ventilator to provide this air from the outside of the dwelling. Without adequate ventilation there is a danger that the combustion process will be incomplete producing large amounts of carbon monoxide and also that the function of the flue will be impaired. This combination can cause emissions of poisonous gases to the room resulting in sickness and ultimately death to the occupants.

AIR REQUIREMENTS FOR SOLID MINERAL FUEL & WOOD BURNING APPLIANCES

Building Regulations (*Approved Document J*) give guidance that should be followed on the amount of air that solid fuel appliances require. For closed appliances this is based mainly on their rated heat output. Less efficient appliances such as simple open fires require more air than closed appliances because of the additional air that enters the appliance above the firebed and the regulations give separate guidance on this. The information given below is for quick reference and is extracted from Table 1, Section 2 of the Building Regulations *Approved Document J: 2010; Combustion Appliances and Fuel Storage Systems*.

Please Note: The air requirement for other fuels (e.g. oil and gas) will be different.

CLOSED APPLIANCES E.G. STOVES, RANGE COOKERS OR INDEPENDENT BOILERS



For closed appliances without any draught stabilizer fitted installed in a building where the design air permeability is greater than 5.0 m³/h.m², the air requirement is 550 mm² per kW of rated output above 5kW e.g. for 8 kW this would be:
 (8-5) x 550 = 3 x 550 = 1,650 mm²/16.5cm². If the building's design air permeability is less than 5.0 m³/h.m² the air requirement is 550mm² per kW of rated output.

If the appliance has a flue draught stabilizer fitted then the following air requirements apply:




Installations in buildings where the design air permeability is greater than 5.0 m³/h.m²; For the first 5 kW of rated output add 300mm² per kW and then from 5 kW upwards, add 850mm² per kW. e.g. for 8 kW the air requirement would be:
 (5x300) + (3x850) = 4,050 mm²/40.5cm². If the building's design air permeability is less than 5.0 m³/h.m²; add 850mm² per kW of rated output.

Please Note: A dwelling constructed before 2008 is unlikely to have an air permeability less than 5.0 m³/h.m² at 50Pa unless extensive measures have been taken to improve air tightness. Appendix F of *Approved Document J* gives additional details.

Permanent Ventilators (for Supply of Combustion Air)

PRODUCT NAME	APPROVAL STATUS	MANUFACTURER'S REMARKS	PRODUCT IMAGE
<p>TPI Europe Ltd Longley House, International Drive, Southgate, Crawley, West Sussex. RH10 6AQ</p>			<p>01293 530196 / 01293 531870 sales@tpieurope.com www.tpieurope.com</p>
TPI 343	-	<p><i>Dual Input Digital Differential Thermometer with a range of -50 to 1,350 deg C. Scroll through the Temperature 1, Temperature 2 and the Differential Temperature. Ideal for Flow & Return, Water or Surface temperatures with the optional appropriate industry standard "K" type sub-mini connected probes. Auto Field calibration using a simple crushed ice solution. Supplied in Protective Rubber Boot with Tilt Stand.</i></p>	
<p>TPI Fixed Service Costs: The TPI fixed price service policy returns instruments to published specification. If serviced annually by TPI, or one of their approved service centres then TPI flue gas analysers have a six year warranty – See www.tpieurope.com or call 01293 530196 for more details and prices</p>			

ANCILLARY EQUIPMENT

PRODUCT NAME	APPROVAL STATUS	MANUFACTURER'S REMARKS	PRODUCT IMAGE
<p>Anton Industrial Services Ltd Unit 6 Greenhill House, 26 Greenhill Crescent Watford Business Park, Watford WD18 8JA</p>			<p>01923 274730 / 01923 256382 sales@anton-group.com www.anton-group.com</p>
Anton ACMT	-	<p><i>For responding to reports of fumes and carbon monoxide activation. To carry out atmosphere testing as laid out in CMDDA1. 2m retractable tripod stand with carry holdall. (Analyser & flue probe for illustration purposes only).</i></p>	
Anton Pro Printer (USB)	-	<p><i>Anton's Pro Printer is compatible with all Anton V, eVo and our new Pro range of analysers. It uses the convenient USB-C charging cable (supplied separately if required) for ease of charging at home, in the vehicle or on site. Supplied with 4 x rechargeable AA batteries and a thermal paper roll (ink not required)</i></p>	
<p>Anton Service Costs: Anton offer full service and calibration facilities for all our products. Following major investments to our service department, we now offer improved turnaround times and have also introduced fixed price annual servicing on Sprint V, eVo and our new Pro range of analysers, to give you peace of mind and great value. Visit www.anton-group.com/calibration.htm for more details</p>			