



TTT Poles

SED • UGLIES • UNILog • MULTIPole
UTILITY • MARINE • TTTESTED • TTTPROTECT

Who are we?

You'll find that poles from TTT Products will be the best quality you can get. That's the result of 150+ years of combined experience in civil/structural engineering, construction, and manufacturing. We have been involved in the wood industry for a long time and our reputation is second to none – just ask the engineers, specifiers, and customers who depend on our products, services and advice. Our experience encompasses a range of skills from designing innovative roundwood solutions, CAD, constructing pole-frame buildings, pole proof-testing, export certification, to developing modern timber pole processing systems.

What we do?

TTT Products Ltd manufactures and stocks a comprehensive range of quality poles for use in many differing situations. We process New Zealand Radiata Pine logs on site in our modern manufacturing facility – peeling, steam-drying, CCA Oxide timber preservation and fixation. Further specialised processes such as TTTtested proof-testing, drilling, gaining, scalloping, profiling, TTTProtect sleeving, and export certification can also be undertaken. TTT Products Ltd stock a range of H4, H5 or H6 (to order) RS SG8 retaining wall timber. We deliver the completed product – either by our own fleet of trucks or a cartage contractor; or we can pack product for export whether containerised or break bulk.

With everything handled on site we have the ability to effectively and efficiently manage any request from our customer and provide a solution that satisfies.

Where are we?

Tuakau is located about half way between Auckland and Hamilton in the North Island of New Zealand. Our nearest ports are Auckland and Tauranga. Our location is such that we have access to road and rail transport and can freight products to just about anywhere.

Which TTT Pole?

TTT SED Poles

TTT SED Poles are naturally tapered (6mm/m), machine-peeled poles. Minimal wood is removed so the pole retains its strength. SED refers to Small End Diameter and this is how all poles are measured and graded. TTT SED Poles are typically used in construction, retaining, foundations, and marine piling and can be installed via pile driving, drilling and concreting, or vibration.

Range

SED	150–550mm
Length	1.8–22.0m
Hazard Class	H5, H6 or ACQ/MCQ (to order)



TTT SED Poles used to construct the retaining wall.



TTT Products Ltd stock a wide range of SED poles.



TTT 350 SED Poles (8.0m above ground) used as part of the UniLog Buildings designed storage shed.

Uglies

TTT Uglies are naturally tapered (6mm/m), debarked poles. Debarking results in a pole about 6% stronger than a TTT SED Pole – due to less removal of cambium layer. The rougher finish of TTT Uglies results in greater skin friction when installing. TTT Uglies are an economical option and typically used for foundations and in situations where they are unseen and can be installed via pile driving, drilling and concreting, or vibration.

Range

SED	150–550mm
Length	1.8–12.0m
Hazard Class	H5, H6 or ACQ/MCQ (to order)



12.0m H5 TTT Uglies being pile driven as part of a foundation system for a commercial project.



UniLog Bridge using pre-scalloped TTT SED Poles and UniLog beams and joists.

UniLog Poles

UniLog Poles are machined, uniform diameter poles exclusively produced by TTT Products. Each UniLog is manufactured when a peeled pole is passed through a rounding machine to remove the natural taper along the length of the pole leaving a uniform diameter, evenly finished pole. Only minimal wood is removed during this process. UniLog Poles are ideal for landscaping, retaining walls, foundations, fencing, public space situations and structures such as pergolas and UniLog Buildings. UniLog Poles can be installed via pile driving, drilling and concreting, or vibration.

Range

Diameter	225–450mm
Length	1.8–12.0m
Hazard Class	H5, H6 or ACQ/MCQ (to order)



UniLog Building with proprietary connections.



Interior view of dwelling designed by Tetrad Group Ltd architects using pre-scalloped and pre-drilled UniLog Poles.

MultiPole

The TTT MultiPole is an incredibly versatile pole due to its unique hollow core. TTT MultiPoles can be manufactured from TTT SED, Uglie, or UniLog Poles, sourced from sustainable forests. Most of the heartwood core is removed via a special process developed by TTT Products Ltd – a first for NZ and possibly the world! This leaves a centre hole that runs the full length of the pole. Removing only the heartwood does not weaken the strength of the MultiPole as the strength is retained in the outer sapwood layers. The heartwood removal results in greatly reduced pole checking and splitting as the pole dries out. Further processing or preservative treatment is then carried out. Full penetration of the preservative can be achieved as the preservative is able to be impregnated from both the internal and external faces.

(Refer TTT MultiPole Brochure for more information.)



ø300 UniLog MultiPole with two scallops for a custom designed project.

UtilityPoles

TTT Utility Poles are TTT Poles that have been drilled, gained, scarfed and tagged for use as power transmission or telecommunications poles.

TTT Products manufactures each TTT Utility Pole to the exact requirements of the customer – length, diameter, gain profile and drilled holes. TTT Utility Poles can be TTtested using the Three-Point Ground Line Proof Test Method. The customer specifies the ground line distance or the Ultimate Top Load (kN) required.

(Refer TTT SED Poles and UniLog Poles for more information.)



