

## Chapter 29: Commercial Girts

### Most Common Mistakes:

1. Installing wall girts before framing roof and roofing.
2. Placing first girt bottom at a height other than 27-1/2" above grade.
3. Girt end blocks cut to varying lengths.
4. Setting girts to project beyond column outsides other than by 1-1/2".
5. Failure to install a sill gasket below and/or caulking base plate.

Commercial girts are like bookshelf girts. Please review **Chapter 19**. In this case, they are spaced 24" o.c. to allow for future wall insulation batts to be installed. Also included with commercial girts is a pressure treated base plate (or mud sill) one dimension smaller than girts as well as a 2x4/2x3 "L" backing for drywall at ceiling line.

With PermaColumn wet-set brackets, lowest girt block will be cut to fit between top of bracket 'ears' and bottom of lowest girt



More girt rows may be ADDED to Bookshelf Girt design to create Commercial Girts without any negative structural effect on building. If so, order additional screws from **Hansen Pole Buildings**.

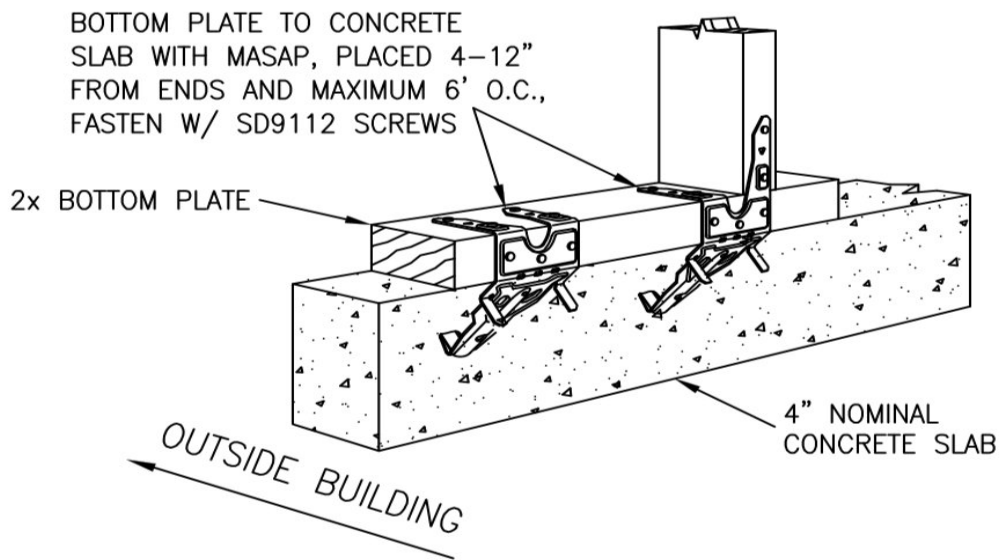


Due to 2x8 commercial girts measuring 7-1/4" and 2x6 base plates measuring 5-1/2" there will be a 1/4" difference on inside finish between base plate and next girt up. Interior finishes (yes, even gypsum wallboard run vertically) will bend this far and due to this occurring well below eye level, it is not noticeable. Should there be a concern, 1/4" of furring material (not provided with kit) can be added to inside face of base plates.

Cut girt blocks to 22-7/16" lengths from 2x3 material provided (for large girt spans or high wind loads 2x4 may be provided). First girt block bottom edge starts 5-1/2" above splash plank bottom. After concrete floor has been poured, a pressure treated base plate will be inserted between floor top and girt block bottoms. Base plate is screwed through pressure treated splash plank (per plans), as well as anchored to concrete floor with MASAP brackets, placed four to 12 inches from base plate ends and up to six feet on center. Building Codes **REQUIRE** this base plate to be installed over a sill gasket and/or caulked to concrete floor. We recommend use of TERM® Sill Moisture / Termite Barrier for installations where termites may be problematic. When space between treated columns is less than 12", there is no base plate.



