Corrosion System

for coating steel substrates

Element Anti-corrosion system

The durability of a protective powder coating system depends on the type of powder coating, type of the substrate, conditions of the substrate before preparation, effectiveness of the surface preparation, standard of the application work, conditions during application and exposure conditions after application.

Please use this guide for your powder coating applications for the best anti-corrosion protection

ELEMENT
New way in Powder Coating

ELEMENT POWDER COATING ANTICORROSION SYSTEMS for STEEL *in accordance with DIN EN ISO 12944-1*

Corrosion category	Typical environment Indoor area	Typical environment Outside area	Duration		Test procedures		Pre-treatment processes and recommended ELEMENT powder coating system									
			Class	Years	ISO 6270 Condensate test in hours	ISO 9227 Salt spray test in hours	Cleaning-Degreasing		Blasting SA 2 1/2		Iron phosphate		Zinc phosphate		Hot dip galvanising	
C1 very low	Heated buildings with clean atmospheres (shops, offices, hospitals)		low	<5	-	-	✓		✓		✓					
			medium	5-15	-	-	✓		✓		✓					
			high	>15	-	-	✗		✗		✓					
C2 low	Unheated buildings where condensation can occur (sport halls, warehouses)	Atmospheres with low level pollution, mostly rural	low	<5	48	-	✓		✓		✓					
			medium	5-15	96	-	✗		✗		✓					
			high	>15	120	-	✗		✗		✓					
C3 medium	Production rooms with high humidity and some air pollution (laundries, breweries, dairies)	Urban/industrial, moderate SO_2 pollution, coastal areas with low salinity	low	<5	48	120	✓		✓		✓		✓		✓	
			medium	5-15	120	240	✓		✓		✓		✓		✓	
			high	>15	240	480	✗		✗		✗		✓		✓	
C4 high	Chemical plants, swimming pools, coastal ship/boat-yards	Industrial areas and coastal areas with moderate salinity	low	<5	120	240					✓		✓		✓	
			medium	5-15	240	480	✗		✗		✓		✓		✓	
			high	>15	480	720					✗		✗		✓	
C5-I very high, industry	Buildings or areas with almost permanent condensation and with high pollution	Industrial areas with high humidity and aggressive atmospheres	low	<5	240	480							✓		✓	
			medium	5-15	480	720	✗		✗		✗		✓		✓	
			high	>15	720	1440							✗		✓	
C5-M very high, marine	Buildings or areas with almost permanent condensation and with high pollution	Coastal and offshore areas with high salinity	low	<5	240	480							✓		✓	
			medium	5-15	480	720	✗		✗		✗		✓		✓	
			high	>15	720	1440							✗		✓	

Step 1 Select corrosion category

Step 2 Select protection duration

Step 3 Select pre-treatment and coating systems

✗ no suitable

▬ unnecessary

✓ recommended

Steel

Galvanized

Iron phosphate

Zinc phosphate

Chromate

Base coat PRIMER
EPX13 130 °C 10'
EPX12 150 °C 10'
EPX10 180 °C 10'
ZINCUC 180 °C 10'
please ask for proper base coat for each system

Top coat Exterior
PLA40 200 °C 10' Qualicoat
PLA30 180 °C 10'
PLI48 180 °C 10'
PLI37 180 °C 10'
PUR60 200 °C 15'
PLA32 180°C 10' for a protection period over 10 years

Top coat Interior
HYB22 200 °C 10'
HYB28 180 °C 10'
HYB26 160 °C 10'
HYB24 140 °C 10'
please call us for others series

For more information please contact: arge@elementboya.com

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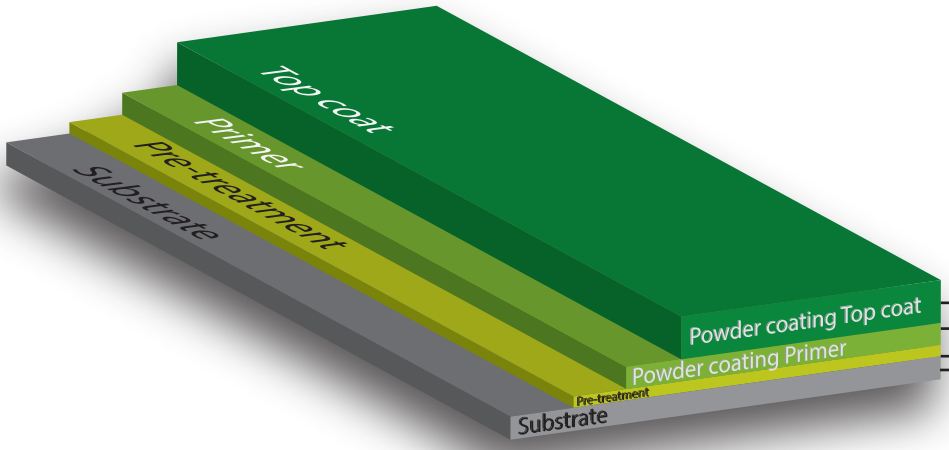

Element Powder Coating
-ELM PLA40
-ELM PLA35
-ELM HYB28

Element Powder Coating
-ELM EPX13
-ELM EPX18
-ELM ZINCUC

Cleaning/degreasing
Abrasive blasting
Iron phosphate
Zinc phosphate
Chromate

Steel
Aluminium
Galavanized steel

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