

# Ministry of Transportation RECOGNIZED PRODUCTS LIST

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## INTERNET ADDRESS: http://www.gov.bc.ca/tran

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# INTRODUCTION / DEFINITIONS

The Recognized Products List document is intended for reference use by Contractors who are providing services or performing work for the Ministry of Transportation, which entails supplying or providing material.

Where possible, brand name products, which in the opinion of the Ministry satisfy the Ministry's generic specifications for the material type, or are otherwise satisfactory to the Ministry, are listed.

In some cases a qualifier on applicability or usage may be included.

This listing is not to be construed to be an endorsement of a given product, or in any way a guarantee of adequate performance relative to the specific Contract requirements.

Use of a listed material by a Contractor shall in no way relieve the Contractor from his contractual obligations.

This list is intended to be a *guide only* for Contractors to identify those specific brands of products which the Ministry feels generally meets its Specifications for particular purposes as:

"TENTATIVE" products which appear to meet requirements of the Standard Specifications and the specific requirements of the work, but have not yet been used extensively on Ministry of Transportation projects;

"PROVEN" products for which an adequate performance record has been established on Ministry of Transportation projects; and

"APPROVED" products for which the Ministry of Transportation has been directly involved in the development of the products for a very specific purpose unique to the Ministry (e.g. traffic paint).

The absence of a particular brand of product from this list does not necessarily imply that it does not meet the Ministry Specifications.

For the latest status of any product, users are encouraged to direct inquiries to the Committee by fax to the Ministry of Transportation, Geotechnical, Materials & Pavement Engineering, Victoria, fax no. (250) 356-2012 or email to: <a href="mailto:RPL@gov.bc.ca">RPL@gov.bc.ca</a>. The Committee also welcomes suggestions for improving its service.

Pamphlets explaining the Committee and including a products submission form are available from the Committee contact and from all Ministry of Transportation Regional Geotechnical, Materials & Pavement Offices throughout the Province.

# RECOGNIZED PRODUCTS LIST

**NOTE**: Throughout the List, a **three digit number in brackets** shown after the name of some products is an office "Product Submission Form" file number and has **no reference to the Product Name.** 

# **ASPHALT PRODUCTS**

## **ADDITIVES - GENERAL**

#### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

Redicote C2914 (318)

Sulphur Asphalt

Silicone Dow Corning DC 200 Fluid

Tall Oil Pitch Emulsion

Tall Oil Pitch (J-32A Juvenax A) – Note: will not be used any more but we have approximately 100 km of pavement constructed 1982-1984.

## **ANTI-STRIPPING AGENT**

#### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

Roadshop (McTar) 129-A (695)

Ad-Here LOF 65-00 (543) CES 446 Redicote C2914 (318)

Travcor 4505 (556)

Tall Oil Pitch (B.C. Chemicals Only) Indulin 814 (for H.F. Emulsions)

## **CUT BACKS**

As regulated by Ministry of Environment, Waste Management Act - Asphalt Plant Regulation (Part 3 Hot Mix Asphalt and Cutback Asphalt) these products may not be used on roadways between May 1 and Sept 30 as a primer or tack coat.

#### **PROVEN PRODUCTS**

#### **TENTATIVE PRODUCTS**

MC-250

RC-30

RM-20

SC-250

SC-70

# **EMULSIONS**

#### **HIGH FLOAT**

PROVEN PRODUCTS TI	ENTATIVE PRODUCTS
HF-100 HF-100S HF-100P HF-150S HF-150P HF-250 HF-500	

- High Float Emulsified Asphalt will be in accordance with the Standard Specifications for Highway Construction Section 951 - Asphalt & Paving Material for Highway Use.
- Sand when tested according to ASTM Designation C117 will have a mean Gradation within the following limits:

Screen (metric)	Percentage Passing
12.5 mm 9.5 mm 4.75 mm 2.36 mm 0.600 mm 0.300 mm	100 80 - 100 50 - 95 30 - 80 10 - 50 0 - 25
	<b>5 –</b> 5

- High Float Emulsified Asphalt will be used on pavements greater than ten years old or pavements
  where there are depressions at the cracks or where the majority of cracks are greater than 25 mm in
  width;
- Cracks sealed with High Float Emulsified Asphalt will be sanded after sealing to prevent the asphalt from Tracking. Excess sand will be removed. The sealant overband will not be so thick that it will produce a noticeable bump when driven across; and
- Routed or cleaned cracks will be filled with sealant the same day.

#### **RAPID SET**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
D0.4		
RS-1 RS-2K		

# **SLOW SET**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
EP2000 EP 94 HI-PEN PRIMER (MCTAR) (651) SS-1	

# **ENGINEERED PRODUCTS**

#### **MULTI-GRADE**

#### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

None at the present time but it will be introduced very soon.

#### **POLYMER ADDITIVES**

## PROVEN PRODUCTS

**TENTATIVE PRODUCTS** 

SBS Latex

#### **POLYMER MODIFIED**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Bitumen 352 (534)
	Husky Black Max (401)
	Imperial Oil – EB 350
	Imperial Oil – EB 352
	Infrapave Polymer Binder (473)

## **RUBBER ASPHALT**

#### **PROVEN PRODUCTS**

**TENTATIVE PRODUCTS** 

None at this time.

## **TACK COAT & PRIMERS**

# PROVEN PRODUCTS

**TENTATIVE PRODUCTS** 

EPT McAsphalt (811)

EP 94 HI-PEN primer (McTar) (651)

Emulsified Tall Oil Pitch - B.C Chemicals only

RC-30

RM-20

SS-1

CSS-1

Snap Tac

EP 2000

Husky Oil - EAP-2 (525)

# **EMULSIFIED PENETRATING PRIMERS**

# PROVEN PRODUCTS

**TENTATIVE PRODUCTS** 

EP 94

EP 2000

EAP-2

# **ASPHALT MAINTENANCE & REHAB.**

# **JOINT / CRACK SEALING SYSTEMS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Seal –cut (630)
	TOK Reinstatement Tape (547)
	TOK band Special (548)
	Denso Skid Resistant Tape (832)
	Denso Reinforcement Tape (833)

# PREFABRICATED CRACK SEALERS (MEMBRANES)

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Crack-a-Tac (274)	Beram 195 (593) Petrotac crack suppression membrane (729) Tapecoat M860 Road Repair (380) MiraTak (885)

# **REJUVENATORS**

# **CONVENTIONAL**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Cyclogen L (203) CRF-Restorative Seal (665) Reclamite	Rejuvenite (currently under review) Rap 400 (currently under review) Cyclogen P (948)

# **HOT-IN-PLACE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Rejuvoil 2 (834) Cyclogen L (203)	Cyclogen P (948)

# **RUBBERIZED & ELASTICIZED CRACK SEALANTS**

# **ENTIRE PROVINCE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Bakelite 590-13A	Beram 195 / 195/LM Hot Pour (594)
Bi-Crackee (433)	Crafco-521
CP Primer	Elsro 1191 (439)
Crafco Roadsaver 221	Elsro 1192
Crafco Roadsaver 231	
Elastopave 2110	
Hydrotech Sealz 6165	
Koch 9005 (133)	
Meadows Hi-Spec	
Shell Cariphalt	
Tremco THC 200	

# LOWER MAINLAND SUNSHINE COAST / VANCOUVER ISLAND

PROVEN PRODUCTS	TENTATIVE PRODUCTS
NOTE: All products listed for entire Province plus	:
Asphalt Rubber, Type 2 or "MS" Bakelite 590-13	Beram 190
Crafco Asphalt Rubber Plus (Viscous) Crafco Roadsaver 211 Flex-A-Fill	

# **SPECIALTY PAVING DEVICES**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	I.D. Locator (447)
	Popper (247)

# **SURFACE TREATMENT**

Hydrotech Sealz 6160 Meadows 164R Tremco THC 205

PROVEN PRODUCTS	TENTATIVE PRODUCTS
RC- 30	Enduraseal 300 (254)
SS-1	Rejuvaseal RA-1 (164)
CRF – Restorative Seal (665)	Rejuvail 1 (464)
Reclamite	Renoil RA-5 (251)

# **ASPHALT CRACK FILLER SEALANTS**

# PROVEN PRODUCTS

## **TENTATIVE PRODUCTS**

CRF – Restorative Seal (665) HF 150P

# **ASPHALT MIXES PROPRIETARY**

# **ASPHALT PATCHING**

## **ASPHALT BASED**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Everlasting Patch Mix WR Meadows Road Repair (Reg, Fine, and Bulk) Pavement Cold Patch (652) QPR 2000 (265) Unique Patch Mix	Blacktop Husky Black Mix (401) Innovative Asphalt Repair (569) Koch EXP Winter Patch (621) Perma-Patch (151) RC 1100 Cold Pour (331) Redicote 95S (318) Tapecoat M 860 Road Rep (380) Tag 8000 (479) Target – Cold Patching Asphalt WSPE-1 Spray Patch Emulsion (939)

## **EPOXY BASED**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
Miton 514 (138)	Everset Type II (358)	
Sikadur		
Sternflex 1 (362)		
Sternflex 2 (359)		
Talypon 1509-208 (344)		
Talypon 1509-205 (345)		

# **PORTLAND CEMENT BASED**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Duracal	Koch EXP Winter Patch (621)
Excel Permanent Cold Patch (646)	Ocean Patching
Express Repair	Road Repair 1170,1175,1178 (644)
SET 45	Flexcrete (713)

# **BRIDGES**

# **ALTERNATIVE COMPOSITE BRIDGE GIRDERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	0 (0.17)
	Compo-Girder (647)

# **BRIDGE BEARINGS**

# **DISC BEARINGS**

	PROVEN PRODUCTS	TENTATIVE PRODUCTS
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Fyfe Disk Bearings

# LOAD MEASURING BEARINGS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Reston (670)

# **POT BEARINGS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Reston (668)

# **SEISMIC ISOLATION BEARINGS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Seismic Isolation Bearings (623) (Seismic Isolation Products) Eradiquake Sliding Isolation Bearing (781)	Disktron Multirotational Seismic Load Bearing (780)
SHOCK ARSORPTION	

#### SHOCK ABSORPTION

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Jarret schock absorbing device (684)

## **SLIDING LAMINAR ELASTOMERIC BEARING PADS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Qualiflex (Z-Tech) (434)	Lasto-Flon Block Bearings (672) Lasto-Fol Separator Foils (676) Lasto-Strip Bearings NS/NSP/LS/TS (675)

# **BRIDGE BEARING PADS**

## LAMINAR ELASTOMERIC BEARING PADS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Locto Flon Block Boorings (672)
	Lasto-Flon-Block Bearings (672) Lasto Black Bearings NB (671)

# PLAIN ELASTOMERIC BEARING PADS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Qualiflex (Z-Tech) (434)	Lasto-pile bearings/Type NPU (673)

# **BRIDGE CONCRETE SEALANTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS

None at this time

# BRIDGE CONCRETE FORM AND SPACING SYSTEMS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Total Bond Bar Supports (Chairs) (721)	Fabric Forms (657)

# FIBER REINFORCED POLYMER WRAP SYSTEMS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
SEH 51/TYFO S	
SikaWrap Hex100G	
MBrace CF 130	
MBrace CF 530	
Mbrace EG 900	
Replark Type 30	
Replark Type MM	

# **PEDESTRIAN FENCING**

# PROVEN PRODUCTS

# TENTATIVE PRODUCTS

Dural (Z-Tech) (434)

# **BRIDGE DECKS**

# **DECK JOINT SYSTEMS**

# **ASPHALTIC PLUG DECK JOINTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Dridge Joint	Che Band #201 (726)
Bridge Joint Infra-Flex APJ Bridge Joint (599)	Sho-Bond #301 (736)
Jeene Joint (370)	
Koch B.J.S. (329)	
Oletex XE 300 (561)	
Series 1000(Z-Tech) (434) Series 2000(Z-Tech) (434)	
Silico Flex (654)	
Thorma Joint (192)	

# **COMPRESSION SEALS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Neoferma Joint Seals (723)
	Tensa Grip-Movement Joint Silent (679)
	Tensa Grip –Movement Joint (680)
	Tensa Lastic Grip (681)
	Britflex "NJ" (859)

# **FINGER JOINTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
	Tensa-flex finger (682)	

# **MODULAR JOINTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Transflex (857)

# **STRIP SEALS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
	Tensa – Acme joint Seals (678)	

# **DECK MEMBRANE SYSTEMS**

#### LIQUID

PROVEN PRODUCTS	TENTATIVE PRODUCTS				
Sterling Lloyd – Eliminator (172) Stop a Drop (954)	Britdex "MDP" (861) Bakor 780-11 (932) Rosphalt 50 (770) (includes paving aggregate)				

# **PREFABRICATED**

Bituthene 5000 Grace (450) Pavegard 180 BG (683) Protecto Wrap, M-400A (152) Tamco Bridgeguard (636) Tamko TWP Primer only (637)

# **DECK CONCRETE SEALANTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Capseal-X (Cappar)	Evercrete Top Seale (Surface Treatment) (615)
Capseal-U	Fabrishield 840
Chem-Trete BSM-40	Hydrozo Silane 40 M (Sternson) (365)
Concressive-AEX 3142SIL-ACT ATS 42	Isoflex 620
Dow-Corning 899	Iso-Flex 618
Duralane (Dural)	Miton 400 (147)
Marathon-40 (Watson)	PQ 6100 BM (529)
Masterseal 40C (Master Builders)	Sikaguard 70
Perma-Seal 444	Sikaguard 71H
Evercrete / Dynacrete DPS	- -
Suretreat	

Other silanes which satisfy Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 418 – Concrete Bridge Deck Sealants(Silane Surface Treatment of New Portland Cement Concrete).

