CONNECTIONS IN A MASS TIMBER STRUCTURE: DESIGN AND BUDGET STRATEGIES

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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

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Connection Considerations For Mass Timber

High Loads
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Aesthetics
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Fire Ratings
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Interface With Other Materials
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High Loads Parallel to Grain

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Shrinkage
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Lateral Loads
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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:

$$R_s \leq \frac{2bd_f C_s C_r C_n}{3}\left(\frac{d}{d_f}\right)^2$$

Figure 4. End bearing notch detail
Reinforced notched beam with ASSY® VG screw
QUESTIONS?

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