Field-cut Treated Lumber



Field-cut treatments are necessary to re-seal the envelope when preservative-treated wood is cross-cut, exposing a core of untreated wood. Forintek cut short lengths of permanent wood foundation (PWF)-grade CCA-treated lumber and coated the cut ends with a variety of field-cut preservatives. The wood was half-buried in soil and rated annually for decay of the ends. Copper naphthenate, a commonly available retail preservative and currently the only one listed in CSA standards for field-cut application, performed very well. Zinc naphthenate did not perform as well and should only be used out of ground contact. Untreated cut ends were severely decayed within six years.

Commodity: Field-Cut Preservative Test method: Ground contact Test Site: Westham Island, BC Date of installation: 1987 Preservative: Various

Treatment: Brush-coated with two applications of preservative **Wood Species**: PWF-grade Hem-fir 2 x 6, incised and CCA-treated

Condition of Untreated Samples: 86% decayed after 6 yrs, 100% severely decayed or failed after 10 yrs

Condition of Treated Samples:

- Zinc naphthenate (2% zinc): 60% decayed at 6 yrs, 92% decayed after 10 yrs
- Creosote at 70 C: 9% decayed at 6 yrs, 26% decayed after 10 yrs
- Copper naphthenate (2% copper): 100% serviceable at 6 yrs, 2% decayed after 10 yrs

Note: After 10 years exposure, there was no difference in performance between a three-minute dip and a double brush coat of copper naphthenate.