



Grow smarter with sustainable plant protectors

Learn how we're working towards being a
leader in sustainable polymers at eplgroup.com



Introducing

Sustainable plant protectors



At EPL we understand that we too need to do our bit to operate more sustainably. That's why on top of the waste management and tree planting projects we already commit to, we've developed a new range of plant protectors made from our innovative new sustainable polymers - PolyNatural™ and PolyCycle™.

Plant protectors help protect young plants from pests and the elements to support faster growth and improve survival rates, making them ideal for vegetation, revegetation or restoration projects.

Available in both standard and slanted hillside configurations and made to withstand New Zealand's varied environment, they're ideal for small or large scale planting projects.

About

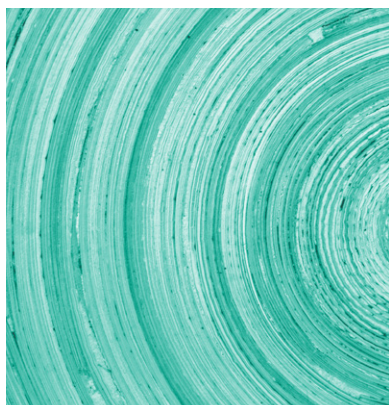
Our sustainable polymers

Our vision to be an industry leader in sustainable polymers is driven by our clients' growing needs to meet sustainability goals, the wider public's concern about the use of non-renewable fossil fuels, and our own passion for innovation.



PolyCycle™

PolyCycle™ is made from a blend of recycled and recyclable compounds from our existing polymer supply and new, synthetic polymer. Taking previously used products or leftover materials means that while PolyCycle™ is made of petrochemicals, we're reducing reliance on fossil fuels to create new material. PolyCycle™ is great for developing more sustainable products that last long-term and can be returned to EPL to be recycled and the material reused again.



PolyNatural™

PolyNatural™ is a range of bio-based polymer technologies that have been carefully developed to go the distance on the shelf and tested and certified to biodegrade over time in the right conditions, including in soil and water environments. PolyNatural™ is great for developing outdoor products that completely break down at the end of their lifecycle.

Key benefits

EPL plant protectors

Robust

Protects the plant from pests, animals, herbicides and weed-eaters. Rigid design means it will not collapse or crowd plant.

Round design

Unlike competitor products, the circular shape allows the plant maximum area for growth and encourages it to grow upwards.

NZ made

Designed and manufactured in New Zealand for New Zealand environments and climates.

Versatile

Can be used for small or large scale planting projects. Available in a range of sizes from 300mm to 1200mm. Other sizes are available on request. Standard and slanted hillside configurations available.

Durable

Built to withstand high wind and rainfall. Designed for use with one or two bamboo stakes, that, when the plant protector grips onto, are very secure.

Good airflow

The slots for the bamboo stakes also allow for airflow.

Easy to assemble

No tools required.

Easy to store and transport

Their flat pack design makes for easy storage, transport and handling on site.



Disposal

What to do with plant protectors once you're done:



PolyCycle™ **RECYCLE**

PolyCycle™: Reuse as often as possible, or, check with your local recycling provider, or return them to EPL to be recycled into new plant protectors.

PolyNatural™ **TERRAIN**

PolyNatural™ Terrain: To biodegrade naturally, bury it in soil or put it in home or industrial compost; it can also go in general waste.

PolyNatural™ **AQUA**

PolyNatural™ Aqua: To biodegrade naturally, bury it in soil or put it in home or industrial compost; it can also go in general waste. PolyNatural™ Aqua has been tested to also biodegrade in marine and fresh water environments but we encourage you to dispose of them in the other ways recommended.

Boosting your efforts

For every 20 packs of 50 brought we will donate one tree to Trees That Count on your behalf. Trees That Count is an organisation we support who are committed to planting millions of native trees across New Zealand.

FAQ's

PolyNatural™ plant protector FAQ's

Are PolyNatural™ Terrain plant protectors biodegradable?

The PolyNatural™ Terrain material has been tested to biodegrade. Over time and in the right conditions, micro-organisms transform it into nothing more than CO₂, water and biomass. It has no adverse effects on the environment and is naturally compostable without requiring a specialised composting facility.

