

Standard drywall weighs about 3.4 lbs per sq ft per inch thickness. **Water resistant drywall** (green board) weighs about 3.9 lbs. per sq. ft. per inch thickness. **Fire code C drywall** weighs about 4.2 lbs. per sq. ft. per inch thickness. These are approximations, as the ratio of core vs. covering varies for different thicknesses, thereby varying the exact weights.

3/8" thick standard drywall weighs $3.4 \times 0.375 = 1.3$ lbs per sq. ft.

4' x 8' x 3/8" thick sheet weighs about 42 lbs.

4' x 10' x 3/8" thick sheet weighs 1.3×40 s.f. = 52 lbs.

4' x 12' x 3/8" thick sheet weighs 1.3×48 s.f. = 63 lbs.

1/2" thick standard drywall weighs 3.4×0.5 , or 1.7 lbs per sq. ft.

4' x 8' x 1/2" thick sheet weighs 1.7×32 s.f. = 54 lbs.

4' x 10' x 1/2" thick sheet weighs 1.7×40 s.f. = 68 lbs.

4' x 12' x 1/2" thick sheet weighs 1.7×48 s.f. = 82 lbs.

5/8" thick standard drywall weighs $3.4 \times 0.625 = 2.2$ lbs per sq. ft.

4' x 8' x 5/8" thick sheet weighs about 70 lbs.

4' x 10' x 5/8" thick sheet weighs about 88 lbs.

4' x 12' x 5/8" thick sheet weighs about 105 lbs.

How much does a pine 2 x 4 weigh

If we know an object's volume and the weight density of the material of which it is made, we can calculate its weight. But to determine the object's volume, we must know more than its width and height (or depth). We must also know its length.

Most standard two-by-fours are eight feet long, but the type of wood varies. Different woods have different weight densities, and some lumber isn't as dry as it should be. Moisture in the lumber increases its weight density.

So, let's assume the 2x4 is eight feet long. A 2x4's actual dimensions are 1.5" x 3.5", so its volume is $1.5 \times 3.5 \times 96 = 504$ cubic inches. Divide that by 12^3 to get 0.2917 cubic feet.

