4/25/2022

Town of Plainfield,

Enclosed is the permit and permit fees ($50.00) for the solar installation for customer Jilian Bump at 133 Main St.

When the permit is approved, please email it to jordan@granitestatesolar.com, or

mail to 57 Ryan Rd Bow NH 03304, or

please let us know if we must pick it up in person.

If you need anything additional, please feel free to contact us.

Thank you!

Jordan Poirier

Office Coordinator

Office: (603) 369-4318

Email: jordan@granitestatesolar.com

GSS
GRANITE STATE SOLAR

GRANITE STATE SOLAR

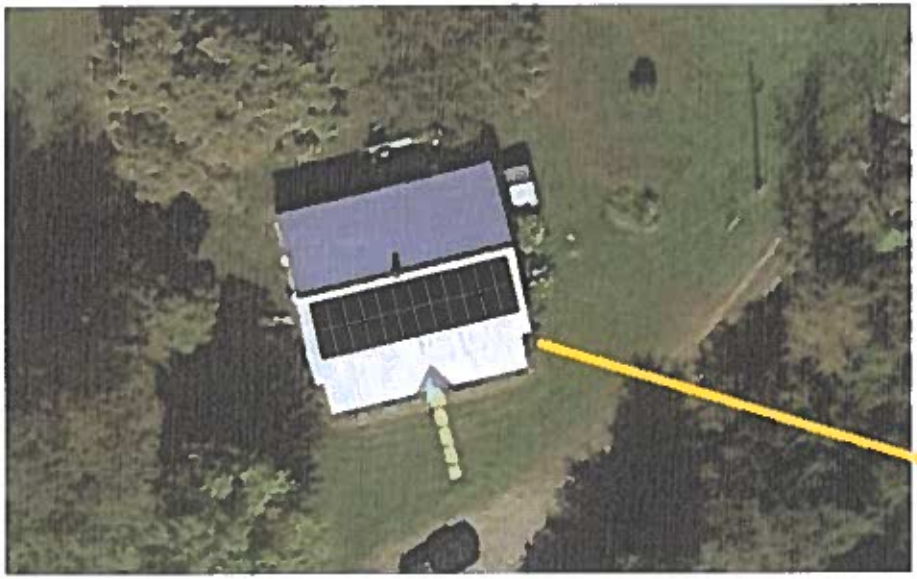
To Whom It May Concern:

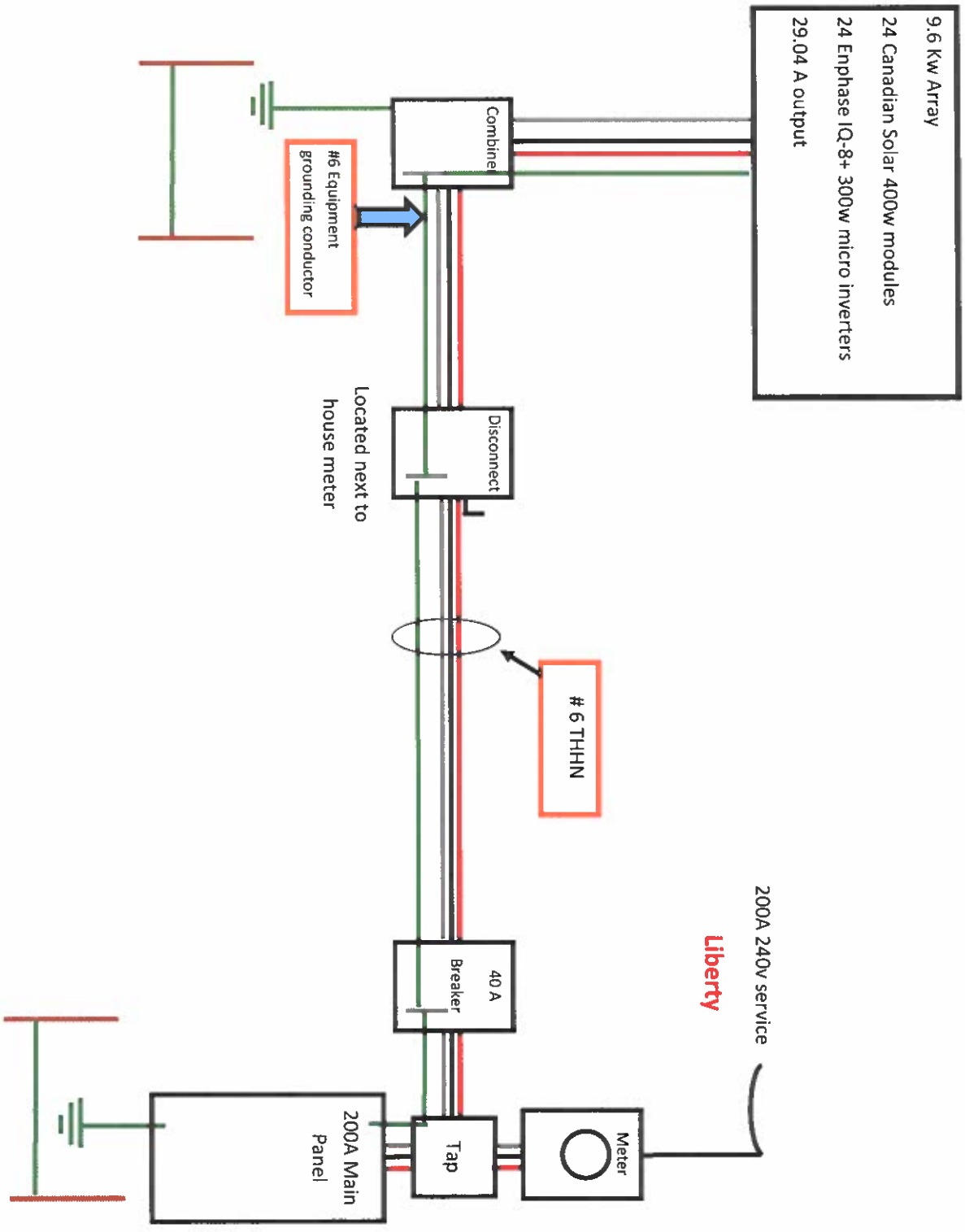
I, Jilian Bump, authorize Granite State Solar to act as my agent and sign on my behalf all permits, and other documents related to my solar installation.

Sincerely,

Jilian Bump

18 inches from top of roof to top of array





GSS GRANITE STATE SOLAR	**TITLE:** Jilian Bump One Line	**PREPARED BY:** Nick Harris, Master Electrician 14961M
	DATE: 4/13/2022	**ADDRESS:** 4/13/2022

