



# HEAT HERO TECHNICAL MANUAL

# GRAVITY

- ✂ HIGHER EFFICIENCY
- ✂ STRONGER CIRCULATION
- ✂ DHW FULLY PUMPED
- ✂ BETTER HEAT TRANSFER
- ✂ EASILY INSTALLED

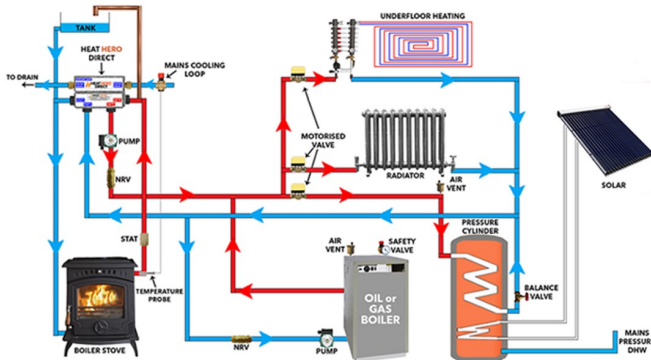


## HEAT HERO INNOVATIVE PRODUCTS



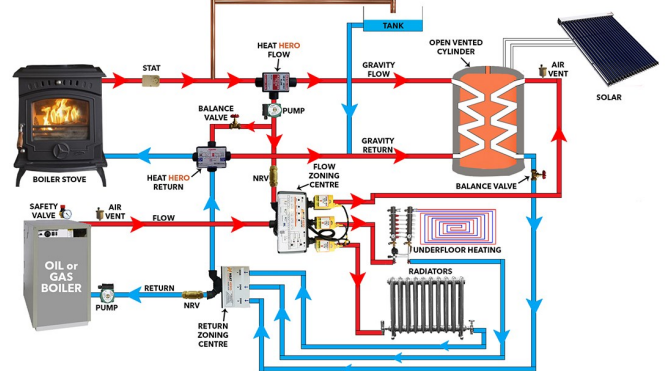
### HEAT HERO DIRECT

- ✂ DIRECT HEAT TRANSFER
- ✂ STRONG HEAT CIRCULATION
- ✂ EASILY INSTALLED & EFFICIENT
- ✂ BUILT IN 44KW COOLING LOOP
- ✂ NO DIGGING UP FLOORS OR CHANGING CYLINDER



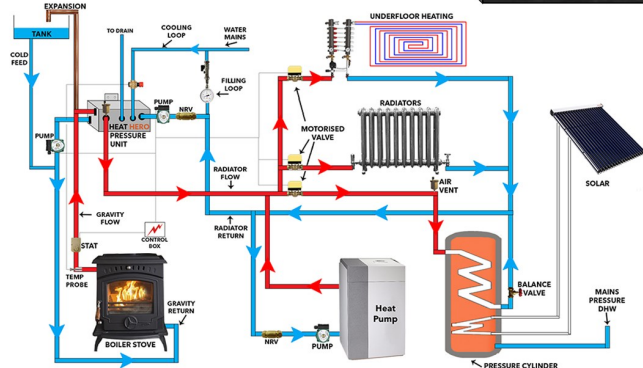
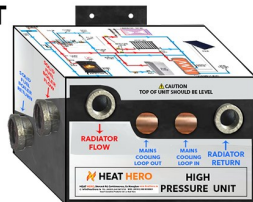
### HEAT HERO FREE FLOW ZONING CENTRE

- ✂ FREE FLOW NO BAFFLES
- ✂ LOW MAINTENANCE
- ✂ LOW RUNNING COSTS
- ✂ DUAL HEATING SYSTEMS
- ✂ EASILY INSTALLED



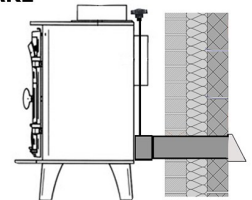
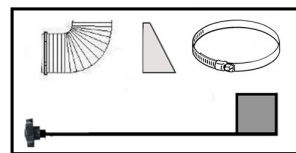
### HEAT HERO HIGH PRESSURE UNIT

- ✂ SEALED HEATING SYSTEM
- ✂ SOLID FUEL OPEN VENTED
- ✂ NO CHANGING CYLINDER
- ✂ NO DIGGING UP FLOORS
- ✂ BUILT IN 44KW COOLING LOOP



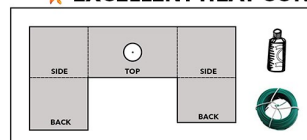
### HEAT HERO OUTSIDE AIR KIT

- ✂ COMPATIBLE WITH ALL STOVES
- ✂ LEVER TO CONTROL AIR INTAKE
- ✂ DIRECT OUTSIDE AIR



### HEAT HERO INSERT STOVE JACKET

- ✂ CERAMIC FIBRE JACKET
- ✂ HIGHER HEAT OUTPUT
- ✂ EXCELLENT HEAT CONTAINER



HEAT HERO, Shercock Rd, Carrickmacross, Co.Monaghan [www.heathero.ie](http://www.heathero.ie)

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Smart Innovation Products Ltd t/a Heat Hero

## Solid Fuel Boilers



A Solid Fuel Boiler can achieve twice the heat of an oil/gas boiler but will not turn off on a thermostat and wait for the circulating pump to take away the heat. Efficiency can only be achieved by strong circulation though the solid fuel boiler. This is not possible when an open vent is installed in front of the circulating pump or a heat exchanger is installed on the solid fuel boiler.

