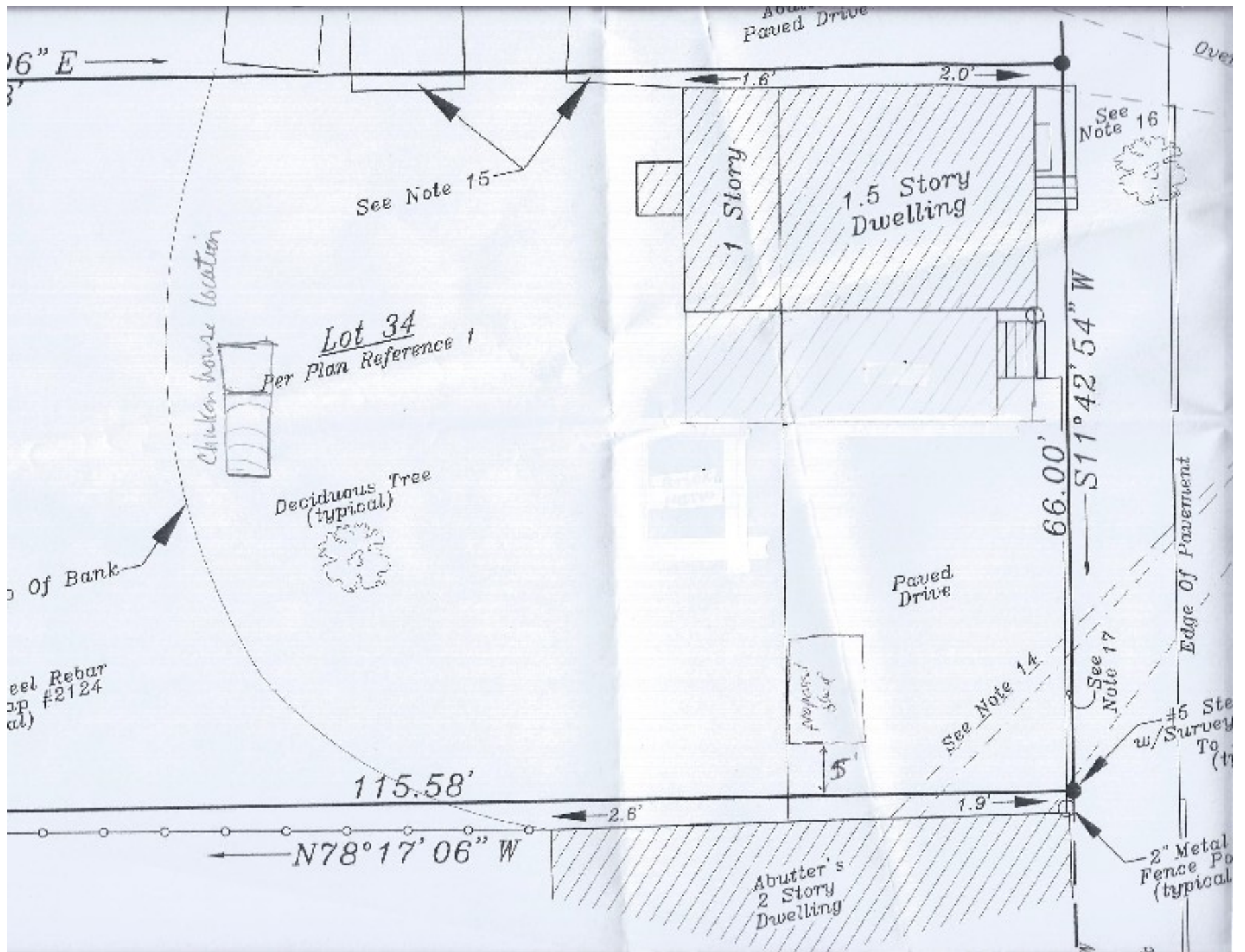


Proposed Solar Electric System Description
42 Hammond Street, Portland Maine

This application is for installation of a solar electric system on the roof of my residence at 42 Hammond Street in Portland. The proposed system consists of 8 solar modules attached to the main roof of the house in the format shown in attached documents. The Solarworld photovoltaic modules will be attached to the room using S5 miniclips and an aluminum rack system provided by Ironridge. The modules will be mounted on the metal roof in a configuration that is the most compact while still providing enough electricity generation to offset annual consumption in the residence; this location provides the best orientation for the modules without impacting the abutters in any way. Because of the size of the modules they will pass by (overhang) the rake line of