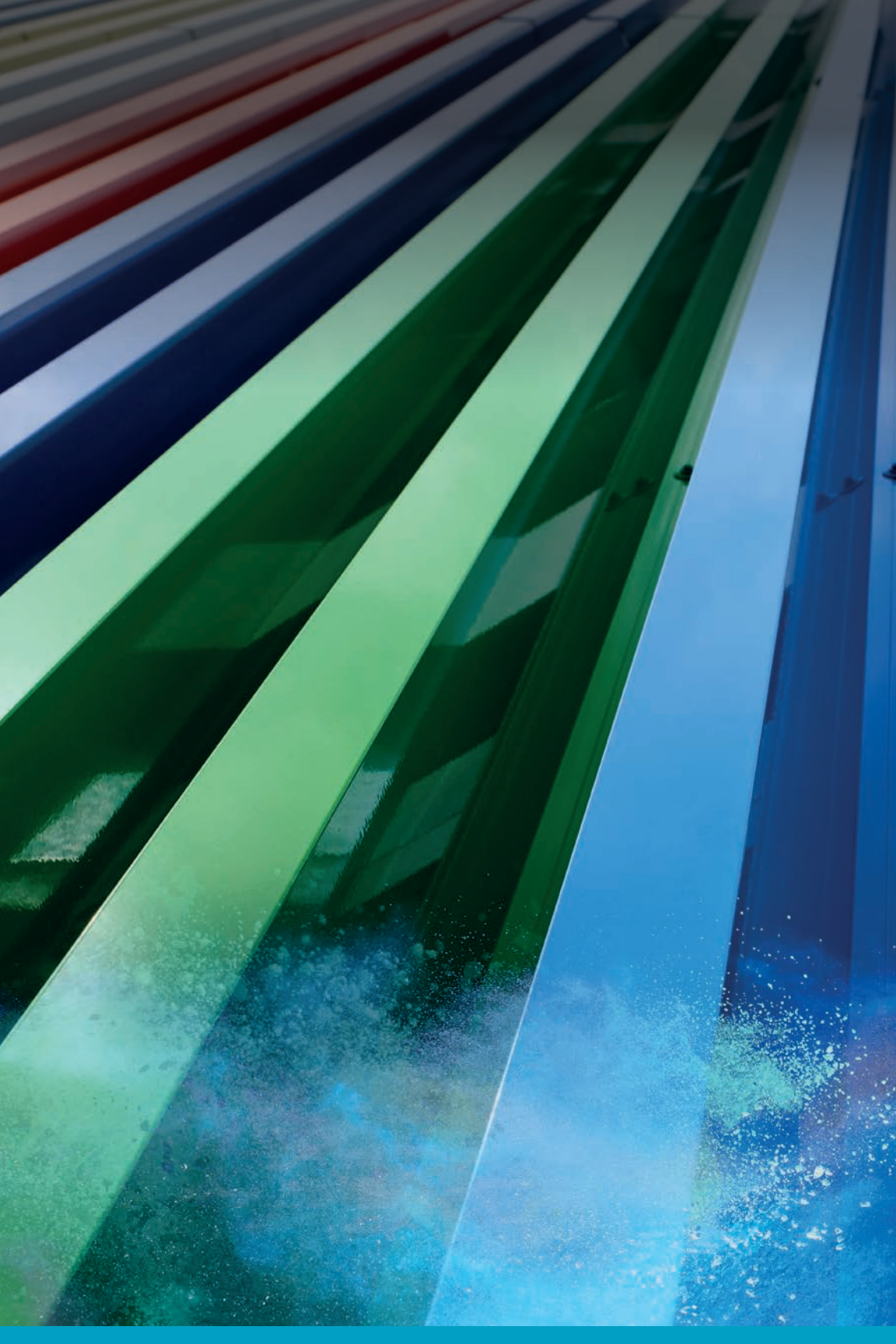
Interpon®
POWDER COATINGS
Architectural

Interpon D for Architecture Specification Guide

Building a new world with color, durability and style

Your imagination starts with our finish

AkzoNobel



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Introduction

Interpon D architectural powder coatings

The ultimate guide

Interpon powder coatings from AkzoNobel, the global leader, are the stand-out performers for architects and fabricators looking to bring their creations to life. It's a stunning range of on-trend colors, finishes and special effects – from high gloss to ultra matt – that are constantly being innovated and updated, and that push the boundaries of what's possible. It's a range that comprises different levels of durability, to match the weather, temperatures and environment to which surfaces, products and buildings are exposed. And it's a range with sustainability at its heart; powder coatings that are free from Volatile Organic Compounds (VOCs), that help stand the test of time and create impressions, futures and partnerships that endure. And last but not least, surfaces can be coated with just a single coat.

Our promise of quality, performance and style is matched by a guarantee of conformity to the most rigorous regulatory benchmarks and standards around the globe, with industry leading warranties that you and your customers demand.

To specify the right powder coating you need to take various factors into consideration. Of course there is the color and style, but also the environmental factors and where your building is located and your products will be used. This will determine your choice of finish; the corrosivity of the environment, for example, will impact how long a surface will last, so choosing the right level of durability supported by the appropriate warranties is essential. It will also determine your choice of pre-treatment, application and curing. Your specification needs to be comprehensive, and carefully considered, to achieve the best results.

What is powder and how is it applied?

Making powder coatings requires a combination of science, technology and skill. A polymer resin is mixed with a pigment and other additives, and heated to form a paste. That paste is then rolled out into a thin sheet, cooled and broken up into small chips. These chips are ground into a fine powder before being sieved, packed and dispatched, ready for coaters to use.

Compared to liquid, a powder coating is much easier to apply, and creates little to no waste after application.

Typically, it involves electrostatically spraying the powder onto a prepared and clean surface – whether that's metal, glass, or even heat sensitive substrates like wood.

First, the powder is fluidized thanks to dry compressed air to behave like a fluid, easing its flow through the powder hose towards the spray gun.

A small amount of air then pushes the powder towards the substrate. The air around the nozzle of the spray gun is electrically charged.

The powder then becomes negatively charged, while the coated object is electrically grounded, and since positives and negatives attract, the powder attaches itself to the surface by an electrostatic bond. This means that the powder perfectly covers the entirety of the substrate, delivering an even and consistent finish, even on sharp edges.

After being coated, the object is then cured in an oven which turns the powder into a tough solid film. It is that, which gives strength, and resistance to corrosion, scratching and blemishes.

Any powder that happens to not stick to the surface can easily be collected and re-used, which is a key factor in supporting a more sustainable operation to minimize waste and maximize efficiency. At Interpon we are always on top of modernizing the manufacturing processes.

Warranties and Industrial Standards

Warranties and Industrial Standards on Aluminum

As a leading powder coatings business, it is our mission to help create buildings and relationships that stand the test of time. This means not only providing the colors and finishes to bring architectural creations to life, but also delivering the product warranties* to assure customers that their powder coatings have been benchmarked and validated against the industry's most rigorous testing regimes, such as the Qualicoat, AAMA and GSB standards. Warranties are provided in two distinct fields – decorative performance and film integrity – and it is important to understand what these actually mean.

Decorative performance refers to the length of time (i.e. the duration) a surface retains its color and finish, as well as how long a surface retains its gloss. Decorative performance is also measured in relation to a phenomenon known as 'chalking', which occurs when the coating breaks down, leaving a chalky residue.

A warranty 'duration', however, can be misleading, for it depends on how duration is being measured. A powder coating applied to a panel and kept in a controlled environment for 30 years cannot be compared on a like-for-like basis to a product warrantied to perform on a building exposed to the elements for the same period of time.

A measurement 'value' for a product used in a real world environment (i.e. 'on the building') offers architects a better representation of a powder coating's true decorative performance. A product's film integrity (i.e. its 'project guarantee' as opposed to a 'product guarantee' that simply confirms that a product will meet the technical claims on the data sheet) is also important. It refers to the protection offered by the coating and is observed by 'checking' and 'cracking'. 'Checking' is the name given to the lines that appear on the surface of the coating that are unsightly, but do not go all the way through the substrate; 'Cracking' involves much deeper lines that penetrate the film and are often more damaging. 'Cracking' leads to the original building material being exposed, and the potential damage caused by weathering is significantly increased.

For Interpon-signed warranties, periods of decorative and project (i.e. film integrity) warranties and a guide to help specifiers understand the likely decorative life and design life of our Interpon D coatings are provided depending on the durability level of the product.

For more information on Interpon warranties and industrial standards, refer to the specification guidelines step 2 on pages 12 and 13. Please note that this document is intended for informational purposes only. No rights can be derived from this document and this document contains no guarantees of any kind.

* When applied on aluminum by an Interpon D Approved Applicator.

Approved Applicators

At Interpon, we recognize that the best can always be better. That's why we've created the Interpon D Approved Applicator Network, an exclusive group of powder coatings' experts to help you choose and apply the right system to protect and enhance your aluminum creations.

Being an Interpon D Approved Applicator requires the coater to participate in a range of pre-arranged and random audits of their powder line, to ensure their continued compliance with excellence. They must have sufficient testing facilities to ensure pre-treatment consistency, correct curing and required film performance and customers need to have the quality management processes in place. They attend regular training events, technical conferences, and practical workshops to ensure their skills – and therefore their advice – is consistent with the ceaseless innovation driven by the Interpon team.

As a customer, using an Interpon D Approved Applicator means accessing some of the greatest minds and skilled practitioners in powder coatings, both directly and via the network. It means accessing a team who can help you to understand the different performance characteristics of each product, and their conformity with the relevant international standards. It is also about the peace of mind that comes from gaining expert advice on the latest products and systems that you know is current, consistent and considered, and will give you the right solution for different substrates and the different levels of durability and performance you need, all backed by an Interpon D project warranty.

