



Chromagen Australia
Scope of Installation Works (Hot Water)

Effective: 1st Oct 2020

Section C. Pumped Roof Mounted Split Systems
(Roof Mounted Tank & Collector)

Scope of works for Solar Hot water Installation:

All installation components must be in accordance with AS3500, AS3100, AS3498, AS2712, AS1170.2 complying with all legislated Federal, State and local Government requirements.

IMPORTANT NOTES:

- **Safe and clear access is required for all works.**
- **Fall protection is the responsibility of the customer.**
The below is required for each according installation:



Single Storey
Pitched Roof (up to 25°C)
Guard Rail Protection Required



Double Storey
Pitched Roof (up to 25°C)
Platform Edge Protection Required



Double and Three Storey
Flat Roof
Roof Access Hatch Required

- **For solar hot water installs, stage 1 must be completed after the roof cladding has been installed and prior to any internal plastering/cladding is installed. This is to allow access through the frame for copper runs and sensor cabling.**
- **Additional site visits due to access restriction and / or site not being ready will incur rebooking fees**

WARNING: Not all roof types/materials are suitable for Solar Hot Water installations. Systems cannot be installed on slate or sites where asbestos may be present and disturbed.

Stage 1 of 1 – Pumped Horizontal Systems

(Full installation with system mounted gas booster)

1. Full installation of Pumped Horizontal Solar Hot Water System (A2007-1 + A2007-2)

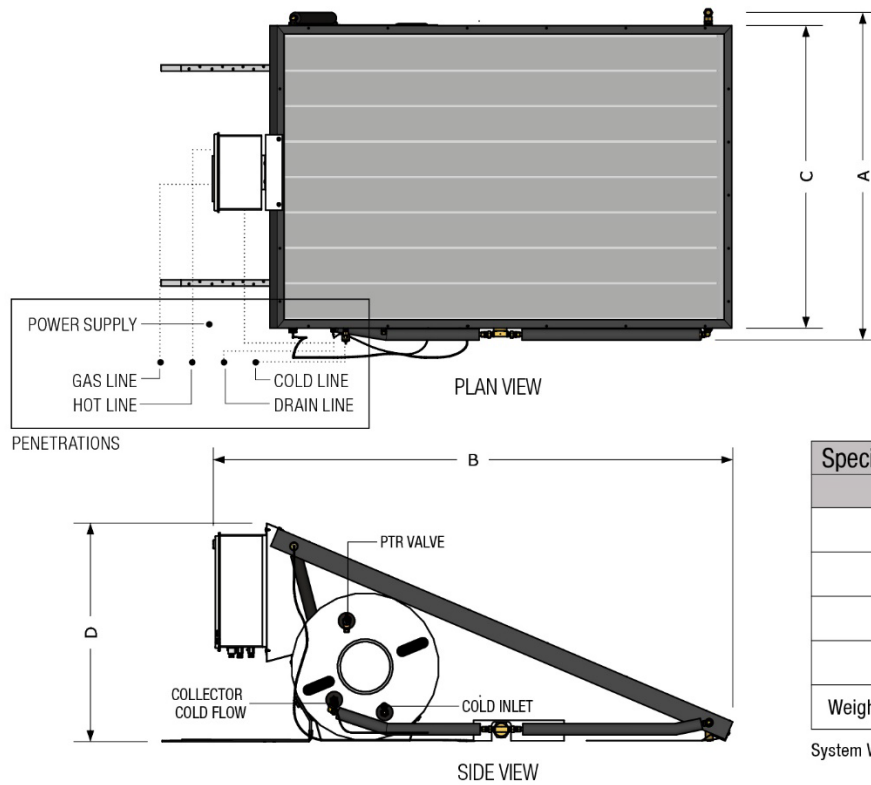
- a. Installation of tank and collector(s) on the roof of the premises as per manufacturer's instructions;
- b. Installation of frost valve (where ordered)
- c. Connection of approved duo (isolation and non-return) valve to cold water inlet line;
- d. Installation of cold expansion valve (Where required, by customer or purchased through Chromagen);
- e. Installation of pump station assembly;
- f. Installation of non-return valve between cold water inlet to tank and cold-water feed to tempering valve;
- g. Connection of flow line to pump station assembly;
- h. Connection of return line to tank;
- i. Connection between tank hot outlet and gas booster inlet connection (within m);
- j. Connection between booster hot outlet & temp valve (by customer or purchased through Chromagen);
- k. Connection of single tempering valve (only if purchased through Chromagen) within 1m of gas booster outlet, otherwise connections and penetrations for hot/cold water and gas to house done by others;
- l. Connection of gas supply to gas booster and test for leaks with soapy water and manometer (within 1m);
- m. Connection of PTR (Pressure/Temp Relief) valve to tank with max 1m pipe run to tundish / PTR line (by others)
- n. Bleed all air from system using internal hot water tap (or at tempering valve outlet if unable to get access);
- o. Plug in solar controller to external waterproof double GPO supplied by builder and energise controller/pump;
- p. Check controller for indications of operation (i.e. no warning lights, only green pump light on);
- q. Check controller after 5 minutes to ensure pump turns off correctly;
- r. Close all hot water taps and plug gas booster into external waterproof double GPO to energise;
- s. Turn on hot water tap (or open tempering valve outlet if unable to get access) to test for gas booster ignition;
- t. Run hot water for 2 minutes to ensure system is operating correctly and flush pipes;
- u. Check filters in gas booster and tempering valve to remove and debris that may have been in pipes;
- v. Run hot water again to ensure system is operating correctly;
- w. Set tempering valve to 50 degrees as required (internal access required to complete);
- x. Completion & submission of all required documentation to meet Local, State and Fed Govt requirements; and
- y. Remove all rubbish from install from site.

