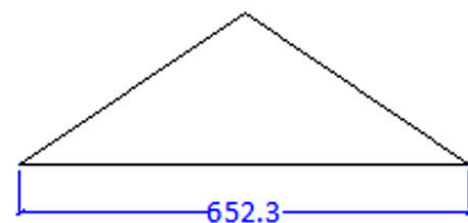


Mitre Angle
 Draw perpendicular view of sloped plane as at right to measure angle at bottom corner = 50.3°



Dihedral Bevel of Roof Hips: Finding Dihedral Angle, Mitre Angle, and Hip Length

Draw plan of hipped end where HR and hR equal run of hip rafter, and RS equals ridge piece. Set up rise of hip Rr from R perpendicular to RH. The true length of hip equals rH. Draw PQ (any line at right angles to RH cutting hip at T and intersecting eaves (baseline) at P and Q. From T draw TV perpendicular to rH cutting rH at V. With centre T and radius TV, draw an arc cutting RH at point X. Join PX and and QX. Angle PXQ = dihedral bevel of hip (133.4°). And PXT = mitre of intersecting roof boards, or the planes (panels) of pyramid type structure (66.7°)

Note: Small numerical discrepancies possible with limited decimal places