Approved Applicator
of
Interpon®
POWDER COATINGS
An **AkzoNobel** brand

Specification

Your quick guide to specifying the right powder coating

Step 1 - Choice of substrate

Step 2 - Choice of application / durability

Step 3 - Choice of pre-treatment

Step 4 - Choice of color and appearance

Step 5 - Choice of cleaning

Step 6 - Writing the specification

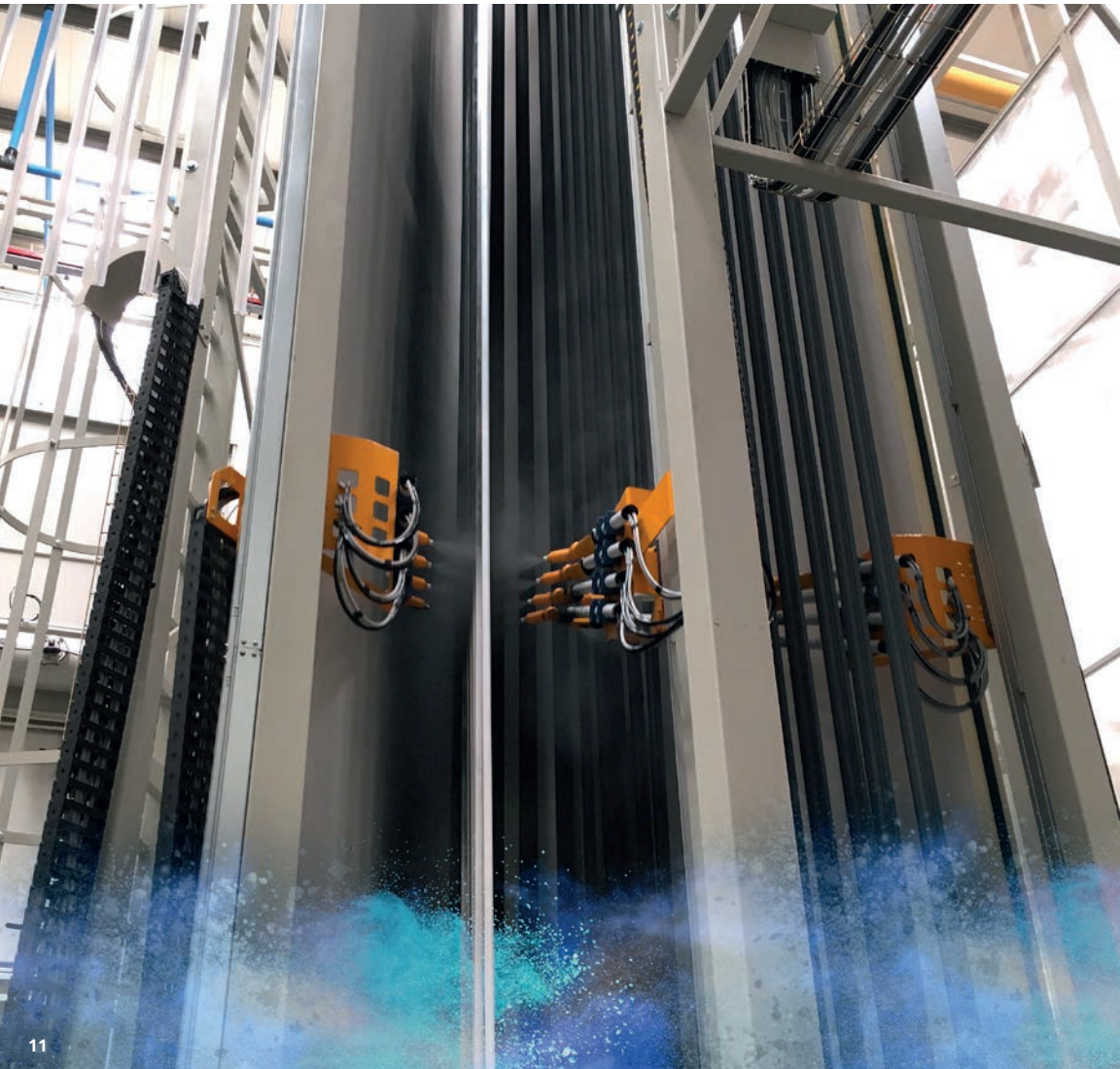
Coating recommendations

Step 1 - Choice of substrate

The first consideration for any specification is the substrate that needs to be coated. These can include:

- Aluminum
- Steel
- Spray steel
- Hot dip galvanized steel
- Continuous hot dip galvanized steel

Your choice of substrate determines the next step in the specification process, from preparation to completion, from the pre-treatment to the subsequent cleaning of the coated part.

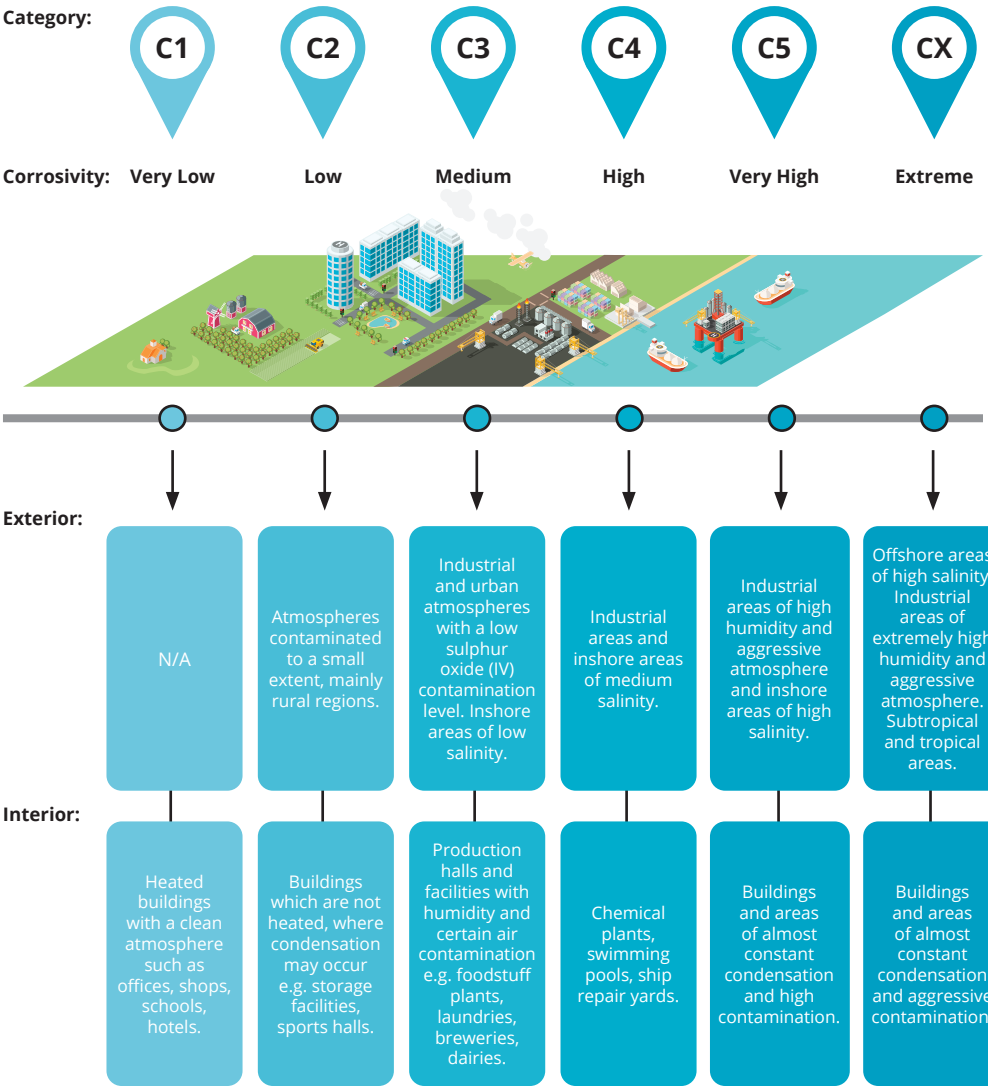


Step 2 - Choice of application / durability

Based on the substrate chosen, the following factors need to be considered to determine your coating selection:

Environment

Different climates and weather patterns, as well the ultimate physical location of the product or part being coated, will impact its performance. High salinity, moisture and exposure to industrial pollution, for example, will all affect the longevity and integrity of the coated finish in different ways and therefore need to be considered.



Durability

The factors outlined above will in turn impact the choice of durability. Harsher climates invariably require a higher durable powder coating if the goal is to achieve optimum long-term performance. Milder climates, however, may enable you to specify a standard durable finish to still achieve the performance you need but at a lower cost.

Interpon has three categories of durability: Interpon D1000 is a standard durable powder coating created for moderate climate conditions externally as well as for interior use; Interpon D2000 is a superdurable range created to withstand more demanding climates; Interpon D3000 is a hyperdurable powder coating engineered to withstand the harshest climate conditions.

All of our powder coatings come with a product warranty (when applied by an Interpon D Approved Applicator – see more on pages 7 and 8). We also adhere to leading industrial standards to assure customers that their powder coatings have been benchmarked and validated against the industry's most rigorous testing regimes.

Range	
Interpon D1000	Standard durable range created for normal climate conditions and interiors.
Interpon D2000	Superdurable range created to withstand demanding climates.
Interpon D3000	Hyperdurable range engineered to withstand the harshest climate condition.

Warranties and Industrial Standards

	Standard durability	Superdurability	Hyperdurability
Product ranges	**Interpon D1000**	**Interpon D2000**	**Interpon D3000**
Warranty*			
Performance guarantee	15 year film integrity 10 year decorative warranty	25 year film integrity 15 year decorative warranty	30 year film integrity 20 year decorative warranty
Design life**	15-30 years	20-40 years	30-50 years
Specification	1 year Florida Qualicoat Class 1 AAMA 2603 GSB Florida 1 (GSB Standard)	3 or 5 Years Florida Qualicoat Class 2 AAMA 2604 GSB Florida 5 (GSB Master)	10 Years Florida Qualicoat Class 3 AAMA 2605 GSB Florida 10 (GSB Premium)

* This guide in no way warrants performance beyond the guaranteed period, but serves to help specifiers plan for replacement or repair of facades and windows.

** The resuts are depending on quality of substrate pretreatment and location; in cooler climates, the design life will be considerably longer.

For further information about our warranties [and how to obtain a warranty] please visit: https://www.interpon.com, speak to your local representative or contact info.interpon@akzonobel.com

Fire Propagation

Fire safety has always been important, and increased regulation – especially in the UK – requires powder coatings to be tested to conform with BS EN13501 by CSTB, a key player in the certification of construction products and services worldwide. The standard focuses on combustibility; materials which are part of an external wall must be either non-combustible or demonstrate limited combustibility.
A key factor is the dry film thickness of the powder on a coated substrate. Interpon powder coatings obtained A2, s1-d0 ratings for its products, and where used can therefore help increase the fire safety of a building. (Fire Safety test reports are available upon request.)

Step 3 - Choice of pre-treatment

Every surface needs to be pre-treated before your choice of powder coating can be applied. This will vary depending on the substrate chosen and how it is expected to perform.

Aluminum Pre-treatment

Aluminum has three pre-treatments (also called 'conversion coating') which are vital to ensuring the powder coating adheres fully to the surface and that it resists corrosion to the performance levels required. Having first removed from the surface any obvious contamination, the pre-treatment process can begin:

Chromate (two- to three-types)

Aluminum and aluminum alloys are treated by a corrosion resistant conversion coating that is called 'chromate coating' or 'chromating'. In this process, an acidic chromium composition is applied to the clean surface. This not only delivers strong, corrosion-resistant properties, but also helps the powder coating basecoat and any further layers to better adhere to the surface (chromate and/or chromate-phosphate conversion is carried out in accordance to EN 12487). The chromate layer is applied by immersion.

Chrome-free (chromium VI-free)

There are several types of chromium (VI) free pre-treatments available for aluminum. The most common types are based on the reactive groups titanium/zirconium (described as being chromium free) and chromium (III). All are accepted as chromium (VI) replacements and capable of withstanding the 1,000-hours salt acid spray, corrosion resistance test requirements of Qualicoat.

Pre-anodizing

Pre-anodizing means the conversion of a very thin layer of the aluminum base material to an artificial aluminum oxide layer. This ensures a very high corrosion resistance and excellent adhesion of the subsequent coating layer(s).

Hot-dip galvanizing pretreatment

Steel pre-treatment

For the four steel substrates (steel, spray steel, hot dip galvanized steel and continuous hot dip galvanized steel) there are various chemical and mechanical pre-treatments:

Chemical pre-treatment

Chemical pre-treatment is a combination of several steps and a specific contact time:

- Cleaning (alkaline or acid);
- Rinsing (neutralization);
- Conversion coating (using phosphate iron/zinc, chromate, phosphor-chromate, or chrome-free options e.g titanium or titanium/zirconium);
- Sealing (via chrome or chrome-free passivation).

The conversion layer produced by the pre-treatment transforms the metal in a non-electrically conductive surface, reducing significantly the advance of corrosion below the coating layer.

