

THERMANN™

INSTALLER'S MANUAL

R-Series Gas Continuous Flow Water Heaters

Installation Details

Warranty

Models

TH26ENG5N
TH26ENG5L
TH26ENG6N
TH26ENG6L
TH21ENG5N
TH21ENG5L
TH21ENG6N
TH21ENG6L
TH17ENG5N
TH17ENG5L
TH17ENG6N
TH17ENG6L



GISI133
FJ6M002
Rev. 07/24



To be installed and serviced only by an authorised person.

This appliance is not suitable for use as a pool heater.

The “authorised installer” is responsible for:

1. Correct commissioning of this appliance
2. Ensure unit performs to the specification stated on the data label
3. Demonstrate operation of the unit to the customer before leaving
4. Hand these instructions to the customer

This appliance must be installed in accordance with the manufacturer’s installation instructions and Plumbing Code of Australia (PCA) and all Local Building, Water and Gas fitting regulations (AS/NZS 5601, AS/NZS 3000, AS/NZS 3500.4).

The product complies with the lead-free requirements of the national construction code, Volume Three.

Failure to install this appliance in accordance with these installation instructions may void warranty.

In the interest of continued product improvement, the manufacturer reserves the right to alter these specifications without notice.

Potential dangers from accidents during installation and use are divided into the following four categories. Closely observe these warnings, they are critical to your safety.

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates a potentially hazardous situation which, if not avoided, may result in property damage.

⚠ WARNING

FOR CONTINUED SAFETY OF THIS APPLIANCE IT MUST BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER’S INSTRUCTIONS.

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

⚠ CAUTION

Requests to Installers

- In order to use the Water Heater safely, read this installation manual carefully, and follow the installation instructions.
- Failures and damage caused by erroneous work or work not as instructed in this manual are not covered by the warranty.
- Check that the installation was done properly in accordance with this Installation Manual upon completion.
- After completing installation, either place this Installation Manual in a plastic pouch and attach it to the side of the Water Heater (or the inside of the pipe cover or recess box if applicable), or hand it (and the Owner’s Guide) to the customer to retain for future reference.
- The Water Heater must be commissioned including checking gas supply pressures at maximum demand.
- The operation of the Water Heater should be explained including normal operation and regular maintenance.

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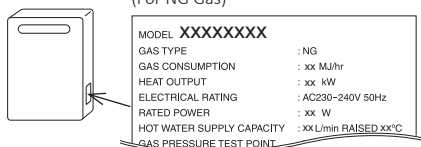
1. Before Installation

⚠ WARNING

Check the Gas

- Check the data label (left side of casing).
- Check that the gas supply pipe is sized for
TH26ENG5(6)N, TH26ENG5(6)L: 195 MJ/hr
TH21ENG5(6)N, TH21ENG5(6)L: 159 MJ/hr
TH17ENG5(6)N: 125.5 MJ/hr
TH17ENG5(6)L: 127 MJ/hr
- DO NOT OPERATE WITH ANY OTHER GAS TYPE.

(For NG Gas)



Check the Power

The power supply required is 230- 240 VAC, at 50 Hz.

Using the incorrect voltage may result in fire or electric shock.

Warning labels

Located on the right hand side of the casing
-PLEASE READ THESE LABELS CAREFULLY!

If the appliance delivers water in excess of 50°C, the following warning must be adhered to:

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.

If the appliance is a 50°C locked model, the following statement & warning must be adhered to:

THIS APPLIANCE DELIVERS WATER NOT EXCEEDING 50°C IN ACCORDANCE WITH AS 3498.

WARNING — THIS APPLIANCE MUST ONLY BE INSTALLED IN ACCORDANCE WITH THE ACCEPTABLE PLUMBING CONFIGURATIONS SPECIFIED IN THESE INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN CONDITIONS WHERE DELIVERY TEMPERATURE CONTROL IS INADEQUATE.

⚠ CAUTION

Do Not Use Appliance for Purposes Other Than Those Specified

Do not use for other purposes than increasing the temperature of the water supply, as unexpected accidents may occur as a result.

Check Water Supply Quality

If the water supply is hard, acidic or otherwise impure, treat the water with approved methods in order to ensure full warranty coverage. See water quality statement on page 23.

Frost Protection

When installed, power to the appliance must be kept switched on, otherwise the appliance should be drained.

This prevents water freezing, and causing damage to the Water Heater.

NOTICE

- This appliance is suitable for potable water applications.
- Do not use this appliance if any part has been immersed in water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and gas control which has been immersed in water.
- 17L, 21L and 26L models are not suitable for connection to a ring main.

2. About the Water Heater

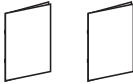
2.1 Included Accessories

The following accessories are included with the Water Heater.
Check for any missing items before starting installation.

Anchoring Screw (× 5)



Owner's Guide,
Installation Manual (this document) (1 each)



2.2 Specifications

- Specifications may be changed without prior notice.
- The capacity may differ slightly, depending on the water pressure, water supply, pipework conditions, and water temperature.