State of New Hampshire

Board of Electricians

Authorized as
Electrical Corporation

Issued To

GRANITE STATE SOLAR LLC

License Number: 0366C

Issue Date: 02/18/2015
Expiration Date: 05/31/2022

State of New Hampshire

Board of Electricians

Authorized as
Electrician Master

Issued To

NICHOLAS M HARRIS

License Number: 14961 Active

Issue Date: 07/21/2021
Expiration Date: 11/30/2024

Master/HMV Name: NICHOLAS M HARRIS

PERMIT APPLICATION PACKAGE

TO INSTALL

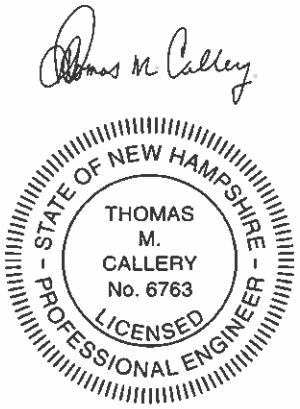
NEW SOLAR PANELS

FOR

JILIAN BUMP

133 MAIN STREET

PLAINFIELD, NEW HAMPSHIRE

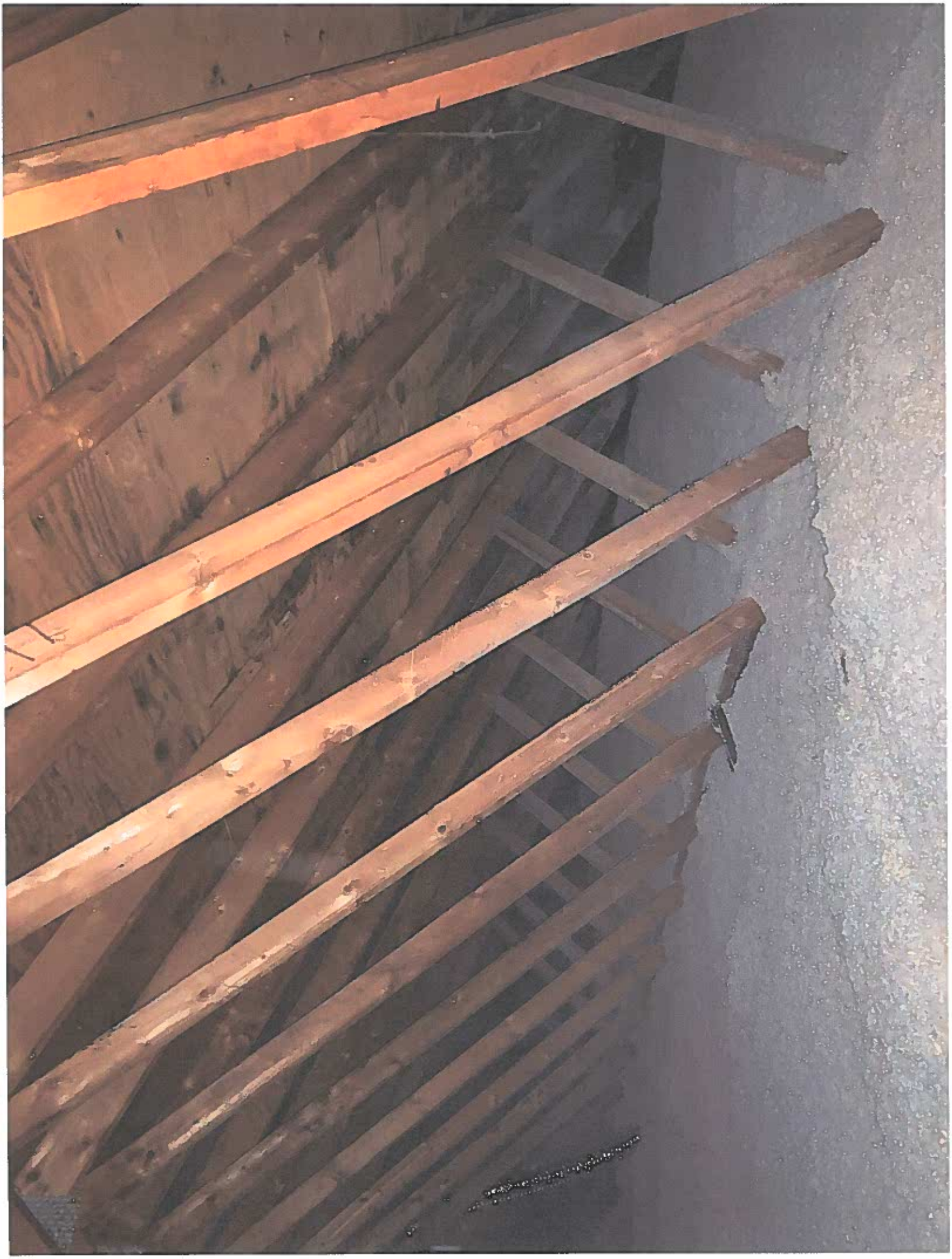


04-18-22

Callery Consulting, LLC
PO Box 607
Pelham, New Hampshire 03076

PHOTOGRAPHS
SKETCHES/MEASUREMENTS
OF
EXISTING STRUCTURE

Callery Consulting, LLC
PO Box 607
Pelham, New Hampshire 03076



GRANITE STATE SOLAR

Sent proposal 3/31
received it 3/31

Site Review Worksheet

Sales Advisor: Eric Kilens	**Address:** 133 main st Plainfield, NH 03781
Customer Name: Jilian Bump / Kevin	
Phone: 603-469-3127	
Email: jilthegsd@gmail.com	**SV Date:** 3/31/22 **SV Time:** 9 am
Referral:	**Soladeck (circle one):** Yes (No)

