Technical Design Services Guide for New Builds and Retrofit Homes

Panasonic

heating & cooling solutions

Heat Merchants

Heat Merchants

HELPING YOU BUILD YOUR ENERGY EFFICIENT HOME

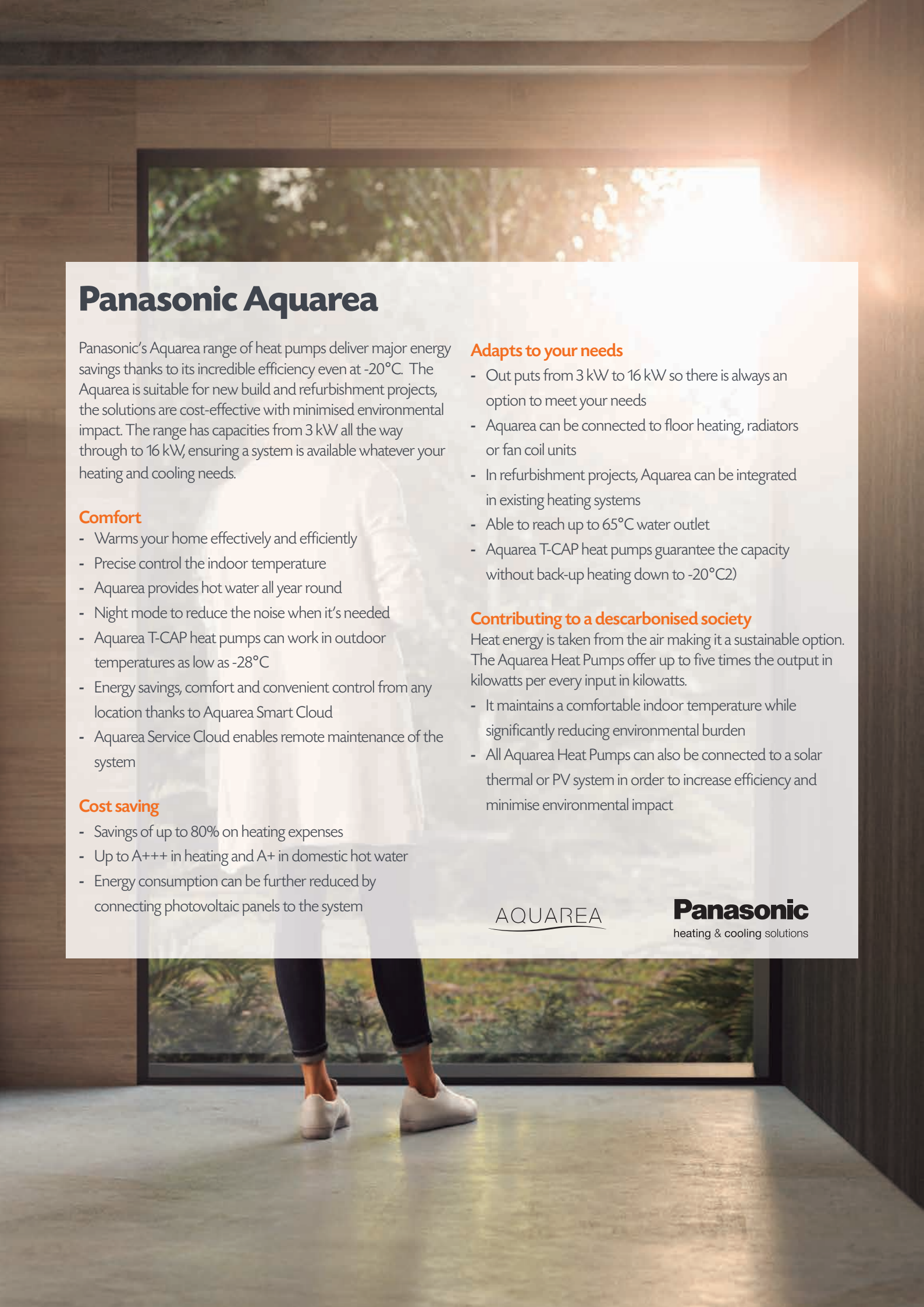
Heat Merchants has a network of 30 branches nationwide supported by a central distribution centre and Technical Services team in Athlone and Ballbriggan. Heat Merchants supplies a comprehensive portfolio of heating, plumbing and renewable energy solutions for both domestic and commercial projects.

Heat Merchants also offers a range of technical services to installers including heating system design and specification, commissioning, ancillary certification, after-sales service and installer training.

We now also offer a range of after sales services to homeowners who have chosen a Panasonic Aquarea Air to Water Heat Pump. Our team of Panasonic trained engineers will service your heat pump and to ensure you meet the servicing terms of your warranty.

Customer Support Centre is available to offer back up support to our customers and are available on 090 6442300.

www.heatmerchants.ie
www.tubstiles.ie



Panasonic Aquarea

Panasonic's Aquarea range of heat pumps deliver major energy savings thanks to its incredible efficiency even at -20°C. The Aquarea is suitable for new build and refurbishment projects, the solutions are cost-effective with minimised environmental impact. The range has capacities from 3 kW all the way through to 16 kW, ensuring a system is available whatever your heating and cooling needs.

