COMPOSITE UTILITY POLES

FARMERS PACK

What are composite utility poles?

COMPOSITE POLES EXPLAINED

Composite utility poles are strong, lightweight poles made from fibres and resin that replace timber or steel and are designed to carry electricity lines with high durability, low maintenance, and minimal impact on farmland.

Composite utility poles are a modern alternative to traditional timber or steel poles used to carry electricity lines across rural and regional areas.

In simple terms, they are poles made from strong fibres, like glass fibres, combined with a specially formulated resin. These materials are brought together in a controlled manufacturing process and then cured into a solid, one-piece structure. The end result is a pole that is strong, lightweight, and designed to last for decades in harsh outdoor conditions.

For landholders, the easiest way to think about composite poles is this: they do the same job as traditional poles, but they are built using modern materials that don't rot, rust, or degrade in the same way.

Unlike timber poles, composite poles are not treated with chemical preservatives to stop decay or insect damage. That means there are no heavy chemical treatments in the pole that can leach into soil or water over time. And unlike steel poles, they do not rust or require protective coatings and ongoing maintenance to stay in service.

One of the key advantages of composites is durability. These poles are designed to handle tough Australian conditions including heat, rain, wind, coastal environments, and bushfire exposure. They do not absorb water, they do not split or crack like timber, and they are not affected by termites or borers.

They are also much lighter than traditional poles. This makes them easier and faster to transport and install. In many cases, more poles can be carried on a single truck, which reduces the number of vehicle movements onto farms. Once on site, installation can often be completed with smaller equipment and less disruption to paddocks.

From a safety point of view, composite poles are electrically non-conductive. That means they do not carry electricity through the structure itself, which adds an extra layer of safety for people, livestock, and equipment in the surrounding area.

Importantly for landholders, these poles are designed to sit quietly in the landscape. Once installed, they require very little maintenance and are built for long service life. That means fewer disruptions to farming operations over time, and less need for repeat access onto your property for replacement or repair.

In bushfire-prone areas, composite poles can also be engineered with additional fire-resistant systems or protective exoskeletons designed to help them withstand extreme heat conditions for longer periods.

In short, composite utility poles are a modern infrastructure solution designed to be strong, durable, low-maintenance, and compatible with working farmland. They are built to support electricity networks while minimising impact on the land they sit on, helping ensure reliable power delivery without compromising agricultural operations.


KP

How is this going to affect my stock?

LIVESTOCK

Composite poles are non-toxic, don't leach chemicals, and have a smooth, inert surface, so they won't harm livestock through contact, ingestion, or exposure in their environment.

One of the first questions we hear from landholders is "Is this going to affect my stock?" It's a fair question and your animals come first!

Composite power poles are designed to be safe around livestock. Once they are made, they're stable and non-toxic. That means there are no chemicals leaching out that animals can lick, chew or absorb through the soil. This is a key difference from some traditional timber poles, which are treated with preservatives (like creosote historically), to stop them rotting.

From a physical point of view, Composite poles are smooth and don't splinter. Timber poles can crack and break down over time, which can leave sharp edges or splinters that may injure animals. Composite poles hold their shape and strength for decades, so there's less risk of cuts or infections from rubbing or contact.

They're also non-conductive, which is important. In simple terms, they don't carry stray electrical current. That reduces the risk of animals getting shocked, particularly in wet conditions where stock are more vulnerable.

In day-to-day farm life, animals tend to ignore Composite poles. They don't give off smells or residues that attract or bother stock. Over time, they just become part of the landscape like a fence post or a trough.

Another benefit is reliability. Composite poles don't rot, rust or get eaten by termites. That means they're less likely to fail or fall over, which reduces the risk of hazards in paddocks and limits the need for emergency repairs.

Less maintenance also means fewer trucks and crews coming onto your property. That's less disruption to your stock and daily operations.

In short, Composite poles are designed to sit quietly in the background; safe for your animals and reliable for the long term.

Do they contaminate the soil like treated timber can?

SOIL

No. Composite poles are chemically inert and don't release or leach any substances into the soil, unlike some treated timber poles that can introduce chemicals and preservatives over time.