Heat Hero solves this problem and allows you get full efficiency from your solid fuel boiler.

 **HEAT HERO GRAVITY**



**RECOMMENDED BY THE STOVE MANUFACTURERS**



**BORU**



Available in over 250 Stores Nationwide



# HEAT HERO

## BURN LESS | MORE HEAT

### HEAT HERO GRAVITY INSTALLATION AND TECHNICAL MANUAL



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**CAUTION: NOT TO BE INSTALLED AS CONCEALED UNIT**



It is important that this information booklet is read and understood fully before installation.

This unit **MUST** only be installed by a fully qualified person who understands and adheres to all relevant regulations.

The following instructions are given to help the installer ensure a safe and efficient installation and to get the most heat from the solid fuel central heating system.

# HEAT HERO GRAVITY

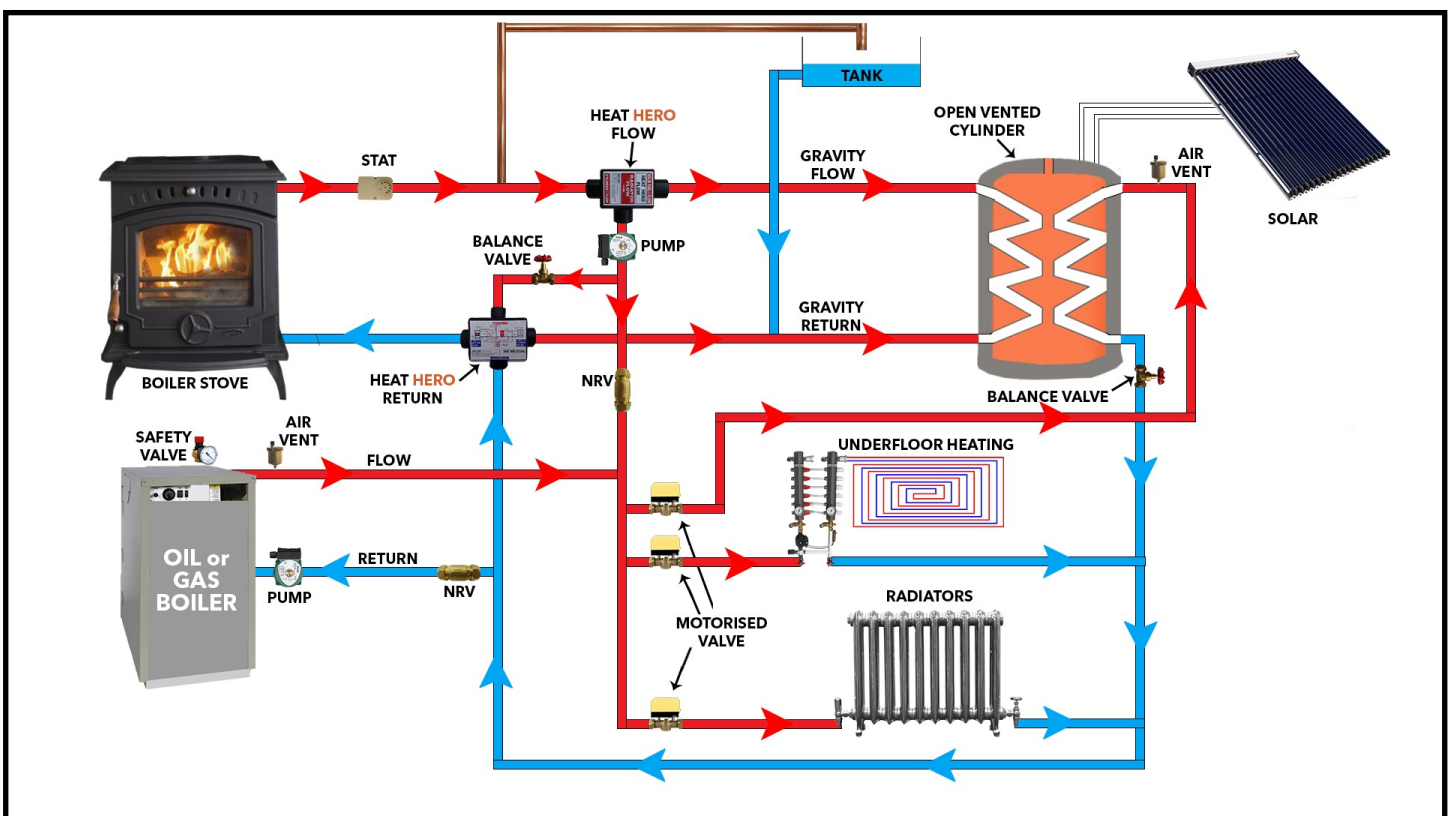
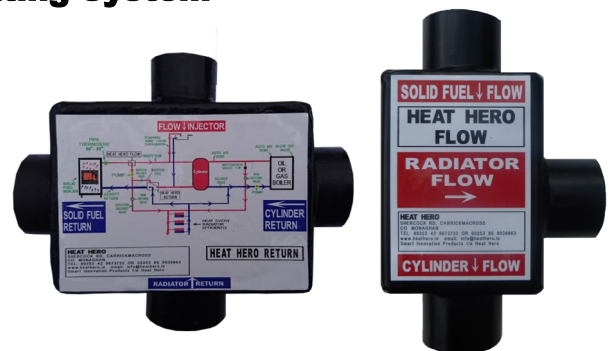
Heat Hero gravity is an award winning heating system and is the most efficient way to get your solid fuel boiler to heat your radiators and domestic hot water.

