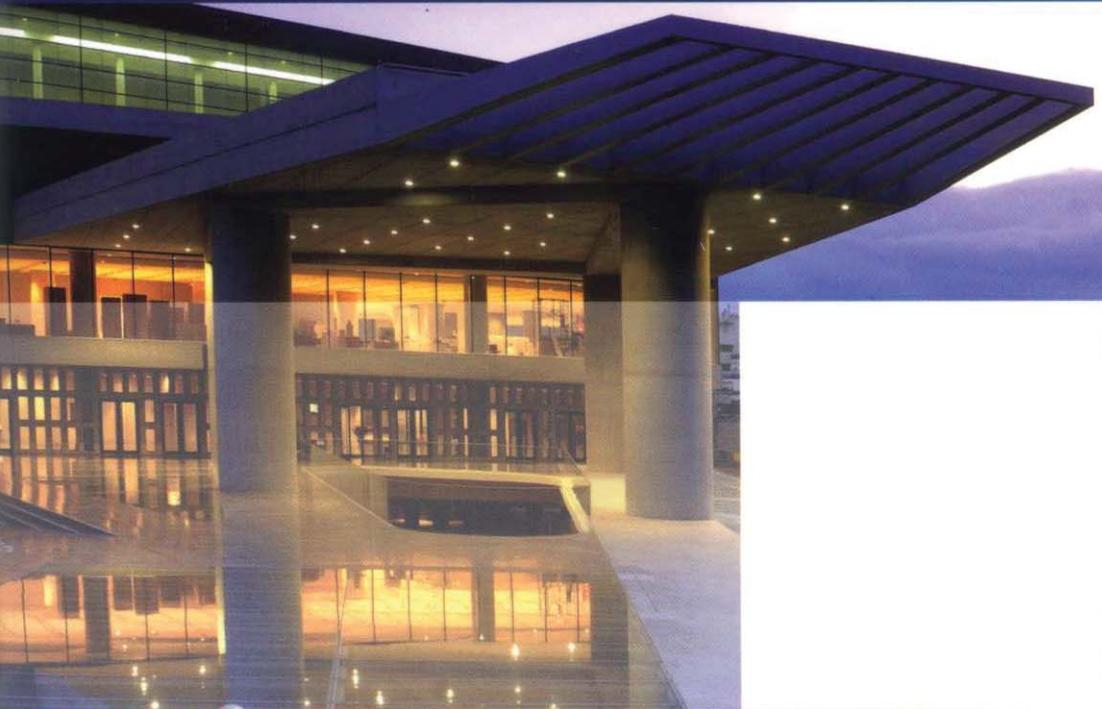
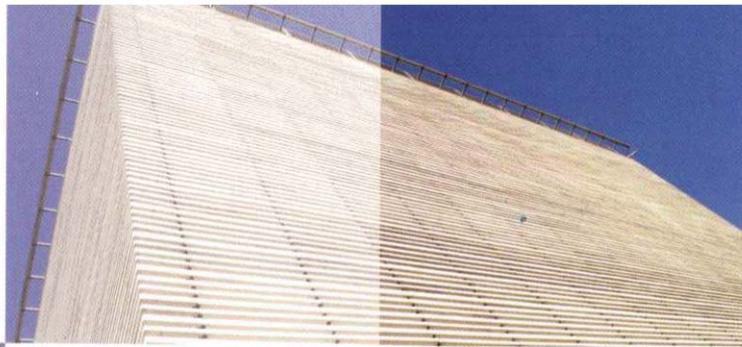


## Collection Eternity : Low Solar Absorption Powder Coatings



# Eternity

The Essential Collection  
for Green Building



**AkzoNobel** is the world's largest manufacturer of powder coatings and a recognized leader in powder coatings technologies.

With bases in more than 44 countries worldwide, we supply customers in virtually every country and are passionate about developing sustainable answers for our customers. We are excited to support architects and consultants on selecting the most suitable coatings solutions that deliver stunning and unique finishes.

## Interpon D Powder Coatings for Architecture

**Interpon D** is our powder coatings range specifically designed for architectural and construction projects. Suitable for coating metallic surfaces such as steel and aluminum - including curtain walls, frames, shutters, beams and panels - the range has been developed to give both exceptional performance and protection, as well as an aesthetic finish that enhances the design. Colors, too, are developed both to reflect and anticipate modern tastes and trends.