Healthy soil is the foundation of any farm. Whether you are running livestock or growing crops, maintaining soil structure and productivity is critical. So, it's only natural to ask what impact utility poles might have on the ground they're installed in.

Composite poles are designed to have minimal impact on soil. One of the key reasons is that they are inert; which means they don't break down or release chemicals into the ground over time. Unlike some traditional timber poles, composite poles don't rely on chemical preservatives to stop rot or insect attack. That means there's no risk of those chemicals leaching into the soil around the pole.

Composite poles are also chemically inert, which means they won't react with other substances in the soil. This includes common agricultural inputs like fertilisers, lime or soil conditioners. Even in areas where fertiliser use is frequent or intensive, the pole material remains stable and unchanged. It won't react, break down or alter the surrounding soil chemistry. In practical terms, that means you can manage your paddocks normally, spreading fertiliser or improving soil fertility without worrying about any interaction with the pole itself.

This is particularly important over the long term. With some older pole types, there can be concern about what's happening below ground where you can't see it. Composite poles remove that uncertainty, as they stay stable and unchanged in the soil.

Another important factor is installation. Composite poles are lighter than timber or steel, which means smaller equipment can be used to put them in the ground. This helps reduce soil compaction around the installation site. Compacted soil can limit root growth, reduce water infiltration and impact pasture or crop performance. By keeping disturbance to a minimum, composite poles help preserve the natural condition of your soil.

Over time, the durability of composite poles also makes a difference. They don't rot, rust, or get eaten by termites, so they don't need to be replaced as often. Every pole replacement means digging, machinery and disruption to the soil. With composites, that happens far less frequently which helps maintain soil structure across the life of the asset.

Composite poles also don't absorb moisture or swell. In wet conditions, this stability means the surrounding soil isn't affected by movement or breakdown of the pole material. The pole stays as it was installed, without causing changes in the ground around it.

For farmers, this all adds up to a simple outcome; the pole sits in your paddock without interfering with your soil. No contamination, minimal disturbance and fewer repeated works over time.

In short, composite poles are designed to work with the land, not against it, helping you maintain the productivity and health of your soil for the long term.

When it rains is anything washing off these poles into my dam or creek?

WATER

No. Composite poles are chemically stable and non-leaching, so even in heavy rain or runoff conditions nothing washes off them into dams, creeks, or groundwater.

Water is one of the most valuable resources on your property, whether it is for stock, irrigation or natural waterways like creeks or dams. Protecting water quality is essential, so it's important to understand how infrastructure like utility poles might affect it.

Composite poles are designed to be water safe. They are made from materials that are stable and non-leaching, which means they don't release chemicals into the surrounding environment. Unlike some traditional timber poles that are treated with preservatives, composite poles don't contain substances that can wash into the soil and eventually make the way into water sources.

This is especially important in areas with high rainfall, irrigation systems or properties with creek and dams. When water moves through the landscape, it can carry anything in the soil with it. Because composite poles don't introduce contaminants, they help protect the quality of that water as it flows across your property.

Another advantage is that composite poles don't break down in wet conditions. They don't rot, corrode or shed material over time. This means there are no particles, residues or by-products entering nearby water systems even after years of exposure to rain, moisture or flooding.

During heavy rain or storm events, runoff is a key concern. Some materials can contribute rust, coatings or chemical residues to stormwater. Composite poles avoid this issue. They remain stable and don't add anything to runoff, helping to keep dams, waterways and downstream areas clean.

Composite poles are also well suited to a wide range of environments, including coastal or high moisture areas. They resist damage from salt and humidity, which can be a problem for other materials. This durability ensures they continue to perform without impacting surrounding water quality.

From a practical farming perspective, this means you can be confident that the presence of composite poles won't affect your water supply. Whether it's drinking water for livestock or water used for irrigation, there's no added risk from the pole itself.

It also supports good environmental management practices. Many farmers are focused on protecting their natural resources and meeting environmental standards. Using infrastructure that doesn't interfere with water quality aligns with those goals.

Simply put, composite poles do their job without affecting yours. They sit in the landscape without introducing anything into your water helping you maintain clean reliable water assets across your property.

