



series 38

AAMA 2604-05

super durable powder coatings
volume 1



TIGER Drylac® Series 38 – Exterior or Interior

A highly weather and UV resistant powder coating based on Super Durable TGIC Polyester

Features

Superior Gloss and Color Retention
Excellent Weather Resistance
Good Mechanical Properties
Superior Chalking Resistance
Very Smooth Flow
Excellent Edge Coverage
Good Storage Stability

Typical Applications

Architectural Applications	Oil & Gas Industry
Land Management Facilities	Renewable Energy Industry
Cell Phone Towers	Defense Industry
Construction Industry	Automotive Equipment
Lighting Fixtures	Marine Applications
Park Furniture	Agricultural Equipment
Playground Equipment	Sports Equipment
Garage Doors	Recreational Vehicles
Stadium Seating	Lawn and Garden Equipment
Fencing	Railing

Standard Series 38

Smooth Matte (20±5*)
Smooth Matte Satin (30±5*)
Smooth Semi Gloss (60±5)
Smooth Glossy (85±5*)

Gloss level according to Gardner 60° ASTM D523

Custom Colors

Any other color or finish is available as a custom color with a 220-lb. minimum order. Due to pigmentation a small percentage of colors in the yellow, orange, red and purple range offer only limited UV stability. UV stability of custom color products in that color range must be verified by our production laboratories on a case by case basis.

Standard Packaging

44 lbs/20 kg carton or 5 lbs/2.5 kg Minipack

Specific Gravity

1.2 – 1.8 g/cm³ depending on pigmentation

Theoretical Coverage

Depending on pigmentation and processing conditions.
1 lb coats approx. 50 sq. ft. at 3 mils avg.
1 kg coats approx. 10 sq. m. at 75 microns avg.

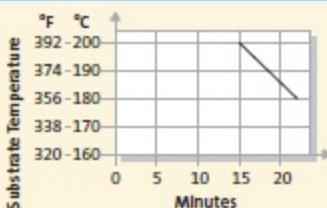
Processing

Electrostatic and Tribo/Airstatic Spraying, manual or automatic.

Dry Storage Stability

6 months at no more than 77° F/25° C

Cure Parameter



Note

A reasonable degree of loss of gloss and color variation due to long-term UV exposure can be expected.

On the cover:
Raymond James Stadium, Tampa, FL
Lanika Tower Honolulu, HI (Hanson Architectural Systems Inc.)
Street Lighting Fixture

TIGER SHIELD System

for superior corrosion protection (recommended for marine environments and coastal regions)

Product Description

The TIGER Drylac SHIELD System is a two-coat process combining optimum corrosion protection with highest weatherability.

The basis for the excellent corrosion resistance is either TIGER Drylac Zinc Rich Primer 69/90500, TIGER Drylac Dryprotective Primer 69/70000 or TIGER Drylac 09/73841 Out-gassing Forgiving Primer. This two coat system warrants an optimum non-porous film as well as excellent UV protection through the use of high quality polyester powder coatings.

Processing

Electrostatic and Tribo/Airstatic spraying, manual or automatic. All primers must be applied over a clean dry substrate, free of any contaminants and oxidation. Note: Time elapsed between application of TIGER Drylac 69/90500 Dryzinc Primer and topcoating with TIGER Drylac Series 38 Polyester must not exceed 12 hours max.

Steel/Iron



Aluminum

Under normal conditions a single coat of Series 38 powder coating is sufficient. In highly corrosive environments, as is found in coastal regions or industrial atmospheres, a 2-coat system comprised of TIGER Drylac Dryprotective 69/70000 plus a topcoat of Series 38 can be beneficial. Both products are engineered to complement each other and offer an excellent corrosion barrier. For objects exposed to extreme conditions, especially where there is a possibility of fillform corrosion, Chromate Conversion coatings or Chrome Phosphatizing has been proven to be an excellent pretreatment choice.

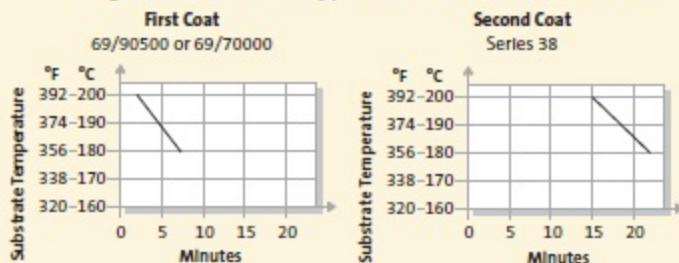
Cast Aluminum and Cast Steel

For porous substrates that are prone to out-gassing we offer a Out-gassing Forgiving Primer — TIGER Drylac OGF Primer 09/73841. For technical information and specific curing parameters please see our datasheet number 1304 online at www.tiger-coatings.us (download area, data sheets).

