

Some Tips

1. Check the Wall Thickness

Most failures happen because the steel is too thin. Thin steel will dent, buckle and rust out within a few years.

You need

- **minimum 5 mm** wall thickness on **150NB / 165 OD Steel** bollards.
- **minimum 3.5 mm** wall thickness on **168 mm Stainless Steel** bollards.

2. Footing Depth

The footing determines impact performance. Shallow footings (300–500 mm) fail at low speeds.

- **Impact Recovery can be surface Mounted or** installed 350/650 mm depth
500 mm = cosmetic protection only for rigid bollard
- **600–800 mm** = Low-speed vehicle protection for rigid bollard
- **900–1200 mm** = engineered impact resistance for rigid bollard

NB: Impact Recovery Bollards are designed to withstand impact and can be reused following even severe impact

3. Avoid Concrete-Filled Steel

Concrete does **not** make a bollard stronger. It makes it **more brittle**, more likely to **crack footings**, and causes **rust**.

Concrete-filled 165 OD steel fails at **~15–20 km/h** in a shallow footing.

4. Powder Coating Quality

Always specify **sandblasting + chemical pretreatment + outdoor polyester**.

- Poor coating lifespan: **3–5 years**
- Quality outdoor polyester: **15–25 years**

5. Stainless Steel? Know the Difference.

Stainless **Tube** = thin, decorative, dents easily
Stainless **Pipe** = structural, expensive, lasts longer

Tube belongs indoors. Pipe (polished to satin finish is best) is the only option if you want outdoor stainless. 304 stainless is suitable for most urban environments; Don't get upsold to 316 stainless unless using in coastal regions or around pools

6. Beware Low Quality Imported Bollards

Not made to Australian standards they look like this (picture right) in no time. (compared to ours that have lasted more than a decade) see back page for pics.

- Cheap powder coating (can fade in less than 12 months)
- Buckle, dent, chip and scratch upon impact
- Rust from the inside out
- Thin inferior quality steel
- Poor welds
- Need replacing often (more landfill)
- Extremely poor reflective striping
- If it's, lightweight, or polished like aluminium → avoid.

7. Standard Surface Mount ZERO Impact Protection

Surface-mounted bollards are **not** designed to stop cars. They rely on **anchors**, which pull out or shear off at low speed.

Surface mount bollards are for delineation purposes only. Not security or serious protection. Refer to Impact Recovery option that provides resistance against forward movement of a vehicle and is resilient (impact resistant)

8. In-Ground Steel Isn't Impact-Resistant

Classic in-ground steel is **rigid**, so on impact it:

- Bends
- Cracks the footing
- Pops out of the ground

A strong post without a shock-absorption system = failure
Refer to Impact Recovery option for impact resistance and substantially improved resilience

STOP THE LANDFILL

A quick search online reveals most Aussie bollards are bought from China for around AUD \$10.00, and they are sold for Aussie steel prices- plus manufacturers profit from regular repeat sales

