



Wagners Composite Fibre Technologies (CFT)

Utility poles

Wagners Composite Fibre Technologies (CFT) produces the most durable, safe and environmentally conscious utility poles for energy infrastructure asset owners around the world.

Our uniquely pultruded Fibre Reinforced Polymer (FRP) utility poles are safer than traditional poles because they do not conduct electricity thereby reducing risk associated with shock or electrocution, especially during installation.

Being 50%+ lighter than traditional poles, FRP utility poles are safer to handle, transport and install leading to improved health and safety for community and workers during installation, reduced wear and tear on equipment and improved transport efficiencies.

Existing equipment and processes are fully compatible with FRP installation so there's no need to upgrade or expand existing assets. Long-term, lighter equipment can be utilised to install FRP poles which translates to reduced future capital expenditure. Onsite fitting and installation are no different to traditional poles with the ability to drill fixtures in-field, ensuring a quality fit and installation every time.

FRP utility poles are extremely durable with an expected 80 year design life. Additionally, Wagners utility poles are inert which means they will not react chemically to their surroundings making them resistant to rot, rust and corrosion caused by moisture, chemicals and UV radiation. Superior return on investment is therefore achieved through total service life owing to reduced maintenance and inspection requirements.

Performance Advantages



Non-conductive - significantly reduced risk of touch potential



Lightweight - safer to handle, transport and install



Durable - expected 80-year design life



Inert - will not rot, rust or corrode



Improved **Return on Investment (ROI)** through reduced ongoing maintenance & inspection requirements.



39% less total Global Warming Potential (GWP) compared to galvanized steel poles over 100-years service life.*



Resistant to termites, acid sulfate soils & non-leaching.



Compatible with existing installation equipment & processes.



Fire - improved bushfire resilience



Maximise network security & resilience.

* These are the result of a Life Cycle Analysis comparing Wagners SHS 301 to a galvanized steel utility pole which has been third party reviewed and verified. Results could vary depending on the specific design of poles being compared. Please note, no comparison to hardwood timber provided as a suitable Life Cycle Analysis is not currently available.



Technical Data

Wagners CFT Fibre Reinforced Polymer (FRP) utility pole sizes and specifications

Length (m)	Typical Burial Depth (m)	Load* @ 5% Deflection (kN)	Characteristic Load Capacity (kN)	Outer Diameter (mm)	Wall Thickness (mm)	Mass (kg)
9.5	1.75	11.1	43.4	301	13.5	235.1
9.5	1.75	18.7	51.8	356	13.5	280.1
11	1.9	8.1	36.8	301	13.5	272.3
11	1.9	12.8	43.9	356	13.5	324.4
12.5	2.05	6.2	32	301	13.5	309.4
12.5	2.05	10.4	38.1	356	13.5	368.6
14	2.2	4.9	28.2	301	13.5	346.5
14	2.2	8.2	33.7	356	13.5	412.8
15.5	2.35	3.9	25.3	301	13.5	383.7
15.5	2.35	6.6	30.2	356	13.5	457.1

* Load assumed to be acting 200mm below the tip.

**Filament wound poles up to 23m/12kN will be offered end 2025.
A 'Fire Fix' solution will also be available as an option in early 2025;
designed and tested to withstand the most extreme bush fire conditions.**

Wagners CFT's Environmental Product Declaration (EPD) gives customers credible environmental information about our products that has been independently verified and is recognised globally. EPD's give asset owners the tools to be able to calculate the environmental impact of a product and allow them to make educated decisions on product selection with the view of reducing global warming and meeting 2030 carbon targets.

Wagners CFT has produced more than a million FRP electrical crossarms for network operators over the past 20 years. Building on our reputation of quality, safety and reliability, the collective characteristics of Wagners' FRP utility poles will further enhance and maximise network security and resilience for asset owners and customers into the future.

Contact Us

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Wagners CFT meets the international management standards for:



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