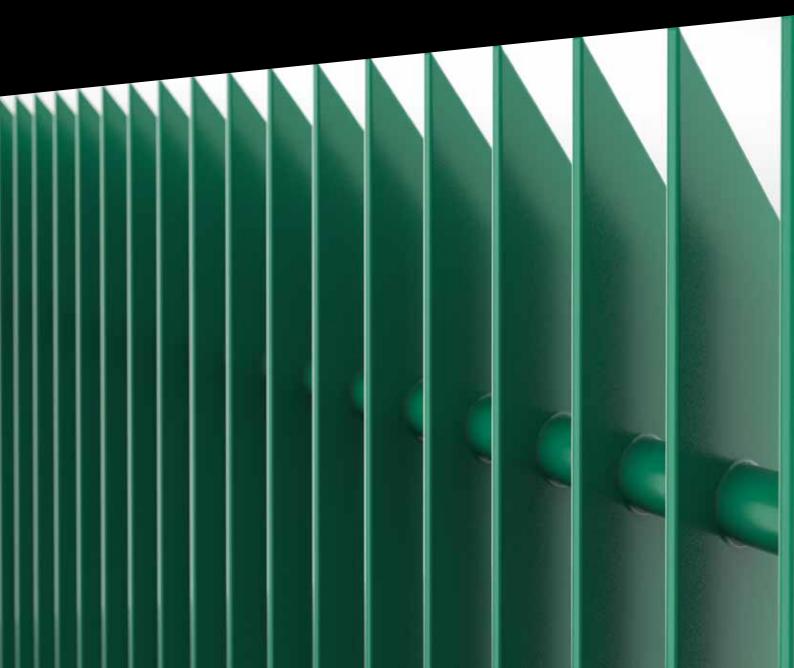


# Long lasting coatings for metal fences

Plascoat® Abcite® WireGuard





### Always protected

Plascoat® Abcite® WireGuard

Fences are a key component of an external site protection, delimitating a property or securing an area. Whatever purpose they are used for and wherever they are placed, fences need to withstand corrosion or any external forces. Long-lasting protection from environmental extremes, such as intense heat, salt, sea and desert storms or high UV radiation, is indispensable.





# Proven performance

Any type of fencing, be it ornamental, welded mesh or chain link, carries its own complexity for the coating process. Axalta thermoplastic coatings provide adequate 1-layer coating for all environmental conditions your fence could be subjected to and any type of metal fence you use, thanks to **Plascoat® PPA 571**, **Abcite®** and **WireGuard**.

#### Plascoat® PPA 571 and Abcite®

protects your fence from corrosion for longer than any other competitive product, and ensures that your fence will remain maintenance-free for decades.

#### Wireguard

is the cost-effective and green alternative to PVC coating, demonstrating excellent salt spray and UV resistance, as well as superior low-temperature properties.

### Product recommendation

#### **Continuous wire**

#### **Continuous mesh**

PPA571, Abcite 1060\* (fluidized bed) PPA571 XT (extrusion) PPA571, WireGuard, Abcite 1060\* (fluidized bed)



#### Welded mesh

PPA571 ES, Abcite X60\* (electrostatic spray) PPA571, WireGuard, Abcite 1060\* (fluidized bed)

### Post, pipe & framework

PPA571 ES, Abcite X60\* (electrostatic spray) PPA571, WireGuard, Abcite 1060\* (fluidized bed)

## Highlights

- Long-term durability
- Superior corrosion resistance
- Barrier properties
- High impact and abrasion resistance
- UV stability
- Excellent chemical resistance
- Weather resistance (climate, humidity, temperature variations)
- Protection of galvanized substrates
- Resistance to acts of vandalism and graffiti
- Environmentally friendly
- Accurate, reproducible and effective coating process



Ornamental

PPA571 ES, Abcite X60\* (electrostatic spray)

# Approved quality



SGS is an independent testing laboratory based in the United Kingdom, where the performance of the submitted coating materials is tested against international benchmarks, and certified. SGS is recognized as the global benchmark in quality and integrity.

