

# RMcylinders

## Stelflow

**PRE-PLUMB ADDENDUM  
INSTALLATION MANUAL  
ISSUE 2-2019**

**FOR MORE INFORMATION GO TO:  
[WWW.RMCYLINDERS.COM](http://WWW.RMCYLINDERS.COM)**

### **IMPORTANT**

**By installing this product you agree to be bound by the terms and conditions supplied within the manual, or available for download via our website.**

## INTRODUCTION

These instructions are designed to be read in conjunction with the main product installation manual. Particular attention should be paid to all the relevant legislative requirements, including Building Regulations, Water Regulations, IEE Wiring requirements and good practice. This installation shall only be conducted by a person competent to do so.

This pre-plumb unit is a stainless steel unvented indirect hot water storage cylinder with factory built hot water central heating controls assembled onto the front outer case of the cylinder. The cylinder may be a single coil indirect for connection to a fossil fuel boiler or a twin coil unit for integration with a solar panel system, which in this instance, the pre-plumb controls are assembled onto the upper coil.

In addition to the components supplied with a standard (non pre-plumb) the following are included:-

COMPONENT	SINGLE ZONE KIT QUANTITY	TWIN ZONE KIT QUANTITY	FITTED / LOOSE	PRE-PLUMBED & / OR WIRED
Pipework Manifold	1	1	Fitted	✓
Two Port Motorised Valve	2	3	Fitted	✓
PCB Wiring Centre	1	1	Fitted	✓
Dual Cylinder Thermostat	1	1	Fitted	✓
6m Head Circulator	1	1	Fitted	✓
Auto By-Pass Valve	1	1	Fitted	✓
Auto Air Vent	1	1	Fitted	✓
Sealed System Filling Loop	1	1	Fitted	✓
Primary Adapter C/W Expansion Valve & Gauge	1	1	Loose	✗
Primary Expansion Vessel (120 - 210 = 12L Exp, 250 = 18L Exp, 300 = 24L Exp)	1	1	Loose	✗
System Programmer	1 x Two Channel	1 x Three Channel	Loose	✗
Room Thermostat	1	2	Loose	✗

## POTABLE WATER CONNECTIONS

The potable (secondary) water connections are 22mm compression and are connected under the same manner as listed in the main installation manual. These connections include; cold mains to inlet control set, equalised cold supply from inlet control set, hot water draw off, secondary return connection (where fitted), expansion vessel, vessel bracket and vessel fitting, and tundish discharge pipework.

## PRIMARY WATER CONNECTIONS

All primary pipework connections are 22mm compression with gland nut and olive at each connection point and require connection in the standard method.

**Boiler flow:-** Remove and discard the transit pipe under the circulating pump by releasing the outer of the pipe clamp and the gland nut to the pump isolation valve. Connect the boiler flow pipework directly into the pump isolation valve re-using the pipe clamp to provide support to both the pipework and the circulating pump.

**Heating flow:-** Connect from the 2-port heating valve the heating flow into the radiator circuit.

**Heating Return:-** The heating return pipework returns back into the pre-plumb cylinder pipework connecting to the 22mm connection on the left hand side of the unit adjacent to the dual cylinder thermostat.

**Boiler Return:-** The pipework connection from both the central heating and the hot water circuit is the lower left 22mm connection below the heating return. This connection requires piping directly back to the boiler.

**Primary Expansion:-** This pre-plumb unit is supplied c/w a manifold connector facilitating the expansion vessel, expansion discharge valve and pressure gauge. The assembly is usually installed in the pipework adjacent to the boiler appliance - see both the boiler manufacturers requirements and the instructions provided with the components supplied. Check the vessel is charged to 1.5 bar on installation. Ensure the discharge pipe terminates at a point where the discharge of hot water is visible, yet does not cause any danger to persons.

## **WIRING REQUIREMENTS**

Pre-plumb wiring requirements are as per the diagram at the back of these instructions.

The factory assembled pre-plumb wiring detail is shown to the lower section of the connector block complete with the plug in connector detail.

The upper section of the wiring to the connector block depicts connections to be created by the installer.