Model Name			TH26ENG5(6)N	TH26ENG5(6)L	TH21ENG5(6)N	TH21ENG5(6)L	TH17ENG5(6)N	TH17ENG5(6)L
Type	Installation		Outdoor, Wall mounted					
	Air Supply / Exhaust		Power Flue					
Operating Water Pressure			200-1,000 kPa					
Minimum Flow Rate			1.5 L/min					
Dimensions (Height) × (Width) × (Depth)			520 mm × 350 mm × 170 mm					
Weight			16 kg		15 kg		14 kg	
Water Holding Capacity			0.7 L		0.5 L			
Connection Sizes	Water Inlet		R 3/4 (20 mm)					
	Hot Water Outlet		R 3/4 (20 mm)					
	Gas Inlet		R 3/4 (20 mm)					
Power Supply	Supply		230- 240 VAC (50 Hz)					
	Consumption	NG/ULPG	55.0 W / 60.0 W		36.0 W / 49.0 W		31.0 W / 41.0 W	
		Freeze Prevention	106 W					
Burner Injector Size		NG	1.45 mm / 2.1 mm		1.2 mm / 2.0 mm		1.2 mm / 1.8 mm	
		ULPG	1.0 mm / 1.4 mm		0.9 mm / 1.4 mm			
Accessories			Anchoring Screws					

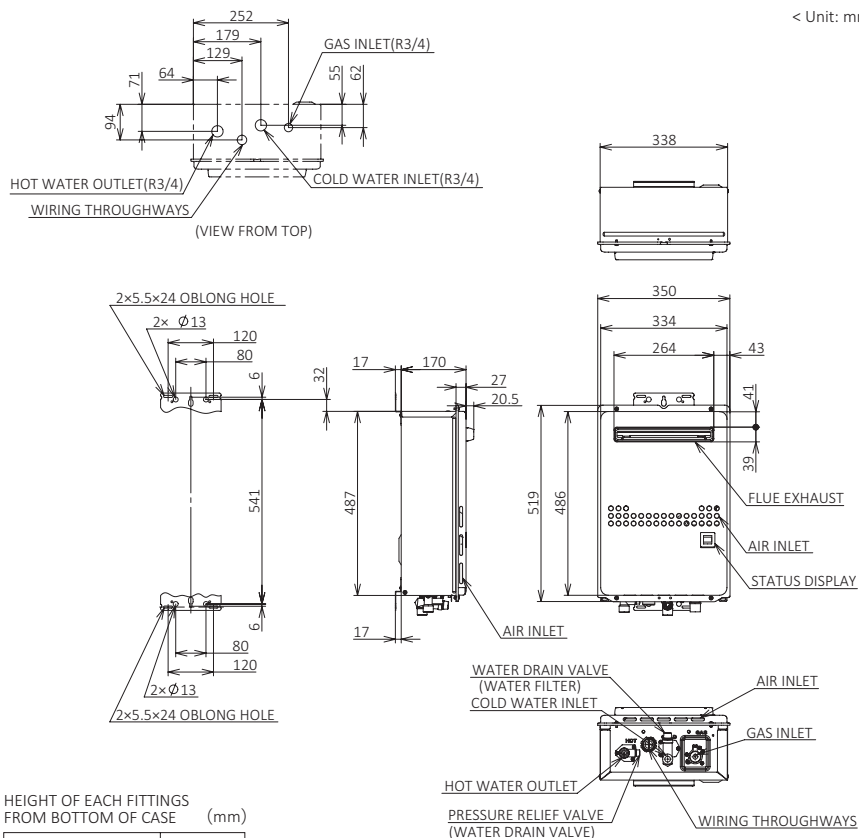
Performance

Item		Maximum Performance					
Model Name		TH26ENG5(6)N	TH26ENG5(6)L	TH21ENG5(6)N	TH21ENG5(6)L	TH17ENG5(6)N	TH17ENG5(6)L
Gas Consumption	NG	195 MJ/hr		159 MJ/hr		125.5 MJ/hr	
	ULPG	195 MJ/hr		159 MJ/hr		127 MJ/hr	
Maximum Hot Water Capacity (25°C Rise)		26 L/min		21 L/min		17 L/min	

2.3 Dimensions

TH26ENG series

< Unit: mm >

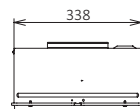
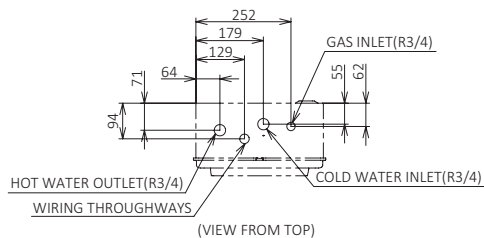


HEIGHT OF EACH FITTINGS
FROM BOTTOM OF CASE (mm)

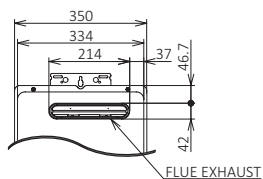
HOT WATER OUTLET	45
COLD WATER INLET	53
GAS INLET	44

