

Standard Assessment Procedure – Instantaneous Waste Water Heat Recovery Systems – Design Checklist for Configurations A, B & C

Design Checklist

Version 10 – 27.06.12



Customer Details:
Customer Name:
Address:
Telephone Number:
Date of Installation:
Name of Lead Contractor:
Installer Name/Company:
Project Reference Number:

NCM (SAP) Identifier:
Technology type: Waste Water Heat Recovery System (WWHRS)
Technology category: Instantaneous Shower Heat Recovery
Brand name:
Model name:
Model qualifier (<i>delete as appropriate</i>) : System A / System B / System C

Completion of this document is a requirement for inclusion of product data within the Standard Assessment Procedure

Note: All checklist items must be ticked in order for this WWHRS product to be used in SAP calculations. Systems must be designed and configured correctly to achieve the energy savings associated with this product.

If more than one Instantaneous WWHRS is installed, a separate checklist must be completed for each installation, even if the WWHRS product is identical. Any additional WWHRS product installations must be installed in a 'System B' configuration only, therefore only products with an NCM (SAP) Identifier - Model Qualifier 'System B' can be installed.

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Refer to the unit's installation manual for the optimum plumbing and drainage configurations and prepare drawings and a schedule of materials for the installation. The Designer's specification for product installation should ensure compliance with Approved Document Part H (2002) of the Building Regulations and the manufacturer's installation guidance.

NOTE: Instantaneous Electric Showers (IES) can be connected to WWHRS but in most cases will not reduce energy consumption, they will therefore not be counted within the SAP calculation. Hand-held showers (showers not fixed above head height) are ignored for the purposes of the SAP calculation.

1. DWELLING EVALUATION	Decision - Tick as appropriate
Has the system designer given due consideration to DHW delivery performance (water pressure and flow rate) as a result of WWHRS induced pressure drop?	
Is the dwelling hot water system (DHW) a mains pressure system, such as Combination Boiler or Unvented cylinder?	
Does the water heater accept a preheated water inlet (Max. 30°C)? [N/A if installed in System B configuration - tick box]	
Does the shower(s) use a thermostatic mixing valve? (Ignore instantaneous electric showers)	
Can the WWHRS be installed within the dwelling heated envelope?	
2. DRAINAGE CONNECTIONS	Decision - Tick as appropriate
Refer to the installation manual for the range of drainage configurations and ensure all drawings and specifications comply with the following aspects.	
Was a WWHRS installation location selected and stated on plans that minimised the length of drain pipe between shower and WWHRS (preferably less than 3 metres)?	
With reference to Approved Document – Part H (2002) of the Building Regulations and the installation manual, has an appropriate method for preventing the ingress of foul sewer gases as a result of the WWHRS installation been devised?	
3. PLUMBING CONNECTIONS	Decision - Tick as appropriate
Refer to the installation manual for the range of plumbing configurations; a decision on the appropriate configuration will be based on the relative installation locations of the shower(s), water heater, soil stack and the WWHRS unit. Ensure all drawings and specifications comply with the following aspects.	
Does the drawing clearly indicate which system configuration (System A, B or C) has been selected and where the relevant connections terminate?	
Do installation drawings indicate the requirement to label pipework between the WWHRS preheated water outlet and the water heater and/or shower cold water inlet(s) (depending on installation configuration) to prevent the future connection of any other service points, such as taps?	
Do installation drawings indicate the requirement to insulate pipework between the WWHRS preheated water outlet and the water heater and/or shower cold water inlet(s) (depending on installation configuration) in accordance with the specification for DHW primary circulation pipes defined in ' <i>Domestic Building Services Compliance Guide - 2010 Edition</i> '?	
If shut-off valves are specified for WWHRS unit inlet and/or outlet, are they 'full flow' (non-restricting) shut-off valves? (Tick if N/A)	
4. INSTALLATION LOCATION	Decision - Tick as appropriate
The following aspects are important for Health & Safety reasons, correct product performance and for any potential maintenance and/or replacement of the WWHRS. Ensure all drawings and specifications comply with the following aspects.	
Access provision is sufficient for cleaning or replacement of WWHRS unit if required?	
Does the drawing specify an installation location for the WWHRS that does not normally exceed 25° C?	
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5. DESIGNER DECLARATION

I declare that the design for this WWHRS has been prepared in accordance with the manufacturer's recommendations and the procedures outlined in this checklist.

