

FAQ RAILWAY TIES



- Q. What do I do if I urgently need railway ties outside of business hours?
- **A.** Call 1-800-272-8437, our 24/7 emergency number for after-hour or holiday emergency needs.
- Q. What is the primary type of preservative used for wooden crossties?
- **A.** The primary preservative used in wooden crossties is creosote.
- Q. On average, how many wooden crossties are used in a mile (1.6 km) of track?
- **A.** Based on 19.5" on-center spacing, there are approximately 3,249 wooden crossties used per 1 mile (1.6 km) of track on average.
- Q. Approximately how many miles of railroad track are in use by railroads in the U.S.?
- A. There are approximately over 200,000 miles (321 000 km) of railroad track currently in use by railroads in the U.S
- Q. Per the above question, how many total crossties does that represent?
- A. Approximately 700,000,000 to 800,000,000 wooden crossties are required to make up the approximate 200,000+ miles (321 000 km) of railroad track in the U.S.



FAQ RAILWAY TIES NEXT

Q. Do you sell railroad ties to the public for landscaping or retaining walls?

A. No, we do not sell railroad ties to the public for these purposes. Ties are treated with creosote, which is a restricted-use pesticide, therefore we are not allowed to sell ties to the general public for non-industrial use.

Q. Are you currently buying crossties from sawmills?

A. Yes, we do buy crossties from sawmills. If you are interested in selling crossties to Stella-Jones, please contact our procurement department at 270-472-5557 ext. 6365 for more information.

Q Do you sell "scrap" ties?

A. No, we only sell newly-manufactured ties.



FAQ UTILITY POLES



- Q. What do I do if I urgently need poles outside of business hours?
- A. Call 877-448-0272, our 24/7 emergency number for after-hour or holiday emergency needs.
- Q. How do I reach someone to request a quote?
- **A.** Call your local sales manager during regular business hours or call 800-426-8430 to speak to a sales representative.
- Q. Who arranges delivery?
- A. Typically, we arrange the delivery with the use of a self-unloading truck, however customers may also pick up their product upon request.
- Q Are we running out of wood poles?
- A. No! Both the United States and Canada have ample, well-managed forest land, with only a mere fraction of capacity being harvested each year. According to the USDA Forest Service, growth exceeds harvest by 49% on commercial timber lands while Natural Resources

 Canada reports that only 0.2% of its forest base is harvested annually. Furthermore, at least one seedling is planted for every tree harvested, ensuring healthy supply for generations to come.



FAQ UTILITY POLES NEXT

Q. How do wood utility poles measure up to steel, concrete and other alternative materials?

Wood poles are more cost-effective, both in the short- and long-term, plus they are better for the environment. For example, wood is a durable natural resource in abundant supply and requires less energy/cost to produce than steel and concrete. Wood also has a lower carbon footprint than alternative materials as it draws energy from the sun to grow, regenerates naturally, absorbs CO2 and emits clean oxygen. In contrast, alternative materials require large amounts of energy to produce and generate significant amounts of CO2. Alternative materials cannot be reused or recycled in their original form, meaning that more energy is required for transformation at the end of their useful life. Wood, on the other hand, can be recycled and ultimately utilized as fuel, thus generating energy, not using it.

Q. Why do utilities prefer wood over alternative materials?

A. Utilities prefer treated wood over alternatives because it is readily available (abundant supply across North America), costs less, and is easy to handle and install. Almost all distribution lines and most lower voltage transmission lines across the continent are built with wood.

Q. Are wood poles guaranteed to withstand an extreme storm?

Electrical power and telecommunications distribution systems are designed and built in accordance with strict national standards and must comply with storm-loading criteria specific to the region. Loads are factored differently based on line construction (height of poles, placement of conductors, etc.) and climate conditions (potential for hurricanes, combined wind and ice, etc.). Poles are tested for both strength and loading capacity. If an extreme weather event exceeds the loads predicted for the design load, failures will most likely occur, the extent of which will depend on the severity of the storm and loads imposed by secondary effects. While wood utility poles are reliably stronger than those made with alternative materials, it is impossible to design a system that is impervious to the most extreme weather events.



FAQ UTILITY POLES NEXT

Q. Can wood poles be used to strengthen overhead systems?

Yes, the use of stronger wood poles is one way to strengthen the transverse load capacity of an overhead system. That said, adding stronger poles will not necessarily guarantee that a system is infallible: other system components might fail, or, a storm could exceed the strength of the pole and subsequent secondary damage, such as falling trees or wind-blown debris, might lead to pole failure.

Q. Is it more cost effective to move overhead lines underground?

A. Given the sizeable financial and time investment required and the variance in costs due to line type, subsurface conditions and underground construction methods, the general consensus is that it is not cost-effective to move existing overhead distribution lines to underground. Furthermore, while the number of outages may be reduced by underground construction, the average length of an outage is longer and the cost to repair higher because it is more difficult to find the fault underground.

Q. How often should a pole be inspected?

As a general rule, poles are inspected every 8-10 years. Inspections consist of visual examination, sounding the pole with a hammer, excavation around the pole for several feet below the ground line, inspection for external decay in the ground line area and/or boring to check for internal decay



FAQ RESIDENTIAL LUMBERS



Q. Why should I use treated wood joists and beams to support my deck?

A. Treated wood guarantees a much longer life for your under-deck structure. Since many of to-day's composite decking products are guaranteed for 20 years or more, it is unwise to use untreated lumber for the deck structure. Even in dry climates, it is advisable to use treated joists, and many decking manufacturers require the use of treated lumber to maintain the warranty

Q. Can you give me more information about the new treated chemicals?

Stella-Jones' residential lumber is treated with copper-based preservatives, which are highly effective in prolonging the life of lumber used in outdoor applications. Copper-based preservatives are not classified as a hazardous substance and can be disposed of in traditional land-fills. In addition, they are safe for use in all outdoor structures, including play sets, sandboxes, etc.

Q. How does lumber treated with copper-based preservative rate as an environmental product?

A. Using treated lumber greatly extends the life of the structure, reducing the replacement cycle for the structure and the amount of material required to rebuild a non-treated structure.



FAQ RESIDENTIAL LUMBER NEXT

Q. Should I seal my pressure-treated decking?

Yes. You should immediately seal your decking if you built it using pressure-treated lumber.

Any quality brand of water-repellent sealer should be effective in reducing the effects of weather on your deck. It is necessary to reapply sealer every year to preserve your deck and its warranty.

Q. What does the treated lumber warranty cover?

A. Our warranty covers any product damage from fungal decay to termite damage. It does not cover damage from checking, splitting, twisting or any other natural wood tendencies.

Q. What fasteners should I use with treated wood?

Extra care must be taken when choosing fasteners because of the copper content of treated wood. All hangers and fasteners must be hot-dipped galvanized to the G185 standard. Stainless fasteners are recommended for best results in marine climates. Never mix stainless fasteners and galvanized hangers or vice-versa.



WHY WOOD?

Versatile, durable and renewable, wood is ideally suited for a broad range of structural and aesthetic applications for both residential and industrial use. It is eco-friendly and in abundant supply.



Low Cost

Wood is an extremely cost-effective resource. It requires significantly less energy to produce than alternative building materials¹, can be recycled into new timber products with very little additional energy, and can be used to produce energy at the end of its life². Consequently, wood manufacturing requires minimal waste management. In contrast, alternative, non-renewable materials, such as steel or aluminum consume more energy and fresh water to produce. Alternative materials may be recycled, consuming additional water and energy, but are not renewable like wood.

Low Environmental Impact

The ultimate "green" material, wood is not only renewable, it's environmentally friendly. It draws energy from the sun to grow and stores carbon taken from the atmosphere, making it a low-cost, sustainable construction material for many applications.

Non-renewable materials such as concrete and steel, require enormous amounts of energy to produce and transport, generating more than a ton of carbon dioxide per ton of steel or concrete produced³. In fact, studies have shown that between 14% and 31% of global CO2 emissions could be avoided by

1 "The Timber Industry Manifesto: Developed by Wood for Good",

https://woodforgood.com/assets/Downloads/WFG_Manifesto_Booklet.pdf, page 2.

2 Wood for Good,

 $https://woodforgood.com/assets/Downloads/WFG_Manifesto_Booklet.pdf \mbox{, page 3.} \\$

3 Clay Risen, "Cross Laminated Timber is the Most Advanced Building Material",

https://www.popsci.com/article/technology/worlds-most-advanced-building-material-wood-0#page-3, (February 26, 2014).



WHY WOOD?

preventing emissions related to steel and concrete alone⁴. In contrast, wood requires very little energy and relatively little fossil fuels (a non-renewable resource) to produce and transport.⁵

Furthermore, wood outperforms steel and concrete when compared using life cycle assessment (LCA) methodology⁶. Based on quantifiable environmental impact indicators, including greenhouse gas emissions, fossil fuel use, acid rain, water use and pollution, air pollution and eutrophication, wood shows to be better for the environment in almost every measure than alternative materials.

Finally, wood is essential in helping mitigate climate change. Growing trees absorb and store carbon dioxide while releasing clean oxygen into the atmosphere. Carbon storage continues when wood is converted into forest products, such as railway timber, utility poles or residential lumber. As trees mature, they store less carbon and start releasing it back into the atmosphere in the case of decay, fire or disease. Therefore, the use of wood as a resource, coupled with responsible forest management and regeneration, contributes to reducing greenhouse gases through effective carbon dioxide absorption by young, vigorous trees.⁷

Available Supply

Naturally recyclable, biodegradable and 100% renewable, wood is in abundance. Responsible forest management across North America helps to ensure that forests are legally harvested and managed for use by future generations. For example, Canada harvests only 0.2% of its forest base and plants some 500 million seedlings each year⁸. According the USDA Forest Service, growth in the United States exceeds

⁴ Chadwick Dearing Oliver, Nedal T. Nasscar, Bruce R. Lippke & James B. McCarter, "Carbon, Fossil Fuel, and Biodiversity Mitigation with Wood and Forests". Journal of Sustainable Forestry

http://www.tandfonline.com/doi/full/10.1080/10549811.2013.839386?scroll=top&needAccess=true, (December 18, 2013).

⁵ Oliver et al. "Carbon, Fossil Fuel, and Biodiversity Mitigation with Wood and Forests",

 $http://www.tandfonline.com/doi/full/10.1080/10549811.2013.839386? scroll=top\&needAccess=true\ , \textbf{(December 18, 2013)}. \\$

⁶ Binational Softwood Lumber Council, "Why Wood?",

http://softwoodlumber.org/why-wood/environmental-footprint.html

I naturally: wood, Forest Innovation Investment, "Sustainable Forests: Carbon and Climate",

https://www.naturallywood.com/sustainable-forests/carbon-climate

⁸ National Forestry Database, Government of Canada, "National Forest and Forest Management Statistics", www.nfdp.ccfm.org/index_e.php , (2015).



WHY WOOD?

harvest by 49% on commercial timber lands with over 1.7 million trees planted daily. In short, North American forests are healthy and productive, poised to meet future demand.