We have over 40 years' experience in supplying construction projects in all arenas, from bridges to stadiums, sky-scrapers to cultural centers, including some of the world's most iconic structures.

**Interpon D** products come with a range of guarantees and meet all international and architectural standards including Qualicoat, GSB and AAMA.

Track Record projects pictured front & back cover, plus pages 2 & 3 include:

- New Acropolis Museum, Athens, Greece
- Trump Towers, Istanbul, Turkey
- Smart Village Pavilion, Giza, Egypt
- Soccer City, Johannesburg, South Africa
- Onasis Cultural Center, Athens, Greece
- Federation Tower, Moscow, Russia
- Aldar HQ, Abu Dhabi, UAE
- Haus Santa Fe, Mexico City, Mexico
- Esentai Park, Almaty, Kazakhstan
- Museum of Islamic Art, Doha, Qatar
- Veles e Vents, Valencia, Spain



Interpon D2525 ECO

## Interpon D2525 ECO

### The trusted powder coating technology for Green Building

Nowadays, people are redefining the way that they think about the places where they want to live, work and learn. In response to the desire to improve quality of life, without jeopardising the environment for future generations, architects and engineers are identifying and implementing practical and measurable green building design and construction techniques.

Sustainable architecture uses a more environmentally conscious approach to design, that seeks to minimize the negative environmental impact of buildings with efficient use of energy and materials. Such an approach can only help to reduce the effects of global warming along with a phenomenon known as urban heat island.

Urban heat island is occurring in large cities across the globe, where the builtup areas are experiencing higher temperatures than nearby rural areas. The temperature differences fluctuate over the course of the day and in the evening the difference can be as high as 12°C. Heat island affects communities by increasing summertime peak energy demand, air conditioning costs, air pollution and damaging our quality of life, resulting in heat-related illness and even, in some cities, complete blackouts.

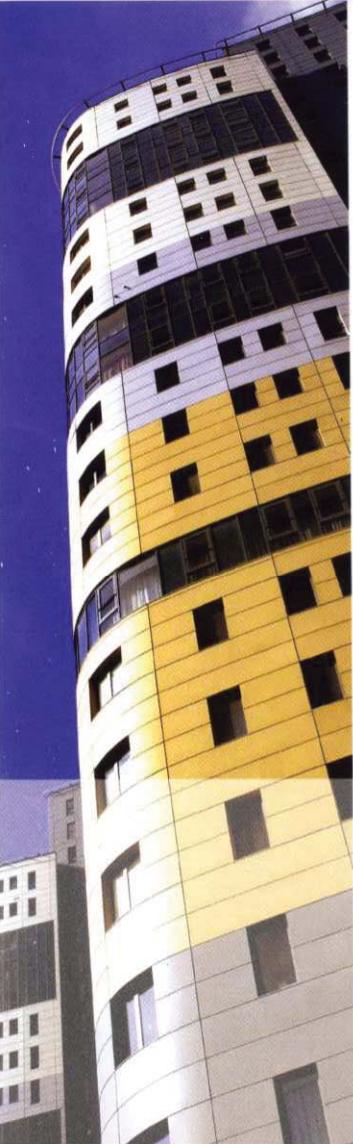
## Eternity -

### the Essential Collection for Green Building

AkzoNobel has always been at the cutting edge, developing products that improve sustainability and diminish environmental impact. In response to the problem of urban heat island and global warming, Akzonobel are proud to present the **Eternity Collection** which uses **Interpon D2525 ECO** Technology.

**Eternity, the Essential Collection for Green Building** is a 20 shades color range of heat reflective powder coatings. As part of the **Interpon D2000** range, it comes with exceptional durability – a proven 21 year on-building track record. We believe that it will become the first choice of architects, not only helping to reduce energy bills but also providing the following benefits:

- Building life cycle cost efficiency
- Better quality of living
- Less problems with polyamide of thermal break aluminum profiles
- Exceptional weathering durability
- A guarantee of up to 25 years
- Exceptional heat reflective performance
- Modern color range
- Qualicoat Class 2; AAMA 2604 compliance
- Contribution to LEED "green building" certification
- SMaRT accredited products
- Unlimited customized colors and finishes, upon request