# **COATING SYSTEMS**

# **CONCRETE**

## FIELD ANTIGRAFFITTI

## PROVEN PRODUCTS

Cappar, Capseal A50 Dow Corning, All Guard Elsro #736 Sternson, Acrytite Sikagard Color A50 GPA-200 SEI (853) Canyon-Tone (Conchem) (110) Spray-Deck (462)

**TENTATIVE PRODUCTS** 

Note: the above products may be suitable for steel

# **BRIDGE STEEL**

# Bridge Steel Coating Colour Guideline Per US Federal Specification 595b

	Steel Structure	US Federal		Application		
	Colour Choices (Top Coat)	Spec. No. (595b	DOH Colour	Visible Areas	Under Decks	Matching Railing Colour Choices
1	Mid-Grey	16314		O.K.	Yes	4, 6, 10, 11, 12, 13, 15,
2	Light Grey	16515		Yes	Yes	4, 6, 10, 11, 12, 13, 14,
3	Light Blue (Sky)	15187	M-6	Yes	Yes	4, 10, 11, 12, 13, 14, 16
4	Mid-Blue (Lake)	15180		O.K.	Yes	2, 3, 10, 11, 12, 13, 14, 16
5	Dark Blue (Navy)	15065		-No-	O.K.	2, 3, 6, 10, 11, 12, 16
6	Light Green (Grass)	14260		Yes	Yes	2, 6, 8, 10, 11, 12, 13, 14, 16
7	Mid-Green (Leaf)	14193		Yes	Yes	2, 6, 10, 11, 12, 13, 14, 16
8	Dark Green (Forest)	14090		O.K.	Yes	2, 6, 10, 11, 12, 16
9	Mid-Brown	10115		Yes	Yes	2, 3, 6, 10, 11, 12, 13, 14, 16
10	Yellow/Brown	10371		Yes	Yes	2, 3, 6, 13, 14, 16
11	Beige/Brown	12648		Yes	Yes	2, 3, 6, 9, 10, 11, 13, 14, 16
12	Orange (Highways)	12473		-No-	O.K.	2, 3, 6, 11, 12, 14, 16
13	Yellow	13538		-No-	-No-	N/A
14	Red	11310		-No-	O.K.	2, 3, 6, 10, 11, 12, 16
15	White	17886	B-3, D-2, D-3, T-2	-No-	-No-	N/A
16	Silver (Aluminum)	17178		Yes.	Yes.	3, 6, 10, 11, 12, 13

# **COATING SYSTEM SELECTION TABLE**

Application Area	Structural Environment	Coating System  Primer - Midcoat - Topcoat			
STRUCTURAL STEEL, SHOP APPLICATION SYSTEMS					
Steel, Shop	Standard New Steel Coating for Moderate to Severe Service	Inorganic zinc, epoxy, polyurethane			
Steel, Shop Weldable Primer	Not Used				
	Area  STRUCTURAL STEEL, SHOP A  Steel, Shop	STRUCTURAL STEEL, SHOP APPLICATION SYSTEMS  Steel, Shop  Steel, Shop			

	STRUCTURAL STEEL, FIELD A			
SF1	Steel, Field	Severe Field Application	Metallizing, epoxy, polyurethane	
SF2	Steel, Field	Standard Field Recoat for Moderate to Severe Service	Organic zinc, epoxy, polyurethane	
SF3	Steel, Field	Not Used		
SF4	Steel, Field	Not Used		
SF5	Steel, Field	Moderate	Alkyd on steel	
SF6	Steel Field	Moderate to Severe Field Application	Multi-Component Urethane Systems	
SF7	Steel Field	Moderate to Severe Field Applications where good gloss retention is critical	Organic Zinc, Epoxy, Polysiloxane	
SFIM1	Steel Field, Immersion	Moderate to Severe Field Application	Coal Tar Epoxy or Equivalent	
	STRUCTURAL STEEL, FIELD C	OVERCOAT SYSTEMS		
SFO1	Steel, Field Overcoat	Moderate to severe	Water-based Acrylics and Vinyls	
SFO2	Steel, Field Overcoat	Moderate to Severe	Water Based Single Component	
SFO3	Steel, Field Overcoat	Moderate to Severe	Solvent Based Single Component	
SFO4	Steel, Field Overcoat	Moderate to Severe	Solvent Based Surface Tolerant Epoxy	
SFO5	Steel, Field Overcoat	Moderate	Alkyd on steel CAN/CGSB-1.59M alkyds	
SFAG	Steel, Field Antigraffiti Coatings	Not Used	Varies with system	
	STRUCTURAL STEEL, TOUCH	UP SYSTEMS		
SFTA	Steel, Field Touchup Aerosol	Small Damaged Areas, or as a Holding Primer	Rust Inhibitive Primer / Topcoat	
SFTB	Steel, Field Touchup Brushable	Small Damaged Areas, or as a Holding Primer	Rust Inhibitive Primer / Topcoat	
	PENETRATING SEALERS			
SPS	Steel, Penetrating Sealers	Penetrating Sealers for Joints, Bolts, Rivets etc.	Various Unique Systems, Designed To Be Used With Coating Materials From The Same Manufacturer	
	CAULKING MATERIALS			
PCM	Paint Caulking Materials	For Non-immersion Service	Assorted	
	UNIQUE SITUATIONS			
U1	Steel, Unique Products	Moderate	Rust Inhibitive Sealer / Topcoat	
U2	Steel, Unique Products	Low Temperature, high humidity	Organic Zinc / Midcoat / Topcoat	
	WEATHERING STEEL			
SW *	Steel, Weathering Field Coatings	Under Development	Two or three coat systems	
	STEEL RAILINGS			
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SRG	Steel, Hot Dip Galvanizing	Preferred Treatment for Removable Railings See CAN/CSA –G164-M92 Specification	Hot Dip Galvanizing
SRM	Steel, Metallizing	Primarily for non-removable posts	Zinc - Zinc Aluminum Powder or Wire
	WOOD		
			Primer, Midcoat, Topcoat
WFR	Wood, Railings and Rub Rails	Moderate to Severe	CAN/CGSB-1.59M alkyds
WFT	Wood, Field Touchup	Moderate to Severe	Primer, Midcoat, Topcoat CAN/CGSB-1.59M alkyds

# STRUCTURAL STEEL - SHOP APPLICATION

#### SYSTEM - SS1

# INORGANIC ZINC PRIMER, EPOXY MIDCOAT, POLYURETHANE TOPCOAT

**Ministry Usage:** This system is designed for use in a shop coating environment where the new steel is protected from the weather during coating and curing. The system will provide good service in a moderate to severe field environment.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT
Proven Produc	ts					
Carboline	Carbozinc 11	None	Midcoat	Carboguard 893	None	Carbothane 134HG
ICI-Devoe	Cathcoat 302H/HB	None	Midcoat	Bar Rust 235	None	Devran 229
International Paint	Interzinc 22	None	Midcoat	Intergard 475HS	None	Interthane 990
Valspar/Cloverdale	13-F-605-(MZ-7)	None	Midcoat	76 series	None	40 series

- Depending on the system chosen, the inorganic zinc primer may require a mist coat to prevent bubbling in the mid-coat material.
- Inorganic Zinc must be dry and cured before additional coatings are applied.
- Note that any stripe coating must be placed on top of the inorganic zinc.
- While most of the above systems require SSPC-SP 10 surface preparation, SSPC-SP 5 "White Metal" blasting will typically give a longer service life.
- It is preferable to complete the system in the shop prior to shipping.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

# STRUCTURAL STEEL - FIELD APPLICATION

#### SYSTEM - SF1

## METALLIZING PRIMER, EPOXY MIDCOAT, POLYURETHANE TOPCOAT

**Ministry Usage:** This system is designed for use in a field coating environment where extreme exposure areas such as splash zones, fence posts (panels should be hot dip galvanized), bearings, expansion joints and any steel exposed to de-icing chemical solutions are present; or where structures are close to heavy industry.

COMPANY	PRIMER	SEAL STRIPE COAT COAT		MIDCOAT	2nd MIDCOAT	TOPCOAT
<b>Proven Produc</b>	ts					
Carboline	Zinc wire or powder	15% thinned midcoat	None	Carboguard 893	None	Carbothane 134HG
Valspar/Cloverdale	Zinc wire or powder	15% thinned midcoat	None	76 series	None	40 series
ICI-Devoe	Zinc wire or powder	15% thinned midcoat	None	Marine Bar Rust 236 or 235	None	Devran 229
Tentative Prod	ucts, acceptable	for use, bu	it not pro	oven.		
International Paint		15% thinned midcoat		Intergard 475 HS		Interthane 990
SURFACE PREPARATION SSPC-SP5 "White Metal", Profile: 50-100 µm (2-4 mils)						

- Previously galvanized railings, fence posts, and panels are to be "Brush-off" cleaned and top-coated with a different colour than the structure, after a wash primer is applied.
- Metallizing can be either of using zinc or zinc:aluminum::85:15 alloy wire thermal spray, flame process or spray and fuse powder process.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

## SYSTEM - SF2

# ORGANIC ZINC PRIMER, EPOXY MIDCOAT, POLYURETHANE TOPCOAT

**Ministry Usage:** This system is designed for use in a field coating environment with moderate to severe exposure areas. This is the most often used field coating system.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
Proven Products								
Carboline	Carbozinc 859	None	Midcoat over primer	Carboguard 893	None	Carbothane 134HG		
ICI-Devoe	Catha Coat 303H	None	Midcoat over primer	Bar Rust 231,235, or 236	None	Devran 229		
ICI-Devoe	Cathacoat 313	None	Midcoat over primer	BarRust 231	None	DevThane38 9H		
Valspar/Cloverdale	13-R-604 (MZ-4)	None	Midcoat over primer	76 series	None	40 series		
Cloverdale	ClovaZinc 3	None	Midcoat over primer	ClovaGuard	None	ClovaThane		
Sherwin Williams	SincClad III HS	None	Midcoat over primer	Macropoxy 646	None	Acrolon 218 HS		
<b>Tentative Produ</b>	Tentative Products, acceptable for use, but not proven.							
International Paint	Interzinc 52	None	Midcoat over primer	Intergard 475 HS	None	Interthane 990		
CLIDEACE DDEDAD	ATION SSDC SD 6.	NACE No.	3 Commercial Blast	Cleaning Minimum	Profile: 50-75			

SURFACE PREPARATION SSPC-SP 6/NACE No.3, Commercial Blast Cleaning, , Minimum Profile: 50-75 μm (2-3 mils)

- There shall be no inter-mixing of paints/solvents from different manufacturers.
- Note that any stripe coating must be placed on top of the primer coat and brushed to a strip width of 50 mm (2 inches) minimum as per SS216.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

## SYSTEM - SF5

## **ALKYD ON STEEL, THREE COAT**

**Ministry Usage:** This system is designed for use in a field coating situation where more moderate conditions are expected. It may also be used in areas where surface preparation is less than ideal.

STRUCTURE	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
Proven Products								
Steel Structure	General Paint 06-160 Grey with 05-550 thinner or equivalent	None	Midcoat over prime	Alkyd Midcoat (CAN/CGSB-1.59- 97	None	Alkyd Topcoat (CAN/CGSB- 1.59-97		
SURFACE PREPARA	SURFACE PREPARATION SSPC-SP 2, Hand Tool Cleaning or SSPC-SP 3, Power Tool Cleaning							

- While this system will work on the an SSPC-SP 2, Hand Tool Clean or an SSPC-SP 3, Power Tool
  Clean surface, service life will be improved on an SSPC- SP 6 Commercial blast surface. There shall
  be no inter-mixing of paints/solvents from different manufacturers.
- Note that any stripe coating must be placed on top of the primer coat and brushed to a strip width of 50 mm (2 inches) minimum as per SS216.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### **MULTI-COMPONENT URETHANE SYSTEMS**

**Ministry Usage:** This system is designed for use in a field coating environment in moderate to severe exposure areas.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
Proven Products								
Pacific Endura Finishes Ltd.								
SURFACE PREPARATION SSPC-SP 2, Hand Tool Cleaning or SSPC-SP 3, Power Tool Cleaning								

#### Notes for use:

- While this system will work on the an SSPC-SP 2, Hand Tool Clean or an SSPC-SP 3 Power Tool Clean surface, service life will be improved on an SSPC- SP 6 Commercial blast surface.
- Note that any stripe coating must be placed on top of the primer coat and brushed to a strip width of 50 mm (2 inches) minimum as per SS216.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SYSTEM - SF7

## ORGANIC ZINC, EPOXY, POLYSILOXANE

**Ministry Usage:** This system is useful in moderate to severe field applications where good gloss retention is desired.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT	
Tentative Products, acceptable for use, but not proven.							
Ameron	Amercoat 68HS		Midcoat	Amerlock 400		PSX 700	
International Paint	Interzinc 52		Midcoat	Intergard 475HS		Interfine 979	

- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SYSTEM - SFIM1

## STRUCTURAL STEEL, FIELD IMMERSION - COAL TAR EPOXY OR EQUIVALENT

**Ministry Usage:** This system is designed for use in a field coating environment in immersion situations.

MANUFACTURER	PRIMER	SEAL COAT	STRIPECOAT	MIDCOAT	2nd MIDCOAT	TOPCOAT	
Tentative Produ	Tentative Products, acceptable for use, but not proven.						
Ameron			Amercoat 78HB	Amercoat 78HB		Amercoat 78HB	
O a sh a line a			Bitumastic 300M or	Bitumastic 300M or		Bitumastic 300M or	
Carboline			Bitumastic 50	Bitumastic 50		Bitumastic 50	
ICI-Devoe	None Typically		Devtar 5A or	Devtar 5A or		Devtar 5A or	
ICI-Devoe	,,,,,		Devtar 247	Devtar 247		Devtar 247	
International Paint			Interseal 670HS	Interseal 670HS		Interseal 670HS	
Cloverdale			Clovatar 22	Clovatar 22		Clovatar 22	
Cioverdale			(Cloverdale 83022)	(Cloverdale 83022)		(Cloverdale 83022)	

- These coatings work best over SSPC-SP 5/NACE No.1, White Metal Blast Cleaning.
- Normally applied as a two coat system to ensure that the coating completely covers the substrate.
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- Some coal tar filled products are carcinogenic. Read the MSDS for detailed information.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing before acceptance or at times of application.