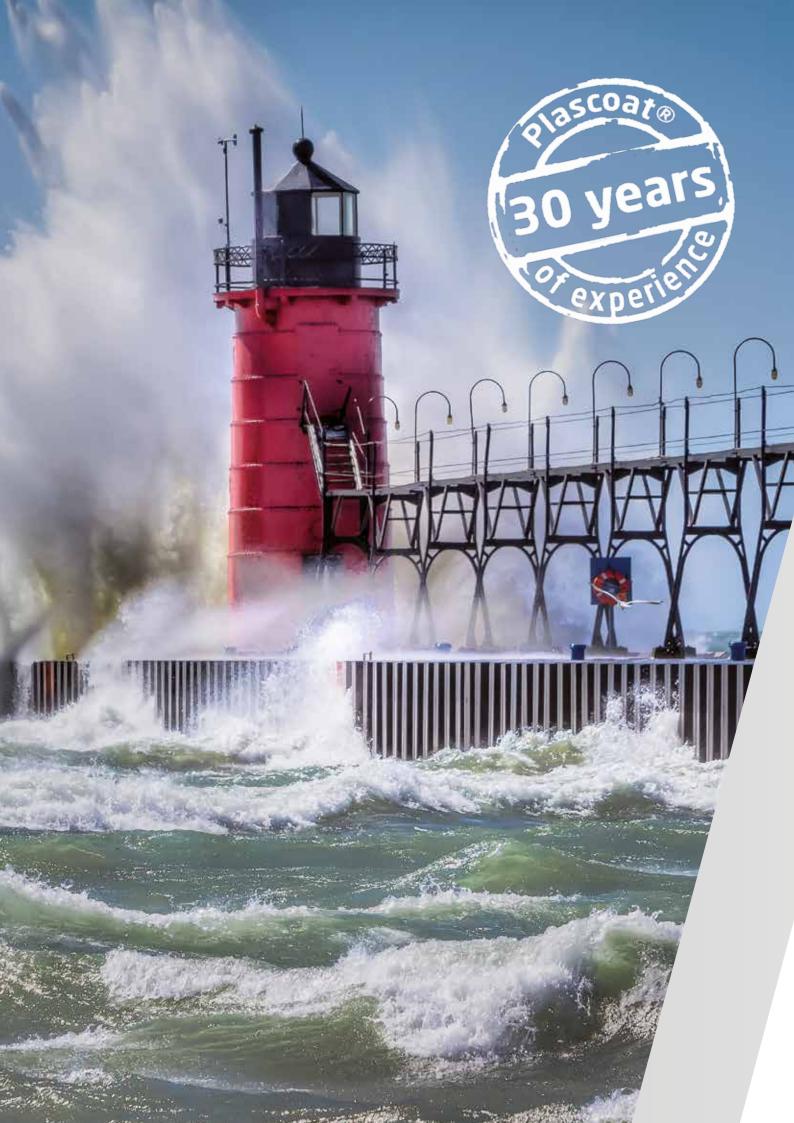
## Outcome of laboratory performance tests:

- Plascoat<sup>®</sup> PPA 571 ES was not affected by immersion nor by UV exposure during the tests executed.
- Neither adhesion nor appearance were affected by any of the tests performed.
- Resistance to corrosion and creep corrosion were good to excellent during the tests.
- The tests revealed no significant difference in performance between phosphated and sandblasted steel panels.

Some extra performance like adhesion can be achieved by providing superior surface treatment. Applications with **Plascoat® PPA 571 ES** properly applied on well-prepared surfaces will allow best results:

### Anti-corrosion performance

- Minimum 10 years in C1, C2, C3 and C4 environments (according to ISO 12944-6)
  - Mininum 5 years in C5 environments (according to ISO 12944-6)



# Plascoat® PPA571

# Outlasts traditional powder coatings

- Corrosion protection
- Aesthetics appearance
- Resistance to salt and abrasion
- Resistance to UV damage and color fading
- Impact resistance
- Graffiti resistance
- Sub-zero temperature performance

### Low environmental impact

- Not harmful to local environment
- No plasticizers
- No VOCs
- No heavy metals
- Very low smoke emission in fire

### Advantages over PVC coating

#### Spray or dip application

- Outlasts PVC coating in demanding environments
- No primer required, can be easily applied directly on metal substrate
- No plasticizers, chlorine, or other halogens

#### **Extrusion application**

- Faster line speeds
- Thinner and more controllable coating
- Adhesion without the use of primers
- Meets requirements of

ASTM F1043-08 and F668-07

# **Plascoat**® Customer experience

In 1996, a local Brisbane coating company recommended the use of **Plascoat® PPA 571** in a tender for the removal, sandblasting, re-coating and re-installation of fences in Sutton Beach, one of Brisbane's seaside parks.