Mechanical pre-treatment

Mechanical pre-treatment aims to remove loose and adherent surface oxides and other physical and chemical contaminants from the metal surface and achieve an optimum surface roughness to which organic coatings can adhere effectively. This is obtained by blasting different media (e.g. sand, metal shot, walnut shells, metal grit spherical or angular particles, etc. or a combination of different elements) against the metal surface at various pressures. Different types of metal require different media to obtain the optimum results.

Redox for steel substrates

Interpon Redox primers provide a total corrosivity solution, enabling products to withstand whatever the world can throw at them, and remain fully operational long into the future.

For more information on which Redox product is suitable please go to our System Finder and visit the Qualisteelcoat website (https://qualisteelcoat.net/).

Substrate and pre-treatment

The performance of the system is closely dependent on its substrate and surface preparation.

Features	Pre-treatment	Interpon Redox APA	Interpon Redox One Coat	Interpon Redox Active	Interpon Redox Plus	Interpon Redox PZ	Interpon Redox Triplex
Steel	Chemical		✓	✓	✓		
	Mechanical		✓	✓	✓	✓	✓
HDG steel	Chemical	✓			✓		
	Mechanical	✓			✓		
Stainless steel	Mechanical	✓			✓		
Aluminum	Chemical	✓	✓	✓	✓		

Step 4 - Choice of color and appearance

The final decision prior to the powder coating being applied is the choice of color and appearance. The determining factors can vary considerably:

Colors

Interpon has more than 1,000 colors as standard to choose from and in multiple finishes from matt to high gloss and texture.

Textures

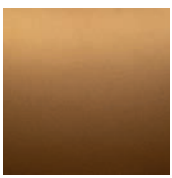
Specifiers can choose a range of different textured finishes from smooth to coarse. They are not only less prone to scratches but also typically require less cleaning.

Finishes

Metallics are particularly on-trend and chosen primarily for their stunning visual appeal. Smooth to touch, they also give surfaces a playful quality and depth.

Special effects

Interpon provides powder coatings that mimic the natural world, from stone to wood, in a way that is less expensive, more sustainable, and easier to handle than using the real thing.



Gloss levels per Interpon range

Interpon range gloss levels	D1000	D2000	D3000
Gloss levels from 100 to 71	✓	✓	
Satin gloss levels from 31 to 70	✓	✓	
Matt gloss levels from 20-30	✓	✓	✓
Ultra matt gloss levels from 1-19		✓	

Step 5 - Choice of cleaning

To support the durability of the coating, a regular cleaning cycle is advised. The cleaning frequency will be determined by the combination of environment (city center buildings are likely to require more cleaning than buildings in the country for example) and durability of the coating.

The corrosivity of the environment will also determine the cleaning frequency. For some indications refer to the table below:

Minimum cleaning frequency for the 3 ranges by location

Range	C1 to C3	C4 to C5	Swimming pool >2m from edge
Interpon D1000	1* 12 months	1* 3 months	1* 3 months
Interpon D2000	1* 18 months	1* 6 months	1* 3 months
Interpon D3000	1* 24 months	1* 9 months	1* 3 months

Step 6 - Writing the specification

Any specification needs to be documented and reviewed before a final decision is taken. The written specification will take into account all of the factors outlined above and in summary your choice of:

1. **Substrate**
2. **Environment**
3. **Application/durability**
4. **Pre-treatment**
5. **Color and appearance**
6. **Cleaning**

Speak to your local representative or contact info.interpon@akzonobel.com to order samples and learn more about what Interpon D can do for you.

The mention “RAL at the architect’s choice” should be avoided: It effectively excludes other references (such as NCS) and shades created by manufacturers. The RAL standard is often mistakenly considered as the general qualifier for powder coating offerings. In fact, RAL is a German color chart whose 190 solid shades are not all achievable in Architectural quality. Example of wording for your CCTP The powder coatings used will be of the Architectural Polyester type, approved by QUALICOAT in class 2 (High Durability), from the Interpon D2525 range by AkzoNobel Powder Coatings. • Case of a shade from a reference (RAL, NCS, PANTONE, AFNOR). It is essential to specify the gloss: RAL 9005 glossy or RAL 9005 matte • Case of a shade from an AkzoNobel PC color chart: it is necessary to name the shade precisely, as well as the original color chart: Blue 2600 Sablé Interpon D2525 from the Futura 2014-2017 Collection or RAL 7035 Structura Interpon D2525 Structura Collection • Case where the shade is not known at the time of writing the description. In this case, it is important to be both precise and as non-restrictive as possible in order to be able to prescribe the finish of your choice when the time comes: AkzoNobel Powder Coatings Color Chart - Futura 2014-2017 Collection - Metallic, sanded or speckled shade at the project manager’s choice.

Coating recommendations

- Only one batch of powder should be used per color and per singular building structure/unit.
- Mixing durability grades on the same external elevation is strictly prohibited.
- Application should be conducted using well-regulated automatic equipment.
- Consult with AkzoNobel Technical Services to determine permitted recycling ratio during application.
- Components should be coated using the minimum number of runs possible and installed on site in order of application.
- Components should be applied in the same orientation where feasible.
- Settings of automatic gun reciprocators and line track speed should be aligned by powder manufacturer's Technical Services prior to application (applicable for salt & pepper effects).
- For each of our products the relevant Technical Data Sheet, Material Safety Data Sheet and package labelling comprise an integral information system about the product in question and have to be consulted. Copies are available on request or from our website: www.interpon.com

Interpon D1000 Standard durable range

Porta Fira Hotel

Barcelona, Spain

The strikingly red Hotel Porta Fira in the coastal city of Barcelona won the Emporis architecture prize in 2010. The iconic building rises 110 meters up into Barcelona's skyline, a city blessed for its art and architecture. Renowned Japanese architect Toyo Ito was inspired by the organic form of a lotus flower to create a contorted cylinder which gives all the rooms excellent views. A façade of red metal tubes also affords the building an intricately textured appearance. Interpon's D1036 powder coating will help preserve the beauty of the building against the maritime weather and heat of the Barcelona sun with the same resilience for which the lotus flower is revered.

Interpon D1000 Standard durable range

Our standard durable range is created for residential, architectural interior and exterior aluminum applications on window and door frames. The range protects and beautifies architectural interiors and exteriors long term in moderate climates. This range can be made in a wide range of textures, gloss levels, colors and metallic effects.

The Interpon D1000 powder coatings range includes:

- Interpon D Textura

Leading benefits

Standard durable
Long term protection for moderate climates or medium intense usage.
1 Year Florida exposure

Cost efficient durability
Created to deliver high class durability in medium demanding climates while being cost efficient.

Exceptional color and texture range
Our powder coatings comprise an extensive range of the very latest, on-trend colors, that retain their color integrity for longer. A full range of colors is matched by a comprehensive range of finishes including glossy, satin, matt, fine texture and special effects such as metallic and wood effect.

Special features
Interpon D1000 offers special features such as scratch resistance (Interpon D X-Pro) or resistance against microbes (Interpon D AM).

Future proof warranties
Our promise of industry leading performance is backed by a 15-year project warranty when applied by an Interpon D Approved Applicator.

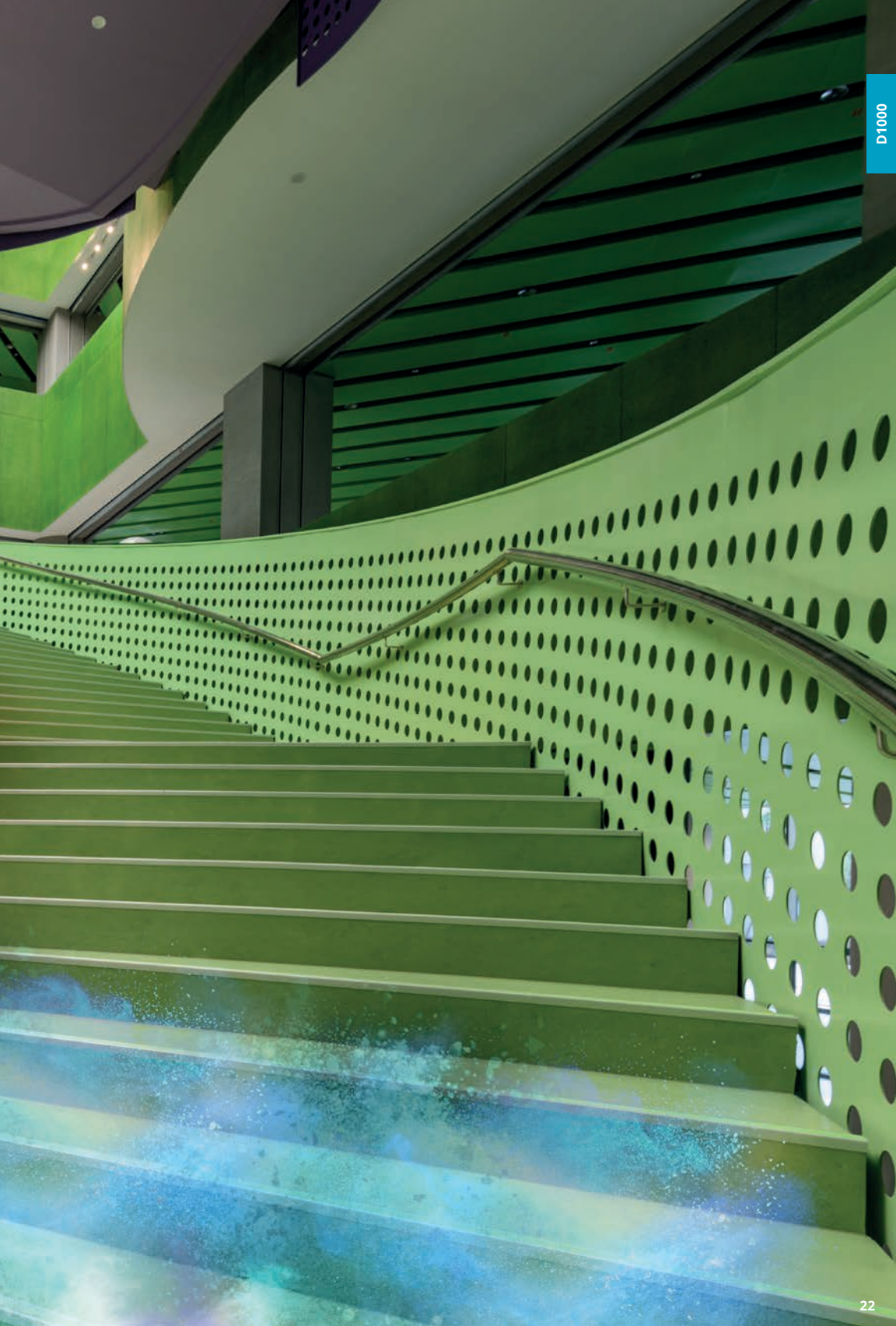
Compliance to the highest industry standards
Qualicoat Class 1 and GSB Florida 1, AAMA 2603, EN 12206 and EN 13438 certifications, guarantee the powder coating's performance across a range of different environments.

