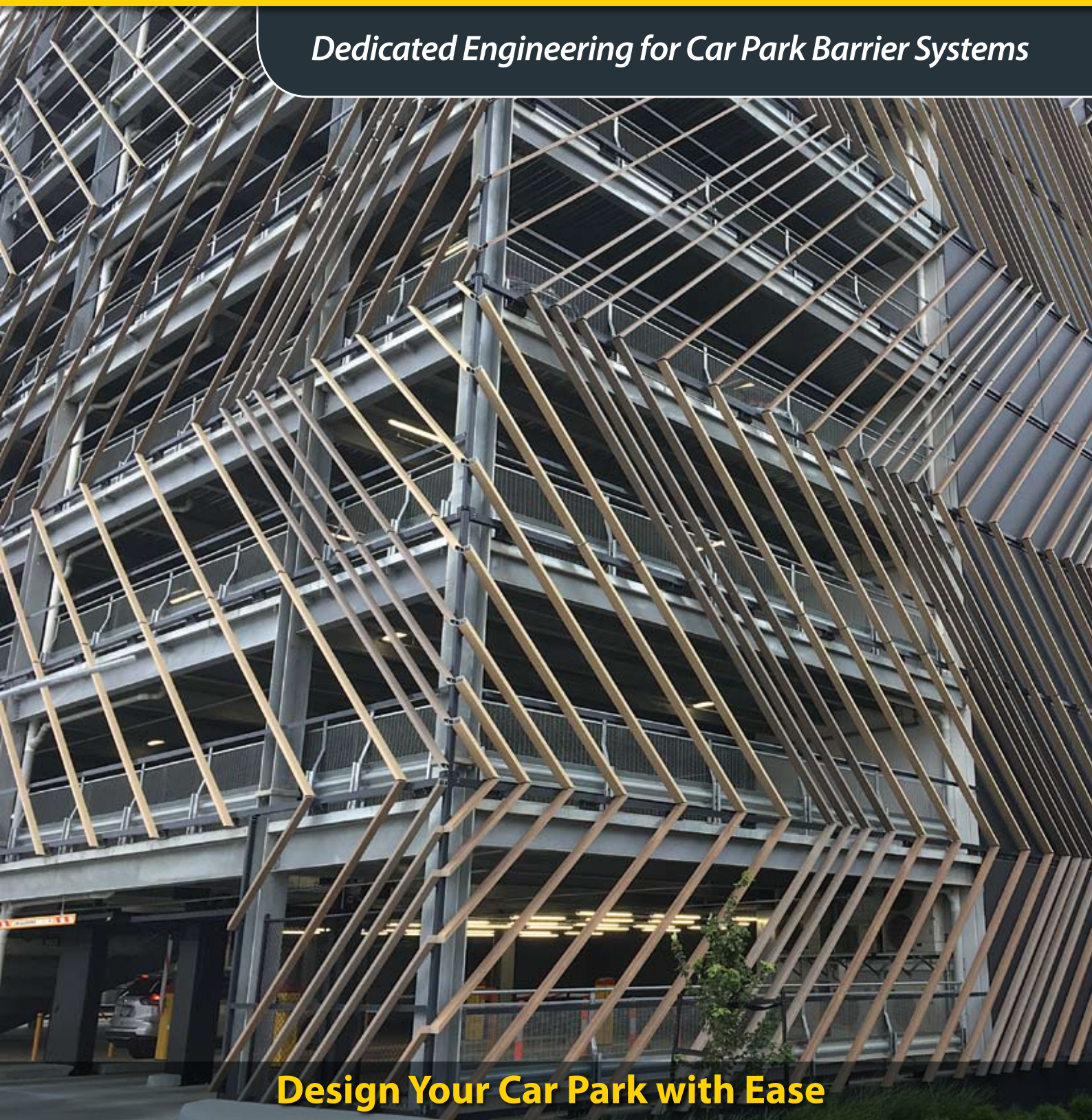


# Car Park and Industrial Barriers

*Dedicated Engineering for Car Park Barrier Systems*



**Design Your Car Park with Ease**

[www.ingalcivil.com.au](http://www.ingalcivil.com.au)



# Adaptable to Your Site

**AS/NZS 1170.1**  
COMPLIANT

## ZEE-Park®

The original and most versatile car park barrier system



**WAREHOUSE**



**CAR PARK**



- Highly adaptable to suit site-specific environments.
- Fully tested and compliant system (AS/NZS 1170.1).
- Suitable for edge protection close to structures or building facades.
- Low initial deflection.
- Yielding design prevents damage to footings with larger impacts.
- Consistent high performance with high containment capacity.
- Single anchor design – easier, cost-effective installation.
- Handrail & Anti-Climb Mesh attachments available for BCA compliance.
- Very low footprint (only 100mm x 200mm).
- 100% Australian Made using Australian Steel & Australian Zinc.