Type: (Roof) Ground Tracker **Orientation:** Landscape (Portrait) **Tree Removal:** Yes (No)

Roof Detail		Electric Detail		
Azimuth: 173°	Pitch: 22°	**Amp Rating:** 100A	Utility: Liberty (Get copy of bill)	kWh: 7800
Layers of Shingles: N/A		**Generator Present:** Y (N)	*If Yes: Sub Panel or Whole House*	
Material: Standing Seam metal		**Vent pipe need to be moved?** Y (N)	**Ground Conduit Run Ft:** N/A	
Is there cell/ data coverage? Y (N)		**Do they have internet?** (Y) N	**Conduit Run to Meter Ft:** N/A	
Year House Built: 1970's		**Main Panel Brand:** Siemens	**Total Conduit Run Ft:** N/A	
Septic Tank/Leach Field (Y) N		***If Fed. Pacific, panel upgrade must***	***Main Breaker needed in panel***	

Send pic of panel label to Alec to get pricing

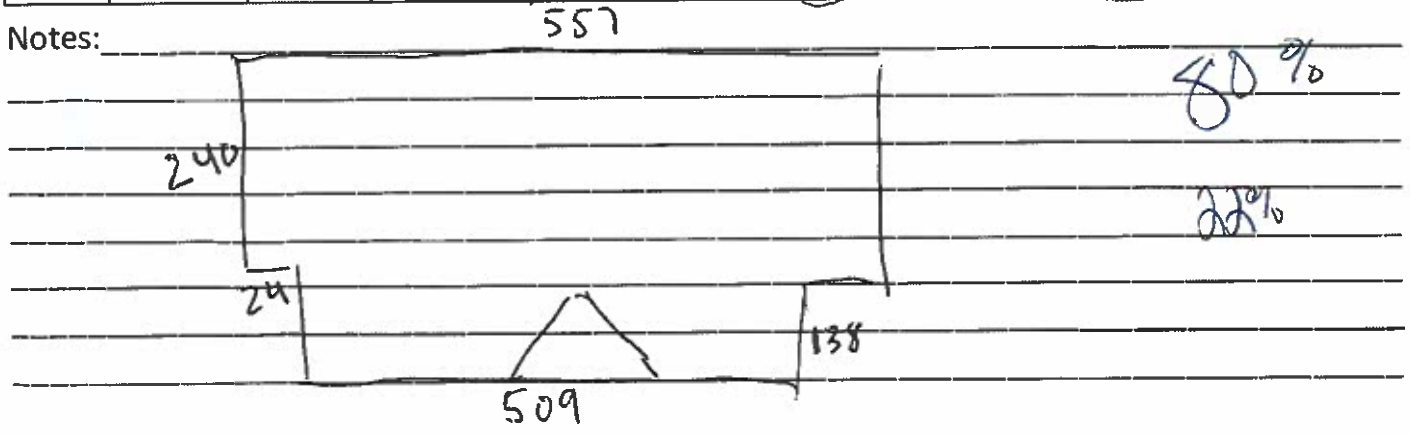
*****GROUND MOUNTS AND TRACKERS*****

Loam & seed – add $2.50 per linear foot to cover trench:	Yes (No)
Rock and stump removal, if customer needs moved, add $200/hr:	Yes (No)
All additional landscaping with machine and materials is $200/hr if not stated in project agreement:	Yes (No)

Photograph Checklist: Post to SharePoint in Customer Folder (*ALL ARE REQUIRED*)

Front of House	System Location, including Conduit Run	Location on Satellite	Pathfinder	Transformer Pic (Over 10K)	Meter Close Up	Roof	Main Electrical Panel (Door Open) 1. Up Close 2. Distance	Meter Drop/ Conduit Run (From Distance)	Rafters

Notes:



STRUCTURAL CALCULATIONS

Callery Consulting, LLC
PO Box 607
Pelham, New Hampshire 03076

Thomas M. Callery, P.E.

