

PERSISTENCE PAYS OFF

We know how easy it can break, even scratch, yet these days companies such as New Zealand based Pilkington Glass, cart tonnes of the see-through stuff, around the rugged south island, with hardly a tinkle.

Sounds simple enough, but with a product as costly and fragile as glass, it has taken many years of painstaking development to achieve the Pilkington model.

It wasn't always the case however, as Pilkington Operations Manager, Colin Eaton explained, "Moving glass from our Christchurch plant to Dunedin and Invercargill has always presented challenges, due to the various sheet sizes and load factors involved.

Then there are the ride conditions, safety issues and weather to consider, as Colin emphasised "glass has to be kept dust and moisture free to prevent transit damage".

So Colin, from his engineering background, came up with a design concept and sought the trailer building expertise of Metal Craft Engineering to produce a first for the New Zealand glass haulage industry.

At the beginning Colin was told his dream could never be achieved, but through two years of persistence, Pilkington has ended up with a truly remarkable trailer – a low-bed concept



... the trailer's payload requirement, the uneven load distribution factors, roll stability and on-road safety factors all had to be carefully considered ...

that's easier to load, fully protective of the cargo, and one of the safest on the road.

"Thanks to Metal Craft, we now have a semi trailer with a deck height of just 780mm, which is capable of carrying 18 tonnes", Colin said.

A major feature of the trailer is its "user friendly" design. The roof, for example, can be retracted to allow for overhead loading. Side-loading access is just as quick and easy, due to the Metal Craft designed pole system. Then there's the trailers internal fittings, the trolleys and racks that allow Pilkington to successfully carry heavy packs of glass, to specially designed pallets containing Insulated Double Glazed sheets.

The lightweight trailer, incorporating an aluminium body, also meets the new rollover regulations and has been designed and built to provide the best ride and stability for carrying glass.

To meet the required ride height and travel characteristics, Metal Craft approached the local BPW axle and suspension supplier, Transport Efficiency.

"This was not a simple case of fitting any suspension/axle combination", recalled Transport Efficiency's South Island Sales Engineer, Peter Wood.

"The trailer's payload requirement, the uneven load distribution factors, roll stability and on-road safety factors all had to be carefully considered", commented Peter.

In consultation with BPW's engineering team, Transport Efficiency selected the proven lightweight Airlight self levelling, underslung air suspension, fitted with disc braked axles.

The result, as Pilkington driver Brett McDonald explained, "has had some remarkable operational advantages".

"Having driven rigids before, I was a bit concerned that an 11.7 metre curtain-sider might be a little hard to handle, especially when you encounter the severe Canterbury Plains cross winds.

"But it's surprisingly stable. There's no rock or roll and the ride is so smooth, the mirrors don't even move", said Brett.

Brett also made comment on the BPW trailer disc brakes, saying that the response times and stopping power were the best he had experienced.

"The end result is that we now have a world class, glass handling unit. A concept that is already receiving great interest from many of our overseas operations", Colin said.

