

## Base Brackets

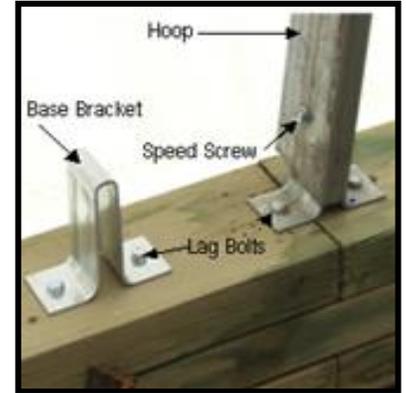
### ***Base Brackets* are NOT used in combination with *Anchor Posts***

Although the building can be anchored directly into the ground, (see option: *anchor posts*) it can sit on a slab, curb or beam or it can be elevated on some sort of a wall. *Base brackets* with lag bolts are supplied to fasten the building to the chosen form of foundation.

Please see video online "How to Install Anchoring to the Base Beam" for further instructions

**A word of caution.**...recommendations made for anchoring are based on years of experience. Ultimately the customer is responsible to properly anchor a structure.

- The outside to outside measurement of the wall or beam should be slightly greater than the width of the building. (+3" for 1x2 *hoops* and +5" for 1x3 *hoops*)
- If the centre of the *base bracket* is more than 2" from the edge, there will be a ledge where there is the potential for damage to the cover as the building is shedding snow or ice.
- The overall length of the beam or wall should also be an extra 4", unless you plan to have a solid end covering.



### Base Beam

By using 3 layers of 2x6 rather than a 6x6 beam (as seen in the pic), you can create a continuous laminating effect by offsetting the layers. By trimming 1" off of the middle board, you get 2x6, 2x5, 2x6. This creates a "pocket" where the side of the cover can be secured.

**There simply is no such thing as too many anchors.**

### Anchoring the Beam

- With the exception of the large concrete blocks, the base needs to be anchored to prevent lateral shifting and/or uplift.
- Spiral earth anchors or T-bars can be used to anchor beams (usually 2 per pair of *hoops*). Leaning these in an alternating pattern creates extra holding capacity.
- **Anchors MUST be to the inside of the beam.** In case of multiple beams (stacked) the anchor must be attached to at least two layers. **Rebar through the beams does not have sufficient holding power.**
- The AVERAGE spacing of your anchors should never be more than 4' unless you are in a forest. Towards the corners, the anchors are usually closer to each other and along the middle they can be slightly further apart.
- **There must be a minimum of 2 fasteners per post.**

### Setting Wall Posts

**Putting some concrete into the bottom of the hole significantly adds to the holding capacity.**

**Posts should always be set below the frost line and have at least as much length below the surface as above.**

- When augering holes to set posts, extreme care should be exercised to pack the soil around the posts firmly.
- Spacing the posts further apart usually does not save any time or money since extra time will be spent packing the soil (also greater need for concrete) and a heavier sill plate will be required.
- There should be a horizontal board on the outside of the posts just below grade. This will give extra protection against posts leaning outward.

### Sill Plate

The *sill plate* bridges the gap between the posts or ties base beams together. In the case of a railroad tie it also gives consistency to the top surface to allow for level construction of the building. If the *sill plate* is capping something else (i.e. beam) then a 2x4 is sufficient. A 2x6 *sill plate* between posts is sufficient unless the post spacing is more than 4'. Unless you are building on a beam you should add a 2x4 on edge as a place to fasten the cover. The joints should always be offset to create extra strength.

### Base Bracket placement

Place 2 parallel runs of the *base brackets* on the beam or wall. The centre to centre spacing between these lines is equal to the width of your building. The in line spacing is equal to the specified *hoop* spacing of the building you purchased. Each *bracket* is secured with 2 *lag bolts* which MUST be in line with the length of the building.



**PLEASE NOTE:** Any italicized words in this document are words that are listed in the glossary.