the roof by 6 inches. A rapid shut down control box will be mounted on the roof and a control switch for the RSB will be mounted next to the electrical meter. A SMA inverter will be mounted next to the load center in the basement utility room and tied into the grid through the existing load center. Though the inverter has the ability to allow for wiring a separate receptacle for power at times when the grid power is down but the sun is shining, it is not planned to be installed at this time.

The plot plan that is provided is based on a comprehensive survey that was done, with a chicken coop and shed sketched in. The overall dimensions of the house are 32' x 28' (along the street front). (*The entry on the street front no longer exists.*)

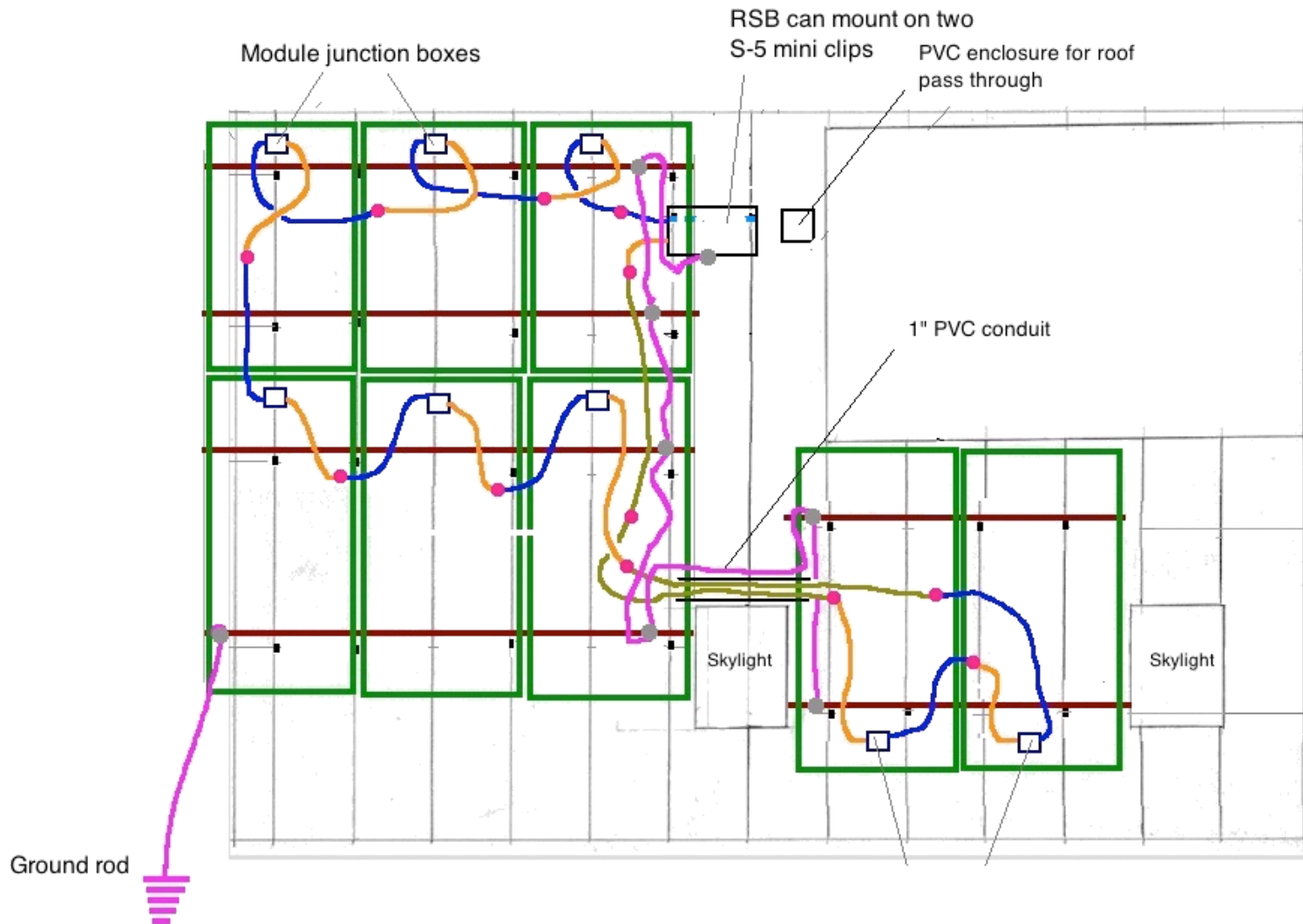
I had the system designed by a registered engineer and plan to do the installation myself.