## STRUCTURAL STEEL - FIELD APPLICATION - OVERCOAT

#### SYSTEM - SFO1

#### WATER-BASED ACRYLIC OR VINYL SYSTEM

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools before repair and top coating. Sealcoat is optional but may be specified for sealing lap joints etc.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2 <sup>nd</sup> MIDCOAT	ТОРСОАТ			
<b>Proven Products</b>	Proven Products								
Ameron		Amerlock Sealer				Amercoat 220			
Carboline		Rust Bond				Carbocrylic 3359 DTM			
ICI / Devoe	Rustmaster 5571		Rustmaster 5572	Rustmaster 5572		Rustmaster 5573			
ICI / Devoe		Preprime 167				Devflex 4208			
International Paint	Intercryl 520		Intercryl 520	Intercryl 520		Intercryl 530			
International Paint		Interbond 600							
Tentative Products, acceptable for use, but not proven.									
Cloverdale	Cloverdale Primer 71289			Cloverdale Primer 71289		Cloverdale Acrylic 72229			

- These products are designed primarily for overcoating and encapsulating existing coatings.
- A test patch, and subsequent adhesion measurements and observation of compatibility are recommended prior to specifying this type of coating. This reduces the risk of overcoating.
- Manufacturer's instructions are used here because there are a wide range of possibilities that
  require specific details of cleaning, coating and curing to address each individual
  circumstance.
- Areas of old coating that are feathered back should be built up to the topcoat level, before overcoating.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SYSTEM - SFO2

#### WATER- BASED SYSTEM SINGLE COMPONENT

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools before repair and topcoating.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2 <sup>nd</sup> MIDCOAT	TOPCOAT	
Tentative Produ	Tentative Products, acceptable for use, but not proven.						
Cloverdale	71282					71282	

- These products are designed primarily for overcoating and encapsulating existing coatings.
- A test patch, and subsequent adhesion measurements and observation of compatibility are recommended prior to specifying this type of coating. This reduces the risk of overcoating.
- Manufacturer's instructions are used here because there are a wide range of possibilities that require specific details of cleaning, coating and curing to address each individual circumstance.
- Areas of old coating that are feathered back should be built up to the topcoat level, before overcoating.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SOLVENT- BASED SYSTEM SINGLE COMPONENT

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools. It may be used in moderate to severe exposures.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2 <sup>nd</sup> MIDCOAT	TOPCOAT	
Proven Products							
Camcoat Industries (BC) Ltd.	Xymax mono-zinc		Xymax mono- ferro	Xymax mono- ferro		Xymax Bridge Finish	
Termarust	None	Termarust 2200 (as per manufacturer's instructions)				Termarust 2100	
Wasser	MC Zinc	None	MC- miomastic	MC MIO Mastic	None	MC Ferrox-A)	
Tentative Products, acceptable for use, but not proven							
Cloverdale	None	Chemotex 5200				Chemotex 4100	

SURFACE PREPARATION Rusted areas and Delaminated areas: High pressure water wash then SSPC-SP 11, Power Tool Cleaning to Bare Metal. Undamaged areas high pressure water wash

- Do not use Cloverdale or Termarust products in areas of high abrasion or in areas where there is pedestrian access as the coating is soft and can be damaged.
- Wasser and Xymax coatings are moisture cured. The entire can should be used at once to prevent reaction and gelling of the coating in the can.
- These products are designed primarily for overcoating and encapsulating existing coatings.
- A test patch, and subsequent adhesion measurements and observation of compatibility are recommended prior to specifying this type of coating. This reduces the risk of overcoating.
- Manufacturer's instructions are used here because there are a wide range of possibilities that require specific details of cleaning, coating and curing to address each individual circumstance.
- Areas of old coating that are feathered back should be built up to the topcoat level, before overcoating.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SOLVENT- BASED SURFACE TOLERANT EPOXY

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools. It may also be used in damp or condensing areas on structures. It may be used in moderate to severe exposures.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT	
Proven Products							
Sigma	7476		7476			7476	
SURFACE PREPARATION Rusted areas and Delaminated areas: High pressure water wash then SSPC-SP 11, Power Tool Cleaning to Bare Metal. Undamaged areas high pressure water wash							

- This system is designed as a two coat system.
- These products are designed primarily for overcoating and encapsulating existing coatings.
- This material shall not be applied to damp or condensing surfaces.
- Edges shall be feathered and where possible, bare areas shall be built up to the level of the previous topcoat before overcoating.
- A test patch, and subsequent adhesion measurements and observation of compatibility are recommended prior to specifying this type of coating. This reduces the risk of overcoating.
- Manufacturer's instructions are used here because there are a wide range of possibilities that require specific details of cleaning, coating and curing to address each individual circumstance.
- Areas of old coating that are feathered back should be built up to the topcoat level, before overcoating.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### **ALKYD SYSTEM ON STEEL STRUCTURES**

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools. It may be used for moderate exposures.

STRUCTURE	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT
Proven Prod	ducts					
Steel Structure	06-160 Grey with 05-550 thinner	None	Midcoat over prime	DOH B-3 White DOH B-4 Grey (CAN/CGSB-1.59-97)	None	DOH C-2 Mid green DOH C-4 Grey DOH C-6 Mid blue (CAN/CGSB-1.59-97)
SURFACE PREPARATION SSPC-SP 2, Hand Tool Cleaning or SSPC-SP 3, Power Tool Cleaning						

#### Notes for use:

- Formulation 06-160 and thinner 05-550 are made by General Paint.
- All paints shall comply in all respects to the relevant current Canadian Government Specification Board (CGSB) specification as noted.
- Manufacturer's instructions are used here because there are a wide range of possibilities that require specific details of cleaning, coating and curing to address each individual circumstance.
- Areas of old coating that are feathered back should be built up to the topcoat level, before overcoating.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- There shall be no inter-mixing of paints/solvents from different manufacturers.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### SYSTEM - - PCM

## STEEL, PAINT CAULKING MATERIALS

MoT Usage:

These materials are designed to be used immediately under the topcoat material. They are compatible with most paint systems, but a test is recommended to ensure compatibility. They are used primarily to seal joints in steel structures to prevent the ingress of water in laps, splices etc. Manufacturer's instructions are followed for use.

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Tremco Mono	Sikaflex 1a

- These materials are applied on the midcoat, and then coated with the final topcoat.
- Typically the top and sides of a plate are sealed and the bottom is not caulked to enable water to exit
  the crack if any gets in.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.

All paints are subject to inspection and testing as specified by the Ministry Representative.

#### **SYSTEM - SFTA**

#### TOUCH-UP COATING SYSTEM, AEROSOL

#### SMALL DAMAGED AREAS OR AS A HOLDING PRIMER: AEROSOL PRODUCTS

**Ministry Usage:** This system is designed for quick touch-up use in a field overcoating situation where the original alkyd system is intact or where loose rust/paint can be removed by hand/power tools. It is designed as a stopgap measure until proper maintenance coating can be scheduled.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
<b>Proven Products</b>	Proven Products							
General Paint	06-160 Grey with 05-550 thinner		Alkyd Midcoat	Alkyd Midcoat (CAN/CGSB- 1.59-97)		Alkyd Topcoat (CAN/CGSB- 1.59-97)		
Pacific Evergreen Industries	Zinga							
Termarust	Termarust 2100					Termarust 2100		
Unistrut Building Systems	ZRC							
SURFACE PREPARATION	SSPC-S	P 2, Hand To	ol Cleaning or S	SSPC-SP 3, Powe	r Tool Cleaning	3		

- All coatings will work better on a properly prepared surface ie. High pressure water washed and abrasive blasted.
- All paints shall comply in all respects to the relevant current Canadian Government Specification Board (CGSB) specification as noted.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- Zinga confers some cathodic protection, while Termarust 8100 is an inhibitive barrier coat.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.
- These coatings are not designed for use on faying surfaces.

#### **SYSTEM - STFB**

## TOUCH-UP COATING SYSTEM, BRUSHABLE

#### SYSTEM SFTB SMALL DAMAGED AREAS OR AS A HOLDING PRIMER: BRUSHABLE PRODUCTS

**Ministry Usage:** This system is designed for brush application in a field touchup situation where the original alkyd system is intact and where loose rust/paint can be removed by hand/power tools

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
Proven Products								
General Paint	06-160 Grey with 05-550 thinner		Alkyd Midcoat	Alkyd Midcoat (CAN/CGSB- 1.59-97)		Alkyd Topcoat (CAN/CGSB-1.59- 97)		
Pacific Evergreen Industries	Zinga							
Unistrut Building Systems	ZRC							
Termarust	Termarust 2100					Termarust 2100		
SURFACE PREPARATION	N SSPC S	SP-2 "Hand To	ool Cleaning" o	or SP-3 "Power Too	ol Cleaning" or	SP-11 Industrial		

- All coatings will work better on a properly prepared surface ie. High pressure water washed and Sandblasted.
- Zinga confers some cathodic protection, while Termarust 2100 is an inhibitive barrier coat.
- Formulation 06-160 and thinner 05-550 are made by General Paint.
- All paints shall comply in all respects to the relevant current Canadian Government Specification Board (CGSB) specification as noted.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.
- These coatings are not designed for use on faying surfaces.

#### **SYSTEM - SPS**

# STEEL, PENETRATING SEALERS

MoT Usage:

These products are designed for use in the field to help seal joints, pack rusted areas riveted and bolted area, and generally any area where a product that will wick into any small cracks and crevices to help seal them. These products must be topcoated as most are epoxy based and will not provide good service in exterior sunlight.

MANUFACTURER	PRIMER	SEALCOAT	STRIPECOAT	MIDCOAT	2nd MIDCOAT	TOPCOAT			
Proven Products, acceptable for use									
Carboline		Rust Bond				As per Manufacturer's Instructions			
ICI-Devoe		Preprime 167							
Tentative Produc	Tentative Products, acceptable for use, but not proven.								
Ameron		Amerlock Sealer							
Cloverdale		Chemotex 5200				Agner			
International Paint		Interbond 600			I	As per Manufacturer's Instructions			
Termarust		Termarust 2200							
Wasser		Prepbond							

- It is important to apply these products exactly as the Manufacturer states since they do not tolerate over-thickness well.
- These products shall be used only with compatible products from the same manufacturer.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.
- When used as part of a coating system, these products shall be applied after the primer coat, before
  the stripe and midcoats. This is to take greatest advantage of the sacrificial primer which must be in
  electrical contact with the steel to be most effective.

# STEEL, UNIQUE SITUATIONS, ENCLOSED SPACES AND PROTECTED AREAS

#### MODERATE TO SEVERE CONDITIONS, NON IMMERSION STEEL ONLY

## **ENCLOSED SPACES AND PROTECTED AREAS**

**Ministry Usage:** This system is designed to use in situations where corrosion protection is desired and where high gloss is not as important. It is not for use in abrasive areas or where dirt retention is a problem.

COMPANY	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT		
Proven Products								
Termarust	None	Termarust 2200 Penetrating Sealer	Termarust 2100 if needed	None	None	Termarust 2100		
SURFACE PREPARATIONS	SPC SP-6 "Commercial" blast, New Steel SP-10 Near White Blast							

- The penetrating sealer shall be used to penetrate and seal rusted areas and lap joints that cannot be properly cleaned. This is a unique application and Manufacturer's instructions shall be followed
- These products shall be used only with compatible products from the same manufacturer.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- When used as part of a coating system, these products shall be applied after the primer coat, before the stripe and midcoats. This is to take greatest advantage of the sacrificial primer which must be in electrical contact with the steel to be most effective.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing as specified by the Ministry Representative.

#### LOW TEMPERATURE / HIGH HUMIDITY

**Ministry Usage:** This system is designed to use in situations where low temperature and /or high humidity preclude the use of other coating systems.

PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT			
Proven Products, acceptable for use								
MC Zinc	None	MC-MIO Mastic	MC-MIO Mastic	None	MC Ferrox-A			
MC-MIOZinc	None	MC-CR	MC-CR	None	MC-Luster			
Tentative Products, acceptable for use, but not proven								
Corothane I Primer	None	Corothane I Mastic	Corothane I Mastic	None	Corothane Ironox A			
	MC Zinc MC-MIOZinc Products, accep Corothane I	MC Zinc None  MC-MIOZinc None  Products, acceptable for  Corothane I None	MC Zinc None MC-MIO Mastic MC-MIOZinc None MC-CR  Products, acceptable for use, but not Corothane I	MC-MIOZinc None MC-CR MC-CR  MC-MIOZinc None MC-CR MC-CR  MC-MIOZinc None MC-CR MC-CR  MC-CR	MC Zinc None MC-MIO MC-MIO Mastic None MC-MIOZinc None MC-CR MC-CR None Corothane I None Corothane I None Corothane I None Corothane I None MC-CR None None None MC-CR None None Corothane I None Corothane I None None None None None None None None			

SURFACE PREPARATION SSPC-SP 6/NACE No.3, Commercial Blast Cleaning for new steel SSPC-SP 10/NACE No. 2, Near-white Blast Cleaning.

#### Notes for use:

- Wasser coatings are moisture cured, the entire can should be used at once to prevent reaction of the coating in the can from contact with atmospheric moisture.
- The Wasser coatings above may also be used at normal coating temperatures and humidities. Since
  it is cured by atmospheric moisture, it shall not be used in areas of low relative humidity
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- All paints are subject to inspection and testing as specified by the Ministry Representative.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.

#### **SYSTEM - SRG**

#### **RAILINGS - HOTDIP GALVANIZING**

**Ministry Usage:** This system is designed for use where small parts such as railing can be removed and sent to the galvanizing plant.

STRUCTURE	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT	
This category has been replaced by							
CAN/CSA-G164-M92, "Hot Dip Galvanizing of Irregularly Shaped Articles"							

- This is the preferred treatment for rails as it provides a very long life combined with low maintenance.
- The colour is grey, if colour is required, then the SRF or SRD coatings should be specified.
- Sections with closed tubes are not able to be hot dipped without relieving the tubes by drilling holes to let the hot gases escape. This must be designed into the item.
- Both the inside and outside of sections are coated with zinc.

Defects include inclusions, dross, runs and mottling.

#### SYSTEM - SRM

#### **RAILINGS AND POSTS - METALLIZING**

Ministry Usage: This system is used primarily to coat steel fence posts that cannot be easily

removed from a structure. It can however be used to coat any structural element in place. For elements which can be removed, hot dip galvanizing is

the preferred treatment.

STRUCTURE	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT	
NON-REMOVABLE HANDRAIL SECTIONS						ZINC	
SURFACE PREPARATION Surface preparation SSPC-SP 5/NACE No.1. White Metal Blast Cleaning							

#### Notes for use:

- Zinc or zinc/aluminum 85/15 wire or powder shall be used. This material is available from a number of different manufacturers and if metallurgically pure, will provide equivalent service.
- The surface to be coated shall meet SSPC- SP 12/NACE No. 5, NV-2 level immediately prior to coating.
- All materials are subject to inspection and testing as specified by the Ministry Representative.
- As long as cleanliness standards are maintained, this work may proceed at virtually any temperature.