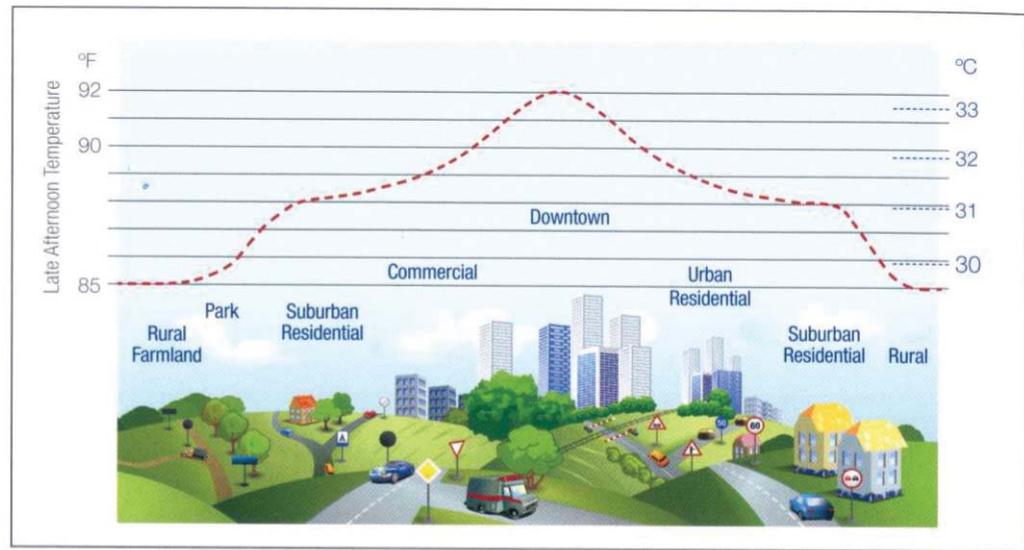
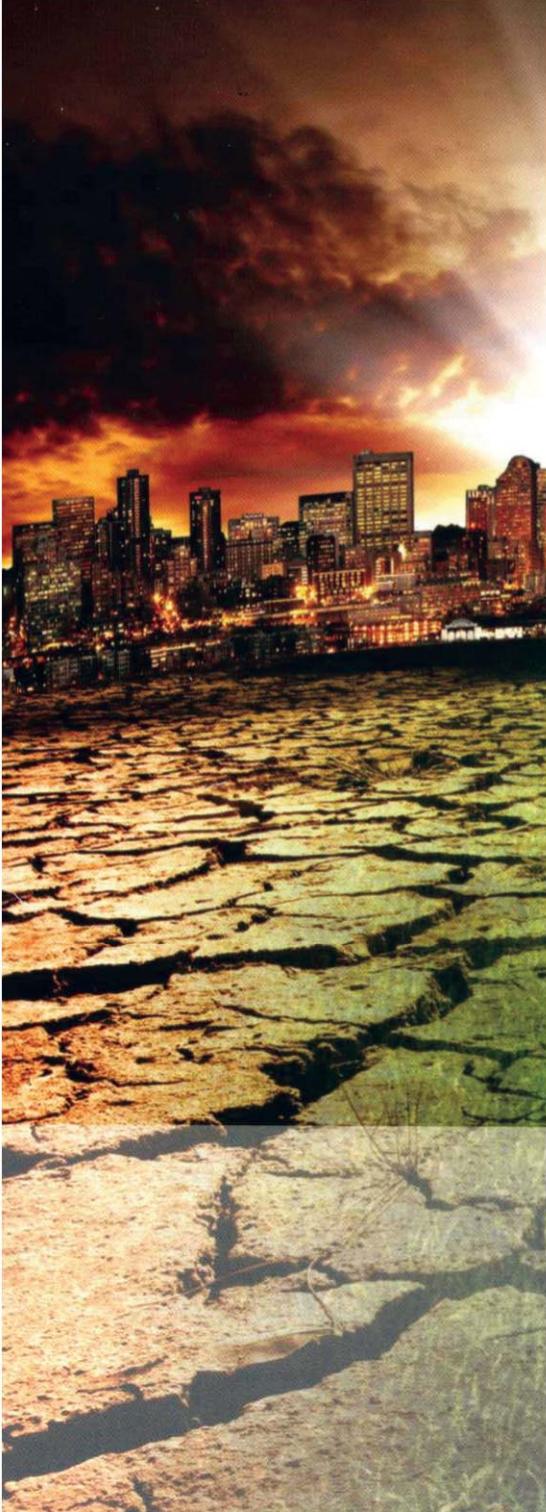
How Does It Work?