System design authority:

Designer's name (please print):

Designer's signature:

Date:

Standard Assessment Procedure – Instantaneous Waste Water Heat Recovery Systems – Installation Checklist & Certificate
for Installation Configurations A, B & C

Installation Checklist and Certificate



Version 10 – 27.06.12

Customer Details:

Customer Name:

Address:

Telephone Number:

Date of Installation:

Name of Lead Contractor:

Installer Name/Company:

Project Reference Number:

NCM (SAP) Identifier:

Technology type: Waste Water Heat Recovery System (WWHRS)

Technology category: Instantaneous Shower Heat Recovery

Brand name:

Model name:

Model qualifier (*delete as appropriate*) : System A / System B / System C

Completion of this document is a requirement for inclusion of product data within the Standard Assessment Procedure

Note: All checklist items must be ticked in order for this WWHRS product to be used in SAP calculations. Systems must be installed correctly to achieve the energy savings associated with this product.

If more than one Instantaneous WWHRS is installed, a separate checklist must be completed for each installation, even if the WWHRS product is identical. Any additional instantaneous WWHRS products can only be installed in a 'System B' configuration, therefore only products with an NCM (SAP) Identifier - Model Qualifier 'System B'.

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for Installation Configurations A, B & C

Refer to the unit's installation manual and to installation drawings and specification for the plumbing and drainage installation configurations and locations. The installation must comply with Approved Document Part H (2002) of the Building Regulations and the manufacturer's installation guidance.

NOTE: Instantaneous Electric Showers (IES) can be connected to WWHRS but in most cases will not reduce energy consumption, they will therefore not be counted within the SAP calculation. Hand-held showers (showers not fixed above head height) are ignored for the purposes of the SAP calculation.

SECTION 1: INSTALLATION	
1. DWELLING EVALUATION	Decision - Tick as appropriate
Has the system installer given due consideration to DHW delivery performance (water pressure and flow rate) as a result of WWHRS induced pressure drop?	
Is the dwelling hot water system (DHW) a mains pressure system, such as Combination Boiler or Unvented cylinder?	
Does the water heater accept a preheated water inlet (Max. 30°C)? [N/A if installed in System B configuration - tick box]	
Does the shower(s) use a thermostatic mixing valve? (Ignore instantaneous electric showers)	
Is the WWHRS installed within the dwelling heated envelope?	
2. DRAINAGE CONNECTIONS	Decision - Tick as appropriate
With reference to the installation manual and to installation drawings and specification - Ensure compliance with the following aspects:	
The installation location has minimised the length of drain pipe between shower and WWHRS (preferably less than 3 metres)?	
In accordance with Approved Document – Part H (2002) of the Building Regulations and the installation manual, the installation has implemented an appropriate method for preventing the ingress of foul sewer gases as a result of the WWHRS installation?	
3. PLUMBING CONNECTIONS	Decision - Tick as appropriate
Refer to the installation manual and to installation drawings and specification for the specified installation configuration (System A, B or C). Ensure the following aspects are complied with:	
The inlet and outlet from the WWHRS are correctly fitted, with the lowest connection for incoming mains water and highest connection for preheated outgoing water?	
The WWHRS preheated water outlet is only connected to the water heater and/or shower cold water inlet(s) (depending on installation configuration), but not any other service points, such as taps?	
Pipework between the WWHRS preheated water outlet and the water heater and/or shower cold water inlet(s) (depending on installation configuration) is insulated in accordance with the specification for DHW primary circulation pipes defined in ' <i>Domestic Building Services Compliance Guide - 2010 Edition</i> '?	
Pipework between the WWHRS preheated water outlet and the water heater and/or shower cold water inlet(s) (depending on installation configuration) is labelled to indicate that no other services can be interconnected?	
If shut-off valves are installed to WWHRS unit inlet and/or outlet they are 'full flow' (non-restricting) shut-off valves? (Tick if N/A)	
4. INSTALLATION LOCATION	Decision - Tick as appropriate
The following aspects are important for Health & Safety reasons, correct product performance and for any potential maintenance and/or replacement of the WWHRS. Ensure the following aspects are complied with:	
Access provision is sufficient for cleaning or replacement of WWHRS unit if required?	
The installation location for the WWHRS will not normally exceed 25° C?	
If the WWHRS features a vertical downpipe design, it has been installed within a tolerance of ±20mm of vertical? [Tick if N/A]	
The NCM (SAP) Identifier label permanently fixed to the WWHRS has been oriented in order to enable visibility, even if a cover panel, etc. must be removed?	
The Second NCM (SAP) Identifier label has been marked appropriately with the Installation Configuration (System A, B or C within the 'Model Qualifier' field) that has been used? The label was then affixed to a nearby service/boiler cupboard or similar and is visible without the requirement for dismantling of any other systems using tools?	

