



Designers at ES Plastics help to make dFence the most desirable safety fence on market

Safety fencing is something we probably don't think about on a regular basis but for local councils and contractors it's a big issue.



NZTA and local council standards require that civil construction sites and general public hazards have safety fences to prevent people (especially children) from accessing hazardous work sites especially if left unattended. To provide an effective barrier, every contractor must use a temporary fence which is A) designed to be un-climbable, B) is highly visible and C) as much as possible, is reasonably hard to move or tip.

Almost a decade ago, as a supplier of temporary fencing and barricades, Form Holdings Ltd had decided to ask ES Plastics to develop a blow moulded plastic option for the market.

The benefits over their current rotational moulded fence panels meant the new product provided a number of benefits:

1. They were reasonably low cost to make and therefore affordable.
2. Because they were made from HDPE they were durable and had a long life cycle.
3. The faster blow moulding cycle time meant that a higher volume of fences could be supplied in a shorter time frame.
4. The manufacture process meant that individual contractors could have their own branding on each fence panel.
5. The product was easily transportable as it was light weight and had swivel feet for easy stacking.

However, after the fence panel had been on the market for some time it became apparent that the wide reflective top (which is required in the standard for barricades) was creating a sticking point for sales in wind prone areas as it had the potential to act as a wind sail which could cause the fence to fall over in a strong wind. This meant that unless they could come up with a solution, Form Holdings could be left with a less than desirable offering in these wind prone areas.

The Form Holdings team challenged ES Plastics designers to come up with a solution which would mean they could continue manufacturing from their existing mould and have a highly desirable product for these wind prone areas. After brainstorming ideas, ES Plastics staff decided on a simple 'foot' system – a plastic base (similar to an umbrella stand) which the feet of each stand could clip into.

The bases can be filled with water or sand adding up to 20kg of weight to each panel foot. This reduced the problem while at the same time it created an opportunity for Form Holdings to become a lead supplier in these windy environments.

QUICK FACTS

Company:
Form Holdings.

Product:
Temporary fencing.

Problem:

The existing plastic fence panels were designed to be compliant with NZ TA CoPTTM standards however, like all other safety panels on the market, the design makes them susceptible to tipping in strong winds. Customers were asking for a stable fence for these conditions.

Solution:

ES Plastic designs a heavier base which the feet from the existing product could clip into adding up to 20kg per foot.

Benefit:

Form Holdings essentially fixed the problem without having to invest in a completely new product mould. The new base is now marketed as an added feature for those who are in high wind areas.