The fence coated with **Plascoat® PPA 571** was recently revisited, and the photographs speak for themselves.

The fence is still in excellent functional and aesthetic condition. **Plascoat® PPA 571** has helped to deliver exceptionally low whole-life costs to the end customer, Brisbane's public authorityies, which are ultimately responsible for the upkeep of these fences by dramatically extending the lifetime of fences near the sea.



#### **United Arab Emirates**

Challenge: The climate in the United Arab Emirates is very demanding on coated metal. Sacrificial zinc, polyester and PVC coatings can be quickly stripped off the metal by wind-blown sand. Very high UV levels can also cause coatings to degrade and fail after just a few years. Two of the key benefits of Plascoat®
PPA 571 are that it is highly UV resistant and not abraded by wind-blown sand. In 2020, twenty years after installation, this fence is still protecting the area and shows no signs of corrosion.

### Expansion of Nottingham tennis centre with PPA571XT

**Challenge:** Long-term durability, damage resistance, flexibility to fence movements and aesthetics.



#### Safety fencing for swimming pools

**Challenge:** Wet environments, exposure to chemicals, such as cleaning and disinfecting agents, resistance to wear and tear in high frequency. This aesthetically pleasing finish is one of the most environmentally friendly coating available on the market.



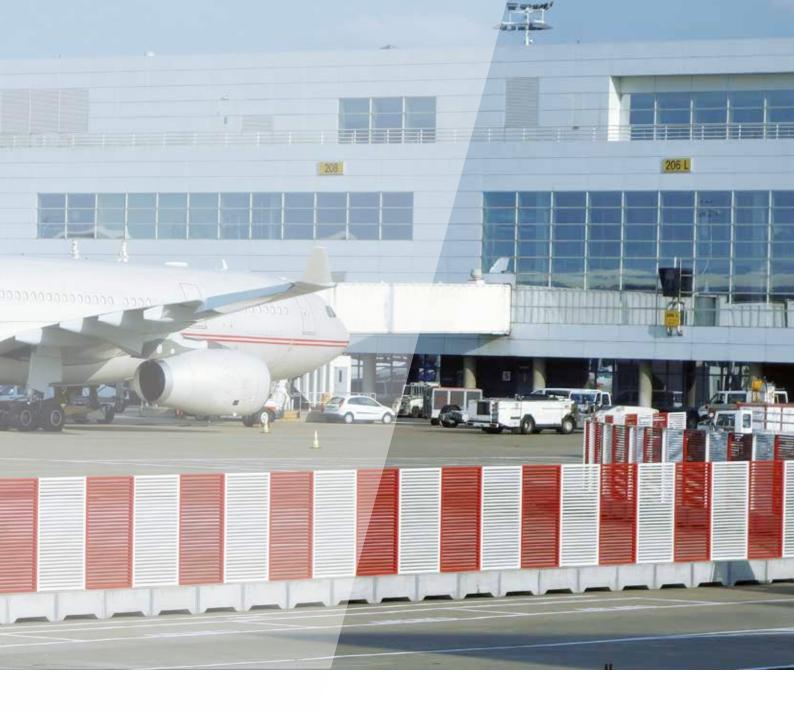




# **Abcite**<sup>®</sup>

In extreme environments, **Abcite®** provides the best long-term corrosion protection with strong adhesion on metal with 1-layer coating system. **Abcite® 1060/X60** was tested externally and found to meet corrosion protection categories CX and Im3 according to ISO 12944-9.

**Abcite**<sup>®</sup> is the the best 1-layer system in its class for powder coatings in extreme environments.



- High abrasion and impact resistance
- High chemical resistance against to most acids and alkalis
- Excellent salt spray resistance
- Long-term weather and UV resistance
- Flexible application methods (spraying or dipping)
- Easy application: good coverage of edges, corners and difficult areas
- Noise reduction
- Repairable in situ
- No need for primer, typical film thickness: 400 700 μm



# Abcite® Customer experience

**Brussels Airport:** Metallic fences, used as security and noise protection for the personnel working on the airfield.



**Challenge:** Wind, sun, rain, snow, and pollution are the normal climatic conditions on an airfield: a tough environment for steel parts. Long-term corrosion protection together with UV stability were the challenges for the required coating, but **Abcite®** mastered them all!







