

Comparison of Specifications for Grade and Industrial Grade (IG) Crossties

<u>GRADE CROSSTIES</u>	<u>INDUSTRIAL GRADE CROSSTIES</u>
Shall be free of any defects that may impair their strength or durability for use as crossties, such as: decay, large splits, large shakes, slanting grain, or large or numerous holes or knots.	Except as noted, ties shall be free of any defects that may impair their strength or durability for use as crossties, such as: decay, large splits, large shakes, slanting grain, or large or numerous holes or knots.
Wane: 6" x 8" ties: max 1" wane in top RBA 7" x 8" ties: min 8" face in RBA (no wane) 7" x 9" ties: max 1" wane in top RBA Max 1" wane anywhere on bottom	Wane: 6" x 8" ties: min 6" face in RBA 7" x 8" & 7"x 9" ties: min 6" face in RBA Outside RBA, up to 5" of wane is allowed on top & bottom
Dimensions: All dimensions are minimum for green ties, if 1" greater they will be rejected Dry ties can be up to ¼" thinner/narrower	Dimensions: Dry ties can be 1" narrower or ½" thinner & length can vary ±6" for 8'6" and 9' ties, and from -2" to +6" for 8' long ties.
Decay: No decay accepted. Blue stain is ok.	Decay: Smaller than 1.5" in diameter acceptable in RBA. Slight incipient decay accepted if tie as a whole looks ok. Decay under 3" diameter accepted outside the RBA. Decay not acceptable if over 2" diameter on both ends
Holes: No large holes, defined as ½" diam x 3" deep in RBA, or ¼ width of the surface on which it appears x 3" deep outside RBA; numerous holes = holes with equivalent dimensions	Holes: Allowed up to 1-1/2" wide on any surface <u>or</u> 3" deep in RBA on any surface. Allowed up to 3" diameter <u>or</u> 4" deep on any surface outside RBA; numerous holes = holes with equivalent dimensions
Knots: Allowed up to 1/3 width of the surface on which it appears in RBA, larger accepted outside the RBA	Knots: Up to 3" in RBA, no limit outside of RBA
Shake: Not more than 1/3 tie width or nearer than 1" to any surface permitted.	Shake: Permitted up to 5" wide. Shake may appear on one face or both ends as long as it is not closer than 1" to any other face. It cannot run the entire length of the tie.
Splits: In green ties, up to 1/8" wide and/or 4" long is acceptable; in seasoned ties, splits no wider than ¼" and/or no longer than the width of the face on which it is seen (ex., 9" on a 9" face) In seasoned ties, splits exceeding these limits are acceptable if end-plated.	Splits: In seasoned ties, up to 1/2" wide and/or 11" long is acceptable. In seasoned ties, splits exceeding these limits are acceptable if end-plated.
Checks: Continuous checks ok up to ¼ the thickness or ½ the length in fully seasoned or treated ties	Checks: Continuous checks up to one-half the tie length are acceptable is less than 2" deep or ¾" wide.
Slope of grain: Ok up to 1" in 15" – not restricted for interlocked grain species	Cross or Spiral grain: Ok up to 2" in 15" – not restricted for interlocked grain species
Bark seams: Ok if bark is no deeper than 2" from surface and/or <10" long	Bark seams: Ok if bark is no deeper than 2" from surface and/or <10" long
Manufacturing defects: No bow in excess of 1½" No score marks exceeding ½" Parallel top and bottom, within ½" Tie ends must be flat, end sloped no more than ½"	Manufacturing defects: No bow in excess of 2" No score marks exceeding 1" Parallel top and bottom, within 1" Tie ends must be flat, end sloped no more than ½"