



## RESIDENTIAL SOLAR PANEL BUILDING PERMIT & INSPECTION GUIDE

### PURPOSE

This is a guide to assist in the plan review, permit, and inspection process for the installation of a residential solar panel system. Listed below are the required components to be included in drawings to obtain permits, and the items that the city inspectors will be verifying in the field during the inspection process.

### PERMIT REQUIREMENTS

A [building](#) permit and a single trade building [electrical](#) permit are required for the installation. A licensed electrician will be required to pull the building electrical permit. As part of the permit application process, the owner will be required to sign a [Deed Restriction Unsworn Declaration](#). Properties located in the Flood Plain will be subject to additional requirements. **Prior to application** verify your [deed restrictions](#) with your civic association or county real property records regarding the placement of solar panels on your property.

**NOTE:** In addition to City of Houston requirements, an application for interconnection to Center Point Energy for approval and subsequent inspection approval must be accomplished. For further information visit <http://www.centerpointenergy.com/en-us/residential/services/electric-utility/electric-technology/alternative-energy-technologies/wind-solar>.

### DRAWING PACKAGE CONTENTS

- When equipment is installed on an existing structure, include a letter from a structural engineer indicating that the existing structure is sufficient to support the new loads associated with the additional weight and wind resistance (minimum 110 mph wind speed design).
- Structural plans designed and sealed by a Texas Professional Engineer for securing the panels to the existing structure, or to a new foundation or structure shall be submitted.
- Electrical solar panel work shall comply with NEC Article 690, and the panels shall comply with UL Standard 1703.
- Provide complete electrical plans prepared by a Professional Engineer or a Licensed Master Electrician.
- At minimum, the following shall be indicated on the plans (including a site or roof plan) to be confirmed during inspection:
 

<input type="checkbox"/> Panel Layout	<input type="checkbox"/> Conductor Size & Type	<input type="checkbox"/> Inverter Size & Type
<input type="checkbox"/> Panel Access Pathway Layout	<input type="checkbox"/> Conductor Insulation Type	<input type="checkbox"/> Battery(ies) Size & Type
<input type="checkbox"/> Mounting Structure & Anchors	<input type="checkbox"/> Over Current Protection	<input type="checkbox"/> One-Line Diagram
<input type="checkbox"/> Roof Penetrations	<input type="checkbox"/> Charge Controllers	
<input type="checkbox"/> Grounding Points	<input type="checkbox"/> Disconnect Size & Type	

### INSPECTION PACKAGE CONTENTS

The manufacturer's installation manual and the permit drawings must remain on the jobsite at all times during the inspection process. The structural engineer must provide a [special inspection letter](#) certifying that the installation conforms to his/her design. This may be submitted to the Structural Inspection Office at 1002 Washington Avenue 4<sup>th</sup> Floor, Houston, TX 77002 in lieu of calling for a structural inspection to accept the letter (minimizing the inspections to electrical only). The inspection requirements for residential solar panels will be based on the approved plans, the manufacturer's installation manual, and the Houston Construction Code, **whichever is more restrictive**. The licensed contractor shall schedule a go-by inspection in order to verify the listing and/or labeling of the Solar Voltaic (PV) wiring and equipment. The equipment will be staged for inspection prior to rooftop installation. Applicant shall provide access for inspectors to review the installation at all locations of the work.

### CONTACT INFORMATION

Structural Inspections	(832) 394-8840
Electrical Inspections	(832) 394-8860
Plan Review Questions	(832) 394-8810