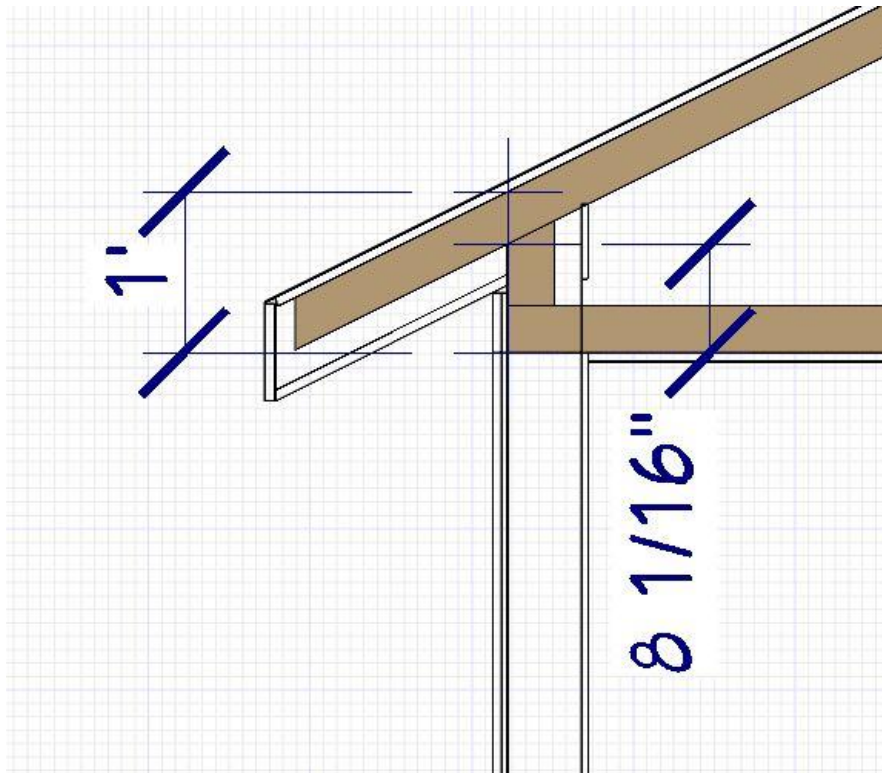


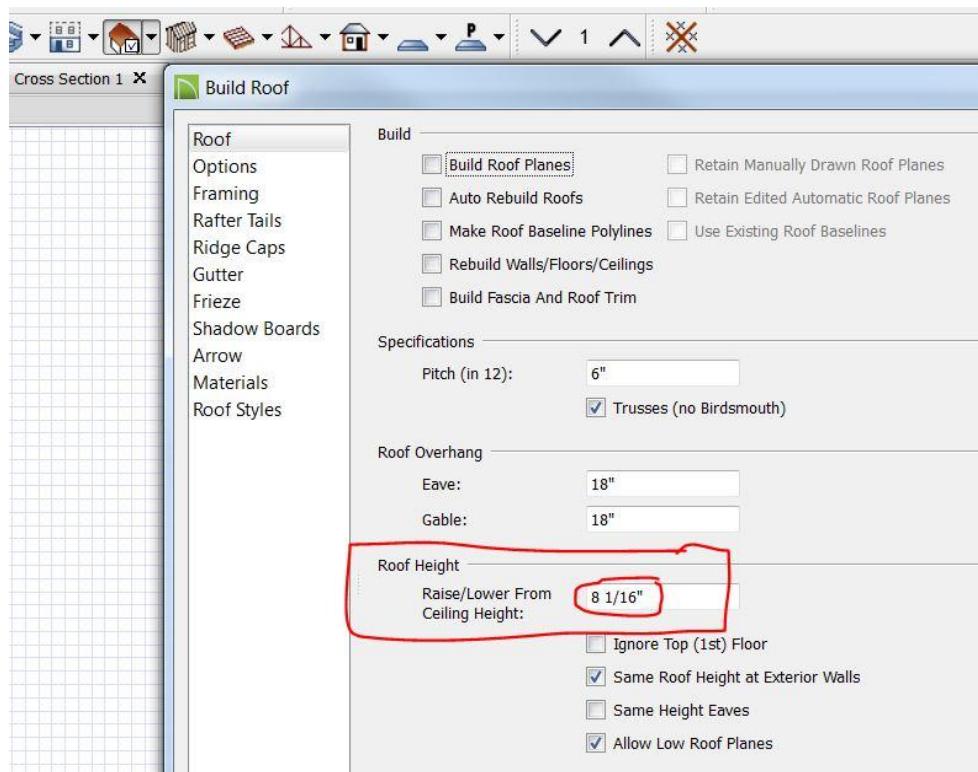
Vert. Rafter Depths

Roof Pitch	2x4	2x6	2x8	2x10	2x12
1:12	$3\frac{1}{2}$	$5\frac{1}{2}$	$7\frac{1}{4}$	$9\frac{5}{16}$	$11\frac{5}{16}$
2:12	$3\frac{9}{16}$	$5\frac{9}{16}$	$7\frac{3}{8}$	$9\frac{3}{8}$	$11\frac{3}{8}$
3:12	$3\frac{5}{8}$	$5\frac{11}{16}$	$7\frac{1}{2}$	$9\frac{9}{16}$	$11\frac{5}{8}$
4:12	$3\frac{11}{16}$	$5\frac{13}{16}$	$7\frac{5}{8}$	$9\frac{3}{4}$	$11\frac{7}{8}$
5:12	$3\frac{13}{16}$	$5\frac{15}{16}$	$7\frac{7}{8}$	10	$12\frac{3}{16}$
6:12	$3\frac{15}{16}$	$6\frac{1}{8}$	$8\frac{1}{8}$	$10\frac{5}{16}$	$12\frac{9}{16}$
7:12	$4\frac{1}{16}$	$6\frac{3}{8}$	$8\frac{3}{8}$	$10\frac{11}{16}$	13
8:12	$4\frac{3}{16}$	$6\frac{5}{8}$	$8\frac{11}{16}$	$11\frac{1}{8}$	$13\frac{1}{2}$
9:12	$4\frac{3}{8}$	$6\frac{7}{8}$	$9\frac{1}{16}$	$11\frac{9}{16}$	$14\frac{1}{16}$
10:12	$4\frac{9}{16}$	$7\frac{3}{16}$	$9\frac{7}{16}$	$12\frac{1}{16}$	$14\frac{5}{8}$
11:12	$4\frac{3}{4}$	$7\frac{7}{16}$	$9\frac{13}{16}$	$12\frac{9}{16}$	$15\frac{1}{4}$
12:12	$4\frac{15}{16}$	$7\frac{3}{4}$	$10\frac{1}{4}$	$13\frac{1}{16}$	$15\frac{15}{16}$

In the event you don't know how to use this information for energy heels, here's a little more information that will help you. If you already have this figured out, maybe it will help someone else.



12in Energy Heel XSec.JPG



