Vocabulary

An awning's job is to protect something underneath. For example, this can be a deck or ramp that might get slippery in snow or rain. The main elements of an awning project are very similar to decks and stairs but also include:

1) **Rafters –** stained DF 2x6s that attach to a beam and support sheathing and roofing.

2) **Beams –** stained DF 4x4 connected to posts by post caps and are connected to rafters with hurricane ties.

3) **Sheathing and roofing –** OSB sheathing attached to rafters, then covered with roofing materials.

4) **Ledger boards** – sometimes it isn't possible to attach rafters directly to a home. In that case, a DF 2x4 or 2x6 has to be bolted to the house in order to connect rafters with hurricane ties.



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Safety

Just like working on roofs, volunteers must be careful when building awnings. Remind them to always have a ladder buddy when attaching rafters, roofing material, etc. It can be difficult to stand on a ladder and hammer in nails, so just remind volunteers to be aware of their surroundings.



Yikes! No ladder buddy!

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Attached Awnings

If SSP is also building a deck, ramp or stair, the same posts can extend from the concrete footings to support the railing and awning as well. There are two types of awnings, attached and freestanding.

An **attached** awning is where a **ledger board** (2x6) is attached to the home with **lag bolts.** Rafters are hung with joist hangers to the ledger board and the lower end of the awning is supported by a row of posts supporting a beam.



Attached awning

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Freestanding Awnings

If it is a **mobile home**, **SSP cannot attach to it**; attaching to one would make it immobile and is therefore illegal. In this case, a **freestanding** awning with two rows of posts and beams create a sloping surface that can be roofed.



Freestanding awning San Diego 2018

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Steps to build an SSP freestanding awning:

1. Clear the surrounding area
2. Set layout
3. Dig and pour concrete footings
4. Measure and cut the first row of posts closest to the building
5. Attach beams
6. Install posts into post bases
7. Repeat steps 4-6 for second row of posts
8. Cut and attach rafters
9. Roof the awning

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1. Clear the surrounding area
2. Set layout



Smith River 2016

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3. Dig and pour concrete footings

- Post holes are 12” wide and 18” deep (24” in Spokane and Tsaile)
- MAKE SURE TO TWIST AND JIGGLE THE POST BASES IN THE CONCRETE; if you don’t, air pockets will form and loosen the post base.
- Allow the concrete to cure overnight.



Smith River 2016

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4. Measure and cut the first row of posts closest to the building



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5. Attach beams

Attach post caps to the beams (stained DF 4x4s) before installing into post bases if you're not attaching it to a deck, stairs, or ramp.

6. Install posts into post bases

7. Repeat steps 4-6 for second row of posts



Smith River 2016

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8. Cut and attach rafters

- Once the beams are attached to the posts, **rafters** can be attached to them with **hurricane ties**.
- Rafters are 2x6s and spaced **24” o.c** just like joists in a deck. If there is a snow load in the winter, rafters are spaced **16” o.c**.
- Rafters can cantilever past their supports no more than 1/3 of the span or 22”.



Tsaile 2017

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9. Roof the awning

- Once the rafters are secure, the awning is sheathed with **½" OSB**.
- See *Chapter 14: Roofing* for roofing instructions.



Spokane 2017

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