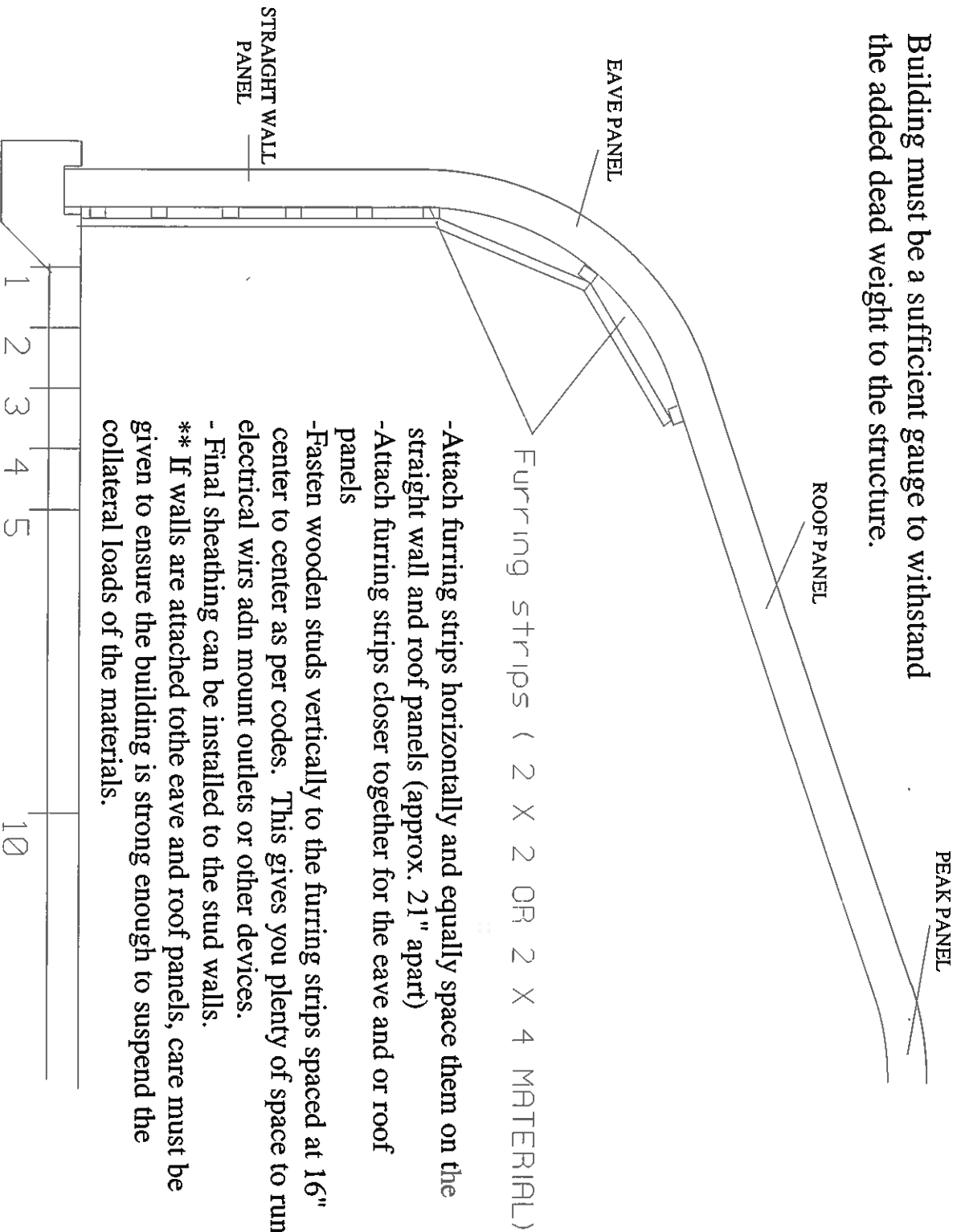
The nearby link shows the weight densities of common lumber. Let's assume it's made of pine, which is pretty common. If we use the high end of the range, pine has a weight density of 34 pounds per cubic foot, so $0.2917 \times 34 = 9.9167$ pound = 158.7 ounces (4.499 kilograms), more or less, depending on the type of pine (Oregon, Parana, Canadian, Red) and the corresponding density. Density tables can be found at a number of sites such as simetric.co.uk, where various material densities can be found, including woods.

Spray Foam:

Close cell spray on foam for insulation is applied in 1 inch increments. The only quality assurance for spray on foam is the experience of the person has with the application gun. Customers must have everything ran attached, connected, tested and sealed before you have the spray on foam applied. Once it is applied it takes a lot of time and area to open and trace a electrical problem, or to attach a new item to the building.

