# **Zenith Tudor**



Single point open outlet (vented) under-sink water heaters

Model: 21102NZ, 21052NZ



Accessory Tapware for Under-Sink Tudors (sold separately)



Solo\*



Hero\*

#### **WARNING**



Please read all installation requirements, installation procedures and precautions before installing any Zenith Tudor water heater.

Never attempt to install the appliance without reading all of the applicable instructions.

For continued safety of this appliance it must be installed, operated and maintained in accordance with the manufacturer's instructions.

This appliance may deliver water at high temperature. Refer to the plumbing code of Australia (PCA), local requirements and installation instructions to determine if additional delivery temperature control is required.

The appliance is recommended for sinks and tubs; not recommended for basins.

Zenith Tudor water heaters are open outlet (vented) water heaters and must not be installed in the same way as mains pressure type water heaters.

The outlet from any Zenith Tudor water heater must be connected directly to an outlet spout on the sink and must not be obstructed by a tap or valve or in any other way.

The water flow is controlled by a cold water tap connected before the water heater. Cold water pushes hot water out of the tank when the cold water tap is turned ON. Any such cold water tap should be labelled HOT.

This water heater must not be connected to more than one outlet.

All plumbing connections must be made in accordance with AS3500.

The appliance is intended only for indoor use and should never be installed outdoors or be exposed to the elements of nature.

Over-sink and under-sink models are NOT interchangeable.

The appliance is unsuited for use by children or infirm people or those without experience; unless they have been given supervision or instruction by a person responsible for their safety. Children should be supervised to ensure they do not play with the heater.

If the power supply cord is damaged it must be replaced by a Zenith Service Provider or a qualified electrician.

Do not remove the cover of the heater under any circumstances without first isolating the heater from the power supply.

Do not turn the power ON unless the appliance is filled with water.

Outlet temperature should be set to no greater than 50°C without due regard to regulations governing the storage temperature of hot water.

The appliance must not be cleaned by a water jet.

#### Installation requirements

Before installing, ensure that the following are available:

- a) sufficient space to position the heater so there is 270 mm clear access under the heater (over-sink models) or 270mm above (under-sink).
- b) standard 10 amp 240 volt power outlet within 1500 mm of the heater
- c) cold water supply with a minimum working pressure of 100 kPa and a maximum working pressure of 350 kPa.
- d) Isolating valve (not supplied)

If the pressure may exceed 350 kPa, a 350kPa pressure limiting valve (not supplied) must be installed in the cold water supply line.

A double check valve (not supplied) is required to comply with the backflow requirements of AS/NZS3500.1

Under-sink models must be installed beneath approved vented mixer taps requiring a single mounting point on a sink, or tub. (Not recommended for basins).

#### Installation

# NOTE: Failure to correctly fit the Restrictaflow valve (provided) will void the warranty

#### Step One - Tapware

Note: Instructions for correct assembly and installation of Tudor tapware is included in the tapware box. Pay close attention to these instructions.

Under-sink models must be installed with approved vented tapware. It is advisable to fit the tap to the sink before mounting the heater to the wall beneath the sink.

- Install the Restrictaflow valve provided, with the isolating valve (not supplied), into the main cold water supply line. The Restrictaflow is adjustable and must be set to deliver no more than 6Ltr/min (Max.) NOTE: Do not fit the Restrictaflow valve to the tank (See P.5 diag)
- 2. Flush water supply pipes thoroughly to remove any silt or fines.
- 3. Fasten the tap body to the sink using the bolt & plate system provided.
- 4. The hose with a WHITE band on it connects to the tap hole with NO marking.
- 5. The hose with a RED band on it connects to the tap hole with a RED marking.
- 6. The hose with a BLUE band on it connects to the tap hole with a BLUE marking.
- 7. Ensure that the flexible tubes are firmly attached to the base of the tap body and in the correct sequence. Refer tapware installation sheet.

