



The image shows a large green Tauren barrier with an orange base. The text "Tauren Barriers" is written in large orange letters on the green panel, and "Worksite Screening" is written in black on the orange base. In the background, a yellow building and a blue sky are visible. The Tauren logo is in the top right corner, and a small inset image of a barrier is in the top left corner.

**Tauren Barriers**  
**Worksite Screening**

**Tauren**  
Road Safety Equipment



The image shows a small inset of a barrier with the text "NZ BARRIERS" on it. The main text "Worksite Protection" is in large orange letters. The Tauren logo is in the top right corner.

**Worksite Protection**

- Protecting the worksite and protecting drivers from the distractive activities on the worksite is our business.
- Tauren Barriers Ltd manufacture, sell and hire the American Easi set JJ Concrete Barrier system.
- We have been manufacturing barriers since 1998
- Tauren Barriers have the manufacturing rights for both New Zealand and Australia and are in Victoria, Queensland, New South Wales and Tasmania

**Tauren**  
Road Safety Equipment



## Background



- Our first screens were made in late 1990's with shade cloth
- Transit NZ as it was then required the screens to have ply inserts which are still being made today
- Our original designs have been adapted and incorrectly copied leading to significant design faults



## INSTALLED FLATSIDE TO THE WORKSITE...INCORRECT




The screens should have the ply to the roadside and the frame to the worksite side thus eliminating any potential snag points should a vehicle ride up the barrier face and make contact with the screen




**INSTALLED WITH  
FRAME TO THE ROAD SIDE  
NOT THE WAY THEY WERE DESIGNED**




**SIGNIFICANT SNAG POINTS**



**Redesign of frame**



- Tauren Barriers saw a need to eliminate any potential foreign debris intrusion into the crew compartment of any vehicle that happens to hit a barrier system and screen assembly . Ply disintegrating would do this.
- The original frame was changed from a 40mm box section to a 32.1mm diameter round tube of 1.2mm thickness
- By moving to a round tube we removed all welds from the top bar. On impact, the round tube would now deform and offer no resistance and eliminate any top bar intrusion



## New look



- We have now gone to a full shade cloth insert that is cable tied to the frame at 20 points and pulled to keep the cloth under tension
- The perimeter of the cloth is folded and hemmed



## New look continued...



80% shade cloth allows wind to pass thru while giving 100% screening from work activities



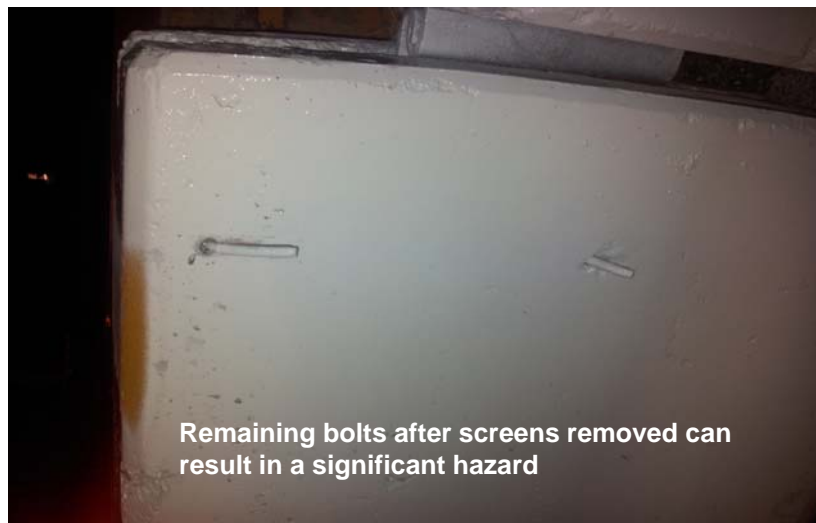
## Product Improvement



- The present (ply) 6m screens have a weight exceeding 60kgs each which require a minimum of 4 staff and a hiab to install
- The current ply screens require the frame to be bolted to the barrier. The screen is then suspended and the crew drill through the frame and insert a bolt into the concrete barrier
- Removing the screen now leaves an exposed bolt which can result in a snag point for workers, motorists and cyclists and motorcyclists