MASAP brackets are easiest to install by tacking to splash plank inside face, prior to concrete pour. **See Figure 29-1**



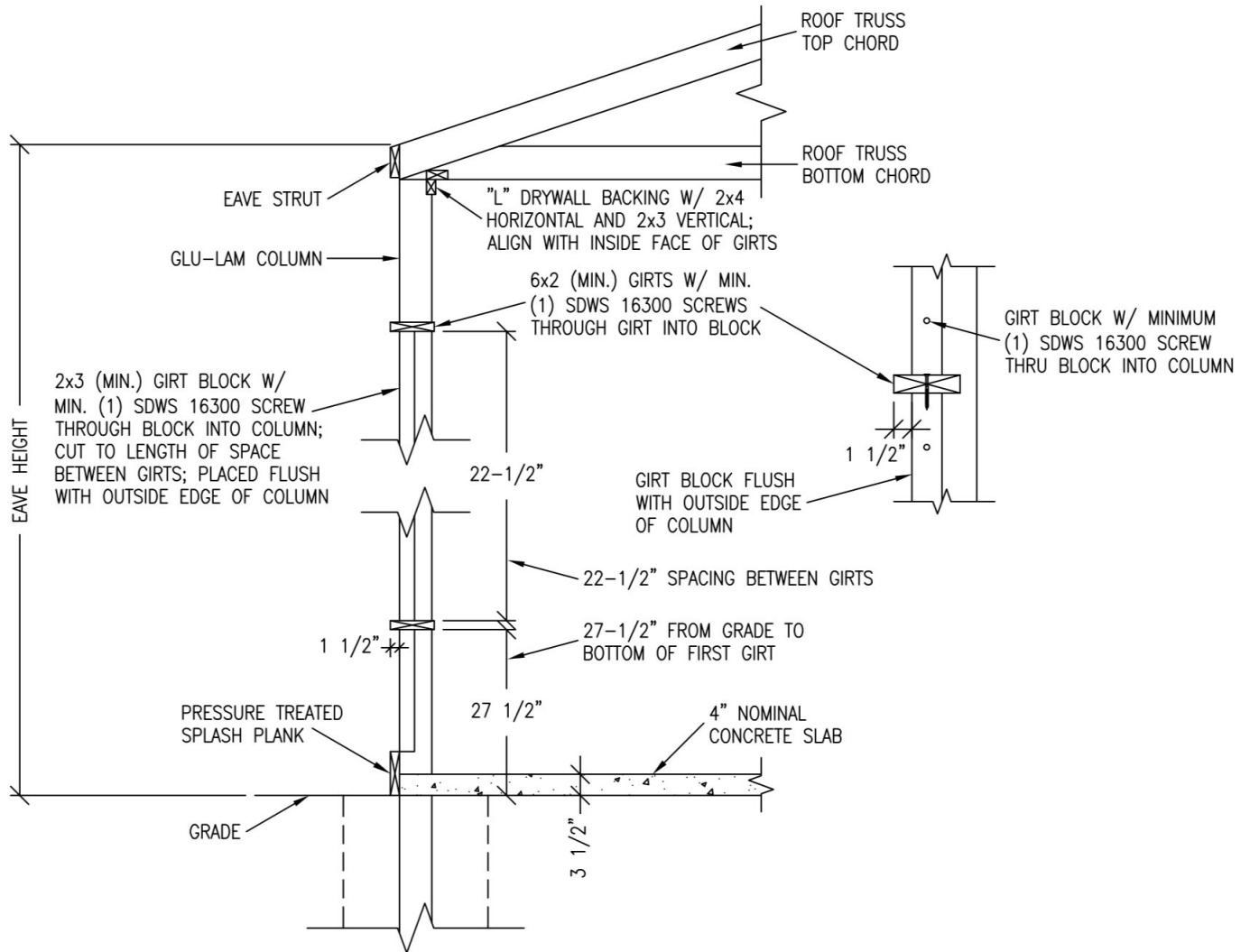
**Figure 29-1 Base Plate Attachment**

Any pressure preservative treated lumber cut edge or end should be treated with a Copper Naphthenate solution. Copper Naphthenate is available as a brush-on (Cuprinol No. 10 Copper-Green® Wood Preserver) or spray-on.

Girts are placed so outside edge is 1-1/2" outside of columns. This will cause girts to extend past columns on inside, without adversely affecting interior finish applications such as gypsum wallboard. Attach girt block with (1) SDWS16300 at each end (unless specified otherwise on building plans).

In any event, total nail number used to attach any girt block to a column should never be fewer than nail number used to attach girt to block top.

