CERTIFICATE OF COMPLIANCE
NZTA T/12:2013

Applicator: Hog Technologies, Scania P450, 3 Axle Line Marker, Registration Number NPE386.
Plant Number:154220 Type LA

Owner:
Downer NZ Ltd
133 Main South Road
Green Island
Dunedin 9018

Test Description: **The pavement marking applicator as described by this certificate has been tested under the conditions described and found to comply with the relevant requirements of NZ Specification NZTA T/12:2013.**

Test Conditions:
The scope of the Certification was as follows:
1) Application of Extruded Flat Thermoplastic to Schedule One, with thickness in accordance with NZTA P/22:2006, NZTA P30:2008 and NZTA T12:2013.
2) Application of Audio Tactile Markings to Schedule Two, with markings in accordance with NZTA M/24:2006, NZTA P30:2008 and NZTA T12:2013.
3) Application of Profiled Multi Dot Line Markings to Schedule Three, with thickness in accordance with DNZ Multi Dot Line Technical Specification NZTA P/30:2008 and NZTA T/12:2013 .

Test Identification:
The tests were carried out at the Downer NZ Depot at 397 McLeans Island Rd, Harewood, Christchurch, between August 23rd 2025 and September 24th 2025.
The Applicator Chassis Number is 5596697.
The test materials used were:
Damar Multi-Grade Thermoplastic for Schedule One, and Schedule Three.
Ennis Flint Vibraline for Schedule Two,
Potters Type B Drop-On Glass Beads were used for Schedule One, Two and Three

Equipment Tested:

Extrusion Heads	Mark Rite Lines	MRL 1 & 2
Structured Head	Hofmann MDL300	721/0036
Audiotactile Heads	Mark Rite Lines	MRL 1,2,3,4,5 & 6
Extruder 1	Hog Technologies	0103TP
Extruder 2	Hog Technologies	0104TP
Temperature Controller 1	Solo	4896
Temperature Controller 2	Solo	4848
Compressor	Atlas Copco U110	WUP200676
Speedometer	Hog Technologies / Skipline	SC12/35493
Bead Guns	Graco Shovel	

Applicator Speeds:

	Line Widths		
Schedule	**100mm**	**150mm**	**200mm**
One	5.57	4.09	3.57
Two		5.07	
Three	6.14	5.04	4.16

Special Notes: The applicator is not capable of applying turn arrows.

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Schedule One

Extruded Flat Thermoplastic in Accordance with NZTA P/22:2006

The markings when applied to flat electro-galvanised steel plates met all dimension and performance requirements as specified in NZTA P22: 2006, NZTA P30: 2008 and NZTA T12:2013.

The values specified in NZTA P/22:2006 used for determination of compliance were as follows:

Gap Length Between Segments
Where gap is 3.0m or more ± 300mm
Where gap is less than 3.0m but greater than 1.0m ± 150mm
Where gap is 1.0m or less ± 50mm

Length of Segments
Where segment is longer than 5.0m ± 150mm
Where segment is shorter than 5.0m but longer than 1.0m ±75mm
Where segment is 1.0m or shorter ± 50mm

Thermoplastic Line Width
All line widths +10% - 5% of the specified values 100mm, 150mm & 200mm

Thermoplastic Height
New markings – asphalt 2.0 – 2.5mm
New markings – chipseal 2.0 – 3.0mm

Retroreflectivity
AS/NZS 2009 Potters Pristine Drop-On Glass Beads,
Applied uniformly at a minimum rate of 300 grams/m^2
Reflectivity (dry – R): A minimum of 150 mcd/m^2 /lux.
Reflectivity (condition of wetness – RW): A minimum of 80 mcd/m^2 /lux.