Do not dismantle the assembled tap body during installation. Mixer taps are factory tested and sealed to provide optimum performance.

To adjust water temperature delivered by Solo and Hero mixer taps, see instructions on page 7. Such adjustments should be made only by a qualified technician.

#### Step Two - Positioning

Water heaters should be installed as closely as possible or directly below the outlet tap, with a clearance of 270 mm above the heater.

This unit must not be positioned in an area that may be cleaned by a water jet.

Model	Weight (kg) Empty Full	
5 Litre under-sink	3.5	8.5
10 Litre under-sink	4.0	14.0

#### Step Three - Fastening

It is not necessary to remove the case of the heater during installation.

The heater must be wall mounted with two fixing screws as shown in the diagram on page 5. Fixing screws must have the strength to support the filled heater.

The fixing screws are to protrude 4 mm from the wall as shown in the diagram on page 5 so as to fit into keyhole slots provided on the rear of the heater.

#### Installation

#### **Step Four - Connecting**

The inlet and outlet water connections are located on the top of the heater.

All Zenith Tudor water connections are via 15 mm compression fittings and must be made strictly as shown in the diagrams.

Under-sink models must be installed with approved vented tapware regulating the incoming water supply which displaces the hot water from the heater so it discharges through the open vented spout incorporated into the tap mounted on the sink or tub.

The use of tapware other than approved vented tapware may result in pressurising the heater water tank, causing damage.

Each heater is equipped with a 1600 mm power cord and plug and should be connected to a standard 10 amp power outlet located adjacent to the heater. When correctly installed the plug must be accessible.



NOTE: Do not turn the power ON until the heater is filled with water and air is purged from the heater.

#### Step Five - Commissioning

Fill the heater tank and purge air from the heater by turning the water supply ON and running water through the "hot" mixer tap, until water flows smoothly. Turn the water supply OFF and turn the power supply ON. The heater will then run through its heating cycle.

During the heating cycle, drips fall from the delivery spout or tap.

Dripping will cease when the heating cycle is completed and the stored water temperature has reached the level set by the user.

# Retrofit instructions for open vented heaters

# NOTE: Failure to fit the recommended Restrictaflow valve will void the warranty

#### Flow restrictor

If replacing an existing open vented water heater, an isolating valve must be fitted to the incoming water supply. A Restrictaflow valve set at 6 litres/minute (maximum), must be fitted to the outlet side of the isolating tap (see diagram on page 5).

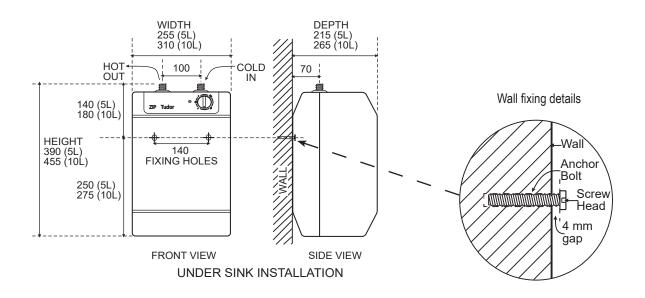


Restrictaflow valve

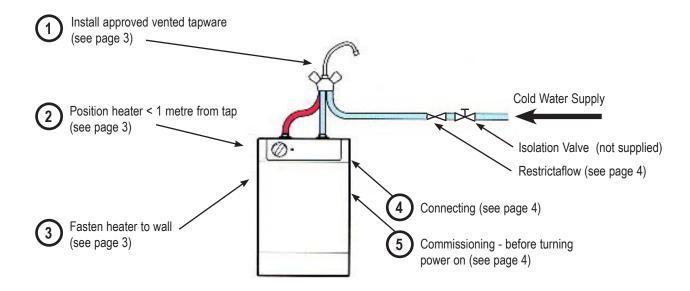
#### NOTE

- It is essential that the tapware is the "Open Vented" type.
- If the aerator on the end of the tap is too restrictive, it must be removed.
- The installation requirements from page 2 are also applicable.