Cut girt to fit snugly between columns, with "crown" out and any "bow" up, resting on girt blocking at each end. Outside girt edge extends from columns outward 1-1/2". **See Figure 29-2**



**Figure 29-2 Commercial Bookshelf Girts For Insulation and Interior Finish**

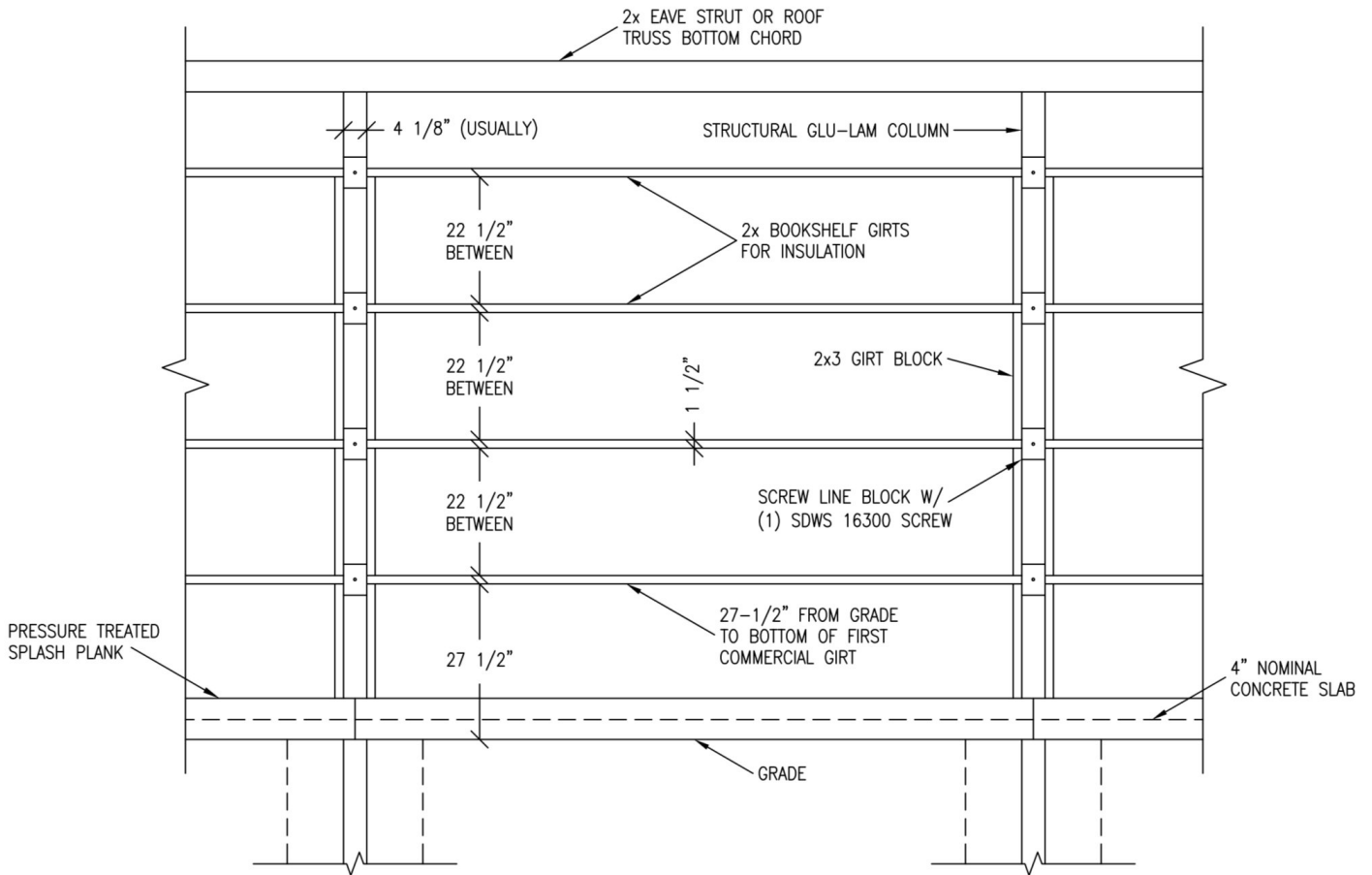
Attach each girt end securely into girt block tops below, with one SDWS16300 minimum. Repeat for each bay around building.



Where two adjacent wall columns are 2' or less in between, 2x3 **exterior** (barn style) girts will be provided to nail on outside column faces, as insulation batts will fill space remaining.

Screw 2x blocking material to exterior column faces in line with girts with one SDWS16300. This a good way to use up cutoffs from bookshelf girts. **See Figure 29-3**

This blocking will serve as backing material for any steel cladding screws falling in this area.

