

Chapter 19: Girts

Wall girts will be shipped with one end spray painted **GREEN**. When cutting to length, cut from unpainted end. This assists inspectors (or you, should you have hired a builder) in verifying correct placement.

Most Common Mistakes:

1. Installing wall girts before framing roof and roofing.
2. Placing flat on column outside (except where noted on engineer sealed plans).
3. Bookshelf girt end blocks cut to varying lengths.
4. Neglecting setting bookshelf girts to project beyond column outsides by 1-1/2".
5. Holding inside face of wall girts flush with inside face of columns.



Prior to installing ANY wall framing, return to Chapters 13 through 17 to install steel on roof.

For "Commercial Girts" please see Chapter 29.

Basic girt configuration is **bookshelf girts**. This places them flat, like shelves. Looking at walls, girt narrow (1-1/2") face will be seen. **See Figure 19-1**

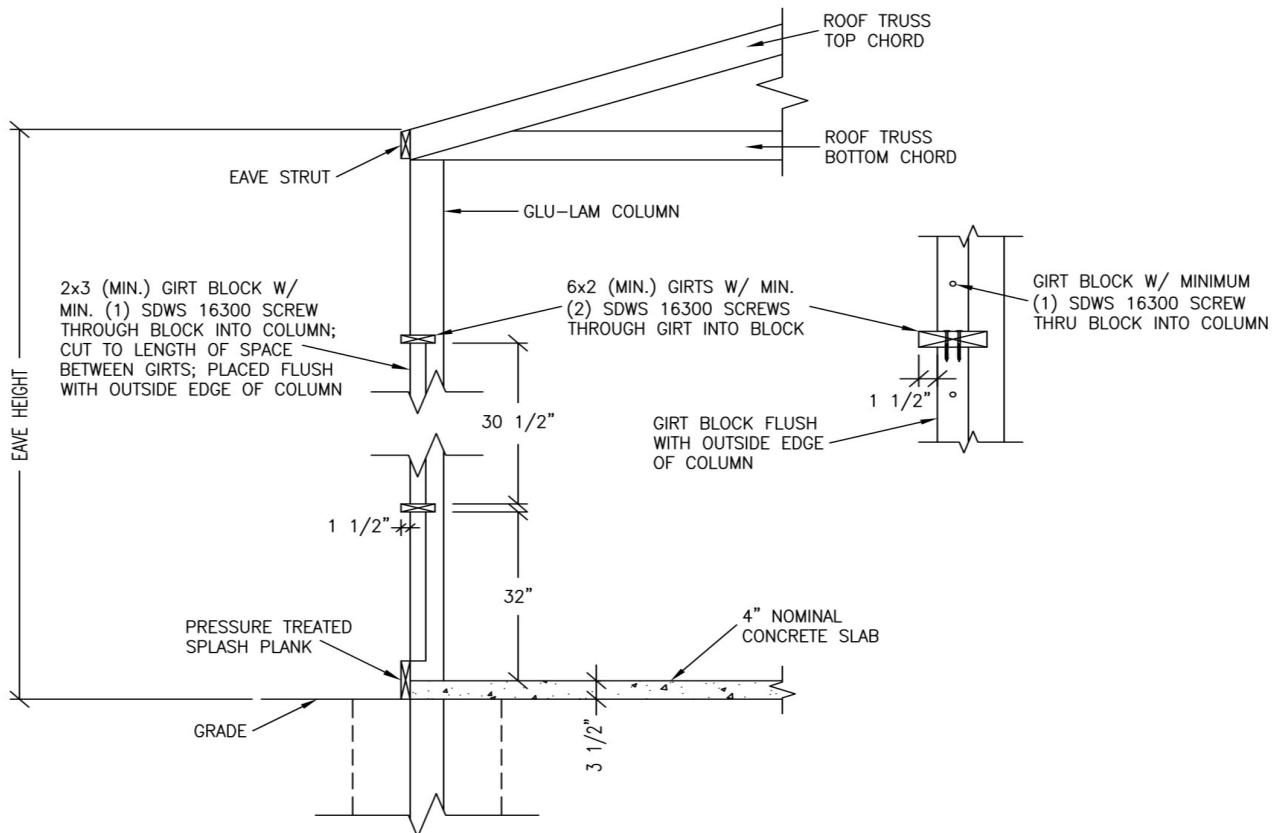


Figure 19-1: Bookshelf Girts

Unless otherwise specified distance, from top of slab to first girt will be 32" (35-1/2" from bottom of splash plank). Spacing "between" subsequent girts will be 30-1/2" as opposed to *on center* spacing. Pay careful attention here or inadequate material quantities will be present to complete wall framing.