Heat Hero is recommended by the major solid fuel boiler manufacturer's because it is the most efficient solid fuel heating system on the market.

Heat Hero can easily be installed in existing or new heating system beside the stove or in the hot press.

When Heat Hero is installed you get a better heat to your radiators more hot water and you burn less fuel.

- **Open Vented Gravity Fully Pumped Heating System**
- **Better Heat Transfer**
- **Hotter Radiators and Water**
- **Burn Less Fuel**
- **Easily Installed**



## INTRODUCTION

### **Some of the benefits of the Heat Hero Gravity are;**

- The Gravity Flow and Return is completely safe and open.
- The radiators and domestic hot water are fully pumped.
- The Heat Hero Return can be fitted anywhere on the Gravity Return.
- The Heat Hero Flow can be fitted anywhere on the Gravity Flow.
- There is a Flow Injector directing the water out from the stove and into the radiators.
- There is a Return Injector directing the water out from the radiators and into the Stove.
- There is a cylinder Injector directing the flow around the cylinder heating the domestic hot water.
- A balancing valve is fitted on the cylinder injector flow, which controls the cylinder circulation when the pump is on.
- Heat Hero Gravity units can be fitted to existing pipework.
- Heat Hero Gravity increases the life span of the grate and baffle plate in the Stove.
- There are no moving parts, so no maintenance is ever required on Heat Hero Gravity manifolds.
- A full technical telephone back up available.

### **IMPORTANT - INSTRUCTIONS BEFORE LIGHTING THE STOVE:**

1. Make sure the system is full of water.
2. Make sure that all of the valves are open.
3. Turn 'On' and 'Off' the circulating pump to clear any air in the heating system.
4. Turn On the circulating pump and light the stove slowly until radiators start to heat.
5. Set the injector balance valve on the cylinder injector pipe to approximately 1/3 open depending on how far away the cylinder is from the Heat Hero Return.
6. Solid fuel circulation pump should be turned up to the maximum speed and the pipe thermostat set at 50°-55°

## INSTALLATION INSTRUCTIONS

**No. 1 The Pipe Thermostat** must be of good quality and should be fitted as close to the solid fuel boiler as per diagrams.

Caution should be taken that the heat from the stove does not damage the workings of the pipe thermostat.

**No. 2 The Circulation Pump** can be fitted in the hot press or beside the stove.

**No. 3 Balancing Gate Valves** must be fitted on the injector flow pipe going into the Heat Hero return manifold. This allows the water that is circulating around the cylinder coil to be balanced when the pump is on.

**No. 4 The Flow Injector Balancing Valve** should be open only enough to ensure that the cylinder return is at the same temperature as the flow to the radiators when the circulation pump is running.

**No. 5 The Cold Feed Connection** must be connected into gravity return.

**No. 6 The Heat Hero Return** can be fitted anywhere on the gravity return. (Follow the directions as shown on the Heat Hero Return Manifold).

**No. 7 The Heat Hero Flow** can be fitted anywhere on the gravity flow. (Follow the directions as shown on the Heat Hero Flow Manifold).

**No.8 The Heating Storage Tank** Should be galvanized and a minimum of 1m above the highest point of the heating System (e.g. above the heating flow or the highest radiator)

**No. 9 Non Return Valves** must be of good quality and installed as per diagrams.

**No. 10 Heating Zones** If the heating system is zoned, at least one radiator zone must be open when the solid fuel circulation pump comes on.

