

Id: ALF (Australia)		Melbourne
Institution: ARRB Group (formerly the Australian Road Research Board)		Australia

Type: Portable Linear Test Track

Construction (commissioned): 1984



Dimensions

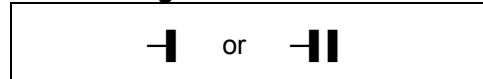
Pavement length	12 m
Useful testing length (at constant speed)	12 m

Loading

Range of Load ^(*)	80–200 kN
Transverse distribution	± 375 mm
Loading direction	⇔

^(*) Wheels loads (half axle) are converted to the corresponding axle loads.

Axle configuration



Speed

Vehicle Speed (max.)	20 km/h
Test frequency (max.) (passes/hour/section)	370
Practical output (loadings/month/section)	200 000

Sections

No. of Sections	1
Thickness	any
Width	Outdoors: any In shed: 18 m

Measured Variables

	Surface	Asphalt	Unbound Layers	Subgrade
Temperature	x	x		
Moisture content			x	x
Suction				
Deflection (transient)	x	x	x	x
Vertical Stress	x			
Horizontal Stress				
Vertical Strain	x	x	x	
Horizontal Strain		x		x



Environmental control

Placement	Currently indoors
Air temperature	®
Pavement temperature	@
Air moisture	-
Freeze-thaw cycles	-
Water table	@
Rainfall	©

- © total control
- @ partial control
- @* indirect control (air Temp.)
- ® registered

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Brief description of Topics/Tests carried out during recent years
Recent tests have focussed on using ALF as a research tool rather than as a means of proof loading pavement structures. Recent work has largely focussed on improving the understanding of unbound granular pavement performance.
Deformation performance of sprayed seal surfaced unbound granular pavements. Comparison of observed performance with repeat load triaxle laboratory testing.
Effect of ultra-wide single tyres on a sprayed seal surfaced unbound granular pavement.
Fatigue of cement treat crushed rock bases (3–4% cement) with different axle loads.
Axle load equivalence for sprayed seal surfaced unbound granular pavements.
Examination of maintenance intervention techniques on sprayed seal surface granular pavements, including development and calibration of work effects models for pavement management systems.