**Operating Manual**

Interdisciplinary Studio Pavilion [ISP] 2019

Team 3A: “Succulent Pavilion”



**Alex Beaubien**

California Polytechnic State University

San Luis Obispo, CA

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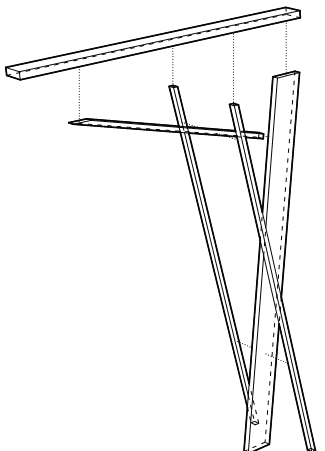
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# Assembly Diagrams & Connection Details

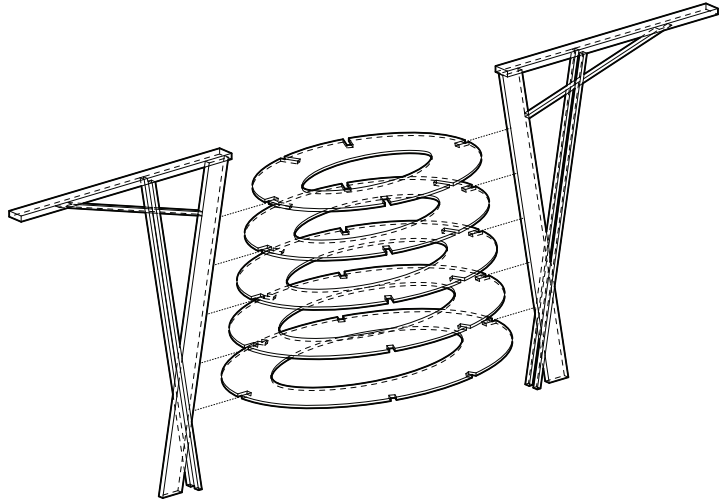
**Fin Assembly Diagram**

**(See Construction Details)**

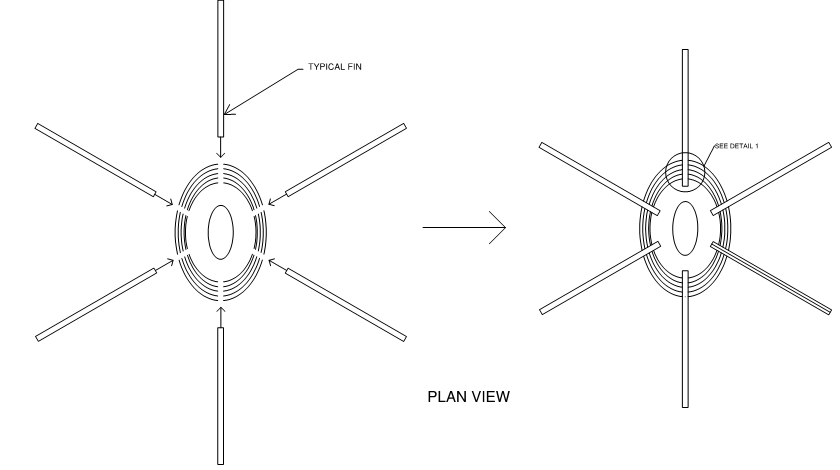


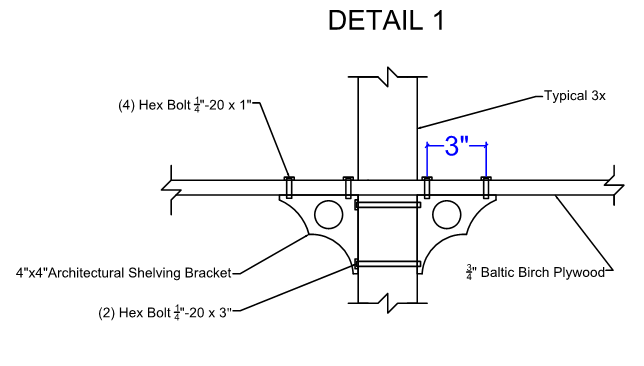
**Fin-to-Ring Assembly Diagram**

**(See Construction Details)**

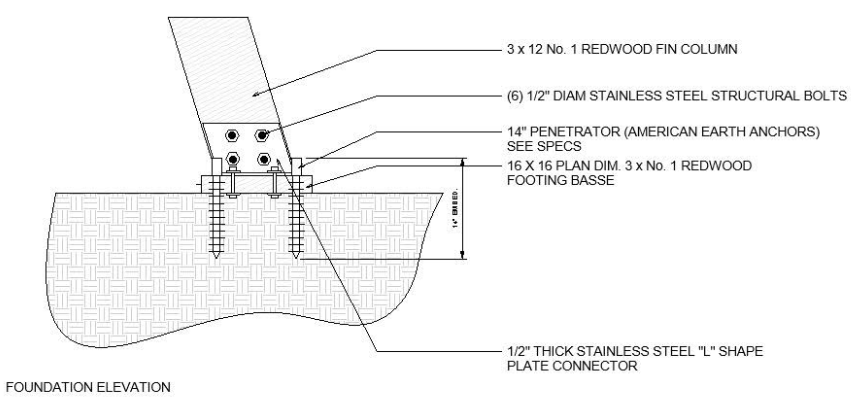


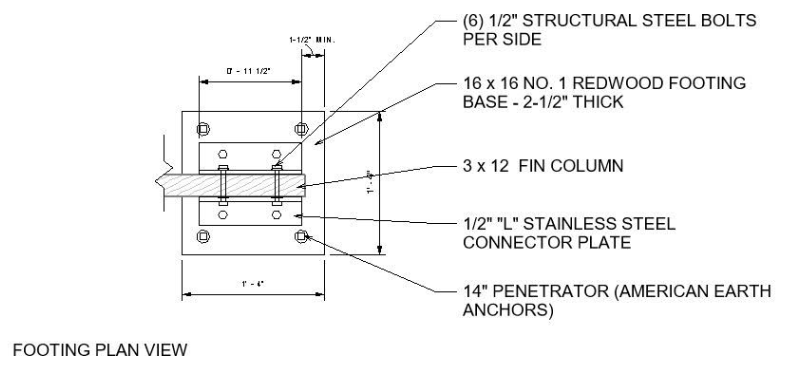
**Fin-to-Ring Connection Detail**



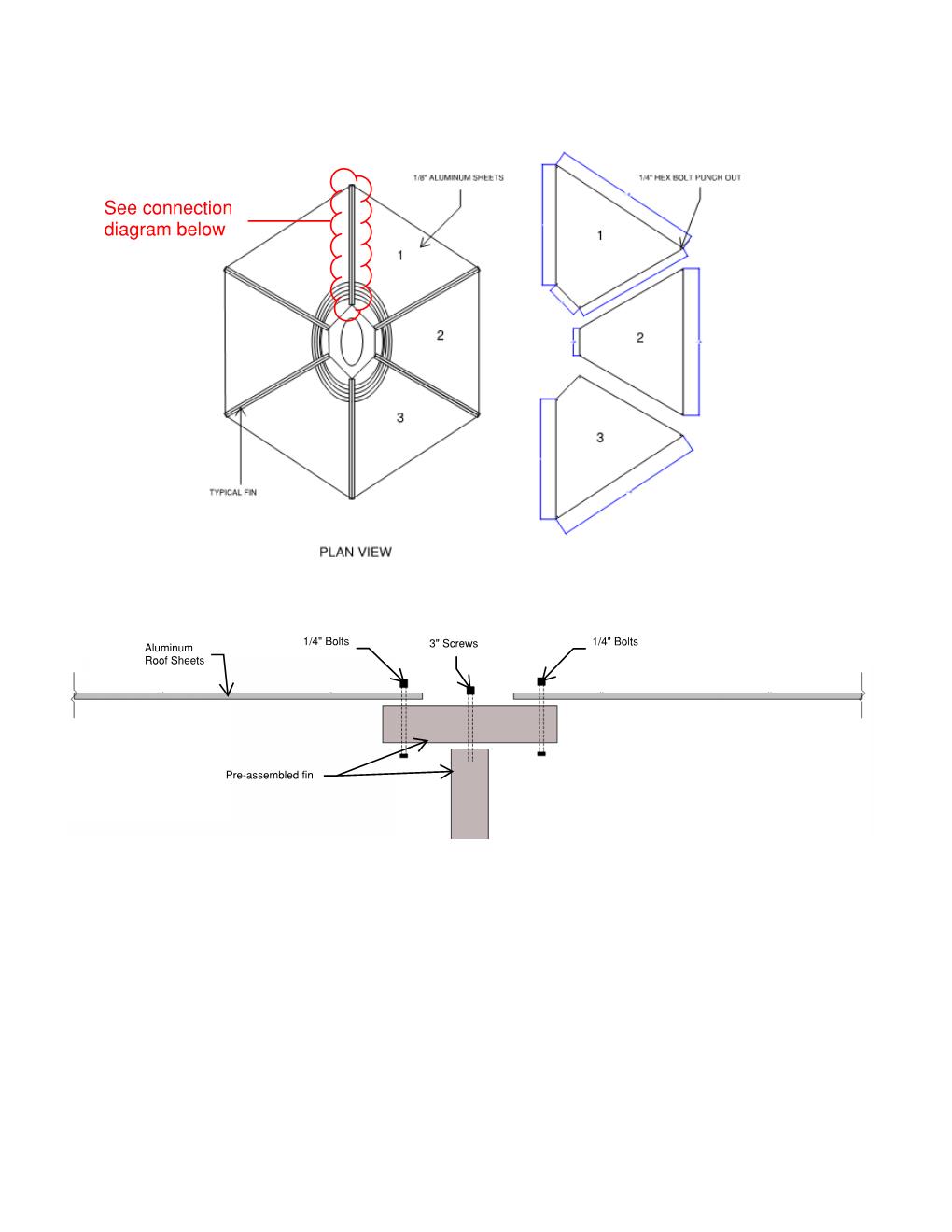


**Foundation Plate Connection Details**





**Roof Assembly Diagram**

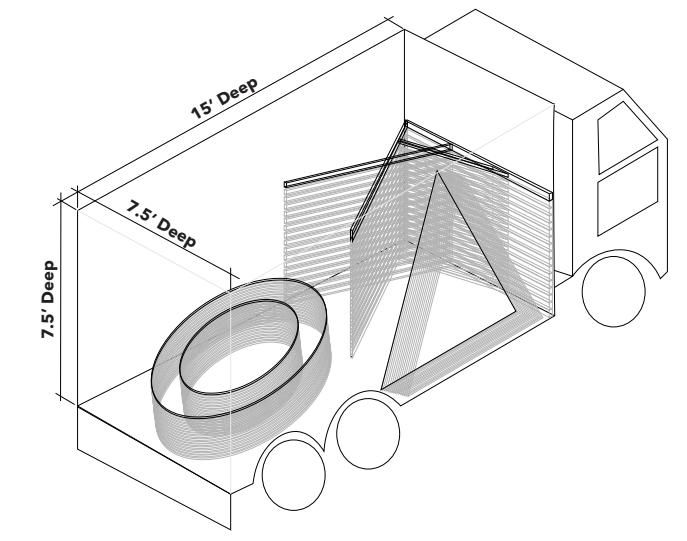
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# Transportation Guidelines

**Lifting and Stacking**

* Be sure to detach all shelving brackets and foundation plate connectors from major wood pieces before stacking
* Will need at least 4 people who can lift 50lbs or more
* Use dollies and ramps to help carry quantities of smaller pieces (rings and aluminum sheets) into the truck bed