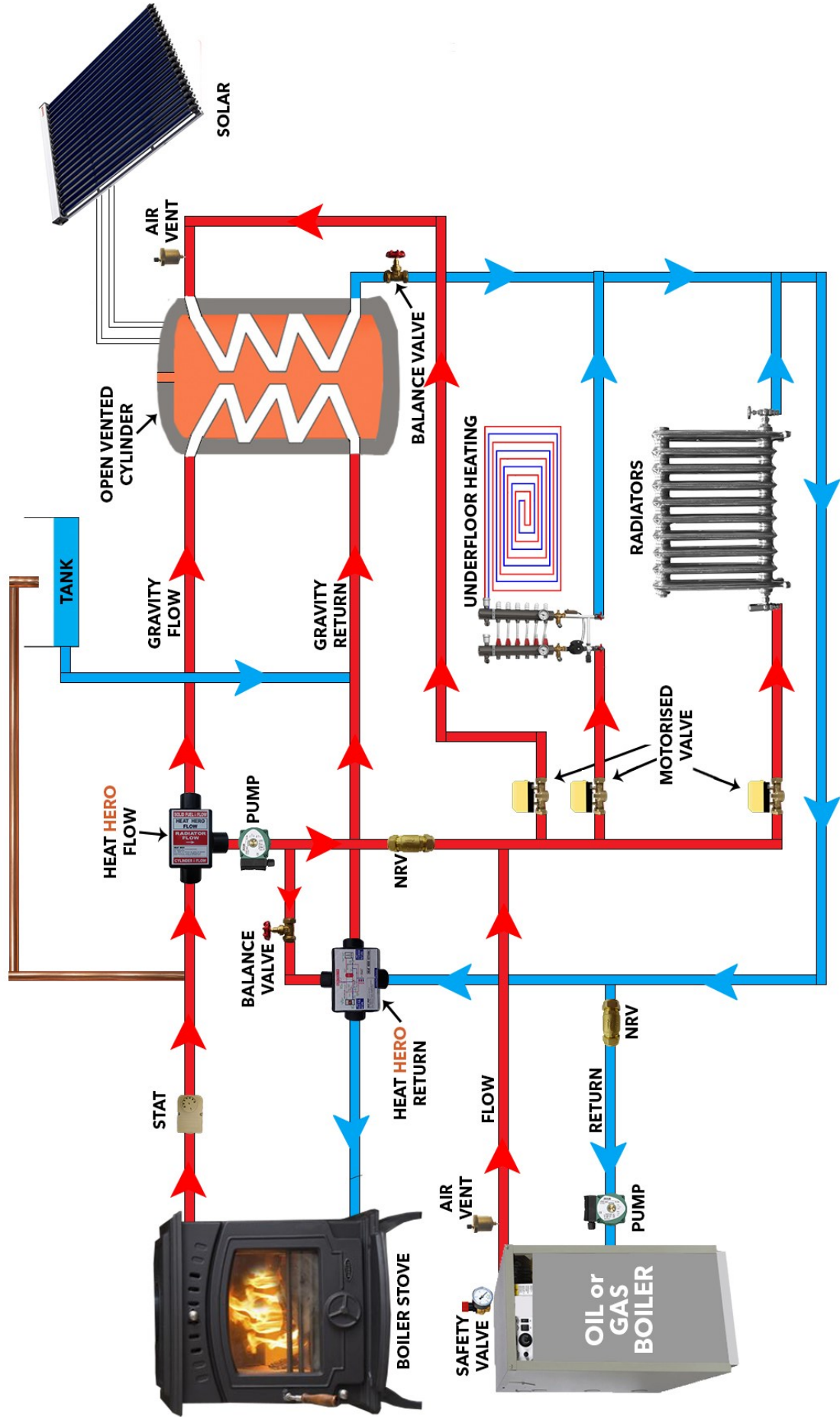
**No. 11 Auto Air Vents** Should be of good quality and installed as per the diagram.

**No. 12 Blow Off Valves** Should be installed at the secondary heat source.

**No. 13 Dual Heating Systems** Oil or Gas can operate fully efficiently at the same time as the solid fuel boiler when Heat Hero is installed without any fear of pitching or banging noises.

**No. 14 High Pressure Gas Boilers & Heat Exchangers** - Please refer to Page 6 of this manual.

**DIAGRAM SHOWING HEAT HERO GRAVITY IN A DUAL HEATING SYSTEM CONNECTED TO AN OIL OR GAS BOILER, SOLAR, RADIATORS, UNDERFLOOR AND AN OPEN VENTED DHW CYLINDER**



