

NEPCOAT - Qualified Products - List A

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

NEPCOAT Product No.	Coats	PRODUCTS - TESTED AND ACCEPTED	Slip Coef Class	Recom'd DFT (min/max) mil	Coating (min/max) micron	VOC (Delivered) lb/gal	g/L	QPL Accepted Dates
NEPCOAT LIST A - INORGANIC zinc rich primer / epoxy or urethane intermediate / aliphatic urethane finish								
A7-97	(T30)	CARBOLINE COMPANY						from
	Primer	Carbozinc 11 HS	B	2-3	50-75	2.4	288	3/3/99
	Inter	Carboguard 893 Epoxy Intermediate		4-6	100-150	1.6	195	until mtg.
	Topcoat	Carbothane 133 HB Aliphatic Polyurethane		3-5	75-125	3.2	384	fall 2004**
A9-97	(T47)	AMERON PROTECTIVE COATINGS						from
	Primer	Dimetcote D9 HS Inorganic Zinc Primer	B	3-4	75-100	2.7	320	3/28/01
	Inter	Amercoat 385 Multi-Purpose Epoxy		4-6	100-150	2.3	280	until mtg.
	Topcoat	Amercoat 450 HS Aliphatic Polyurethane		2-3	50-75	2.4	282	spring 2005

NOTES:

- 1 NEPCOAT is the NORTHEAST PROTECTIVE COATINGS COMMITTEE of CT, ME, MA, NH, NJ, NY, PA, RI, VT
 - 2 Products are accepted for use on NEW and 100% BARE EXISTING steel (cleaned by abrasive blasting) for bridges.
 - 3 (Ax-97) Products comply with NEPCOAT 97 Testing Standard (6/1/97) & Acceptance Criteria (3/30/00).
 - 4 (Ax-R31) Products comply with AASHTO R-31 Testing Standard & NEPCOAT Acceptance Criteria (3/16/04).
 - 5 The VOC values are provided by the testing lab. NEPCOAT max limit (3.5 lb/gal). DFT values are from manufacturer.
 - 6 Any change in formulation from that tested will result in removal of the product from the QPL.
 - 7 The full QPL term is for four years starting from the date of acceptance until the next bi-annual NEPCOAT meeting.
 - * Acceptance is CONDITIONAL pending submission within three years of successful 2-year field history.
 - ** The term is extended for one year if the identical product is being retested at the end of the term.
- HB= High Build MC= Moisture Cured MIO= Micaceous Iron Oxide PU= Polyurethane ZR= Zinc Rich

NEPCOAT - Qualified Products - List B

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

NEPCOAT Product No.	Coats	PRODUCTS - TESTED AND ACCEPTED	Slip Coef Class	Recom'd DFT (min/max) mil	Coating micron	VOC (Delivered) lb/gal	g/L	QPL Accepted Dates
NEPCOAT LIST B - ORGANIC zinc rich primer / epoxy or urethane intermediate / aliphatic urethane finish								
B7-97	(T31)	CARBOLINE COMPANY						from
	Primer	Carbozinc 859 Zinc Rich Epoxy Primer	B	3-5	75-125	2.7	325	2/18/99
	Inter	Carboguard 888 Epoxy Intermediate		3-5	75-125	2.8	330	until mtg.
	Topcoat	Carbothane 133 HB Aliphatic Polyurethane		3-5	75-125	3.2	384	fall 2004**
B9-97*	(T45)	SHERWIN WILLIAMS						from
	Primer	Zinc Clad III HS	B	3-5	75-125	2.8	330	3/28/01
	Inter	Macropoxy 646		5-10	125-250	1.9	230	until mtg.
	Topcoat	Acrolon 218 Acrylic		3-6	75-150	3.3	400	fall 2004
B10-97*	(T49)	M.A.B. INDUSTRIAL COATINGS						from
	Primer	Ply-Tile Epoxy Organic Zinc Primer	A	2.5-3.5	63-88	3.5	420	3/28/01
	Inter	Ply-Mastic Epoxy		5-7	125-175	1.3	150	until mtg.
	Topcoat	Ply-Thane 890 HS		2-6	50-150	2.6	310	fall 2004
B12-R31	(02-02)	WASSER PROTECTIVE COATINGS						from
	Primer	MC-Zinc	B	3-5	75-125	2.9	353	3/16/04
	Inter	MC-Ferrox B		3-5	75-125	3.2	378	until mtg.
	Topcoat	MC-Ferrox A		2-4	50-100	3.4	412	fall 2004