The Color Palette

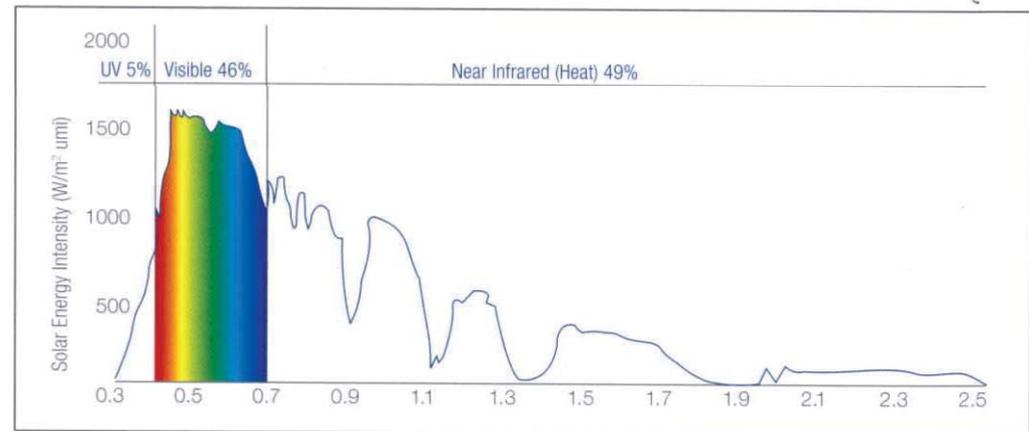


Why Specify Interpon D2525 ECO?



### What is Urban Heat Island Effect?

An urban heat island (UHI) is when a metropolitan area is significantly warmer than its surrounding rural areas. The temperature difference between urban areas and the surrounding suburban or rural areas can be as much as 5°C during the day, and on an evening the difference can increase to as high as 12°C. UHI is experienced both during summer and winter. We can help to counteract the heat island effect with the use of reflective building materials on houses, roofs, pavements, and roads. The use of such materials can also lower energy demand, air conditioning costs, air pollution and help promote a better quality of life.



### The mechanism behind heat absorption

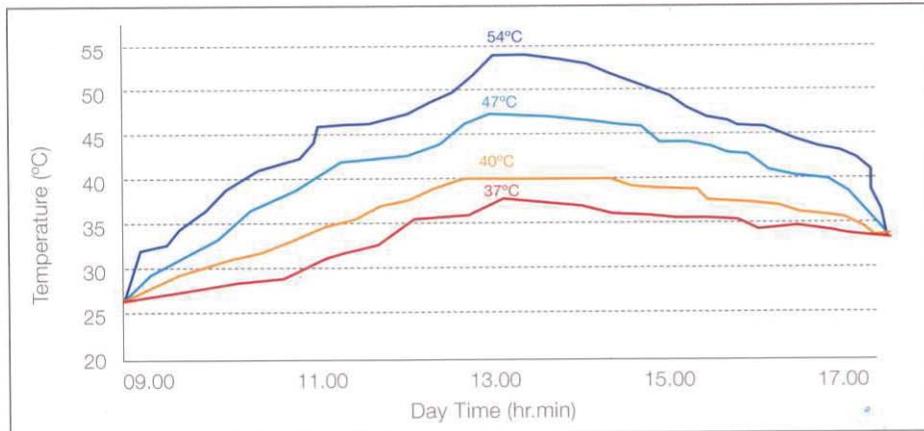
The sun's energy is made up of three components: the visible spectrum (46%), ultra-violet light (5%) and invisible infrared light (49%). And it's the latter that is responsible for heat build-up; virtually half the sun's total energy.

## The Science Bit - How **Interpon D2525 ECO** works

Sustainable Architecture aims to reduce energy consumption and improve quality of life, with the use of specially developed materials, that ensure interior spaces are kept cool and comfortable. Powder coatings play an important role within Sustainable Architecture, as they can be used to coat most of the metallic building components on a designed project e.g. aluminum frames and panels, curtain walls, facades, blinds and shutters, sun shades/ brise soleil, in fact any steel construction may be powder coated.