Environmental and durability tests		
Exterior durability	ISO 2810	Meets Qualicoat Class 1 and AAMA 2603 requirements after 1 year Florida
Acetic acid salt spray	ISO 9227	<16 mm2 corrosion/10cm (1000hrs)
Constant humidity	ISO 6270	No blistering, creep <1mm (1000 hrs)
Sulphur dioxide	ISO 3231	Pass 30 cycles– no blistering, loss of gloss or discoloration

Mechanical tests	Test standard	Test requirement
Adhesion	ISO 2409	Gt0
Flexibility (cylindrical mandrel)	ISO 1519	Pass 5 mm
Erichsen cupping	ISO 1520	Pass >5mm
Bucholz hardness	ISO 2815	>80

Interpon D1036 Textura

Interpon D1036 Textura is a range of textured powder coatings specifically designed with scratch resistance in mind. Intended for use on architectural aluminum and galvanized steel, the range is ideally suited for gates, railings, and pergolas. Available in a choice of over 100 RAL colors, Interpon D1036 Textura offers a low maintenance, easy-cleaning solution in a tough, scratch resistant finish.



Interpon D2000 Superdurable range

The Maestria Condominiums

Montreal, Canada

There are few buildings in the world that exude a smooth, confident style more than The Maestria Condominiums in Montreal. It's a statement of flamboyant eccentricity, with two of the highest residential towers in the city joined by a suspended skybridge overlooking the Quartier des Spectacles. Little wonder the designers chose Interpon D2000 powder coatings in smooth black and bone white colors to protect its windows and walls from the weather and deliver a superdurable finish deserving of a building destined to become a future icon.

Interpon D2000 Superdurable range

For more challenging climates our precious architecture requires heavy duty protection. The Interpon D2000 range delivers superdurable protection to ensure the creations of the world's greatest minds stand the test of time. Designed to protect and beautify architectural exterior aluminum applications, the Interpon D2000 range offers higher gloss retention and greater resistance to color change, with maximum film integrity to ensure long term cosmetic and functional protection. This range can be made in a wide range of textures, gloss levels, colors and metallic effects.

The range is specifically designed to protect and enhance window and door systems, louvres, balustrades, and other exterior metal features.

The Interpon D2000 powder coatings range includes:

- Interpon D2525 Futura
- Interpon D2525 Structura
- Interpon D2525 Natural Metals
- Interpon D2015 Précis Ultra Matt
- Interpon D2525 Stone Effect
- Interpon D2525 Anodic
- Interpon D2525 Low-E
- Interpon D2525 X-Pro
- Interpon D2525 Slip Resistance (ISR)
- Interpon D2525 Low Solar Absorption (LSA)
- Interpon D2525 Wood Effect (STF)
- Interpon D Antimicrobial (AM)

Leading benefits

Superdurable performance
Created to deliver long lasting performance in highly demanding climates.
3 & 5 Year Florida Exposure

Exceptional color and texture range
We have the widest range of colors, special effects and finishes to match every imagination and style.

Future proof warranties
Our promise of industry leading performance is backed by a 25-year project warranty when applied by an Interpon D Approved Applicator.

Compliance to the highest industry standards
Qualicoat Class 2, GSB Florida 3 & 5, AAMA 2604, EN 12206 and EN 13438 certifications, guarantee the powder coating's performance across a range of different environments.

Environmental and durability tests		
Exterior durability	ISO 2810	Meets Qualicoat Class 2 requirements after 3 years Florida Meets AAMA 2604 requirements after 5 years Florida
Acetic acid salt spray	ISO 9227	<16 mm2 corrosion/10cm (1000 hrs)
Constant humidity	ISO 6270-2	No blistering, creep <1mm (1000 hrs)
Sulphur dioxide	ISO 22479	Pass 24 cycles– no blistering, loss of gloss or discoloration

Mechanical tests	Test standard	Test requirement
Flexibility	ISO 1519 (cylindrical Mandrel)	Pass Qualicoat Class 2 requirements
Adhesion	ISO 2409 (2mm Crosshatch)	Pass Gt0
Erichsen cupping	ISO 1520	Pass Qualicoat Class 2 requirements
Impact resistance	ISO 6272-2	Pass Qualicoat Class 2 requirements
Hardness	ISO 2815	>80

Westminster Abbey

London, United Kingdom

The challenge was to architecturally bridge the gap between the past and the present, and the Weston Tower, the first tower to be built at Westminster Abbey in 300 years, has delivered. The 80-foot-high structure is built from glass, lead, steel, wood and stone. It skillfully blends both old and new materials, and its window frames are protected with an Interpon D2525 Anodic powder coating as a perfect alternative to anodized aluminum. It ensures the new tower has the magical appearance it needs to becomes part of a lasting legacy.

Interpon D2525 Futura Collection

A favorite with architects for almost a quarter of a century, the latest Interpon D Futura Collection comprises three exciting color palettes and authentic, on-trend finishes to create buildings that inspire. With color quality that doesn't fade into the past, buildings will remain as bright and stylish as the day they were imagined. And with a superdurable performance backed by a 25-year warranty, the collection is also helping to create a future that endures.

The color palettes scheme for 2022-2025 includes:

Merging Worlds

Using bright, earthy colors, the Merging Worlds pallet elevates authentic materials like brick and natural wood to create a bold and powerful statement. Building on warm, rich tones, Merging Worlds plays on the theme of traditional craftmanship from across the globe, creating comforting finishes that capture the style past with a nod to the future.

Healing Nature

With a renewed focus on health and wellbeing, Healing Nature provides the chance to reconnect with the natural world and find the balance to contrast our busy lives. The trend showcases a range of natural shades – greens and blues, organic shapes and natural patterns to bring us closer to the world around us and deliver a sense of tranquility and calm.

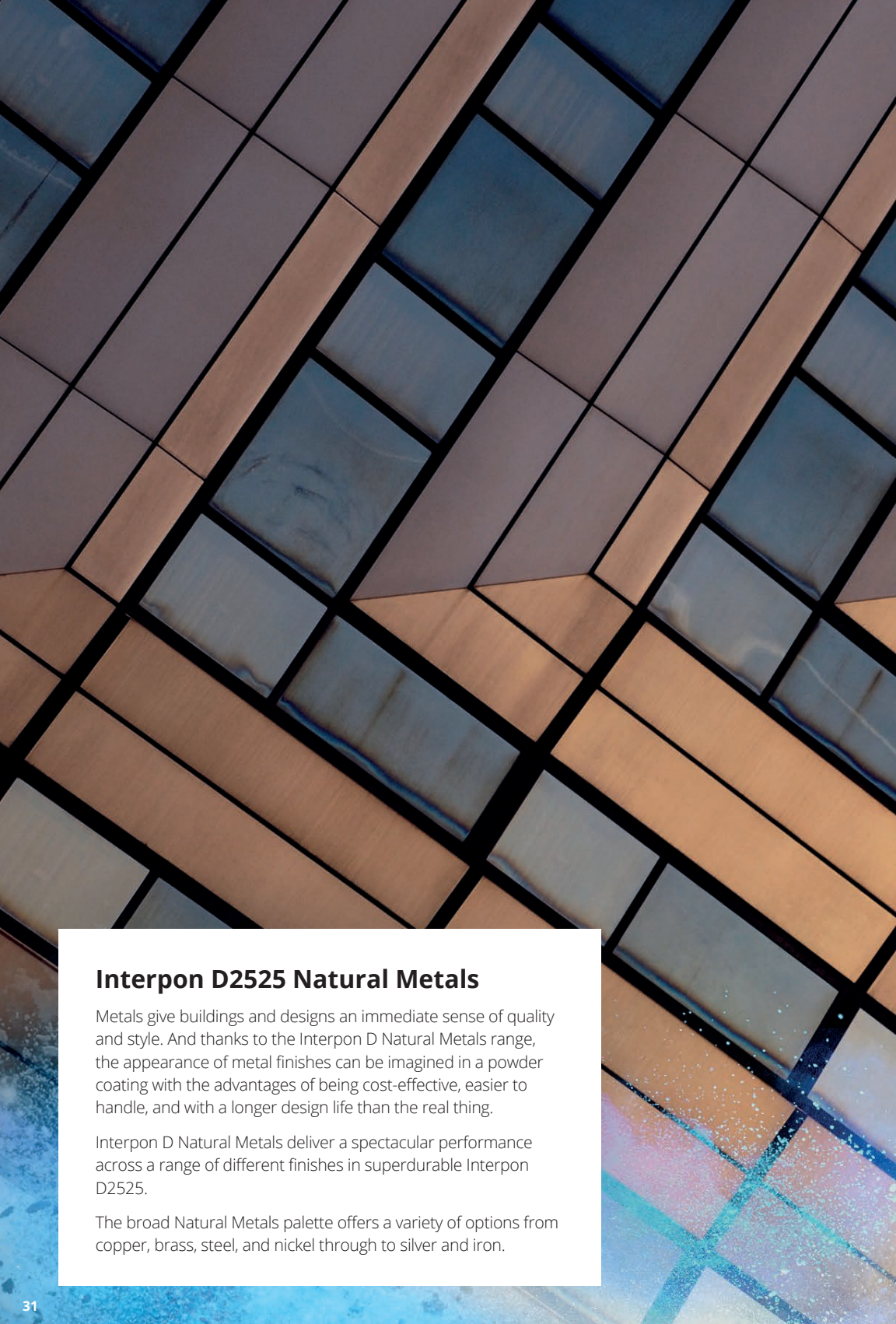
Soft Abstraction

We all need time to sit back and think, to rest and reconsider, to contemplate and imagine a positive future. Driven by the power of contemplation, this trend covers a beautiful range of neutral, soft tone color shades and fine metallics that bring vitality and health to open spaces, laying the foundations for people to connect and recharge.

Interpon D2525 Structura

For surfaces that need a textured finish, scratch resistance and superdurable protection, architects and specifiers can trust the Interpon D2525 Structura to ensure quality and performance without compromise. Specially formulated without the use of any Triglycidyl Isocyanurate (TGIC), the Structura range of Interpon D powder coatings has become the first choice for architects who want style and performance for the buildings they imagine. Offering a choice of more than 80 RAL colors, architects can be assured that their creations are always on-trend, while the structured finish gives aluminum and steel surfaces an intriguing sense of quality and depth with significantly higher gloss retention and resistance to color change.

Interpon D Structura conforms to the slip resistance test standard BS7976-2.2002+A1.2013 resulted in PTV≥40 (Dry) and 36 (Wet).

