

## HOW IS PVC MADE?

manufacturing PVC happens in three stages.

First, we combine chlorine (from sea salt) and ethylene (from natural gas or oils) to form ethylene dichloride. Second, we heat that compound in an environment with no oxygen.

This heating is called pyrolysis and it forms the vinyl chloride monomer.

**Poly** means many, so we combine and melt many of the vinyl chloride monomers together with a process called polymerization to form a polyvinyl chloride polymer (PVC).

The polymer is then extruded through die heads to form the shape or profile of the fencing component along with UV inhibitors and outside colour treatments.

Our pvc is rigid which means there are no plasticisers or lead additives in our Think Fencing profiles.

## KEY PROPERTIES AND CHARACTERISTICS OF PVC

PVC possesses unique properties that make it suitable for fencing.

The properties of PVC include:

1. **High density:** The density of PVC is 1.38 g/cm<sup>3</sup>.
2. **Low cost:** Economically friendly and affordable.
3. **Good durability:** PVC can last up to 50 years.
4. **High strength:** High tensile strength (2.6 N/mm<sup>2</sup>) meaning it takes a lot of force to stretch it out and break it.
5. **Excellent electric insulator:** PVC doesn't conduct electricity, making it great for electrical insulation.
6. **Fire-retardant:** When PVC catches fire, it slowly extinguishes the fire because it contains chlorine and low oxygen content which combined, isn't good for fire.

## PVC and recycling

PVC is widely used in guttering, pipes and ducting in NZ. Manufacturers locally take clean pvc to recycle and re purpose into new pipe and products. These manufacturers are Marley NZ located in Auckland and Christchurch, Iplex pipelines located in Palmerston North and Christchurch and RX Plastics located in Hamilton and Ashburton. It is highly recommended that you make contact first to assess logistics to get your used pvc to these locations and the guidelines around the condition of the product prior to despatch.

Quoted from NZ Plastics Recycling initiatives link

<https://www.plastics.org.nz/environment/environmental-news/nz-s-pvc-recycling-scheme>

See our [Guidelines For Recycling](#)