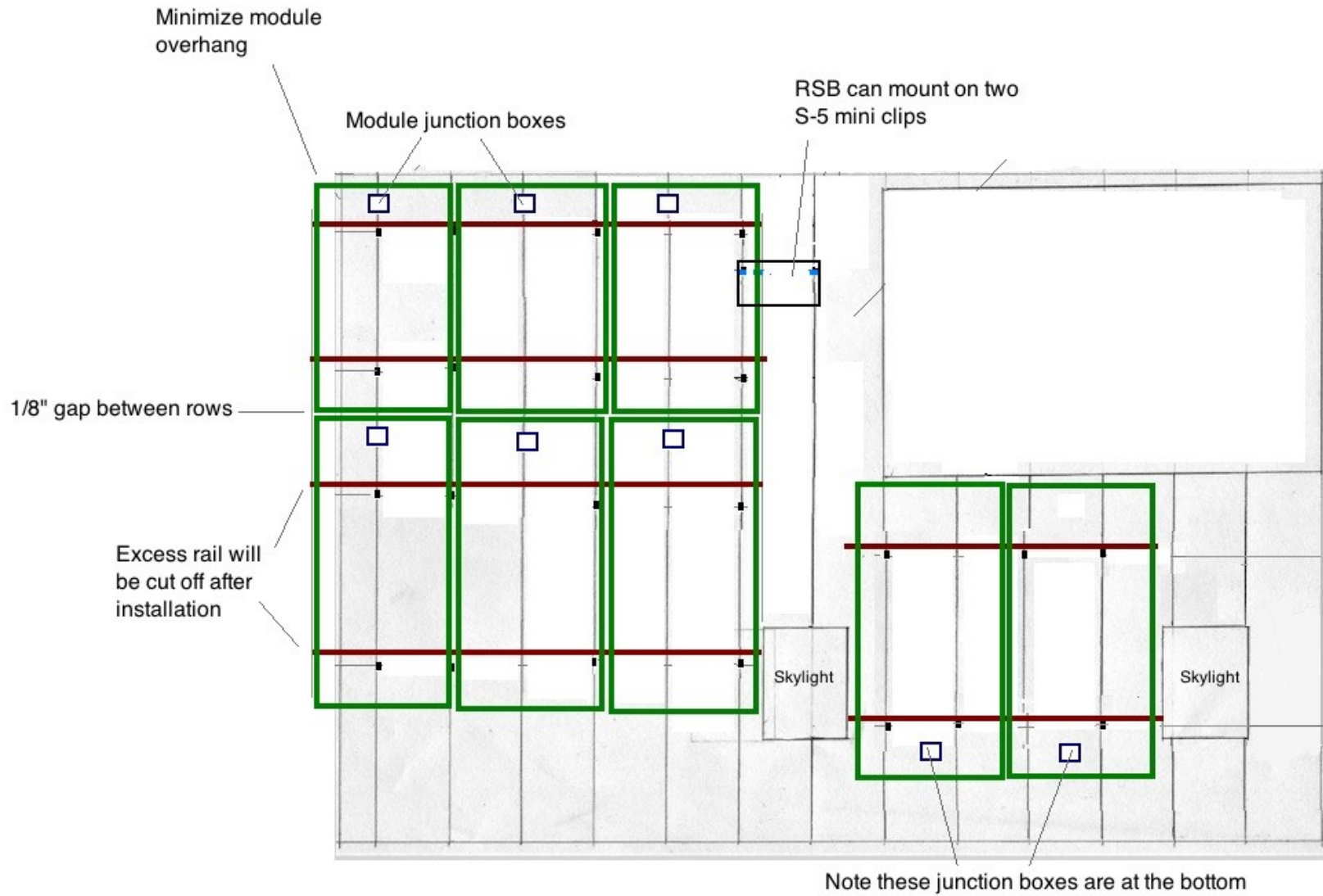


Module Wiring

- = MC4 connector junction
- = ground clip
- = positive wiring
- = negative wiring
- = Extension cable
- = #6 copper ground wire