TH21ENG series, TH17ENG series

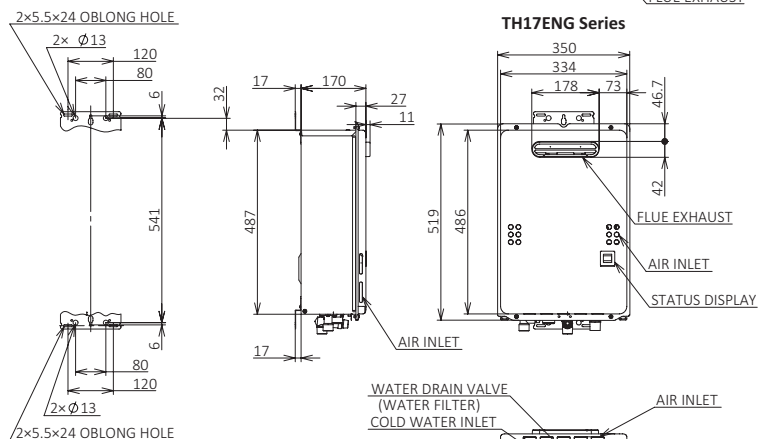
< Unit: mm >



TH21ENG Series

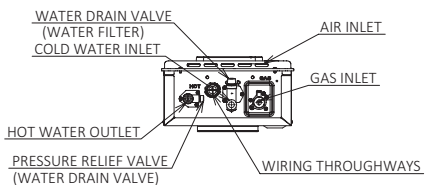


TH17ENG Series



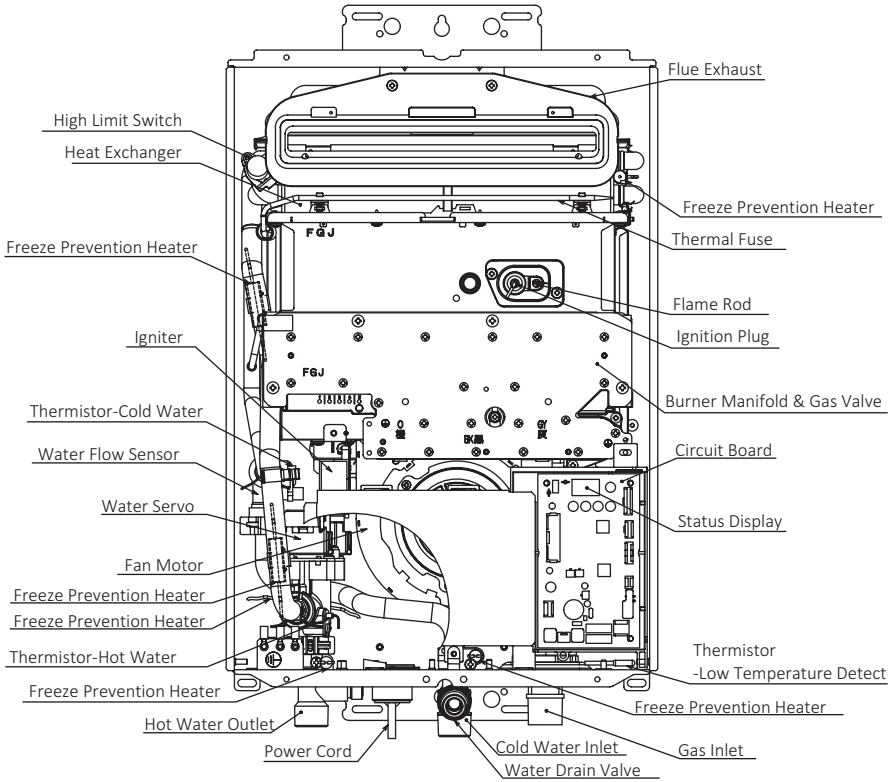
HEIGHT OF EACH FITTINGS
FROM BOTTOM OF CASE (mm)

HOT WATER OUTLET	45
COLD WATER INLET	53
GAS INLET	44



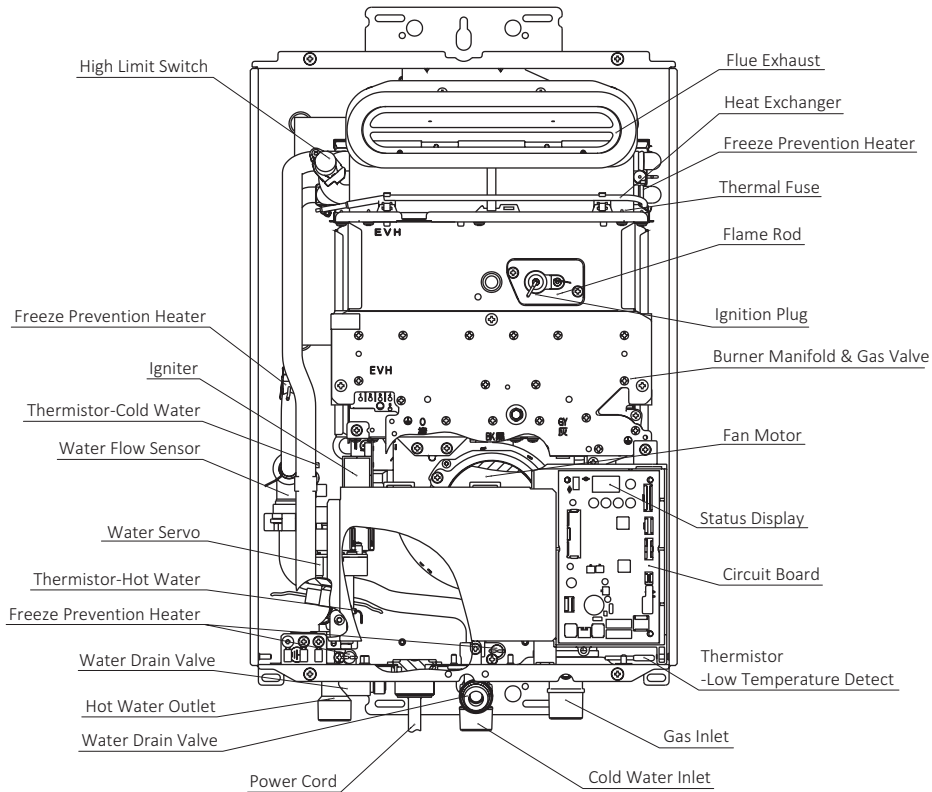
2.4 Component Details Example

TH26ENG series



(e.g. TH26ENG5N)

TH21ENG series, TH17ENG series



(e.g. TH21ENG5N)

3. Choosing an Installation Location

⚠ DANGER

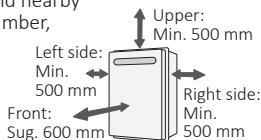
- This Water Heater is for outdoor installation only. Do not install indoors.
- Do not enclose the environment in which the water heater is installed by adding walls or a ceiling e.g. using corrugated sheets, etc. Carbon monoxide poisoning or fire may occur as a result.

⚠ WARNING

- Avoid installation in places where fires are common, such as those where petrol, benzene and adhesives are handled, or places in which corrosive gases (ammonia, chlorine, sulfur, ethylene compounds, acids) are present.

If you do not follow the above, a fire or explosion may result causing property damage, personal injury or death.