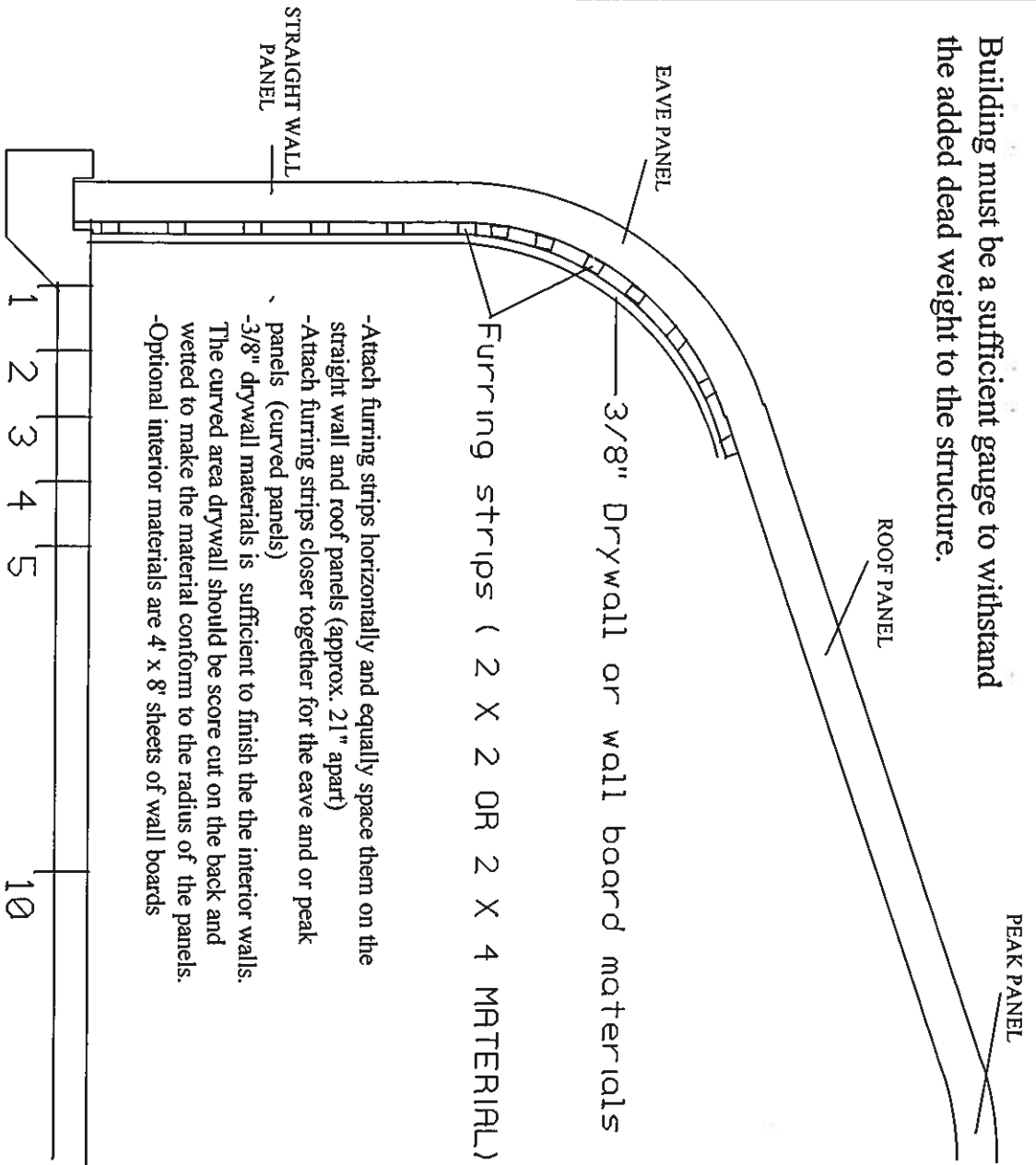
Close cell foam weights roughly 2 pounds per cubic foot or .5 to .6 pounds per square foot of application area.

Building must be a sufficient gauge to withstand the added dead weight to the structure.



