

Chapter 23: Entry Door Installation

Most Common Mistakes:

1. Failure to inspect for damage at delivery.
2. Not verifying installation screws and door knob were received at delivery.
3. Improper storage prior to installation.
4. Failure to cut notch into pressure treated skirt board.
5. Not installing with outside of jamb 1-1/2" outside of columns.
6. Failure to install so as to miss overhead door rails.



This is the last opportunity to move entry door(s) location. Before making final door placement determination, consider weather effects. If building is in snow country and the intent is to install door on sidewall, a wise choice may be to invest in "snow brakes" or other similar devices. These can be used to either keep snow from sliding off from roof in front of door or to divert sliding snowfall away from door. Hansen Buildings can offer several alternatives for any given situation. As an alternative, relocate entry door to building peaked endwall or beneath a "side shed" (if building has this feature). It is also usually best – again in snow country – to swing door to open in to building rather than out.

Entry Door Rough Openings

Remove entry door assembly from carton. Measure entire assembly overall width (from frame outside edge to frame outside edge). Typical actual unit sizes for Harvard Products AS-3 and AS-6 assemblies supplied by Hansen Buildings are:

3' width = 38-5/8" x 80-5/8"

4' width = 48-5/8" x 80-5/8"

6' width = 74-7/8" x 81-7/8"

Verify placement (location on building) and door swing (in or out, hinged on right or left). Locate any "in swinging" door to avoid potential contact with overhead door rails.

Entry Door Columns

Install entry door column, leaving adequate space between it and closest structural building column, to allow door assembly to be comfortably placed between. It is typically prudent to make this space 1/4" to 1/2" wider than the actual frame, to compensate for any irregularities in either column.



Entry doors (or framed openings for a entry doors) are furnished (as well as priced) with one(1) 4x4 pressure treated column, per door. The other door side is planned to mount to a main building columns, which will give the best finished result. If a mounting location other than this be desired, acquire another post.

See **Figure 23-1** for wind or commercial girts.

See **Figure 23-2** for flat or "barn" girts.

This column is concreted in!!