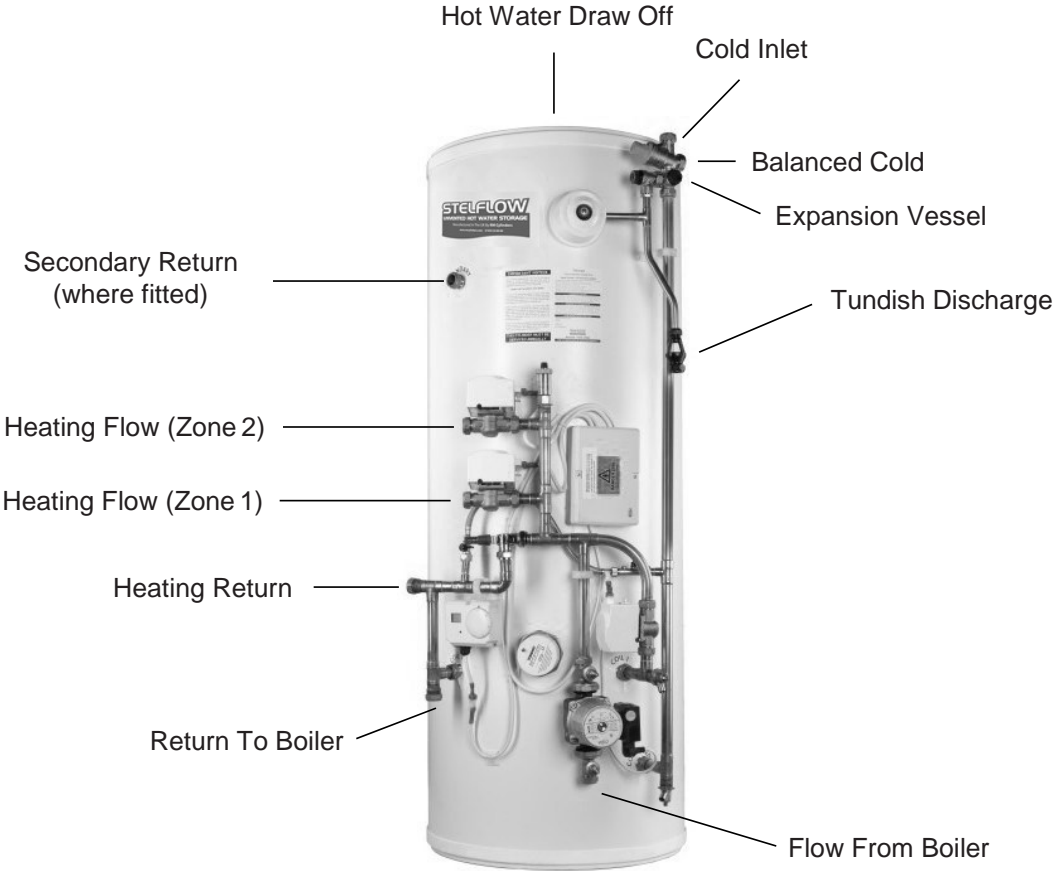
## **SYSTEM FILLING & COMMISSIONING**

Once all plumbing and wiring is complete the primary system may be filled and flushed in the proprietary manner. Before filling ensure all drain points and air valves etc. are fully closed. Fill via the filling loop ensuring the 2 port valves and the circulating pump isolation valves are fully open.

Release all air from the auto air valve at the highest point of the pre-plumb pipework and also any other high points in the system. The normal fill pressure is 1.0 bar to 1.5 bar - check both the boiler and radiator manufacturers requirements. During filling ensure all plumbing connections including factory made connections are water tight, prior to leaving the factory the effects of transit may cause some connections to subsequently leak upon filling, for which *we* can accept no responsibility for damage or inconvenience caused.

