EAVE RETURN HIP ROOF KEystrokes

7 inches Run

15 Pitch

Diag

Rise

Hip/V

Run

Pitch

Diagonal

Rise

15 degree Pitch

Run 7in

Pitch 15.00°

Diagonal 7-1/4in

Rise 1-7/8in

Access the full article here
Choose Regular Analysis Type

Choose Results for Miter Saw

Hip/Valley Rafter Length: 10-1/16 in
Plumb Cut: 79.27°
Level Cut: 10.73°
Cheek Cut - on Saw's Bevel Gauge: 45.00°
Hip Backing Angle: 10.55°
Dihedral Angle: 158.91°
Plan Angle: 45.00°
Hip/Valley Rafter Pitch: 10.73°
Purlin Miter Angle: 44.01°
Purlin Bevel Angle: 10.55°
Sheathing Angle: 45.99°
Total Hip/Valley Roof Area: 50.72853 in²
Choose Irregular Analysis Type

Enter the Minor (irregular) pitch

Choose Results for Miter Saw

Miter setting for MAJOR purlin/sheathing on irregular hip side

Dihedral angle is the change in plane between the roofs

143.48°  
-90.00°  
53.48° Bevel setting