ACN: 085 606 597
ABN: 65 085 606 597
PO Box 650
79-81 Intrepid St
Berwick VIC 3806
(P): 03 9707 0077
(F): 03 9707 0088
E: admin@mpspaving.com.au
W: www.mpspaving.com.au

StreetBond CL Specification Help

STREETBOND CL COATING
PART 1 – GENERAL

1.1 Description

A. **StreetBondCL™** coating is a highly specialised coating specifically designed for application onto pavement to demarcate asphalt or concrete cycle lanes.

B. **StreetBondCL™** coating has been specifically formulated to provide the optimal balance of performance properties for a durable, long lasting colour and texture to asphalt or concrete pavement surfaces. Some of these key properties include wear and crack resistance, colour retention, adhesion, minimal water absorption and increased friction properties.

C. **StreetBondCL™** coating performance has been tested and verified by an independent recognised laboratory. A Certificate of Analysis confirming these test results is available through either an accredited applicator or direct from MPS Paving Systems Australia Pty Ltd (03 9707 0077). Please refer to the certified performance properties of StreetBondCL coating outlined in Section 2.1 of this specification.

D. A variety of standard and custom colours are available to meet all federal or state specifications.

To ensure a quality installation, it is recommended to obtain confirmation of applicator accreditation or qualification from MPS Paving Systems Australia Pty Ltd before proceeding with this work.

References

A. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings using Portable Adhesion Tester.

B. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrasion.

C. ASTM D522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.

ACN: 085 606 597
ABN: 65 085 606 597
PO Box 650
79-81 Intrepid St
Berwick VIC 3806
(P): 03 9707 0077
(F): 03 9707 0088
E: admin@mpspaving.com.au
W: www.mpspaving.com.au

D. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Non-metallic Materials.

E. ASTM D-2486 MEK rub test for chemical resistance

F. ASTM D-570 Standard Test Method for water absorption of plastics.

G. ASTM E-303 British Pendulum Test for friction.

H. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

PART 2 – PRODUCTS

2.1 Materials

Materials used for the coating of the asphalt or concrete pavement shall consist of the following:

A. **StreetBondCL™** coating is an epoxy-modified polymer coating. It is specifically designed for application on asphalt or concrete pavements to provide a safe, durable, long lasting colour and texture to the pavement surface.

B. **StreetBondCL™** coating is environmentally safe and meets EPA requirements for Volatile Organic Compounds (VOC).

C. **StreetBondCL™** colourant is a highly concentrated, high quality, UV stable pigment blend designed to be added to the StreetBondCL coating. It is available in a wide range of standard and custom colours to meet all state specifications.

2.2 Performance Properties of StreetBondCL Coating

The following table outlines performance properties of StreetBondCL coatings which are backed up by Certificates of Analysis produced by an independent qualified testing facility. MPS Paving Systems Australia Pty Ltd (03 9707 0077) or the Accredited Applicator can provide a copy upon request.

ACN: 085 606 597
ABN: 65 085 606 597
PO Box 650
79-81 Intrepid St
Berwick VIC 3806
(P): 03 9707 0077
(F): 03 9707 0088
E: admin@mpspaving.com.au
W: www.mpspaving.com.au

TABLE 1: Typical Performance Properties of StreetBondCL™ coatings

Characteristics	Test Specification	Measured Result
Durability: Taber Abrasion	ASTM D-4060 <1 day cure, H-10 wheel cycles (dry)	<1.5g/1000
Water Sensitivity	ASTM D570 Water absorption after 9 days Remaining absorption after 1 hour of recovery	 <10% <10%
Colour Stability	ASTM G-155 QUV 2,000 (CIE units)	Brick Colour ΔE = 1.5
Flexibility: Mandrel Bend	ASTM D522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical Resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate failure<
Friction Wet	ASTM E-303 British Pendulum Test	>55
Environmental Sensitivity	EPA 24 ASTM D3960-05 Volatile Organic Compounds	VOC <150

ACN: 085 606 597
ABN: 65 085 606 597
PO Box 650
79-81 Intrepid St
Berwick VIC 3806
(P): 03 9707 0077
(F): 03 9707 0088
E: admin@mpspaving.com.au
W: www.mpspaving.com.au

PART 3 – EXECUTION

3.1 General

StreetBondCL™ coating shall be supplied and applied by an **Accredited Applicator** or an applicator designated by MPS Paving Systems Australia Pty Ltd in accordance with the plans and specifications or as directed by the superintendent

3.2 Pre-Conditions

3.2.1 Pavement

The asphalt or concrete pavement should be stable, well compacted, and generally in excellent condition for the application of StreetBondCL™ coating to be successful.

3.2.2 *Pavement Marking Removal*

Pavement markings may be removed by sandblasting, water-blasting, grinding, or other approved mechanical methods. The removal methods should, to the fullest extent possible, cause no significant damage to the pavement surface. The Superintendent shall determine if the removal of the markings is satisfactory for the application of StreetBondCL™ coating. Work shall not proceed until this approval is granted.

3.3 Application of StreetBondCL™ Coating

3.3.1 Surface Preparation

A. The asphalt or concrete pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

B. Either the Accredited Applicator or MPS Paving Systems Australia Pty Ltd services department can advise if StreetBondCL Primer is required on the pre-existing asphalt or concrete pavement or not.

C. Note that StreetBondCL™ primer is not required for new pavements.

3.3.2 Application of Coating

A. The applicator shall apply StreetBondCL™ coating only when the air temperature is at least 10°C within 8 hours of application of the coating material. There should be no

ACN: 085 606 597
ABN: 65 085 606 597
PO Box 650
79-81 Intrepid St
Berwick VIC 3806
(P): 03 9707 0077
(F): 03 9707 0088
E: admin@mpspaving.com.au
W: www.mpspaving.com.au

precipitation expected within the 2 hours after the final layer of StreetBondCL™ coating is dry to touch.

B. Each application of StreetBondCL™ coating material shall be the same colour and shall be allowed to dry completely before applying the next layer.

C. The number of passes or layers of StreetBondCL™ coating is dependent upon the application. Three layers will generally be sufficient, depending upon the asphalt/concrete pavement texture and traffic.

3.4 Coating Thickness

Approximate coating thickness is as outlined in TABLE 2 below.

TABLE – COATING THICKNESS

	Thickness (approx.)			
	Wet		Dry	
Spray Passes	mm	mil	mm	mil
3	0.65	25.7	0.36	14.1
4	0.87	34.3	0.48	18.9

3.5 Opening to Traffic

Minimally, the StreetBondCL™ coating must be 100% dry before traffic is permitted. **TABLE 3** is a guide.

Air Temperature	**Relative Humidity**	**Time to Dry (approx)**
15°C	80%	8 hours
27°C	57%	4 hours
49°C	5%	2 hours

Substrate temperature, wind and humidity can also affect dry times. Generally, warm, and dry conditions decrease the time required for the coatings to dry.