On-Site Protection of Structures

These experimental deck units demonstrate the beneficial effect of in-place preservative treatments.

Research at the Forest Products Laboratory has demonstrated that the service life of exterior wood not in contact with the ground can be extended for many years by surface application of a wood preservative. It was shown that brushing or brief immersion of wood in a preservative protected Douglas-fir decking for more than 20 years.

Preservatives can be applied by brushing, spraying, or brief soaking at the construction site or in a routine maintenance program. The job situation usually dictates the application procedure. Soaking generally ensures most complete coverage of surfaces needing protection. Surface application of preservative is more effective if done before construction because all surfaces and joints can be reached by the preservative.

The increase in service life resulting from such treatment will vary depending on such factors as species, size of timber, climate, and preservative used. This type of treatment is a preventative, not a remedial, measure. It will not reliably eradicate decay already established in wood. Decay that has progressed far enough to produce external signs of its presence usually is too deep in the wood to be reached by a preservative.

Note: This type of treatment is not intended for wood used in ground contact. Wood in contact with the ground should be treated commercially by pressure impregnation of a preservative.