#### FIELD APPLICATION - WOOD

#### **SYSTEM - WFR**

#### ALKYD SYSTEM WOOD RAILINGS AND RUBRAILS

**Ministry Usage:** This system is designed for use in a field over coating situation for wooden railings and rubrails where the original alkyd system is intact or loose paint can be removed by hand/power tools.

STRUCTURE	PRIMER	SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT				
Proven Products, acceptable for use										
Wood Exterior	DOH A-3 (CAN/CGSB-1.189- 2000)	None	None	DOH B-3 White DOH B-4 Grey (CAN/CGSB-1.59- 97))	None	DOH D-1 White latex (CAN/CGSB-1.138-97)  DOH D-2 White alkyd (CAN/CGSB-1.59-97) For guardrails: DOH D-3 White alkyd (CAN/CGSB-1.28-98)  For sign/posts: DOH T-1 Green alkyd DOH T-2 Yellow DOH T-3 White (CAN/CGSB-1.59-97)				

#### Notes for use:

- All paints shall comply in all respects to the relevant current Canadian Government Specification Board (CGSB) specification as specified.
- Color identification numbers are those of CGSB Schedule 1-GP-12c: Standard Paint Colours unless prefixed DOH as those of the Ministry of Transportation.
- All colors when dry shall match the designated CGSB or DOH colour chips.
- White colour has CGSB specification number 513-101.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All materials are subject to inspection and testing as specified by the Ministry Representative.

#### ALKYD SYSTEM FOR TOUCHUP ON WOOD STRUCTURES

**Ministry Usage:** This system is designed for use in a field over coating situation where the original alkyd system is intact or where loose paint can be removed by hand/power tools.

STRUCTURE PRIMER		SEAL COAT	STRIPE COAT	MIDCOAT	2nd MIDCOAT	TOPCOAT				
Proven Products, acceptable for use										
Wood Exterior	DOH A-3 (CAN/CGSB-1.189- 2000)	None	None	DOH B-3 White DOH B-4 Grey (CAN/CGSB-1.59- 97)	None	DOH D-1 White latex (CAN/CGSB-1.138-97)  DOH D-2 White alkyd (CAN/CGSB-1.59-97) For guardrails: DOH D-3 White alkyd (CAN/CGSB-1.28-98)  For sign/posts: DOH T-1 Green alkyd DOH T-2 Yellow DOH T-3 White (CAN/CGSB-1.59-97)				
SI	SURFACE PREPARATION SSPC SP-2 "Hand Tool Cleaning" or SP-3 "Power Tool Cleaning"									

#### Notes for use:

- All paints shall comply in all respects to the relevant current Canadian Government Specification Board (CGSB) specification as specified.
- Color identification numbers are those of CGSB Schedule 1-GP-12c: Standard Paint Colours unless prefixed DOH as those of the Ministry of Transportation.
- All colors when dry shall match the designated CGSB or DOH colour chips.
- White colour has CGSB specification number 513-101.
- All paints must bear the manufacturer's name and address, batch number, paint type, color code, and mixing and application instructions.
- All paints are subject to inspection and testing before acceptance or at times of application.

#### Bridge Steel Coating Colour Guideline Per US Federal Specification 595b

	Steel Structure	US Federal		Applic	ation	
	Colour Choices (Top Coat)	Spec. No. (595b	DOH Colour	Visible Areas	Under Decks	Matching Railing Colour Choices
1	Mid-Grey	16314		O.K.	Yes	4, 6, 10, 11, 12, 13, 15,
2	Light Grey	16515		Yes	Yes	4, 6, 10, 11, 12, 13, 14,
3	Light Blue (Sky)	15187	M-6	Yes	Yes	4, 10, 11, 12, 13, 14, 16
4	Mid-Blue (Lake)	15180		O.K.	Yes	2, 3, 10, 11, 12, 13, 14, 16
5	Dark Blue (Navy)	15065		-No-	O.K.	2, 3, 6, 10, 11, 12, 16
6	Light Green (Grass)	14260		Yes	Yes	2, 6, 8, 10, 11, 12, 13, 14, 16
7	Mid-Green (Leaf)	14193		Yes	Yes	2, 6, 10, 11, 12, 13, 14, 16
8	Dark Green (Forest)	14090		O.K.	Yes	2, 6, 10, 11, 12, 16
9	Mid-Brown	10115		Yes	Yes	2, 3, 6, 10, 11, 12, 13, 14, 16
10	Yellow/Brown	10371		Yes	Yes	2, 3, 6, 13, 14, 16
11	Beige/Brown	12648		Yes	Yes	2, 3, 6, 9, 10, 11, 13, 14, 16
12	Orange (Highways)	12473		-No-	O.K.	2, 3, 6, 11, 12, 14, 16
13	Yellow	13538		-No-	-No-	N/A
14	Red	11310		-No-	O.K.	2, 3, 6, 10, 11, 12, 16
15	White	17886	B-3, D-2, D-3, T-2	-No-	-No-	N/A
16	Silver (Aluminum)	17178		Yes.	Yes.	3, 6, 10, 11, 12, 13

### **CORRUGATED STEEL PIPE**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction - Section 320, qualifies under this section.

### **CULVERT SYSTEMS**

### **MISCELLANEOUS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Boss 2000	PVC Pipe (Flex-Lox) (533) Solflo single (724) Solflo Max (724) Double Zinc Atlantic (757) Soleno HDPE Pipe (767)

#### FITTINGS AND END TREATMENTS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
PRO-ECO-LTE Structural Headwall (718)	A.B.C. 3 X 3 Brown Water tube (710) Culvert Debris Deflector (187) Ages Distarge Tube (829)
PLASTIC DRAINS	
PROVEN PRODUCTS	TENTATIVE PRODUCTS

### **DE-ICING CHEMICALS**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

Freezegard System (550-4)

Calcium Chloride (372)

Ice-Stop (130)
K-Mix (201)
Sodium Chloride
Magnesium Chloride

CMA

Sodium Formate Nu-Salt (153)

\*Salt

Calcium Chloride - CGSB 15-GP-1M Sodium Chloride - CGSB 15-G9-9M

Note: CGSB Specifications are obtainable from Canadian Government Specification Board

Ottawa, Ontario K1A 0S5

### **DUST PALLIATIVES**

# PROVEN PRODUCTS TENTATIVE PRODUCTS

Magnesium Chloride Calcium Chloride Calcium Lignosulphonate Sodium Lignosulphonate BA 65 (under evaluation, summer2003)

DC-40 (827)

Note: Only those products containing the above chemicals and conforming to the B.C. Ministry of Environment, Lands, and Parks' Environmental Standards shall be considered for use as dust

palliative.

Calcium Chloride 38% (328) 77% Calcium Flake 94% Calcium Mini Pellets

<sup>\*</sup>The new MoTH Standard SpecificationS for Highway Construction Section 991 Calcium Chloride and Sodium Chloride shall apply

# **ELECTRICAL EQUIPMENT – APL0106**

Please quote the above number when making a request to the Ministry on this section.

Note: The following is a list of suppliers and their product(s) who have successfully been preapproved to supply the Ministry of Transportation.

### **GENERAL EQUIPMENT**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Circuit Breakers	Square 'D'	QO	n/a
2	Size 1 - 4 pole lighting contactors	Westinghouse	A202KIDA	n/a
3	Flasher Unit	Electro Systems	TFF-12	n/a
4	Photocells	Precision Multiple Controls Inc.	869ON (105-285V)	n/a
5	Photocells Receptacles	American Electric	99000	n/a
6	Padlocks	Associated Lock	AS-HWY-1	n/a
7	35 W LPS Pedestrian Underpass Luminaire	Valid Manufacturing		n/a
8	Banner Hangers	Globe Foundry	BB100	n/a
9	End Mount Plumbizer	Econolite Canada	C00641P001 c/w Kit no. SE-3045	n/a
10	Illuminated Pedestrian Crosswalk Signs	Valid Manufacturing		n/a
11		Electrome 6A		Apr/06

# **LIGHTING EQUIPMENT LUMINAIRES & ACCESSORIES**

### **ROADWAY LUMINAIRES**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
	Roadway Luminaires			
1	150W HPS Roadway Luminaires with standard glass refractors (120V) 313 series. Photometric file: AE2030I.IES	T&B	MoTH-SC314-00660	Sep-98
2	150W HPS Roadway Luminaires with flat glass lens (120V) 313 series, Photometric file: AE4505I.PHT	T&B	MoTH-SC314-00656	Sep-98
3	250W HPS Roadway Luminaires with standard glass refractors (120V). 125 series, Photometric File: AE38421.PHT	T&B	MoTH-SC326-00661	Jul-98
4	250W HPS Roadway Luminaires with flat glass lens (120V). 125 series, Photometric file: P5820.IES	T&B	MoTH-SC326-00659	Jul-98
5	400W HPS Roadway Luminaires with standard glass refractors (120V). 125 series, Photometric file: AE38421.PHT	T&B	MoTH-SC326-00662	Jul-98
6	400W HPS Roadway Luminaires with flat glass lens (120V) 125 series, Photometric file: TB_P5718.IES	T&B	MoTH-SC326-00596	Jul-98
7	150W HPS Roadway Luminaire with flat glass lens (120V), Photometric file: OVF1S2D.IES	Cooper	MoTH-OVF15 IIMC	Aug-98
8	250W HPS Roadway Luminaire with flat glass lens (120V) Photometric file: OVF2S2D.IES or OVF2S3D.IES	Cooper	MoTH-OVF25S IIMC	Aug-98
9	400W HPS Roadway Luminaire with flat glass lens (120V) Photometric file: OVF4S2D.IES	Cooper	MoTH-OFV40S IIMC	Aug-98
10	150W HPS Roadway Luminaires with standard glass refractors (120v) M250A2 Photometric file: GE7230.IES	GE	MoTH- M2AR15S1M1GMS2 1108 c/w Encapsulated Starting Aid	Aug-98
11	150W HPS Roadway Luminaires with flat glass lens (120v) M400A Photometric file: 98081903.IES	GE	MoTH- MDCL15S1M12FMC 21108 c/w Encapsulated Starting Aid	Aug-98
12	250W HPS Roadway Luminaires with standard glass refractors (120v) M400A Photometric file: 98072104.IES	GE	MoTH- MDRL25S1A12RMC 31108 c/w Encapsulated Sarting Aid	Aug-98
13	250W HPS Roadway Luminaires with flat glass lens (120v) M400A Photometric file: GE1006.IES	GE	MoTH- MDCL25S1A12FMC3 1108 c/w Encapsulated Starting Aid	Aug-98
14	400W HPS Roadway Luminaires with standard glass refractors (120V) M400A Photometric file: GE1011.IES	GE	MoTH- MDRL40S1A12RSC3 1108 c/w Encapsulated Starting Aid	Aug-98
15	400W HPS Roadway Luminaires with flat glass lens (120V) M400A Photometric file: 98040209.IES	GE	MoTH- MDCL40S1A12FMC3 1108 c/w Encapsulated Starting Aid	Aug-98

### **WALLMOUNT LUMINIARES**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
	Wallmount Luminaires			
16	150W HPS Wall Mount Luminaires (120V).	T&B	WP3G15S4-BCT	Apr-93
	Post Top Luminaires			
17	150W HPS Post-Top Luminaires (120V).	T&B	MoTH-246-H5962-8A	Apr-93

### **LUMINIARE ACCESSORIES**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
18	Glare shield for 150W Roadway Luminaires	T&B	55754	Apr-93
19	Glare shield for 150W Roadway Luminaires	GE	ELS-M2A	Jun-95
20	Glare shields for 250/400W Roadway Luminaires	T&B	55755	Apr-93
21	Glare shields for 250/400W Roadway Luminaires	GE	ELS-M4A	Jun-95
22	HID Lamps	Phillips		Mar-96
23	HID Lamps	Osram-Sylvania		Mar-96
24	HID Lamps	GE L	ighting	Mar-96

### **SIGN LUMINIARES& ACCESSORIES**

NO.	PRODUCT	AIMING ANGLE	ARM LENGTH (MM)	APPLICATION NOTES	MANUFACTURER	MODEL NO.	APPR. DATE
	Sign Luminaires						
1	Type A 100W HPS Sign Luminaires (120V). Photometric file: xxxxx.IES, Tilt=60 in AGI, Tilt fixture 30	30	1200	Use for 1.8m x 3.0m signs or smaller	Holophane	Predator, MoTH- PD100HP12KW4G	Apr-93
2	Type A 100W HPS Sign Luminaires (120V). Photometric file: GE8372.IES, Tilt=0 in AGI, Tilt fixture 0	0	1200	Use for 1.8m x 3.0m signs or smaller	GE Lighting	Versaflood II Signliter MOTH- V2FS10S1M1PSN4GRP c/w 5m of 14/3 SOW and Encapsulated Starting Aid	Nov-98
3	Type A 100W HPS Sign Luminaires (120V). Photometric file: 1972B.IES, Tilt=60 degrees using AGI, Tilt fixture 0	0	1200	Use for 1.8m x 3.0m signs or smaller	Metrolux (Div of Quality Lighting)	SignMaster Series, MoTH SI-17F-HPS100-(60)- 120-LG-SF-QD-RTP- NL	Oct-98
4	Type A 175W MV Sign Luminaires (120V). Photometric file: 36366.IES, Tilt=60 in AGI, Tilt fixture 30	30	1200	Use for 1.8m x 3.0m signs or smaller	Holophane	Predator, MoTH- PD175MV12KW4G	Jun-96
5	Type A 175W MV Sign Luminaires (120V). Photometric file: GE8374.IES, Tilt=0 in AGI, Tilt fixture 0	0	1200	MacGrid WG / KG Series	GE Lighting	Versaflood II Signliter MOTH- V2FS17M1A1PSN4GRP c/w 5m of 14/3 SOW and Encapsulated Starting Aid	Nov-98

