Renewable Energy Ready Home Solar Water Heating Checklist

Home Location:	City:	State:

RERH Checklist (See Renewable Energy Ready Home (RERH) specifications for details)		Builder Verified	NA
1 Building/Array Site Assessment			
1.1	Designate a proposed array location and square footage on architectural diagram: _____sq. ft.	❑	
1.2	Identify orientation (azimuth) of proposed array location: _____degrees.	❑	
1.3	Identify inclination of proposed array location: _____degrees.	❑	
1.4	Conduct a shading study documenting impacts on proposed array location: _____% adjusted annual shading impact. If using monthly values as verified through the solar path assessments, check here: _____.	❑	
1.5	Assess if proposed array location supports a solar resource potential of more than 75 percent of the optimal solar resource potential for the same location using the online RERH Solar Site Assessment Tool (SSAT). Yes ❑ This home meets the minimum recommended solar resource potential per the RERH SSAT Results; continue with Section 2 below. No ❑ This array location does not meet the recommended solar resource potential per the RERH SSAT Results; this location is not a good host for a future solar energy system and should not be made renewable energy ready.	❑	
2 Structural and Safety Considerations: Solar Water Heating			
2.1	Provide code-compliant documentation of the maximum allowable dead load and live load ratings of the existing roof; dead load rating should support an additional 6 lbs/sq. ft. for future solar system.	❑	
2.2	Provide code-compliant documentation of the maximum allowable floor load rating for storage tanks installed on non-concrete floors.	❑	
2.3	Install permanent roof anchor fall safety system (NA for roof pitch ≤ 3:12).	❑	❑
3 Renewable Energy Ready Home Infrastructure: Solar Water Heating			
3.1	Dedicate and label a 3′ x 3′ x 7′area in the utility room adjacent to the existing water heater for a solar hot water tank.	❑	
3.2	Dedicate and label a 3′ x 2′ plywood panel area adjacent to the solar hot water tank for the balance of system components/pumping package.	❑	
3.3	Install an electrical outlet within 6′ of the designated wall area (3.2).	❑	
3.4	Install a solar bypass valve on the cold water feed of the water heater (cap and label both ends).	❑	
3.5	Install a single 4″ chase or 2–2″chases from utility room to the attic space below designated array location (cap and label both ends).	❑	
3.6	Provide architectural drawing and plumbing riser diagram of RERH SWH system components.	❑	
4 Homeowner Education			
4.1	Provide to the homeowner a copy of this checklist and all the support documents listed below (to be provided to future solar designer).		
	- Copy of the Renewable Energy Ready Home Specification guide	❑	
	- Fully completed RERH checklist (all sections)	❑	
	- Architectural drawings detailing proposed array location and square footage	❑	
	- Plumbing riser diagram of RERH solar water heating system components and their locations	❑	
	- Shading study with percent monthly or adjusted annual shading impact(s)	❑	
	- Site assessment record generated by the online RERH SSAT indicating that the proposed site meets a minimum solar resource potential of 75 percent of optimal	❑	
	- Code-compliant documentation of the maximum allowable dead load and live load ratings of the roof	❑	
	- Code-compliant documentation of the maximum allowable floor load rating for storage tanks installed on non-concrete floors	❑	
5 Builder Best Practices (Optional Elements)			
5.1	Develop a detailed landscape plan with a clear emphasis on low-growth vegetation	❑	❑
5.2	Place roof penetrations above or north of the proposed array to prevent casting shadows on the array	❑	❑

Builder Completion Date:	Builder Company Name:
Builder Employee Name:	Builder Employee Signature: