



Requirements for Thermal Hot Water Solar Systems

APPLICATION MUST BE APPROVED BY PLANNING AND ZONING

- Valuation to include labor and material before rebates
- Specify if the array is ground, flush, or tilt up system
- Locate array on roof plan.
- Mechanical/Plumbing permit required – installation shall comply with Chapter 23 of the IRC (see below)
- Provide safe access for inspections
- Requires (2) sets of all paperwork submitted
- A separate permit may be required if any alteration to existing equipment has occurred

Note: Roof Mount Systems creating a dead load greater than the roof system design allows, requires Engineering including:

- Original Engineered Stamped Details showing site specific attachment to existing structure (Roof, Wall, Trusses, Rafters, etc)
- Compliance with R802.10.4 - **Alterations to trusses**. Truss members shall not be cut, notched, drilled, spliced, or otherwise altered in any way without the approval of a design professional. Alteration resulting in the addition of load (e.g., HVAC equipment, water heater) that exceeds the design load for the truss shall not be permitted without verification that the truss is capable of supporting such additional loading.
- Design Criteria (Wind, Exposure, Snow, etc.)
- Fasteners (Type, Size, Length, etc.)
- Installation Instructions

• MECHANICAL OR PLUMBING Permit submittal requires:

- Specifications for all components (i.e. rack/collector mounting and installation requirements, listing information, etc.)
- Collector cut sheets (including description, weight, markings)
- Controller (installation requirements)
- 1-line diagram conforming to field installation (including number of collector's, pipe sizes and routes through system, valves, pumps, back flow, vacuum relief and storage tanks).
- Type of medium heat transfer fluid - (Ethylene or Propylene glycol)
- Storage Tanks:
 - Manufactured - Requires installation instructions and specifications.
 - Custom Built Tanks - Requires an engineer original wet stamp, or have an approved independent testing facility test the tank for the intended use.

- **Approved documents are required to be on site for all inspections**
- **Underground mechanical/plumbing inspection required (when applicable)**
- **Rough mechanical/plumbing inspection required when all piping is installed and can hold pressure.**
- **Final mechanical/plumbing inspection required.**