Cure Parameters

TIGER Drylac Zinc Rich and Dryprotective Primer

In general, we recommend only partial rather than full cure for the first coat.



Specific Gravity

TIGER Drylac Series 38: 1.2–1.8 g/cm³ depending on pigmentation.

TIGER Drylac 69/90500 Zinc Rich Primer: 2.72 ± 0.1g/cm³

TIGER Drylac 69/70000 Dryprotective Primer: 1.52 ± 0.1g/cm³

Theoretic Coverage

Depending on pigmentation and processing conditions and a specific gravity of 1.5, 1 lb coats approximately 50 sq. ft. at 3 mils avg. 1 kg coats approximately 10 sq. m. at 75 microns avg.

Test Results on Aluminum:

Corrosion Resistance Humidity Resistance 3000 hrs.—ASTM D 2247	Formation of blisters not to exceed "few" blisters size #8 as shown in Figure 4.0 ASTM D 714	No blistering
Salt Spray Resistance 3000 hours—ASTM B 117	Minimum rating of 7 on scribe or cut edges, and a minimum blister rating of 8 within the test specimen field, in accordance with the Table 1 and Table 2 Reference modification of ASTM D 1654	No blistering, no undercutting

Test Results on Steel:

Salt Spray Resistance* ASTM 117-90	Undercutting	Blisters	Adhesion
1000 hour	0	m0 / g0	Ct0
2000 hour	0–1	m0 / g0	Ct0
3000 hour	2–3	m2 / g1	Ct0

*Tested on a 2-coat system of Series 38 and TIGER Drylac® 69/90500 Zinc Rich Primer (substrate: steel—sandblasted)

Mechanical Properties:

Test	Results for basecoat alone 69/90500	Two-Coat System TIGER Drylac 69/90500 + TIGER Drylac Series 38
Film Thickness	2.4-2.6 mils/60±5µm	2.4-2.6 mils/60±5µm (Primer) 2.4-2.6 mils/60±5µm (Topcoat) Minimum requirement for a non-porous film!
Cross Hatch Adhesion ISO 2409 / ASTM D 3359	pass 100%	pass 100%
Mandrel Bending Test ISO 1519 / ASTM D 522	5/32 in./4 mm (3/16 in./5 mm)	3/8 in./10 mm
Impact test 1/10 In. Distortion ISO 6272 / STM D 2794-90	up to 40 in./lbs. (up to 20 in./lbs.)	up to 40 in./lbs. (up to 20 in./lbs.)
Cupping ISO 1520	5/16 in./8 mm (3/16 in./5 mm)	5/16 in./8 mm (3/16 in./5 mm)

Data in "()" reflects properties valid for TIGER Drylac 69/70000 Dryprotective.

TIGER Drylac™ Series 38 Super Durable Polyester Powder Coatings

Our Super Durable Polyester powder coatings are designed and engineered to be a single coat finishing system, with the exception of applications within extremely harsh environments, such as coastal or heavy industry regions (see TIGER Shield information in this brochure).

AAMA 2604-05 Compliant

All products featured in this brochure comply with the American Architectural Manufacturers Association's specification AAMA 2604-05

Bureau of Land Management Standard Environmental Colors

The BLM Standard Environmental Colors were developed by the US Government to assist with color selection to minimize the visual contrast of facilities in the landscape.

TIGER Drylac offers BLM colors in an environmentally friendly, long wearing, highly weather and UV resistant Super Durable powder coating formulation.

TIGER Drylac™ Smooth Glossy RAL Colors available in Series 38:

RAL 1001 • 38/15001	RAL 6007 • 38/50007	RAL 7010 • 38/70014	RAL 8001 • 38/60005
RAL 1002 • 38/20002	RAL 6008 • 38/50008	RAL 7011 • 38/70011	RAL 8002 • 38/60002
RAL 1013 • 38/10013	RAL 6009 • 38/50009	RAL 7012 • 38/70012	RAL 8003 • 38/60003
RAL 1014 • 38/15014	RAL 6010 • 38/50031	RAL 7013 • 38/70013	RAL 8004 • 38/60004
RAL 1015 • 38/15015	RAL 6011 • 38/50011	RAL 7015 • 38/70015	RAL 8007 • 38/60007
RAL 1016 • 38/20016	RAL 6012 • 38/50012	RAL 7016 • 38/70016	RAL 8008 • 38/60008
RAL 1019 • 38/15019	RAL 6013 • 38/50013	RAL 7021 • 38/70021	RAL 8011 • 38/60011
RAL 1020 • 38/20020	RAL 6016 • 38/50016	RAL 7022 • 38/70022	RAL 8012 • 38/60012
RAL 1023 • 38/20023	RAL 6017 • 38/50017	RAL 7023 • 38/70023	RAL 8014 • 38/60010
RAL 1024 • 38/20024	RAL 6018 • 38/50018	RAL 7024 • 38/70024	RAL 8016 • 38/60016
RAL 3012 • 38/30012	RAL 6019 • 38/50019	RAL 7026 • 38/70026	RAL 8017 • 38/60017
RAL 5004 • 38/40004	RAL 6020 • 38/50020	RAL 7030 • 38/70027	RAL 8019 • 38/60019
RAL 5007 • 38/40007	RAL 6021 • 38/50021	RAL 7031 • 38/70031	RAL 8022 • 38/60022
RAL 5008 • 38/40008	RAL 6022 • 38/50022	RAL 7032 • 38/70001	RAL 8023 • 38/60023
RAL 5011 • 38/40011	RAL 6026 • 38/50026	RAL 7033 • 38/70033	RAL 8024 • 38/60024
RAL 5013 • 38/40013	RAL 6027 • 38/50027	RAL 7035 • 38/70035	RAL 8025 • 38/60025
RAL 5017 • 38/40017	RAL 6028 • 38/50028	RAL 7036 • 38/70036	RAL 8028 • 38/60028
RAL 5018 • 38/40020	RAL 6029 • 38/50029	RAL 7037 • 38/70037	RAL 9001 • 38/10001
RAL 5019 • 38/40019	RAL 6032 • 38/50032	RAL 7038 • 38/70038	RAL 9002 • 38/10002
RAL 5020 • 38/40018	RAL 6033 • 38/50033	RAL 7039 • 38/70039	RAL 9003 • 38/10003
RAL 5021 • 38/40021	RAL 6034 • 38/50034	RAL 7040 • 38/70046	RAL 9004 • 38/80004
RAL 6000 • 38/50000	RAL 7000 • 38/70000	RAL 7042 • 38/70042	RAL 9005 • 38/80010
RAL 6001 • 38/50005	RAL 7002 • 38/70007	RAL 7043 • 38/70043	RAL 9010 • 38/10004
RAL 6003 • 38/50003	RAL 7004 • 38/70004	RAL 7044 • 38/70044	RAL 9016 • 38/10010
RAL 6004 • 38/50004	RAL 7005 • 38/70005	RAL 7045 • 38/70045	RAL 9017 • 38/80017
RAL 6005 • 38/50002	RAL 7006 • 38/70006	RAL 7046 • 38/70002	RAL 9018 • 38/10018
RAL 6006 • 38/50006	RAL 7009 • 38/70009	RAL 7047 • 38/70047	

Please refer to our RAL Exterior brochure for a display of RAL colors to go with above listed Series 38 product numbers. Gloss levels for RAL colors are 85±5.

To eliminate possible errors in finish and sheen, please specify the TIGER Drylac product number along with the RAL number.

Primer



TIGER Drylac 69/70000
Dry Protector Primer 3±2



TIGER Drylac 69/90500
Zinc Rich Primer 70±5



TIGER Drylac 09/73841
Out-gassing Forgiving
Primer 70±5

Architectural Matte, Satin and Semi Gloss



TIGER Drylac® 38/10130
Seashell White 30±5*



TIGER Drylac® 38/70070
Taupe 30±5*



TIGER Drylac® 38/60014
Medium Bronze 30±5*



TIGER Drylac® 38/30028
Brick Red 20±5*



TIGER Drylac® 38/70049
Silver Grey 30±5*



TIGER Drylac® 38/10070
Bone White 30±5*



TIGER Drylac® 38/15002
Sierra Tan 30±5*



TIGER Drylac® 38/60080
Statuary Bronze 30±5*



TIGER Drylac® 38/60006
Aged Copper 20±5*



TIGER Drylac® 38/40025
Interstate Blue 20±5*



TIGER Drylac® 38/70048
Sky Grey 30±5*



TIGER Drylac® 38/70025
Ash Grey 30±5*



TIGER Drylac® 38/60090
Dark Anodized Bronze 20±5*



TIGER Drylac® 38/50080
Ivy Green 30±5*



TIGER Drylac® 38/40051
Military Blue 30±5*



TIGER Drylac® 38/15003
Almond 30±5*



TIGER Drylac® 38/70019
Slate Grey 30±5*



TIGER Drylac® 38/30033
Boysenberry 20±5*



TIGER Drylac® 38/50037
Classic Green 30±5*



TIGER Drylac® 38/80020
Jet Black 30±5*



TIGER Drylac® 38/15012
Sandstone 30±5*



TIGER Drylac® 38/60018
Koko Brown 30±5*



TIGER Drylac® 38/30041
Redwood 30±5*



TIGER Drylac® 38/50110
Hartford Green 30±5*



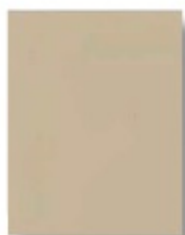
TIGER Drylac® 38/81009
Railing Black Semi Gloss 60±5*

