

# Permitting Residential Rooftop Solar Collectors

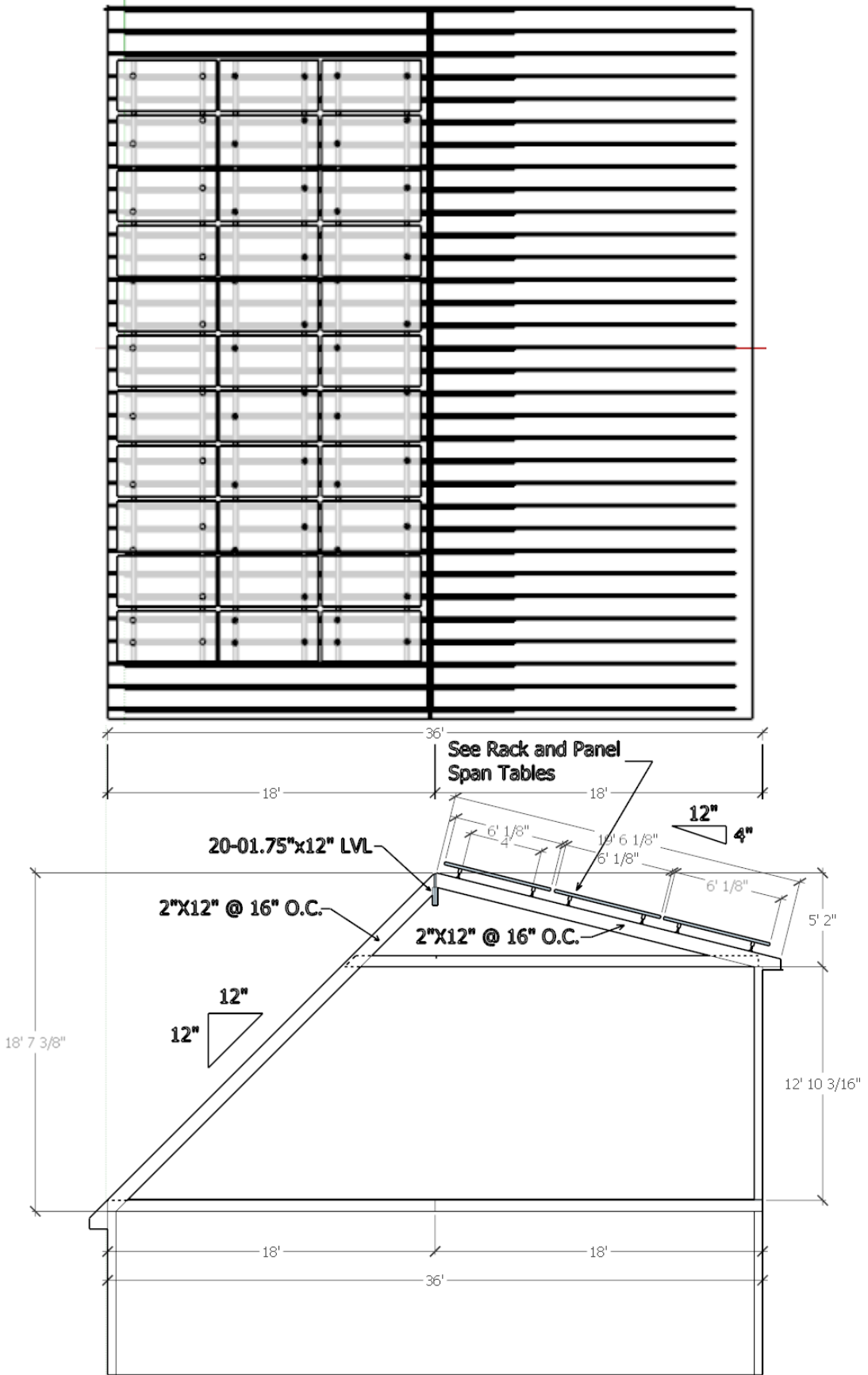
## Permitting

- General:** rooftop solar collectors require a Building Permit and a wiring Permit. The homeowner or the general contractor may apply for the Building Permit. **Only a Massachusetts licensed electrician** may apply for a wiring permit for rooftop solar collectors.
- Structural Evaluation:** Prior to applying for a building permit the applicant must perform a structural evaluation to determine whether the existing roof will carry the wind and snow loads that will be imposed on it. A roof which was built and approved after 1975 with one layer of asphalt shingles will typically be able to support a PV system if the load is sufficiently distributed. The applicant should identify the size species and spacing of all structural members. Once the evaluation is complete the applicant needs to create a structural plan which shows the rafters, beams, rack rails and feet and panels. The applicant should also create a section drawing to clarify the load path. The **drawing should either be dimensioned or drawn to a scale** (see attached sample). If sufficient documentation is provided which demonstrates prescriptive compliance with the Building Code a building permit will be issued. If not, a designed solution from a professional engineer may be needed.
- Submittal:** please submit a complete Building permit and Wiring Permit application with appropriate fees. The applications must be accompanied by a wiring schematic, rack and panel specifications structural plan and section drawing.
- Documents:** **One** application, **three** structural plans, **three** wiring diagrams **three** panel and rack specs.
- Fee:** The Building Permit Fee is \$150. The wiring Permit fee is \$65 plus \$60 for each inspection. A typical installation will require 2 Wiring inspections for a total Wiring Permit fee \$195. The total cost of both permits with two wiring inspections is \$345.

## Inspections

### 1<sup>st</sup> Wiring

- Inspection:** The project will require a **rough wiring inspection**. Only the **licensed electrician** may request a wiring inspection. The inspection should not be requested until **all rough wiring** from the service to the rack is complete and in place and only the final connections to the panels and to the service remain. At this point the electrician can either email a request to the Wiring Inspector at [jrogers@oakbluffsma.gov](mailto:jrogers@oakbluffsma.gov) or fill out a written inspection request at the town hall. A ladder must be in place so the wiring inspector can do the inspection.
- Timeline:** Within **three business days** the wiring inspector will schedule a time and inspect. The Licensed electrician should be available for the inspection with a safe ladder to the roof.
- 2<sup>nd</sup> Wiring Inspection:** If the wiring passes the electrician and the contractor can complete the installation. When the project is complete the electrician schedules a final wiring inspection.
- Final Building Inspection:** If the project passes the owner or the contractor can call or email the Building inspector so schedule a final inspection at [mbarbadoro@oakbluffsma.gov](mailto:mbarbadoro@oakbluffsma.gov) 774-563-9657 the Building Inspector can usually inspect the next business day between the hours of 9:00 and 12:00. The owner or his representative must be onsite for the inspection.
- Power up:** once the final inspection is approved the system may be powered.



123 Main Street  
Oak Bluffs

Section View