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SECTION 2: USER INFORMATION

1. Handover and Maintenance Advice	Decision - Tick as appropriate
Has a copy of suitable documentation detailing maintenance and operational requirements been supplied for the home user pack?	
Guidance has been provided for cleaning of unit waste pipe to ensure continued thermal performance?	
Has a copy of this document been supplied for the Home User Pack?	

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SECTION 3: INSTALLATION CERTIFICATE

1. Installation Configuration (delete as appropriate)

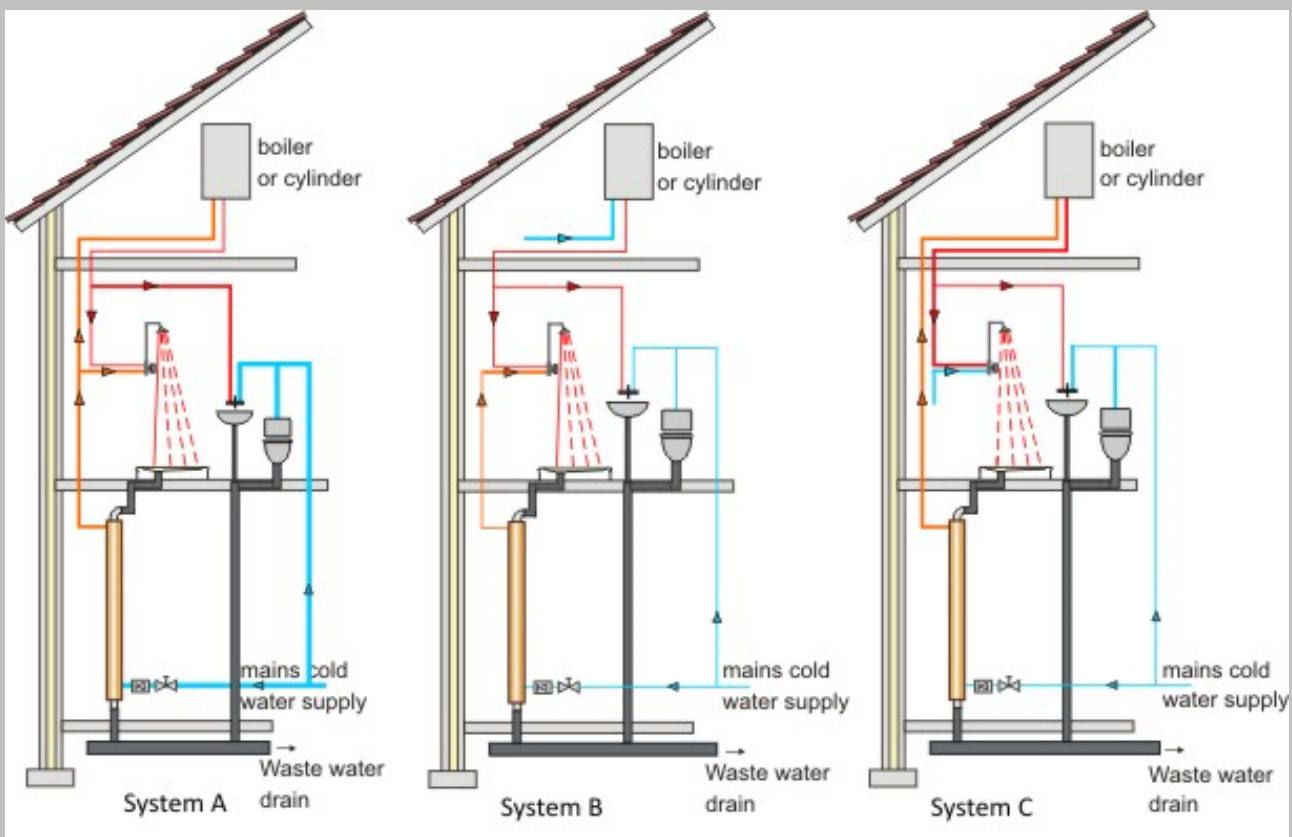


Image courtesy of Building Products Distributors Ltd.

- System A - WWHR outlet connects to water heater inlet AND shower cold inlet
- System B - WWHR outlet connects to shower cold inlet ONLY
- System C - WWHR outlet connects to water heater inlet ONLY

	Number of:
<p>2. All bathrooms connected or not connected to WWHR Count total number of rooms with mixer showers (including Instantaneous Electric Showers) and/or baths fitted, whether connected to WWHR or not</p>	

	Number of:
3. Details for bathrooms with showers and baths, e.g. showers within baths and/or baths and separate shower Count total number of thermostatic mixer showers (exclude Instantaneous Electric Showers) with WWHRS ₁ (System 1 = WWHRS ₁) connected to drain in rooms with a bath	
<u>If applicable</u> - Count total number of thermostatic mixer showers (exclude Instantaneous Electric Showers) with WWHRS ₂ (System 2 = WWHRS ₂) connected to drain in rooms with a bath Note: Additional instantaneous WWHRS products can only be installed in a 'System B' configuration, therefore only products with an NCM (SAP) Identifier - Model Qualifier 'System B' can be installed for additional installations. A separate checklist must be completed for any additional product installations.	
