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AMERICAN WOOD COUNCIL

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## Codes & Standards > Calculators & Software > Connection Calculator

<b>Design Method</b>	Allowable Stress Design (ASD)
<b>Connection Type</b>	Lateral loading
<b>Fastener Type</b>	Wood Screw
<b>Loading Scenario</b>	Single Shear
<a href="#">Submit Initial Values</a>	

<b>Main Member Type</b>	Douglas Fir-Larch
<b>Main Member Thickness</b>	3.5 in.
<b>Main Member: Angle of Load to Grain</b>	0
<b>Side Member Type</b>	Douglas Fir-Larch
<b>Side Member Thickness</b>	1.75 in.
<b>Side Member: Angle of Load to Grain</b>	0
<b>Wood Screw Number</b>	20 (D = 0.32 in.)
<b>Length</b>	5 in.
<b>Load Duration Factor</b>	C <sub>D</sub> = 1.6
<b>Wet Service Factor</b>	C <sub>M</sub> = 1.0
<b>End Grain Factor</b>	C <sub>eg</sub> = 1.0
<b>Temperature Factor</b>	C <sub>t</sub> = 1.0

### Calculate Connection Capacity

<a href="#">Connection Yield Mode Descriptions</a>	<a href="#">Limits of Use</a>
<a href="#">Diaphragm Factor Help</a>	<a href="#">Load Duration Factor Help</a>
<a href="#">Show Printable View</a>	<a href="#">Technical Help</a>

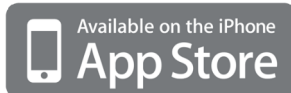
## Connection Yield Modes

Im	1856 lbs.
Is	1000 lbs.
II	707 lbs.
IIIIm	799 lbs.
IIIIs	463 lbs.
IV	344 lbs.

<b>Adjusted ASD Capacity</b>	<b>344 lbs.</b>
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- Wood Screw bending yield strength of 60000 psi is assumed.
- Dowel bearing strengths for wood screws with nominal diameter greater than 1/4 in. are rounded to the nearest 50 psi in accordance with NDS Table 11.3.2.
- Length of tapered tip is assumed to be two times the nominal wood screw diameter for bearing length in the main member.

Provides users with a web-based approach to calculating capacities for single bolts, nails, lag screws and wood screws **per the 2005 NDS**. Both lateral (single and double shear) and withdrawal capacities can be determined. Wood-to-wood, wood-to-concrete, and wood-to-steel connections are possible.



Connection Calculator available for the **iPhone**.



Connection Calculator available for the **Android OS**.



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