



# Carpinteria Building & Safety Division

5775 Carpinteria Avenue  
Carpinteria, CA 93013  
805-684-5405

## Structural Criteria for Express Solar PV Permitting of One and Two Family Dwellings (10 kW or Less)

This criterion is intended to provide prescriptive structural requirements in lieu of site specific structural engineering from a California Licensed Design Professional for small residential rooftop solar PV systems 10 kW or less.

| General Requirements:    |   | Y                        | N                        |
|--------------------------|---|--------------------------|--------------------------|
| A                        | Solar PV rooftop system will be installed in areas with a basic design wind speed of 110 MPH                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| B                        | The roof has a pitch of 6 in 12 or less   | <input type="checkbox"/> | <input type="checkbox"/> |
| C                        | The solar array is <b>roof-mounted</b> on a one- or two-family dwelling   | <input type="checkbox"/> | <input type="checkbox"/> |
| D                        | The racking system includes a <b>California Engineering Certification</b> or an equivalent approved research report               | <input type="checkbox"/> | <input type="checkbox"/> |
| E                        | Space between roof finish and bottom of solar modules is between 2" to 10" maximum  | <input type="checkbox"/> | <input type="checkbox"/> |
| F                        | The plane of the modules (panels) is parallel to the plane of the roof  | <input type="checkbox"/> | <input type="checkbox"/> |
| G                        | The roof has a single roof cover (finish) without any additional overlays   | <input type="checkbox"/> | <input type="checkbox"/> |
| H                        | The roof has been investigated and is structurally sound, without signs of defect, sagging, or any substandard conditions         | <input type="checkbox"/> | <input type="checkbox"/> |
| I                        | The arrays cover no more than 50% of the roof area  | <input type="checkbox"/> | <input type="checkbox"/> |
| Structural Requirements: |   | Y                        | N                        |
| A                        | The modules (panels) plus support (racking system) weigh no more than 4 pounds per square feet (PSF)                              | <input type="checkbox"/> | <input type="checkbox"/> |
| B                        | Maximum spacing between supports (stand offs) in each direction is 4 ft. with their layout shown on the roof plan                 | <input type="checkbox"/> | <input type="checkbox"/> |
| C                        | Anchor fasteners (lag screws) are 5/16" inch diameter with a minimum penetration of 2 ½ inches into existing roof framing members | <input type="checkbox"/> | <input type="checkbox"/> |
| D                        | Size of existing roof rafters are at least 2 x 4 DF #2 or better @ 24" o.c. max   | <input type="checkbox"/> | <input type="checkbox"/> |
| E                        | Roof sheathing is at least 7/16 inch plywood, OSB, or 1 inch skip sheathing   | <input type="checkbox"/> | <input type="checkbox"/> |

**Note:** This criterion is intended for an express solar permitting process without structural engineering. If any items are checked NO, please revise plans to fit within the eligibility checklist; otherwise supporting structural design may be required from a California Licensed Design Professional.

**Project Address:** \_\_\_\_\_

**Applicant Signature:** \_\_\_\_\_