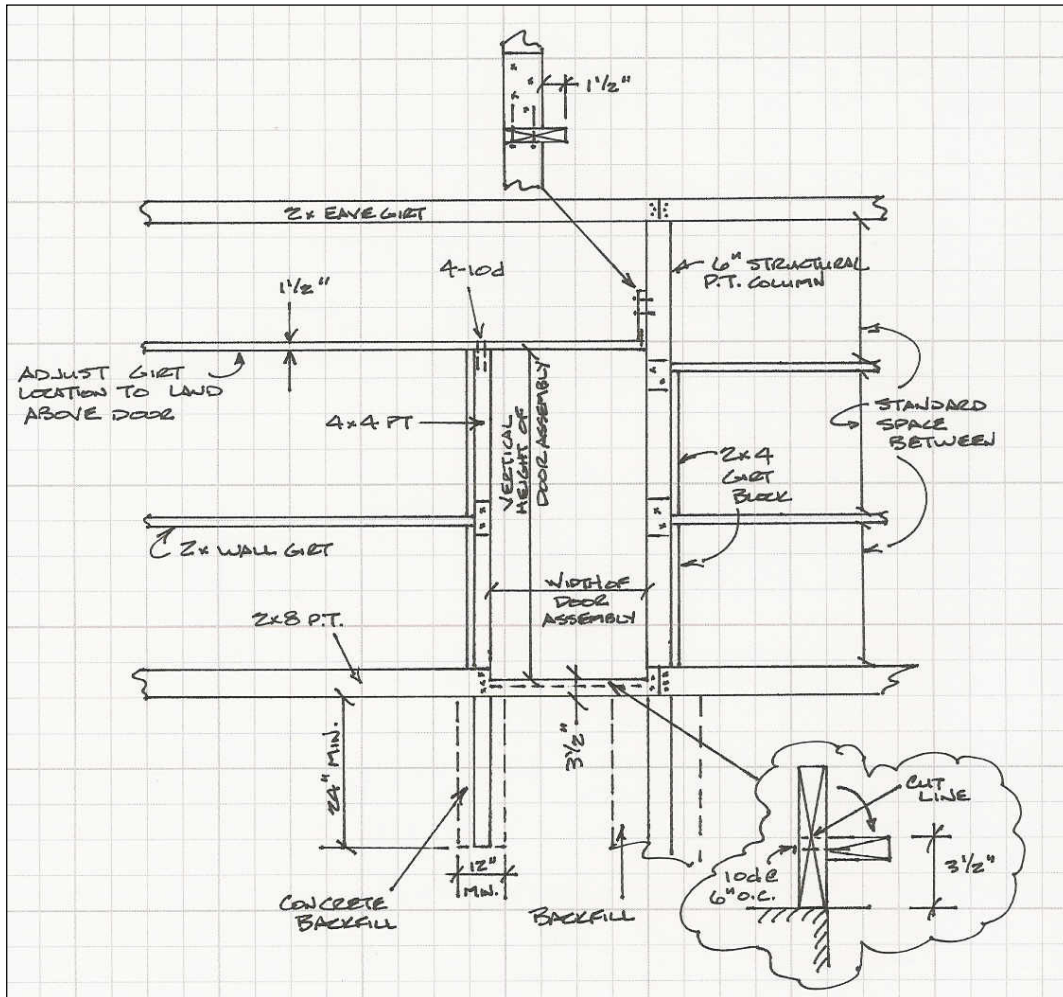


Figure 23-1

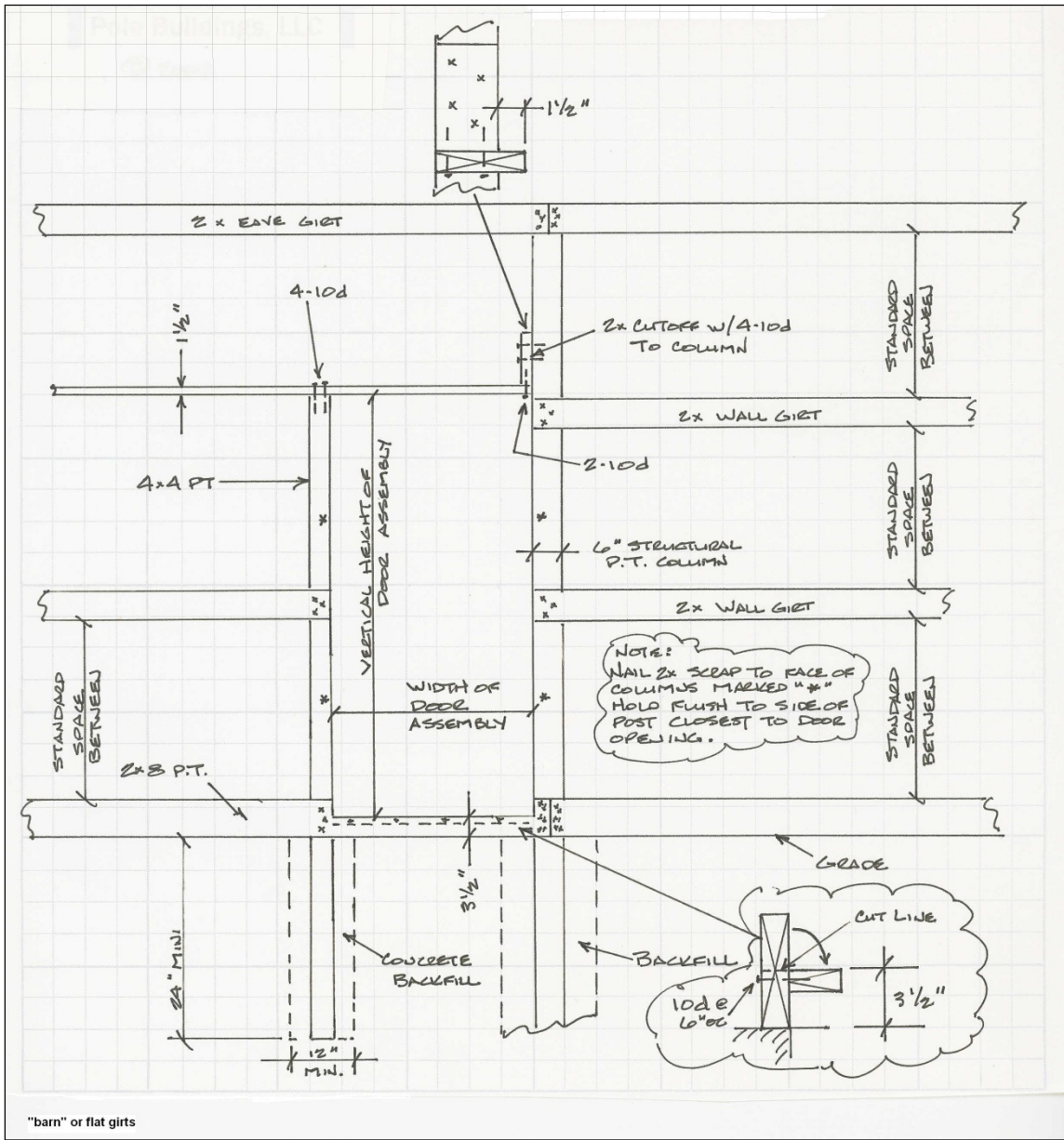


Figure 23-2

Nail skirt board and girts to door column securely. Skirt board is to be notched out to a 3-1/2" height above skirt board bottom between the two columns. The skirt board portion removed for door is to be laid flat behind skirt board. (See photo below)



Trim off entry door column even with entry door top.

The girt above entry door is turned narrow face (1-1/2" dimension) to wind and **installed level** between structural building columns across entry door top and entry door column. This girt is to be located with outside edge *flush with standard girt outside edges*. This is typically not an "extra" girt. It is usually created by nearest girt relocation.

Installing Entry Door

Check screws holding jambs to header and threshold for tightness.

Place door assembly into rough opening with door jamb outside edge flush with girt outside edges (outside edge of door jamb 1-1/2" past outside of columns). Square up door assembly so clearance gaps between panel and jambs are uniform. Use temporary shims to maintain.

Set into rough opening with threshold on finished floor level (on top of notch cut into skirt board).

Using a level, plumb door assembly in two directions (in to out and side to side), using wood shims between jambs and rough opening as required.

Temporarily nail through pre-punched holes in jambs while setting clearances and squareness.

Nail 2x dunnage or scrap blocking to columns on each side of entry door at locations of any pre-punched holes in jambs flush to door jambs.

Once clearances and squareness have been set, replace nails with pan head wood screws supplied with door.

Install lockset. Swing door assembly through full arc to assure there is no interference.

Trims

When installed, J Channel will cover all except 1/8" of entry door jamb face (leaves a 1/8" reveal).

J Channel installs along door verticals first.

Square cut side J Channel. Length will equal: door height plus top J Channel back face width plus 1/8".

Cut top end of each side channel as shown in **See Figure 23-3**. Nail into place with a joist hanger nail at towards each end and approximately 1/2 height.

