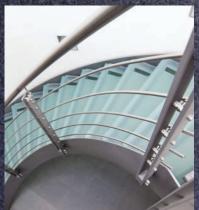


# **Binding protection at different levels**









### **Keeping corrosion away**

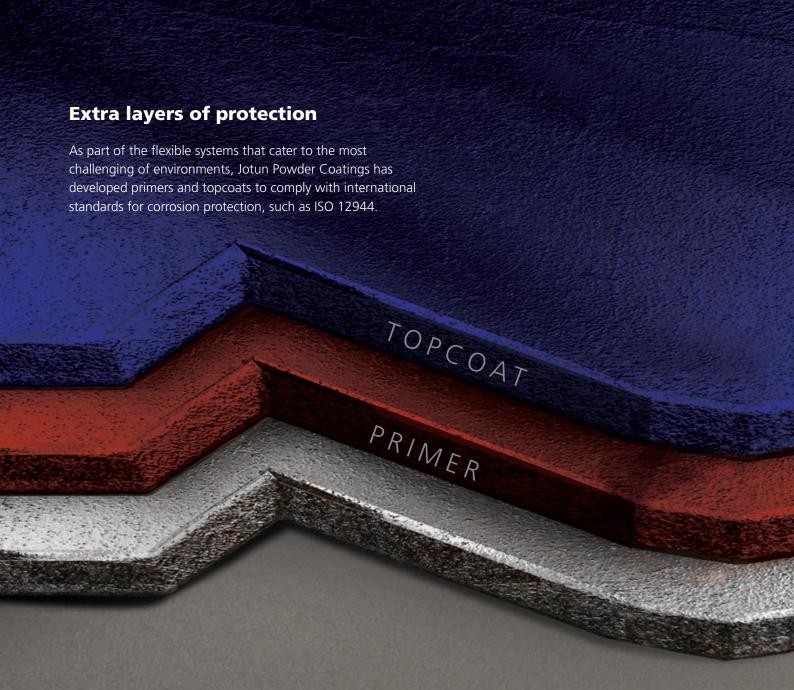
The use of steel is increasing in many industries due to the numerous and flexible design options it provides. However, as with most materials exposed to the elements, steel requires a level of protection to stop it from corroding over time. Without protection, the deterioration of the steel can compromise the integrity of the structure or component, creating long-term impacts on the environment, budgets and safety.



Jotun Powder Coatings has developed an approach to steel protection that gives you a sustainable solution – reduced environmental impact, less time and money spent on repairs, and less material required for protection.

Jotun's steel systems use coatings which deliver the level of protection required by the environment where your project will be situated.





### **Single layer protection**

Use the topcoat on its own when a moderate level of protection is required. For single coat application we recommend choosing a Jotun product that is designed to deliver corrosion protection whilst providing an attractive appearance. Your local Jotun representative can assist with choosing the right powder coating for your project.

### Two layer protection

To achieve the highest level of protection against corrosion, we recommend you use both a primer and topcoat.

# The right level of protection

### A winning combination

By using Jotun Powder Coatings steel systems for protection of your substrate, you not only boost the durability and lifespan of your components, but also gain flexibility for your design and reduce initial and life-cycle costs of the project.

Jotun helps you reduce the number of coats and amount of material required thanks to the advanced protective properties, saving you material and labour costs. Application is fast and produces results that are more durable and resistant to abrasion, corrosion and scratching.

The systems are also flexible so you can mix and match topcoats and primers to ensure you achieve the maximum coating durability for the environment in which you are working.

### **Environmental benefits of Powder Coatings**

Environmentally friendly, powder coatings do not contain solvents, so no VOCs are released into the air. Unused or oversprayed powder can be recycled with minimal wastage, and disposal is easy and safe. In addition, all Jotun Powder Coatings' products are lead-free.

### **About Jotun**

Jotun is one of the world's leading manufacturers of decorative paints, marine, protective and powder coatings. The Group has 63 companies and 40 production facilities on all continents.

At Jotun Powder Coatings, we are committed to develop, produce and deliver solutions that create value through consistency in application, enhanced appearance and superior durability.

