



# PercoTop<sup>®</sup> Industrial Coating

DIN EN ISO 12944

**For professional use only!**

## DIN EN ISO 12944

**Corrosion protection of steel constructions with coating systems**

Unprotected steel corrodes, e.g. in the atmosphere, which can lead to damages. In order to avoid such corrosion damages, steel constructions are normally protected to ensure that they withstand corrosion strains during their required service life.

There are several possibilities to protect steel constructions from corrosion. ISO 12944 deals with protection by coating systems. In its different sections it considers all essential aspects for adequate corrosion protection.

**The application range is characterized by:**

- the type of surface to be coated and surface pretreatment
- the type of surrounding conditions (corrosivity categories)
- the protection time provided by a coating system

## Corrosivity categories

<b>C1: insignificant</b>	<b>Outside areas:</b>	<b>Interior areas:</b>
	not applicable	Heated buildings with neutral atmosphere (e.g. office, school, hotel).
<b>C2: low</b>	<b>Outside areas:</b>	<b>Interior areas:</b>
	Atmosphere with low environmental impact. Mainly rural areas.	Unheated buildings where condensation can occur (e.g. warehouses, gymnasiums).
<b>C3: medium</b>	<b>Outside areas:</b>	<b>Interior areas:</b>
	Urban and industrial atmosphere, low pollution by sulphur dioxide. Coastal areas with low salt impact.	Production facilities with high humidity and some air pollution (e.g. laundries, breweries).

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<b>C4: high</b>		<b>Outside areas:</b> Industrial areas and coastal regions with low salt impact.	<b>Interior areas:</b> Chemical plants, swimming pools, objects above sea water.
<b>C5 - I: very high</b>	<b>Industry</b>	<b>Outside areas:</b> Industrial areas with high humidity and aggressive atmosphere.	<b>Interior areas:</b> Areas with almost constant condensation and strong pollution.
<b>C5 - M: very high</b>	<b>Sea</b>	<b>Outside areas:</b> Coastal and off-shore areas with high salt impact.	<b>Interior areas:</b> Areas with almost constant condensation and strong pollution.

<b>In addition, the corrosivity categories are divided into 3 time spans:</b>			
Protection time:		Time span:	
• S	short	2-5 years	
• M	medium	5-15 years	
• L	long	> 15 years	

## Special notes

<p>Our paint recommendations are not related, concerning the corrosion classification and resulting warranty, to the international specification of "DIN EN ISO 12944". We confirm, however, that our product systems perform according to DIN EN ISO 12944 as far as salt spray and humidity tests are concerned.</p>
<p>We want to point out that the DIN EN ISO 12944 only refers to steel structural engineering. A warranty according DIN will not be assumed. The application of warranty areas is not accepted by Axalta. In particular we refer to our general terms and conditions.</p>

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## Recommended paint systems for steel substrates

Class	Pretreatment	Primer	Topcoat
<b>C1 S/M/L</b>	bare metal and degreased	PercoTop® Primer 010 CS310 > 25 µm	PercoTop® 9600, 9700, 449, HS,611, PUR, MIO  > 40 µm
<b>C2 S</b>	bare metal and degreased	PercoTop® Primer 040 / CS381 PercoTop® EP > 40 µm	PercoTop® 9600, 9700, 449, HS,611, PUR, MIO > 40 µm
<b>C2 M</b>	bare metal and degreased	PercoTop® Primer 040 / CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS,611, PUR, MIO > 40 µm
<b>C2 L</b>	SA 2.5	PercoTop® Primer 040 / CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS,611, PUR, MIO > 80 µm
<b>C3 S</b>	bare metal and degreased	PercoTop® Primer 040 / CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS,611, PUR, MIO > 40 µm
<b>C3 M</b>	SA 2.5	PercoTop® Primer 040 / CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm
<b>C3 L</b>	SA 2.5	PercoTop® Primer 040 / CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 120 µm

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Class	Pretreatment	Primer	Topcoat
<b>C4 S</b>	SA 2.5	PercoTop® Wash Primer CS307 > 10 µm + PercoTop® Primer 040 > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 40 µm
<b>C4 M</b>	SA 2.5	CS381 PercoTop® EP > 40 µm + PercoTop® Primer 040 > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm
<b>C4 L</b>	SA 2.5	CS382 PercoTop® Primer 053 > 40 µm + CS381 PercoTop® EP > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm
<b>C5-IS</b>	SA 2.5	CS582 PercoTop® EP ZP > 80 µm + CS581 PercoTop® EP MIO ICM > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 40 µm
<b>C5-IM</b>	SA 2.5	CS382 PercoTop® Primer Surfacer 053 > 80 µm + CS581 PercoTop® EP MIO ICM > 80 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm
<b>C5-IL</b>	SA 2.5	CS382 PercoTop® Primer Surfacer 053 > 80 µm + CS591 PercoTop® EP HS PCM > 160 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm



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Class	Pretreatment	Primer	Topcoat
<b>C5-MS</b>	SA 2.5	CS382 PercoTop® Primer Surfacer 053 > 80 µm + CS591 PercoTop® EP HS PCM > 120 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm
<b>C5-MM</b>	SA 2.5	CS382 PercoTop® Primer Surfacer 053 > 80 µm + CS591 PercoTop® EP HS PCM > 160 µm	PercoTop® 9600, 9700, 449, HS, PUR, MIO > 80 µm

## Notes

- SA 2.5 with a surface roughness of at least 50 µm
- With sandblasted substrates, dry film thickness always refers to the sandblasted tops.

**Information**

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