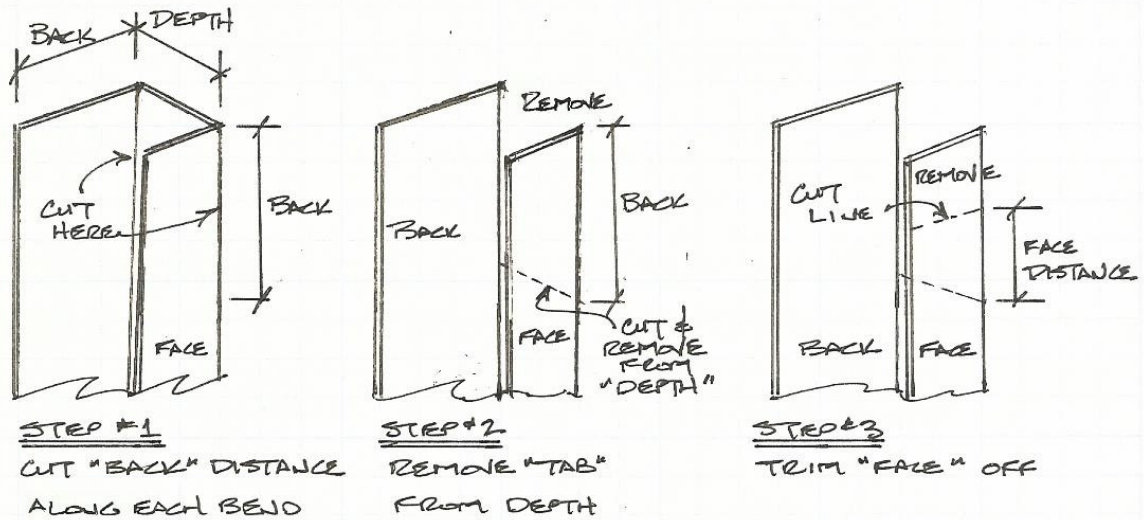


Figure 23-3

Square cut top J Channel. Length will equal: door opening width plus both J Channel side piece back faces plus $\frac{1}{4}$ ". Cut 45 degree miters and tabs for drainage at each end as shown in **See Figure 23-4**

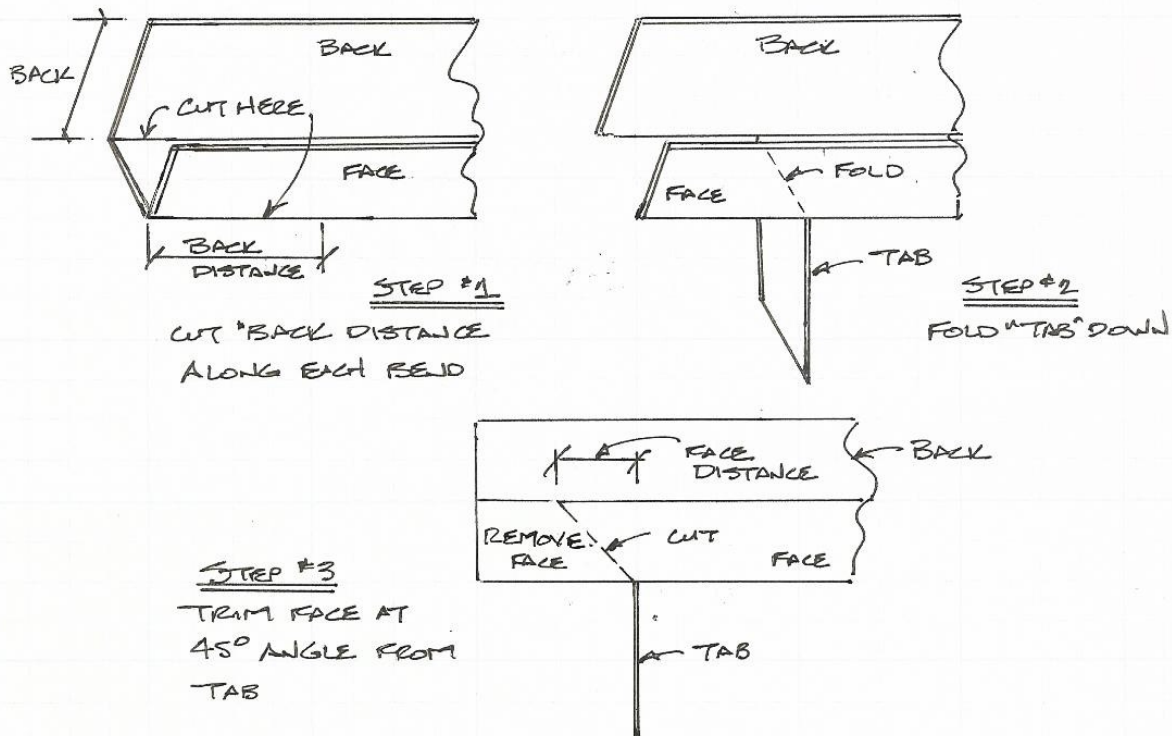


Figure 23-4

Place into position with top J Channel face overlapping side J Channel back faces and top J Channel mitred ends overlapping side J Channel faces. Fold tabs into side channels. Nail into place with a joist hanger nail at each end.



If a span requires more than one J Channel length, butt pieces tightly together (they will not cleanly overlap).

Entry Door Window Kits

As entry doors are designed to be a “four-way” application (can be hung to swing in or out; left or right), preinstalled windows would have a 50 percent chance of knee level location. The installation process for window kits is relatively straightforward. See **Figure 23-5**.

