

## TECHNICAL DESIGN QUESTIONNAIRE

### AIR + GROUND SOURCE HEAT PUMP

#### Customer Information:

<b>Company Name:</b>	<input style="width: 95%;" type="text"/>	<b>Account Number:</b>	<input style="width: 95%;" type="text"/>
<b>Contact Name:</b>	<input style="width: 95%;" type="text"/>	<b>Address:</b>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div>
<b>Contact Number:</b>	<input style="width: 95%;" type="text"/>		
<b>Contact Email:</b>	<input style="width: 95%;" type="text"/>		
<b>Enquiry Date:</b>	<input style="width: 95%;" type="text"/>	<b>Postcode:</b>	<input style="width: 95%;" type="text"/>

#### RTM Information:

<b>RTM Brand:</b> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"><input type="checkbox"/> PTS</div> <div style="text-align: center;"><input type="checkbox"/> City Plumbing</div> </div>	<b>Branch:</b> <input style="width: 95%;" type="text"/> <b>Branch Contact:</b> <input style="width: 95%;" type="text"/> <b>Branch Tel No:</b> <input style="width: 95%;" type="text"/> <b>Branch Email:</b> <input style="width: 95%;" type="text"/>
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#### Project Information:

<b>Project Name:</b>	<input style="width: 98%;" type="text"/>		
<b>Project Status:</b>	<input type="checkbox"/> Order to Place <input type="checkbox"/> Out to Tender <input type="checkbox"/> General Enquiry	<b>Project Address:</b>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div>
		<b>Project Postcode:</b>	<input style="width: 95%;" type="text"/>

#### Property Information:

<b>Year of Construction:</b>	<input style="width: 95%;" type="text"/>	<b>Building Type:</b>	<input style="width: 95%;" type="text"/>
		(e.g. Detached House, Office, Care Home etc.)	
<b>No of Bedrooms:</b> <small>(If applicable)</small>	<input style="width: 95%;" type="text"/>	<b>Total Floor Area:</b>	<input style="width: 95%;" type="text"/> m <sup>2</sup>
<b>Heat Loss (If Known):</b>	<input style="width: 95%;" type="text"/> watts	or	<b>Assumed Heat Loss:</b> <input style="width: 95%;" type="text"/> w/m <sup>2</sup>
		(New build to Part L1a:2013 (Domestic) assume 40w/m <sup>2</sup> )	
<b>Current Fuel:</b> <small>(If applicable. Oil/LPG/Natural Gas etc)</small>	<input style="width: 95%;" type="text"/>		
		<b>Electrical Supply Available:</b>	<input style="width: 95%;" type="text"/>
		(Single Phase or Three Phase)	

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<b>Insulation Standards</b>			
<b>External Wall build up:</b>	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	<b>U-Value:</b>	<input style="width: 95%;" type="text"/> w/m <sup>2</sup> k
		(New build default: 0.18w/m <sup>2</sup> k)	
<b>Glazing Type:</b>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<b>U-Value:</b>	<input style="width: 95%;" type="text"/> w/m <sup>2</sup> k
		(New build default: 1.4w/m <sup>2</sup> k)	
<b>Roof Build Up:</b>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<b>U-Value:</b>	<input style="width: 95%;" type="text"/> w/m <sup>2</sup> k
		(New build default: 0.13w/m <sup>2</sup> k)	
<b>Floor Build Up:</b>	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	<b>U-Value:</b>	<input style="width: 95%;" type="text"/> w/m <sup>2</sup> k
		(New build default: 0.13w/m <sup>2</sup> k)	

(e.g. 150mm concrete slab, 75mm celotex, 65mm Traditional Screed)

Please Note: CPS will not typically carry out heat loss calculations. All MIS3005 heat loss calculations to be carried out by the MCS installer.