With PermaColumn wet-set brackets, lowest girt block will be cut to fit between top of bracket 'ears' and bottom of lowest girt. **See Figure 19-2**

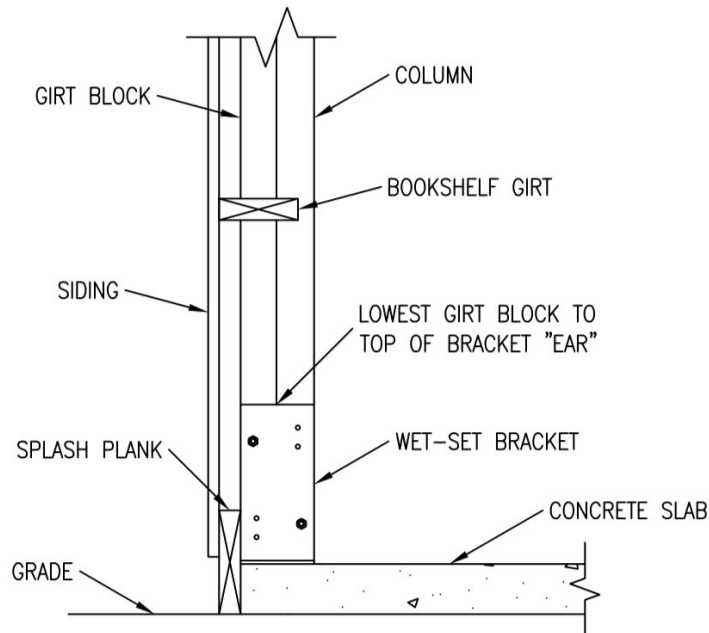


Figure 19-2 Lowest Girt Block with Wet-Set Brackets

Cut bookshelf girt blocks to 30-1/2" from 2x material provided.

First bookshelf girt block bottom edge starts five (5) inches above splash plank bottom edge. Screw bookshelf girt block flush to column outside edge with one (1) SDWS16300 minimum at 6 inches from each end (unless specified otherwise on building plans). In any event, total screw number needed to attach any bookshelf girt to a column will never be fewer than what is used to fasten bookshelf girt to bookshelf girt block top.

Cut bookshelf girt to fit snugly between columns. Lay girt flat, like a shelf, between columns with "crowns" out, resting on bookshelf girt blocking at each end.



Bookshelf girts are installed so bookshelf girts project 1-1/2" **outside** of columns at each end. They are NOT installed flush with column inside or outside edges.

Screw bookshelf girt ends securely into bookshelf girt block tops with one (1) SDWS16300 minimum (more if specified on plans) at each end. Repeat for each bay around building. A maximum of two (2) SDWS16300 can be placed through any given bookshelf girt end into a 2x3 girt block below. **See Figure 19-3**

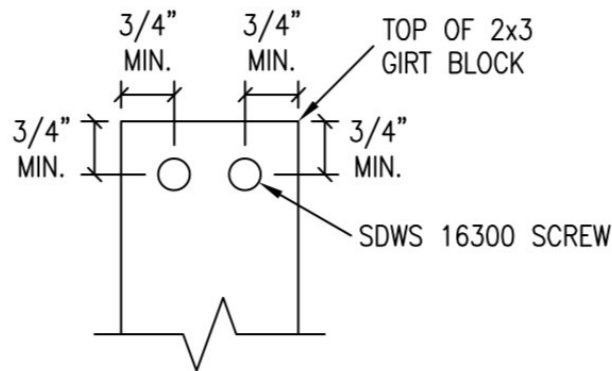


Figure 19-3: Screwing Pattern To Girt Block Top

Between initial installation time and wall sheeting bookshelf girts may sag or droop. Relax, bookshelf girts can be easily pushed up or down by hand, to straight, as siding is applied. Once installed, siding is strong enough to hold bookshelf girts permanently in place. There is no structural reason to add mid-span vertical blocking between bookshelf girts.