NOTES:

- 1 NEPCOAT is the NORTHEAST PROTECTIVE COATINGS COMMITTEE of CT, ME, MA, NH, NJ, NY, PA, RI, VT
 - 2 Products are accepted for use on NEW and 100% BARE EXISTING steel (cleaned by abrasive blasting) for bridges.
 - 3 (Bx-97) Products comply with NEPCOAT 97 Testing Standard (6/1/97) & Acceptance Criteria (3/30/00).
 - 4 (Bx-R31) Products comply with AASHTO R-31 Testing Standard & NEPCOAT Acceptance Criteria (3/16/04).
 - 5 The VOC values are provided by the testing lab. NEPCOAT max limit (3.5 lb/gal). DFT values are from manufacturer.
 - 6 Any change in formulation from that tested will result in removal of the product from the QPL.
 - 7 The full QPL term is for four years starting from the date of acceptance until the next bi-annual NEPCOAT meeting.
 - * Acceptance is CONDITIONAL pending submission within three years of successful 2-year field history.
 - ** The term is extended for one year if the identical product is being retested at the end of the term.
- HB= High Build MC= Moisture Cured MIO= Micaceous Iron Oxide PU= Polyurethane ZR= Zinc Rich

NEPCOAT - Acceptance Criteria for R31 Testing - List A, B

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

'97 NEPCOAT Testing Standard (6/1/97) & NEPCOAT Acceptance Criteria (7/22/97, 3/3/99, 9/22/99, 3/30/00)
 '02 AASHTO R31-02 Testing Standard & NEPCOAT Acceptance Criteria (3/16/04)

TEST NO. 1 - SLIP COEFFICIENT

Primer Acceptance criteria (min.)
 IOZ Slip coefficient 0.5 (Class B) required
 OZ Report results only

TEST NO. 2 - SALT FOG RESISTANCE (ASTM B117)

Delamination Acceptance criteria: none
 Rust / Blistering Acceptance criteria (max.):

<u>Primer</u>	<u>System</u>	<u>@ Hrs</u>	<u>max creep</u>	<u>ave creep</u>	<u>% length</u>	<u>in scribe</u>	<u>@ Hrs</u>	<u>Convers'n #</u>
IOZ	P-I-T	5000	4 mm	2 mm	3%	report	4000	8
OZ	P-I-T	5000	4 mm	2 mm	15%	report	4000	7

TEST NO. 3 - CYCLIC WEATHERING RESISTANCE (ASTM D5894)

Delamination Acceptance criteria: none
 Rust / Blistering Acceptance criteria (max.):

<u>Primer</u>	<u>System</u>	<u>@ Hrs</u>	<u>max creep</u>	<u>ave creep</u>	<u>% length</u>	<u>in scribe</u>	<u>@ Hrs</u>	<u>Convers'n #</u>
IOZ	P-I-T	5040	4 mm	2 mm	report	report	4032	9
OZ	P-I-T	5040	12 mm	5 mm	report	report	4032	8

GLOSS value Acceptance criteria: Report results only
 GLOSS % Retent'n Acceptance criteria: Report results only
 COLOR Change, Δe Acceptance criteria: Report results only

TEST NO. 4 - ABRASION RESISTANCE (ASTM D4060)

Weight Loss Acceptance criteria: Report results only
 Wear Index Acceptance criteria: Report results only

TEST NO. 5 - ADHESION (ASTM D4541)

Pull-Off Strength Acceptance criteria (min.) for both primer and PIT panels:
 IOZ 2.4 MPa (350 psi)
 OZ 4.1 MPa (600 psi)

TEST NO. 6 - FREEZE THAW STABILITY

Pull-Off Strength Acceptance criteria: to equal or exceed adhesion results of Test 5 for PIT panels

TEST NO. 7 - COATING IDENTIFICATION TESTS

VOC Acceptance criteria: 3.5 lb/gal (max)
 Coating properties Acceptance criteria: Report only

TEST NO. 8 - ATMOSPHERIC EXPOSURE (TWO YEAR) at ocean beach site

Acceptance criteria: To be determined / Report results

ITEM NO. 9 - FIELD HISTORY (TWO YEAR) Field history on five projects in one of four regions of the country

Acceptance criteria: Report results