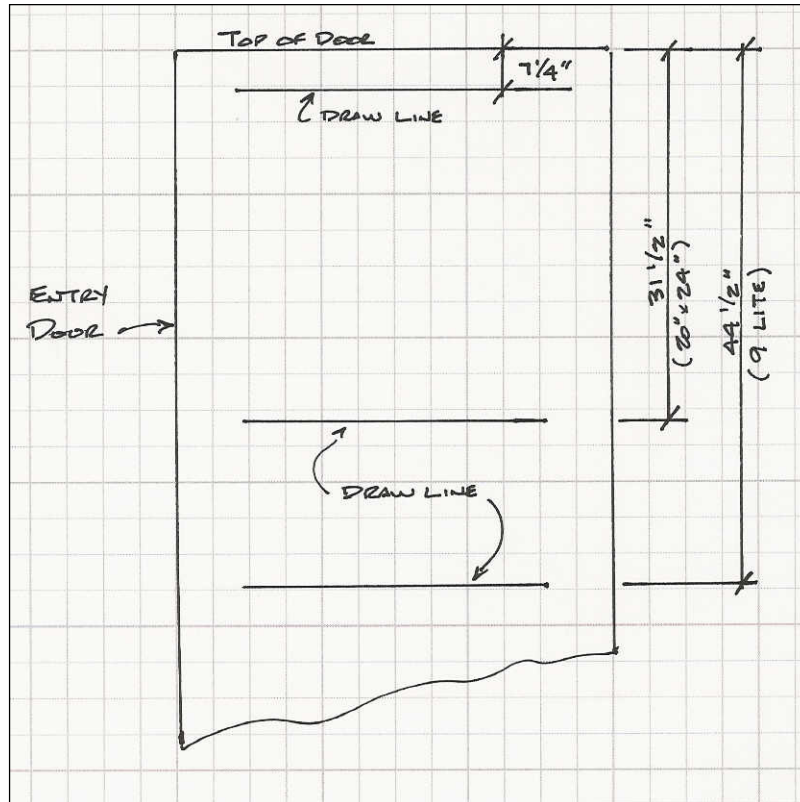


Figure 23-5

For 20" x 24" and 23" x 37" nine-light window kits – measure down from door top 7-1/4" and draw a light pencil line (or snap a chalk line).

Draw a parallel line down 31-1/2" from top for 20" x 24" windows, or 44-1/2" from top for nine-light windows. Measure across door, from left to right, and locate vertical door center.

See **Figure 23-6**.

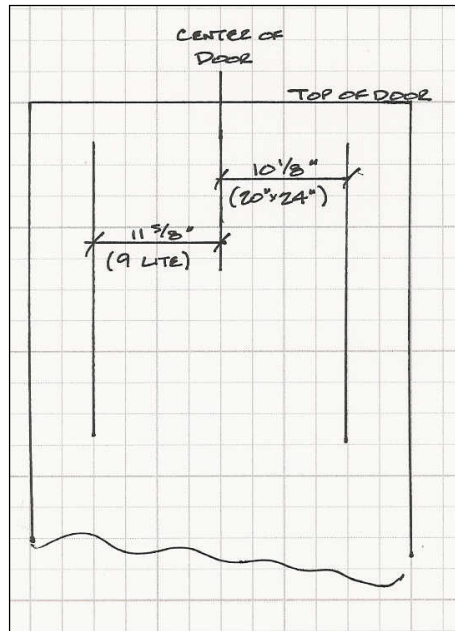


Figure 23-6

From this point measure 10-1/8" to left and right (for a 20" x 24" window) or 11-5/8" (for a nine-light window), and draw vertical lines between the two earlier- drawn horizontal lines.

The rectangle created by these four lines is to be cut out and removed for window kit. Cutting is best done with a hand held jig saw or other reciprocating saw. Use caution to not mar door surface or scratch paint while cutting.

Erase or wipe off any lines remaining on door face.

Remove screws from window kit, and then pull the two frame halves apart.

It is a good idea to run a caulking bead on outside door face around window hole before next step.

Place the window frame half *without* screw holes into window hole from outside. Insert window frame balance from inside and replace screws.