Screw 2x blocking material to column exterior faces with (1) SDWS16300 in line with bookshelf girts. This is a good way to use up cutoffs from bookshelf girts. **See Figure 19-4**

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

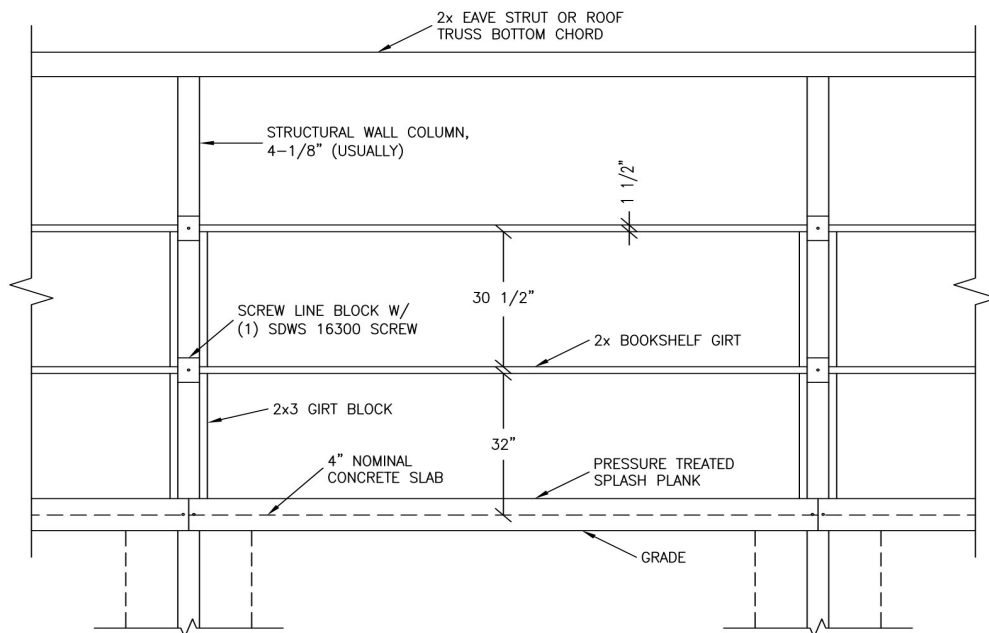


Figure 19-4: 2x Blocking With Bookshelf Girts

Exterior girts – also called “flat girts”. In very small column spacings or low wind load applications girts are installed in traditional fashion flat to column outsides. Looking at walls, board “wide” face will be seen. This is also sometimes referred to as “barn” style girts.

See Figure 19-5

CAUTION

International Building Code (IBC) has a minimum design wind pressure (ASCE/SEI 7-05 6.1.4.2) as well as deflection limits (Table 1604.3). These prohibit exterior girt structural use, in most instances.

Unless building plans indicate **exterior girts** – “flat” or “barn” style girts, building integrity (as well as ability to pass a building inspection) could be severely compromised. If girts are installed oriented other than what is specified on building plans, all risk and structural liability falls upon contractor and building owner.

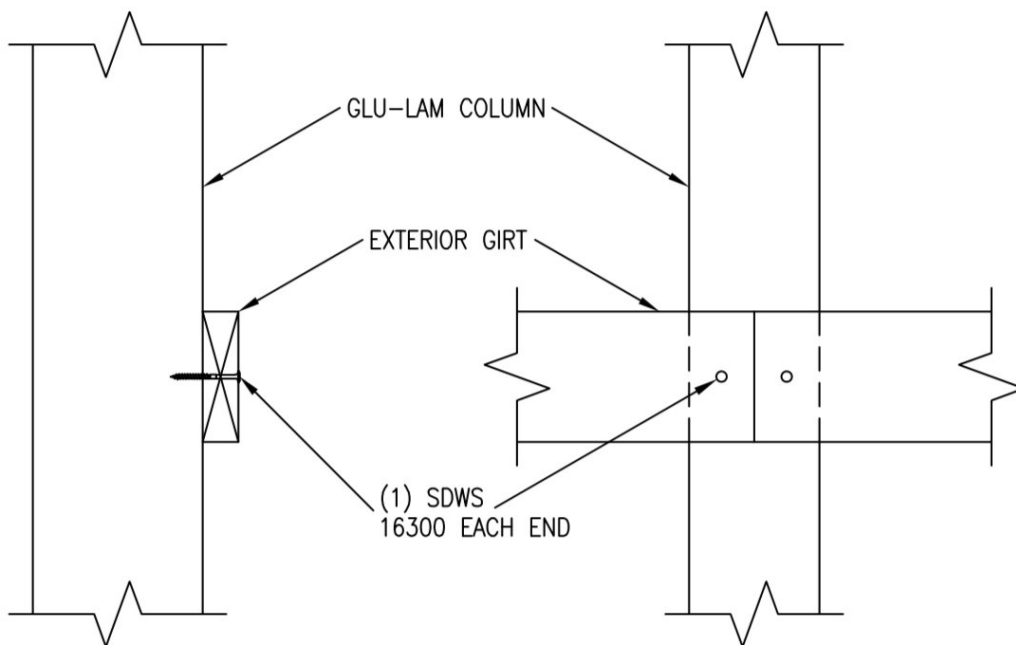


Figure 19-5: Exterior Girt To Column

Standard Exterior (Flat) Wall Girts (No Openings, Eave Lights Or Wainscot

GIRT SPACING BLOCK (“Exterior” girts only): After installing splash plank, cut at least two girt spacing blocks from load dunnage. Girt spacing blocks are used to correctly space girts and cut to spacing BETWEEN girt length as shown on building plans.