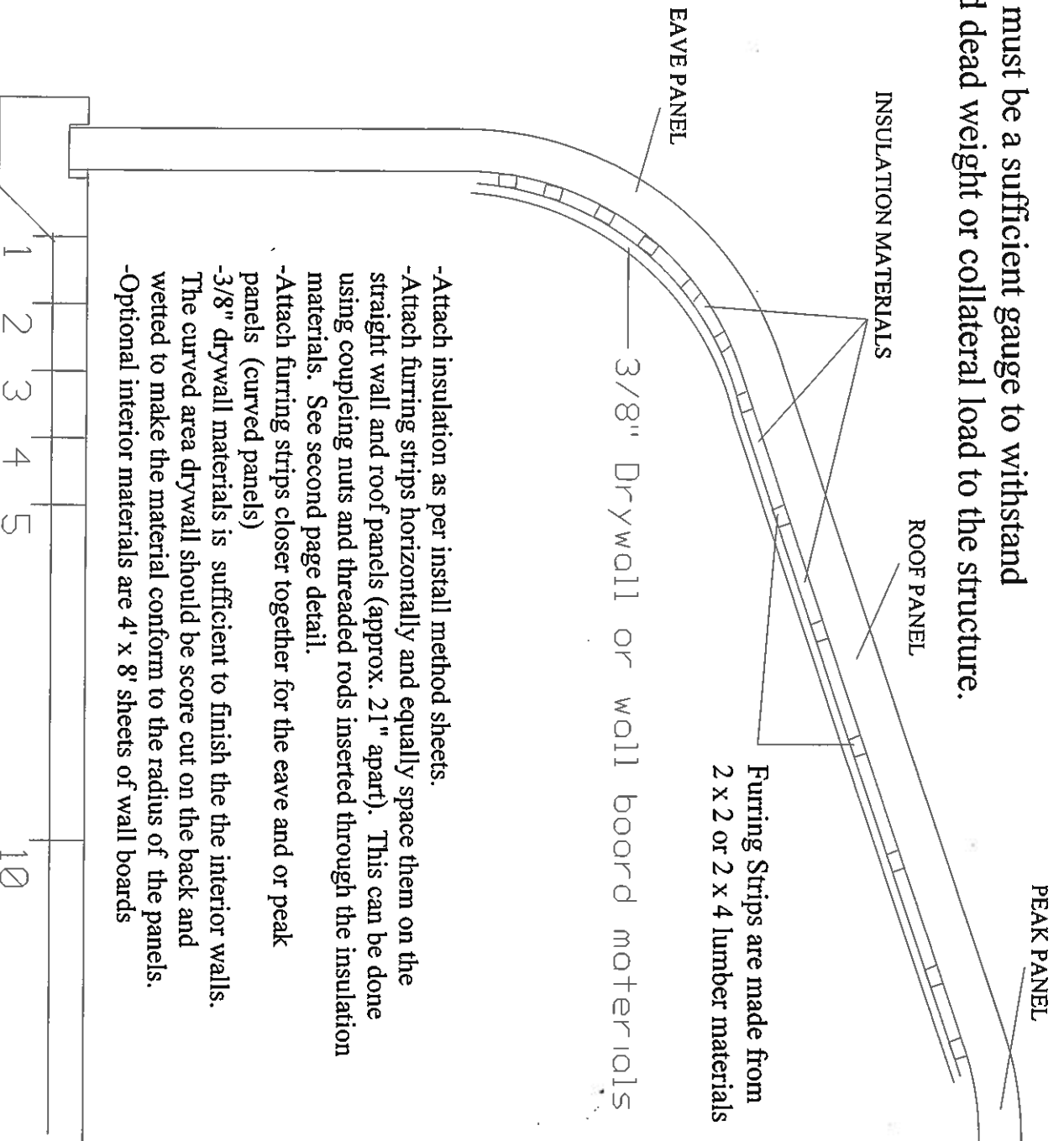
- Attach furring strips horizontally and equally space them on the straight wall and roof panels (approx. 21" apart)
 - Attach furring strips closer together for the eave and or roof panels
 - Fasten wooden studs vertically to the furring strips spaced at 16" center to center as per codes. This gives you plenty of space to run electrical wires and mount outlets or other devices.
 - Final sheathing can be installed to the stud walls.
- ** If walls are attached to the eave and roof panels, care must be given to ensure the building is strong enough to suspend the collateral loads of the materials.**