Builder requirement:

- Crane lift of all product onto the roof
- Provision of cold inlet and hot water lines* within 1 metre of hot water system location (already penetrated through roof and suitably water proofed)
**where gas boost is employed, hot water line must be run to boost location and subsequent hot water line to the home*
- Provision of 20mm gas line within 1 metre of the boost location (gas boost systems only) (already penetrated through roof and suitably water proofed if at roof level)
- Provision of 20 amp dedicated electrical circuit to the hot water system location (electric boost systems only)(already penetrated through roof and suitably water proofed and suitably isolated)
- Provision of cold expansion valve (where applicable and not purchased through Chromagen)
- Tempering valve (where not purchased through Chromagen)
- Provision of Double 10amp 240V power GPO as per system diagram (if gas boost at same location, otherwise single 10amp 240V power GPO at both system and boost locations)
- Provision of suitable discharge point for PTR drainage within 1 metre of hot water system location
- Suitable means of access, where access point exceeds single storey (refer to "A note regarding service and Maintenance")

System Diagram

200L (Gas)



Specifications		
		200L
A	Overall Width	1415mm
B	Overall Length	2310mm
C	Collector Width	1274mm
D	Overall Height	850mm
Weight (Empty)	System Weight	140kg

System Weight includes: Tank, Collector & Gas Booster

SPECIAL NOTES

- All plumbing connections must be done by a licensed plumber and in accordance with local authority regulations.
- Under no circumstances can plastic pipe be used for higher temperature solar water heater plumbing
- The cold water inlet, cold flow and hot return lines require an approved isolating non-return valve.
- In some locations, regulations require a pressure relief valve be fitted to the cold water supply.
- Pressure relief valve must be plumbed to appropriate waste drain
- All hot water pipes must be insulated

A note regarding Service and Maintenance

As per building and gas regulations any installation of a hot water system (particularly those with a gas component) must be suitably accessible for ongoing service and maintenance.

As such it is important that a suitable means of access is available at all times for trained professionals to gain access to allow servicing



Permanent Ladder
(Commercial Application)



Internal Roof Access Hatch
(Residential Application)

Images for example only