* Stack all pieces as necessary

Refer to the diagram below for an appropriate truck size needed to hold all of the pavilion’s pieces:



# Assembly and Disassembly Instructions

\*Refer to Assembly Diagrams and Connections for further detail

**Assembly Instructions**

Step 1: Fin Assembly

* All 18 fins should come pre-assembled to the onsite location
* Bolt 4” shelving brackets at appropriate locations on each fin after unloading
* Layout 6 fins and rings next to desired structure location

Step 2: Fin-to-Rings Assembly

* Stand up a singular fin using multiple people for support
* Begin with slotting the largest/lowest ring in place onto the singular fin
* Bolt the shelving bracket onto the first 6’ ring
  + Be sure to have multiple people supporting the opposite side of the ring
* Slot the next fin on the opposite side of the 6’ ring
* Once both opposite fins are secured, proceed with installing each sequential ring
* Once all rings are secured, proceed with installing each sequential fin

Step 3: Foundation Plate Assembly

* Foundation plates should come pre-assembled onto each fin
* Position base redwood plate at desired location
* Once all fins and rings are bolted and secured, anchor bolt each foundation plate to the base plate using the appropriate tools

Step 4: Roof Assembly

* Using ladders, bolt each individual aluminum sheet into place at appropriate locations on 3x12 members

**Disassembly Instructions**

Step 1: Roof Disassembly

* Using ladders, unbolt and remove each aluminum roof sheet

Step 2: Foundation Plate Disassembly

* Before removing fins and rings, un-anchor each foundation plate from the ground

Step 3: Fin-to-Rings Disassembly

* Working with one fin first, unbolt each shelving bracket from rings at each level
* Once all shelving brackets are unbolted, haul and carry away the fin
* Repeat for each fin

Step 4: Store and Secure

# Maintenance and Operating Instructions

**Maintenance Instructions**

* Routinely inspect all wood for damage, defects, warping, and rot
* Routinely inspect all metal members for warping, bending, and rust
* Replace wood that has minor splits through any connection (bolted or screwed)
* Replace/re-fabricate metal that poses structural hazards (sharp edges, loose connections, etc.)
* Routinely check shelving brackets for levelness
* Dust and clean all shelving and aluminum pieces weekly

**Operating Instructions**

This structure does not require any operating instructions.

# Spare Parts/Material Lists

Order the following amounts in addition to the Material Cost/Quantity estimate:

