



## About Forest Salvaged Timbers

*Thanks to Erin Ryan and Matt Walker of Clark's Fork Timber for this information*

The use of Forest Salvaged timbers (or standing dead) or FOHC (free of heart center) both are an attempt to minimize changes in shape and dimension as a timber dries. FOHC timbers when used in the sizes that are required for timber framing are typically sawn from very large logs so as to eliminate the center (or bull's-eye) of the log from being enclosed in the timber. This is done because wood shrinks along the growth lines (annual rings) of the tree. The more that you have the annual rings parallel to the faces of the timber the less change in shape there is as the timber dries and shrinks. The downside to specifying FOHC is that these timbers must be sawn from very large logs - often Old Growth timber - which many people have an objection to on environmental grounds, and they are subject to changing availability. Additionally there is no guarantee with this spec that you will get true quarter sawn material - the real grain orientation that minimizes all checking and distortion.

Forest Salvaged, or standing dead timbers use an alternative approach, "natural pre-drying" to reduce checking and shrinking. These are timbers that are sawn from trees that died of natural causes in the forest before they were harvested. During that process they have given off a significant (but not all) of their moisture. They are then sawn into logs and delivered to the user. Typically the largest and oldest trees do not make the best Forest Salvaged timbers, as these are prone to internal decay that is exposed in the sawing process. That usually precludes the specification of FOHC in this product. One of the collateral benefits of Forest Salvaged Douglas fir is that the sapwood typically is fairly quick to show signs of decay. This is then removed in the sawing process, leaving a larger percentage of heart wood showing which has a deeper color and nicer tone.

Forest Salvaged timbers minimize shrinking and checking by having a substantial portion of the moisture leave the wood before the timber is sawn from the log, therefore there is less movement afterward than in green wood. As far as structural differences (i.e. strength) the design tables do not classify FOHC as a separate category, implying that there is no strength advantage gained by specifying this grade. Grain density, knot size and placement, and defects from shake or slope of grain are the determining factors in timber strength.