**EXCLUSIVE TO  
INGAL CIVIL**



**AS/NZS 1170.1**  
COMPLIANT

## ZEE-Park® 1500 & 1800

High containment, anti-climb, integrated car park barrier



**WAREHOUSE**



**CAR PARK**



- ZEE Park 1800 utilises a longer post, enabling the installation of 1800mm high anti-climb mesh screens.
- Public safety at the forefront of the design – no climbable horizontal members between 50mm and 1800mm above surface level.
- Sturdy steel top section effectively shields the upper mesh, while contributing to overall strength.
- Ideal for upper exposed car park decks, providing increased anti-climb security far in excess of AS/NZS building codes.
- Fully tested to AS/NZS1170.1 for light traffic areas.
- Low deflection, high containment capacity.
- Suitable for exposed perimeter edge protection.
- Yielding design prevents damage to structure with over-capacity impacts.
- Consistent high performance.
- Two anchor design – easy, cost-effective installation.
- Anti-Climb Mesh prevents pedestrian encroachment.
- Available in 1500mm or 1800mm heights.
- Low footprint – only 200mm wide.
- 100% Australian Made using Australian Steel & Zinc.



# Warehouse or Car Park

**AS/NZS 1170.1  
COMPLIANT**

## **Cable BUFFA™** Low profile car park barrier for light traffic areas



**EXCLUSIVE TO  
INGAL CIVIL**

- Compliant to loading requirements of AS/NZS 1170.1 "Type F light traffic".
- Cable BUFFA removes the visual bulk of traditional guardrail barriers, and is ideal for locations where a less obtrusive aesthetic is required.
- Cable BUFFA does not require drilling through or connecting to supporting columns.
- Surface mounted, simply bolts down to the car park deck.
- Utilising off-the-shelf components.
- Lightweight, high strength protection.
- Bolts down to the car park deck.
- Exclusive to Ingal Civil Products.
- Utilising the same high-strength galvanized wire rope as our Flex-Fence and MASH Flex highway barriers, Cable Buffa has been proven to easily withstand over twice the required impact loads.



**AS/NZS 1170.1  
COMPLIANT**

## **DeckGuard** Suitable for edge protection in multi-storey car parks

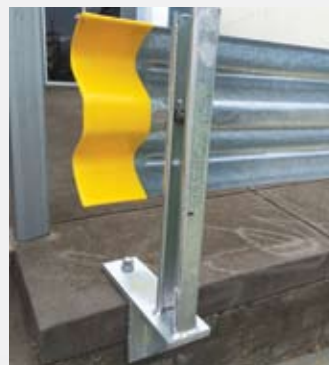


**OPTIMISES  
FLOOR SPACE**

- ZEE Park DeckGuard is designed to allow maximum use of car park floor space, by placing the Flex-Beam guard rail right at the edge of the car park deck.
- Designed to spring under light 'nudge' impacts, but predictably yield under severe impacts, preventing damage to the car park structure.
- Maximum protection within a minimum of space.
- Uses the proven Ezy-Guard post profile and is a high-strength semi-rigid system.
- DeckGuard is tested and designed to exceed the force prescribed under AS/NZS 1170.1 for light traffic areas.
- Single anchor per post.



**EXCLUSIVE TO  
INGAL CIVIL**



# Engineered for Superior Safety

**AS/NZS 1170.1  
COMPLIANT**

## Sentinel

Suitable wherever high-containment barriers are required



**WAREHOUSE**



**CAR PARK  
HEAVY DUTY**



**MAXIMUM  
SAFETY RATING**



- Design your car park with ease – using ZEE Park for deck perimeters and ramp sides, continuing with ZEE Park Sentinel at the ramp ends, or anywhere else a high-strength barrier system is required.
- ZEE Park® Sentinel has been tested to the 240kN requirement of AS1170.1 for the ends of down ramps.
- A low-cost proprietary system from Ingal Civil that integrates to create a complete car park or warehouse safety solution.
- High-strength semi-rigid system.
- Uses a heavier-duty version of the Ezy-Guard post profile.
- Only two anchors per post makes easy installation.
- Designed to spring under light 'nudge' impacts, but predictably yield under severe impacts, preventing damage to the car park structure.



**CUSTOM  
COLOUR OPTIONS**



**AS/NZS 1170.1  
COMPLIANT**

## TruckShield

Heavy-duty barrier solution for separation of heavy vehicles



**WAREHOUSE**



**CAR PARK  
HEAVY DUTY**



**MAXIMUM  
SAFETY RATING**



- Heavy duty car park barrier system designed to exceed the force prescribed under AS/NZS 1170.1 rating.
- High-strength semi-rigid system.
- Uses a heavier-duty version of the Ezy-Guard post profile.
- Only two anchors per post makes easy installation.
- Integrates easily with the Ingal range of car park barriers to create a complete solution.

### ZEE Park® TruckShield Applications:

- Anywhere separation of heavy vehicles and pedestrians is required.
- Protection to high value plant and equipment.
- Head-on impact protection from fork-lift trucks.
- Industrial warehouses.
- Logistics facilities.
- Freight terminals.
- Loading docks.

