



## NOTES ON INSTALLATION OF DAFI WATER HEATERS AND FILTERS

DAFI energy saving water heaters can be installed above, or under your basin or sink. Shower installations are also possible, but never inside the shower cubicle. Installation of your water heater in the ceiling or behind the wall, or in a cupboard next to the shower should be considered.

### DAFI water heater Installation Requirements:

- 1 DAFI water heaters must be installed as close to the point of use as possible to minimise pipeline heat loss. Closer is better, maximum distance 4-5 metres - pipe to be lagged and insulated.
- 2 Water pressure must not be less than 200kPa (2 bar) and not exceed 600kPa (6bar). Should water pressure be too high, a pressure reducing valve must be installed.
- 3 Water quality e.g. mains supply, borehole, river etc. Should water quality be suspect, a filter must be installed.
- 4 Single phase or 3 phase power supply with own isolator switch must be available as close as possible to point of usage.

### DAFI water heater Installation Procedure:

Installing the DAFI energy saving water heater is not complicated, but it needs to be installed by a professional plumber and electrician for problem-free operation.

#### Water supply:

- To be undertaken by a qualified Plumber
- Incoming water supply should be clean and without any suspended solids or organic materials.
- The "static" incoming cold water supply pressure to be accurately measured to ascertain operating conditions.
- The maximum operating pressure of all DAFI Heater models is 600 kPa (6 Bar).
- A suitable Pressure Reducing Valve is to be installed before the heater unit, should this 600 kPa limit be exceeded.
- Heater manifold nut assembly must only be tightened with the spanner supplied in each box.
- All air to be vented from the heater unit prior to connecting the 220 volt or 380 volt 50 Hz power supply.
- A cut-off valve should be installed on the water inlet line to the DAFI heater.
- All heater units for under sink installation can be installed at any angle.

#### Recommendations:

- Installing a composite pipe from your DAFI water heater to the point of usage will further reduce heat loss and save more energy.
- "Wonder" Delux Energy & Water saving capacity matched showerhead nozzles can be installed with the selected heater unit for optimum performance enhancement.
- Beware of over tightening of taps on the 3.7kW model.

#### Electric supply:

To be undertaken by a qualified Electrician

- 1 Each heater unit is to be wired to the Distribution Board via the existing Earth Leakage System. For recommended minimum power cable sizes from the distribution board to the heater, see point 4 below.
- 2 A suitably sized wall mounted electrical isolator to be installed within 600mm above the heater unit.
- 3 A dedicated suitably sized breaker to be installed on the Distribution Board for each heater unit.
- 4 Minimum 3 core cable sizes
  - 2,5mm<sup>2</sup> for 3,7 kW models
  - 4,0mm<sup>2</sup> for 7,3kW & higher models
- 5 Municipal bylaws require that a 30 amp X 3pole, or 60 amp X 2pole electric isolator is installed at the unit.
- 6 DAFI heater units are not to be connected to the electrical supply by standard 3-point wall plug.
- 7 Three phase heaters(400v) to be connected using two phases. See diagram on back of heater.

#### DAFI Water Filter Installation:

- The water pressure at point of installation should be 50kpa to 600kpa or 0.5bar to 6.0bar.
- Water flow direction is as per arrow shown on top side of black tube at the back of the filter lid.
- If required, the water flow direction can be changed by removing the four chrome screws at the rear of filter lid and rotating the tube.
- Filter cartridge to be inserted with the blue rubber seal at the top end of filter housing.
- Ensure that the o ring is correctly seated, before closing the filter.
- Use the spanner supplied for all locking and loosening of components, metal tools will damage the unit.
- Close the brass screw/ release valve, at the top of filter lid, once the filter has filled with water. This screw must be opened, to release the pressure inside the filter, when changing cartridges.
- Fit the blue protective cover to the top of the filter, to complete installation.
- If required, a cut-off valve can be fitted ahead of the water feed to the DAFI filter.