



TECHNICAL BULLETIN
Community Development & Planning, Building Inspections
TOPIC:
Solar Hot Water Installations, Roof Mounted Systems
May 18, 2009

This Technical Bulletin describes the minimal information necessary to apply for a permit and general inspection information for a roof mounted solar hot water system. Ground mounted collectors are not considered at this time. Applications to install a Solar Hot Water roof mounted system will be either a ***CP-Commercial Remodeling Permit*** or a ***RP-Residential Remodeling Permit***, dependent on the use of the property. Any plumbing and/or electrical permits must be issued to a registered plumbing contractor and/or registered electrical contractor after the building permit is issued.

Permit Application - submit with a completed building permit application:

1. Scaled & dimensioned plan view all roof mounted collectors
2. Details of the means of attachment of the roof mounted collectors with typical side view detail
3. If weight distribution of the collectors exceeds **5 lbs** per square foot, then an engineer's design is required for the structural mounting and support
4. Data cut sheets for the solar collectors that provides listing by Nationally Recognized Testing Laboratory
5. Data cut sheets for water heater/storage tanks that provides listing by Nationally Recognized Testing Laboratory
6. One line system diagram that includes:
 - a. Piping materials
 - b. Water heater/storage tank capacity
 - c. Identify the heat transfer fluid (air, water, ethylene or propylene glycol, etc.)
 - d. List controls, valves, expansion tanks, etc.
 - e. Temperature limiting control set to 180 degrees

Inspections

1. Approved plans on site shall match the installation
2. All piping and electrical (other than 24 volts or less) must be inspected prior to being concealed or covered.
3. Water heaters and storage tanks are subject to standard code regulations for installation of water heaters (such as T&P valves and lines, emergency pans and drain lines, expansion tanks, etc.)
4. Final inspection will include observation of the mounting, flashing, overall piping and controls. Access to attic may be required.