AXALTA COATING SYSTEMS



Plascoat[®] PPA 571 Proven Performance for Exterior Application

Nearly 30 Years of Proven Performance

Axalta's Plascoat[®] PPA 571 is a thermoplastic powder technology designed to provide long-term corrosion protection for metal against the most demanding environments.

A durable coating that has the versality to work in a wide array of application and processing techniques including electro-static spraying flock spraying and fluid bed dipping.

Whatever the application Plascoat[®] PPA 571 has almost 3 decades of proven performance to back its credentials.

Key Features

- Superior resistance to salt, sea, sand and sun
- Excellent abrasion protection
- · High flexibility
- Excellent environmental credentials: no bisphenol A (BPA free), no VOCs, no TGIC, no phthalates, no isocyanates, no halogenes and no heavy metals
- Sound insulation
- Electrical insulation
- Excellent coverage of edges and welds
- Very low smoke in event of fire

Benefits

- Highly durable: how extreme weatherability might be, Plascoat® PPA 571 provides long life for the coated assets
- Highly economical: no primer required, no maintenance during the product life
- Safe and dependable: easy to clean surface with a warm-touch effect
- Tough and resistance Plascoat[®] PPA 571 is unaffected by salt spray, stone chips and temperature extremes
- Universal and versatile
- Relies on almost 30 years proven performance

Used in a wide array of application

BO YEARS

Fencing

In this environment, resistance to high UV, intense heat, salt, sea and desert storms is key. Traditional coatings in these conditions do not last well, as many long-term fields test have shown. Plascoat[®] PPA 571 is used all over the world for chain link, ornamental and security fencing and meets all the requirement of ASTM F1043-08 and F668-07.

Key Benefits

- Superior resistance to salt, sea, sand and sun
- Excellent abrasion protection
- Excellent coverage of edges and welds

Proven Performance

Thousands of kilometres of fencing in the harsh climates of the USA, the Middle East and Australia have been successfully coated with Plascoat[®] PPA 571.

Live tests in the US have shown that the salt spray corrosion rate of Plascoat[®] PPA 571 are half those of standard powder coatings and the fading rate is 1/20th.

Outdoor furniture

Playground, street furnitures or lighting columns: all those objects are exposed to demanding climatic conditions, continual use or extreme corrosive attacks from urban environment.

Key Benefits

- Superior resistance to salt, sea, sand and sun
- Excellent abrasion protection
- Excellent environmental credentials: no bisphenol A (BPA free), no VOCs, no TGIC, no phthalates, no isocyanates, no halogenes and no heavy metals
- Easy to clean surface: due to its smooth surface graffiti can be easily wiped clean
- Provide grip and warm-to-the-touch feel

Proven Performance

Trials at the Swedish Corrosion Institute have proved that Plascoat[®] PPA 571 is one of only three out of 52 corrosion protection systems that can extend the life of a lighting column by up to 50 years.



Construction



Construction

It is essential that steel and aluminium structures are protected from corrosion for as long as possible. Plascoat® PPA 571 is ideally suited to achieve this objective. Typical use include the coating of rock pins, the steel in reinforcement concrete and structure metalwork on bridges.

Key Benefits

- Highly durable: how extreme weatherability might be, Plascoat[®] PPA 571 provides long life for the coated assets
- Excellent environmental credentials: no bisphenol A (BPA free), no VOCs, no TGIC, no phthalates, no isocyanates, no halogenes and no heavy metals
- Highly economical: no maintenance during the product life
- Very low smoke in event of fire: the perfect coating solution in tunnels and enclosed public coatings

Proven Performance

Axalta relies on worldwide references of bridges or construction for the last 20 years, still in place, exposed to weather conditions and not requiring any maintenance.



Automotive





Automotive

The automotive and transportation market is well known for its highest standards and specifications: safety and long-lasting performance are key. Plascoat[®] PPA 571 is popular because it is tough, flexible and stone chip resistant.

Plascoat[®] PPA 571 is ideal to protect all kind of automotive accessories: bike racks, pipe fuel tanks, battery casings, door hangs, chassis, springs or all other parts exposed to stone impacts.

Key Benefits

- High durability through superior resistance to road salt and all climatic conditions
- Resistance over the years thanks to a very high impact and stone chip resistance
- Noise dampening properties
- Security, as the material is a strong electrical insulator
- Color stability over the time
- No craking on flexible parts

Proven Performance

Plascoat[®] PPA 571 passed the stone chip resistance test SAE J400.



A Wider World of Applications

Furthermore Plascoat[®] PPA 571 will be used in a wide variety of applications, including fire extinguishers, battery boxes, fan-guards, tanks, school furniture, shopping trolleys, stadium seating and submersibles.

