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 prior to this document.

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 PPG STEELGUARD – APPLICATION GUIDELINES, PPG STEELGUARD 951 – 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 STEELGUARD type	Topcoat options
C4	TYPE X	Intended for all conditions where intumescent may be recommended for use up to full outdoor exposure (internal, externalexposed and semi-exposed environments).	General industrial areas, coastal areas with moderate salinity,exposed outdoor areas, e.g., chemical plants, swimming pools.	1xEpoxy 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
C3			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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Atmospheric corrosivity categories (ISO 12944-2)	**Exposure type EAD-350402-00-1106**	**Exposure description**	**Typical examples of locations (EN ISO12944)**	**Primer options**	**PPG STEELGUARD type**	**Topcoat options**
C2	**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 onlycasual exposure to UV). Use under canopies/in sheltered locations for internal locations which are constantly damp with some air pollution.	Atmospheres with low level of pollution, mostly rural areas.	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
C3			Urban and industrial atmospheres, Areas with moderate sulphur dioxide pollution, e.g., coastal areas with low salinity.			
C2			Atmospheres with low level of pollution, mostly rural areas.			
C3	**TYPE Z1**	Intended for internal conditions only, with high humidity (greateror 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
C2			Unheated warehouses, sports halls, roof voids.			
C1	**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

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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 prior to this document.

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

Topcoat is not 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%, unless covered by CE/UL263 Mark DFT conditions. 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. If the system you are looking for is not included, please contact PPG.
7. SB= solvent-based; WB= water-based, DFT= Dry Film Thickness

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