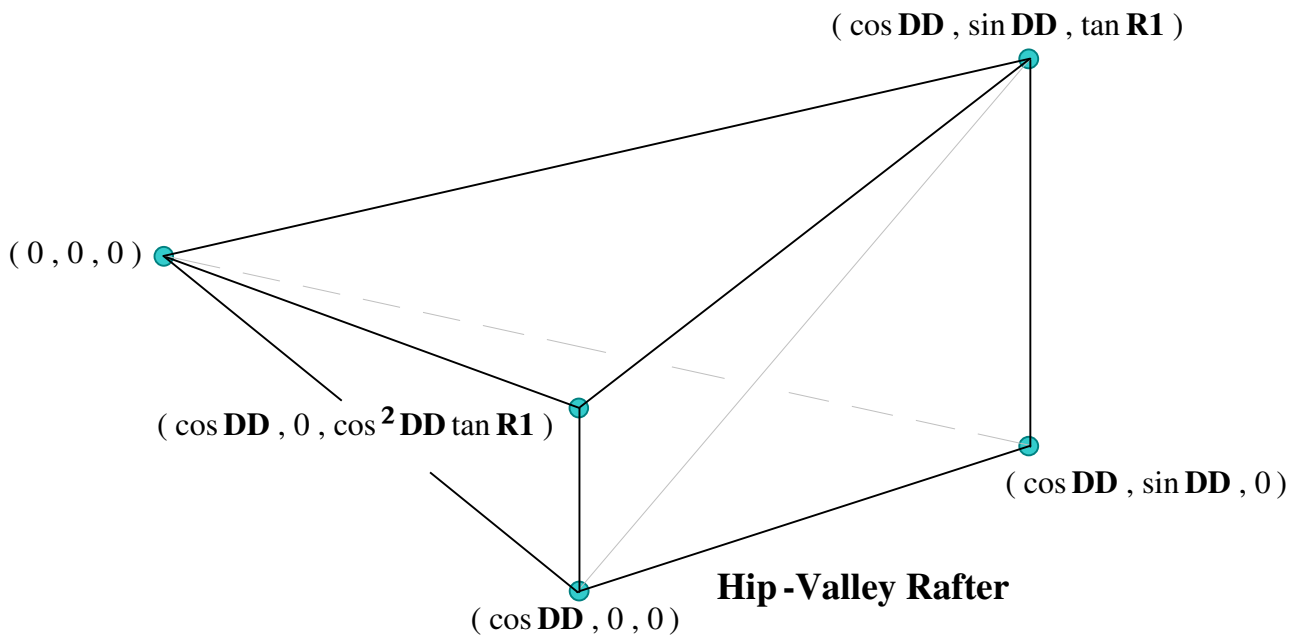
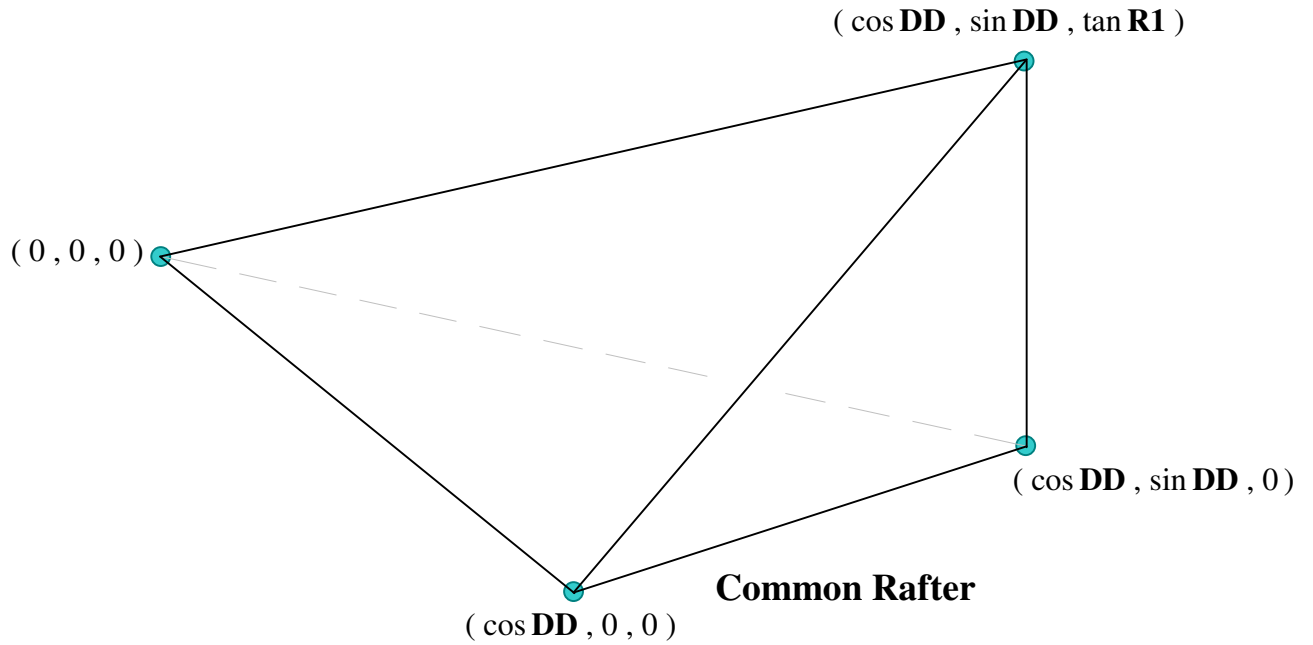
