

## OUTPUT SUMMARY

Date of Report:	12-01-2014/Rev A	Job Name:	103-zep
Data Input by:	Tom Milner	Job Number:	<u>103</u>
Contact E-mail:	tom@solar-roof-check.com	Job Address:	123 Main Street
Contact Phone:	530-878-0755		Auburn, CA 95603

### CALCULATIONS

### COMPLIANCE TEST RESULT

#### Loading Combination #1:

(% of Code Compliancy=318.6 %)  
Wind Uplift on standoff- 0.6 DL Solar

PASS

#### Loading Combination #2:

(% of Code Compliancy=1001.8 %)  
DL Rf + DL Solar + Roof Live Load

PASS

#### Loading Combination #3:

(% of Code Compliancy=642.6 %)  
DL Rf + DL Solar + Wind Down

PASS

#### Loading Combination #4:

(% of Code Compliancy=207.1 %)  
DL Rf + DL Solar + Snow

PASS

#### Loading Combination #5:

(% of Code Compliancy=286.9 %)  
DL Rf + DL Solar + .75 Wind + .75 Snow:

PASS

#### Loading Combination #6:

(% Increase of Seismic Load=6.1 %)  
Check Additional Seismic Load

PASS

#### Loading Combination #7:

(% of Code Compliancy=1166.1 %)  
DL Rf + DL Solar + Wind Up

PASS

This Report is based on Code required Engineering Calculations using the data which has been input by the User. This Report indicates the Code compliance or Code non-compliance of the Solar Panels proposed for the Selected Roof Type. This Report has not been reviewed by a licensed Professional Engineer.

Date of Report: 12-01-2014/Rev A  
Data Input by: Tom Milner  
Contact E-mail: tom@solar-roof-check.com  
Contact Phone: 530-878-0755

Job Name: 103-zep  
Job Number: 103  
Job Address: 123 Main Street  
Auburn, CA 95603

## ABSTRACT

This Report is based on Engineering calculations using the input data supplied by the User, listed above. The User's input has not been independently reviewed by a licensed Professional Engineer for appropriateness or accuracy.

This Report indicates Compliance/Non-Compliance with the reference Codes listed below. The following items have been checked for Code Compliance:

- **Load Combination#1:**  
Wind Uplift on the Standoff attachment to the Roof Framing members: Wind Uplift - 0.6DL Solar
- **Load Combination#2:**  
Supporting Rafter Strength with: DL Rf + DL Solar + Roof Live Load
- **Load Combination#3:**  
Supporting Rafter Strength with: DL Rf + DL Solar + Wind Down
- **Load Combination#4:** Supporting Rafter Strength with: DL Rf + DL Solar + Snow
- **Load Combination#5:**  
Supporting Rafter Strength with: DL Rf + DL Solar + .75Wind + .75Snow
- **Load Combination #6:** Check Additional Seismic Load
- **Load Combination #7:**  
Supporting Rafter Strength with: DL Rf + DL Solar + Wind Up

## Job Information

Data Input By: Tom Milner  
Job Number: 103  
Job Name: 103-zep  
Job Address: 123 Main Street  
City, State: Auburn, CA 95603

## Current Input Data

Payment Method	Invoice
Roof Type	Truss
Ceiling Type	None
Collar Tie Space	0
Coverage %	20
Frame Size	2x8@12
Ground Snow (psf)	30
Sloped Roof Snow Load (psf)	30
Lag Screw Diam. (in)	3/8
Lag Screw Embed. (in)	2
Overall Span (ft)	7
PV Weight (psf)	4
PV Width (ft)	4
Rafter Span (ft)	7
Roof Mean Height (ft)	20
Roof Slope (degrees)	20
Roofing Type	Asphalt Shingles
Sloped Ceiling	Yes
Standoff Spacing (ft)	4
Standoff Staggered	Yes
Wind Exposure	B
Wind Speed (mph)	110

**Legend:** DL=Dead Load  
Rf=Roof

## Reporting and Analysis Organization

Solar-Roof-Check [www.solar-roof-check.com](http://www.solar-roof-check.com)  
Email: [service@solar-roof-check.com](mailto:service@solar-roof-check.com)

## Reference Codes

International Building Code (IBC latest edition)  
American Society of Civil Engineers (ASCE/SEI 7-05, 7-10) National Design Spec. for Wood Constr. (NDS latest edition) CBC and NJ Edition