TTT SED Utility Poles.

MarinePoles

TTT Marine Poles are manufactured to order from TTT SED, Uglie, UniLog or MultiPoles and treated to CCA Oxide Hazard Class H6. Each batch of H6 treated poles are sampled, and borings are sent to an independent laboratory to check compliance with H6 requirements. Once confirmation of compliance has been received the TTT Marine Poles are ready to be despatched.



22.0m H6 TTT SED Marine Poles with one end gained for wharf piles.

What makes a good TTT Pole?

Sourcing, peeling, grading and handling

Radiata Pine logs are sourced from sustainably managed forests by responsible logging contractors and selected for consistent quality (straightness, regular sizing, knotsize, even taper).

On delivery to TTT yard, our skilled staff inspect logs, then machine peel and grade poles to ensure compliance with NZS 3605:2001 Timber Piles and Poles for Use in Building. Together with careful handling and storage this results in consistent, high quality TTT Poles.

Timber preservation and fixation

All TTT Poles are steamed then treated with CCA Oxide to Hazard Class H5 as per NZS 3640:2003 Chemical Preservation of Round and Sawn Timber, to provide protection against fungal and insect attack in an in-ground, critical use situation. After treatment the CCA preservative is fixed into the wood using our fixation process to prevent leaching of any surface CCA from the poles. Use Hazard Class H6 for poles regularly immersed in seawater or estuarine ground. TTT Products Ltd is a registered CCA Oxide Treatment Plant and we generally treat to Hazard Classes H3.2, H4, H5 and H6. ACQ/MCQ treatment can be carried out on a per order basis. Also refer Osmose LifeWOOD CCA 50 Year Limited Guarantee for H1–H5 (New Zealand).

Traceability

All TTT Poles are tagged with SED/diameter, length, Hazard Class and Preservative Code recorded. In addition each pole is tagged with a steam charge and treatment charge number. For TTTtested Poles individually numbered tags are attached to successfully proof-tested poles. (See TTTtested Brochure.)



CCA Oxide Hazard Classes guide as per NZS 3640:2003

Also refer Osmose LifeWOOD CCA 50 Year Limited Guarantee for H1–H5 (New Zealand)

H3.2

For moderate decay situations where timber is exposed to the weather but is not in contact with the ground. Timber used outdoors above ground, exposed to weather or protected from the weather but with a risk of water entrapment; i.e. decking, fencing and pergolas.

H4

Used in high decay areas such as ground contact or fresh water. Generally used for fence posts and landscaping timbers and pergolas.

H5

Used for severe decay hazard risks such as ground contact where conditions of severe or continuous wetting may occur. End uses for this hazard class are house piles and poles, retaining walls, crib walling and horticultural supports.

H6

This hazard class is for marine use. Wharf piles and fenders, marine and jetty components regularly immersed in seawater or estuarine ground.

Pole proof-testing

TTT Tested

TTT Poles can be individually proof-tested (for stiffness and bending stress) on our Certified Pole Tester for 38MPa normal density poles or 52MPa high density poles. Poles are proof-tested as per NZS 3605:2001 and/or ISO 15206:2010 using The Four-Point Proof Test Method, The Three-Point Proof Test Method or The Three-Point Ground Line Proof Test Method with Ultimate Top Load. Each TTT Pole that passes testing is individually tagged and numbered. A Certificate of Proof Testing can be supplied for each pole or a Proof Test Summary for a batch of poles tested. (See TTTtested Brochure.)

Sleeved Poles

TTT Protect

To extend the performance of poles in marine and other harsh environments, we press a TTT Protect polyethylene PE100 Sleeve onto the pole. This Sleeve can extend the whole length of the pole (UniLog, MultiPole UniLog) or partially sleeve a machined section of the pole (SED, MultiPole SED, Uglie, MultiPole Uglie).

Export certification

TTT Products Ltd is a Ministry of Primary Industries (MPI) approved organisation authorised to carry out:

- Phytosanitary Inspection
- Phytosanitary Heat Treatment (saturated steam)
- Phytosanitary Timber Preservative Treatment (CCA Oxide treatment)

We can pack your order for export whether it be sawn timber or TTT Poles, either break bulk or containerised. Packaging can be ISPM 15 compliant with or without wrap and/or stencilling. We can organise delivery of product to port location.



Sawn timber ready for export.



For product enquiries:

TTT Products Limited
Freephone 0800 UNILOG (864 564)
Phone +64 9 236 8880
Fax +64 9 236 8663
Web www.unilog.co.nz
Bollard Rd, PO Box 99
Tuakau 2342, New Zealand

TTT Products Limited has used all reasonable endeavours to ensure the accuracy and reliability of the information contained in this document. However, TTT Products Limited assumes no responsibility or liability for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information. All content remains the property of TTT Products Limited, and is subject to change.

TTT, MultiPole, Uglies and UniLog are trademarks of Fellrock Developments Limited.



SED Poles, Uglies, MultiPoles, Utility Poles, Marine Poles, Proof Tested Poles



Uniform diameter machined poles