- Avoid installation in places where dust or debris will accumulate. Dust may block the air-supply opening, causing the performance of the device fan to drop and incomplete combustion to occur as a result.
- Avoid installation in places where special chemical agents (e.g. hair spray or spray detergent) are used. Ignition failures and malfunctions may occur as a result.
- Do not install this Water Heater in a mobile home, recreational vehicle or on a boat as this may be a Carbon Monoxide Poisoning Hazard.
- Leave the proper clearance between the Water Heater and nearby objects (trees, timber, boxes with flammable materials, etc.).



⚠ CAUTION

Do not install in the following places

- A location where it is not free from obstacles and stagnant air.
- Near staircases or emergency exits.

Consideration to the surroundings

- Do not install the Water Heater where the exhaust will blow on outer walls, other walls or material not resistant to heat. Also consider the surrounding environment. The heat and moisture from the Water Heater may cause discoloration of walls and resinous materials, or corrosion of aluminium materials.
- Do not locate the vent termination directed towards a window or any other structure which has glass or wired glass facing the termination.
- Take care that noise and exhaust gas will not disturb neighbors.
- On combustible surfaces (e.g. weatherboards), it is not required to install a fire proof back board.
- Install in a location where the exhaust gas flow will not be affected by fans or range hoods.

**NOT
CORRECT**



Install according to regulations and manual

- The Water Heater must be installed according to the manual.
- Before installing, make sure that the exhaust flue will have the proper clearances according to AS/NZS 5601, or your local authority.

NOTICE

Locate the appliance in an area where water leakage from the unit or connections will not result in damage to the area adjacent to the appliance or to the lower floors of the structure. When such locations cannot be avoided, it is recommended that a suitable drain pan, adequately drained, be installed under the appliance. The pan must not restrict combustion air flow.

4. Installation Clearances

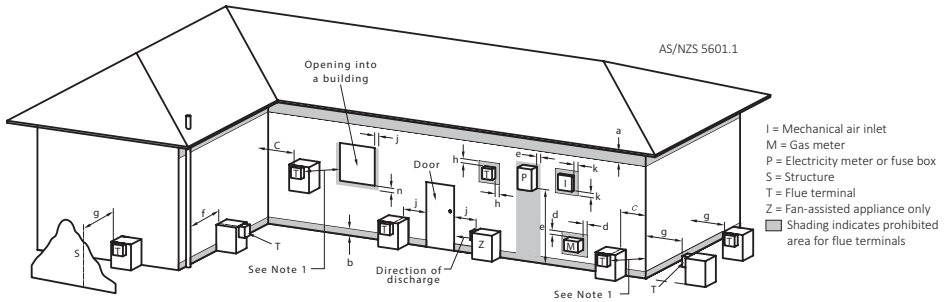
⚠ WARNING

Before installing, check for the following:

The location of the flue terminal must comply with the clearances shown on this page. If you are unsure about clearances not indicated here, in general refer to AS/NZS 5601, or your local authority. In Western Australia refer to the WA Office of Energy rules and regulations.

Flue outlet must be free from any combustible material.

CLEARANCES FOR FLUE TERMINAL (front of heater)



Ref.	Item	Minimum clearances mm
		Fan assisted
a	Below eaves, balconies and other projections: Appliances up to 50 MJ/h input Appliances over 50 MJ/h input	200 300
b	From the ground, above a balcony or other surface *	300
c	From a return wall or external corner *	300
d	From a gas meter (M) ‡ (see Clause 5.11.5.9 for vent terminal location of regulator) (see Table 6.7 for New Zealand requirements)	1000
e	From an electricity meter or fuse box (P) † ‡	500
f	From a drain pipe or soil pipe	75
g	From a return wall or other building structure * or obstruction facing a terminal	500
h	From any other flue terminal, cowl, or combustion air intake *	300
j	Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation: Appliances up to 150 MJ/h input* Appliances over 150 MJ/h input up to 200 MJ/h input* Appliances over 200 MJ/h input up to 250 MJ/h input* Appliances over 250 MJ/h input* All fan-assisted flue appliances, in the direction of discharge	300 300 500 1500 1500
k	From a mechanical air inlet, including a spa blower	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation: Space heaters up to 50 MJ/h input Other appliances up to 50 MJ/h input Appliances over 50 MJ/h input and up to 150 MJ/h input Appliances over 150 MJ/h input	150 500 1000 1500

* Unless appliance is certified for closer installation.

† Prohibited area below electricity meter or fuse box extends to ground level.

‡ Minimum clearances d and e also apply to any combustion air intake openings of appliances.

NOTES:

1 Where dimensions c, j or k cannot be achieved an equivalent horizontal distance measured diagonally from the nearest discharge point of the terminal to the opening may be deemed by the Technical Regulator to comply.

2 See Clause 6.9.4 for restrictions on a flue terminal under a covered area.

3 A flue terminal is considered to be a source of ignition. AS/NZS 1596:2014 specifies the minimum clearances required from a flue terminal to an LP Gas cylinder (see Figure 1.5(A), Appendix I).

4 For minimum clearances not addressed above, acceptance should be obtained from the Technical Regulator.

5 Contact the appliance manufacturer if in doubt that the minimum clearances will provide adequate thermal protection of surfaces adjacent to the flue terminal. Additional protective measures may be required.

5. Installation of the Water Heater

5.1 Securing the Water Heater to the wall

⚠ WARNING

Do not drop or apply unnecessary force to the appliance when installing. Internal parts may be damaged and may become highly dangerous.

⚠ CAUTION

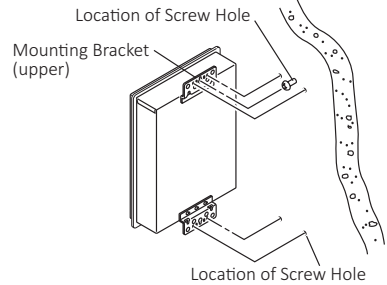
- Protect your hands with gloves and take caution to avoid injury.
- Be careful not to hit electrical wiring, gas, or water pipework while drilling holes.