Whatever the application, Plascoat[®] PPA 571 has long-term field tests to back its credentials



Plascoat[®] PPA 571 lasts and lasts and lasts

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Pictures courtesy of FSP Finnish Steel Painting Oy

Product features and performance

Corrosion Resistance	More than 20,000 hours salt spraw testing accordin	a to ASTM B117 with po blistoring cracking corresion			
Conosion Resistance	More than 20 000 hours salt spray testing according to ASTM B117, with no blistering, cracking, corrosion or flaking				
	1000 hours salt spray testing according to ASTM B117 with an under-film corrosion between 0 and 0,5 mm from scribe (on pre-treated steel)				
	Zero loss of adhesion when tested to ASTM D3359-A				
UV Stability	No significant change in colour, gloss or mechanical properties: after 2000 Hours QUV ASTM G154-06, Xenon arc or Five years in Florida at 45 °C to the sun by the sea				
Mechanical Resistance	Over half of Plascoat [®] PPA 571 coating still remained after one million cycle of tumbling (salt and grid according to ASTM A 926-94 whereas all other coatings tested (including thermosets and galvanisin were completely stripped				
	Passed stone chip resistance Test according to SAE J400				
Chemical Resistance	Excellent chemical resistance. Meets Water industry standards (WIS 4 52 01 or AS/NZS 4158) and will protect metal from aggregate slurries (ASTM A 926-94).				
Electrical Insulation	Good electrical insulation properties Volume resistivity: 3 x 1017 ohm.cm. (measured on black) in accordance with standard IEC 93				
	Electric resistance, coupled with its high dielectric strength: 47.8 KV/mm (measured on white, IEC 243) when measured at 370 microns				
Approvals	Food contact and drinking water approvals availab	le for specific grades. Only upon request.			
Fire Properties	Very low toxicity of the fumes: Toxicity index of 1.78 (NES 713), whilst Royal (British) Navy requirement is 5 max. Toxicity index of 0.21 (BS 6853:1999) used for London Underground Projects Very low density of the fumes generated: Index of 1.13 (A0 (ON)) (BS 6853:1999) used for London Underground Projects with a requirement f 2.6				
	Class 0 according to BS 476				
Surface Properties	Plascoat [®] PPA 571 contains no reactive ingredients and provides little "anchor" or food for seaweed, barnacles and lichen. While not specifically anti-fouling, the rate of growth of algae, fungus, mildew and marine flora or faune is slower than many other coatings				
Graffiti Removal	Many metro, subway and city authorities around the world including the Paris Metro and Stockholm City have confirmed that graffiti and fly-poster adhesives can be easily removed from Plascoat® PPA 571. Plascoat® PPA 571 is impermeable to graffiti paints. Therefore, often you can wipe the graffiti off with just a cloth (but a small amount of solvent on the cloth will help). Standard water-based graffiti removal products remove the graffiti paint within just a few wipes.				
Application Method		H			
	Electrostatic or Flock Spray with Plascoat [®] PPA 571ES	Fluidised Bed with Plascoat [®] PPA 571			
Pre-Treatment	 Plascoat® PPA 571 will survive many years outside in adverse environments if undamaged. However, should damage through to the metal occur at any stage it is necessary that the pre-treatment allows the coating to continue to adhere to the metal for as long as possible. All metal items should therefore be clean, degreased and free from rust. Plascoat® recommend the use of grit-blasting at least to Sa 2,5 (Swedish Standard) for dip coating or the use of Zinc Phosphate systems for spray coating. Certain chromates (if compliant with local authority legislation) and resin-based systems can also be used. If iron phosphate is used, Plascoat® recommend the use of suitable rinse. We have found exceptional results with certain silane-based rinses and pre-treatments. 				
Overcoating	Given the correct procedures, Plascoat [®] PPA 571 can be over-sprayed with Alesta Polyester Powder Coatings to provide an almost infinite variety of colours and finishes.				

The information provided herein corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Plascoat cannot anticipate all variations in actual end-use conditions Plascoat makes no warranties and assumes no liability in connection with any of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.

Success Stories

Fencing at sea side in Australia

In 1996 a local Brisbane coating company recommended Plascoat[®] PPA 571 in a tender to remove, sand blast, re-coat and re-install fences in Sutton Beach, one of Brisbane's seaside parks. Whilst it took only 6 months for the previous chosen coating technology to corrode completely, fences coated with Plascoat[®] PPA 571 still look like new today.

Gas pipeline security fence in the UAE

















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 levels of UV can also cause coatings to degrade and fail after just a few years. Due to its outstanding performance on corrosion resistance, UV stability and abrasion resistance, Plascoat® PPA 571 has been chosen to do the job. Since 2001 the fence is still in place without any damages.