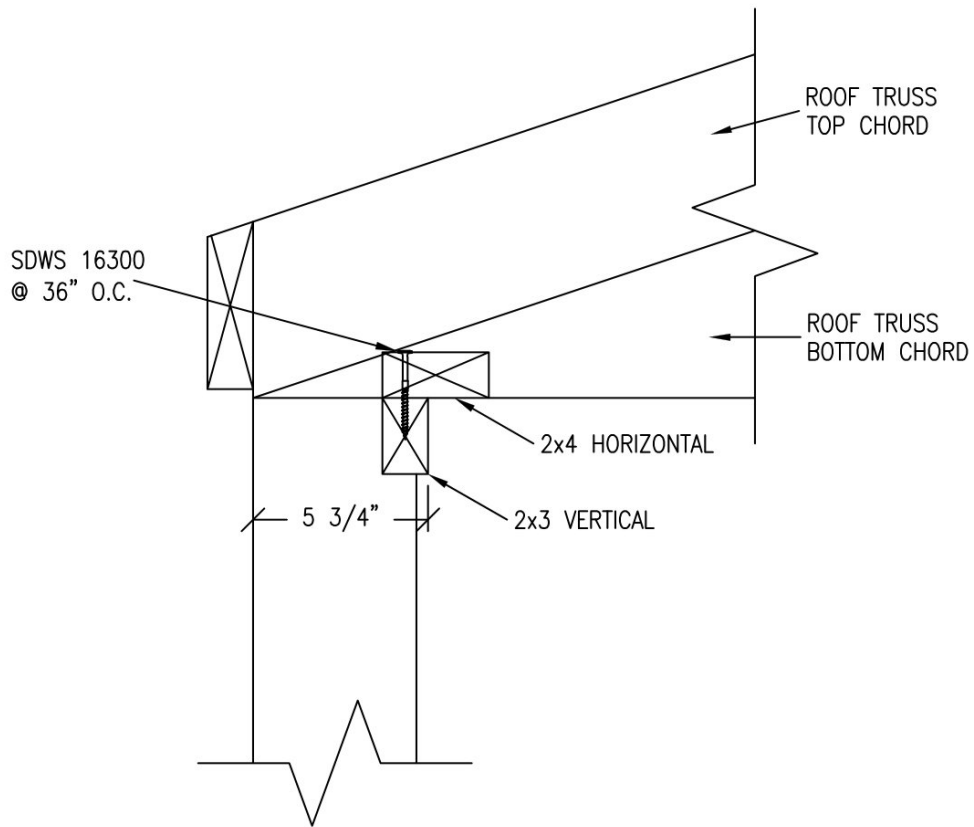


**Figure 29-3: Commercial Bookshelf Girts 2x Blocking**

Install 2x4/2x3 inverted "L" sidewall drywall backing using one SDWS16300 at an angle through "L" 2x3 vertical member into columns and one SDWS16300 at an angle downward through "L" 2x4 horizontal member into column. **See Figure 29-4**

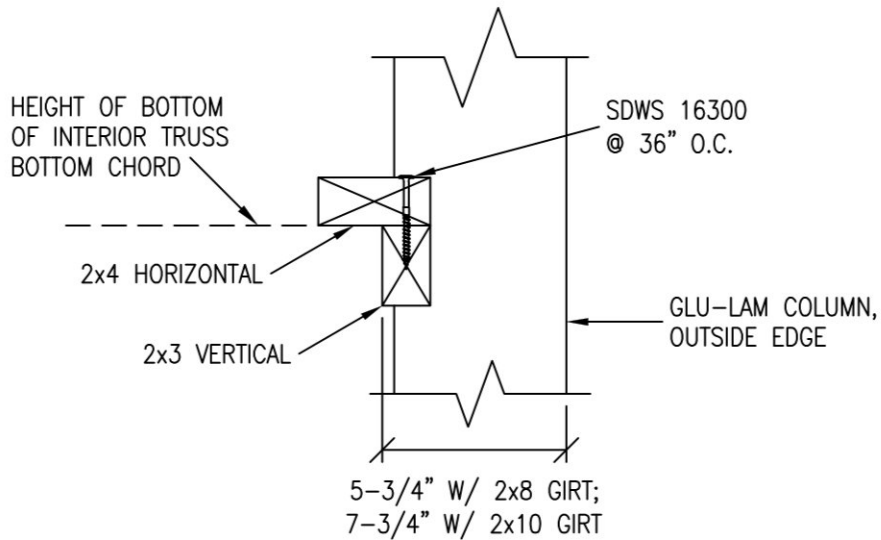


5-3/4" shown in **Figure 29-4** is for 2x8 girts; for 2x10 girts, it will be 7-3/4".



**Figure 29-4: "L" Sidewall Drywall Backing**

For buildings without ceiling joists, install 2x4/2x3 inverted "L" endwall drywall backing using one SDWS16300 at an angle through "L" 2x3 vertical member into columns and one SDWS16300 at an angle downward through "L" 2x4 horizontal member into column. **See Figure 29-5**



**Figure 29-5: "L" Endwall Drywall Backing**