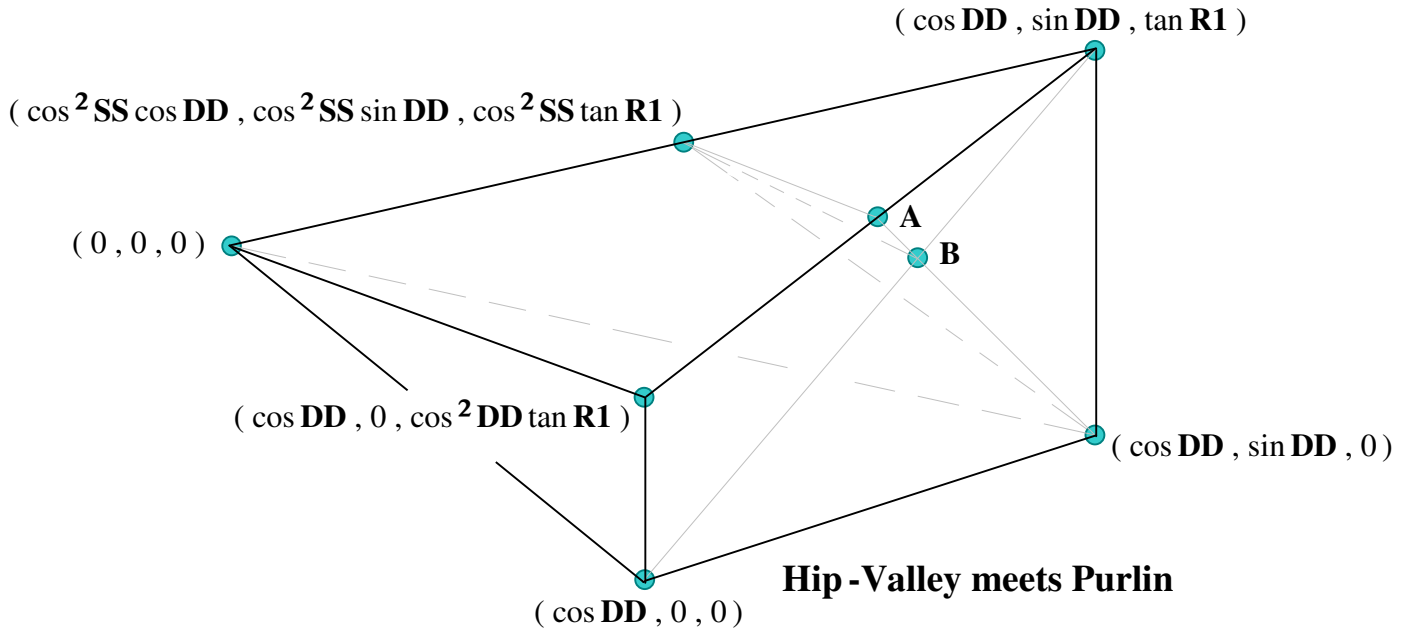