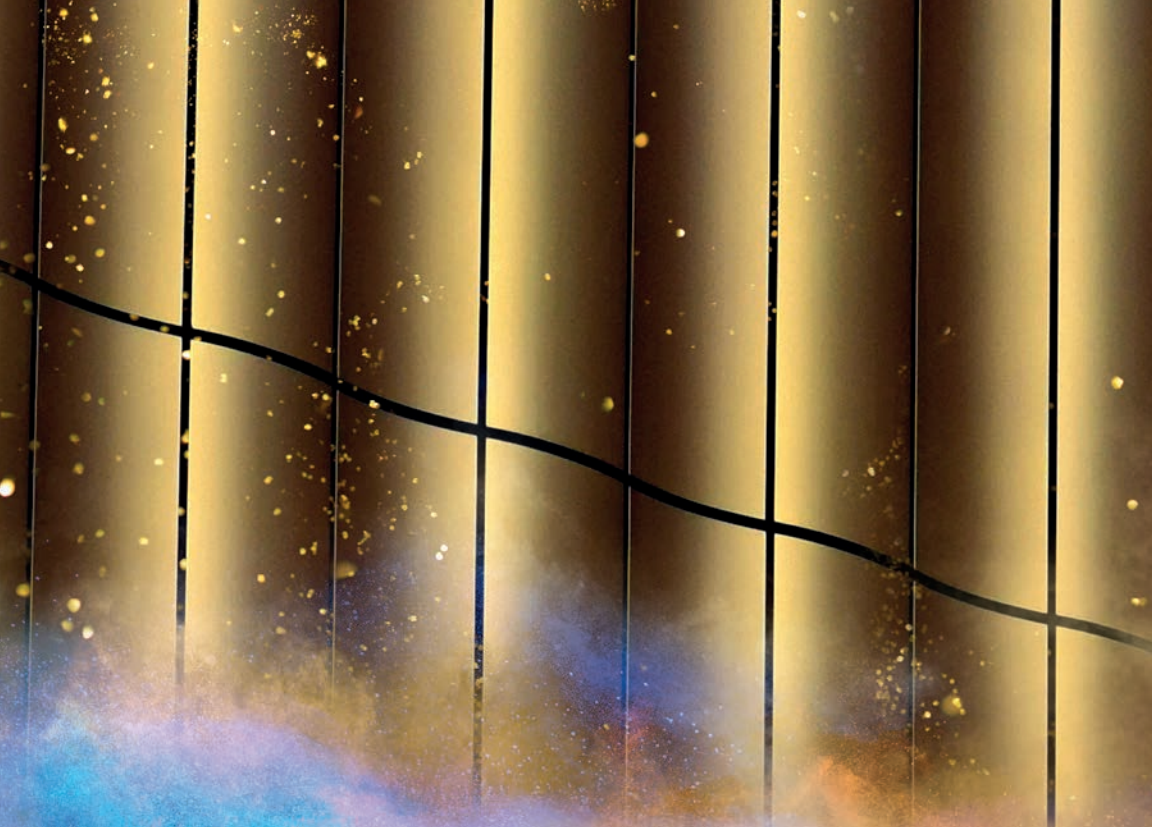


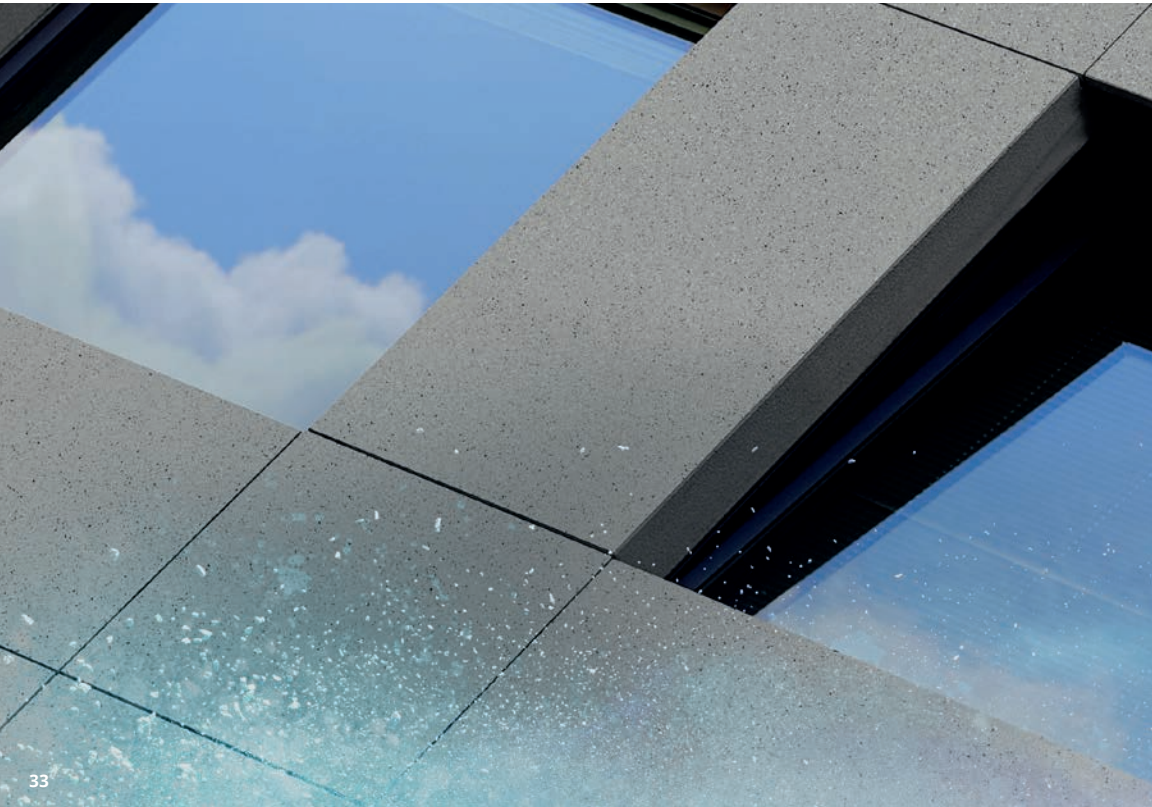
Interpon D2525 Natural Metals

Metals give buildings and designs an immediate sense of quality and style. And thanks to the Interpon D Natural Metals range, the appearance of metal finishes can be imagined in a powder coating with the advantages of being cost-effective, easier to handle, and with a longer design life than the real thing.

Interpon D Natural Metals deliver a spectacular performance across a range of different finishes in superdurable Interpon D2525.

The broad Natural Metals palette offers a variety of options from copper, brass, steel, and nickel through to silver and iron.

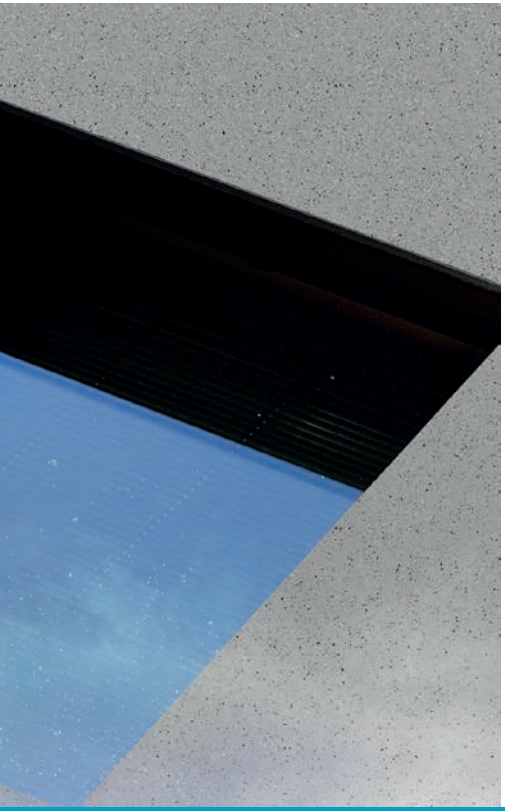




Interpon D2015 Précis Ultra Matt

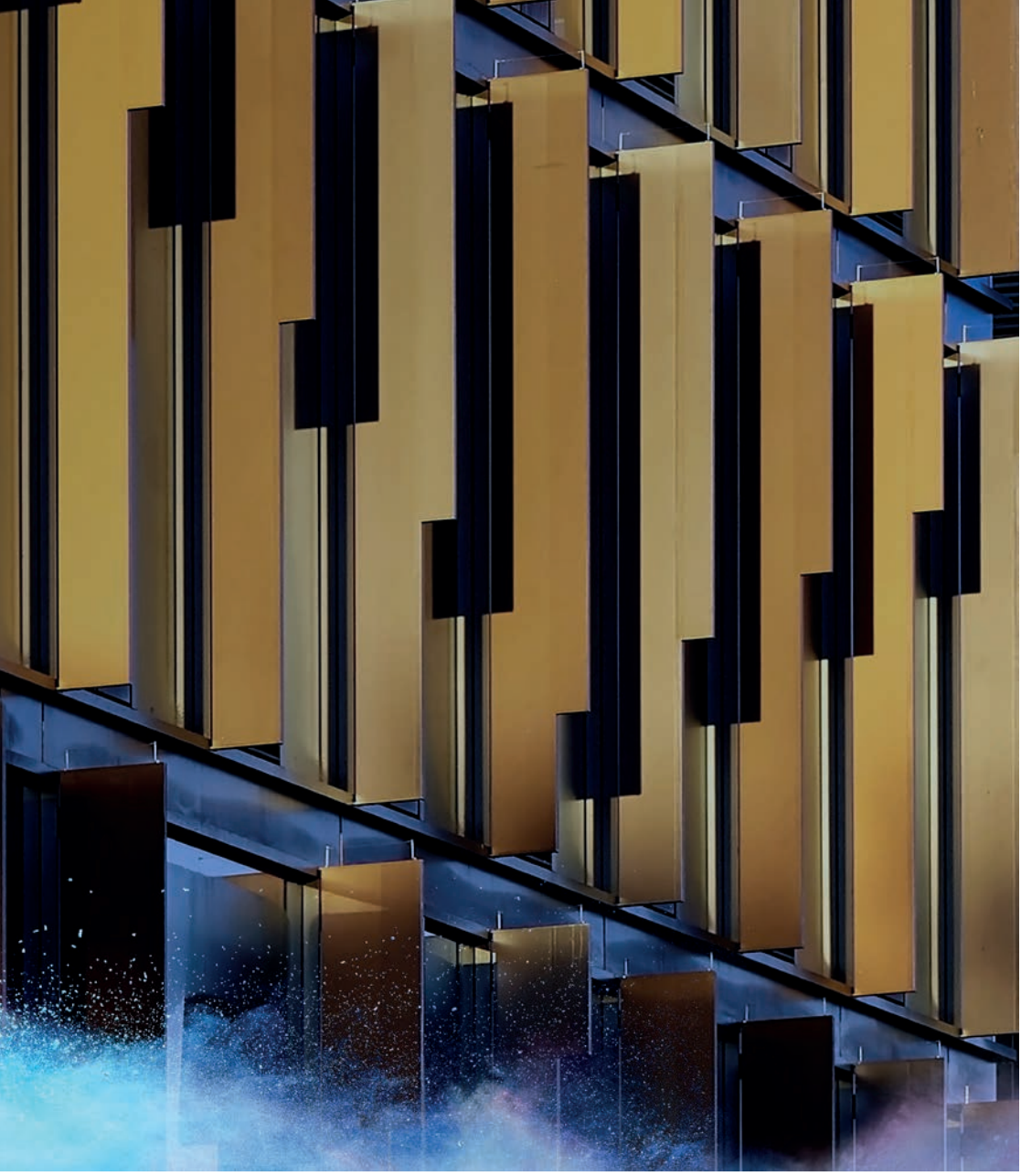
Interpon D2015 Précis Ultra Matt is a powder coating that enables architects to give ultra matt surfaces a glint of brilliance and luminescence not possible before. Thanks to a fine mica effect, the appearance of non-reflective surfaces can be transformed, such that the light appears to dance across them. The range offers another sustainable alternative to real anodizing.

The Interpon D2015 Précis Ultra-Matt powder coatings give a consistent low gloss appearance when cured according to the recommended cure schedule.



Interpon D2525 Stone Effect

For architects who want the beautiful look and feel of stone without any of the cost or labor of installing and maintaining the real thing, we have created the ultimate alternative in the Interpon D2525 Stone Effect. This specialty coating has all of the aesthetic qualities of Portland stone, limestone and brickwork. And because its part of the D2525 system the Interpon D Stone Effect is built to last with the long-term weathering resistance needed for highly demanding environments.



