KOPPERS

Utility &
Industrial Products

Crossarms

products

Utility Crossarms from a Respected Treating Company

Why Koppers for Crossarms?

Koppers Utility and Industrial Products southern pine crossarms are the durable and economical choice for utility companies across the United States.

As the country's largest American-owned wood pole manufacturer, Koppers combines decades of treating innovation, with multiple manufacturing facilities and dozens of distribution yards from coast to coast. Whether supplying normal inventory demands or responding to storm related emergencies, KUIP is ready. The best wood in the world is not the best, if it's not where you need it when you need it.

- 24/7 Storm Response
- Southern Pine Crossarms
- CCA and DCOI Treated

Southern Pine Crossarm Mechanical Properties

Size	FPSL (psi)	MOR (psi)	MOE (psi)	WEIGHT (lbs)
3 1/2" x 4 1/2"	5,170	9,382	1,825,257	44.0
3 3/4" x 4 3/4"	6,363	10,395	1,969,421	48.0

FSPL (Fiber Stress Proportional Limits) – For any given piece of wood subjected to stress, the load deformation curve reaches a proportional limit, beyond which the total deformation is non-recoverable and some permanent set is imposed. Simply stated, if any piece of wood is loaded beyond a certain amount the sample will not return to its prior shape. In the case of a crossarm, if an arm is overloaded by a tree falling on a line or any like situation, the arm will retain some "bend" or curve in the piece.

MOR (Modulus of Rupture) – The magnitude of a load required to cause failure, or the point at which a crossarm will break.

MOE (Modulus of Elasticity) – A measurement of an object's resistance to bending (also related to the "stiffness" of a member).

Density (Weight Density) – The weight of wood per unit volume. There exists a direct correlation between weight and strength. (i.e. the heavier a known sample, the stronger the said sample at a given moisture content.)

Note: All samples were independently procured and conformed to ANSI 05.3-1995 and SPIB specifications. Sampling was in accordance with ASTM D2915. Following receipt, MFPL personnel tested the crossarms in static bending using ASTM D198-98.

Why Southern Pine Crossarms?

At KUIP, we believe in southern pine and have reliable sources for the high quality stock needed for southern pine crossarms. Southern pine is less costly than Douglas fir, and its availability throughout the Southeast results in significant freight savings for Northeastern and Eastern utilities. In addition, southern pine crossarms are stronger and more elastic in nature than Douglas fir samples of the same cross-sectional size. Coupling these strength properties with the considerable cost savings and ready availability, southern pine is now a viable alternative to Douglas fir for all users, from municipalities to cooperatives to regional investor-owned utilities. The chart to the left shows the results of an independent study conducted by Mississippi Forest Products Laboratory (MFPL) to test the structural integrity of southern pine crossarms.