

# UNDERSTANDING GREEN WRC TIMBERS



**SPLITS**



**CHECKED BRACKET**



**CHECKS**



**WANE**



**IRON STAINS**



**HEART CENTER**



**YARD ROUGH  
(BEFORE)**



**CLEAN & BRIGHT  
(AFTER)**

**CHECKS:** A long crack that appears as the sap wood of a timber shrinks around the heart wood over time. Checking is not a structural problem, and usually occurs only on one or two sides of a beam.

**SPLITS:** Woodchecking. Splits and cracks (known as 'checks' in the industry) occur when wood shrinks as it dries. Wood shrinks roughly twice as much along the growth rings (radially) as it does across the rings – and it is this uneven shrinkage that causes checks to develop.

**WANE:** Defects on the ends or sides of the lumber, but wane can occur just about anywhere on milled wood. Wane is often associated with bark that remains on the lumber after it's milled.

**WARP:** Occurs when the moisture content in wood changes unevenly. In damp or rainy conditions, moisture is absorbed into the wood causing swelling. When timber dries, it shrinks.

**IRON STAINS:** Oak, redwood, cypress, and cedar are particularly prone to iron stain because these woods contain large amounts of tannin-like extractives. The dis-coloration is caused by a chemical reaction between extractives in the wood and iron in steel products, such as nails, screws, and other fasteners and appendages.