Success Stories

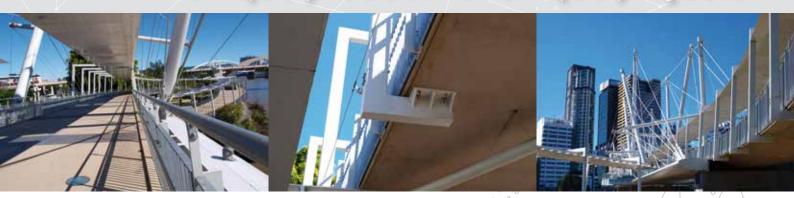
The tale of 2 coatings in Indiana, USA



2011 Plascoat[®] PPA 571 was chosen to recoat Lighting columns, crash barriers, railings and public information board on the Jackson Street Bridge in Indiana. A mile down the road standard polyester coatings has been applied on similar furniture for comparison. After 2 harsh winters, the polyester coatings already began to flake off while Plascoat[®] PPA 571 still looked new.



Unique product for unique projects



It is essential that steel and aluminium in construction projects are resistant to corrosion for many years without costly maintenance programmes.

Pictures with courtesy of Cox Architecture

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2011 Plascoat® PPA 571 had again the opportunity to demonstrate its performance by an Australian famous architectural project, the Kulripa Bridge in Brisbane. This award-winning masterwork was designed as pedestrian bridge over the Brisbane river using a unique tensegrity structure combining multiple masts and cable trays which gives this bridge the silhouette of a ship cruising the river.

Plascoat[®] PPA 571 has been chosen to protect the handrail support structure from corrosion and withstand the tough Australian climate and environment of a pedestrian bridge crossed by hundreds of people per day.

Bridge structure under spanish climate

1990 Plascoat[®] PPA 571 has been chosen to protect steel and aluminium tubular parts of a footbridge in northern Spain (San Sebastian), as existing Polyamide coating started to peel off already after few months. The search was on for a coating that could accommodate the wide temperature range, provide a high level of UV resistance, resist to vandalism, meet the requirements of a tightening budget, and offer a coating life in excess of 10 years. Whilst other part needed to be recoated several time, Plascoat[®] PPA 571 is still in place since 1990, with no trace of under film corrosion or blistering.



No under-film corrosion after years of exposure.

Success Stories

700 lamp posts in Finland

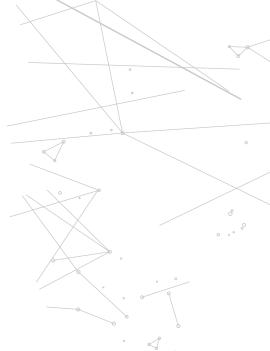


Pictures courtesy of FSP Finnish Steel Painting Oy

The fast-growing city of Tampere, located on a narrow isthmus between 2 great lakes in the south of Finland started a new public transportation project, in order to relieve the city center from traffic whilst improving the environmental impact. The project involves 2 tramlines crossing the city center and consequently the installation of posts along the route, assuring lighting and supporting overhead lines.

3 different designs of posts have been chosen, from decorative one's to multifunctional in ladder shape, all coated with Plascoat[®] PPA 571.





Aruba, Queen Beatrix International Airport solar energy project



On Aruba, a large part of the power supply is supplied by solar panels at the airport.

For this large-scale solar energy project, a Dutch coater powder coated the steel structure. The roof has an area of 24,000 m² and is equipped with 14,000 solar panels that produce approximately 7,000,000 kWh on an annual basis.

The biggest challenge with this project was the Caribbean maritime climate on Aruba. The circumstances demanded a coating system that could withstand the high salinity in the air to prevent corrosion. Combining different expertise enabled the Dutch coater to develop a completely new coating system using Plascoat[®] PPA 571. This system still manages to guarantee the required high quality under severe conditions.

Colourful Performance

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Broad choice of colours

Plascoat[®] PPA 571 is available in these listed stock colours. A comprehensive colour matching service is available for larger orders. Please contact us for further details.

Our colour range is listed in 3-digit codes and RAL 4-digit identification numbers where appropriate.

Beige 222	RAL 1015		Red 233	RAL 3020		
Yellow 344	RAL 1021		Green 475	RAL 6005		
Blue 536	closest RAL 5017		Blue 542	RAL 5015		
Grey 613	RAL 7035		Grey 654	RAL 7001		
Grey 695	closest RAL 7046		Grey 640	RAL 7016		
Brown 813	RAL 3009		Brown 838	closest RAL 8019		
Black 700	RAL 9005		White 110	RAL 9016		
		this pag limitatio reflect c	Please note: whilst every effort is made to ensure the colours on this page are as accurate as possible, due to printing and on-screen limitations, these colours should be used as guidance only. Colours reflect coated finish, and matched to nearest RAL number where appropriate. Samples are available as coated plates or powder.			
Silver	closest RAL 9006	est RAL 9006				

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