Comfort

- Warms your home effectively and efficiently
- Precise control the indoor temperature
- Aquarea provides hot water all year round
- Night mode to reduce the noise when it's needed
- Aquarea T-CAP heat pumps can work in outdoor temperatures as low as -28°C
- Energy savings, comfort and convenient control from any location thanks to Aquarea Smart Cloud
- Aquarea Service Cloud enables remote maintenance of the system

Cost saving

- Savings of up to 80% on heating expenses
- Up to A+++ in heating and A+ in domestic hot water
- Energy consumption can be further reduced by connecting photovoltaic panels to the system

Adapts to your needs

- Out puts from 3 kW to 16 kW so there is always an option to meet your needs
- Aquarea can be connected to floor heating, radiators or fan coil units
- In refurbishment projects, Aquarea can be integrated in existing heating systems
- Able to reach up to 65°C water outlet
- Aquarea T-CAP heat pumps guarantee the capacity without back-up heating down to -20°C2)

Contributing to a descarbonised society

Heat energy is taken from the air making it a sustainable option. The Aquarea Heat Pumps offer up to five times the output in kilowatts per every input in kilowatts.

- It maintains a comfortable indoor temperature while significantly reducing environmental burden
- All Aquarea Heat Pumps can also be connected to a solar thermal or PV system in order to increase efficiency and minimise environmental impact

AQUAREA

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AQUAREA

Aquarea Heat Pump Options

Aquarea High Performance
For new installations and low consumption homes.

Outstanding efficiency and energy savings with minimised CO2 emissions and minimum space for new homes with low consumption.
COPs up to 5.33 (J Generation 3 kW).

Aquarea T-CAP
For both refurbishment and new build homes.

Ideal to ensure that the heating capacity is maintained even at very low temperatures. This line-up is able to maintain the heat pump output capacity until -20°C outdoor temperature.

Aquarea HT
For retrofit homes with existing high-temperature radiators.

Ideal for retrofit and can work with existing radiators requiring higher temperatures, providing output water temperatures of 65°C even at outdoor temperatures as low as -15°C.

	Aquarea High Performance	Aquarea T-Cap	Aquarea HT
	Heating - Cooling - DHW Single phase from 3 to 16 kW Three phase from 9 to 16 kW	Heating - Cooling - DHW Single phase from 9 to 12 kW Three phase from 9 to 16 kW	Heating - DHW Single phase from 9 to 12 kW Three phase from 9 to 12 kW
Connectable to	Radiators - Fan coil - Underfloor heating - DHW	Radiators - Fan coil - Underfloor heating - DHW	Traditional high-temperature radiators - DHW
Application	Normal installation	For extreme cold ambient	Retrofit for old radiators
Energy Efficiency	A+++ / A++ Heating 35°C / 55°C 1)	A++ / A++ Heating 35°C / 55°C 1)	A++ / A++ Heating 35°C / 55°C 1)
Minimum Outdoor Temperature	-20°C	-28°C (All in One and Bi-bloc) -20°C (Mono-bloc) 2)	-20°C
Minimum outdoor temperature to provide constant capacity at 35°C supply water temperature	-7°C (not for all units)	-20°C 2)	-15°C
Supply temperature for heating. Maximum / Heat pump only	75°C 3) / 55°C 4) (or 60°C for Aquarea J Generation)	75°C 3) / 60°C 4) (65°C 5) for Aquarea J generation)	75°C 3) / 65°C
Control and connectivity	Smart Grid Contact 6) Wireless LAN Ready	Smart Grid Contact 6) Wireless LAN Ready	------
Range	All in One from 3 to 16 kW (185 L) Bi-bloc from 3 to 16 kW Mono-bloc from 5 to 16 kW	All in One from 9 to 16 kW (185 L) Bi-bloc from 9 to 16 kW Mono-bloc from 9 to 16 kW	Bi-bloc from 9 to 12 kW Mono-bloc from 9 to 12 kW

All in One system
Indoor unit is combined with domestic hot water storage tank

Bi-Bloc System
The system includes separate indoor and outdoor units and connects to the heating and/or hot water system.

Mono-Bloc System
Outdoor unit only and doesn't require a refrigerated connection

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Smart Cloud Control

ADVANCED USER CONTROL

The Panasonic Smart Cloud WiFi adapter allows for easy and powerful remote control, monitoring and energy management of your air to water heating system from anywhere in the world.

- Energy savings & comfort from anywhere
- Easy to adjust temperature and hot water
- Up to two zones and hot water
- Weekly timer by zone
- Holiday mode activation
- Intuitive and powerful energy statistics
- Operation log history
- Enables professional remote monitoring

Service Cloud

PROFESSIONAL REMOTE MONITORING AND MAINTENANCE

The Smart Cloud will save you time and money by facilitating remote monitoring and maintenance by our Service Engineers or your installer. The homeowner can control and permit access via the app as required.

