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Confirmation of HIU Settings

This form has been issued by Thermal Integration to the customer to confirm the settings required for heat interface units being supplied on the project named below. Please confirm or request alterations to following settings and return this signed form as soon as possible. (see page 2 for explanation of settings)

(Failure to return this form promptly may result in HIU's leaving the factory with the standard settings shown below)

Customer Name: _____ Project: _____

Date: _____

Domestic Hot Water Settings (Defaults)

Customer Preference (Changes from default)

DHW Output Temp. – **55°C**

Adjustable between 45°C & 60°C:-.....

DHW Keep-warm time – **30 Minutes**
(Following the last DHW draw-off)

Please tick							
Off	☐	15min	☐	30min	☐	60min	☐
120min	☐	On always	☐	DHW recirc.	☐		☐

DHW Keep-warm temperature – **25°C**

Adjustable between 25°C & 60°C:-.....

Legionella disinfection program – **OFF**

Off ☐ On ☐

Central Heating Settings

Maximum CH Supply temperature – **70°C**

Adjustable between 25°C & 75°C:-.....

CH Return temperature protection enabled – **Yes**

Off ☐ On ☐

CH Return temperature limit – **50°C**

Adjustable between 30°C & 55°C:-.....

CH Pump over-run time – **5 Minutes**

Adjustable:-.....

Approved By

Signature _____

Print Name _____

Date _____

Position _____

Please return this form to

Jason.lawrence@thermalintegration.com

**For further details please contact Thermal
Integration.**

Explanation of settings

The majority of HIU settings are fairly self-explanatory, however in order to make informed choices we recommend you read and understand what each setting does. The settings are applied to the HIU controller in our factory and can only be changed after installation by connecting a laptop to the HIU.

Domestic Hot Water Settings

DHW Output Temp. – Temperature of hot water delivered to the taps, adjustable between 45°C & 60°C

DHW Keep-warm– This can help reduce the amount of time it takes to pull hot water through from the district heating circuit to the HIU, and is often useful where there are long primary lateral pipe runs with dead-legs without a temperature operated bypass.

The HIU controller will keep the domestic hot water plate heat exchanger at a defined temperature for a defined period of time, following the last tap draw-off. Therefore when the tap is opened during this time period, the plate heat exchanger is already up to temperature and hot water is delivered to the tap in the shortest possible time.

If there are no more tap draw-offs during the selected time period, the HIU will shut down and stop keeping the plate heat exchanger warm to save energy.

We recommend setting the temperature and time as low as possible, so that the flow in the primary circuit is kept to a minimum, reducing unnecessary energy consumption.

It is also possible to turn the keep-warm 'OFF' or 'ON Always', depending on the end user's needs, and if the HIU is fitted with a hot water recirculation pump, the keep-warm setting should be set to 'DHW Recirc'

The keep warm temperature is completely independent from the DHW Output temperature.

Legionella disinfection program – Used for HIU's that might be left unused for longer periods of time with the domestic hot water keep warm set to 'ON Always'. The legionella disinfection program runs every 24 hours, for 90 minutes at 60°C. Flushing the primary circuit of the domestic hot water plate heat exchanger to kill any legionella growth that may occur.

If the keep-warm is set to anything other than 'ON Always' the likelihood of legionella growth is vastly reduced and the disinfection program may be turned off to save energy.

Central Heating Settings

Maximum CH Supply temperature – Temperature of the water delivered to the radiators or underfloor heating circuit, adjustable between 25°C & 75°C.

If the primary temperature is not hot enough to achieve this temperature, the HIU controller will regulate the CH supply temperature to 5°C below the primary temperature. This enable the primary circuit temperature to be reduced in the summer, or to be weather compensated, and all connected HIU's will follow suit, without the need to adjust the HIU settings.

CH Return temperature protection – Designed to combat badly balanced heating systems, this feature helps protect the primary system against high return temperatures, which affects the efficiency of the entire district heating network and causes overheating in corridors.

When enabled the HIU controller will regulate the primary flow into the central heating plate heat exchanger to maintain a defined temperature differential across the apartment heating system. If the return temperature from the heating system begins to rise above the **CH Return temperature limit** (adjustable between 30°C & 55°C) the primary flow into the plate heat exchanger is reduced to help save energy.

If the heating system is correctly balanced and each radiator is working to the defined temperature differential, then the **Maximum CH supply temperature** from the HIU will be maintained, however if the radiators are badly balanced or there is a heat leak radiator allowing an unregulated flow of water back to the HIU, the output temperature will drop until the temperature differential is achieved.

CH Pump over-run time – When the central heating demand ends, the pump is allowed to continue running for a defined period of time to ensure hot water is circulated to every radiator. This is particularly useful when the room thermostat is positioned near a radiator which causes it to switch off before the entire system is up to temperature.