NOTICE

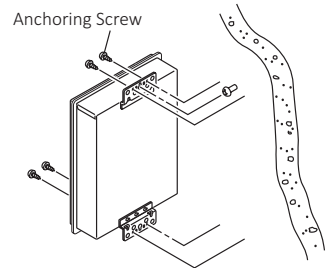
- Installation must conform with all local building, water or Gas Regulations or AS/NZS 5601.
- The weight of the appliance will be applied to the wall. If the strength of the wall is not sufficient, reinforcement must be made to prevent the transfer of vibration.
- Install the appliance on a vertical wall and ensure that it is level.
- Ensure no additional pressure is applied to the pipework.

1. Drill a single screw hole, making sure to hit a stud, or into a solid masonry surface.
2. Insert and tighten the screw and hang the Water Heater by the upper wall mounting bracket.

3. Determine the positions for the remaining four screws (two for the top bracket and two for the bottom), and remove the Water Heater.



4. Drill holes for the remaining four screws.
5. Hang the Water Heater again by the first screw, and then insert and tighten the remaining four screws.
6. Take waterproofing measures so that water does not enter the building from screws mounting the device.



7. Make sure the Water Heater is installed securely so that it will not fall or move due to vibrations or earthquakes.

NOTE For a masonry wall follow the same process but use suitable plugs or dynabolts (not supplied).

5.2 Elevation Adjustment Above 600 m (TH26ENG series only)

If installation altitude is higher than 600 m, contact Customer Service to change the altitude settings.

6. Connecting the Gas Supply

Follow the instructions from the gas supplier.

Gas Type

The gas type indicated on the Water Heater's rating plate (NG or ULPG) must match the type of gas being supplied to the Water Heater.

Gas Meter

Select a gas meter capable of supplying the entire MJ/h demand of all gas appliances in the building.

Gas Connection

1. Fit a union to the Water Heater gas inlet for easy connection and removal. The thread diameter is 20 mm.

NOTE THIS DOES NOT INDICATE THE SIZE OF THE GAS SUPPLY.

2. Fit an suitably approved isolating gas cock in the supply pipe adjacent to the Water Heater gas connection.
3. Ensure that the supply pipe and the gas pressure regulator (ULPG or Natural Gas) has sufficient flow capacity for this and other appliances connected to the fitting pipe.
4. For ULPG appliances ensure that gas cylinders are of sufficient size. The Water Heater alone will require 2 x 45 Kg capacity cylinders.
5. Before connecting the appliance to the gas service, purge any debris or air from the gas service.
6. Check all joints for leaks with an approved leak tester after connection.

Gas Pressure

Ensure measurement is taken when the appliance and all other gas appliances connected to the meter are running at max load.

⚠ WARNING

- The inlet gas pressure must be within the range specified.
- This is for the purposes of input adjustment.
- Gas pressures below or above the required minimum or maximum pressure may result in ignition failure, personal injury or death.

Pressure Test

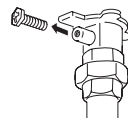
The appliance and its gas connections must be leak tested before placing the appliance in operation.

If test pressures are in excess of 3.5 kPa, the appliance must be completely disconnected from the gas supply pipework during the test process.

Measuring Gas Pressure

SEE DOCUMENT IN PLASTIC SLEEVE BEHIND FRONT COVER FOR PRESSURE ADJUSTMENTS

- In order to check the gas supply pressure to the Water Heater, a pressure test point is provided on the gas inlet.
- 1. Remove the sealing screw from the test point.
- 2. Connect a manometer using a silicon tube.
- In order to check the gas manifold pressure, use the pressure test point located on the gas valve inside the water heater. Remove the sealing screw from the test point and connect a manometer with a silicon tube.



	Supply Pressure	
	Natural Gas	ULPG Gas
Min	1.13 kPa	2.75 kPa
Max	3.00 kPa	3.50 kPa

Pipe Sizing

Please refer to the Gas Installations Standard AS/NZS 5601.1 for the proper method of sizing the gas supply pipe for the water heater. When selecting the pipe size, it is essential to consider the gas input requirements of this water heater along with all other gas appliances on the premises.

- NOTE**
- Ensure that the gas pipe size is correct. If undersized the appliance will not operate correctly.
 - SERVICE CALLS ARE CHARGEABLE FOR UNITS WITH INCORRECT PIPE SIZES OR BLOCKED GAS OR WATER FILTERS.

Flexible Connectors

Flexible gas pipes are not recommended unless the minimum inside diameter is ¾ in. or greater and the rated capacity of the connector is equal to or greater than the MJ/h demand of the Water Heater.

7. Connecting the Water Supply

- Installation and service must be performed by a qualified plumber.
- Observe all applicable codes.

7.1 Guidelines

Installation location

- If installing the Water Heater on a roof (Above lower-level hot water supply):
If the Water Heater is installed on a roof to supply water to the levels below, make sure that the water pressure supplied to the Water Heater does not drop below 199 kPa. It may be necessary to install a pump system to ensure that the water pressure is maintained at this level.
Check the pressure before putting the Water Heater into operation.
If you do not supply proper pressure to the Water Heater, noise may increase, the life of the Water Heater will be shortened, and the Water Heater may shut down frequently.

Potable water

- Pipework and components connected to the Water Heater shall be suitable for use with potable water.
- Toxic chemicals, such as those used for boiler treatment, shall not be introduced into the potable water.
- A Water Heater used to supply potable water may not be connected to any heating system or components previously used with a nonpotable water heating appliance.

Tempering Valve

- For temperature unlocked models, when hotter water is required for some outlets e.g. in a kitchen, a separate hot line must be plumbed.
- For outlets receiving lower temperature water e.g. in ablution areas, fit a tempering valve to this hot line to reduce risk of scalding.