Interpon D2525 Anodic

As a more sustainable alternative to anodized aluminum, the Interpon D2525 Anodic range of matt and metallic finishes enables architects to create stand out designs with a superdurable finish. Compared to anodizing, the Interpon D Anodic powder coating has far greater resistance to acid and alkalis. Because of its durability, the Interpon D Anodic range is by definition more sustainable.

Interpon D2525 Low-E

For those looking to reduce their energy consumption on their sustainability journey towards a net zero carbon future comes Interpon D2525, a low energy (Low-E), superdurable powder coating that achieves an industry first in being able to cure at temperatures as low as 150°C while still being Qualicoat Class 2 certified. The innovative Interpon D2525 Low-E supports an architect or specifier's sustainability goals in one of two ways: either curing at a lower temperature (30°C lower than 'traditional' powder coatings) or at a faster line speed. In both cases, the product is helping to reduce the total energy consumed, lowering carbon emissions, and enhancing production line efficiencies while still delivering the optimum level of performance.

The Interpon D Low-E is also available in the D1036 range.

Interpon D2525 X-Pro

The Interpon D2525 X-Pro is the latest generation coating system offering a market leading scratch resistant solution, that never compromises on style, color, or finish. From factory floor to final delivery on site, the powder coating helps protect products in transit or that are regularly moved and stacked. It is ideally suited to the manufacture of window frames, doors, and similar architectural products.

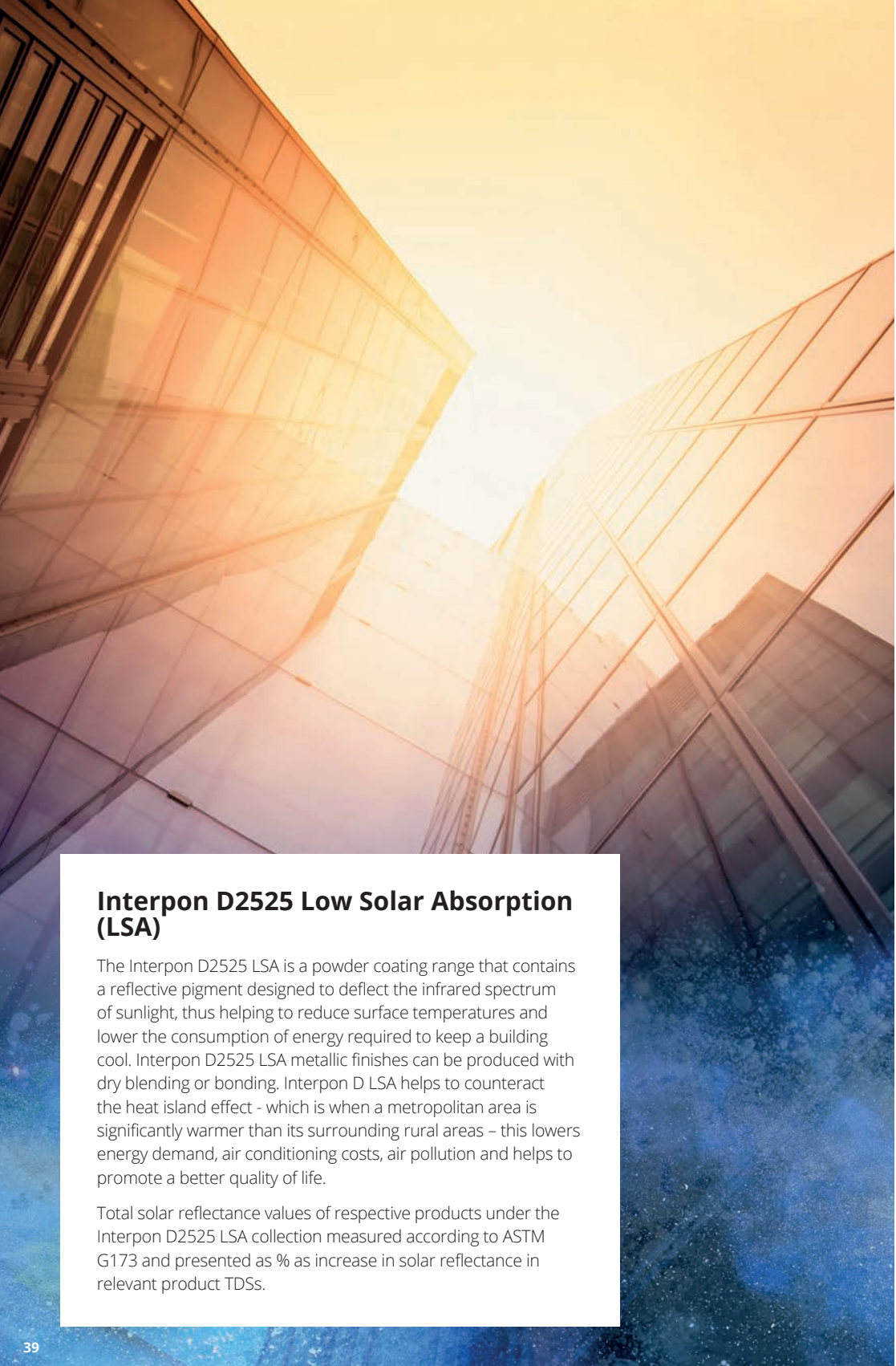
The Interpon D X-Pro is also available in the D1036 range.

Interpon D2525 Improved Slip Resistance (ISR)

Certain surfaces in particular outdoor environments such as balconies and ramps can become slippery, especially when wet. By choosing Interpon D2525 ISR, architects can help prevent slips from occurring, and give those surfaces a stylish, superdurable finish. Interpon D2525 ISR is particularly designed for use on architectural aluminum and galvanized steel, to bring greater levels of safety even in the most demanding climates. The powder coating is also designed to retain its color for longer, conforming to all the major European architectural finishing standards while offering low risk potential of slip according to BS7976-2.2002+A1.2013.

ISR Slip Resistance Test standard BS7976-2.2002+A1.2013 results in Low slip potential PTV>60 (dry) and 50 (wet) respectively for solid colored products PTV>55 (dry) and 45 (wet) respectively for special-effect products.

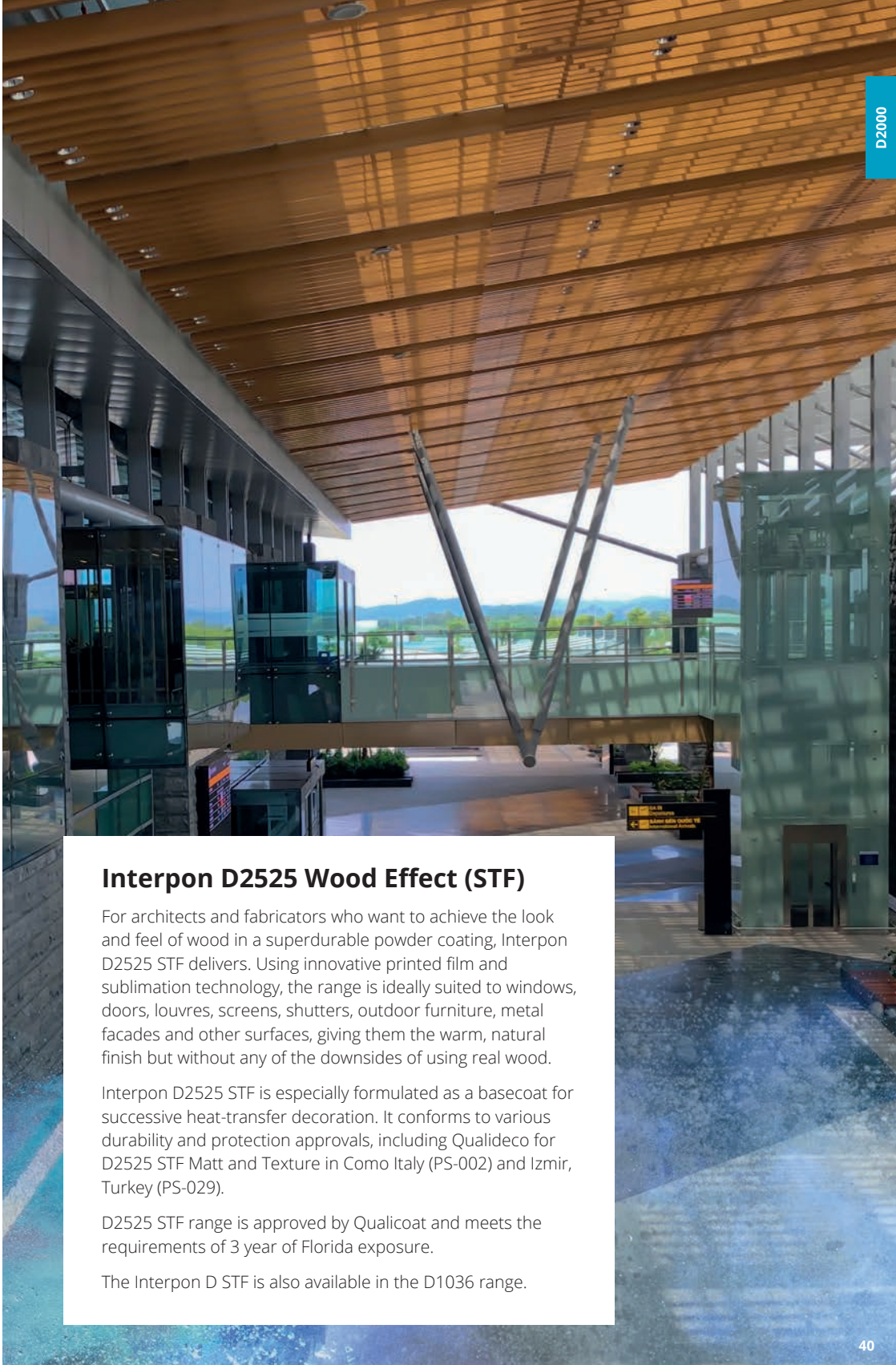
The Interpon D ISR is also available in the D1036 range.



Interpon D2525 Low Solar Absorption (LSA)

The Interpon D2525 LSA is a powder coating range that contains a reflective pigment designed to deflect the infrared spectrum of sunlight, thus helping to reduce surface temperatures and lower the consumption of energy required to keep a building cool. Interpon D2525 LSA metallic finishes can be produced with dry blending or bonding. Interpon D LSA helps to counteract the heat island effect - which is when a metropolitan area is significantly warmer than its surrounding rural areas – this lowers energy demand, air conditioning costs, air pollution and helps to promote a better quality of life.

Total solar reflectance values of respective products under the Interpon D2525 LSA collection measured according to ASTM G173 and presented as % as increase in solar reflectance in relevant product TDSs.



Interpon D2525 Wood Effect (STF)

For architects and fabricators who want to achieve the look and feel of wood in a superdurable powder coating, Interpon D2525 STF delivers. Using innovative printed film and sublimation technology, the range is ideally suited to windows, doors, louvres, screens, shutters, outdoor furniture, metal facades and other surfaces, giving them the warm, natural finish but without any of the downsides of using real wood.

Interpon D2525 STF is especially formulated as a basecoat for successive heat-transfer decoration. It conforms to various durability and protection approvals, including Qualideco for D2525 STF Matt and Texture in Como Italy (PS-002) and Izmir, Turkey (PS-029).

