

Applicator:2011 Kadcam Cub, Pedestrian<br/>Controlled, Type LB Cold<br/>Applied Plastic Applicator.<br/>Applicator # 0982502111

Owner: Fulton Hogan Ltd, T/A Coastline Markers P O Box 302-528 North Harbour 0751



Test Description: The long life pavement marking applicator described by this certificate has been tested under the conditions described and found to comply with the relevant requirements of NZTA Specification NZTA T12:2013

**Test Conditions:** The scope of the NZTA T12: 2013 recertification was as follows;

- Application of Agglomerate Cold Applied Plastic to Schedule One, agglomerate Cold Applied Plastic, in accordance with Coastline Markers Technical Specification, NZTA P30:2008 and NZTA T12:2013.
- Application of Audio Tactile Markings to Schedule Two, Cold Applied Plastic Audio Tactile, in accordance with Coastline Markers Technical Specification, NZTA M24:2006, NZTA P30:2008 and NZTA T12:2013.
- Application of Audio Tactile Markings to Schedule Three, Cold Applied Plastic Audio Tactile in combination with Agglomerate Cold Applied Plastic, in accordance with Coastline Markers Technical Specification, NZTA M24:2006, NZTA P30:2008 and NZTA T12:2013.
- Application of Plain Flat Cold Applied Plastic to Schedule Four, Flat Spray Cold Applied Plastic in accordance with Coastline Markers Technical Specification, NZTA P30:2008 and NZTA T12:2013

### **Test Identification:** • The Chassis number of the tested unit is 0982502111

- The tests were carried out at Mitre 10 Mega carpark in Albany, Auckland on 15<sup>th</sup> and 17<sup>th</sup> August 2023.
- The materials used for the tests were: Damar CAP Structure/ ATP for Schedule One, Two and Three, Damar Spray Plastic Parts A & B for Schedule Four. Potters AC-07 adherence promoting coated drop-on type B glass beads were used for Schedule one, two & three, Potters adherence promoting coated intermix type C glass beads were used for Schedule Four.



Equipment Tested:	CAP Spray Gun	Homebuilt Handok Two Component	2111
	CAP Pump	Graco Viscount 1:1	2111
	CAP Dosing Unit	Kadcam	2111
	Structure Spindle	Kadcam	2111
	Bead Applicator	Handok	2111
	Compressor	Campbell Hausfeld	DK639700
	Speedometer	Autoline 400	11928

Applicator Speeds:	Schedule One	100mm	<b>150mm</b> 1.61 km/h	200mm
	Schedule Two		1.75 km/h	5
	Schedule Three		1.62 km/h	2
	Schedule Four	2.43 km/h	1.87 km/h	1.42 km/h
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# CERTIFICATE OF COMPLIANCE NZTA T 12:2013 SCHEDULE ONE

# Agglomerate Cold Applied Plastic, in accordance with Coastline Markers Technical Specification, NZTA P30:2008 and NZTA T12:2013.

The markings when applied to flat electro-galvanised steel plates met all dimension and performance requirements as specified in; NZTA P30:2009 Specification for High Performance Roadmarkings and NZTA T12:2013 Specification for Long-Life Pavement Marking Material Applicator Testing.

The values specified in NZTA P30:2009 and NZTA T12:2013 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 less than 1.0m:  $\pm$  50mm

### Length of segment.

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 shorter than 1.0m;  $\pm$  50mm

<u>Line width</u>. All line widths; +10%, -5% of the specified value. (150 mm)

### Structured (Agglomerate) Cold Applied Plastic.

- 1. Material application rate of  $2.5 \text{kg/m}^2 \pm 10\%$
- 2. A coverage between 55% and 75%, and
- 3. Line appearing continuous when sitting in a passenger car.

### **Retroreflectivity.**

AS/NZS 2009 Class B (drop-on) glass beads applied uniformly at a minimum rate of 330gm/m<sup>2</sup>. Dry retroreflectivity; a minimum of 150 mcd/m<sup>2</sup>/lux. Wet retroreflectivity; a minimum of 80 mcd/m<sup>2</sup>/lux

### Day Time Visibility.

Minimum Qd of 100 mcd/m<sup>2</sup>/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.

50 BPN or greater for roadmarkings with a dry film thickness of 0.9 mm or greater





# SCHEDULE TWO

# Cold Applied Plastic Audio Tactile, in accordance with Coastline Markers Technical Specification, NZTA M24:2006, NZTA P30:2008 and NZTA T12:2013

The markings when applied to flat electro-galvanised steel plates met all dimension and performance requirements as specified in;

NZTA M24:2006 Specification for Audio Tactile Profiled Roadmarkings, (alternative dimensional tolerances)

NZTA P30:2009 Specification for High Performance Roadmarkings and

NZTA T12:2013 Specification for Long-Life Pavement Marking Material Applicator Testing.