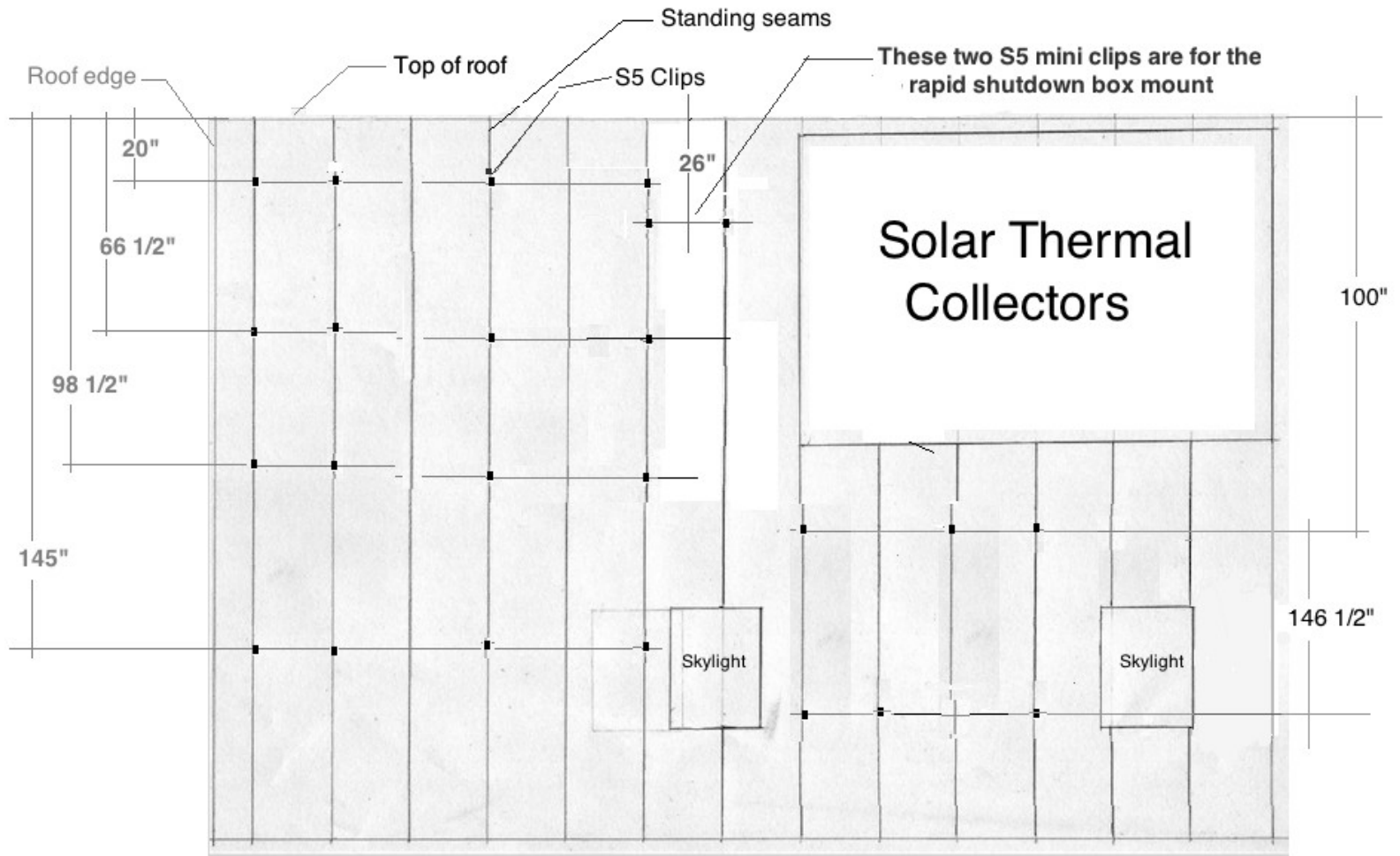
Module placement