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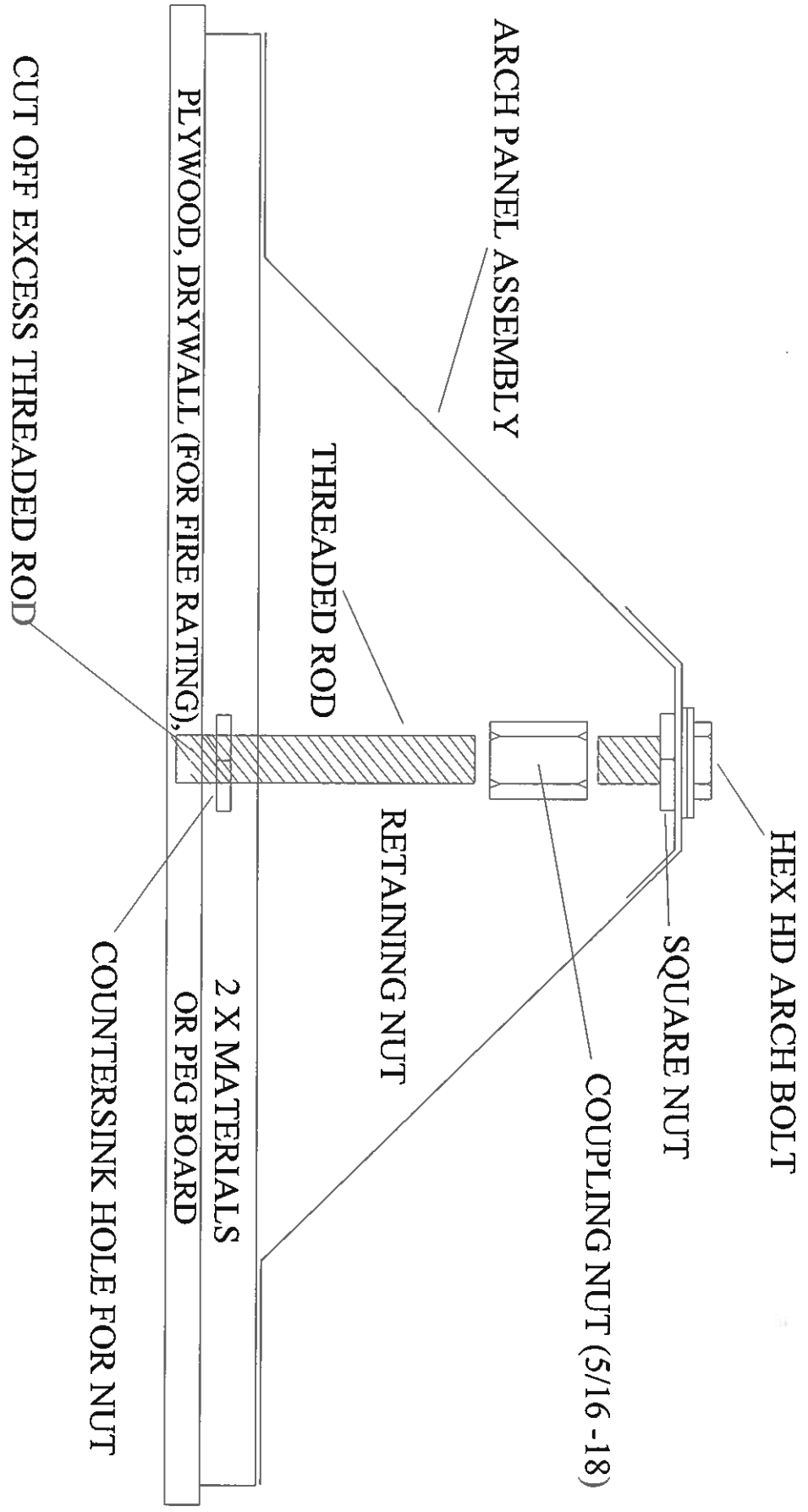
- Attach furring strips horizontally and equally space them on the straight wall and roof panels (approx. 21" apart)
- Attach furring strips closer together for the eave and or peak panels (curved panels)
- 3/8" drywall materials is sufficient to finish the the interior walls. The curved area drywall should be score cut on the back and wetted to make the material conform to the radius of the panels.
- Optional interior materials are 4' x 8' sheets of wall boards

Building must be a sufficient gauge to withstand the added dead weight or collateral load to the structure.

