



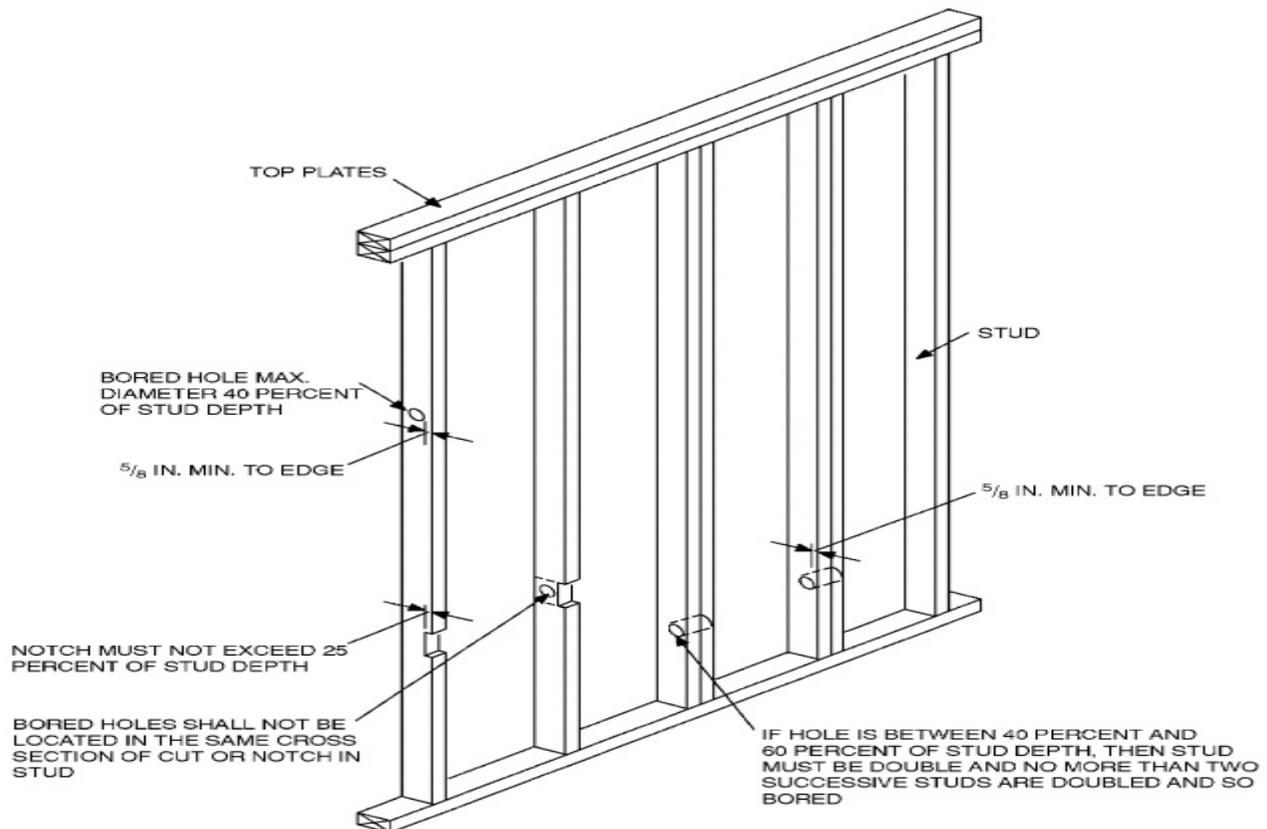
## Notching and Bored Hole Limitations

### ***Notching and boring of studs.***

- Notching- Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25% of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40% of a single stud width.
- Boring- Any stud may be bored or drilled, provided that the diameter of the resulting hole is no more than 60% of the stud width, the edge of the hole is no more than  $\frac{5}{8}$ " to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior walls or bearing partitions drilled over 40% and up to 60% shall also be doubled with no more than two successive doubled studs bored (see figures R602.6.1 and R602.6.2).