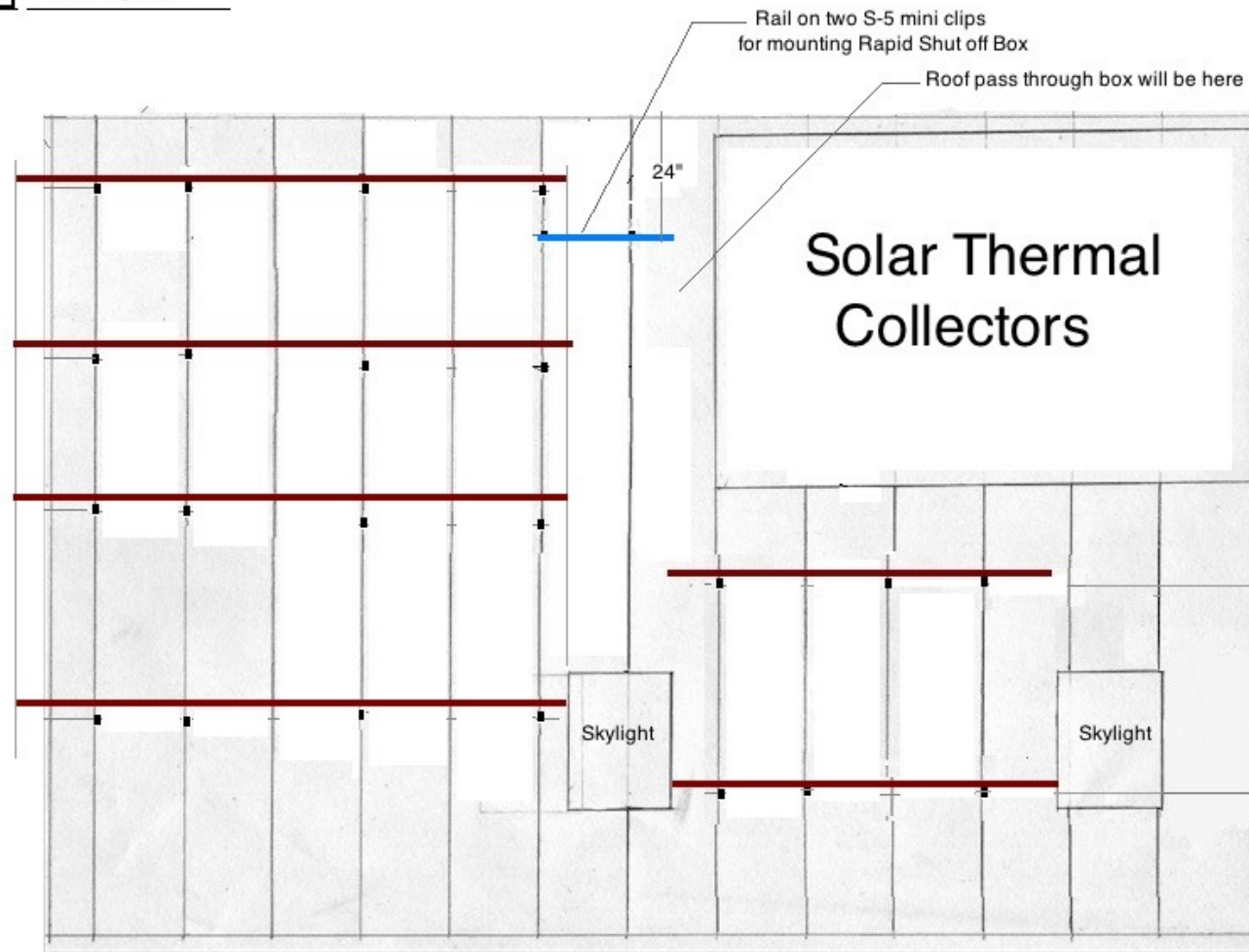
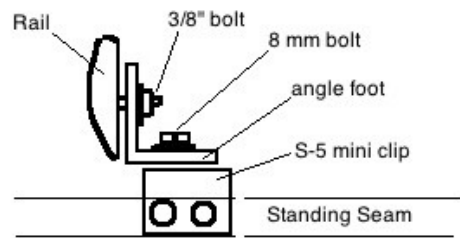