# Installation



# **Quick installation guide**



### Operation

#### **Control Panel**



#### **Water Temperature**

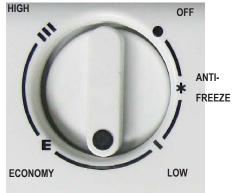
Zenith Tudor water heaters are fully automatic, and may be left switched ON under the control of the variable thermostat.

Nominal operating temperature can be varied from about 30°C to about 80°C.

Temperature should not be set to less than 50°C without due regard to regulations governing the storage temperature of hot water.

#### **Economy Setting**

The economy setting "E" will maintain stored water temperature at approximately 50°C. At the "E" setting, the temperature control locates into a set position and a slight resistance will be felt when rotating the temperature control beyond that setting. This measure is to help ensure that higher temperatures are only selected deliberately.



#### **Frost Protection**

If the heater is located where ambient air temperature could fall below 5°C when the heater is not in use, the "anti freeze" setting on the temperature control will maintain stored water temperature over 5°C to prevent freezing and damage to the water heater.

The same protection does not extend to connecting pipework or fittings.

#### Safety Cut-out

Should the heater over-heat, a manually resettable safety cut-out will automatically turn the heating element OFF. The cut-out must be reset by a Zenith Service Provider or a licensed electrician. Users should never reset the cut-out without qualified assistance.

#### **Spare parts**

Part no	Description
90836NZ	Element kit (pre-August 2019)
90852NZ	Gasket-New Style Element Kit Tudor 2010
90854NZ	Thermostat Kit Tudor 2010
90855NZ	Thermal Cut-Out Kit Tudor 2010
93865NZ	Kit Zenith Mixer Tap V Arc CH Celsius Style Bright Chrome

#### Service

This appliance may only be serviced by a suitably qualified technician. Disconnect from power and turn water supply OFF before attempting any kind of service work.

Knob removed to show screw

# Removing the case

- 1. Remove temperature control knob by gripping it and pulling towards you.
- Remove the single retaining screw located beneath the temperature control knob.
- 3. Remove the four case screws: two at top, two at bottom.
- 4. Carefully lift off the case.

To replace the case, perform the above procedure in reverse.

# Replacing a thermostat

- 1. Remove the front cover.
- 2. Disconnect the two electrical terminals from the thermostat. These are spade connectors and can be easily pulled off.
- 3. Remove the two screws attaching the thermostat to the plastic upright.
- 4. Pull the capillary out of the thermostat pocket located on the element assembly.
- 5. Take the new thermostat (90421) and uncoil about half of the capillary tube.
- 6. Push the new capillary into the pocket ensuring that the thermostat bulb is inserted first, before the safety cut out bulb.
- 7. Attach the thermostat to the plastic upright.
- 8. Reconnect the two electrical terminals. It does not matter which way around the connections occur.
- 9. Ensure the remaining capillary coil is out of the way of any live terminals.
- 10. Ensure the plastic upright is located securely in the position provided.
- 11. Refit the cover assembly.

#### Tap temperature adjustment

Adjustment of a tap temperature limiter on Solo and Hero vented taps should be made only by a Zenith Service Provider or a qualified technician.



Thermostat spade connectors

# Cleaning

Never use strong, corrosive or abrasive cleaning materials. Wipe clean the outer surfaces with a sponge or soft cloth using a mild soap and water. Domestic dish washing liquid detergent is most suitable.

# End of life disposal

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact your local city council for collection centre details

# **Troubleshooting**

Fault	Possible cause	Recommended solution
No heat	No power	Check power supply
	Faulty element	Contact Zenith
	Faulty thermostat	
	Faulty cutout	
	Tripped overload	
No water	No supply	Check water supply
	Blockage	Contact Zenith
	Faulty thermostat	
No indicator	Faulty LED	Contact Zenith
	Faulty connection	

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