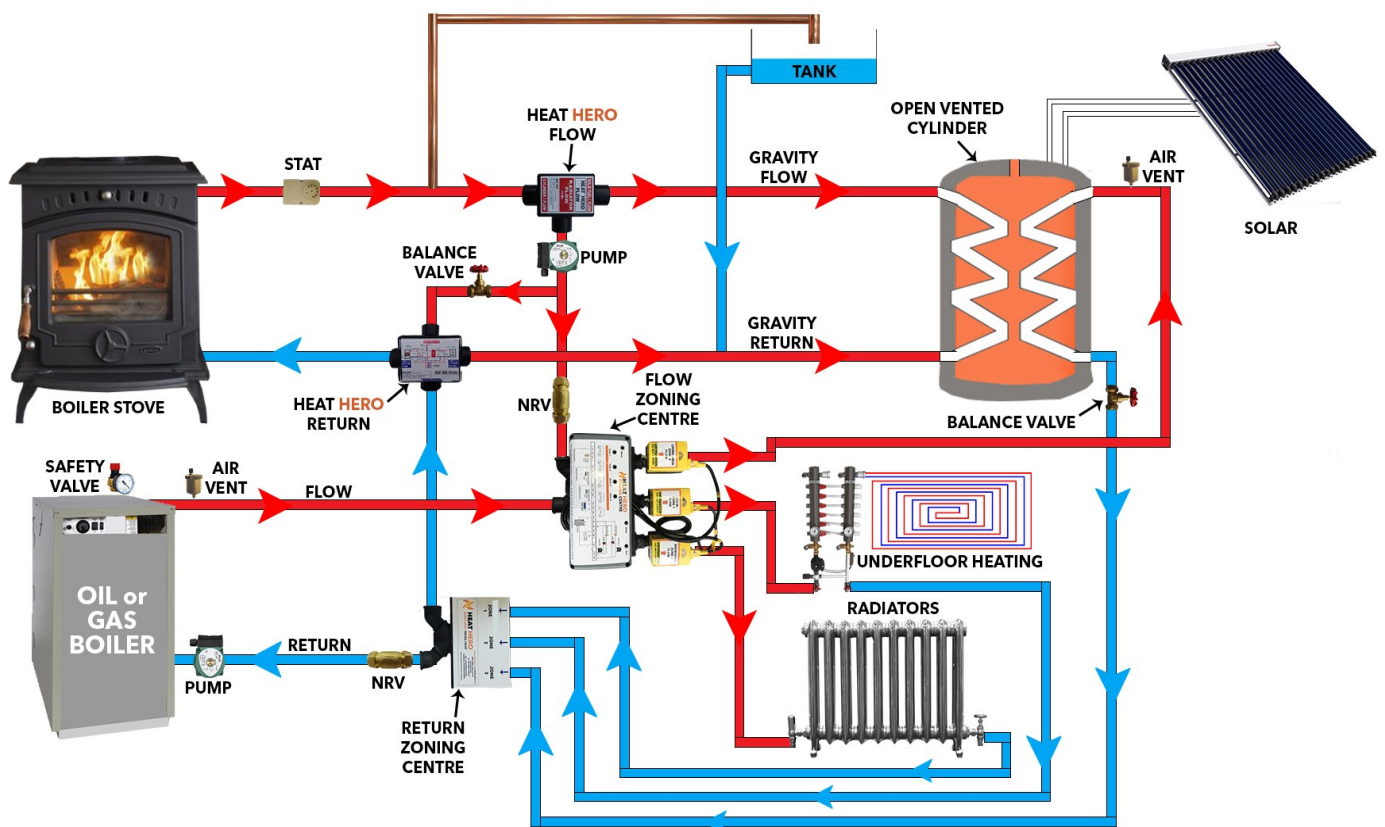
See detailed Video on website [www.heathero.ie](http://www.heathero.ie)

# HEAT HERO GRAVITY CONNECTED TO HEAT HERO FREE FLOW ZONING CENTRE

## BENEFITS OF HEAT HERO FREE FLOW ZONING CENTRE

- Available in 3 or 4 Zone
- The Living Room Zone automatically turns on when the stove reaches 50°-55°.
- The Domestic Hot Water is controlled through the Thermostat on the Cylinder.
- The 3rd & 4th Zones are controlled through the 3 or 4 Zone Time Clock.
- The heat transfers quickly throughout your heating system.
- Strong circulation throughout your heating system is created by installing only one 8 metre head circulation pump at the boiler.
- Water flows freely throughout the zones without any restrictions..
- 5 Year warranty motorised valves are used to open and close zones.
- Very easily installed with low maintenance and very low running costs.
- There are no baffles that would restrict or slow down circulation.
- Motorised valves are prewired and electrical diagram is very easy to follow.
- Return manifold has valves for balancing zones.
- Oil Boiler turns off when the Solid Fuel Boiler reaches 50°/55°

