

### Safence™ TL3 End Terminal Technical Data

The **Safence™ TL3 End Terminal** is designed to provide a soft gating impact to prevent vehicles from launching or snagging upon impact with **Safence™** Wire Rope Safety Barrier. The terminal utilises shortened **Safence™** posts at reduced post spacings to minimise the angle at which the cables are terminated, thus reducing the potential for launching and vehicle rollover.

The TL3 End terminal uses standard **Safence™** components to minimise product inventory and facilitate rapid repair. It can be used on all new installations or be retrofitted to existing **Safence™** installations. The TL3 End Terminal is designed not to release the cables upon impact ensuring the system remains tensioned and functional in the event of secondary impacts occurring downstream from the end anchor.

This terminal is approved by Transit New Zealand to be used on New Zealand's state highway network and is listed in M23.



### Functional Principles

The terminal consists of a concrete end anchor in which is embedded a fabricated steel plate. The four cables are connected to this plate. The first post, approximately 300mm high is set 2m beyond the anchor and each of the next 9 posts, set at 1m centres, increase uniformly in height until the first full height post is reached, 12m from the anchor point.

Upon impact the posts will bend at ground level, preventing vehicle vaulting. The posts are reduced in length in order to reduce the angle of the cables as they terminate at the anchor block, preventing vehicle launching. The cables remain tensioned after impact, thus ensuring the barrier remains functional in the event of secondary impacts downstream from the barrier. The terminal is a 'gating terminal' and vehicles will be redirected upon impact 12.6m from the anchor point.



## Technical Data : Safence™ TL3 Terminal End

---

### Retrofitting to Existing Safence™ WRSB

An advantage of **Safence™** WRSB is its compliance to NCHRP 350 Test Level 3 (TL3) without modification. Therefore **Safence™** WRSB installed in accordance with NCHRP 350 TL3 can be retrofitted with the TL3 End Anchor.

Since the angle and shape of the anchor bracket on existing installations is unaltered, it is a case of installing the shortened sigma posts at 1m centres commencing 2m from the anchor point. The terminal comprises of 10 shortened posts. The cables are not cut and once the new posts are inserted the cable is replaced and retensioned.