- Remote malfunction notification
- Remote monitoring and service enabled
- Identify if an engineer needs to call and if parts are required
- System fine tuning to ensure optimal performance
- Performance efficiency reviews
- Advance failure prediction
- Preventative maintenance scheduling

Heat Merchants Technical Services

The Heat Merchants Technical Services team can provide a complete design for heating and hot water, plumbing, mechanical ventilation and drainage for domestic projects. All designs are supported by professional indemnity insurance which offers a guarantee that systems will perform as intended when installed in accordance with our design.

We will work with your design team to assess your requirements and will offer bespoke solutions with a comprehensive technical design including product specification, full schematics and drawings which will be in accordance with current building regulations and best practices. The team have expertise in specifying and estimating for a variety of projects to offer the best and most energy efficient solutions to meet any requirements and budget.

SERVICES

- Technical Design
- Commissioning
- Ancillary Certification
- Technical Support
- Service & Maintenance
- Installer Training
- Estimation Service
- Expert Advice
- Professional Indemnity Insurance
- Assistance with SEAI Grant Application

About our Technical Designs

- All calculations are based on SR50-1-2021: Code of Practice - Part L - Domestic Plumbing & Heating
- All calculations and data will be provided to the BER Assessor so compliance with regulations can be confirmed
- The design provided is covered by Professional Indemnity if installed as per specifications based on the information provided.
- Any changes in dimensions, U-Values will require the calculations to be amended.
- We can also provide commissioning, design sign off and ancillary certification.

Service and Maintenance

Service and maintenance plans for your Panasonic heat pump are provided through our nationwide network of service engineers. Regular maintenance is required to ensure you get the maximum performance from your heating system and to extend the lifespan of your heat pump. Annual servicing by a Panasonic trained professional is also required to fulfill the conditions of your heat pump warranty.

CONTACT US

customersupport@heatmerchants.ie

090 6442300

Heat Merchants Technical Design Team will provide a full technical design and product specification for the installation of a heat pump into either a new home or into an existing domestic building. This design will be bespoke to each individual property. The requirements to complete a custom design for any domestic building are outlines below.

Designing Heating Systems

New Build

Requirements to provide a bespoke design

1. House plans including elevations and cut sections
2. Dwelling Report or the Part L report for the new dwelling (this is available from your BER Assessor)
3. If you are using well water or mains water as this will impact the type of cylinder specified

Why we need a Dwelling Report?

- We can carry out a heat loss calculation based on SR50-1-2021: Code of Practice - Part L - Domestic Plumbing & Heating
- Heat emitters, radiators and/or underfloor heating will be correctly sized according to SR50-1

Benefits of Designing using the Dwelling Report over relying on Current Building Regulations

Without a Dwelling Report the design is calculated using the building regulations dated on the plans however using the accurate detail provided in the Dwelling Report allows us to provide a bespoke design according to the design of the building. This can potentially avoid the expense which can arise from oversizing in cases where the fabric of the building heat loss standards exceed current regulations

Retrofit

Requirements to provide a bespoke design

1. House plans including elevations and cut sections or adequate drawings or sketches with dimensions.
2. Dwelling Report file (available from BER Assessor).
3. Listing of all radiator size and type so we can design flow rates to determine if they can be kept or if they need to be changed (underfloor heating it is deemed to be suitable).

SEAI Air to Water Heat Pump Grant Requirements

SEAI grants (€4,500 for apartments and €6,500 for houses) are available for air to water heat pump installations with a further €200 available towards the required technical assessment.

1. House must be built and occupied before 2021.
2. Technical assessment must be conducted by an SEAI Registered Technical Advisor.
3. Heat Loss Indicator (HLI) - total heat loss per m^2 of dwelling floor area. A minimum HLI of 2 Watts/Kelvin/m^2. There are limited exceptions provided additional requirements are met.
4. Contractor must be an SEAI approved contractor.

The Heat Merchants Technical team will assist installers with the grant application process by completing all the technical information and calculations on the designer/ installer tab on the SEAI grant application which can then be signed off by the contractor.

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TECHNICAL SERVICES

The Technical Services team can provide installers with a complete design for heating and hot water, plumbing and mechanical ventilation for domestic projects. All designs are supported by professional indemnity insurance which offers a guarantee that systems will perform as intended when installed in accordance with our design.

SERVICING & WARRANTY

Heat Merchants now also offer a range of after sales services to homeowners who have chosen a Panasonic Aquarea air to water heat pump. Our team of Panasonic trained engineers offer homeowners a range of service and maintenance plans to ensure their heat pump is professionally maintained and in the event of any issues our team will be on hand to answer any queries, provide remote diagnostics or a call out service.

OUR LOCATIONS

Visit www.heatmerchants.ie for contact details and branch locations

HAVE A QUERY?

Contact us on 090 6424000
enquiries@heatmerchants.ie

ORDER ONLINE

www.heatmerchants.ie

REGISTER NOW AT WWW.HEATMERCHANTS.IE

- Exclusive trade prices and promotions
- Click and collect or delivery to site
- Manage your account - view transactions, previous orders and invoices
- Check stock availability in your local branch
- Quick and easy repeat orders