## Potential Hazards



Remaining bolts after screens removed can result in a significant hazard



## Ply Mounting Method



## Painted Barriers



Tauren Barriers are painted **orange** to the road side and **grey** to the worksite

Note:  
Mounting location marked by stencils



## Barrier face painted Mandarin Orange.



## Tauren Barrier Solution



- We set about moulding inserts into the barrier at the time of moulding/ forming the barrier
- This allowed a clean face on removal of the bolt resulting in the total elimination of any potential snag point



M 16 Ferrels  
secured into mould,  
2 at each end



## Redesign of Mounting



**Mounting Brackets, lefts, rights and doubles as centres**



## Screen Sizes



- Tauren Barriers make both 3.6m and 6m long barriers. All barriers are 810mm high
- The screens are all 1.2m high thus effective when mounted on the barrier - resulting in a screen of 2m from road level
- Note: The NZTA only require a screen height of 1.2m. This based on the effective screening height for a conventional car
- NZTA height regulations do not take into account the Remuera Tractor, 4WD vehicles, light commercial vehicles, recreational vehicles or heavy vehicles
- Tauren Barriers saw the 2m height as far more effective





## Why are screens important?



Screening:

1. Eliminates **driver distraction** caused by machinery operating close to a barrier stream
2. Eliminates **worker distraction** from vehicle movement in the adjacent live lane
3. Increases worker **productivity**
4. Eliminates **missiles/projectiles** being thrown from moving vehicles (significant potential hazard)
5. Helps to reduce **dust nuisance** crossing live lanes



## Benefits



Tauren screen systems significantly reduce time, cost and risk of injury:

- Installation time is reduced by up to 80%
  - Increased installation meters per working day/night (up to 100m per hour)
  - Reduction in cost due to less staff required for installation
  - Significantly reduced traffic management costs associated with lane closures and TTM installation.
- Eliminates the need for heavy lifting equipment (hiabs or cranes)
- Risk of installer injury significantly minimised
- Greater driver protection in the event of an accident and screen impact



## MOUNTING BRACKET WITH SPACER



## MOUNTING BRACKETS

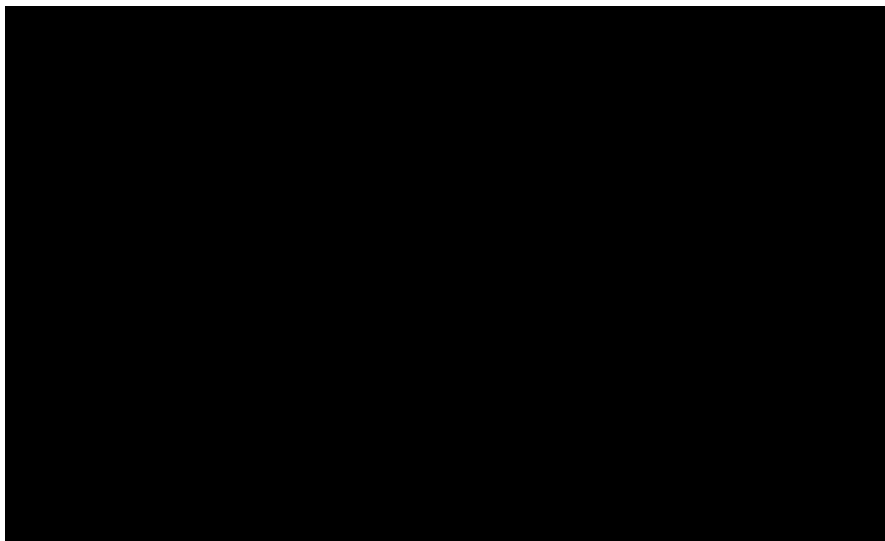




## Behind the screens




## WELLESLEY STREET OFF RAMP CYCLE WAY





## VIDEO FROM LANE 1



## Summary



**TAUREN BARRIERS SIGHT SCREEN  
PROVIDES**

Increased safety  
+  
Reduced Costs  
=  
**Better product delivery.**



Thank you for the opportunity to present our Innovative  
new development to this Industry Group.

If anyone has any questions wish to know about  
This product I am available in the Conference  
Product display area.