ConstructionCalc™ We Empower The Building Industry — **ProBeam** v5.01

Job Name:	Bump, Plainfield, NH
Beam I.D.:	2"x6" rafters @ 24" OC
Other Info.:	Exist. Rafters

Main Span, L = 9.00 ft

Main Span Max. Allowed Live Defl: L / 180 = 0.60 in

Main Span Max. Allowed Total Defl: L / 120 = 0.90 in

Cantilever (Overhang) Exists? No

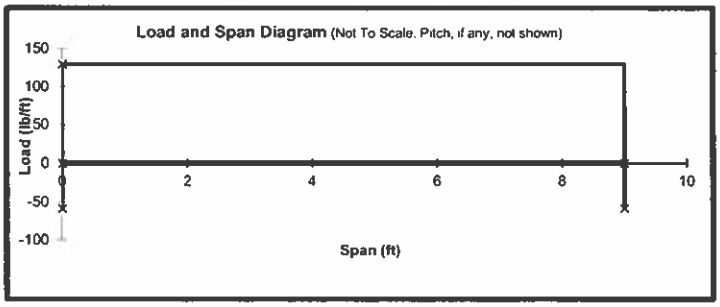
Pitch if Sloped: 5.0 :12

Load Duration: Snow: 1.15

...ous Member? No

Add Self Wt.? ○ Yes ◉ No

...epetitive Use? Yes



For Wood and GluLams Only: Press Treated? Not press treated | Wet Cond? Dry | Temp Cond. 100 deg F & less

...Uniform Loads Over Full Length of Member

	Live, psf	Dead, psf	Tributary Width, ft	Uniform Live Load, plf	Reduced Live Load, plf.	Uniform Dead Load, plf.
...oof Loads (not including snow)	16 psf	10 psf	2.00 ft	-	-	21.7 lb/ft
Roof Snow (only)	51 psf		2.00 ft	102.0 lb/ft	102.0 lb/ft	(Adj'd for pitch)
Floor 3 Loads				-	-	-
Floor 2 Loads				-	-	-
Floor Loads				-	-	-
Wall Dead Load						-
Other 'psf' load and trib. width	3 psf		2.00 ft	6.0 lb/ft	6.0 lb/ft	-
...dditional 'plf' Unif. Live Loads	Descrip'n, opt'l:					
...dditional 'plf' Unif. Dead Loads	Descrip'n, opt'l:					
			Load Subtotals	108.0 lb/ft	108.0 lb/ft	21.7 lb/ft
			Total Adjusted Uniform Loads	w_L = 108.0 lb/ft		w_D = 21.7 lb/ft
			Combined Total Uniform Load	w_U = 129.7 lb/ft		

...pe for LL Red'n: 5.0 :12 | All other beams

4x And Smaller (Lumber)

Lumber Material: Spruce Pine Fir

Lumber Grade: Select Structural

Acceptable Solutions

2 x 6	(4) 2 x 4
(2) 2 x 5	3 x 6
(3) 2 x 5	4 x 5

List properties for what size lumber? 2 x 6

An asterisk * indicates a non-acceptable sol'n.

Fb=2150 Fv=156 Fcp=425 E=1500000 Slf Wt=0

5x And Larger (Timbers)

Timber Material: Spruce Pine Fir

Timber Grade: Scroll Up

Acceptable Solutions

-	-	-
-	-	-
-	-	-
-	-	

Slf Wt=0

List properties for what size? 6 x 14 * Fb=0 Fv=0 Fcp=0 E=0

Final Member Sawn Wood

Material Library Choose From All Sizes Of Beam Type

Final Size: 2 x 6

Min. Bearing Lengths : = 1.50 in. (Left) : = 1.50 in. (Right)

Vert Diff (approx): 3.75 ft True Len (approx): 9.75 ft

Actual Member Size: 1.50" x 5.50" 9.75 ft

Final Member: 2 x 6, Spruce-Pine-Fir, Select Structural

Use Conditions Selected: Rept'v Mem.