12in Energy Heel Build Roof Dbx.JPG

Roof Plane Specification

General

Height/Pitch

☐ Lock Ridge Top Height: 271 1/8"
☒ Lock Baseline Height: 121 1/8"
☐ Lock Fascia Top Height: 112 13/16"
☐ Lock Shadow Boards Top Height: 112 13/16"
☐ Lock Pitch: 6"
☐ Pitch in Degrees

Heights are measured from top surface of rafters or trusses.

Measurements

Rafter Depth: 3 1/2"
 Birdsmouth Depth: 0"
 Birdsmouth Seat: 0"
 Vertical Rafter Depth: 3 15/16"
 Top of Plate: 109 1/8"
 Overhang From Baseline: 18"
☒ Mark as Edited
☐ No Special Snapping

In this example, my truss has 2x4 top and bottom chords. The roof is 6:12 pitch. The vertical rafter depth for a 2x4 is 3-15/16" (per the roof plane spec dbx and as shown on my cheat sheet). In the Build Roof Specification dbx I have shown that I need to raise the truss top chord 8-1/16" to give me the desired 12" total energy heel height at the outside edge of the wall.

It is up to the designer/architect to determine what energy heel height is appropriate/required for a given project. For climate zones requiring lots of heating, an energy heel is often necessary to achieve a full depth of ceiling insulation at the roof-wall connections. Obviously there are many ways to insulate a ceiling/roof so roof design (including a requirement for energy heels) is driven by the overall building design needs.