

Notice of Non Compliance

DATE:

In terms of the SOUTH AFRICAN NATIONAL STANDARD (SANS) 10254, 10106, 1352 and the National Consumer Protection Act; all owner/users of a maintained, replaced or repaired hot water heating system comply to these standards, and any non-compliance of the respective South African National Standard must be notified in writing to the user/owner.

This Non-compliance notice which shall form part of PIRB Certificate of Compliance No: _____, hereby informs you in writing of the respective SANS non-compliant areas of your installation. It is further noted that if the respective area's of non-compliance of the installation are not made compliant it may result in any future warranty/guarantee/insurance being voided.

SANS Ref	Description	Compliant	Non Compliant	Critical Area of Safety
SANS 10106				
4.1	Does the installaton comply with relevant national legislation			
4.3.1	Solar water heater complies to SANS 1307			
	Control components and drip tray comply to SANS 10254			
	Hot water to terminal fittings complies with SANS 10252 [tempering valve installed]			
4.3.2	Where storage tank is installed below the solar collector or where natural thermosiphon circulation is not intended a suitable means of prevention is installed			
4.3.3	Where natural thermo-siphon circulation occurs there are no thermal or air traps or flow restrictions			
4.4.1	The installation components comply with the manufacturers specifications			
	The installation components comply with the applicable mandatory standards			
	The installation components ensure safe and effective operation of the system			
	The installation components have safe and effective discharge and drainage of water/transfer fluid			
	Shut off valves and unions are installed to ensure repairs/replacement/removal			
4.4.3	The rated pressure of the system does not exceed a static pressure of 600kpa			
	The expansion relief and pressure control valve have the same or lower pressure rating than that of the system			
4.4.1	Are the various components installed as such to ensure that the system is balanced when water is delivered to terminal fittings			
5.1	Installation complys to SANS10252-1			
5.1.2	HWC complies to SANS 151			
5.1.4	Installation complies to SANS 10254			
5.1.5	Electrical installation complies to SANS 10142-1			
5.1.6	System complys to SANS1307			
5.2	In the event of the installation being in an area prone to freezing, the system utilised is freeze resistant			
5.3.1	The integrity of the roof structure has been supported in terms of loading, and where required has been approved by a competent person			
	Deemed to satisfy is limited to 250lt system			
5.3.2	System is installed such that the installation does not contribute to the acceleration of the roofing material or structural material			
5.3.3	Where required, supports to maintain orientation tilt angle are installed			
5.3.4	Hot water outlet is at the highest point of the tank			
5.3.5	Orientation of the collectors are true north, with a maximum of 45deg towards East or West			
5.3.6	The position of solar collectors are not shaded 3hrs before or after zenith (after 12)			
5.3.7	Components requiring maintenance are accessible			
5.3.8	Collectors and supports are installed in a manner that will not cause build up of debris or water			
5.3.9	There are no penetrations through roof water ways			
	Pipes that penetrate through roofs are water proofed using a UV material			
SANS Ref	Description	Compliant	Non Compliant	Critical Area of Safety
	Pipes are dressed with water proofing to a minimum of 100mm			
5.3.10	The solar collector and all operating components are connected using union type fittings (no flexi connectors)			
5.3.11	The solar collector is secured in position and does not place any additional strain on the installation pipework			

5.3.12	In the event of accidental discharge of hot water on the roof will the hot water discharge in a controlled manner to a fibre cement or metal gutter			
	Is accidental discharge of hot water discharged onto an alternative roof and controlled drainage to ground level			
5.4.1	Sizing of the storage capacity of the container within the solar system is in accordance with SANS 10252-1 / SANS 10400 XA			
5.4.2	Where the storage container and its components are installed in a position where any leakage or discharge from components can cause damage to a property, has a drip tray been installed			
	The tray position slopes to the outlet of the tray, and is supported and secured correctly			
	The discharge pipe from tray is led through an external wall and is secured correctly			
	Tray discharges in a position which is visible			
	Joints are leak tight			
5.4.3	Where required, the overflow from a storage container installed on the roof discharge pipe will be led to a position where no damage can be caused			
5.4.4	Union type fittings are utilised to connect up solar water heater and all components			
5.4.5	Installation complies to SANS 10254			
5.4.6	Solar water heater is secured in the correct manner			
5.4.7	On the hot water installation, there are no zones where water is stored at a temperature of between 25°C and 45°C, and stored hot water shall achieve at least 16°C for a minimum of 1 hour per day to alleviate favorable conditions for legionella pneumophila (legionnaires' disease)			
5.5.1	Safety and control valves comply to SANS standards			
5.5.3	Pressure and safety valves comply in accordance with SANS 198 and are installed as per SANS 10254			
5.5.4	The thermostat has not been replaced by any device that does not comply with SANS 181			
5.5.6	Temperature pressure valve probe protrudes by a minimum of 15mm within the storage water heater			
5.5.7	No modifications to the T&P valve are made			
5.5.8	Vacuum breakers are installed as per SANS 10254, or as per manufactures specifications			
5.6.1	Pipework and insulation is designed to withstand pressure and temperatures			
5.6.2	Material utilised on the solar system is of a type that can withstand temperature of water generated			
5.6.3	Fittings that are soldered; jointing is as specified in SANS 10252-1			
5.6.4	Hot and cold water supply pipework is designed as such to limit length and directional changes			
5.6.5	Where copper pipe has been used, piping is of SANS 460 and no soft solder joints are made within 1m of the connections to the solar collectors			
5.6.6	Piping system has been installed in terms of the manufacturer of the systems' specification			
5.6.8	All pipes and fittings where required are protected from freeezing and system is insulated with required material that will be appropriate for the minimum temperatures in the region			
	Plastic, composite and metallic pipes and fittings are installed in accordance with SANS 10252-1			
SANS Ref	Description	Compliant	Non Compliant	Critical Area of Safety
5.6.10	All connections from the solar collectors 22mm are as per the manufacturers specifications otherwise specified			
5.6.11	Steps have been taken to ensure no formation of air traps			
	Direct pump system has air release valve installed at the highest point of the installation			
5.6.12	Installation of pipework ensures that there is no water hammer as specified in SANS 10252-1			
5.6.13	No leaks on the solar system			
5.6.14	All exposed hot and cold water piping is insulated in accordance with SANS 10252-1			
5.6.15	Where required, pipes and fittings are insulated in terms of freezing, based on the geographical areas minimum temperature			
5.6.16	The insulation material is protected against weather and sunlight			
	Is able to with stand the hot water temperatures			
	Achieves the minimum R value given in SANS 10252-1			