4. Details for bathrooms with showers but <u>NOT</u> baths, e.g. dedicated shower room Count total number of thermostatic mixer showers (exclude Instantaneous Electric Showers) with WWHRS ₁ (System 1 - WWHRS ₁) connected to drain in rooms without a bath	
<u>If applicable</u> - Count total number of thermostatic mixer showers (exclude Instantaneous Electric Showers) with WWHRS ₂ (System 2 = WWHRS ₂) connected to drain in rooms without a bath Note: Additional instantaneous WWHRS products can only be installed in a 'System B' configuration, therefore only products with an NCM (SAP) Identifier - Model Qualifier 'System B' can be installed for additional installations. A separate checklist must be completed for any additional product installations.	
Note: Hand-held showers (showers not fixed above head height) are ignored for the purposes of the SAP calculation and therefore should not be counted in any of the above.	

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SECTION 4: INSTALLER DECLARATION

I declare that this WWHRS has been installed in accordance with the manufacturer's recommendations and the procedures outlined in this checklist.

Installation Company:

Installer's name (please print):

Installer's signature:

Date:

Copies of the combined Design checklist and Installation Checklist & Certificate should be supplied to:

- The dwelling's SAP Assessor
- Building Control Officer (where requested)
- Home User Pack
- The WWHRS product manufacturer