**Interpon D2525 ECO** powder coatings contain a reflective pigment that deflects the infrared light, and thus the sun's heat, from any substrate that it coats. As a result, the surface of the substrate, and any interior spaces that it protects, are cooler than if painted with a standard coating.

To demonstrate the effectiveness of the ECO product, we coated two typical metallic house roofs in black - one from the ECO range, one from the standard one. Under controlled laboratory conditions, we replicated the effect of sunlight shining on the roofs and monitored the external surface and indoor temperatures. The outside temperature of the roof that was coated with **Interpon D2525 ECO** was 7°C cooler and the temperature inside the house was 3°C cooler than the standard-coated house roof.



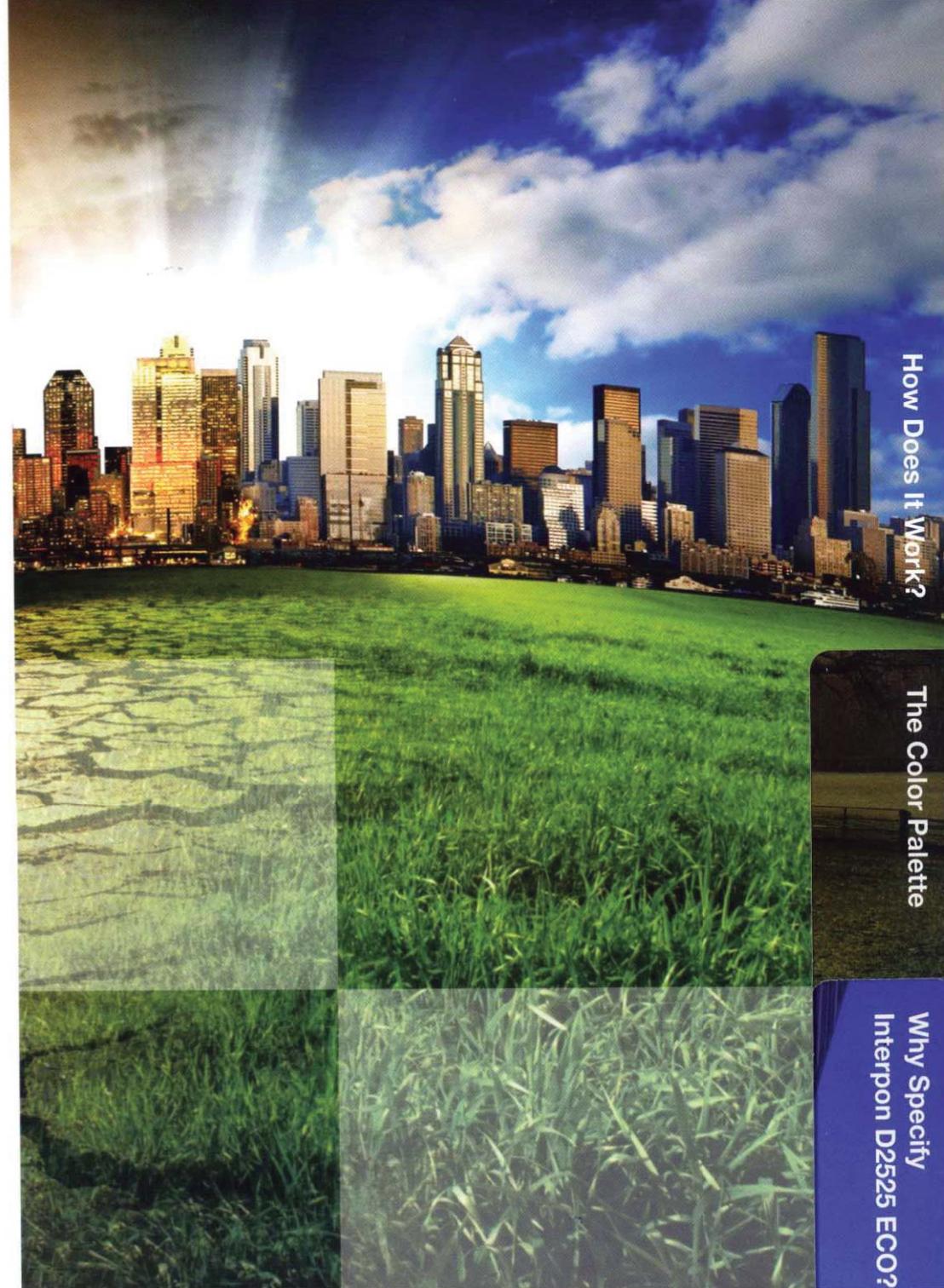
### KEY

Standard Black  
Outside Metal Temp

Onyx Black D2525 ECO  
Outside Metal Temp

Standard Black  
Inside House Temp

Onyx Black D2525 ECO  
Inside House Temp



How Does It Work?

The Color Palette

Why Specify  
