

# PPG STEELGUARD™ 601 and 651

Waterborne thin-film intumescent coatings for up to 120 minutes cellulosic fire protection

**We supply products that buy time, save lives, limit asset damage and contribute to a greener environment.**



# Buying time, saving lives and minimizing asset damage

Specifically developed for infrastructure projects, including:

- Airport terminals
- School buildings
- Concert halls
- Shopping centers
- Factories
- Sports stadia
- Hospitals
- Train stations
- Hotels
- Warehouses



Popular in the design of today's civil buildings, structural steel demands a particular performance from a protective coating system. It must provide a smooth and aesthetically pleasing finish and protect the structure against corrosion – but most importantly, it must maintain the steel's stability in the event of a fire.

PPG STEELGUARD coating systems deliver on all counts. These highly protective intumescent coatings are designed to expand at high temperatures – from a very thin, lightweight film into a thick, foam-like layer that insulates the steel from cellulosic fire. It is this insulation that maintains the steel's stability, providing up to 120 minutes of fire protection.

This buys additional time for people to escape and firefighters to arrive – potentially saving lives and limiting damage to buildings and assets.

## Contributing to a greener environment – low VOC

Having worked closely with architects and designers around the world, we understand the pressures to specify 'greener' products. We have responded by investing in the research and development of waterborne intumescent technology that performs the same vital purpose as traditional solvent-borne intumescent coatings, whilst contributing to a greener and safer environment.

The result is PPG STEELGUARD 601 and PPG STEELGUARD 651. These two products are low VOC, which means they are environmentally friendly and are virtually odorless. This makes for a healthier atmosphere for painters working with these products, and because these coatings are free from harmful fumes they may be applied while buildings are in use or under construction.

PPG STEELGUARD 601 and PPG STEELGUARD 651 have been tested and certified to the latest international standards and comply with the most stringent environmental regulations.

These products are uniquely positioned as top-of-the-range, thin-film intumescent coatings. PPG STEELGUARD intumescent coatings are widely recognized as market leading products capable of protecting a full range of steel profiles, including hollow sections.

## Benefits

- Low VOC – contributing to a greener environment
- Up to 120 minutes fire protection
- Covering a wide range of temperatures from 350°C (660°F) to 750°C (1380°F)
- High volume solids
- Meets the latest standards (including EN 13381-8:2013 and BS476 Parts (20/21))
- Fully tested for all conventional profiles
- Outperforms other market solutions on hollow section
- Meets ISO 12944-2 C1\* and C2 internal environments and ETAG 018-2 Z2\* and Z1, Y and X durability categories
- CE-marking
- Easy to apply on-site – one component product
- Dry to touch within 2 hours at 20°C (68°F)
- Efficient – can be applied up to 700 µm (28 mils) DFT per layer
- Backed up with access to our global engineering support network

\* no topcoat required

## Beautifying steel structures

With PPG STEELGUARD coatings, designers can also enhance the appearance of structural steel and utilize it as a contemporary, aesthetic feature.

As well as providing a long-lasting smooth finish, both PPG STEELGUARD 601 and PPG STEELGUARD 651 are compatible with a wide range of fast drying PPG primers and topcoat colors. These include waterborne solutions specially formulated to protect steel against corrosion under a variety of atmospheric conditions.

## Global engineering support

Our engineers are experts in intumescent fire protection and are up to date with all relevant industry standards and fire ratings. They also have the engineering capability to support you in the early stages of development, guiding you through the specification process and providing ongoing support right through to project completion and beyond.

The table below provides a quick reference to help you find the the most compatible PPG STEELGUARD solution for your project. All products are one-component intumescent coatings and are suitable for application both on and off site.

PPG STEELGUARD products can be used to coat some of the most challenging steel profiles without compromising on vital fire resistance properties, hence providing architects the peace of mind to fully utilize the aesthetic feature of the steel within their design.



Product	Fire protection in minutes					Maximum DFT in one coat µm (mils)	Exposure conditions (ISO 12944-2)		Independent approval
	15	30	60	90	120		C1	C2	
PPG STEELGUARD 601	•	•	•	•		700 (28)	•	•	13381-8:2013; CE-marking
PPG STEELGUARD 651	•	•	•	•	•	700 (28)	•	•	13381-8:2013; CE-marking; BS476 Parts 20/21



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We protect and  
beautify the world™