## DIAGRAM SHOWING HEAT HERO GRAVITY IN A DUAL HEATING SYSTEM CONNECTED TO HEAT HERO FREE FLOW ZONING CENTRE

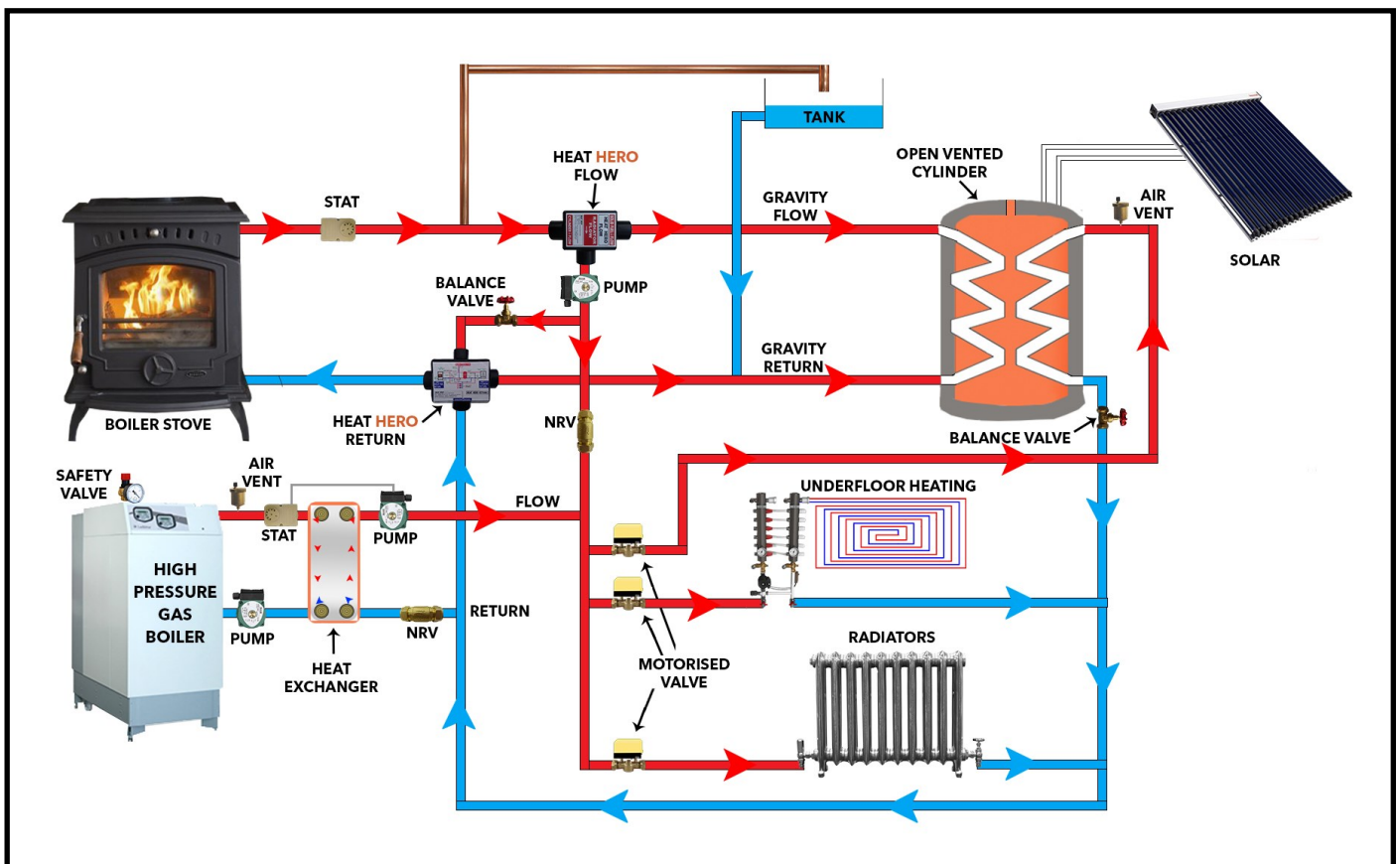




## HEAT HERO GRAVITY CONNECTED TO A HIGH PRESSURE GAS BOILER

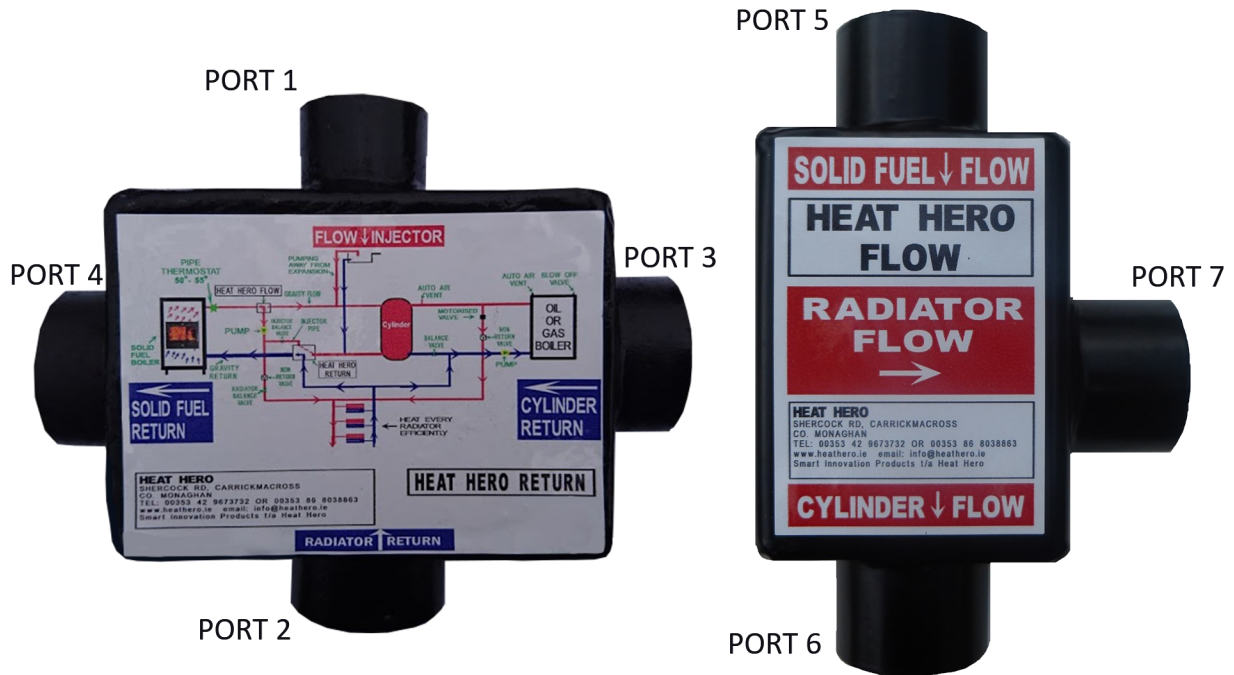
A high pressure gas boiler can be connected efficiently to a solid fuel boiler by installing a heat exchanger on the gas boiler as shown in the diagram below. A gas boiler is a controlled heat source which will allow a heat exchanger operate at its full 98% efficiency. A heat exchanger **CAN NOT** operate at its full efficiency when connected to a solid fuel boiler because a solid fuel boiler is a non-controllable heat source that can achieve twice the heat of an oil or gas boiler. When Heat Hero Direct is installed the water circulates directly around the radiators, under-floor heating and DHW and through the solid fuel boiler which achieves full efficiency and good heat transfer throughout the home.