Are these poles going to give off any fumes, smells or chemicals into the air around my place?

AIR

No. Once installed, composite poles are inert and do not release fumes, smells, or chemicals into the air around your property.

Clean air matters on the land for your family, your stock, and your day-to-day operations. Whether it's dust from dry paddocks, smoke during bushfire season, or emissions from machinery, farmers are very aware of what's in the air around them. So it's natural to ask whether new infrastructure like composite utility poles has any impact.

Composite poles do not release fumes, smells, gases, or particles into the air once they are manufactured and installed. They are made in a controlled factory process where the materials are combined and cured into a solid, stable form. Once that process is complete, the material becomes inert. In simple terms, it stops reacting and doesn't "give off" anything into the environment.

This means there is no ongoing air impact from the poles themselves. They don't smell, they don't off-gas, and they don't release dust or chemical vapours into the surrounding area during their service life. For landholders, that means nothing new is being added to the air on your property because the poles are there. It also means there are no ongoing chemical treatments required after installation. Some traditional infrastructure materials need periodic maintenance such as painting, sealing, or preservative treatments. Those activities can involve sprays, fumes, or equipment emissions. Composite poles don't need any of that. Once they're in the ground, they are designed to stay that way with minimal intervention.

There are also practical air quality benefits during installation and transport. Composite poles are much lighter than timber or steel, which means more can be carried per truckload. Fewer truck movements generally means less diesel use, fewer exhaust emissions, and less disturbance on farm tracks and access roads.

Installation is typically faster as well. Less time on site means less machinery running, which reduces dust and exhaust emissions in and around the work area. For farmers, that often translates into less disruption to stock and fewer temporary changes to paddock conditions while work is being done.

In bushfire-prone areas, protecting both infrastructure and surrounding air quality is critical. Composite poles can be engineered with a fire-resistant exoskeleton designed to shield the pole during extreme heat. This protective layer helps insulate the structure, reducing heat transfer and helping keep the pole cooler during bushfire events. The system is built to maintain structural integrity under high temperatures, without relying on chemical treatments that could produce unwanted smoke or fumes.

Overall, composite poles are designed to quietly do their job without changing the air around them. No smells, no fumes, no ongoing treatments, just stable infrastructure that sits in the landscape without affecting the quality of the air you and your livestock rely on every day.


WAGNERS

What about poles in paddocks where we practice mechanical weed control through the use of fire?

FIRE

While composite poles are more resilient than timber poles to fire, damage to the network is still possible via thermal heat, smoke and exposure to intense or prolonged burn conditions near electricity infrastructure.

Fire is a normal and important part of many farming operations. In some regions, it is used for cane trash burning, wheat stubble management, weed control, pest reduction, and preparing paddocks for the next season. Used carefully, fire can be an effective tool on farm.

However, when fire is used near electricity infrastructure, extra care is needed. Utility poles, crossarms, conductors, insulators, and other network assets are designed to operate safely in outdoor conditions, but they are not designed to be exposed to uncontrolled or prolonged heat from farm burn-offs. Even if flames do not directly touch a pole or powerline, radiant heat from a nearby fire can still create problems. This is particularly important in network corridors, where poles and overhead lines pass through paddocks, headlands, cane fields, cropping areas, and grazing country. Fire burning too close to this infrastructure can expose the network to high temperatures, smoke, ash, and airborne debris. In some cases, heat can affect network performance, damage hardware, or create safety risks for landholders, workers, and crews.

For this reason, landholders should avoid lighting fires close to utility poles, stay wires, overhead lines, or other network equipment. A burn that seems controlled at ground level can quickly change direction with wind, dry fuel loads, or uneven paddock conditions. Flame height and radiant heat can increase quickly, especially in stubble, cane trash, dry grass, or heavy weed growth.

Where fire is being used for farming purposes, it is important to plan ahead. Before burning, check the location of all poles and overhead lines in the paddock. Consider wind direction, fuel load, fire intensity, and how close the burn will come to the network corridor. If there is any risk that flames, heat, or smoke could affect electricity infrastructure, the burn should be adjusted, delayed, or managed with additional controls.

