

Annexure-VII: Completion Checklist

		Parameter	Specified Requirements / Input Parameters	Observations
General	1.	Name of beneficiary		
	2.	Address and contact details		
	3.	Type of establishment	Institutional (govt.) / Commercial / Domestic	
	4.	Date of inspection		
	5.	Location – Latitude		
		Location – Longitude		
	6.	Altitude (m)		
	7.	Electricity availability	Yes / No	
	8.	Water availability	Yes / No	
	9.	Water quality and source		
	10.	User points and Purpose of hot water		
	11.	System type	Thermosiphon (passive) / forced circulation (active)	
	12.	System type	Open loop (direct) / Close loop (indirect)	
	13.	Backup / auxiliary heater	Integrated / separate Rating (kW)	
	14.	Backup / auxiliary heater	Automatic/ Manual (with temperature cut-off)	
	15.	Backup / auxiliary heater	Proper electrical wiring	
	16.	System design and drawings	3 copies - @ system (Laminated), @ beneficiary, @ DRE	
17.	System operational	Yes / No		
Installation and	Installation and Commissioning			
	1.	Installer's name and contact details		
	2.	Azimuth angle (angle with South)	0°	

		Parameter	Specified Requirements / Input Parameters	Observations
	3.	Tilt Angle (Angle with horizontal)		
	4.	Location of system	Ground mounted / Rooftop	
	5.	Accessibility to system		
	6.	User point distance (m)		
	7.	Levelling and plinth		
	8.	Fence and Gate		
	9.	Obstacle and shadows		
		Panels		
Panels	1.	Number of panels	(Repaired/ replaced)	
	2.	Total collector area (m ²)		
	3.	Type of collectors		
	4.	Make and models		
	5.	Certification	ISI	
	6.	Array size (Rows X Columns)		
	7.	Approachability for cleaning		
	8.	Leakages		
	9.	Panel joints (Gaskets and fasteners)	Tightened with no leakages	
	10.	Panel gourmet/gasket condition	Complete and Good condition	
	11.	Panel (inner) observations	Dust / Insects / water tracks / condensation	
	12.	Panel mountings	Panels properly fixed (not just rested upon)	
	13.	Distance between rows	2 m	
		Water tanks		
	1.	Capacity of hot water tank		
	2.	Heat exchanger	Present / absent	
	3.	Quality and stability of structure for hot water tank		

		Parameter	Specified Requirements / Input Parameters	Observations
	4.	Hot water tank structure	Integrity and members sizes	
	5.	Joints	Properly fastened / welded	
	6.	Insulation for hot water tank	Material and thickness	
	7.	Capacity of cold-water tank		
	8.	Distance between cold water tank and hot water tank		
	9.	Height differential		
	10.	Cold water tank structure	Integrity and members sizes	
	11.	Overnight temperature drop (°C)		
		Piping		
Piping	1.	Pipe material		
	2.	Insulation	Material, Condition and thickness	
	3.	Insulation retainer and cladding	Material and thickness	
	4.	% of open pipes and remarks		
	5.	Pipe supports	Material and size	
	6.	Maximum length of dangling pipe (m)		
		Mountings and Accessories		
	1.	Thermometer	Position, Accessibility, Reading	
	2.	Water meter	Position, Accessibility, Reading	
	3.	Strainer	Position and Accessibility	
	4.	Glycol tank with level indicator	Position and Accessibility	
	5.	Glycol	Position and Accessibility	
	6.	Tool kit and spares	Position and Accessibility	
	7.	Inlet valve	Position and Accessibility	
	8.	Outlet valve	Position and Accessibility	

		Parameter	Specified Requirements / Input Parameters	Observations
	9.	Pump with operating circuit	Rating, Position and Accessibility	
	10.	Non-Return valve		
	11.	Vent or pressure relief valve		
	12.	Height differential between vent and top most water level		
		Testing and measurements		
	1.	Hot water outlet temperature	°C	
	2.	Circulation with thermosiphon system	Check circulation by feeling or measuring the temperature difference between the hot and cold pipes	
	3.	Circulation with forced system	Temperature difference between hot and cold junctions	
	4.	Circulation with forced system	Differential temperature control settings and temperatures	
		User opinion		
	1.	User satisfaction level	Mark on the scale of 0-5, 0 = Lowest, 3= Normal, 5 = Well satisfied	
	2.	Temperature of hot water	Satisfactory / not-satisfactory	
	3.	Quantity of hot water supply	Satisfactory / not-satisfactory	
	4.	Constant temperature in single use	Satisfactory / not-satisfactory	
	5.	No. of users benefitted		
	6.	General Comments		

		Parameter	Specified Requirements / Input Parameters	Observations
	7.	Improvements needed		

Additional actions needed:

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Inspected by :

Date :