Connecting water supply

- Flush water through the pipe to clean out metal powder, sand and dirt before connecting it.
- Use a union coupling for connecting the pipes to reduce the force applied to the pipework.

- Use approved pipework materials.

NOTE

- Avoid using joints as much as possible to keep the pipework simple.
- Avoid pipework in which an air obstruction can occur.
- Avoid connection using liquid sealant. It can cause the filter to stick, and may be torn. Excess sealant may damage the heat exchanger if it enters the burner assembly, and cause the filter to stick and tear when trying to remove for maintenance.

Cold water supply

NOTICE

No pressure reduction is required unless the water pressure exceeds 1,000 kPa.

- Pipe and fittings must meet the installation requirements of AS/NZS 3500.4 and local authority regulations.
- An isolating valve must be installed on the water inlet in close proximity to the Water Heater.
- A GATE VALVE OR BALL VALVE must be used on the cold water inlet to the Water Heater, THIS REQUIREMENT IS AN AUSTRALIA WIDE REQUIREMENT UNDER THE NATIONAL PLUMBING CODE. STOP TAPS OR COMBINATION STOP TAPS AND NON-RETURN VALVES ARE NOT TO BE USED.
- The Water Heater needs a minimum water supply pressure of 200 kPa to operate.
- Maximum water supply pressure must not exceed 1,000 kPa.
- If the water pressure is too high, use a Pressure Reducing Valve and a Water Hammer Arrester.
- The unit is fitted with a pressure relief valve. In some circumstances, there may be small amounts of water droplets appearing from the pressure relief valve. If required the pressure relief valve should be connected to a suitable drain.

Hot water supply

⚠ WARNING

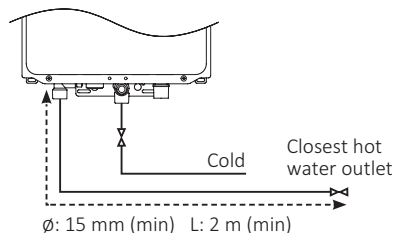
For any sanitary fixture used for personal hygiene, the delivered hot water temperature shall not exceed 50°C.

Models which are not 50°C compliant should be fitted with a temperature control device meeting the appropriate plumbing code requirements.

- Pipe and fittings must meet the installation requirements of AS/NZS 3500.4.
- Hot water lines should be lagged with suitable insulating material.
- DO NOT FIT ANY VALVES OR RESTRICTORS TO THE OUTLET OF THE WATER HEATER.
- DO NOT FIT ANY OBSTRUCTION TO THE PRESSURE RELIEF LOCATED ON THE HOT WATER OUTLET CONNECTION.

[(50°C Models Only) Minimum Distances]

In order to comply with AS 3498 the minimum distances as per the diagram below must be observed.



Commission Check for 50°C Temperature Delivery

A temperature check must be completed at the nearest outlet to the Water Heater to ensure delivered water is below 50°C.

How to check if the water temperature is below 50°C

1. At the closest outlet adjust the hot water flow to at least 5 litres/min.
2. After hot water has been running for 1 min confirm the water temperature is below 50°C.
3. Turn the water off.

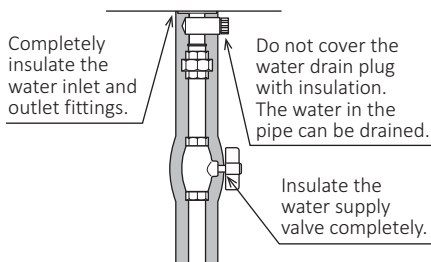
7.2 Freeze Prevention

Perform the following insulation measures for prevention of freezing.

- Take appropriate heat insulation measures (e.g. wrapping with heat insulation materials, using heat tape, electric heaters, solenoids, or pipe covers) according to the climate of the region to prevent the plumbing external to the Water Heater from freezing.

The freeze prevention heaters will not prevent this plumbing from freezing.

- Make sure that there are no water leaks from the cold and hot water supply lines, then insulate the pipes completely.
- Be sure to also completely insulate the water supply valve and the cold and hot water connections on the Water Heater.



7.3 After Installing the water supply pipework

After purging the air from the system using the hot water supply taps, remove the water inlet strainer located on the cold water supply inlet connection. Remove any debris from the filter and replace. When replacing the filter, do not over-tighten the seal.

8. Connecting Electricity

Water Heater

WARNING

Electrical Shock Hazard

Do not connect the electrical power to the appliance until all Remote Controllers have been connected.

It may result in death or serious injury from electrical shock.

CAUTION

Electrostatic discharge can affect electronic components.

Take precautions to prevent electrostatic discharges from personnel or hand tools during the Water Heater installation and servicing to protect product's electronic control.

Ground

To prevent electrical shock and ensure correct operation, always plug power lead into an earthed powerpoint.

Power Supply

- The Water Heater is equipped with a 1.5 m cable with a three pinned earthed plug to be connected to 230- 240 VAC at 50 Hz.
The power consumption may be up to TH17ENG series 147 W, TH21ENG series 155 W, TH26ENG series 166 W.
Use an appropriate circuit.
- The Water Heater requires 230-240 VAC 50 Hz in Australia and New Zealand, weatherproof plug installed in a protected position adjacent to the appliance.
- If the power cord is damaged and requires replacement, use only an original spare part available from the manufacturer.
- Tie the redundant power cord outside the Water Heater. Putting the redundant length of cord inside the Water Heater may cause electrical interference and faulty operation.

- NOTE**
- Do not let the power cord contact the gas pipework.
 - Do not disconnect the electrical power when not in use. When the power is off, the freeze prevention in the Water Heater will not operate, resulting in possible freeze damage.