### Stay in touch

Please contact us for more information on the Jotun steel systems. We offer company training on our product portfolio and powder coating technology through a number of powder schools that we run for our customers. Feel free to contact your local sales representative for more information.





## **Steel performance matrix**

		Level of durability		low	medium	high	low	medium	high	low	medium	high
		Condensation test, hrs ISO 6270 Salt spray test, hrs ISO 9227*		48 120	120 240	240 480	120 240	240 480	480 720	240 480	480 720	720 1440
		Approximate time to 1st ma		<5 years	5-15 years	>15 years	<5 years	5-15 years	>15 years	<5 years	5-15 years	>15 years
Grit Blasting Sa 2.5**	Pretreatment	System		C3		C4			C5-M&I***			
<b>✓</b>	None	Topcoat		•	•	•						
~		Topcoat + Primax Xtend		•	•	•	•	•	•			
<b>✓</b>		Topcoat + Primax Protect		•	•	•	•	•	•			
<b>✓</b>	Iron Phosphate	Topcoat + Primax Xtend		•	•	•	•	•	•	•	•	
<b>√</b>		Topcoat + Primax Protect		•	•	•	•	•	•	•	•	
<b>✓</b>	Zinc Phosphate	Topcoat + Primax Xtend		•	•	•	•	•	•	•	•	•
<b>√</b>		Topcoat + Primax Protect		•	•	•	•	•	•	•	•	•
	Hot-Dipped Galvanized Steel + Sweeping****	Topcoat + Primax Xtend		•	•	•	•	•	•	•	•	•
		Topcoat + Primax Protect		•	•	•	•	•	•	•	•	•
		Topcoat		•	•	•	•	•	•			
	Hot-Dipped Galvanized Steel + Chromating****	Topcoat + Primax Xtend		•	•	•	•	•	•	•	•	•
	Chromating *****	Topcoat + Primax Protect		•	•	•	•	•	•	•	•	•

- Results are based on laboratory conditions and in combination with Jotun Facade 2487 as a topcoat. Other suitable topcoats from Jotun's portfolio are available - please consult with your local JPC representative
- Field performance will depend on the quality of substrate, pretreatment and application parameters. Environmental conditions and design of the coated object also influence field performance of the system.
- For best coating results follow Jotun's "Application Guide of Powder Coatings on Steel"
- For recommended film thicknesses kindly refer to Technical Data Sheets of relevant primers and topcoats
- \* Salt spray test is not required by ISO 12944 for Galvanized Steel substrate also known as Zinc coated Steel
- \*\* According to specification in Jotun's "Application Guide of Powder Coatings on Steel"
- \*\*\* Chemical resistance test, hrs 168 ISO 2812-1.
  Relevant for C5-I only
- \*\*\*\* Refer to Jotun's "Application Guide of Powder Coatings for Hot-Dipped Galvanized Steel"

IFO

Institute for Surface Treatment GmbH

Tested by IFO: Institute for Surface technology, Germany 2014

# ISO 12944 classifies the environments into the following corrosion classes:

	Exterior	Interior				
C1		Heated buildings with clean atmospheres, e.g. offices, shops, schools, hotels				
C2	Atmospheres with low level of pollution. Mostly rural areas	Unheated buildings where condensation may occur, e.g. depots, sports halls				
<b>C</b> 3	Urban and industrial atmospheres, moderate sulfur dioxide pollution. Coastal areas with low salinity	Production rooms with high humidity and some air pollution, e.g. food-processing plants, laundries, breweries, dairies				
C4	Industrial and coastal areas with moderate salinity	Chemical plants, swimming pools, coastal ships and boatyards				
C5-I (industrial)	Industrial areas with high humidity and aggressive atmosphere	Buildings or areas with almost permanent condensation and with high pollution				
C5-M (marine)	Coastal and offshore areas with high salinity	Buildings or areas with almost permanent condensation and with high pollution				

### **Primax Protect**

Primax Protect is a primer designed for blast-cleaned and phosphated steel objects that combines the highest level of corrosion protection with enhanced inter-coat adhesion and uniform flow.

### **Primax Xtend**

Primax Xtend combines zero Zinc content and lowered powder consumption to provide an exceptionally economic and sustainable primer that delivers the highest level of corrosion protection.