Day Time Visibility.
Minimum Qd of 100 mcd/m^2/lux

Colour.
White; A discolouration of not more than 4/5 from colour Y35 of AS2007S
Yellow; A discolouration of not more than 4/5 from colour Y13 - Y14 of AS2007S

Skid Resistance
Greater than 50 BPN but less than 65 BPN

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Schedule Two

Thermoplastic Audio-Tactile in Accordance with NZTA M24: 2006, NZTA P/30:2008 and T/12:2013

The markings when applied to flat electro-galvanised steel plates meet all dimension and performance requirements as specified in NZTA M24: 2006 Specification for Audio-Tactile Profiled Roadmarkings, NZTA P/30:2008 Specification for High Performance Roadmarkings and NZTA T/12:2013 Specification For Long-Life Pavement Marking Material Applicator Testing.

The values specified in NZTA M/24, NZTA P/30 and NZTA T/12:2013 used for determination of compliance were as follows.

Thermoplastic Line Width
All line widths +10% - 5% of the specified value 150mm

Thermoplastic Base Height
N/A Profile Blocks only

Raised Blocks
Pitch +5% - 5% of specified value (250mm)
Pitch +5% - 5% of specified value (500mm)
Length of block +30% - 20% of specified value (50mm)
Width of block +30% - 20% of specified value (150mm)
Block Height -5% +15% of specified value (9.0mm)

Retroreflectivity
AS/NZS 2009 Potters Pristine Drop-On Glass Beads,
Applied uniformly at a minimum rate of 300 grams/m^2.
Reflectivity (dry – R): A minimum of 150 mcd/m^2 /lux.
Reflectivity (condition of wetness – RW):
A minimum of 80 mcd/m^2 /lux.

Day Time Visibility.
Minimum Qd of 100 mcd/m^2/lux

Colour.
White; A discolouration of not more than 4/5 from colour Y35 of AS2007S
Yellow; A discolouration of not more than 4/5 from colour Y13 - Y14 of AS2007S

Skid Resistance: *Not Applicable*

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Schedule Three

Profiled "MultiDotLine" - markings in Accordance with DNZ Technical Specification, NZTA P/30:2008, and NZTA T/12:2013

MultiDot Line Application

Inside of a housing a hollow cylinder (scattering drum) positioned at the periphery and equipped with outlets is rotating during forward movement of the extruder. At a lockable slot, which width corresponds to the requested line width, outlets continuously open and close when the cylinder periphery is sliding along towards the road. Through these outlets the thermoplastic marking material will be applied in portions on the road.
The result is an exact defined regular pattern with regular distribution.
The markings when applied to flat electro-galvanised steel plates meet all dimension and performance requirements as specified in NZTA P/30:2008 Specification for High Performance Roadmarkings.
The values specified in NZTA P/30:2008 used for determination of compliance were as follows:

Gap Length Between Segments

Where gap is 3.0m or more ± 300mm
Where gap is less than 3.0m but greater than 1.0m ± 150mm
Where gap is 1.0m or less ± 50mm

Length of Segments

Where segment is longer than 5.0m ± 150mm
Where segment is shorter than 5.0m but longer than 1.0m ±75mm
Where segment is 1.0m or shorter ± 50mm

MultiDot Line Dots

1. Material application rate of 3.48kg/m^2 ±10%
2. A coverage between 55 and 75%
3. Line appearing continuous when sitting in a passenger car.

MultiDot Line Widths

All line widths +10% - 5% of the specified values 100mm, 150mm & 200mm

Retroreflectivity

AS/NZS 2009 Potters Pristine Drop On Glass beads applied uniformly at a minimum rate of 300 grams/m^2
Reflectivity (dry – R): A minimum of 150 mcd/m^2 /lux.
Reflectivity (condition of wetness – RW):
A minimum of 80 mcd/m^2 /lux.

Day Time Visibility.

Minimum Qd of 100 mcd/m²/lux

Colour.

White; A discolouration of not more than 4/5 from colour Y35 of AS2007S
Yellow; A discolouration of not more than 4/5 from colour Y13 - Y14 of AS2007S

Skid Resistance

Greater than 50 BPN but less than 65 BPN

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Registration Details: [NZRF Stamp & Unique Number} 6164

Initial Certificate: Initial T/12

Testing Officer: P Del Favero Downer NZ LTD

Signed:

Date of Expiry: 24th September 2026