Interpon D2525 ECO?

# Eternity

The Essential Collection  
for Green Building

The **Interpon D2525 ECO** new Eternity collection of 20 matt colors has a modern, understated feel and comes in four color themes.



TSR Value 43%



Zultanite 748

YW278X

TSR Value 41%



Hematite 907

YW297X

## Luxury

Add an extra dimension to prestigious projects with an opulent metallic finish.

TSR Value 57%



Goshenite 906

YW296X

## Harmony

Pale, light colors that create a feeling of calm and serenity.

TSR Value 79%



Perlite 916

YA216X

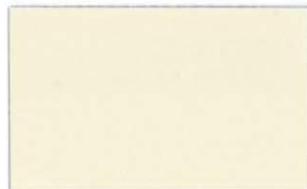
TSR Value 76%



Pearl 901

YA201X

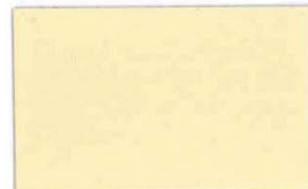
TSR Value 70%



Moonstone 113

YD213X

TSR Value 69%



Spodumene 115

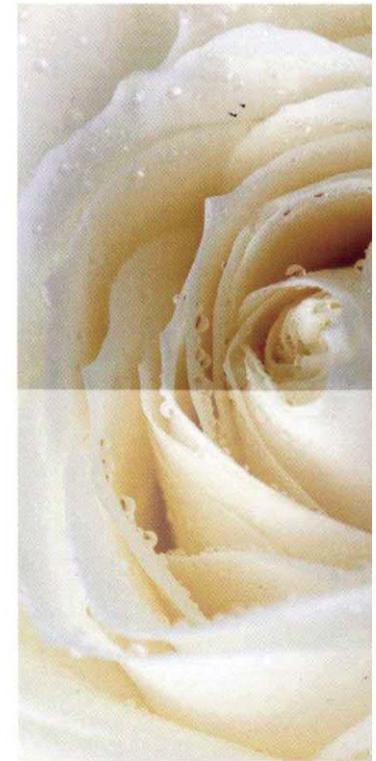
YD215X

TSR Value 51%



Scapolite 102

YD202X

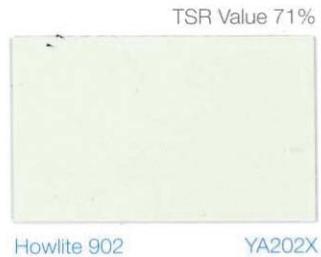




\*TSR Value:  
Total Solar Reflectance  
value using ASTM G173  
testing standards

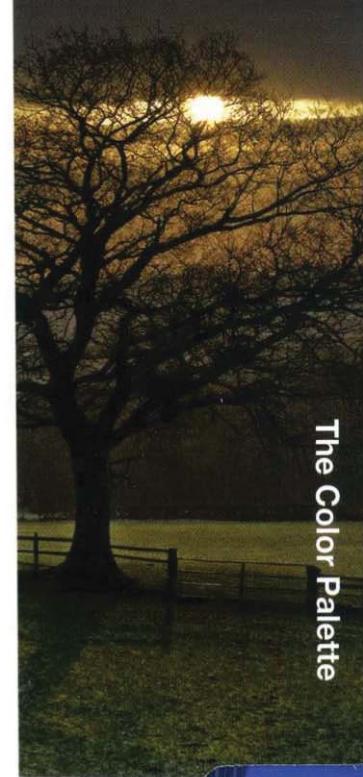
## Simplicity

Colors that work well to combine elements such as cement, glass and stone.