9. Remote Controller

Suitable remote controller combinations:

Main Controller	Bath Room Controller		Operation
	RCB1T	RCB2T	
RCM1T			Works
✓			Won't work
	✓		Won't work
		✓	Works
✓	✓		Works
✓	✓	✓ (× 2)	Won't work
✓		✓ (× 2)	Won't work
	✓	✓ (× 2)	Won't work

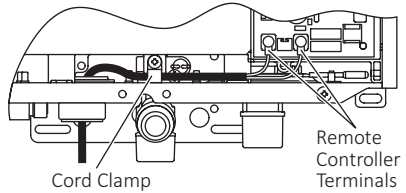
Maximum number of installed:

Main Controller	RCM1T	1
Bath Room Controller	RCB1T	1
	RCB2T	2
Total		4

9.1 Connecting Remote Controller Cord to the Water Heater

- NOTE**
- Tie the excess cord outside the Water Heater. Do not put the extra length inside the Water Heater.
 - The remote controller cord can be extended up to 35 m.
 - Be sure to hand tighten when screwing to the terminal block. Power tools may cause damage to the terminal block.

- Use remote controller cord for any extensions.
 - Install according to the National Electrical Code and all applicable local codes.
1. Disconnect the electrical power to the Water Heater.
 2. Leave enough slack so that the remote controller cord will not be damaged if the Water Heater is removed from the wall.
 3. Remove the front cover (4 screws).
 4. Pass the remote controller cord through the wiring throughway and into the Water Heater.
 5. Connect the Y-shaped terminals at the end of the remote controller cord to the terminal block.
 6. Secure the remote controller cord with a clamp.
 7. Reattach the front cover.



9.2 Temperature Setting

⚠ WARNING

When changing the temperature, make sure to confirm with the customer that the temperature of the hot water will be very high and that there is a risk of scalding.

To ensure compliance with Australian Standard AS/NZS 3500.4, for sanitary areas, install the Water Heater with a tempering valve. In New Zealand, please refer to the New Zealand Building Code and all other applicable electrical, gas fitting and plumbing codes. Temperature is controlled by the maximum temperature set in the Water Heater.

The procedure for changing the maximum temperature setting

NOTE This setting ("F03") must be done with all hot water fixtures closed within the first 10 minutes of connecting the electrical power to the Water Heater.

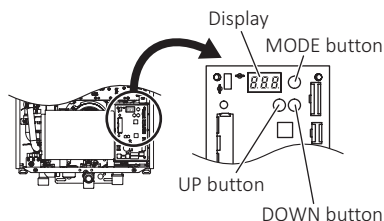
1. Turn the Water Heater off at the powerpoint.

NOTE Do not use the Water Heater while temperature setting.

2. Remove the front cover (4 screws).
3. Turn the power back on.
 - 1) Press and hold MODE button for 2 seconds, and set the DISPLAY to "F03" using UP or DOWN button.
 - 2) Press MODE button once when DISPLAY lights "F03".
 - Switch to SELECT mode.
 - 3) Select the temperature using UP or DOWN button.

NOTE (For TH26ENG series)
If you want to use hot water above 60°C, press the UP button 10 times in a row with "60" displayed.

50°C model: 37-48°C (In 1°C intervals), 50°C
55°C model: 37-48°C (In 1°C intervals), 50°C, 55°C, 60°C, 65°C*, 70°C*
*65°C and 70°C can be set only for TH26ENG6 series.



4. Reattach the front cover (4 screws).

- NOTE** (For TH26ENG series)
- If you want to set the water heaters temperature at 70°C, please change it using the Status Display monitor, even if the Remote Controller is installed. The maximum temperature setting via the Remote Controller is 60°C.
 - If you want use it less than 42°C, call Customer Service on 1300 412 612 (in Australia) or 0800 081 909 (in New Zealand).

- 4) After selecting the temperature, press MODE button again for 2 seconds.
 - Displayed for a few seconds, then the new temperature is locked in. If "----" is not displayed turn the power off at the power point and wait 10 seconds, then turn the power back on and repeat step 3.

		(°C)					
		MODE button	Maximum Temperature Setting	Without Controller	Main Controller	Bath Room Controller	
					RCM1T	RCB1T	RCB2T
50°C model	TH26ENG5 N/L TH21ENG5 N/L TH17ENG5 N/L	Factory Setting	50	50	37-48, 50	37-48, 50	
		F03	37	37	37	37	
			⋮	⋮	⋮	⋮	
			48	48	37-48	37-48	
55°C model	TH26ENG6 N/L	Factory Setting	55	55	37-48, 50, 55	37-48, 50	
		F03	37	37	37	37	
			⋮	⋮	⋮	⋮	
			48	48	37-48	37-48	
			50	50	37-48, 50	37-48, 50	
			55	55	37-48, 50	37-48, 50	
			60	60	37-48, 50, 55, 60	37-48, 50	
			65	65	37-48, 50, 55, 60	37-48, 50	
	70	70	37-48, 50, 55, 60	37-48, 50			
	TH21ENG6 N/L TH17ENG6 N/L	Factory Setting	55	55	37-48, 50, 55	37-48, 50	
		F03	37	37	37	37	
			⋮	⋮	⋮	⋮	
			48	48	37-48	37-48	
			50	50	37-48, 50	37-48, 50	
			55	55	37-48, 50	37-48, 50	
			60	60	37-48, 50, 55, 60	37-48, 50	

NOTE Maximum temperature is controlled by the maximum default temperature set in the Water Heater.

10. Trial Operation

The installer should test operate the Water Heater, explain to the customer how to use the Water Heater, and give the owner this manual before leaving the installation.

Trial Operation

⚠ DANGER

There is a possibility of scald if the setting temperature is too high.

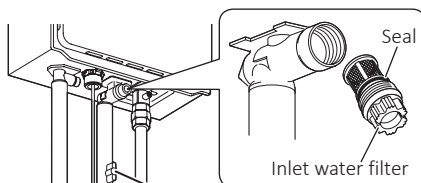
If overheating occurs, or the gas supply fails to shut off, turn off the gas supply valve to the unit.

