

# ACO Infrastructure - TramDrain

## Case Study



## Newcastle Light Rail, Newcastle, NSW

Newcastle Light Rail is a light rail corridor running from Newcastle Interchange through the central business district to Pacific Park. Designed to connect key activity precincts within the greater Newcastle metro area, this infrastructure is part of a \$650M program to revitalise Newcastle's city centre by linking six stations with a reliable high capacity and high frequency service.

#### Project Design Brief

Designers required a safety containment trench in the form of a channel run to provide effective surface drainage whilst acting as a wheel trap in the event of a derailment. The dual-purpose system would be installed parallel with the tram rails and fitted with frangible grates that would intentionally collapse if struck by a tram wheel. To protect the public from stray currents, all components required to be non-metallic and suitable for both vehicular and pedestrian traffic.

### ACO Solution

N100 System with Composite Slotted Heelsafe<sup>®</sup> Anti-Slip grates

#### Benefits

- N100 Polymer<sup>®</sup> Channels with black polyamide grates comprise no metal components.
- Grates are certified to Load Class D (AS 3996)
- Grates are bicycle wheel compliant (AS 3996), safe for heels and wheelchairs (AS 1428.2). Tested to AS 4586 for slip resistance

#### Other ACO Products used:

- Light rail trench drains (ACO Infrastructure)
- Urban trench drains (ACO Drain)
- Cable pits (ACO Cablemate)
- Covers and frame systems (ACO Access







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