The values specified in NZTA M24:2006, NZTA P30:2009, NZTA T12:2013 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 less than 1.0m:  $\pm$  50mm

### Length of segment.

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 shorter than 1.0m;  $\pm$  50mm



### Raised blocks.

Block height; +15 %, -5 % of the specified value. (8 mm) Block width; +30 %, -20 % of the specified value (150mm) Block length; +30 %, -20 % of the specified value (50mm) Block pitch; +5 %, -5 % of the specified value. (250mm)

### **Retroreflectivity.**

AS/NZS 2009 Class B (drop-on) glass beads applied uniformly at a minimum rate of 300gm/m<sup>2</sup>. Dry retroreflectivity; a minimum of 150 mcd/m<sup>2</sup>/lux. Wet retroreflectivity; a minimum of 80 mcd/m<sup>2</sup>/lux

# Day Time Visibility.

Minimum Qd of 100 mcd/m²/lux

### <u>Colour</u>.

White; a discolouration of not more than 4/5 from colour Y35 of AS2007S

### Skid Resistance.

N/A



## CERTIFICATE OF COMPLIANCE NZTA T 12:2013 SCHEDULE THREE

# Cold Applied Plastic Audio Tactile in combination with Agglomerate Cold Applied Plastic, in accordance with MOTSAM Part II, Coastline Markers Technical Specification, NZTA M24:2006, NZTA P30:2008 and NZTA T12:2013.

The markings when applied to flat electro-galvanised steel plates met all dimension and performance requirements as specified in;

MOTSAM Part II, NZTA P30:2009 Specification for High Performance Roadmarkings and NZTA T12:2013 Specification for Long-Life Pavement Marking Material Applicator Testing.

The values specified in MOTSAM Part II, NZTA P30:2009, NZTA T12:2013 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 less than 1.0m:  $\pm$  50mm

### Length of segment.

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 shorter than 1.0m;  $\pm$  50mm

### Raised blocks.

Block height; +15 %, -5 % of the specified value. (8 mm) Block width; +30 %, -20 % of the specified value (150mm) Block length; +30 %, -20 % of the specified value (50mm) Block pitch; +5 %, -5 % of the specified value. (250mm & 500mm)

### Structured (Agglomerate) Cold Applied Plastic.

- 1. Material application rate of  $2.5 \text{kg/m}^2 \pm 10\%$
- 2. A coverage between 55% and 75%, and
- 3. Line appearing continuous when sitting in a passenger car.

### **Retroreflectivity.**

AS/NZS 2009 Class B (drop-on) glass beads applied uniformly at a minimum rate of 300gm/m<sup>2</sup>. Dry retro reflectivity; a minimum of 150 mcd/m<sup>2</sup>/lux. Wet retro reflectivity; a minimum of 80 mcd/m<sup>2</sup>/lux

### Day Time Visibility.

Minimum Qd of 100 mcd/m<sup>2</sup>/lux

### <u>Colour</u>.

White; a discolouration of not more than 4/5 from colour Y35 of AS2007S

### Skid Resistance.

N/A





# CERTIFICATE OF COMPLIANCE NZTA T 12:2013 SCHEDULE FOUR

# Flat Spray Cold Applied Plastic in accordance with Coastline Markers Technical Specification, NZTA P30:2008 and NZTA T12:2013

The markings when applied to flat electro-galvanised steel plates met all dimension and performance requirements as specified in; NZTA P30:2009 Specification for High Performance Roadmarkings and NZTA T12:2013 Specification for Long-Life Pavement Marking Material Applicator Testing.

The values specified in NZTA P30:2009 and NZTA T12:2013 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 less than 1.0m:  $\pm$  50mm

### Length of segment.

Where segment is longer than 5.0m;  $\pm 150$ mm Where segment is shorter than 5.0m but longer than 1.0m;  $\pm 75$ mm Where segment is shorter than 1.0m;  $\pm 50$ mm

### Line width.

All line widths; +10 %, -5 % of the specified value. (150 mm)

### Flat Spray Cold Applied Plastic.

Dry film thickness (DFT) of 450  $\mu$ m ± 75 $\mu$ m.

### **Retroreflectivity.**

AS/NZS 2009 Class C (Intermix) glass beads applied uniformly at a minimum rate of 275gm/m<sup>2</sup>. Dry retroreflectivity; a minimum of 150 mcd/m<sup>2</sup>/lux. Wet retroreflectivity; a minimum of 80 mcd/m<sup>2</sup>/lux

### Day Time Visibility.

Minimum Qd of 100 mcd/m<sup>2</sup>/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.

50 BPN or greater for roadmarkings with a dry film thickness of 0.9 mm or greater





**Registration Details**:

[NZRF Stamp & Unique Number]



Initial Certificate Testing Officer:

Ross Ridings Quality Surveillance Ltd

T/12 Testing Officer:

Lance Wright Fulton Hogan Ltd T/A Coastline Markers

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Signed:

Date of Expiry:

17<sup>th</sup> August 2024