

# Concrete Roads

**WHY  
CHOOSE  
CONCRETE  
?**

# Concrete Excels.

Concrete roads are the strongest and most durable, performing better under heavy traffic loads and lowering costs across the lifetime of the asset.

Fully  
Recyclable

High Local  
Content

## Durable

- No ruts, pot holes or shoving
- Resists abrasion & petro-chemical attack
- Long design life
- Lower life cycle costs
- Low repair & maintenance costs
- Superior shear resistance

## Resilient

- Stands up to extreme weather conditions
- Doesn't melt in the heat
- Won't erode in floods

HEAVY VEHICLE  
FUEL SAVINGS

Better  
Visibility

- Lighter coloured roads
- Increased safety
- Safer night driving

More  
Reflective

FOR COOLER  
TEMPERATURES

↓ ENERGY SAVINGS ↓



# STRONG

QUIET  
RIDE

INNOVATIVE SURFACES  
FOR NOISE REDUCTION

Concrete pavements are renowned for their long life and low maintenance especially under tough weather and heavy traffic conditions.



Concrete pavements can provide a service life of forty years or more under extreme conditions due to the inherent strength and durability of concrete. They are used widely in NSW, across major arterials including the recently constructed Hunter Expressway - the main artery to Newcastle International Port. Concrete's excellent performance and financial benefits are also being realised in other regions of Australia.

### PROJECT: NORTHERN CONNECTOR

**Location:** Adelaide, South Australia      **Principal:** South Australian Government  
**Value:** \$985 million      **Contractor:** Lendlease  
**Completion:** December 2019  
**Scope:** This fifteen kilometre, six lane, dual carriageway expressway is the first major concrete pavement in South Australia. It has been designed to successfully carry heavy industrial traffic through an environmentally sensitive mangrove wetland.  
**Project Selection:** A plain concrete pavement was selected to provide strong structure for heavy freight access to Adelaide's port and north and northwest industrial areas.  
**Features:** Diamond grinding has been selected for the surfacing to provide a low maintenance, highly durable and quiet riding surface. The advantages of the design include increased local materials content, creation of extra local jobs, lower operating fuel costs for heavy vehicle owners and a lower cost over the life of the road asset.

### PROJECT: HUNTER EXPRESSWAY

**Location:** New England Hwy, Newcastle, NSW      **Principal:** NSW Government  
**Value:** \$1.7 billion      **Contractor:** Thiess and Abigroup.  
**Completion:** March 2014  
**Scope:** The forty kilometre, four lane, dual carriageway expressway connects NSW's busiest port Newcastle with the Upper Hunter Coalfields. This is a challenging road project designed for high frequency heavy industrial traffic over unstable abandoned coal mines through environmentally sensitive regions.  
**Project Selection:** Both plain concrete and continuously reinforced concrete pavement types were selected to manage the varying foundation conditions.  
**Features:** Diamond grinding of the surface produced a highly durable, low maintenance and quiet road surface. The pavements were designed for forty years of high performance and low maintenance.

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### CONCRETES KEY BENEFITS

#### STRONG

- Superior performance under heavy traffic

#### DURABLE

- Much lower repair & maintenance costs
- Lower life cycle costs
- No rutting, potholes or shoving
- Long design life
- Resists abrasion & petro-chemical attack
- Superior shear resistance

#### RESILIENT

- Stands up to extreme weather
- Doesn't melt in hot weather
- Doesn't erode in flood conditions

#### HEAVY VEHICLE FUEL SAVINGS

#### BETTER VISIBILITY

- Lighter coloured roads
- Increased safety
- Safer night driving

#### ENERGY SAVINGS

- Lower lighting costs
- Light coloured for cooler temperatures

#### HIGH LOCAL CONTENT

- Locally manufactured raw materials

#### RECYCLABLE

#### QUIET RIDE

- Innovative surfaces for noise reduction