Practical steps may include maintaining a clear buffer around poles, slashing or grading vegetation near the pole base, removing heavy fuel loads from the immediate area, and avoiding hot burns directly under or beside powerlines. In some situations, creating a firebreak around network assets may be appropriate before a planned burn.

If a burn has occurred near the network corridor, landholders should not approach damaged or heat-affected infrastructure. If there are concerns about poles, wires, crossarms, smoke damage, or fallen material, contact the electricity network operator immediately.

In simple terms, fire can be a useful farm management tool, but it needs to be kept well clear of electricity infrastructure. Managing fuel loads, maintaining buffers, and planning burns around the network corridors helps protect the farm, the power supply, and everyone working nearby.

It's hard to see the poles when the paddock is fallow; is there an easy solution to make them more visible, especially early morning and when its foggy?

VISIBILITY

Yes. Simple reflective marker bands or safety tape can be applied to the lower section of the pole, making it much easier to see in headlights, low light, fog, dust, or early morning conditions without affecting the pole's performance.

One practical concern farmers sometimes raise, particularly in broadacre cropping country, is visibility of utility poles in low light conditions. Early morning starts, fog, dust, low sun, or nighttime operations can make it difficult to clearly see poles in open paddocks, especially after ploughing or during harvest when normal ground reference points change. Modern farm equipment is also larger than ever, with wider implements and long operating hours increasing the importance of clear visibility around infrastructure.

While composite utility poles are designed to be durable and low maintenance, visibility can easily be improved with simple and low-cost solutions. One practical option is the use of reflective safety tape applied around the lower section of the pole. Products such as reflective red-and-white or white safety tape are commonly used in industrial and roadside environments to improve visibility in low-light conditions. These tapes are designed to reflect headlights and machinery lighting, helping operators identify obstacles earlier and more clearly.

Reflective tape is easy to apply and is designed for outdoor use in harsh environments. Many products are UV resistant, water resistant, and built to withstand exposure to weather, dust, chemicals, and farm conditions over long periods. For farmers operating machinery before sunrise, after sunset, or during periods of fog or smoke, reflective markers can provide an extra level of confidence when working around poles in paddocks. Even a small amount of reflective material can significantly improve visibility when lights hit the pole from a distance.

Another advantage is flexibility. Reflective tape can be applied at a height and position that best suits the property and farming operation. Some landholders may prefer a simple band around the pole base, while others may choose additional markings where large machinery frequently operates.

Importantly, these visibility measures do not affect the performance or integrity of the composite pole itself. Composite poles have a stable outer surface that is well suited to adhesive reflective products and other visibility markers.

For electricity networks and landholders alike, visibility improvements are a simple way to support safer farm operations without changing the infrastructure footprint on the property. In practical terms, it's about making sure the poles are easy to spot when conditions are less than ideal, whether that's early morning spraying, late-night harvesting, dusty paddocks, or low winter fog.

Small additions like reflective tape can make a big difference in helping utility infrastructure work safely alongside modern farming operations.

Use QR Code for an example of reflective tape being used on composite utility poles.

How do I know these poles are actually environmentally sound and not just greenwashing?

EPD

Wagners composite utility poles are supported by an independently verified Environmental Product Declaration (EPD), which transparently measures their full life cycle environmental impact using international standards so you can see the real data, not just empty claims.

When new infrastructure is placed on farmland, most landholders want a simple answer to a fair question: ‘What’s the real environmental impact of this? Not just what we’re told, but what can actually be proven?’ That’s where an Environmental Product Declaration (EPD) comes in.

Wagners EPD is an independently reviewed report that sets out the environmental impact of composite utility poles across their full life cycle. That means it looks at everything from the raw materials used to make the pole, through manufacturing, transport, installation, decades of service, and eventually end-of-life. Nothing is left out.

Importantly, this isn’t a company opinion or marketing claim. An EPD is prepared using strict international standards and then checked by independent third-party reviewers. That means the information is verified, transparent, and comparable with other infrastructure materials like timber and steel.