VECTOR MODELS

ROOF FRAMING and JOINERY ANGLES

Initial and Terminal Points of Vectors

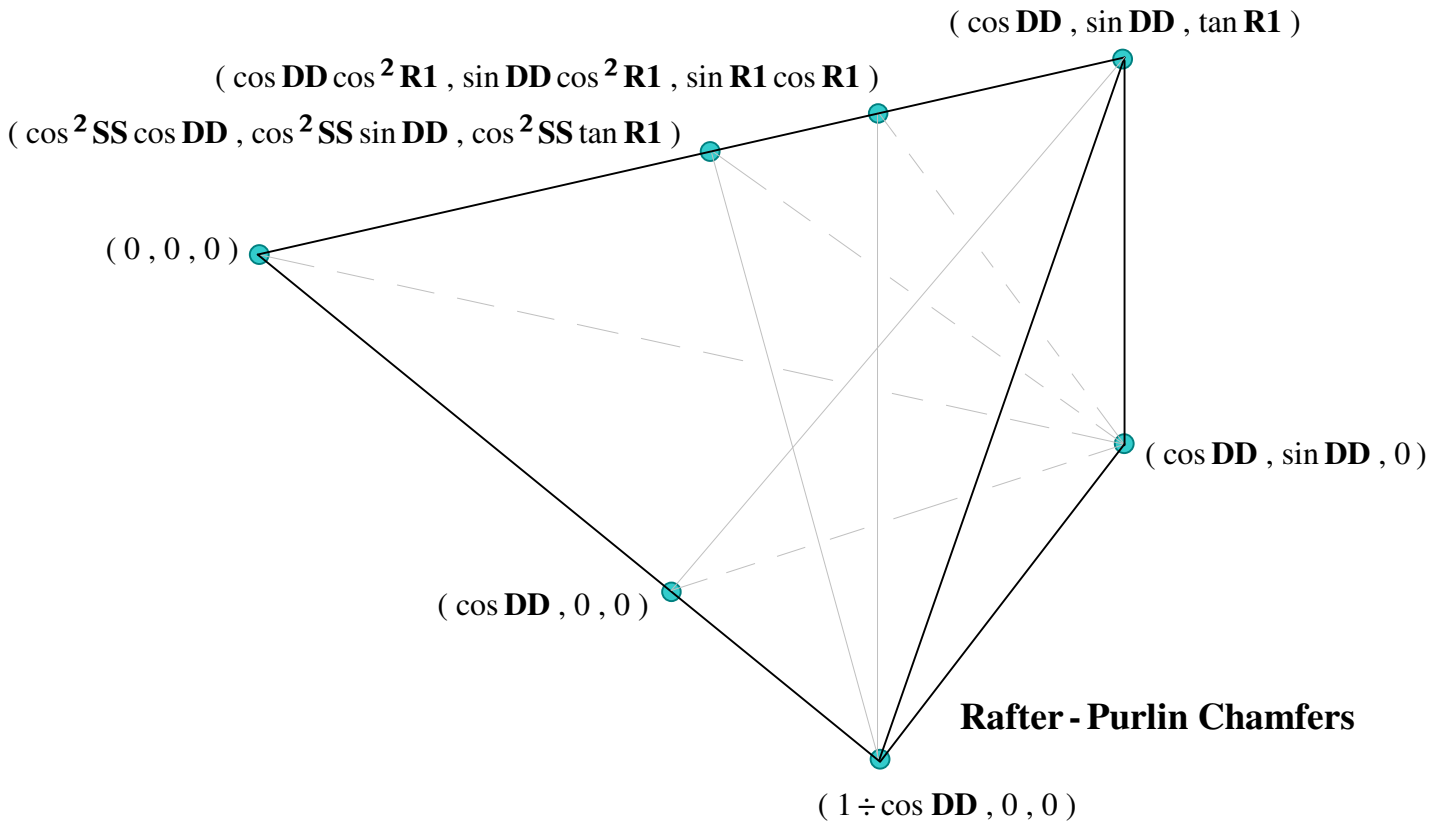




Hip-Valley meets Purlin

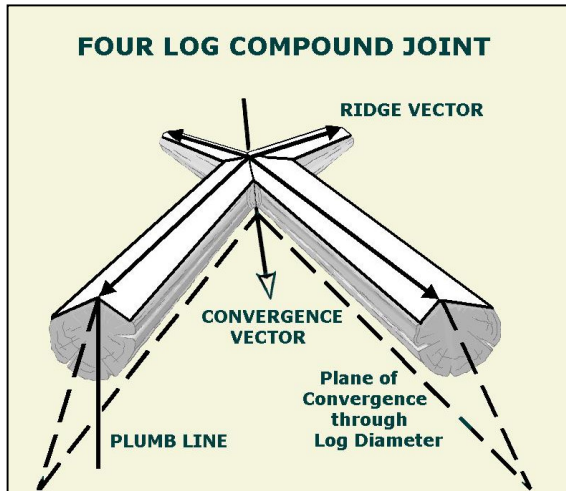
Point A = $(\cos DD, \sin DD - \tan SS \sin R1 \cos R1, \sin R1 \cos R1)$

Point B = $(\cos DD, \cos^2 SS \sin DD, \cos^2 SS \tan R1)$