What about PolyNatural™ Aqua plant protectors - are they also biodegradable?

Similar to PolyNatural™ Terrain, PolyNatural™ Aqua will also biodegrade in the right soil conditions as well as certain water environments too, so you don't need to worry too much if a plant protector accidentally made its way into a stream or the sea, for example.

Are PolyNatural™ materials bio-based?

Yes. Both PolyNatural™ Terrain and PolyNatural™ Aqua are bio-based polymers. 'Bio-based' means it is made from biological materials that either occur naturally or are synthesized organic compounds that exist in nature. Often these biological materials come from waste streams of other manufacturing processes, or are synthesized organic compounds. All these are renewable resources, unlike those from fossil origin, which is not renewable.

Every stage of our process is designed to generate a positive impact on the environment. We use untapped resources and non-toxic ingredients.

As the PolyNatural™ materials are both biodegradable and manufactured from biomass they have the great advantage of presenting a closed loop. CO₂ and H₂O + the biomass from biodegradation feed the growth of plants that themselves could be transformed into biomaterial.

What testing has been done?

For PolyNatural™ Terrain, the material (before it has been processed into a plant protector) has been tested as OK Compost, OK Compost Home and OK Biodegradable for soil at 502µm. The material complies to food contact applications EU10/2011.

How long will the plant protector last?

Whether it's made from PolyNatural™ Terrain or PolyNatural™ Aqua, because it's manufactured out of biomass and designed to break down over time, it really does depend on the environment it's in. We are always looking for feedback as to how your plant protectors are going in which environment.

FAQ's continued

PolyNatural™ plant protector FAQ's

What do you do at the end of the life of the plant protector?

PolyNatural™ Terrain is certified to biodegrade and transform into CO₂, water and biomass within a defined period of time under certain temperature and environmental conditions (compost/soil/water). You can either put it in general waste or bury it in soil where it will break down and become part of the bio cycle for plant growth over and over again.

PolyNatural™ Aqua can biodegrade in any of the following environments: marine, freshwater, soil, home or industrial compost, or general waste.

The process in which PolyNatural™ Aqua breaks down is similar to cellulose or wood. When kept in an environment with limited bacterial and fungi activity, the material will last for a long time. If that material is discarded into the environment or compost bin, it will be consumed by microorganisms that feed off the material as a carbon food source.

Should it be stored anywhere special to stop it accidentally biodegrading?

For both PolyNatural™ Terrain and PolyNatural™ Aqua, as soon as it comes into contact with microbes it will start to biodegrade. So when not in use, store in a cool dry environment.

Is PolyNatural™ Aqua available to purchase?

Currently we are running test quantities. We are working with our partners in the collaboration to scale up production in the near future.



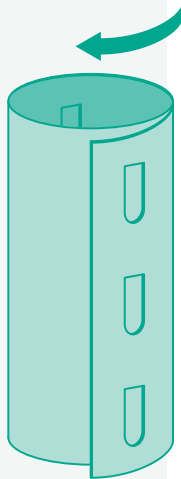
Scan here to learn more about our sustainable plant protectors.



Plant Protector Assembly Guide

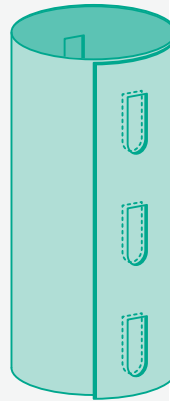
Step 1

Roll up the plant protector to form a cylinder shape.



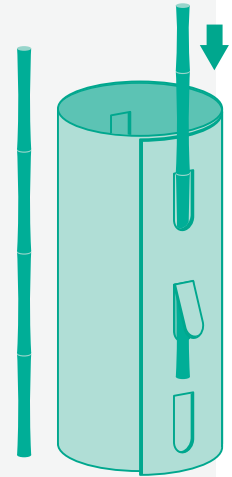
Step 2

Ensure the tabs are aligned together.