After eave strut is installed, trim to length and screw to columns according to plan, with “crowns” up, using girt spacing blocks to maintain distances. **See Figure 19-6**

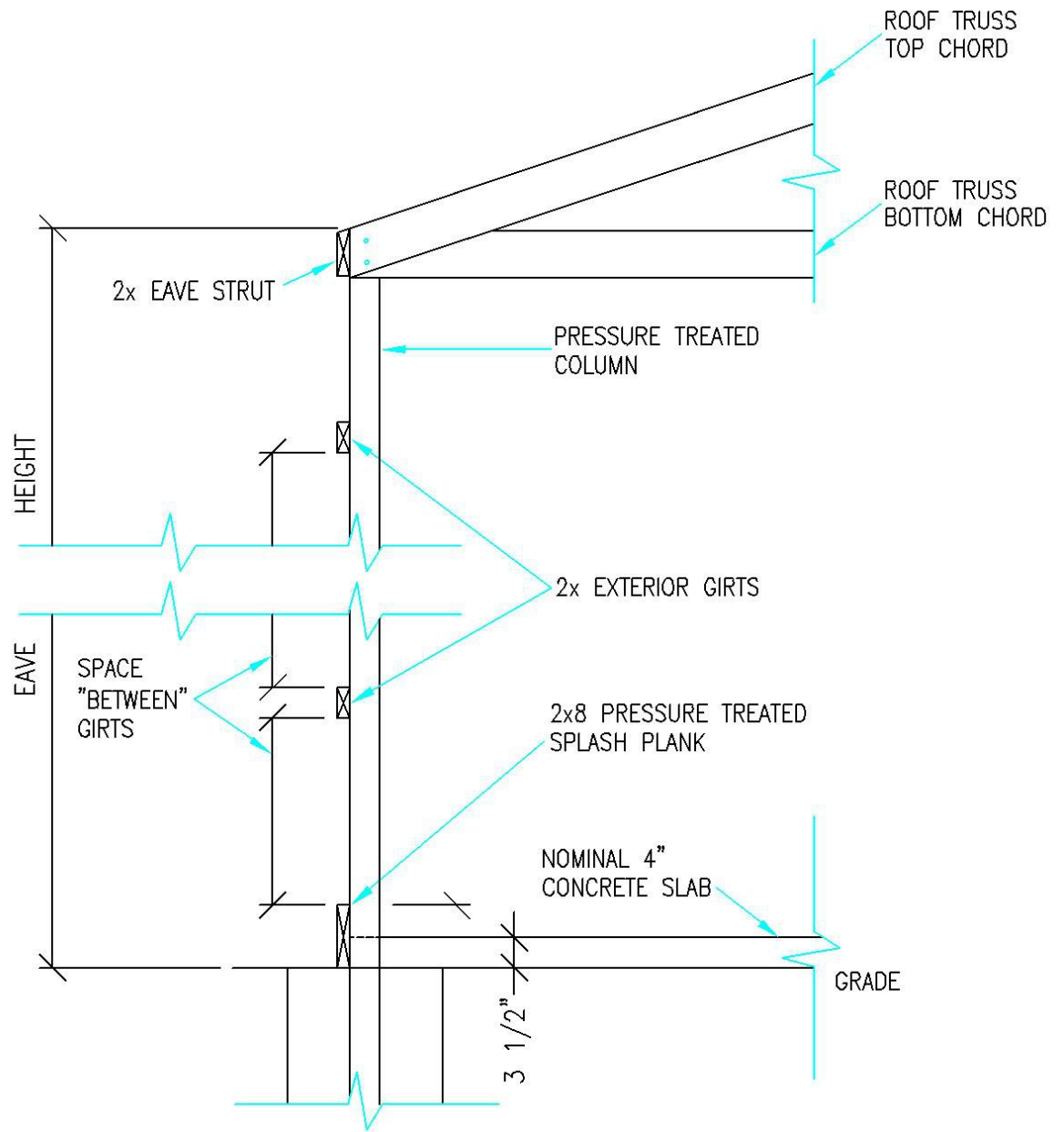


Figure 19-6: Exterior Girt Spacing Measuring Blocks



Girt grade, spacing and dimensions can vary from wall to wall, or at times from bay to bay. Pay close attention to building plans for specifics.