NO.	PRODUCT	AIMING ANGLE	ARM LENGTH (MM)	APPLICATION NOTES	MANUFACTURER	MODEL NO.	APPR. DATE
6	Type A 175W MV Sign Luminaires (120V). Photometric file: 1972B.IES, Tilt=60 in AGI, Tilt fixture 0	0	1200	Use for 1.8m x 3.0m signs or smaller	Metrolux (Div of Quality Lighting)	SignMaster Series, MoTH SI-17F-MV175-(60)-120- LG-SF-QD-RTP- NL	Oct-98
7	Type A 250W MV Sign Luminaires (120V). Photometric file: 40896.IES, Tilt=0 in AGI, Tilt fixture 0	0	1600	Use for signs higher than 2.4m	Holophane	Sign-Vue II, MoTH- SNVW250WMVOOXD	Oct-98
8	Type A 250W MV Sign Luminaires (120V). Photometric file: 37223.IES, Tilt=60 in AGI, Tilt fixture 30	30	1600	Use for signs higher than 2.4m	Holophane	Predator, MoTH- PF250MV12KS4G	Nov-98
9	Type A 250W MV Sign Luminaires (120V). Photometric file: GE5506.IES, Tilt=0 in AGI, Tilt fixture 0	0	1600	Use for signs higher than 2.4m	GE Lighting	Versaflood II Signliter MOTH- V2FS25M1A1PSN3GRP c/w 5m of 14/3 SOW and Encapsulated Starting Aid	Nov-98
10	Type A 250W MV Sign Luminaires (120V). Photometric file: 1972A.IES Tilt=60 in AGI, Tilt fixture 0	0	1600	Use for signs higher than 2.4m	Metrolux (Div of Quality Lighting)	SignMaster Series, MoTH SI-17F-MV250-(60)-120- LG-SF-QD-RTP- NL	Oct-98
11	Type B 250W MV Sign Luminaires (120V). Photometric file: 37163.IES, Tilt=90 in AGI, Tilt fixture 0	0	1600	Use for signs wider than 3.0m and 2.4m high or less	Holophane	Panel-Vue, MoTH- PAN250MH12NTG	Apr-93
12	Type B 250W MV Sign Luminaires (120V). Photometric file: 37224.IES, Tilt=55 in AGI, Tilt fixture 35	35	1600	Use for signs wider than 3.0m and 2.4m high or less	Holophane	Predator, MoTH- PF250MV12NGR	Nov-98

### **POLE STRUCTURES**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Traffic Signal, Luminaire and Sign Poles	Nova Pole International		
		Westcoast Engineering Ltd.		
		Valmont Industries		Jun-95
		Power-Pacific Poles Ltd.		Nov-04
2	Frangible Bases	Pacific Mako	1730-003	May-94
		Canadian World Trading Inc.		Sep-97
		Globe Foundry		Sep-97
3	B reakaway Base – Luminaire Pole (Type 2-6.5 &8.0mm 280mm BCD)	Safety Base Ltd.	CS Coupler/ RP2C Reaction Plate / S3C Shroud	Sept-05
4	Breakaway Base – Luminaire Pole	Safety Base Ltd.		
	(Type 2 – 11.0 m 12" BCD)	Transpo Coupler (Nova Pole)	4125	Dec-99
5	Breakaway Base – Luminaire Pole	Safety Base Ltd.		n/a
	(Type 1 or 3 16" BCD)	Transpo Coupler (Nova Pole)	4100	Feb-00
6	Breakaway Sign Structures	Nova Pole International	-	Apr-95
		West Coast Engineering Ltd.		Apr-95
		H & H Welding Safety Base Ltd.		Apr-95 Sept 05

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
6	Barrier Stands	Nova Pole International		Apr-95
		Westcoast Engineering Ltd.		Apr-95
		Brenco Industries		Oct-96
		H & H Welding		Apr-95
7	Sign Bridge and Cantilever Sign Support Structures	Nova Pole International		-
		Westcoast Engineering Ltd.		Jun-95
		Valmont Industries		Jan-97
8	Highmast Pole	Nova Pole International		Jan-97
		Westcoast Engineering Ltd.		Jan-97
		Valmont Industries		Jan-97
9	Electrical Systems for Highmast Poles	Valid Manufacturing		Jan-97
		West Coast Electric Ltd.		Jan-97
		Sigma Technologies		Jan-97
10	Winches, Steel Cables, Head End Assembly and Drive Units for Highmast Poles	CU Phosco Lighting Limited <sup>1</sup>		Jun-96
11				

Approval pending submission of Winch and Head End Design test data

#### **POWDER COAT APPLICATORS**

NO.	PRODUCT	SUPPLIER	MODEL NO.	APPROVAL DATE
1	Altech Custom Coaters	Burnaby, B.C.		6-Aug-96
2	Hudson Plating	West 5 <sup>th</sup> – Vancouver, BC		6-Aug-96
3	Linex Industries Ltd.	Delta, B.C.		6-Aug-96
4	McCain Traffic Supply	Vista, California		6-Aug-96
5	Protek Powder Coating Ltd.	Kelowna, B.C.		6-Aug-96
6	Wesgar Industries	Port Coquitlam, B.C.		6-Aug-96
7	ABC Electro Powdercoating	Port Hope, Ontario		9-Sep-96
8	Automatic Coating Ltd.	Scarborough, Ontario		26-Aug-96
9	Ducan Powder Coating	Duncan, B.C.		20-Aug-96
10	Island Powder Coating	Victoria, B.C.		15-Aug-96

#### **POWDER COAT PRODUCTS**

This document contains a list of suppliers and their product(s) who have successfully been preapproved to supply the Ministry of Transportation.

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Polyester(TGIC)	Protech		
2	Polyester(TGIC)	Fuller-O'Brien		
3	Polyester(TGIC)	Cardinal		
4				
5				

### **SERVICE EQUIPMENT**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	30A-120/240 V, 1 Ø,Service Panels	Valid Manufacturing	HWYSP8	May-94
		West Coast Electric Ltd.		Jan-96
2	100A-120/240 V, 1 Ø,Service/Distribution Panels	Valid Manufacturing	HWYSP16	May-94
		West Coast Electric Ltd.		Jan-96
3	100A-120/240 V, 1 Ø,Service Disconnect Panels	Valid Manufacturing	HWYSD	May-94
		West Coast Electric Ltd.		Jan-96
4	100A-120/208 V, 3 Ø,Service/Distribution Panels	Valid Manufacturing	HWYSP3	May-94
		West Coast Electric Ltd.		Jan-96
5	Pre-emption Panels	Valid Manufacturing		N/a
		West Coast Electric Ltd.		N/a
6	Telephone Demarcation Panels	Valid Manufacturing	HWYTDP	May-94
		West Coast Electric Ltd.		Jan-96
7	Distribution Kiosks	Sigma Technologies		Apr-93
		Electrotec Industries		Jan-02
		Valid Manufacturing		May-94
		West Coast Electric Ltd.		Jan-96

### **SIGNAL EQUIPMENT**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Side Mount Kits (Single arm brackets, pole plates, bolts, and washers)	Greenlite Traffic	GEL189	Sep-94
		Globe Foundry		Apr-00
2	Spring cushion end hangers	Greenlite Traffic	GEL327	Sep-94
3	Spring cushion end sign hangers	Greenlite Traffic	GEL348	May-95
4	Spring cushion mid hangers	Greenlite Traffic	GEL307	Sep-94
5	Spring cushion mid sign hangers	Greenlite Traffic	GEL338	May-95
6	Plumbizer kit	Greenlite Traffic	GEL378	Sep-94
		Globe Foundry		Apr-00
		Canadian World Trading Inc.		Sep-97
7	Plumbizer and sign bracket	Greenlite Traffic	GEL379	May-95
		Globe Foundry		Apr-00
8	Flasher Luminaires	Greenlite Traffic	GEL125	Sep-94
9	Post top adaptors	Greenlite Traffic	GEL143	Sep-94
		Globe Foundry		Apr-00
10	Two-way spreaders (Tubular and T-Section) 18"	Greenlite Traffic	GEL410	Sep-94
		Globe Foundry		Apr-00
11	Three-way spreaders (Tubular and T-Section) 22"	Greenlite Traffic	GEL440	Sep-94
		Globe Foundry		Apr-00

<b>NO</b> .	PRODUCT Four-way spreaders (Tubular and T-Section) 22"	MANUFACTURER Greenlite Traffic	MODEL NO. GEL460	APPROVAL DATE Sep-94
	Section) 22"	Globe Foundry		Apr-00
13	Small spacer	Greenlite Traffic	GEL197	Sep-94
	oman space.	Globe Foundry	0	Apr-00
14	Large spacer	Greenlite Traffic	GEL198	Sep-94
• •	24.90 00400.	Globe Foundry	022.00	Apr-00
15	Finials	Greenlite Traffic	GEL133	Sep-94
		Globe Foundry	0 = 2.00	Apr-00
		Canadian World Tradind		Sep-97
16	Two-way sign mounting kit	Greenlite Traffic	GEL340	May-95
17	Span wire hanger and cable entrance	Greenlite Traffic	GEL360	Sep-94
18	Pedestrian Pushbuttons	Polara	BDLM (Bulldog) -red led	Nov-04
		47 <sup>th</sup> Parallel Traffic Products	Bull's Eye -red led	Nov-04
		Progressive Traffic Products	Bumble Bee -red led	Nov-04
	Signal heads without visors (200 Ø Red, 200 Ø Yellow and 200 Ø Green)	McCain		Jun-96
		Eagle	SRH130	Oct-98
		Econolite	EA31-BC	May-93
20	Signal head without visors (300 Ø Red, 200 Ø Yellow and 200 Ø Green)	McCain		Jun-96
		Eagle	SRH121	Oct-98
		Econolite	CA36-BC	May-96
21	Signal head without visors (300 Ø Red, 300 Ø Yellow, 300 Ø Green)	McCain		Jun-96
		Eagle	SRH103	Oct-98
		Econolite	TA31-BC	May-93
22	Signal head (200 Ø) with no lens and no visor	McCain		Jun-96
		Eagle		Oct-98
		Econolite	EAIX-BC	May-93
23	Signal head (300 Ø) with no lens and no visor	McCain		Jun-96
		Eagle	TALV DO	Oct-98
0.4	Pedestrian heads - 1 section	Econolite McCain	TAIX-BC	May-93
24	Pedestrian neads - 1 section		7000 BC	Jun-96 May-93
OF.	Dedectries hands with visers 2 section	Econolite	7090-BC	
25	Pedestrian heads with visors 2 section	McCain	DED2 BC	Jun-96
		Econolite	PED2-BC	May-93 Mar-99
26	Polycarbonate Signal Head (300	Eagle Econolite		Aug-01
27	ØRed,300 ØYellow, 300 Ø Green) Backboards, Visors, and Lenses	Econolite	-	May-93
	and ad, victor, and London	Eagle		Oct-98
		Fortran	_	Jan-94
		McCain		Jun-96
28	50 Watt halogen lamp and receptacle for fibre optic displays	Philips	50MR16/NFL24- EXZ	Mar-96
	ποτο ορτίο αισριαγό	GE	50MR16/NFL25- EXZ	Mar-96
		Osram-Sylvania	50MR16/24/NFL (EXZ)	Mar-96
		Leuci	EXZ-GÚ5,3	Jul-00
		lwasaki (Eye)	50MR16NFL (EXZ)	Aug-02

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
29	Traffic Signal lamps	Phillips		Feb-94
		Osram-Sylvania		Mar-96
		Duro-Test		Feb-94
		GE Lighting		Mar-96
30	Audible Signals	Novax	DS102A- S124VDC	Nov-94
31	1 Pair (2 Conductor) No. 18 Shielded Cable	Beldon	9318	
32	2 Pair No. 18 Shielded Cable	Impulse	181801	Apr-00
33	3 Pair No. 18 Shielded Cable	Beldon	9773	Oct-00
		Alpha	6024C	Oct-00
		Impulse	181803	Oct-00
34	4 Pair No. 18 Shielded Cable	Beldon	9388	Apr-00
		Impulse	18104	Apr-00
35	1.8 m Square ¾"RPVC Preformed Loop c/w 25m of twisted home run conducters	Valid Manufacturing	1818B	Oct-00
	(Dwg SP635-2.8.15)	Electromega	17-7306	Oct-00
		InterProvincial Traffic	ITS-RPL	Oct-00
36	1.8 m Square Flexible PVC Preformed Loop c/w 25m of twisted hone run	InterProvincial Traffic	ITS-FPL	Oct-00
37	conducters (Dwg SP635-2.8.15) 200mm Red LED Display	Gelcore	D08RA2-A4	Aug-00
31	20011111 Ned LED Display			Aug-00
		Dialight Precision Solar	4331110003	Mar-02
		Act One	T1-08R-004	Aug-02
		Leotek Electronics Corp.		Sept 05
38	300mm Red LED Display	Gelcore	D12RA4-A4	Aug-00
		Dialight	4331210003	Aug-00
	!	Precision Solar	I	Mar-02
		Act One Leotek Electronics Corp.	T1-12R-004	Aug-02 Sept 05
39	200mm Yellow LED Display	Gelcore	D08YA2-4	Aug-00
		Dialight	433111003	Aug-00
	l	Precision Solar	I	Mar-02
		Act One Leotek Electronics Corp.	T1-08A-004	Aug-02 Sept 05
40	300mm Yellow LED Display	Gelcore	D12YA4-4	Aug-00
		Dialight	433323001	Aug-00
	'	Precision Solar	"	Mar-02
		Act One Leotek Electronics Corp.	T1-12A-001	Aug-02 Sept 05
41	200mm Green LED Display	Gelcore	D08GA2-4	Aug-00
		Dialight	4322170001	Aug-00
	ı	Precision Solar	I	Mar-02
		Act One Leotek Electronics Corp.	T1-08G-004	Aug-02 Sept 05
42	300mm Green LED Display	Gelcore	D12GA7-4	Aug-00
		Dialight	4322270001	Aug-00
	I	Precision Solar	I	Mar-02
		Act One	T1-12G-001	Aug-02
		Leotek Electronics Corp.	11-120-001	Sept 05

