

PPG STEELGUARD™

Systems & Environments

INTRODUCTION

This information sheet contains a list of typical approved PPG systems for the PPG STEELGUARD intumescent product range for use in conjunction with ISO12944-2 (Classification of Environments) and ISO12944-5 (Protective Paint Systems) outside the scope of UL 263 certification and European CE MARK.

Refer to product specific UL263 certification and DoP documents for CE mark approved primers, topcoats, durability categories and DFT guidance.

For the recommended application conditions/instructions/guidance and surface preparation, please see the relevant product data sheets. For overcoating intervals of the PPG STEELGUARD product to be top coated and handling/transportation/erection, please see Information Sheet 1222 – PPG STEELGUARD INTUMESCENT COATINGS – APPLICATION GUIDELINES and the relevant product data sheets.

All primers and topcoats must be PPG-approved as part of the fully applied system. Non-PPG topcoats should not be used, please contact PPG for guidance.

Selection of STEELGUARD systems for non-European CE MARK/UL 263 systems. For CE/ UL 263 Mark systems, see relevant DoP and CE/UL Mark statements.							
Atmospheric corrosivity categories (ISO 12944-2)	Exposure type EAD-350402-00-1106	Exposure description	Typical examples of locations (EN ISO12944)	Primer options	PPG STEEL-GUARD type	Topcoat options	Expected corrosion resistance
C4 HIGH	TYPE X	Intended for all conditions where intumescent may be recommended for use up to full outdoor exposure (internal, external exposed and semi-exposed environments).	General industrial areas, coastal areas with moderate salinity, exposed outdoor areas, e.g., chemical plants, swimming pools.	1x Epoxy 1x Zinc Phosphate Epoxy 1x Zinc Rich Epoxy + Epoxy Sealer 1x High Solids Epoxy 1x Epoxy MIO	SB	2 x STEELGUARD 2458 2 x SB Polyurethane	Up to 25 years
C3 MEDIUM			Urban and industrial atmospheres, areas of moderate sulphur dioxide pollution, e.g., coastal areas with low salinity. Production rooms with high humidity and some air pollution, e.g., food processing plants, laundries, breweries, dairies.				



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C2 LOW			Atmospheres with low level of pollution, mostly rural areas.				
C3 MEDIUM	TYPE Y	Intended for internal and semi-exposed external conditions (semi-exposed includes temperatures below 0°C, but no exposure to rain and limited or only casual exposure to UV). Use under canopies/in sheltered locations for internal locations which are constantly damp with some air pollution.	Urban and industrial atmospheres, Areas with moderate sulphur dioxide pollution, e.g., coastal areas with low salinity.	1x Epoxy 1x Zinc Phosphate Epoxy 1x Zinc Rich Epoxy + Epoxy Sealer 1x High Solids Epoxy 1x Epoxy MIO	SB	2 x STEELGUARD 2458 2 x SB Polyurethane	Up to 25 years
C2 LOW			Atmospheres with low level of pollution, mostly rural areas.				
C3	TYPE Z¹	Intended for internal conditions only, with high humidity (greater or equal to 85%) and excluding temperatures below 0°C.	Production rooms.	1x Alkyd 1x Epoxy	WB or SB	1x STEELGUARD 2458 1x Acrylic 1x SB Epoxy Acrylic 1x Polyurethane 1x SB	Up to 25 years
C2 LOW			Unheated warehouses, sports halls, roof voids.				
C1 VERY LOW	TYPE Z²	Intended for internal conditions only, with humidity conditions less than 85% (e.g., humidity class 5 in EN ISO 13788) and excluding temperatures below 0°C.	Heated buildings with clean atmospheres, e.g., interiors of offices, shops, schools, hotels.	1x Alkyd 1x Epoxy	WB or SB	1x STEELGUARD 2458 1x Acrylic 1x SB Epoxy Acrylic 1x Polyurethane 1x SB Polyaspartic	Life of building



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Selection of STEELGUARD 951 Systems for non-European CE MARK/UL 263 systems. For CE/ UL 263 Mark systems, see relevant DoP and CE/UL Mark statements.

For PPG STEELGUARD 951, no primer is needed for up to C3 Medium (Type Y), with 1x epoxy-based primer up to C5H (Type X) and 1x Zinc Rich and 1x Epoxy for C5VH.

No topcoat is needed for any exposure condition.

Notes

1. As a general rule, the DFT of the primer or topcoat should not exceed the DFT approved by more than 50%. Please consult the product data sheet or PPG for additional details.
2. Expected durability is not guaranteed, it is a technical consideration based on ISO 12944-1 to allow a suitable maintenance schedule to be prepared.
3. Before the application of the topcoat or topcoat system the following conditions shall be met:
 - The PPG STEELGUARD intumescent coating shall be applied in accordance with the product data sheet
 - The PPG STEELGUARD intumescent coating shall be within its stated overcoating period
 - The PPG STEELGUARD intumescent coating shall be intact and free from damage and degradation
 - The PPG STEELGUARD intumescent coating shall be clean and free from any contamination
4. Where offsite application of the topcoat is carried out, sufficient drying time must be allowed prior to handling, transportation and erection to minimize damage. Drying times will increase significantly with higher applied DFTs for PPG STEELGUARD intumescent coatings and be dependent on application and drying conditions and the section type. The generic type of the topcoat will also influence dry-to-handle times.
5. Where fast track processing is required with topcoats on high DFT PPG STEELGUARD intumescent coatings and/or on vulnerable sections, please contact PPG.
6. Topcoats above refer to solid colours only.
7. If the system you are looking for is not included, please contact PPG.
8. SB= solvent-based; WB= water-based, DFT= Dry Film Thickness

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING

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