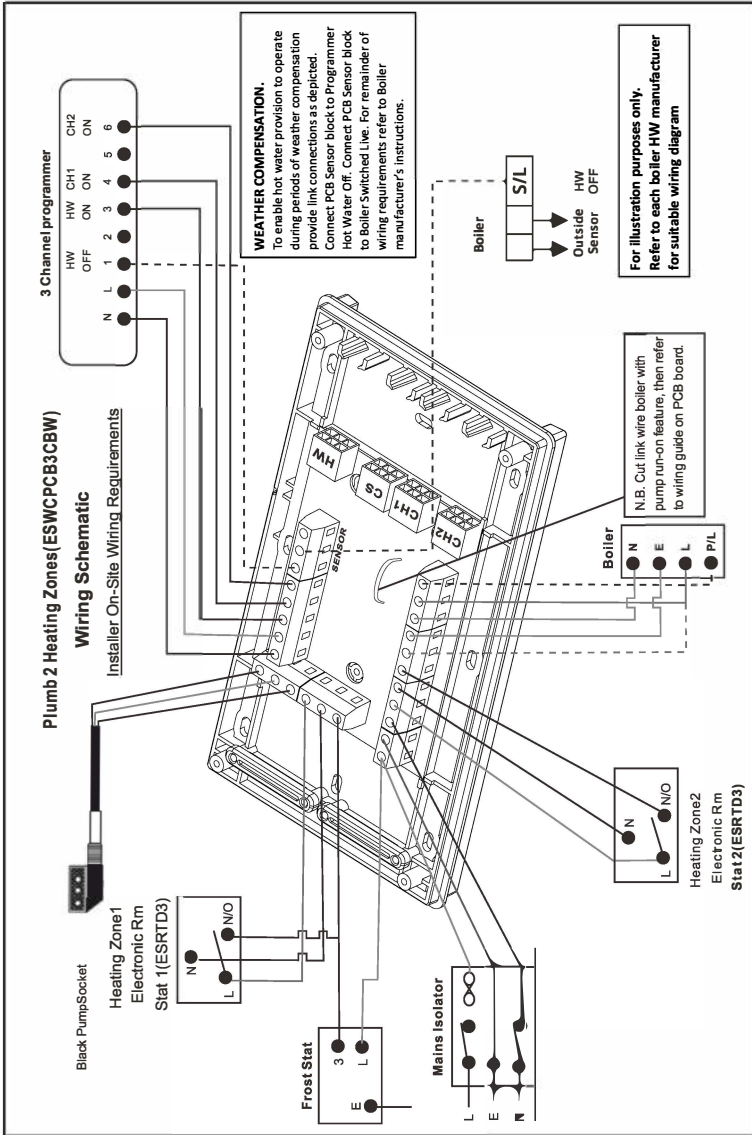
Once the system is full of water and devoid of air, turn on the boiler appliance and thermostats and heat both the hot water and the heating circuits. The recommended hot water storage temperature is 60°C. Adjust the auto bypass valve as per the manufacturers instructions included. Check all components are functioning correctly and that there are no leaks present.