Position of 16 S-5 Clips

Measurement to lower edge of clips

NOTE: Use anti seize paste on stainless set screws





SUNNY BOY 3000TL-US / 3800TL-US / 4000TL-US /
5000TL-US / 6000TL-US / 7000TL-US / 7700TL-US



58 3000TL-US-22 / 3800TL-US-22 / 4000TL-US-22 / 5000TL-US-22 /
6000TL-US-22 / 7000TL-US-22 / 7700TL-US-22

OUTLET NOT INCLUDED

Certified

- UL 1741 and 16998 compliant
- Integrated AFCI meets the requirements of NEC 2011 690.11

Innovative

- Secure Power Supply provides daytime power during grid outages

Powerful

- 97.6% maximum efficiency
- Wide input voltage range
- Shade management with OptiTrac Global Peak MPP tracking

Flexible

- Two MPP trackers provide numerous design options
- Extended operating temperature range

**SUNNY BOY 3000TL-US / 3800TL-US / 4000TL-US /
5000TL-US / 6000TL-US / 7000TL-US / 7700TL-US**

Setting new heights in residential inverter performance

The Sunny Boy 3000TL-US/3800TL-US/4000TL-US/5000TL-US/6000TL-US/7000TL-US/7700TL-US represents the next step in performance for UL certified inverters. Its transformerless design means high efficiency and reduced weight. Maximum power production is derived from wide input voltage and operating temperature ranges. Multiple MPP trackers and OptiTrac™ Global Peak mitigate the effect of shade and allow for installation at challenging sites. The unique Secure Power Supply feature provides daytime power in the event of a grid outage. High performance, flexible design and innovative features make the Sunny Boy TL-US series the first choice among solar professionals.

Sunmodule

SW 340-350 XL MONO (33mm frame)



TUV Power controlled:
Lowest measuring tolerance in industry



Every component is tested to meet
3 times IEC requirements



Designed to withstand heavy
accumulations of snow and ice



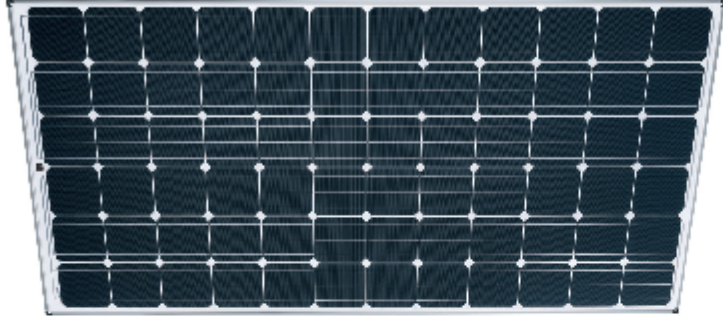
Sunmodule
Positive performance tolerance



25-year linear performance warranty
and 10-year product warranty



Glass with anti-reflective coating



World-class quality

Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

SolarWorld Plus-Sorting

Plus-Sorting guarantees highest system efficiency. SolarWorld only delivers modules that have greater than or equal to the nameplate rated power.

25-year linear performance guarantee and extension of product warranty to 10 years

SolarWorld guarantees a maximum performance degradation of 0.7% p.a. in the course of 25 years, a significant added value compared to the two-phase warranties common in the industry, along with our industry-first 10-year product warranty.*

*In accordance with the applicable SolarWorld Limited Warranty at purchase.
www.solarworld.com/warranty



certified, no more safety issues, no more safety issues, no more safety issues, no more safety issues, no more safety issues



UL 1709



UL 1709



UL 1709



UL 1709



solarworld.com