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
43	300mm Sqr. Pedestrian Don't Walk LED	Gelcore	P09PAC-3S4	Aug-00
	Display	Leotek Electronic Corp.		Sept 05
		Act One	TP-12WP-002	Aug-02
		Dialight	4306774001	Aug-00
44	300mm Sqr.Pedestrian Don't Walk Signal	Gelcore		Aug-00
		Leotek Electronic Corp		Sept 05
45	300 mm Bi-modal Green/Yellow Left Turn	Gelcore	D12YGA7-4	Aug-00
	Arrow	Leotek Electronic Corp		Sept 05
	•	Precision Solar	'	Mar-02
		Dialight	4306730	Aug-00
46	Signal Bags	West Coast Engineering Ltd.	Signal sax	Dec-04
		ITS.	Signal shirts	Dec-04
47	Uninterruptible Power Supply	Alpha Technologies Clary Corp.	Novus 1000	Dec-04
		Clary Corp	SP1000 SR.SN	Dec-04
		Brownfield	BM124M11	Dec-04
45	Countdown Redestries Circust	Calana	DCC DEDC 044	luna 05
45	Countdown Pedestrian Signal	Gelcore	PSG-PFD2_01A PSC-121	June-05
		Tassinco		June-05
			430-7773-001	
		Dialight		June-05

# **UNDERGROUND ELECTRICAL EQUIPMENT**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPR. DATE
1	Large Round Plastic Junction Box Sections	Westcoast Engineering Ltd.	WCE-JB530-P	Apr-94
2	Large Round Steel Junction Box Lids	Westcoast Engineering Ltd.	WCE-L530-S	Apr-94
3	Large Round Plastic Junction Box Lids	Westcoast Engineering Ltd.	WCE-L530-P	Apr-94
4	Large Round Plastic Junction Box Drain Plates	Westcoast Engineering Ltd.	WCE-D530-P	Apr-94
5	Rectangular Plastic Junction Box Sections	Westcoast Engineering Ltd.	WCE-JB1324-P	May-94
6	Rectangular Steel Junction Box Lids	Westcoast Engineering Ltd.	WCE- L1324-S	May-94
7	Rectangular Plastic Junction Box Drain Plates	Westcoast Engineering Ltd.	WCE- D1324-P	May-94
8	Rectangular Junction Box Mid Braces	Westcoast Engineering Ltd.	WCE- MB1324	May-94
9	Large Round to Rectangular Plastic Junction Box Adaptors	Westcoast Engineering Ltd.	WCE- AP1324/530 - P	May-94
10	Small Round Plastic Junction Box Sections	Westcoast Engineering Ltd.	WCE-JB370-P	May-94
11	Small Round Steel Lids	Westcoast Engineering Ltd.	WCE-L370-S	May-94
12	Small Round Plastic Lids	Westcoast Engineering Ltd.	WCE-L370-P	May-94
13	Small Round Plastic Drain Plates	Westcoast Engineering Ltd.	WCE-D370-P	May-94
14	Concrete Junction Box (SP635-1.3.1)	A.E. Concrete Products	MoTH No. 5686	Jun-96
		Kon Kast Products	No. 950	Jun-96
NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE

15	Concrete Vault (SP635-1.3.3)	A.E. Concrete Products		Jun-96
13	Concrete vauit (31 000-1.0.0)	Kon Kast Products		Jun-96
16	4" by 20' 6" long multi-cell conduit - coloured innerducts (BL, OR, GR, BR), Schedule 40 RPVC outerduct (orange)	Carlon Telecom Systems	MFSS40A-020	Mar-96
		Opticom Manufacturing Network Inc.		Mar-96
17	4" by 20' 6" long multi-cell conduit - coloured innerducts (BL, OR, GR, BR), bullet resistant FRE outerduct	Carlon Telecom Systems	MBSS40A-020	Apr-96
		Opticom Manufacturing Network Inc.		Apr-96
18	4" by 10' 6" long multi-cell conduit - coloured innerducts (BL, OR, GR, BR), galvanized steel outerduct	Carlon Telecom Systems	MRSS40A-010	Apr-96
		Opticom Manufacturing Network Inc.		Apr-96
19	4" Schedule 40 pass through termination	Carlon Telecom Systems	MFT24S (type 2)	Mar-96
	kit	Opticom Manufacturing Network Inc.	526771200 (type F)	Mar-96
20	Spare innerduct spacers	Carlon Telecom Systems	MAES4	Mar-96
		Opticom Manufacturing Network Inc.	536005000	Mar-96
21	10' repair kit (1 innerduct occupied)	Carlon Telecom Systems	MFR14S	Mar-96
22	10' repair kit (2 innerducts occupied)	Carlon Telecom Systems	MFR24S	Mar-96
23	10' repair kit (3 innerducts occupied)	Carlon Telecom Systems	MFR34S	Mar-96
24	10' repair kit (4 innerducts occupied)	Carlon Telecom Systems	MFR44S	Mar-96
25	10' repair kit - specify combination of occupied innerducts when ordering	Opticom Manufacturing Network Inc.	536123090	Mar-96
26	0.250" FRE to Sch. 40 PVC adapter	Opticom Manufacturing Network Inc.	526331240	Apr-96
		Carlon Telecom Systems	MFAB4	Apr-96
27	0.250" FRE to Steel Threaded adapter	Opticom Manufacturing Network Inc.	526334050	Apr-96
		Carlon Telecom Systems	MRAB4	Apr-96
28	4" Steel to Sch. 40 PVC adapter	Opticom Manufacturing Network Inc.	526331250	Apr-96
		Carlon Telecom Systems	MRAF4	Apr-96
29	1 1/4" conduit plugs	Jackmoon U.S.A., Inc.	12D148U	Mar-96
30	2" conduit plugs	Jackmoon U.S.A., Inc.	20D236U	Mar-96
31	1 1/4" conduit plug - central hole for fibre optic cables 0.35"-0.57" f	Jackmoon U.S.A., Inc.	12S057SB	Apr-96
32	1 1/4" conduit plug - central hole for fibre optic cables 0.57"-0.70" f	Jackmoon U.S.A., Inc.	12S070SB	Apr-96
33	1 1/4" conduit plug - central hole for fibre optic cables 0.57"-0.70" f	Jackmoon U.S.A., Inc.	12S090SB	Apr-96

# TRAFFIC CONTROLLER PRODUCTS

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Controller Unit	Peek Traffic	LMD 8000 Rev 8K	Jan-04
2	Conflict Monitor	Peek Traffic	LNM12E Rev 18	Jan-04
3	Malfunction Management Unit	Peek Traffic	Double Diamond MMU TS1 Cardwith TS2 Covered	Jan-04
4	Programmable Logic Controller for Traffic Controller Assemblies	Omron	CPM1/CPM1A- 20CDR-D (24 VDC source,24 VDC input,24 VDC or 240VAC output)	Jan-04
5	Hand-Held Loader for Programmable Logic Controllers for Traffic Controller Assemblies	Omron	CPM1-EMU01-V1	Jan-04
6	Firmware (EEProm) Loader for Programmable Logic Controllers for Traffic Controller Assemblies	Omron	AT28C256 15PL 0022	Jan-04
7	Programming Cable Loader for Programmable Logic Controllers for Traffic Controller Assemblies	Omron	CQM1-CLF02	Jan-04
8	Cellular Telephone for Traffic Controller Assemblies	Motorola	S4018A	Jan-04
9	Cellular TelephoneAntenna for Traffic Controller Assemblies	Maxrad	MLPV8000 c/w MAML 195PLmounting hardware and cable	Jan-04
10	General Purpose Solid State Relay	Electro Systems	120-25-SSR 525 S/N	Jan-04
11	Solid State NEMA Load Switch	Electro Systems	Model 200	Jan-04
12	Solid State Two Pole NEMA Intersection Flasher	Electro Systems	Model204	Jan-04
13	Advanced WarningFlasher	Electro Systems	Model AW-2	Jan-04
14	Advanced Warning Card	Electro Systems or Thermatek Instruments	TEC-AW2	Jan-04
15	Pre-emption Interface Card	Electro Systems or Thermatek Instruments	TEC_DPE3	Jan-04
16	4-Phase Pedestrian Vehicle Interface Card	Electro Systems or Thermatek Instruments	TED-PV4	Jan-04
		Electro Systems or Thermatek Instruments	TEC-PV8	Jan-04
17	Two-pole Flasher	Electro Systems	Model TFF12	Jan-04
18	Loop Detector	Sarasota	GP6C	Jan-04
		E.D.I.	ORA2	Jan-04

		Reno A&E	222R	Jan-04
19	LCD Diagnostic Detector	Eberle	MORACLE/2	Jan-04
20	Power Supply Card	Thermatek Instruments	TEC-PS	Jan-04
21	Pedestrian Audible Signal	Novac or Traconex	APS-10	Jan-04
22	Mercury Relay Contactor	MDI or Durakool	SP-1130-120A	Jan-04
23	Flash Transfer Relay	Midtex	136—62T3A1	Jan-04
		AEMCO	136-4992	Jan-04
24	#14-6 Screw Lugs	Burndy	KPA-8C	Jan-04
25	120V Flash Control Relay	Potter & Brumsfield	KRPA-11AG-120	Jan-04
26	Traffic Controller Serial Communication Cable	Cabco	TEC-1 through TEC- 7 inclusive	Jan-04
27	Solid State Timer	ARTISAN	438 USA	Jan-04
28	K9-Relay 24VDC	Potter & Brumsfield	R10-EIX4-V700	Jan-04
29	Fire Signal Controller	Novax Industries Inc.	ELA 515	Sept 05

# **VIDEO DETECTION PRODUCTS**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Video Image Processor For Video	Traficon	VIP 3.2	Jan-04
	Detection	Trafcon	VIP3D.x	
		Iteris		
2	Video Detection Expansion Module	Traficon	2-I/O Extender	Jan-04
		Traficon	4-I/O Extender	Jan-04
		Iteris		
3	Surge Suppresor For Video	EDCO	CX06-BNCY	Jan-04
	Detection			
4	Image Processor Key Pad	Traficon	Trafico Programming	Jan-04
	Controller	Iteris	Key Pad	
5	Camera Focus/Zoom Controller	Traficon	Zoom Box	Jan-04
		Iteris		
6	Video Monitor	Phillips	LTC 9388/60	Jan-04
7	Power Supply for Video	Thermatek	TC-PS1	Jan-04
		Instruments		

# **WEB CAMERA PRODUCTS**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Day / Night Netwirk Camera with	Axis	Axis 221	July-05
	Autolris & Zoom Lens			
2	Heat / Blow 120V 105 Watt Pelco	Pelco	EH5729-1	July-05
	Enclosure			
3	Window Defroster	Pelco	WD57-1 120 V	July-05
4	Thermal Insulation	Pelco	TI57	July-05
5	Enclosur Mounting Arm	Pelco	EM-1900U	July-05
6	Power Supply	Sola	663-SCP30S15-DN	July-05
7	CDMA X1 Cellular Modem	Anydata or	EMIII Dual	July-05
		Airlink Comm	Raven	
8	Coaxial Cable	Various	LMR 400	July-05
9	Antenna	Max Rad	Various	July-05
10	Telephone Modem	US Robotics	USR5686E	July-05

# **SOLAR PRODUCTS**

NO.	PRODUCT	MANUFACTURER	MODEL NO.	APPROVAL DATE
1	Solar Flashing Beacon	Carmanah	R247C	Sept 05
	_	Technologies		
		JSF	1400 – 24hr Flashing	
		Technologies	Beacon	
2	Solar LED Pedestrian Cross Walk	Carmanah		
	Flashers	Technologies		
		JSF		
		Technologies		

# **EPOXY PRODUCTS**

#### **ANCHORING**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
CIA Gel Epoxy System (545) HST200 (597) HS200 (597) JR200 Power-Fast (758) Chem-Stud (759)	High Tech Structural Gel (687)

### **CRACK INJECTION**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
Concressive 1050-15 Concressive 1468 Sikadur 31 HI MOD Gel Sikadur 33	Sho-bond #101	

### **EPOXY GENERAL**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Bonding Agent ST-433 (372)	Bonding Agent ST-432 (361)
Bonding Agent ST-435 (372)	Everset Type II (358)
Miton 514 (138)	Miton 223 (141)
Sternflex 1 (362)	Miton 227 (143)
Ulcan Hanner Cap (619)	Pro-Proxy 300 Fast (609)
	Talygrout 100 (356)

### **EROSION CONTROL SYSTEMS**

#### **BLANKETS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Bon Terra (Various) EcoAegis (Bonded Fiber) (731) Geocoir/Dekowe (487) Multimat 100Geogrid (226) North American Green(Various) Soil guard (Bonded Fibre Matrix System) (440)	A-Jax Block Georidge (848) Aqua Dams (333) Foreshore Revetment Mattress (373) Made to degrade (459) Xcel Temp/Perm (478) AGES Premium Silt Fence Supergro (843)
	Gabion Mat (882)
	MacMat N 10, & 20 (880 & 881)
	Western Excelsior ECB (890)
	SI GeosolutionsTRM (891)

### **SILT FENCING**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
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Beltech Silt Fence (489) Layfield WBSF (892) AGES Premium Silt Fence (904)

### **EROSION -G ENERAL**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Deltalok (791)	Trilock Erosion Control (686) Enviroberm (691)

### **FASTENERS**

#### **GENERAL**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Strapbinder (627)	

### **GEOSYNTHETICS**

#### **GEOTEXTILES - WOVEN & NONWOVEN**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Geolon HP Series (883)	Beltech Silt Fence (489)
	Geoweb (224)
	Geocoir/Dekowe (487)
	Trevira Spunbond (227)
	Antiwash Geojute Plus (690)
	Webtech (826)
	Ages HS (828)
	Checkmate Geosynthetics (905)

### **CELLULAR CONFINEMENT SYSTEMS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Geoweb (224)

### **ENVIRONMENTAL LINERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Layfield Plastics 30mil PVC sheet	Bentofix (838)

### **GEOGRIDS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Mirafi XT\PWG Series (714)	Beltech Silt Fence (489)
Multimat 100 Geogrid (226)	MacGrid WG . KG Series
- , ,	Carthage Mills FX Series(870)
Pitchmastic (Tensar) (662)	E'Grid (889)
Tensar Bx Series	Tenax TT Sieries (894)
Tensar Ux Series	Mirafi AXEG Series (897)
Fortrac 20/13-20 (603)	Combi Grid (929)
Fortrac 110/30-20 (607)	Tenax MS 220/330 Series (689)
Fortrac 35/20-20 (604)	Strata Products
Fortrac 55/30-20 (605)	Paralink / Paragrid
Fortrac 80/30-20 (606)	MacGrid EB 20 / 30 (813)
	Checkmate Bx Series (905)
	Checkmate Ux Series (905)
	Secugrid (940)

### **GEOGRIDS-PAVEMENTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Nilex Glassgrid	MiraPave (994) PaveGrid FG Series (896)

#### **GEOMEMBRANES**

Note: This category is currently under revision

#### **GEODRAINS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
ADS Advan edge/HDPE (633) Miradrain 6000 Miradrain 9000 (136) RED Pak (281)	Tendrain (688) Delta Drain LD Series (893)

### **GEOCOMPOSITES**

Note: This category is currently under revision

### **GEOFOAM**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Geospec (855)	Plasti-Fab (799)

### HAZARDOUS WASTE MANAGEMENT

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Aqua Dams (333)
	Claymax (225)
	KCM Containment (400)
	HAZGARD 100 and 250 (907)
	HAZGARD 500 (908)
	HAZGARD 10000 (911)

### LIGHTWEIGHT FILL MATERIAL

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Geolite (711)	Plasti-Fab (799)
	Super Fill LW (925)
Note: see also Geofoam	

### **HIGHWAY SAFETY DEVICES**

#### **GLARE SCREENS**

#### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

Glare-Guard (519) Safe-hit (728) Carsonite (109)

#### **IMPACT ATTENUATORS**

The following products have met the certification requirements of the National Co operative Highway Research (NCHRP) Report 350, Test Level 3 and as such are acceptable for use by the Ministry.

#### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

Brakemaster 350 CAT – 350 Energite III Sand Barrels Fitch Sand Barrels Quad Guard React 350 SCI100GM Universal TAU-II Quad Trend

Adiem 350 Traffix sand barrels Quad Guard Elite Quad Guard LMC

#### WATER FILLED BARRIERS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Guardian Barrier System
	Triton Barrier System

\*Contact Highway Safety Section, Engineering Branch, Victoria, (Ed Miska (250) 387-7676), prior to using these products.

### PLASTIC DRAINAGE PIPE

#### P.E.

P.E. Plastic Drainage Pipe - Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction, Section 317 under this heading, qualifies under this section.

### P.V.C.

PVC Plastic Drainage Pipe - Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction, Section 318 under the same heading, qualifies under this section.

### **SHAPES, SPACERS & FITTINGS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
RACI - Spacers (Insulators) (234) Ring-Tite (886)	ADS Polythene End Sections (634) AGRU Pipes AGRU Liners (207) Royal Cobra Lock System (926)

#### **SPECIALTY APPLICATIONS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Boss 2000 (377)	ADS N-12 & N12HC Pipe (632)
Weholite (618) ACO S100 Power Draun (924)	Sure-Lok HDPE (748)
Perma-Loc (945) Ultra-Rib (944)	

# PORTLAND CEMENT CONCRETE

#### **ADMIXTURES**

#### **AIR-ENTRAINING**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Darex II - Grace (934 was Darex AEA - Grace (535) Daravair 1400 Grace (943) MBVR - Master Builders MBAE 90-Master Builders	Micro Air - Master Builders  NVR – Sternson  Websen Air – Websen

#### **HYDRATION CONROL**

PROVEN PRODUCTS	TENTATIVE PRODUCTS

Delvo Stabilizer (liquid or puck)

### **MISCELLANEOUS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Tylac 97314-00 (Reichold) (162)	Rheomac UW450 Anti-washout
Tylac 68015-00 (Reichold) (163)	VMA 358
Fibremesh (613)	VMA 362

#### **SET RETARDERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
Delvo Stabilizer (liquid or puck)	Daratard 17 – Grace Daratard HC - Grace Recover – Grace (943) Plastiment - Sika	

#### **SUPERPLASTICIZERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Daracem 19 (was Daracem 100) - Grace	SPN – Conchem
	Sternflo – Sternson
	Rheobuild 1000 - Master Builders
CorrCrete MCI – 2007 Cortec	Glenium 1466
	Glenium 3400 NV (Precast)
	Glenium 3030 NS (Ready Mix)
	Adva Cast 350 (927)
	ADVA 100 (930)
	ADVA 140 (933)

#### **WATER REDUCERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
WRDA L440 Non Chloride - Grace WRDA 82 Non Chloride - Grace WRDA Hycol Non Chloride - Grace	WRDA 20 Non Chloride - Grace Pozzolith 200N WRDA 64 - Grace (943) MIRA 92 Grace (943)
Pozzolith 322N Non Chloride – Master Builders Polyheed 997 Non Chloride – Master Builders	Recover Grace (943)

#### **ANCHORS - EXPANSION TYPE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
PROVEN PRODUCTS	TENTATIVE PRODUCTS

Hilti HSL (557) Machtle HLN (558) Redhead HL (559) Spit 2X (560)

### **ANCHORS - STUD/ADHESIVE TYPE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Acrylic-Tie AT (901)
	Epoxy-Tie SET, ET, ETF (902)
	Vinylester Glass Capsule Adhesive VGC (903)

### **ANTI-SKID TREATMENTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
SRM Grip (472)	Durabak (816)

### **BONDING AGENT**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
	Target Bonding Agent 935)	
Bonding Agent ST 433	Bonding Agent 432 (361)	
Bonding Agent ST 435 (372)	Everset Type II (358)	
Concressive	Industrial Formulators	
Powerbond	Miton 514 (138)	
Pro-Bond	Starpatch Acrylic 900 (301)	
Sikadur	Sternson	
	Strong Bond (Symons)	
	Talygrout 100 (356)	
	Target	

### **CORROSION INHIBITORS**

PROVEN PRODUCTS TENTATIVE PRODUCTS
------------------------------------

Cortec MCI 2005 Cortec MCI 2006 D.C.I. (Darex) (535)

### **CURING MEMBRANES**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Elsro 702 Sonneborrn (438) Vabar 300 (279)	Dayton Ritecure – Sternson (348) W.R. Meadows Webres – Websen Waterproof & Spec. Coating

### **GROUTS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Burke-2 (108)	Basalite Rehab Mix -(426)
Burke, Fast Patch 928 (126)	Dot Patch & Strong Bond (Symons) (580)
Flowcrete (703)	
Grout (Nonferrous) (127)	Everset Type II (358)
Grout (Standard 621) (128)	M-Bed Standard (369)
Miton 700 (144)	Basalite Microsil Anchor (424)
Miton 227 (141)	M-Bed Superflow (346)
Basalite Non Shrink (425)	
Machine Base Grout (699)	
Portland Expanding (708)	
1118 Grout (702)	
Rapid Set Non Shrink (321)	
Starpatch Patch (313)	
Starpatch Hard Top (314)	
Starpatch - Thin Set	
Starpatch Filling Mix (315)	

#### PATCHING PRODUCTS

#### **PROVEN PRODUCTS**

Basalite Rehab Mix -(426) Fast Set Patching Concrete (700)

Basalite Fast Patch (422) Fusion-Crete Crystals (638)

Highway Patch Insta-Patch

Rapid Set No Shrink Grout (323) Rapid Set Mortar Mix (320)

Rapid Set Cement (321) Rapid Set Concrete Mix (322)

Rapid Set DOT (467)

SET 45

SC100W (701) SC100D (704)

Basalite Traffic Patch (423) Trafffic Patch Fine (Target) (706)

Traffic Patch Course (705)

Wunder-Plast Swiss System (180)

#### **TENTATIVE PRODUCTS**

Basalite Dam Sac (421)

EMACO T415 EMACO T430

Epoxy Overlay/Polymer Concrete (437)

Fusion Crete (Reg Set) (123)

Flexcrete (713)

Five Star Highway Patch (194) Fusion Crete (Minute Set)

Gel Patch (712) MCI – 2038 (Cortec) MCI – 2039 (Cortec)

Quasite(patching blend) (209) RT-15 (Master Builders) (444) RE-18 (Master Builders) (445) Starpatch Thin Coat (316) Sealcoat Elastic Plus (652) Starpatch Patch Mortar (313) Starpatch Hard Top Mortar (314) Starpatch Skim-Coat (312)

Starpatch Filling Mix (315) Sylcrete 10 min Concrete Mender (277)

Thin Patch (Symons) (577)

Tapecoat M860 Road Repair (380) Verticle Patch (Symons non-sag) (582)

HD-50 (837) MG-Krete (937)

#### **SEALANT**

CIM Membranes (112) Cemflex (658) Chemco System 646 (129) Clear seal (460) Code Blue (544) Dynasylan BH-N (381) Hydrozo Silane 40 (365) Masonry Guard(Weather-bos) (642) Miton 400 (147) Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660) Sealobond (661)	PROVEN PRODUCTS	TENTATIVE PRODUCTS
Cemflex (658) Chemco System 646 (129) Clear seal (460) Code Blue (544) Dynasylan BH-N (381) Hydrozo Silane 40 (365) Masonry Guard(Weather-bos) (642) Miton 400 (147) Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		
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Code Blue (544)  Dynasylan BH-N (381)  Hydrozo Silane 40 (365)  Masonry Guard(Weather-bos) (642)  Miton 400 (147)  Pena-Seal (455)  Sealcoat Elastic (652)  Sealoflex (659)  Sealclear (660)		Chemco System 646 (129)
Dynasylan BH-N (381) Hydrozo Silane 40 (365) Masonry Guard(Weather-bos) (642) Miton 400 (147) Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		Clear seal (460)
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Masonry Guard(Weather-bos) (642) Miton 400 (147) Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		Dynasylan BH-N (381)
Miton 400 (147) Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		Hydrozo Silane 40 (365)
Pena-Seal (455) Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		Masonry Guard(Weather-bos) (642)
Sealcoat Elastic (652) Sealoflex (659) Sealclear (660)		Miton 400 (147)
Sealoflex (659) Sealclear (660)		Pena-Seal (455)
Sealclear (660)		Sealcoat Elastic (652)
Sealclear (660)		Sealoflex (659)

### **SIDEWALK TOPPING**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Epoxy Overlay/Polymer Concrete (Steilacoom) (437) Starpatch Skim Coat Mortar (312) System 400 (443)

### **SPECIALTY PRODUCTS**

TENTATIVE PRODUCTS
Dam Sac Rehab Mix (420) Ultimax (620) Voton (178)

### **PRESERVATIVES**

### **WOOD TREATMENT**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 908, Preservative Treatment - Wood Products, qualifies under this section.

### PROPRIETARY STRUCTURES

#### **ARCHES AND PIPES**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

AIL Super-Cor Bolt-a-Plate (655)

Armtec Multi-Plate Super Span

Siderar Arsa MP 150 (775)

Siderar Arsa MP 152S (775)

RECO Tech Span

Armtec Bridge-Plate (821)

Shotcrete Arch Note: unbound tendons are not permitted

Armtec Mini-Span (843)

#### **BRIDGE ABUTMENTS**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

Hilfiker Eureka Reinforced Soil(436) Hilfiker RSE Smooth Face ISOGRID SSL MSE Plus (629) Reinforced Earth TerraClass (264) VSL Retained Earth

### **RETAINING WALLS - (UP TO 5M IN HEIGHT)**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

Allan Block (324)

Evergreen Wall

Standard Unit Keystone

Versa-Lok Wall System

Lock + Load (720)

NOTE: facing slope not to be steeper than

United Lock - Block 10 vertical to 1 horizontal NOTE: with geosynthetic reinforcement NOTE: if geogrid reinforcement is specified,

Gabions PVC Maccaferri (124)

Tensar Mesa Plateau System

NOTE: Il geogrid Tennorcement is specimed,

Miragrid XT or Stratagrid geogrid shall be used

Stresswall (174) Maccaferri Terramesh (836)

NOTE: Hollow panels not permitted Redi-Rock (822)

**NOTE**: with geosynthetic reinforcement

NOTE: In areas of the Province where the number of freeze–thaw cycles will exceed 3000 over the design life of the project, dry pack (zero slump) concrete products will not be used. In these areas, wet poured concrete products may be used with a 4-6% entrained air requirement added to the requisition.

NOTE: All modular block systems with individual block heights of less than 300 mm. must have the top 4 courses grouted. Additional mechanical connections may be required for seismic design considerations.

### **RETAINING WALLS - (UP TO 9M IN HEIGHT)**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Hilfiker Eureka Reinforced Soil(436) Hilfiker Welded Wire Hilfiker RSE Smooth Face	Tensar Ares (719) <b>NOTE</b> : System approval based on HITEC CERF Report #40301using 1.52 m high by 2.74 m wide precast concrete panels
ISOGRID	with UX 1700HS HDPE geogrid soil reinforcement Tensar SierraScape
SSL MSE Plus (629) Reinforced Earth TerraClass (264) VSL Retained Earth	Reinforced Earth TerraPlus (862) Criblock (942) KeySystem 1 (931)
VOL Notamba Lant.	Armtec Wire Mesh Wall Systems (949)

NOTE: In areas of the Province where the number of freeze –thaw cycles will exceed 3000 over the design life of the project, dry pack (zero slump) concrete products will not be used. In these areas, wet poured concrete products may be used with a 4-6% entrained air requirement added to the requisition

NOTE: Approval for systems using wire mesh facing is conditional on compliance with AASHTO Standard Specifications for Highway Bridges, corrosion-resistance durability requirements.

### LANDSCAPING WALLS – (UP TO 3M IN HEIGHT)

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	C-Loc Vinyl Plastic Sheeting (750) Yard Blocks (787) Macaferri Green Terramesh (867) Deltalok (791)

#### SALT STORAGE STRUCTURES

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	<b>- -</b>
Cover-All Building Systems	Fabric Shelter (788
Colony Fabric Structures	Megadome / Superdome (with Fabrene type N705
•	fabric only)
Barr Fabric Structures (831)	Norseman Portable Shelter (922)
,	Diamond Fabric Shelter (938)

#### **SLOPE RETENTION SYSTEMS**

NOTE: All products qualifying under this category shall have a maximum 5m. Height (vertical equivalent).

NOTE: Slope Retention Systems are limited to a slope of up to 45 degrees. Systems installed steeper than 45 degrees must qualify as a retaining wall.