**CYLINDER CONNECTIONS**



Twin Zone Cylinder Depicted  
For Illustration Purposes Only

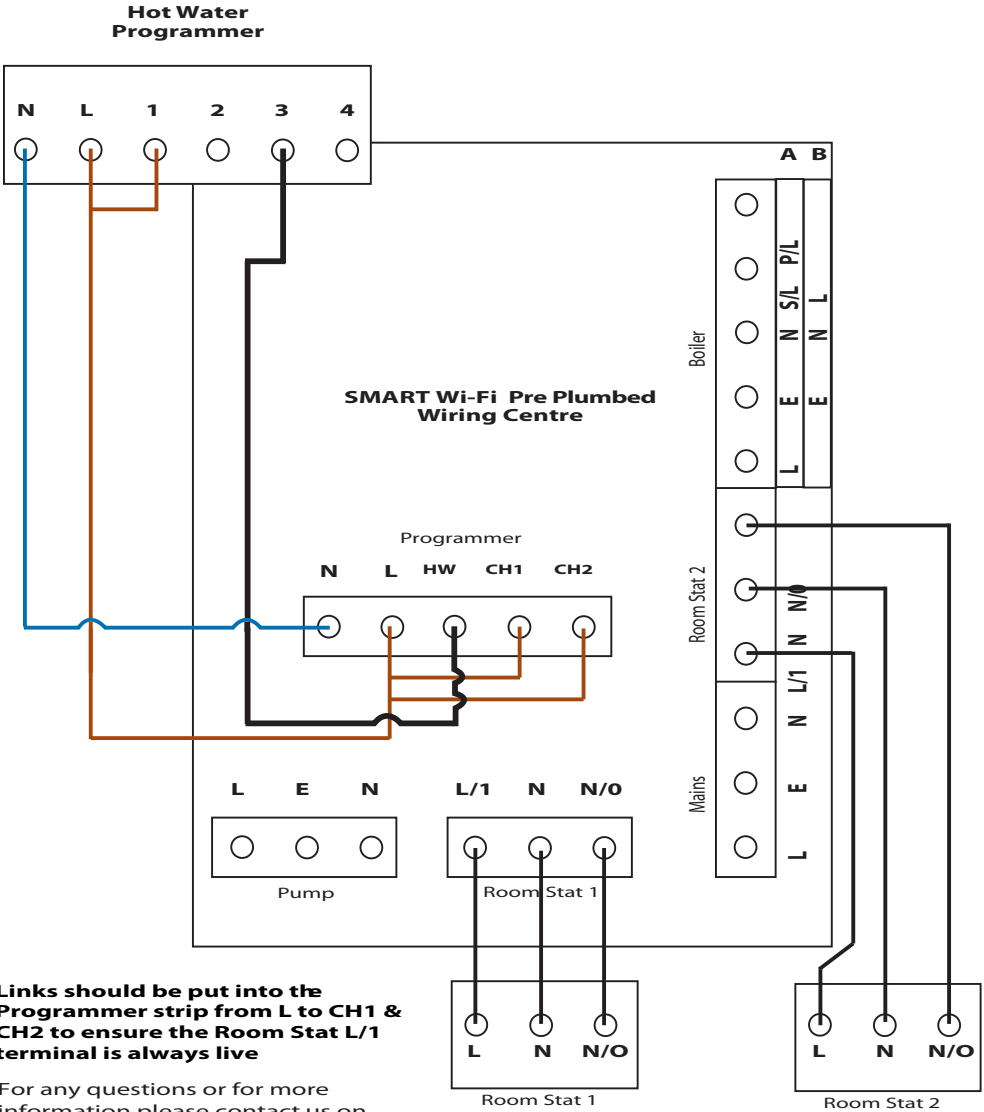
# TWIN ZONE WIRING REQUIREMENTS



**For clarity a twin heating zone schematic is pictured. For single heating zone use only CH1 connections leaving CH2 unused.**

## SMART Wi-Fi WIRING REQUIREMENTS

The following diagram details how to link the wiring centre to the Wi-Fi SMART controls.



**Links should be put into the Programmer strip from L to CH1 & CH2 to ensure the Room Stat L/1 terminal is always live**

For any questions or for more information please contact us on 01924 224282

**Programmable L.E.D Room Thermostat with Wi-Fi**

## ESWCPCB3CBW PCB Wiring Centre

### User and Installation Instructions

#### PCB Wiring Centre

The ESi Controls PCB Wiring Centres, using our plug in system, really simplify and speed up installation and utilise our plug in Zone Valves.

The ESWCPCB3CBW is for Two Heating Zones and Hot Water. With models to suit the new ESi Controls Electronic Dual Cylinder Thermostat, the ESCTDEPW.

#### Installation

Always isolate the AC mains before installing the wiring centre. Plug the system components to the correct terminals.

PCB Wiring Centre	
Protection Rating	IP20
Power Supply	230VAC 50-60Hz
Maximum PCB Current	Fused at 3 amp
Operating Temperature Range	0°C to 45°C
Fixing	4 fixing holes
Dimensions	L196 x W142 x D40 (mm)
Complies With:	EC Directive 2006/95/EC, EMC (89/336 & 92/32 EEC) BS EN 60730-1:2000 BS EN 60730-2-9:2002. LVD (73/23/EEC) (93/68/EEC) BS EN 60730-1:2000 BS EN 60730-2-9:2000)

#### WARNING!

**Interference with sealed parts renders the guarantee void. Always isolate the ac mains supply before removing or fitting the product. This accessory must be fitted by a competent person, and installation must comply with the guidance provided in the current editions of bs7671 (iee wiring regulations) and part 'p' of the building regulations.**

In the interests of continuous product improvement we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

Version 6.4.3

RM Cylinders

Unit 4 Gilcar Way Wakefield Europort Castleford WF10 5QS  
Tel: **01924 224282** Fax: **01924 224283** Web: **[www.rmeylinders.com](http://www.rmeylinders.com)**