Belgium, Antwerp: Ornamental fencing Challenge: The changing weather conditions, with alternating rainfall, frost, and heat, cause their share of corrosion. In addition, property-enclosing fences are often regarded with envy and encourage property damage.



More than 20 years without any maintenance, and it looks like new as the first day.

# WireGuard

WireGuard is ideal for businesses that can apply powder coating to wire mesh using the fluidized bed (dip) method, and are looking for a powder coating superior to PVC but with similar costs to use instead. WireGuard has been specifically developed to coat outdoor wire structures, such as welded and continuous mesh fences.

### In service, benefits of WireGuard:

- Coating withstands flexing caused by wind, and changes in temperature down to -20 °C
  - Fence can be unrolled easily in the cold, thus extending the fence construction season
    - Excellent salt spray and UV resistance
    - Superior low-temperature properties, coating will not crack or become brittle

#### Low environmental impact:

- Not harmful to the local environment
- No plasticizers
- No VOCs
- No heavy metals
  - Very low smoke on burning
  - No hazardous fumes generated during applications

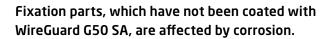
### Advantages over PVC coating:

- Save almost 35 % in material for the same coating thickness
  - Save time and money in the production process thanks to the 1-layer solution (no primer needed)
    - Energy savings due to lower oven temperature
    - No extra equipment needed (air scrubbers, ventilation) to limit VOC emissions

### Example of WireGuard application:

#### Same environment Same exposure Better protection

Welded mesh fence and post in Western Cape, South Africa, installed by the ocean 3 years ago. One section was installed using PVC as coating and one using **WireGuard 50 SA**. Today, the PVC-coated's fence is severely damaged by the coastal climate, whereas the **WireGuard 50 SA**-coated fence does not show any signs of corrosion.

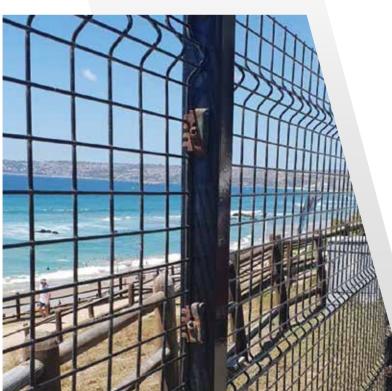




PVC



WireGuard G50 SA



### Performance of **Plascoat® Abcite® WireGuard**

Environments	PPA571	Abcite
Fence exposed to salt: coastal and, marine environments worlwide	****	****
Fence exposed to sand abrasion: desert and beach environments worlwide	****	****
Fence exposed to extrem cold: coating flexibility at temperatures below -20 °C	****	****
Fence exposed to constant heat and humidity: tropical environments	****	****
Fence exposed to chemicals: vicinity of chemical plants, fuel stations or airports	****	****
Fence exposed to intense sunlight: UV resistance	****	****
Characteristics	PPA571	Abcite
Resistance to lichen, mold, moss and algae	****	****
Ability to be electrostatically sprayed in hot weather	****	****
Range of available colours	****	***
Low toxicity on burning	****	****
No leaching or emission of VOCs, plasticizers or metals into the local environment.	****	****

WireGuard	PVC	Galvanized
***	***	**
***	***	*
***	**	***
***	*	**
***	**	*
****	*	**

WireGuard	PVC	Galvanized
****	**	*
NA	*	NA
***	***	*
****	*	*
****	*	*
★possible ★★good	*** superiour **** exceller	nt ★★★★★ best in class

Axalta is a member of the British Coatings Federation and the American Fence Association.





WWW.POWDER.AXALTA.COM

# For questions please contact your local sales office.

#### Europe

Plascoat Europe B.V. PO Box 9, 3214ZG Zuidland the Netherlands Tel: +31 (0) 181 458 888 Email: Plascoat-salesNL@axalta.com

#### United Kingdom and Overseas

Plascoat Systems Ltd Farnham Trading Estate, Farnham Surrey, GU9 9NY, United Kingdom Tel: +44 (0) 1252 733777 <u>Email: Plascoat-salesUK@axalta.com</u>

#### USA

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