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
Tensar Sierra Slope Retention System	Deltalok (791)	

### **SOUND ATTENUATION WALL SYSTEMS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Whisper Wall	Durisol Sound Absorption Noise Barrier (950)

### **RAILWAY CROSSINGS**

#### **FLANGEWAYS**

### PROVEN PRODUCTS

HI-Rail PPI Rubber Interface

Polycorp Railseal Interface

#### **SURFACES**

#### **PROVEN PRODUCTS**

**TENTATIVE PRODUCTS** 

**TENTATIVE PRODUCTS** 

HI-Rail (rubber) Extruda-Rail (concrete) Rail-Way Inc.(concrete & rubber)

### **REINFORCING STEEL**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 911, Concrete-Steel & Iron qualifies under this section.

### ROADSIDE DEVELOPMENT PRODUCTS

#### **HYDRO-SEEDING**

#### **HYDRO-MULCHES**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
EcoAegis (731) Eco Fiber Spra-mulch Silva Fiber Soil Guard (440)	Hydrotech (732)

#### **TACKIFIERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
J-Tac M-Binder DS-Tack FX (764)	Earth Bond (664)

#### **LANDSCAPING**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

Commercial Tree Ties Interlocking Concrete Pavers Lava Rock (284) Stamped Concrete Finish (Bowmanite) Weed Barrier Geo Textile Driwater (725) Deeproot Barrier (468) Netlon Advanced Turf Trilock (686)

#### **REST AREA IMPROVEMENT**

#### PROVEN PRODUCTS TENTATIVE PRODUCTS

#### **Composting Toilets**

Clivus Multrum (733) Phoenix System (717)

#### **Environmental Cleanup**

BOE 505/BOE 510 (626)

#### **Miscellaneous**

Eco-Superwood (330)

Concrete Blocks (451)

#### **Picnic Tables**

Dominion pre-cast (Terrazzo Finish) Leko precast (Terrazzo Finish)

Maintenance Free Benches & Picnic Tables (538)

### Waste Receptacle – Machinery

Rough Country
Hide-A-Bag (Rollins) I BC Special Bear Proof
Refuse/Recycling Container (45 gallon capacity)
Hide-A-Bag (Rollins) II BC Special Bear Proof
Refuse/Recycling Container (90 gallon capacity)
Hide-A-Bag (Rollins) I Mini Special Bear Proof
Refuse/Recycling Container (32 gallon capacity)
Hide-A-Bag (Rollins) II Mini Special Bear Proof
Refuse/Recycling Container (64 gallon capacity)

### **ROAD MATERIALS - TEMPORARY**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Terra Mats (262)

### **SOIL STABILIZATION**

#### **ROADWAY BASE**

#### **ASPHALT EMULSIONS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
SS-1	Mohawk

#### **B.C. STABILIZER**

#### 1. <u>Lignosulphonate</u>

Test Parameter	Ammonium	Calcium	Sodium
Solids (wt %)	53.0	51.3	53.2
Water (wt %)	47.0	48.7	46.8
Relative Density	1.23	1.26	1.25
pH (1:1 with water)	4.2	6.8	5.2
Sugars (% of solids)	14.3	3.8	19.7
Ash (% of solids)	3.2	18.0	16.2
Viscosity (cp)	250	660	200

- 2. SS-1 asphalt Emulsion component in accordance with Specifications Section 311 of the Standard Specifications for Highway Construction.
- 3. Water component that is clean and soft with a conductance less than 200 V, ph @ 6.0 to 8.0 and fully compatible with SS-1 asphalt Emulsion.
  - J. Stabilizer mixture at equal parts asphalt Emulsion, lignosulphonate and water.

#### **Test Parameter**

SS-1 asphalt emulsion (volume %)	33.3
Water (volume %)	33.3
Lignosulphonate (volume %)	33.3
Relative density 1.09 – 1.10 Solids (weight %)	37.0
Solids (volume %)	31.3
7.0 – 8.0 Viscosity (cp)	50.0
Stability 24 hour	Stable
Compatibility	Compatible

#### **CALCIUM CHLORIDE**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 991 Calcium Chloride and Sodium Chloride shall apply.

#### **LIGNOSULPHONATES**

### PROVEN PRODUCTS

#### **TENTATIVE PRODUCTS**

Calcium Lignosulphonate Georgia Pacific Sodium Lignosulphonate ITT Rayonier

### **SUBGRADE BASE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	D 01 (500)
	Base Seal (568)
	CBR Plus Con-Aid (415)
	Consolid Blend (458)
	Conservex CX (with lime) (457)
	Descobond
	Enduraseal (120)
	Elastomer Method SFPF2000 (624)
	Geol-Bind ` ´
	ISS-2500 (549)
	Lime
	Lite-Con
	Mountain Grout (650)
	Paczyme Soil-sement (510)
	Top Seal
	Geosolid (928)

### **FOUNDATION BASE**

#### **EXPANDING INJECTION SOIL STABLIZERS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Uretek (956)

#### STEEL & IRON

#### **GENERAL**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 911 – Steel & Iron and 219 – Concrete Curb & Gutter & Storm Drainage, qualifies under this section,

Culvert Pipe, Half-Round Flume Catch Basin Boxes and Covers Cast Iron Frames for Cast Iron Basins and Manholes Barsplice Mechanical Couplers (653)

### STEEL & WIRE FENCING MATERIALS

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 316 –under the above heading, qualifies under this section.

#### PRE-CAST FENCE FOOTINGS

TROVENT RODOCTO	PROVEN PRODUCTS	TENTATIVE PRODUCTS
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Chain Link Fence Footing (Ericsson Manufacturing)

### STORMWATER and DRAINAGE MANAGEMENT

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Ring-Tite (886)	StormFilter (819)
Perma-Loc (945)	Interceptor A67 (825)
Ultra-Rib (944)	Stormtech Chambers (845)
,	Atlantis Water Management (852)
	Enviro Liner 6000 (910)

### **TIMBER**

#### **GLUE LAMINATE**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 905 – Glued Laminated, & 906 –Round Timber Piles, qualifies under this section.

#### **TIMBER MATERIALS**

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction Section 903, Timber Materials, and 904, Treated and Untreated, Fabrication & Handling, qualifies under this section.

# TRAFFIC CONTROL DEVICES

### **ACTIVE DELINEATORS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Sigma Technologies SMG (Barrier Side Mount)	J.S.Foster PD-5 (Post Mount)
Sigma Technologies TM1 (Barrier Top Mount)	HIL-Tech LEDline (Barrier Top Mount)
Sigma Technologies TM2 (Upgradeable Top	· · · ·
Mount)	
Harding Smartstud Wayfarer	Item Miracle MS200
J.S.Foster PF-8 (Post Mount)_	Item Miracle MS100
SunBeacon SB104 (Barrier Top Mount)	
JSF Active Barrier	

### **BARRIER MOUNTED REFLECTORS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Astro Optic B1 (235) Stimsonite 965 Stimsonite 960 Swareflex 3350-Glass bead (715) Swareflex 3351-Glass bead (715) BAM Flexible Rayolite 2001 (154) Rayolite 2002 (154) Rayolite 2003 (154) Rayolite G-1 Way (154) Rayolite G-2 Way (154) Scotchbrite Delineation Strip (851)	Astro Optics CM1 (104) Davidson PCBM T12 Item IMarker 701 Artuk FT-2 (895)

### **CENTRELINE REFLECTORS**

#### **PLOWABLE**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Stimsonite 96 Stimsonite 96LP	Rayolite Snow Plowable (steel)

#### **RAISED**

PROVEN PRODUCTS	TENTATIVE PRODUCTS	
Stimsonite 911 Stimsonite 88 3M 290 series Rayolite 8700 series Rayolite All Acrylic series Rayolite AA ARC-II series Rayolite 2002 series	Stimsonite 948 Stimsonite 953 Apex 921 AR Item IMarker 702	

#### **MISCELLANEOUS**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Lifegard Chennelizer (669) Barrier Stand (750) Portable Changeable message signs (863)	Traf-Fix Flags (291) Traf-Fix Stand (292) Traf-Fix Signs (293) Traffic Control Products (542) Superwood (330) Super bright roll-up signs (663) Versa Bump (319)

#### ROAD EDGE DELINEATION

PROVEN PRODUCTS	TENTATIVE PRODUCTS
4" Flexible Marker Posts (441)	Polytubes Highway Post (899)
Carsonite (109)	Ridan Composite Marker (960)

#### TRAFFIC BARRIERS - STEEL BEAM & WOOD POST

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction, of Section 312 - Steel Traffic Barriers & Wood Posts, qualifies under this section.

#### TRAFFIC BARRIERS – WATER FILLED

Products listed in this category provide visual delineation only. No traffic redirection should be considered.

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Road Runner –Premium Plastics (850)

#### TRAFFIC CONES

Any product which meets the requirements of the Ministry of Transportation and Highways Standard Specifications for Highway Construction of Section 322 – Plastic Traffic Cones, qualifies under this section.

#### **CONCRETE SINGLE POST SIGN BASES**

Max Sign Size	Base Mass
75 cm x 75 cm	46 kg
120 cm x 90 cm	75 kg

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Friedrich (500)	
Ericsson (523)	

#### **ROUND SIGN POST-BREAKAWAY BASE**

#### PROVEN PRODUCTS

**TENTATIVE PRODUCTS** 

Quickfix Sign Base QF 001 Skid Ril Sign Support System (Oct 2005)

#### ALTERNATE BACKFILL FOR CONCRETE SINGLE POST SIGN BASES

**TENTATIVE PRODUCTS** 

**BMK Polecrete** 

### TRAFFIC MARKING MATERIALS

#### **GLASS BEAD**

Any product which meets the requirements of AASHTO M-247-02 with a minimum roundness value of 75% true spheres, qualifies under this section.

#### **TEMPORARY**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Belpro Temporary Roadmarking "S" (340)	Yodock Barrier System (341) Removable Pavement Marking Tape (410) Wet Night Removable Marking Tape (411) Removable Blackout Pavement Mask (412) Durable pavement. marking Tape Ss. 1000 (413)

### **THERMOPLASTIC**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Interprovincial Traffic Services Can 100 (White)	Swarcotherm Hydro White (947)
Lafrentz Road Services Ltd 0320 (White)	
Lafrentz Road Services Ltd 0333 (White)	
Lafrentz Road Services Ltd 0358 (Yellow)	
Lafrentz Road Services Ltd 0359 (Yellow)	

### **TRAFFIC PAINT**

The following list details the suppliers and their formulations which meet our specifications for bidding on the Traffic Paint Supply:

### WHITE TRAFFIC PAINT (ALKYD)

Supplier	Contains Lead Pigment	Formulation	Year First Used	Year Last Used
Standard White		78-915		
General Paint	No	78-612	1996	1998
General Paint	No	78-915	1999	2002
Ibis Products	No	40-4948	2002	
Mills Paint	No	EX-004	2002	
Cloverdale Paint	No	79-424	2002	
Hannigan	No	A1	This product is approved for	
			use on a 1yr conditional basis (expires Dec. 31,2005)	

### YELLOW TRAFFIC PAINT (ALKYD)

Supplier	Contains Lead Pigment	Formulation	Year First Approved	Last Year Used
Standard Yellow		78-161		
General Paint	Yes	78-161	1991	2002
General Paint	No	78-965	1999	
General Paint	No	78-966	1999	
General Paint	No	78-967	1999	
Ibis Products	No	40-4845	1999	
Ibis Products	No	40-4923	2001	
Ibis Products	No	40-4925	2001	
Ibis Products	No	40-4949	2002	
Ibis Products	No	T-40-4973	2003	
Ibis Products	Yes	T-40-4975	2003	
Northern Pt/ (Cloverdale)	Yes	62321	2003	
Northern Pt/ (Cloverdale)	Yes	62324	2003	
`Hannigan <sup>'</sup>	No	A2	This product is approved for use on a 1yr conditional basis (expires Dec. 31,2005)	

### WHITE TRAFFIC PAINT (WATER BASED)

Supplier	Contains Lead Pigment	Formulation	Year First Used	Year Last Used
General Paint	No	78-916	1999	
General Paint	No	78-192	2000	
General Paint	No	78-034	2000	
General Paint	No	78-210	2002	
General Paint	No	78-211	2002	
Ibis Products	No	40-4844	1999	
Ibis Products	No	44-4964	2002	
Ibis Products	No	44-4956	2002	
Ibis Products	No	44-4958	2002	
Ibis Products	No	44-4960	2002	
Ibis Products	No	44-4962	2002	
Ibis Products	No	44-5010	2003	
Mills Paint	No	EX-006	2002	
Mills Paint	No	EX-007	2002	
Cloverdale Paint	No	79-426	2002	

### YELLOW TRAFFIC PAINT (WATER BASED)

Supplier	Contains	Formulation	Year First Approved	Last Year Used
	Lead Pigment			
Ibis Products	No	44-4955	2002	
Ibis Products	No	44-4959	2002	
Ibis Products	No	44-4963	2002	

### WET NIGHT HIGH VISIBILITY STRIPING SYSTEMS

PROVEN PRODUCTS	TENTATIVE PRODUCTS
Rainline (666) Bright Spot System 400 MMA (LaFrentz) Sno Pro Rumble Strip (LaFrentz) Sno Pro Thermo 0320 Diamond (LaFrentz) Sno Pro Thermo 0320 Gear (LaFrentz)	Stamark A380i (3M) ScotchLane 620 (3M) ScotchLane 750 (3M) PolyCarb-Mark 55.4 (Petersen) Innovative Performance System HPS 4 (Petersen) Epoplex LS50 (918) Epoplex LS90 (919) Epoplex Glowmarc 50 (920) Epoplex Glowmarc 90 (921)

### TRAFFIC MARKING DEVICES

### **ILLUMINATING LEDs**

PROVEN PRODUCTS	TENTATIVE PRODUCTS
	Lanelight MLK 150 (941) (MoT – test section req.) LEDline (959) (MoT Barrier tested – test section req.)

### **URETHANE INJECTION CRACK SEALERS**

### PROVEN PRODUCTS

TENTATIVE PRODUCTS

Miton 700 (144) Miton 773 (140)

### **WIRE ROPE**

Any product which meet the requirements of the Ministry of Transportation Standard Specification for Highway Construction of Section 917 – under the same heading, qualifies under this section.