New Zealand Steel use Tensar® InterAx® for Heavy-duty pavement in Laydown Yard

New Zealand Steel Laydown Yard Heavy Duty Pavement

South Auckland, New Zealand

CLIENT'S CHALLENGE

The client required a durable, heavy-duty pavement solution for their laydown yard, which would be constructed over a moderate-strength subgrade with a CBR of 6%. The pavement specification needed to accommodate heavy traffic loading from 52-tonne forklifts used for handling steel coils, with each forklift generating front axle loads of up to 83 tonnes.

TENSAR SOLUTION

Pavement design optimised using Tensar+ HHR (Heavy Haul Road) module with LAAMS approach to mitigate rutting over the 5-year design life. Initially designed with GAP65 aggregate, the specification adapted to non-standard brown rock aggregate with ≤100mm maximum particle size and 75mm rut depth limit. Two layers of InterAx geogrid enable a thicker, more durable pavement compared to the original section without geogrid, significantly reducing long-term maintenance requirements.

BENEFITS

- **Reduced maintenance** Two InterAx layers mitigate rutting and minimize long-term maintenance under 83-tonne loads
- **Design flexibility** Tensar+ HHR approach accommodates non-standard brown rock (≤100mm particle size) while maintaining performance
- **Enhanced Durability** The Tensar mechanically stabilised pavement delivers superior performance compared to original section without geogrid

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PROJECT DETAILS

Constructed in
June 2025

Project Owner
New Zealand Steel

Contractor
CLC Contractors

Product
Tensar® InterAx®

Tensar® InterAx® geogrid installation at New Zealand Steel laydown yard construction site.

Heavy Duty & Industrial Pavements |

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