Glossy

Metallic



TIGER Drylac[®] 38/00001
Clear 90+*



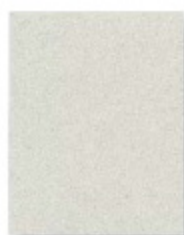
TIGER Drylac[®] 38/15009
Crème 305 85±5*



TIGER Drylac[®] 38/50039
Highland 305 85±5*



TIGER Drylac[®] 38/70061
Grey Classic 314 85±5*



TIGER Drylac[®] 38/90003
Argento 301 Metallic



TIGER Drylac[®] 38/10007
Bianco 302 85±5*



TIGER Drylac[®] 38/15007
Crème 303 85±5*



TIGER Drylac[®] 38/50040
Highland 306 85±5*



TIGER Drylac[®] 38/80002
Carbon 301 85±5*



TIGER Drylac[®] 38/90010
Marine Silver



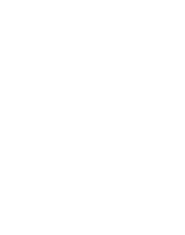
TIGER Drylac[®] 38/10090
Extrusion White 85±5*



TIGER Drylac[®] 38/15005
Crème 301 85±5*



TIGER Drylac[®] 38/50041
Highland 307 85±5*



TIGER Drylac[®] 38/40033
Azzurro 307 85±5*



TIGER Drylac[®] 38/90007
Argento 305 Metallic



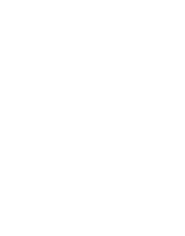
TIGER Drylac[®] 38/70032
Grey Classic 303 85±5*



TIGER Drylac[®] 38/60026
Marrone 306 85±5*



TIGER Drylac[®] 38/40033
Azzurro 307 85±5*



TIGER Drylac[®] 38/70054
Grey Classic 308 85±5*



TIGER Drylac[®] 38/90011
Argento 308 Metallic



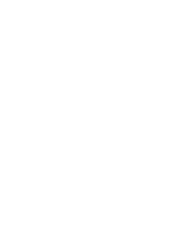
TIGER Drylac[®] 38/70056
Grey Classic 310 85±5*



TIGER Drylac[®] 38/60039
Marrone 308 85±5*



TIGER Drylac[®] 38/70054
Grey Classic 308 85±5*



TIGER Drylac[®] 38/90015
Pearl Dark Grey Metallic

Bureau of Land Management Standard Environmental Colors



TIGER Drylac[®] 38/90016
Argento 312 Metallic



TIGER Drylac[®] 38/50043
Highland 301 Metallic



TIGER Drylac[®] 38/15021
Champagne 304 Metallic



TIGER Drylac 38/16500
**BLM Carlsbad Canyon
Brown 55±5**



TIGER Drylac 38/60400
BLM Sudan Brown 65±5



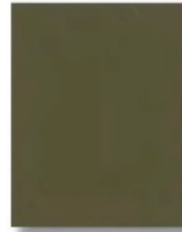
TIGER Drylac[®] 38/90018
Argento 314 Metallic



TIGER Drylac[®] 38/40127
Pearl Night Blue Metallic



TIGER Drylac[®] 38/20013
Deore 301 Metallic



TIGER Drylac 38/50500
BLM Covert Green 55±5



TIGER Drylac 38/50400
BLM Beetle 65±5



TIGER Drylac[®] 38/60060
Medium Bronze Metallic*



TIGER Drylac[®] 38/20014
Deore 302 Metallic



TIGER Drylac[®] 38/15020
Champagne 303 Metallic



TIGER Drylac 38/71700
BLM Shadow Gray 60±5



TIGER Drylac 38/53000
BLM Yuma Green 60±5



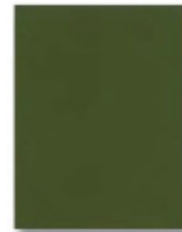
TIGER Drylac[®] 38/60064
Pearl Copper Metallic



TIGER Drylac[®] 38/15018
Champagne 302 Metallic



TIGER Drylac[®] 38/90009
Argento 307 Metallic



TIGER Drylac 38/51400
BLM Juniper Green 60±5



TIGER Drylac 38/60500
BLM Carob Brown 60±5



TIGER Drylac[®] 38/50035
Seafoam Green Metallic



TIGER Drylac[®] 38/15017
Champagne 301 Metallic



TIGER Drylac[®] 38/91020
Anodized Silver



TIGER Drylac 38/52600
BLM Shale Green 60±5