Mass Timber Connections

Referenced Projects

General Connection Considerations

Beyond Code Approaches
  Deep Beam Notches
  Glued In Rod Connections
PLATTE FIFTEEN

OZ Architecture

Adolfson & Peterson Construction

KL&A

Nordic
LOADING DOCK
DU BURWELL CENTER

Lake Flato
Shears Adkins + Rockmore
PCL Construction
KL&A
Nordic
Connection Considerations For Mass Timber

High Loads
Connection Considerations For Mass Timber

Aesthetics
Connection Considerations For Mass Timber

Fire Ratings
Connection Considerations For Mass Timber

Interface With Other Materials
Connection Considerations For Mass Timber

Shrinkage
Connection Considerations For Mass Timber

Lateral Loads
Connection Considerations For Mass Timber

Cost
33A. Notching a beam at its bearing may cause splits. **THIS DETAIL IS NOT RECOMMENDED!**

Where a notch on the tension face cannot be avoided (Figure 4), the depth of a tension side notch is limited to a maximum of \(1/10\) the depth of the member, not to exceed 3 inches. The design shear reaction at the notch must be limited by Equation 11:

\[
R_x \leq \frac{2bd_F C_d C_y C_{Cy}}{3} \left( \frac{d}{d_x} \right)^2
\]

\( (11) \)

**Figure 4.** End bearing notch detail

- Drill 1 in. diameter hole
- Cut from beam face to hole.

Min. 0.9d d
Reinforced notched beam with ASSY* VG screw
QUESTIONS?

Chris Kendall (EOR)
ceendall@klaa.com