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### AIR + GROUND SOURCE HEAT PUMP

#### System Information:

<b>Heat Source:</b> <input style="width: 150px;" type="text"/> (e.g. Ground/Air/Water)	<b>Preferred manufacturer:</b> <input style="width: 150px;" type="text"/> (The preferred manufacturer may not always be suitable for the project).
<b>If Air Source, what is the preferred installation method (If unknown we will default Monobloc):</b> <input style="width: 150px;" type="text"/> (Split/Monobloc/Hybrid)	
<b>Will the unit be remotely located?</b> <input style="width: 50px;" type="text"/> (Yes/No)	<b>If yes, distance from plant to building:</b> <input style="width: 50px;" type="text"/> m
<b>Quote for pre-insulated pipework?</b> <input style="width: 50px;" type="text"/> (Yes/No)	<b>If yes, which manufacturer:</b> <input style="width: 100px;" type="text"/> (Uponor/Maincor/Rehau etc.)

#### Ground Collector Information:

<b>Surface Collector Ground Conditions:</b> <input type="checkbox"/> Dry / Loose (e.g Dry Sand 0.3-0.8w/mk) <input type="checkbox"/> Dry / Compact (e.g Dry Clay 0.4-1.0w/mk) <input type="checkbox"/> Saturated / Compact (e.g Wet Clay 0.9-1.8w/mk) <input type="checkbox"/> Saturated / Loose (e.g Wet Sand 1.5-4.0w/mk) <input style="width: 100px;" type="text"/> Other (Please Specify)	<b>Borehole Collector Ground Conditions:</b> <input type="checkbox"/> Clay (1.8w/mk) <input type="checkbox"/> Limestone (2.1w/mk) <input type="checkbox"/> Quartz (2.8w/mk) <input type="checkbox"/> Sandstone (3.1w/mk) <input style="width: 100px;" type="text"/> Other (Please Specify)
Distance from heat pump to ground collector manifold/chamber: <input style="width: 50px;" type="text"/> m	

#### Heating System:

<b>Emitter Type:</b> <input type="checkbox"/> District Heating <input type="checkbox"/> Radiators <input type="checkbox"/> UFH <input style="width: 100px;" type="text"/> Other (Please Specify)	<b>Hydraulic Break:</b> <input type="checkbox"/> Buffer Cylinder <input type="checkbox"/> Low Loss Header <input type="checkbox"/> Multi Fuel Store <input style="width: 100px;" type="text"/> Other (Please Specify)
<b>Will there be any additional integrated heat sources?</b> <input style="width: 250px;" type="text"/> (e.g. Oil Boiler, Stove/AGA etc)	
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<b>Pool Heating</b> <b>Is pool heating required?</b> <input style="width: 50px;" type="text"/> (Yes/No)  <b>Req. Pool Temperature:</b> <input style="width: 30px;" type="text"/> °C (Default: 32°C Indoor, 28°C Outdoor)  <b>Pool Dimensions:</b> Length <input style="width: 40px;" type="text"/> Width <input style="width: 40px;" type="text"/> Depth <input style="width: 40px;" type="text"/> m (Use <u>average</u> pool depth)	<b>Where is the pool located?</b> <input style="width: 100px;" type="text"/> (Indoor/Outdoor)  <b>Is pool covered when not in use?</b> <input style="width: 50px;" type="text"/> (Yes/No)  <b>Pool usage:</b> <input style="width: 150px;" type="text"/> (Default: 365 days for Indoor, May-Sept for Outdoor)

#### Hot Water Requirements:

<b>Is domestic hot water required?</b> <input style="width: 50px;" type="text"/> (Yes/No)  <b>Cylinder size required:</b> <input style="width: 50px;" type="text"/> Litres  <b>Will solar thermal be integrated:</b> <input style="width: 50px;" type="text"/> (Yes/No)  <b>Is a specific reheat time required?</b> <input style="width: 50px;" type="text"/> Hours (From 10°C cold)  <b>High flow rate appliance:</b> <input style="width: 50px;" type="text"/> = <input style="width: 50px;" type="text"/> l/s (e.g. Drench shower) (Flow Rate)	<b>No of outlets:</b> <input style="width: 30px;" type="text"/> x Baths <input style="width: 30px;" type="text"/> x Showers <input style="width: 30px;" type="text"/> x Wash Hand Basin <input style="width: 30px;" type="text"/> x Kitchen / Utility Sinks Other <input style="width: 30px;" type="text"/> x <input style="width: 100px;" type="text"/> (Please specify)
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#### Additional Notes:

#### Internal Use:

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