

CERTIFICATE OF COMPLIANCE NZTA T/12:2013

Applicator: Hino FC Mac Stripper, registration number BQY303, fleet number T91, Plant Number:116033 Type LA

Owner: Downer NZ Ltd
Private Bag 93225
Otahuhu
Auckland

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 TNZ 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.

Test Identification: The tests were carried out at the Downer NZ Depot at 133 Main South Rd Green Island, Dunedin, from January 22nd 2019 to January 24th 2019.
The Applicator Chassis Number is JHDFC4JJPXXX101157.
The test materials used were:
Ennis Premium Extrusion Grade for Schedule One.
Ennis Premium AT2 Grade for Schedule Two.
Ennis Intermix Glass Beads were used for Schedule One and
Potters Type B Drop-On Glass Beads were used for Schedule Two

| | | | |
|--------------------------|------------------------|------------------|---------|
| Equipment Tested: | Extrusion Heads | Mini Mac | FC |
| | | ITS Profile Head | |
| | Extruder | Mini Mac 75mm | FC |
| | Temperature Controller | Carel | FC |
| | Compressor | Ingersoll Rand | 8830199 |
| | Speedometer | Roadmarker | FC |
| | Bead Gun | VisiMax Bead Gun | FC |

| | | | | | |
|---------------------------|-----------------|-------------------|--------------|--------------|--------------|
| Applicator speeds: | | Line Width | | | |
| | Schedule | 100mm | 150mm | 200mm | 300mm |
| | One | | 4.0 | | |
| | Two | | 2.9 | | |

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

Premelter: Nissan PreMelter Unit XG2463 T/18 Certificate No:4758 was used for the T/12 tests.

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 \pm 300mm

Where gap is less than 3.0m but greater than 1.0m \pm 150mm

Where gap is 1.0m or less \pm 50mm

Length of Segments

Where segment is longer than 5.0m \pm 150mm

Where segment is shorter than 5.0m but longer than 1.0m \pm 75mm

Where segment is 1.0m or shorter \pm 50mm

Thermoplastic Line Width

All line widths +10% - 5%

Thermoplastic Height

New markings – asphalt 2.0 – 2.5mm

New markings – chipseal 2.0 – 3.0mm

Retroreflectivity

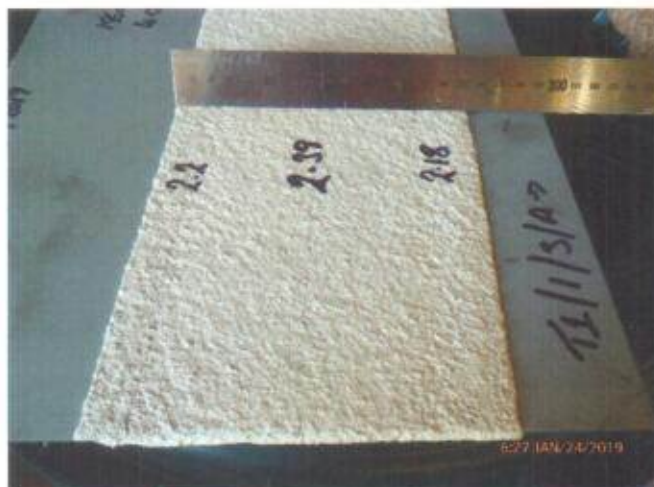
AS/NZS 2009 Ennis Intermix Glass beads applied uniformly at a minimum rate of 300 grams/m²

Reflectivity (dry – R): A minimum of 150 mcd/m²/lux.

Reflectivity (condition of wetness – RW): A minimum of 80 mcd/m²/lux.

Skid Resistance

Greater than 50 BPN but less than 65 BPN



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%

Thermoplastic Base Height

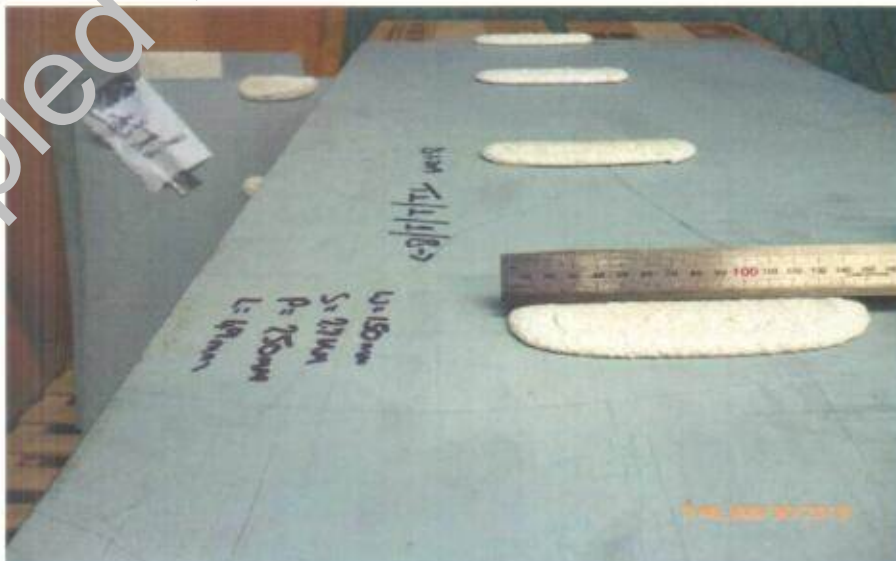
N/A Profile Blocks only

Raised Blocks

Spacing between blocks +5% - 5% of specified value (250mm)
Spacing between blocks +5% - 5% of specified value (500mm)
Length of block +30% - 20% of specified value (50mm)
Width of block +30% - 20% of specified value (100mm, 150mm & 200mm)
Block Height -5% +15% of specified value (8.5mm)

Retroreflectivity

AS/NZS 2009 Potters Drop-On Glass beads applied uniformly at a minimum rate of 275 grams/m².
Reflectivity (dry - R): A minimum of 150 mcd/m²/lux.
Reflectivity (condition of wetness - RW): A minimum of 80 mcd/m²/lux.
Skid Resistance *No Applicable*



CERTIFICATE OF COMPLIANCE
NZTA T/12:2013



Registration Details: {NZRF Stamp & Unique Number}

Initial Certificate

Issuing Officer:

R J Ridings
Quality Surveillance Ltd

4844



Testing Officer:

P Del Favero

Signed:



Downer NZ LTD

Date of Expiry:

24 January 2020