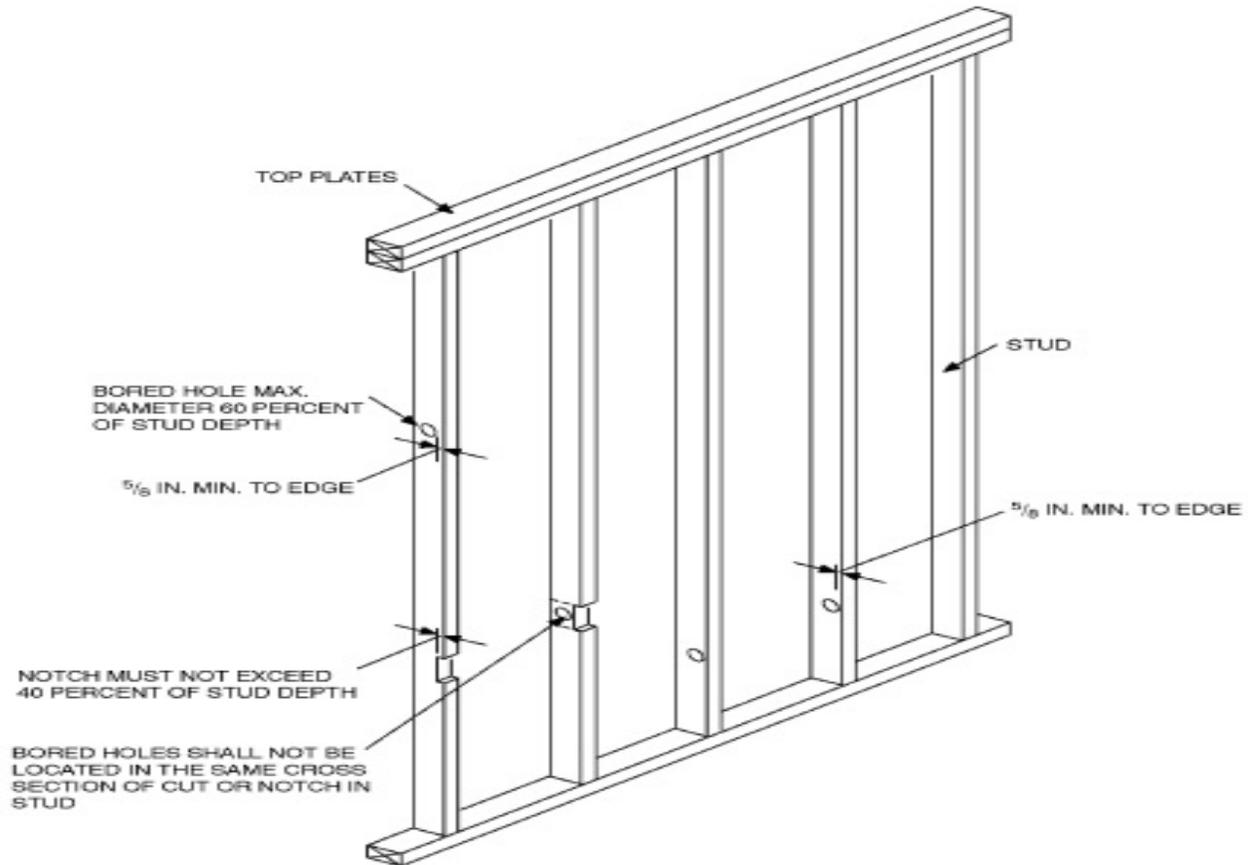
Exception: Use of approved stud shoes is permitted when they are installed in accordance with the manufacturer's recommendations.

Figure R602.6.1 Notching and bored hole limitations for exterior walls and bearing walls



Note: Condition for exterior and bearing walls.

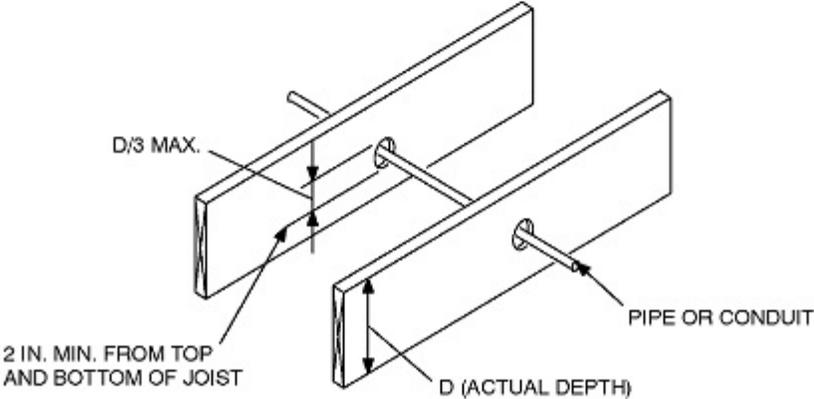
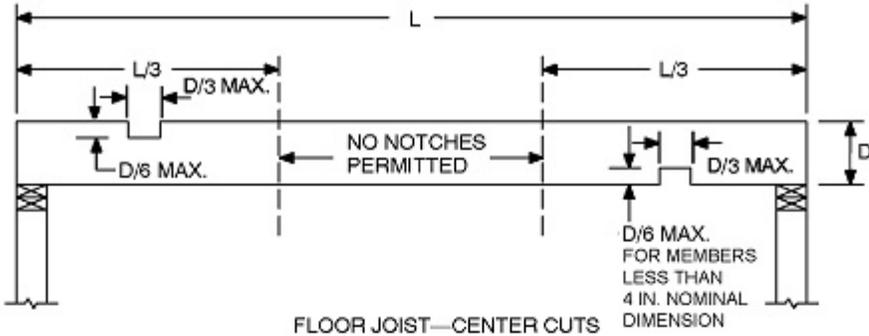
Figure R602.6.2 Notching and bored hole limitations for interior and nonbearing walls



### ***Cutting, notching, and boring of other structural members***

- Engineered wood products  
Cuts, notches and holes bored in trusses, structural composite lumber, structural glue-laminated members or I-joists are prohibited except where permitted by the manufacturer's recommendations or where the effects of such alterations are specifically considered in the design of the member by a registered design professional (R502.8.2).
- Alterations to trusses  
Truss members and components shall not be cut, notched, spliced or otherwise altered in any way without the approval of a registered design professional. Alterations resulting in the addition of load (e.g., HVAC equipment, water heater, etc.), that exceed the design load for the truss, shall not be permitted without verification that the truss is capable of supporting the additional loading (R502.11.3).
- Sawn lumber  
Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4" or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2" to the top or bottom of the member, or to any other hole located in the member. Where the member is also notched, the hole shall not be closer than 2" to the notch (R502.8.1).

Figure R502.8 Sawn lumber cutting, notching and boring



**Call the City of Mendota Heights' Department of Building Safety at 651 452 1850 if you have questions (8:00-4:30 M-F).**