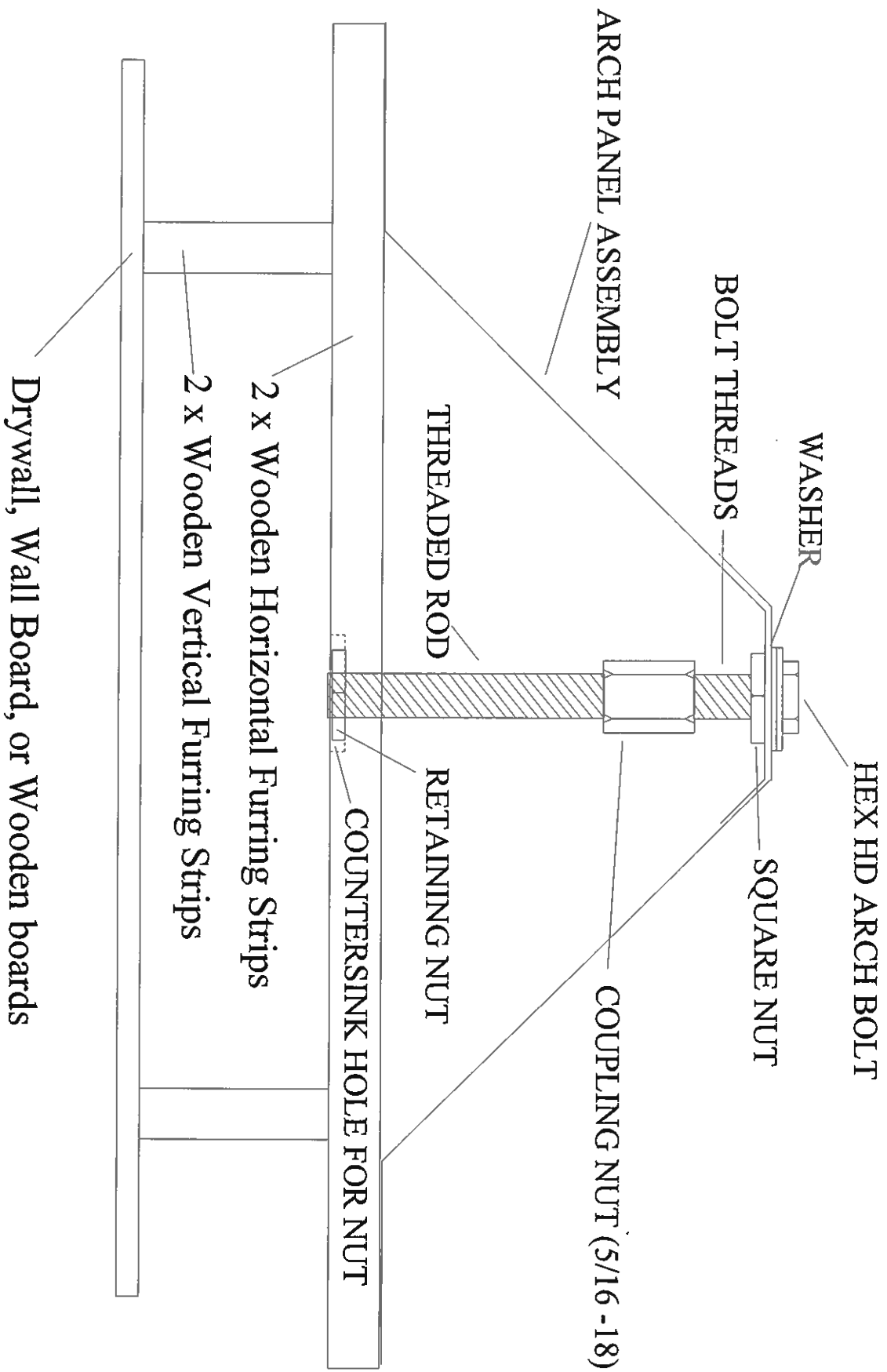


- Attach insulation as per install method sheets.
- Attach furring strips horizontally and equally space them on the straight wall and roof panels (approx. 21" apart). This can be done using coupling nuts and threaded rods inserted through the insulation materials. See second page detail.
- Attach furring strips closer together for the eave and or peak panels (curved panels)
- 3/8" drywall materials is sufficient to finish the the interior walls. The curved area drywall should be score cut on the back and wetted to make the material conform to the radius of the panels.
- Optional interior materials are 4' x 8' sheets of wall boards

ONE METHOD OF INTERIOR FINISH WITH FURRING STRIPS



ONE METHOD OF A FINISHED INTERIOR



ONE METHOD OF DRYWALLING A METAL ENDWALL

4 X 4 TO CARRY THE WALL WEIGHT