*All Ingal Civil Car Park and Warehouse products are*





# Protecting Your Investment

## Column BUFFA™ Support column protection

WAREHOUSE • CAR PARK • CAR PARK HEAVY DUTY



**EXCLUSIVE TO  
INGAL CIVIL**

- Protects lighting columns, structural columns and racking supports in car parks, warehouses and logistic depots.
- Offers protection from collisions at low speeds with fork-lift trucks or pallet movers.
- Available as a single, double or triple hoop system.
- Available in full or semi circle units.
- Post supports can be turned inwards to prevent a trip hazard or damage to tyres.

## Rigid Post/Steel Bollard Barrier protection for walls

WAREHOUSE • CAR PARK • CAR PARK HEAVY DUTY



**HARD STOP**

### Rigid Posts:

- Available as C posts or U posts to suit your site.
- Glancing blow collisions at low speeds with light vehicles.
- Internal and external barrier protection for walls in warehouses and logistic depots.

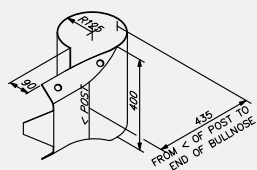
### Steel Bollards:

- Suitable for situations where a hard-stop is required.
- Suitable for edge-protection of buildings and around sensitive infrastructure (eg concrete edges, electricity boxes, air conditioning, etc).

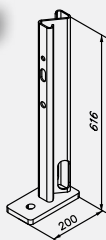
## Angles and Corners Ingall barriers provide safety at every turn



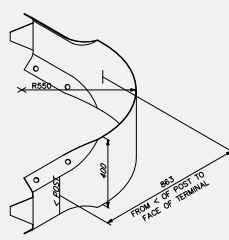
**INGAL EZY-FIT**



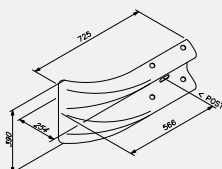
Short Bullnose



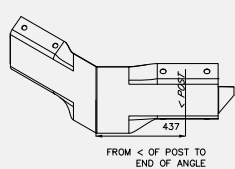
ZEE-Park Post



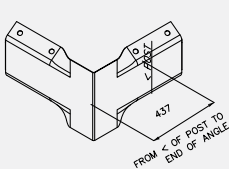
Right Angle Terminal



Fishtail



45° Convex Corner



90° Convex Corner

- Car park barriers meeting at an angle can be joined using one of our many 45 degree or 90 degree angled sections. These enable use of a continuous barrier system throughout. Contact Ingall Civil for more information.

## Accessories

Complete solutions for Car Parks and Warehouses



**CUSTOM  
COLOUR OPTIONS**

Complement your car park and industrial barriers with our complete accessory range:

- Post Caps
- Short W-beam Bullnose Ends
- Wheel Stops
- Handrails
- Corner Protectas
- Plastic Rail Caps
- Steel Bollards
- Anti-Climb Mesh



*Australia's leading manufacturer  
of road safety barriers since 1933*

## Specialist Supplier of Vehicle Barriers for Car Park and Warehouse Projects

All barriers are manufactured in our Sydney factory and galvanised in-house using Australian Zinc. Our ability to understand our customers needs allows our team of in-house engineers to design the optimum solutions that are adaptable to site-specific locations. The Ingal "Ezy-Fit" philosophy ensures that our range of components are able to be integrated to create complete solutions.



Ikea, Sydney



Calvary Hospital, Canberra



Crown Casino, Perth



Geelong Car Park, Victoria



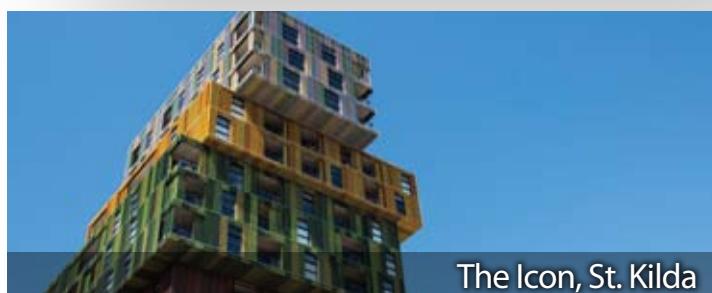
Fonterra Head Office, Auckland



Epworth Hospital, Lee Wing, Richmond



Northern Beaches Hospital, Sydney



The Icon, St. Kilda



Murrarie Park & Ride, Queensland



Clayton Station, Melbourne

**[www.ingalcivil.com.au](http://www.ingalcivil.com.au)**

Head Office: Sydney  
57-65 Airds Road, Minto, NSW 2566  
Ph: +61 2 9827 3333 • Fax: +61 2 9827 3300  
Local call (within Australia) 1300 446 425

- Sydney (02) 9827 3333
- Melbourne (03) 9358 4100
- Perth (08) 9452 9111
- Wagga 0427 779 588
- Brisbane (07) 3489 9120
- Adelaide/NT 0438 153 482
- Newcastle 0400 235 883
- [sales@ingalcivil.com.au](mailto:sales@ingalcivil.com.au)