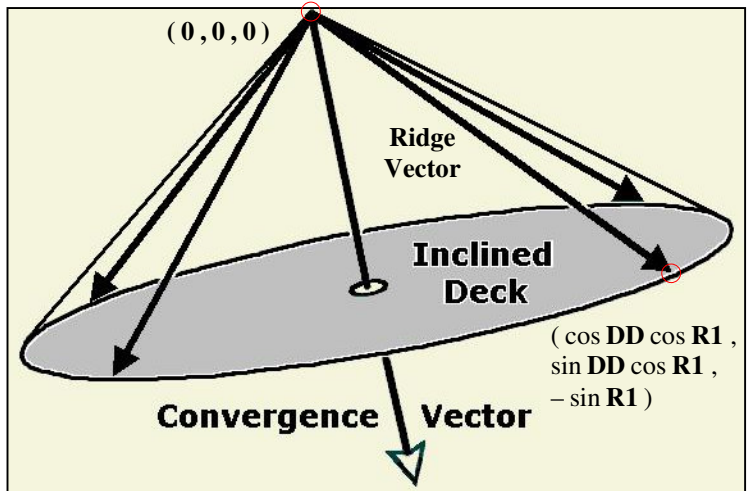


Rafter - Purlin Chamfers

Compound Joint Models



Vector Model

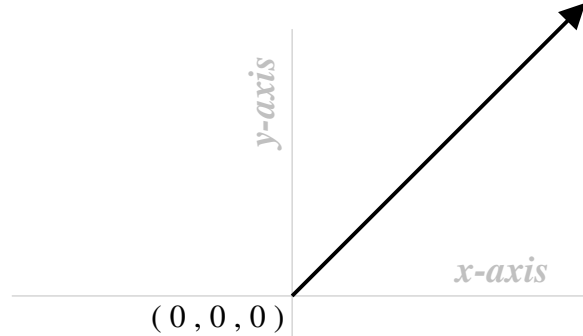


Conic Model : Ridge Vector Endpoints



Three-branch and Four-branch Compound Joints

$$(\cos DD \cos R1, \sin DD \cos R1, -\sin R1)$$



Unit Ridge Vector Endpoints
x - y plane projection

