Chapter 19: Girts



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

The basic girt configuration is **Wind girts.** This places them flat, like shelves. Looking at walls, the girt's narrow (1-1/2") face will be seen. **See Figure 19-1.**



Figure 19-1

Most Common Mistakes:

- 1. Installing wall girts before framing roof and roofing.
- 2. Placing flat on outside of columns (except where noted).
- 3. Girt end blocks not cut to same length.
- 4. Not setting girts to project beyond outside of columns by 1-1/2".

Girt spacing is always specified on plans as spacing *BETWEEN* girts, not an *on center* spacing. Pay careful attention here or inadequate material quantities will be present to complete wall framing.

Cut girt blocks to the space *between* girts length from 2x4 material provided. First girt block bottom edge starts even with skirt board <u>top</u> edge. Nail girt block flush to column outside edge with a minimum of (2) 10d nails at each end (unless specified otherwise on building plans).

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



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

Nail girt each end securely into girt block tops with a minimum of (2) 10d nails (more if specified on plans) at each end. Repeat for each bay around building.

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

Nail 2x blocking material to column exterior faces in line with girts. This is a good way to use up cutoffs from wind girts. **See Figure 19-2** This blocking will serve as backing material for any screws which will fall in this area.



Figure 19-2

Flat girts - In very small column spacings or low wind load applications girts are installed in the traditional fashion flat to column outsides. Looking at walls, the board "wide" face will be seen. This is also sometimes referred to as "barn" style girts. **See Figure 19-3.**



The International Building Codes (IBC and IRC) have a minimum design wind pressure (ASCE/SEI7-05 6.1.4.2) as well as deflection limits (Table 1604.3), which prohibit flat girt structural use, in most instances. Unless building plans indicate flat or "barn" style girts, building integrity (not to mention 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 19-3

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

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

After eave girt is installed, trim to length and nail to columns according to plan, with "crowns" up, using girt spacing blocks to maintain distances. See Figure 19-4.



Figure 19-4

The 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.