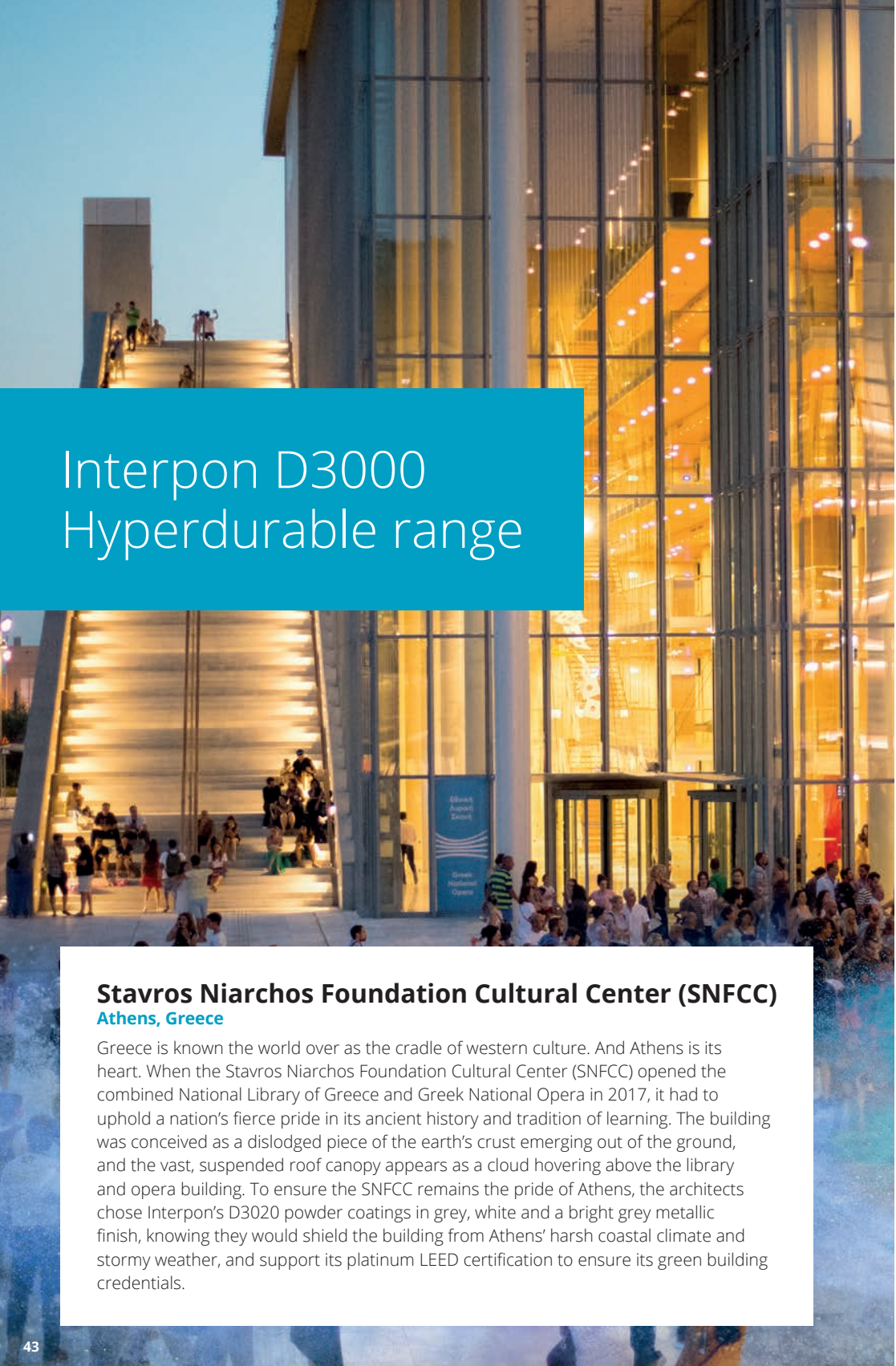
D2525 STF range is approved by Qualicoat and meets the requirements of 3 year of Florida exposure.

The Interpon D STF is also available in the D1036 range.

Interpon D2525 Antimicrobial (AM)

The Interpon D2525 AM is a superdurable, antimicrobial powder coating that can be used on a variety of internal and external surfaces, protecting against microbes such as bacteria and mold and conforming to the highest industry standards. Thanks to a silver phosphate glass additive, surfaces are much better protected against the degradation caused by bacterial growth. The Interpon D2525 AM is available in a range of finishes including gloss, satin, matt, and textured finish.

The Interpon D AM is also available in the D1036 range.



Interpon D3000 Hyperdurable range

Stavros Niarchos Foundation Cultural Center (SNFCC)

Athens, Greece

Greece is known the world over as the cradle of western culture. And Athens is its heart. When the Stavros Niarchos Foundation Cultural Center (SNFCC) opened the combined National Library of Greece and Greek National Opera in 2017, it had to uphold a nation's fierce pride in its ancient history and tradition of learning. The building was conceived as a dislodged piece of the earth's crust emerging out of the ground, and the vast, suspended roof canopy appears as a cloud hovering above the library and opera building. To ensure the SNFCC remains the pride of Athens, the architects chose Interpon's D3020 powder coatings in grey, white and a bright grey metallic finish, knowing they would shield the building from Athens' harsh coastal climate and stormy weather, and support its platinum LEED certification to ensure its green building credentials.

Interpon D3000 Hyperdurable range

The Interpon D3000 range of hyperdurable powder coatings is an architect's first choice in protecting metal surfaces from the most demanding environments and conditions. Its hyperdurable performance protects window and door systems, louvres and balustrades for up to 30 years, and retains their color, finish and performance, come rain or shine. This range can be made in a wide range of textures, gloss levels, colors and metallic effects.

It is also important to note the distinction that exists between liquid and powder coatings. Traditionally hyperdurable liquid coatings are PVDF-based and hyperdurable powder coatings are mostly FEVE-based. Since FEVE-based powder coatings are thermosets, if you compare the two with regards to scratch and abrasion resistance and touch up requirements, the FEVE-based powder coatings are stronger than the PVDF-based liquid coatings due to cross-linked film. And from a sustainability point of view, the one-layer application of powder coatings, high reclaimability and respray efficiency, and the fact they are free of VOCs, means they are also more sustainable.

Leading benefits

Hyperdurable performance
Engineered to withstand the harshest climates and environments, such as deserts and coastal areas for many years.
10 Year Florida exposure

Wide color and texture range
Available in a wide range of on-trend colors with exceptional levels of color and gloss retention even in tropical, desert or coastal climates.

Future proof warranties
Our promise of industry leading performance is backed by a 30-year project warranty when applied by an Interpon D Approved Applicator.

Industrial standards
Designed to meet Qualicoat Class 3, AAMA 2605, and GSB Florida 10 standards.

Meets 10-year Florida testing requirements.

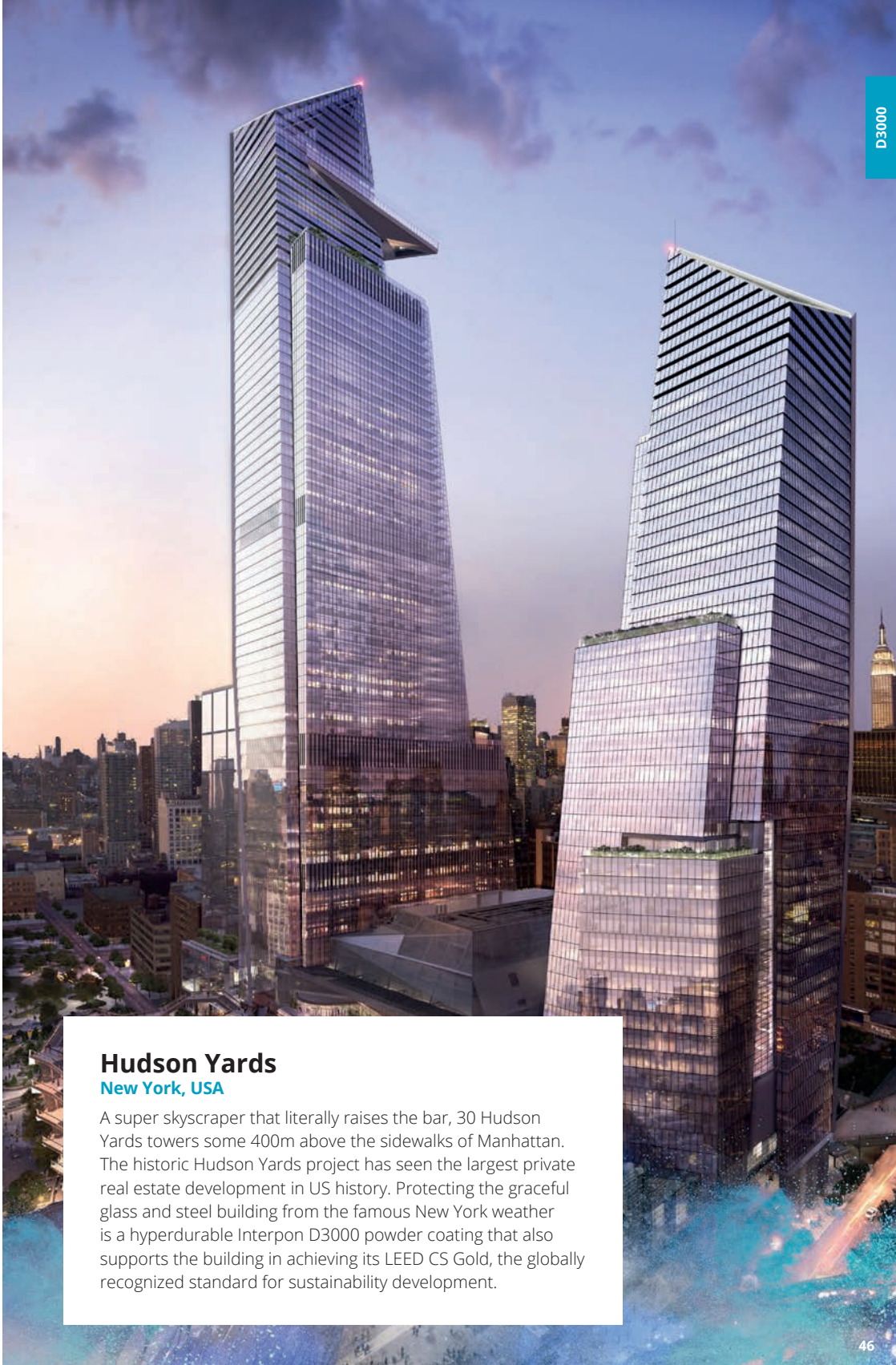
Interpon D3020 Matt has several Qualicoat approvals:
Matt (Light): P-1887, Matt (Medium): P-1888, Matt (Dark): P-1889

Comparison of Interpon D3020 and PVDF liquid coating systems

	Interpon D3020	PVDF liquid coatings
System	Thermosetting FEVE resin	Thermoplastic PVDF resin
Finish	Matte and texture finish	Matte finish
Application	Single coat (50-80 µm) without need for primer and with near zero waste (up to 98% of the coating is utilized)	2 coats (Solid and Mica) or 3 coat system (Al){30-55 µm)
Curing schedule	20-30 minutes at 392°F (200°C) 15-25 minutes at 410°F (210°C)	10-12 minutes at 450°F (232°C)
Tolerance	Wider application tolerance at ambient temperature	Color consistency depends on control of ambient temperature and solvent content (Metallic Color)