### DIAGRAM SHOWS HEAT HERO GRAVITY CONNECTING A SOLID FUEL BOILER TO A HIGH PRESSURE GAS BOILER USING A HEAT EXCHANGER ON THE GAS BOILER



# TECHNICAL DATA

**HEAT HERO GRAVITY CONSISTS OF TWO MILD STEEL MANIFOLDS**



### TECHNICAL DESCRIPTION – HEAT HERO RETURN

PORT 1	3/4" BSP FEMALE	FLOW INJECTOR CONNECTION
PORT 2	1" BSP FEMALE	RADIATOR RETURN CONNECTION
PORT 3	1" BSP FEMALE	HOT WATER CYLINDER GRAVITY RETURN CONNECTION
PORT 4	1" BSP FEMALE	SOLID FUEL BOILER GRAVITY RETURN CONNECTION

### TECHNICAL DESCRIPTION – HEAT HERO FLOW

PORT 5	1" BSP FEMALE	SOLID FUEL BOILER GRAVITY FLOW CONNECTION
PORT 6	1" BSP FEMALE	HOT WATER CYLINDER GRAVITY FLOW CONNECTION
PORT 7	1" BSP FEMALE	RADIATOR FLOW CONNECTION

### GENERAL TECHNICAL INFORMATION – HEAT HERO RETURN

Overall Length	95mm	Maximum test pressure	6 Bar
Overall Depth	80mm	Maximum work pressure	4 Bar
Overall Height	150mm	Maximum Heat Capacity	50 KW
Overall Weight	1.18 KG	Material is Mild Steel	3mm

### GENERAL TECHNICAL INFORMATION –HEAT HERO FLOW

Overall Length	95mm	Maximum test pressure	6 Bar
Overall Depth	80mm	Maximum work pressure	4 Bar
Overall Height	150mm	Maximum Heat Capacity	40 KW
Overall Weight	1.18 KG	Material is Mild Steel	3mm



# HEAT HERO DIRECT

- **Open Vented Gravity Fully Pumped Heating System**
- **Direct Heat to Radiators & DHW without going through a Heat Exchanger**
- **No Need to Dig Up Floors**
- **No Need to Change Cylinder**
- **Built-in 44KW Cooling Loop**
- **Easily Installed**