Final Member Results

Bending Overdesign:	3.2%
Shear Overdesign:	62.9%
Deflection Overdesign:	8.4%
Bearing / Buckling Overdsgn:	N/A
Final member OK by:	**3.2%**
Controlling criteria is:	**Bending**

Reactions

Maximums	R_1 - Left	R_2 - Right
Live Load:	486 lb	486 lb
Dead Load:	97 lb	98 lb
Total Load:	583 lb	584 lb
Live Case Causing Max	N/A	N/A
Minimums	R_1 - Left	R_2 - Right
Live Load:	0 lb	0 lb
0.6 or 1.0 Dead :	59 lb	59 lb
Net Reaction	59 lb	59 lb
Live Case Causing Min	N/A	N/A

Final Member Additional Information

		Location	Live Case
Max. Positive Moment:	1,313 ft-lb	4.50 ft	Main Span
Max. Negative Moment:	0 ft-lb	0.00 ft	Main Span
Max Design Shear:	524 lb	0.00 ft	Main Span
Main Span Max. Downward Deflection (Live / Total):	0.554" / 0.665"	4.50' / 4.50'	Main / Main
Main Span Max. Upward Deflection (Live / Total):	0.000" / 0.000"	0.00' / 0.00'	Main / Main
Cant. Down. Defl. (Live / Tot):	N/A	N/A	N/A
Cant. Up. Defl. (Live / Tot):	N/A	N/A	N/A
Req'd EI, Not Incl. Self Wt.:	2.879E+07	Actual EI:	3.12E+07
Approx. Self Weight:	N/A	Approx. Tot. Wt.:	N/A
Min. Calc'd Bearing Lengths:	= 0.92 in (Left)	= 0.92 in (Right)	

Bracing Req'd For Full Strength: Lateral bracing required at supports and at 5.92-ft. max. along member

W/O Mid-Bracing: *Bending Red'n:* 42%

Allowed Moment: 791 ft-lb

ENPHASE

DATA SHEET

IQ8 and IQ8+ Microinverters

Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.

Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Battery, Enphase IQ Gateway, and the Enphase App monitoring and analysis software.

Enphase 25 year limited warranty

IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.

Connect PV modules quickly and easily to IQ8 Series Microinverters using the included Q-DCC-2 adapter cable with plug-n-play MC4 connectors.

UL CERTIFIED SAFETY

IQ8 Series Microinverters are UL Listed as PV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer's instructions.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produce power even when the grid is down
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

IQ8SP-DS-0002-01-EN-US-2021-10-19

NEW

CanadianSolar

HiDM

High density MONO PERC module

400W~420W

CS1U-400|405|410|415|420MS

MORE POWER

UP TO 20.4% — Maximize the light absorption area, module efficiency up to 20.4 %

Low temperature coefficient (Pmax): -0.37 % / °C

Better shading tolerance

MORE RELIABLE

Lower internal current, lower hot spot temperature

Cell crack risk limited in small region, enhance the module reliability

Heavy snow load up to 5400 Pa, wind load up to 2400 Pa*

15 years — **enhanced product warranty on materials and workmanship***

25 years — **linear power output warranty***

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system

ISO 14001:2015 / Standards for environmental management system

OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE / CE / MCS / KS / INMETRO

IEC 61701 ED2: VDE / IEC 62716: VDE

UNI 9177 Reaction to Fire: Class 1 / Take-e-way

As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 40 GW deployed around the world since 2001.

* For detail information, please refer to Installation Manual.

CANADIAN SOLAR INC.
545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, www.canadiansolar.com, support@canadiansolar.com