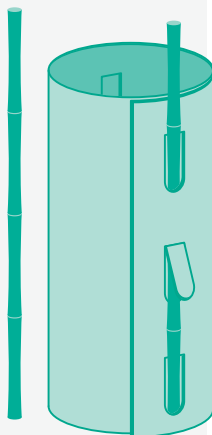
Step 3

Thread the bamboo stake through the tabs ensuring it goes under and over.



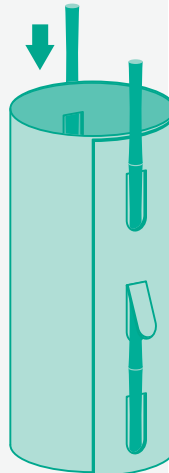
Step 4

Ensure the bamboo stake goes all the way to the bottom.



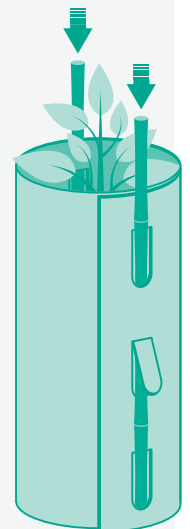
Step 5

Repeat with an optional second bamboo stake through the tabs on the other side.



Step 6

Your plant protector is ready to be placed over your plant. You can then tap the bamboo stakes into the ground.

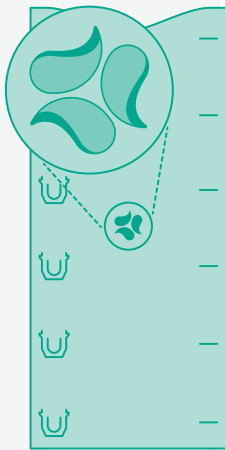


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Plant Protector 1200 Assembly Guide

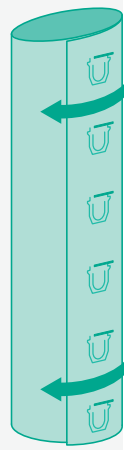
Step 1

Push through the air holes along the perforated edge in the centre of the plant protector.



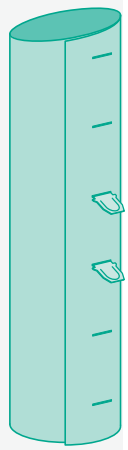
Step 2

Roll the plant protector to form a cylinder shape, and line up the tabs and inserts.



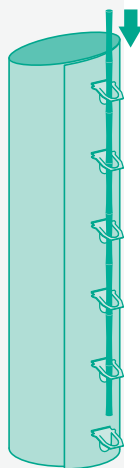
Step 3

Insert the middle tabs through their corresponding insets; work your way outwards from top to bottom.



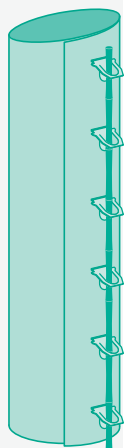
Step 4

Thread a bamboo stake through all the holes in the tabs.



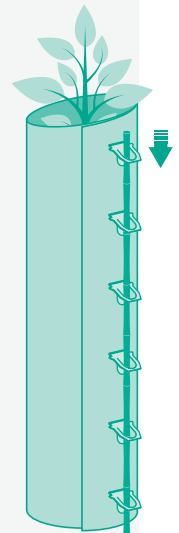
Step 5

Make sure the stake goes all way to the bottom.



Step 6

Your plant protector is ready to be placed over your plant. Push the bamboo stake/s firmly into the soil to secure the plant protector.



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Our commitment to sustainability

We've always been innovators, and over the years this has seen us step up to the challenge of increasing sustainability in our product design.

- We have been part of the Plastics New Zealand Sustainability Initiative since 2003 and we work with our partner Comspec to actively decrease the amount of waste going to the landfill. We measure our performance to actively target waste reduction to ensure we recycle paper, cardboard and other materials.
- Each year our team get involved in Keep New Zealand Beautiful Clean Up Week campaign. We travel to various locations to support the efforts of the local community to clean up beaches, rivers and parks.
- We are also supporters of Trees That Count. Native trees are a gift to our natural environment, they absorb carbon from the atmosphere and are planted to last for decades longer. Every time we do a new development, we gift native trees to be planted for community-based projects across New Zealand.



INNOVATION EVERY DAY



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