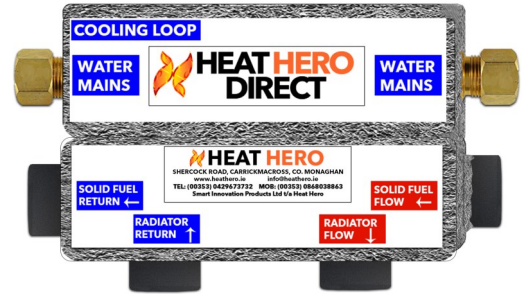
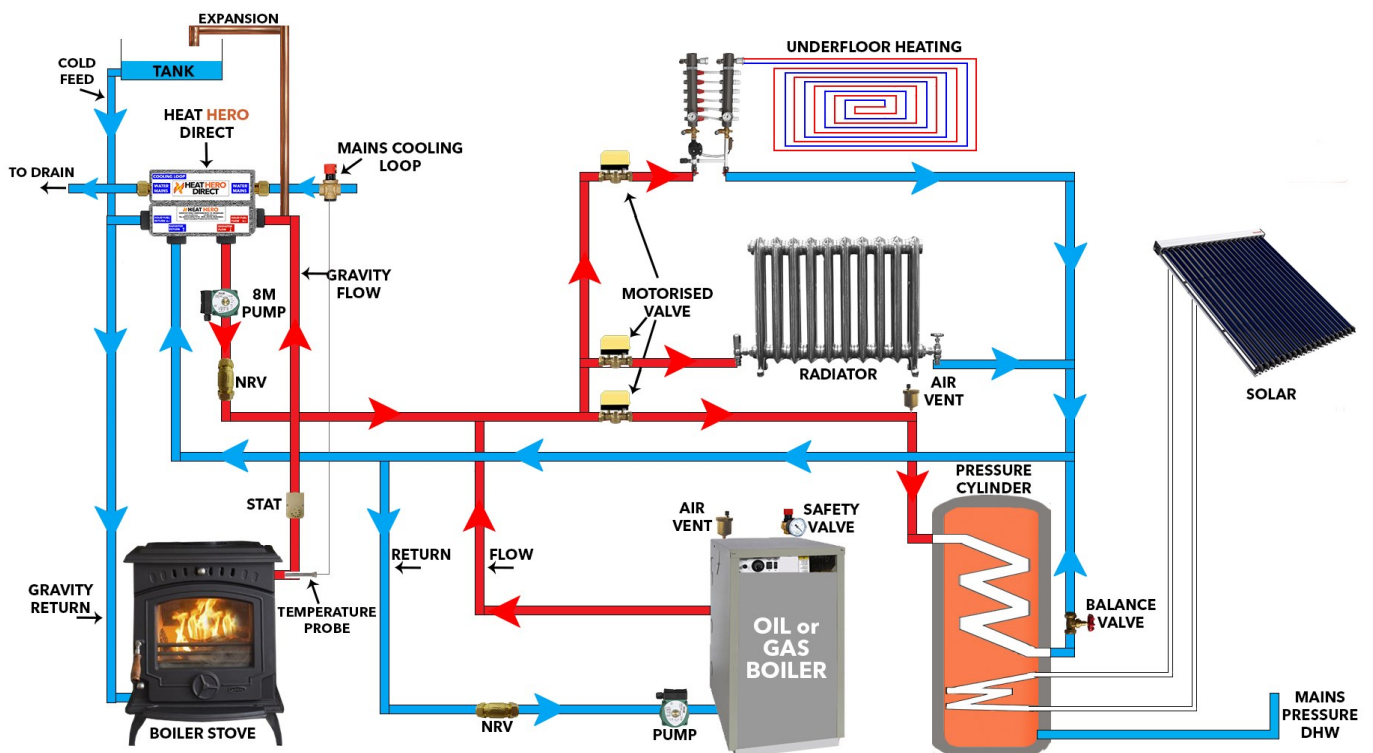


DIAGRAM SHOWING HEAT HERO DIRECT IN A DUAL HEATING SYSTEM CONNECTED TO AN OIL OR GAS BOILER WITH A PRESSURE CYLINDER, SOLAR, RADIATORS AND UNDERFLOOR HEATING



# HEAT HERO INNOVATIVE PRODUCTS

## HEAT HERO GRAVITY



- ✂ Open Vented Gravity Fully Pumped Heating System
- ✂ Better Heat Transfer
- ✂ Hotter Radiators & Water
- ✂ Burn Less Fuel
- ✂ Easily Installed

## HEAT HERO DIRECT



- ✂ Open Vented Gravity Fully Pumped Heating System
- ✂ Built in 44KW Cooling Loop
- ✂ No Need to Change Cylinder
- ✂ No Need to Dig Up Floors
- ✂ No Heat Exchanger on the Solid Fuel Boiler

## FREE FLOW ZONING CENTRE



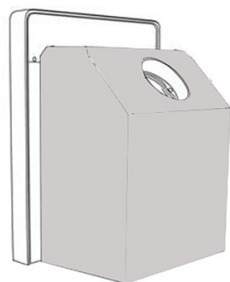
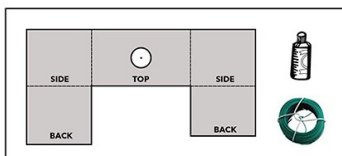
- ✂ Pre-Wired for Dual Link Ups
- ✂ Has Low Running Costs
- ✂ Easily Installed and Maintained
- ✂ EPH 5 Year Warranty Valves
- ✂ Available in 3 or 4 Zones

## HIGH PRESSURE UNIT



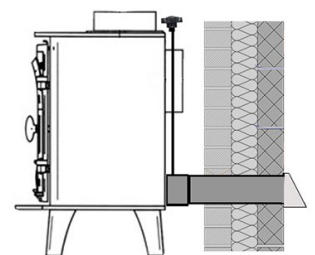
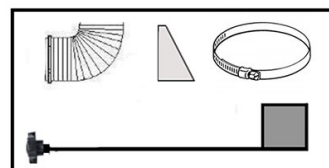
- ✂ Sealed Heating System
- ✂ Solid Fuel Open Vented
- ✂ No Need to Dig Up Floors
- ✂ No Need to Change Cylinder
- ✂ Easily Installed
- ✂ Built in 44KW Cooling Loop

## INSERT STOVE JACKET



- ✂ Ceramic Fibre Jacket
- ✂ Excellent Heat Container
- ✂ Improves Heat Output

## OUTSIDE AIR KIT



- ✂ Direct Outside Air
- ✂ Compatible with All Stoves
- ✂ Lever to Control Air Intake

GO TO [WWW.HEATHERO.IE](http://WWW.HEATHERO.IE) FOR EXPLANATORY VIDEOS