SUPERDUTY
ENGINEERED FOR EFFICIENCY

CISTERNFLOW® HIGH RECOVERY CYLINDER

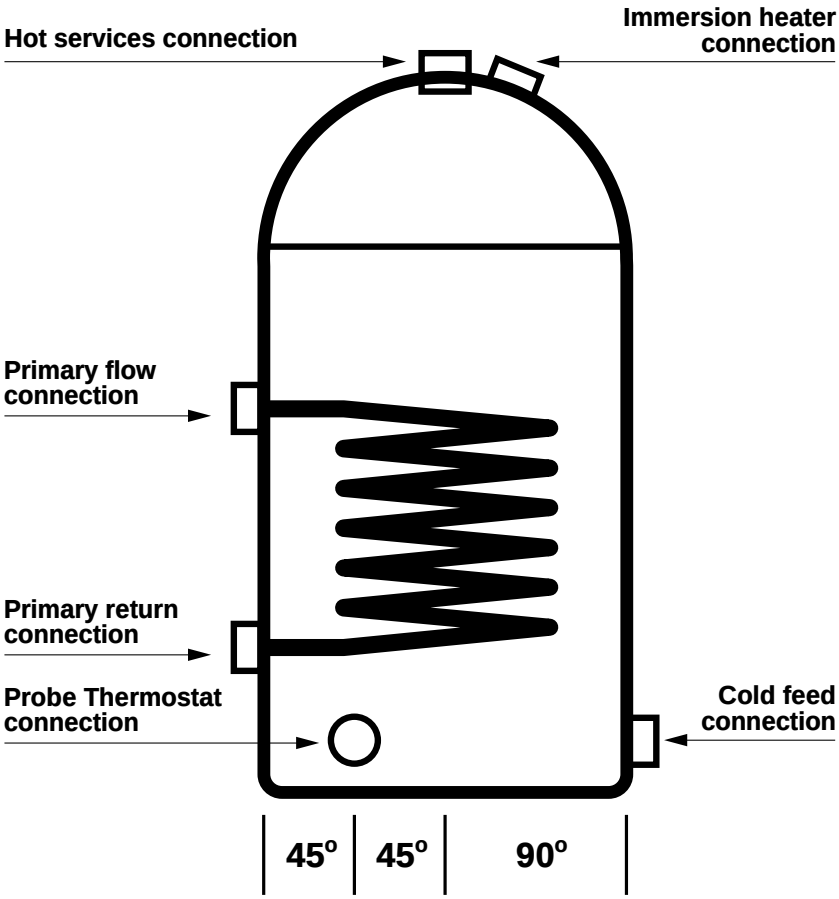
INSTALLATION INSTRUCTIONS

INTRODUCTION

Albion Superduty Cisternflow (CF) cylinders are designed to provide a traditional tank fed hot water supply within the home whilst ensuring enhanced efficiency and reducing the running costs normally associated with cylinders employing a traditional coil heat exchanger.

Installation of Albion Superduty cylinders is very straightforward making them the ideal choice when considering a property refurbishment programme.

SUPERDUTY®
PRODUCT SPECIFICATION



CAPACITIES: 45, 80, 120, 140, 160, 180, 210 (litres).

CONNECTIONS: PRIMARY FLOW/RETURN
CF45/CF80: 22mm compression.
Other models: 1" male BSP.

COLD FEED/HOT WATER SERVICES
CF45/CF80: 22mm compression.
Other models: 1" female BSP.

THERMOSTAT
All models: 1/2" female BSP

MAXIMUM WORKING HEAD:
STANDARD MODELS: 10 metres.
15 and 25 metre working heads available to order.
Please ensure you have the correct model before installing.

PRIMARY HEAT EXCHANGER:
Albion's unique Superduty multi-coil is suitable for both open vented and sealed primary circuits with a maximum working pressure of 3.5bar.

OTHER DETAILS: CFC free factory applied insulation.

FLEXIBILITY OF DESIGN (PRIMARY CIRCUIT)

The design of the Superduty multi-coil heat exchanger requires the primary circuit to be fully pumped. Highly efficient Superduty heat exchangers enable a wide choice of control designs to be used eg hot water priority valving, flow share valving or individually zoned circuits for divided heating schemes.

Albion recommend hot water priority systems for the CF45, such as Honeywell W plan. As a comparison, if a 15 kilowatt boiler is linked is linked to a conventional cylinder in a hot water priority scheme the traditional recovery time of 40 - 50 minutes would cause the central heating radiators to cool rapidly and after 20 minutes or so the rooms would chill significantly. With the CF45 this is eliminated as the unit would have fully recovered to 60^{o}C in 6 - 10 minutes.

Larger Superduty units would benefit in a flow share or individually zoned system, the increased volume of water prolonging the overall recovery time yet still reheating significantly faster than a standard cylinder.

CONTROL OF TEMPERATURE

In order to obtain maximum performance and efficiency from the Cisternflow unit an accurate method of sensing temperature changes is required. To achieve this, Albion recommend the introduction of a probe type cylinder thermostat. This will provide a much quicker response to changing stored water temperatures and will assist the economical operation of the system. The temperature of the delivered hot water is very much an individual decision. Albion recommend that the thermostat setting is adjusted to suit user comfort.

BOILER SETTING

To ensure maximum efficiency of the Superduty heat exchanger it is important to operate the boiler at its maximum temperature setting. This will ensure recovery times are reduced to a minimum. In the interests of high levels of combined overall annual efficiency, whenever a system is renewed or replaced, it is vital to alleviate the problems associated with part load demand not only for hot water but also for household warmth. The Superduty will assure full load demand on the appliance during water heating sequences of short duration and permit controls on the heating circuit to operate to best effect. With such rapid re-heat times it is possible to size the boiler for space heating only with the CF45, offering installers and householders the opportunity for down sizing and appropriate cost savings.
Superduty works well with condensing boilers, giving low temperature return to the boiler thus maximising time the boiler is in condensing mode.

LARGER HOT WATER DEMANDS

If the biggest single hot water draw-off is larger than a standard bath, use an appropriately sized Superduty Cisternflow. They are available in 80, 120, 140, 180, and 210 litre sizes as well as a standard 45 litre unit.

APPROVALS

The NHBC allows the Superduty CF45 to be fitted in an appropriate system in new-build. The WRc list the full range of Superduty products, No 9806040.