For farmers, the simplest way to think about it is this: an EPD is like a “nutritional label” for infrastructure. Just like food labels show what’s in your groceries, an EPD shows what goes into a product and what comes out of it in terms of environmental impact.

So, what does it say about composite poles in practical terms? First, it confirms that composite poles are designed for long service life. Because they don’t rot, rust, or get eaten by termites, they last much longer than many traditional alternatives. Fewer replacements over time means fewer trucks on your property, less digging, less disturbance to paddocks, and less material going into the ground overall.

Second, it measures energy use and emissions across the product’s life. While all infrastructure has some environmental footprint during manufacturing, the EPD helps show the full picture, not just the starting point. When you factor in long life and low maintenance, composite poles perform strongly over time because they don’t need constant replacement or treatment.

Third, it highlights resource efficiency. Composite poles are lighter than traditional materials, which means more can be transported per truckload reducing freight movements, fuel use, and overall transport impact. For landholders, that also means less heavy vehicle activity across farm roads and access tracks.

Most importantly, the EPD provides transparency. It allows electricity networks, councils, and landholders to make decisions based on real data, not assumptions. It also allows fair comparisons between different types of infrastructure, so decisions can be based on whole-of-life impact rather than just upfront cost.

For farmers, this matters because infrastructure doesn’t just sit in isolation; it becomes part of your land. You want to know it’s been properly assessed and that it won’t create hidden environmental problems over time.

Wagners EPD gives that reassurance. It shows composite poles have been fully evaluated, independently verified, and measured against international standards for environmental performance.

COMPOSITE FIBRE TECHNOLOGY

ENVIRONMENTAL PRODUCT DECLARATION

WAGNERS

IN ACCORDANCE WITH ISO 14025:2006 AND EN 15804:2012+A2:2019/AC:2021 FOR:

SQUARE HOLLOW PULTRUDED GFRP SECTION WGN-S1000

FROM

WAGNERS- COMPOSITE FIBRE TECHNOLOGY PTY LTD.

AUSTRALASIA EPD®
ENVIRONMENTAL PRODUCT DECLARATION

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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

Where are Wagners composite utility poles made?

AUSSIE MADE

Wellcamp, Queensland, Australia.

When you live and work on the land, you know the value of things that are genuinely Australian made. Not just assembled here, but designed, manufactured, and tested for the conditions we face every day, heat, drought, floods, storms, and bushfires.

Wagners composite utility poles are proudly certified Australian Made. That certification is not just a label, it is independently verified and confirms the poles are substantially manufactured in Australia under strict requirements. It means what is being installed on your property has a genuine local origin and has gone through a formal certification process to prove it.

For farmers and landholders, that matters. You rely on products that are built for this country, not adapted from somewhere else. Composite poles are designed with Australian conditions in mind from the start, because they are made here by people who understand what rural and regional environments demand.

Like farming itself, Australian manufacturing is about resilience and practicality. You don't have the luxury of equipment that only works in perfect conditions. Everything has to stand up to real-world use. Composite poles follow that same principle, they are built to perform in tough environments and keep doing their job for decades.

Being Australian Made also supports local industry and local jobs. The poles are manufactured in Australia using Australian workers, skills, and facilities. That helps build capability here at home, rather than relying on long international supply chains.

It also means more certainty in delivery, with less exposure to global delays or shipping disruptions. For landholders, there's another practical benefit: support is local. If questions come up about installation, performance, or maintenance, you're dealing with an Australian team who understands both the product and the conditions it's operating in.

Quality control is also tighter when manufacturing is done locally. Every pole is made under controlled conditions and checked against consistent standards, so there is reliability in what is delivered to site.

Wagners composite poles themselves are built using advanced composite materials, high strength fibres combined with resin systems, to create a pole that is strong, lightweight, and resistant to rot, corrosion, and termites. But just as importantly, they are made for the places they end up: farms, paddocks, and regional networks across Australia.

For farmers, Australian Made often means trust. It means knowing the product has been built with your environment in mind and to a standard you can rely on.

Wagners composite utility poles reflect that same expectation, Australian made, Australian tested, and built for Australian land.


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