Environmental and durability tests		
Exterior durability	ISO 2810	Meets Qualicoat Class 3 requirements and AAMA 2605 requirements after 10 years Florida
Acetic acid salt spray	ISO 9227	<16 mm² corrosion/10cm (2000hrs)
Constant humidity	ISO 6270-2	No blistering, creep <1mm (2000hrs)
Sulphur dioxide	ISO 22479	Pass 24 cycles - no blistering, loss of gloss or discoloration

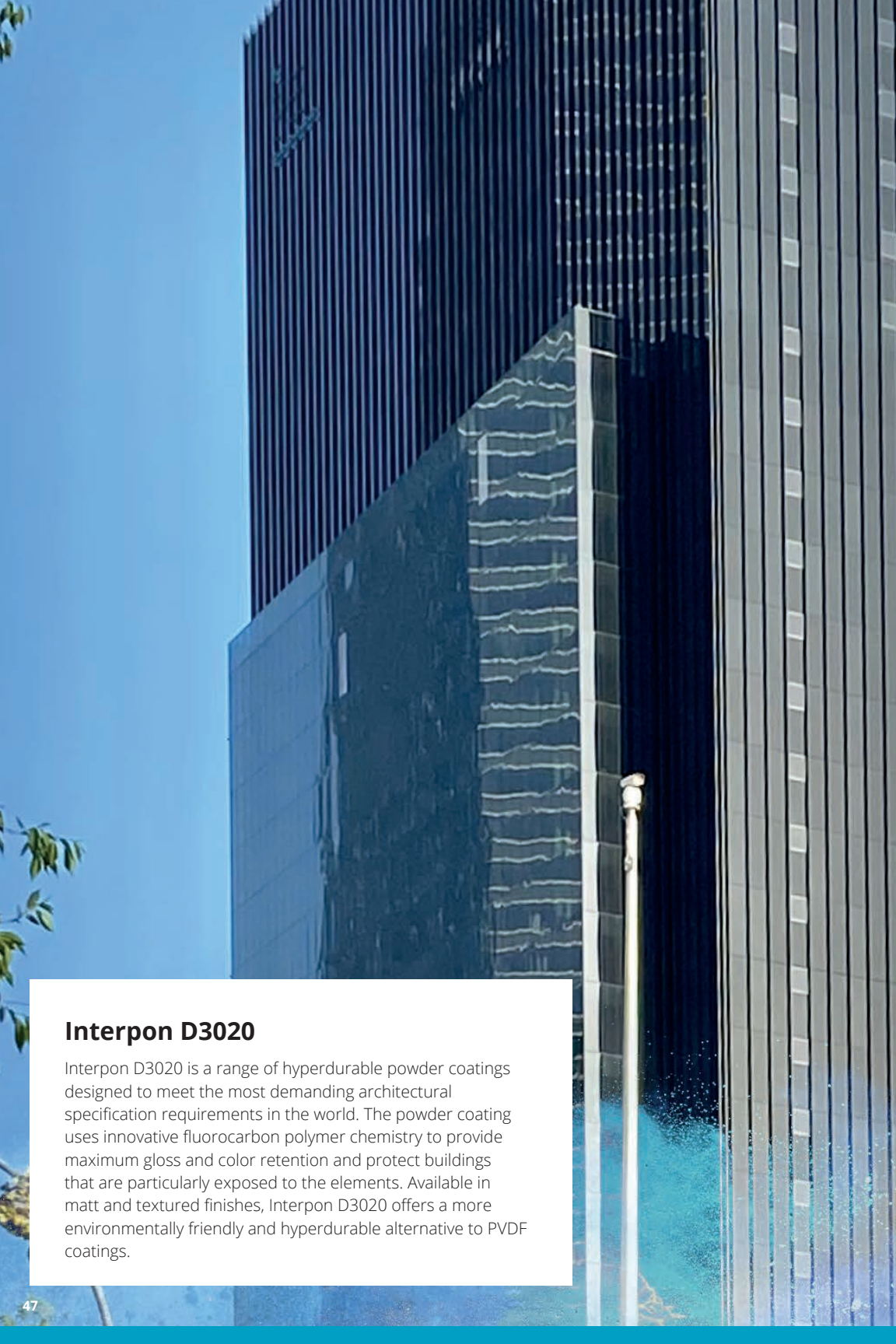
Mechanical tests	Test standard	Test requirement
Flexibility	ISO 1519 (cylindrical Mandrel)	4000 hours GR≥75%, ΔE≤3
Adhesion	ISO 2409 (2mm Crosshatch)	Pass Gt0
Erichsen cupping	ISO 1520	Pass Qualicoat Class 3 requirements
Impact resistance	ISO 6272-2	Pass Qualicoat Class 3 requirements



Hudson Yards

New York, USA

A super skyscraper that literally raises the bar, 30 Hudson Yards towers some 400m above the sidewalks of Manhattan. The historic Hudson Yards project has seen the largest private real estate development in US history. Protecting the graceful glass and steel building from the famous New York weather is a hyperdurable Interpon D3000 powder coating that also supports the building in achieving its LEED CS Gold, the globally recognized standard for sustainability development.



Interpon D3020

Interpon D3020 is a range of hyperdurable powder coatings designed to meet the most demanding architectural specification requirements in the world. The powder coating uses innovative fluorocarbon polymer chemistry to provide maximum gloss and color retention and protect buildings that are particularly exposed to the elements. Available in matt and textured finishes, Interpon D3020 offers a more environmentally friendly and hyperdurable alternative to PVDF coatings.

Interpon D RTS Range

Interpon D RTS Range

Quality, performance, and style at your doorstep

With over 1000 products in its portfolio, Interpon D RTS (Ready to Ship) range is the largest range of powder coatings in stock and available for delivery in Europe within 24-72 hours for your convenience.

The RTS range comprises a wide range of premium colors, textures and finishes to help the architectural world realize their most imaginative designs.

We have a portfolio of products to suit different uses, applications and environments, to protect the integrity and appearance of surfaces from the weather and everyday wear and tear, through to the tougher challenge of corrosion.

And we can provide products to the quantity you need, big or small.

Color

Color, performance, and protection

Everyone needs color in their lives. People choose Interpon D powder coatings for many reasons, but one of the most important is that it has the widest selection of on-trend colors, textures and finishes to choose from.

This doesn't happen by chance. There's skill behind it. Expertise. Knowledge. Colors are not guessed at. They are an art, a discovery supported by science and research. They are the result of the years of experience of our team of color experts from our AkzoNobel Aesthetics Center, and of ongoing trend research among some of the world's finest creative minds.

We have colors that dazzle and colors that hide, colors that stand out when they need to, or blend in when they don't. We have colors and shades to reflect moods and environments, that lift spirits and support our health and wellbeing. We have textures that are hard or soft to touch and finishes that can make metal look like wood or stone, bringing all of the benefits while protecting our natural resources and we offer metallic coatings that are chosen for their stunning visual appeal and optical depth.

We offer the most comprehensive Ready to Ship (RTS) range of on-trend premium colors, textures and finishes to help realize the most imaginative designs. On top of our RTS range offer, we can do color matching on request.

Speak to your local representative or contact info.interpon@akzonobel.com to order samples and learn more about Interpon D colors.

Sustainability

Transparency

Building a sustainable future

Our commitment to sustainability is at the heart of what we do. Unlike traditional liquid paints, powder coatings are free of Volatile Organic Compounds, create minimum waste, and through their durable, superdurable and hyperdurable qualities deliver longer-lasting performance. Our primers are also designed to fight corrosion for longer, adding yet another layer of protection and performance to extend the lifetime of the buildings and products they protect.

We evidence our commitment through a range of actions:

- We were the first in the market to secure an Environmental Product Declaration (EPD), which has been recently renewed for the third time and will last for the coming 5 years.
- We've been proactively eliminating lead pigment and moving away from TGIC.
- We've been actively marketing low cure technology, with the benefits this brings to reducing the energy our customers consume in their own production processes, and in reducing the overall environmental footprint of the entire industry.
- We've made our own commitment to eliminating carbon emissions by 50%, using 100% renewable energy and reaching 50% of revenue from sustainable solutions by the year 2030, protecting our world and our future.

More about EPD

EPD provides total cradle to grave transparency for those in the built environment, seeking sustainable powder coating solutions and partners:

- The new EPDs evidence AkzoNobel's commitment to providing total transparency concerning the sustainability of the raw materials, manufacture and transportation associated with creating Interpon D powder coatings.
- Products with EPD contribute to some of the leading Green Building schemes, such as LEED (Materials and Resources category) and BREEAM (Materials category).
- Interpon's EPD is compliant with a broad range of international standards including ISO 14025:2006 type III declaration and EN 15804:2012+A2:2019/AC:2021.

EPD D1000

EPD D2000

EPD D3000

EPD®

Digital Tools

Immersive 3D Design Tool

The app is a tool that allows architects and specifiers to better understand the use of powder coatings applied to metal in built environments. It enables the creation of technical specification documents based on internationally recognized architectural standards.

The Design App is created especially for professionals who want the latest information about the use of colors and properties of coatings in the buildings and construction sectors.

Key features

- Technical information on coatings.
- Based on the project location (worldwide) generate your own technical specification.
- Uses internationally recognized standards (AAMA, Qualicoat, GSB, and more).
- Product finder: choose from a comprehensive range of colors and finishes including metallic.
- Color picker: find a match to the color you want by using your camera or photos.
- Build your own color card: if your project has a range of colors, use the 'Color Card' features to produce personalized color documentation.
- Document library: technical information and reference documents for use by professional operators in the building and construction sector.
- Glossary: explanation of common terms that relate to coatings.
- Track record: find examples worldwide where coatings have been used in construction projects.
- Help: in addition to the technical tools and content in the app, there are details of who you can contact locally (worldwide) for help and advice on anything related to coatings.

Currently available on iOS only. Check your local App Store for availability.

AkzoNobel Interpon

Download on the App Store

Interpon Design App
Created especially for architects and specifiers

Interpon AkzoNobel

Interpon App
Our Interpon App opens the door to all you need to know about Interpon powder coatings

Also on our website: product finder, color picker, document library and system finder.

AkzoNobel

Since 1792, we've been supplying the innovative paints and coatings that help to color people's lives and protect what matters most. Our world class portfolio of brands – including International, Sikkens and Interpon – is trusted by customers around the globe. We're active in more than 150 countries and use our expertise to sustain and enhance everyday life. Because we believe every surface is an opportunity. It's what you'd expect from a pioneering and long-established paints company that's dedicated to providing more sustainable solutions and preserving the best of what we have today – while creating an even better tomorrow. Let's paint the future together.

For more information please visit www.akzonobel.com.

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All products supplied and technical advice or recommendations given are subject to the Conditions of Sale of our supplying company. Any warranties, if given, are contained in those standard Conditions of Sale and are the only ones made with respect to any products we sell to your or advice or recommendations we give to you.

We hereby disclaim any warranties or representations, expressed or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose.

For each of our products the relevant Product Data Sheet, Material Safety Data Sheet and package labelling comprise an integral information system about the product in question. Copies of our Product Data Sheets and Material Safety Data Sheets are available on request or from our website: interpon.com

Information on our Technical Data Sheets prevail over any information given in this information bulletin.

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Speak to your local representative or contact **info.interpon@akzonobel.com** to order samples or to learn more about what Interpon powder coatings can do for you.

Interpon Design App
Created especially for architects and specifiers

Interpon App
Our Interpon App opens the door to all you need to know about Interpon powder coatings

bimobject®

Follow us
Powder Coatings by AkzoNobel

interpon.com

Interpon®

Architectural

Your imagination starts with our finish