5.7.1	WHERE APPLICABLE pumps are installed as per the manufacturers specification, and are installed in a manner that is servicable in order to replace or repair			
5.7.2	The pump cannot be heard above back ground noise when operational			
5.7.3	Union type fittings are utilised in order to ensure ease of removal or servicing Lever type valves are installed on either side of pump			
5.7.4	Pump installed is suitable to operate under temperatures delivered and is resistant to corrosion			
5.8	Electrical installation of control and ancillary components complies with SANS 10142-1			
9.1	A certificate of compliance was issued on completion of the installation			
A.2.1	TYPE OF SYSTEM INSTALLED	ANSWER		

ANNEXURE B SUPPORT OF ROOF TRUSSES

	Roof trusses/ roof has been supported in the appropriate manner in terms of b.3, b.4, b.5			
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GENERAL NOTES IN TERMS OF SANS 10252-1 APPLICABLE TO ALL INSTALLATIONS

5.1	The materials utilised are suitable for the expected conditions			
5.1.9	Insulation material is minimum R1 rated			
5.4.14	There are no flexible connectors used in order to connect to heat pump/geyser/solar geyser or panel			
5.4.15	Where a non return valve has been installed, a spring type has been used and not a metal on metal flap type			
6.1.3.2	There are no isolating valves installed between the pressure control valve and the hot water cylinder			
6.1.3.3	Isolating valves installed on the hot water installation are of a full-bore type			
6.6.1.1	Safety device installed is compatible with the hot water cylinder, and not rated higher No isolating or non return valve is installed between hot water cylinder and the pressure control valve Safety valve is not restricted (reduced pipe size or damaged) Vacuum breakers are installed correctly and not below the top of the water heater Electrical installation ensures that temp of water is controlled			
6.6.1.5	Expansion relief and temperature discharge pipes are not inter connected			
6.6.2.2	There is no flow control fitting of any sort other than a draining tap installed between hot water cylinder and the pressure control valve			
6.6.2.3	All discharge pipes are unobstructed and open to atmosphere			
6.6.5.1	All drain pipes are sized correctly to the connection to which fitted In the event that the discharge pipe distance exceeds 4m, has the drain pipe size increased Discharge pipe has three or less bends			
SANS Ref	Description	Compliant	Non Compliant	Critical Area of Safety
	Where increased, discharge pipe shall not exceed 9m			
	For each additional bend (over the allotted 3) the discharge pipe length is reduced by 600mm			
	All labour bends are formed, with a centre radius, of a minimum of 5 times the diameter of the drain pipe			
	Drain pipe discharges down and directly out			
	Drainage of both valve and pipe is ensured			
	Installed such that in the event of freezing - cannot be blocked, nor by foreign objects			
	Is used for normal conveyance of discharge water resulting from normal expansion			
	Discharge in a position that is readily seen			
	Discharge does not inconvenience buildings occupants or cause damage to property			
6.6.5.2	Drain pipes from expansion relief/temp pressure valve are not inter connected			
6.7.5.7	Insulation of pipework includes all flow and return piping Insulation of pipework includes cold water supply 1m from the heating or cooling system Insulation of pipework includes pressure relief piping 1m of the connection to the geyser Insulation of pipework includes temperature pressure discharge pipe and valve, to 1m from the hot water cylinder			

Code _____ Serial _____ Cylinder Size _____ Pressure Control Valve _____ kPa

This inspection is a visual inspection of component(s) and part(s) of your plumbing system as listed. These are reasonably visible and capable of being inspected without creating damage(s). The inspection does not cover/include pressure testing and/or the design nor efficiency of the plumbing system.

I, _____ being a registered Plumber with the Plumbing Industry Registration Board; Reg No: _____ and a current (paid up) member of The Institute of Plumbing South Africa; Member No: _____ hereby confirm that I have inspected the aforementioned property personally and without prejudice, and should the aforementioned membership and registration

not be valid, this certificate is null and void to date of termination of membership(s). Further note; The validity of this document expires on change, alteration, replacement or destruction and necessitates a further PIRB Certificate of Compliance.

Signed: _____

Client: _____

Date: _____

Disclaimer: This document is issued by IOPSA as a guideline for requirements of installation to SANS standards and can be used as a notice of non-compliance. This document is not a certificate of compliance (CoC)