- NOTE**
- White smoke may be noticed from the exhaust vent during cold weather. This is not a malfunction of the Water Heater.
 - If the Water Heater does not operate normally, refer to “Troubleshooting” in the Owner’s Guide.

1. Open a hot water fixture to confirm that water is available, and then close the fixture.
2. Open the gas supply valve.
3. Ensure power is turned on to the appliance (at the GPO), or turn on the Operation button on the Remote Controller (where fitted). The operation indicator will turn on.
4. Open a hot water fixture and confirm that the Status Display on the Water Heater shows a dotted line moving in a clockwise direction. This display will then change to show the unit’s temperature indicating operation. If fitted with remote controllers, confirm that the Burner on indicator of the Remote Controller turns on, and that hot water is being produced.

- NOTE** If an error code “11” appears on the Status Display or the Remote Controller, air may be trapped in the gas pipe.
- 1) Close a hot water fixture.
 - 2) Turn the unit off and then back on.
 - 3) Open a hot water fixture again.
 - 4) If necessary, repeat until the air is completely purged from the gas pipe.

5. Check that the hot water temperature changes by pressing the ↑ / ↓ buttons.
6. After the trial operation, clean the filter in the cold water inlet according to the procedure as follows.
 - 1) Close the water supply valve.



(e.g. TH26ENG5N) Water Supply Valve

- 2) Open all hot water fixtures.
- 3) With a bucket ready, remove the inlet water filter. (about 1 L will drain out)
- 4) Clean the inlet water filter with a brush under running water.
- 5) Reinstall the inlet water filter.

NOTE Do not lose the seal.

- 6) Close all hot water fixtures.
- 7) Open the water supply valve and check that water does not leak from the inlet water filter.

If error codes “11”, “12”, and “90” appear, check the following contents.

[“11” : Ignition failure, “12” : Flame loss]

- Check that the gas supply pipe is appropriately sized.
- Check that the gas supply pressure is within the ranges required in this manual.
- Check that the gas supply matches the type indicated on the Water Heater’s rating plate.
- Air may be left in the gas pipework. Repeat the power ON/OFF.

[“90” : Combustion abnormality]

- Check that the air supply / exhaust vent for blockage.
- Check that the gas supply pressure is within the ranges required in this manual.
- Check that the pipework is not frozen or clogged.

Handling after trial operation

If the Water Heater will not be used immediately, close all gas and water valves, and drain all of the water out of the Water Heater and the plumbing system to prevent the Water Heater and system from freezing, and discharge the gas out of the gas pipe.

NOTICE

Freezing is not covered by the warranty.

Lighting Instructions

⚠ WARNING

A fire or explosion may result if these instructions are not followed, which may cause death, personal injury or property damage.

This Water Heater does not have a pilot. It is equipped with an ignition device that automatically lights the burner.

Do not try to light the burner by hand.

1. Read the safety information in the installation manual or on the right side of the Water Heater.
2. Turn off all electrical power to the Water Heater.
3. Do not attempt to light the burner by hand.
4. Turn the gas supply valve (external to the Water Heater) clockwise to the off position.
5. Wait five minutes to clear out any gas. If the smell of gas remains, stop, and follow the instructions on page 3 of the Owner's Guide.
6. Turn the gas supply valve counterclockwise to the on position.
7. Turn on the electrical power to the Water Heater.
8. The Water Heater will now operate whenever hot water is needed. If the Water Heater will not operate, follow the shutdown instructions and call a service technician.

Shutdown Instructions

1. Turn off the water supply to the unit.
2. Turn off the electrical power.
3. Turn the gas supply valve clockwise to the off position.

NOTE If the water heater is to be left switched off, follow the drain procedure in the Owner's Guide.

11. Maintenance

11.1 Periodic Check

- Check the following to ensure proper operation of the Water Heater periodically .
- Also check the items of maintenance described in the Owner's Guide or consult the manufacturer for recommended service checks.

[Burner]

- Check the burner flame periodically for a proper blue color and consistency.
- If the flame does not appear normal, the burner may need to be cleaned by a qualified service technician.

[Water filter]

- Check and clean the filter inside of the cold inlet connection.

NOTICE

Do not use this appliance if any part has been immersed in water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been immersed in water.

11.2 WATER QUALITY

All Thermann water heaters are constructed from high quality materials and components and all are certified for compliance with relevant parts of Australian and New Zealand gas, electrical and water standards.

Whilst Thermann water heaters are warranted against defects, the warranty is conditional upon correct installation and use, in accordance with detailed instructions provided with the water heater. In the case of the water supplied to the water heater, it is important that the water quality be of an acceptable standard.

The water quality limits/parameters listed in the water quality table are considered acceptable and generally, Australian and New Zealand suburban water supplies fall within these limits/parameters.

In areas of Australia and New Zealand where water may be supplied, either fully or partly, from bores, artesian wells or similar, one or more of the important limits may well be exceeded and the water heater could, therefore, be at risk of failure.

Where uncertainty exists concerning water quality, intending appliance users should seek a water analysis from the water supplying authority and in cases where it is established that the water supply does not meet the quality requirements of the water quality table, the Thermann warranty would not apply.

WATER QUALITY TABLE

Maximum levels:

pH	6.5-8.5
Saturation Index (LSI) (langelier)	+0.4 to Minus 1.0 @65C
Total Hardness	200 mg/L
Hardness (as CaCO ₃)	200 mg/L
Chlorides	250 mg/L
Sodium	150 mg/L
Iron	1 mg/L
Silicon Dioxide (SiO ₂)	50 mg/L
TDS	600
Dissolved CO ₂	25 mg/L
Magnesium	10 mg/L