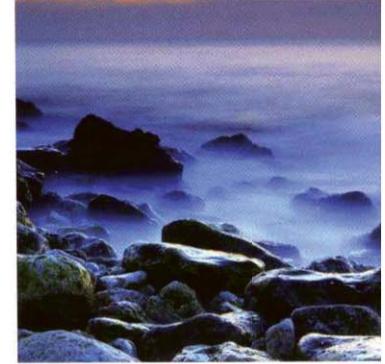
## Earthy

Colors that reflect the natural environment.



The Color Palette

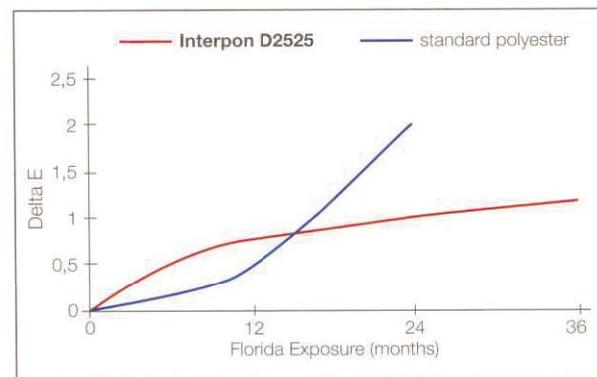
Why Specify  
Interpon D2525 ECO?



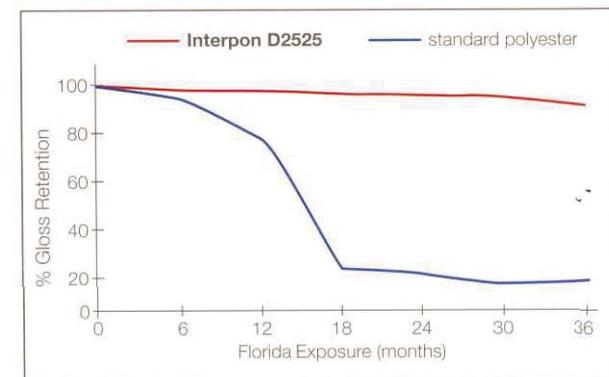
## Exceptional weathering durability

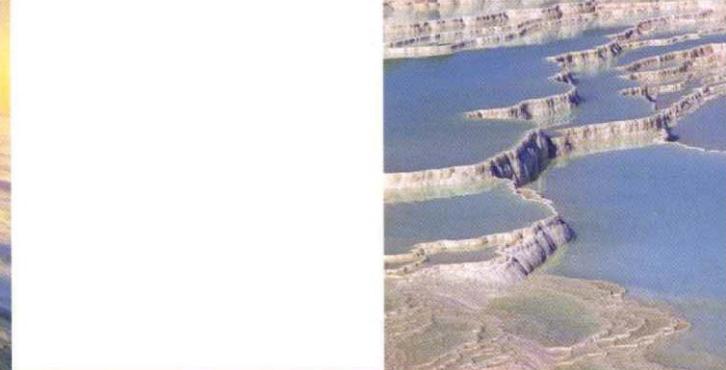
**Interpon D2525** technology is the optimum choice for projects and residences in areas of high salinity, solar radiation, humidity and air pollution. **D2525** offers significantly improved color and gloss retention in these high risk areas in comparison to standard architectural powder coatings, as shown in the two graphs.

### Color Retention



### Gloss Retention





## Mission Hospital - A Landmark Project

The **Interpon D2000** family of coatings is synonymous with durability. Indeed, the first building to be coated with it, 21 years ago, is proof of its superior qualities.

In 1991, architects Bobrow, Thomas & Associates selected the newly launched **Interpon D2000** to coat the five-storey Patient Tower at California's Mission Hospital. The project required a coating that could both withstand the heat and dryness of the Californian climate and also give a stylish finish to match the clean lines of the building.

The coating's properties were measured in 2007 and 2012 and found to be still providing excellent protection and decoration. As a result, **Interpon D2000**, which forms the basis of all subsequent sub-series, including **D2525**, holds the world's longest track record for a super-durable powder coating.

**Interpon D2525's** unrivalled performance and durability promises to significantly add to a building's lifecycle.

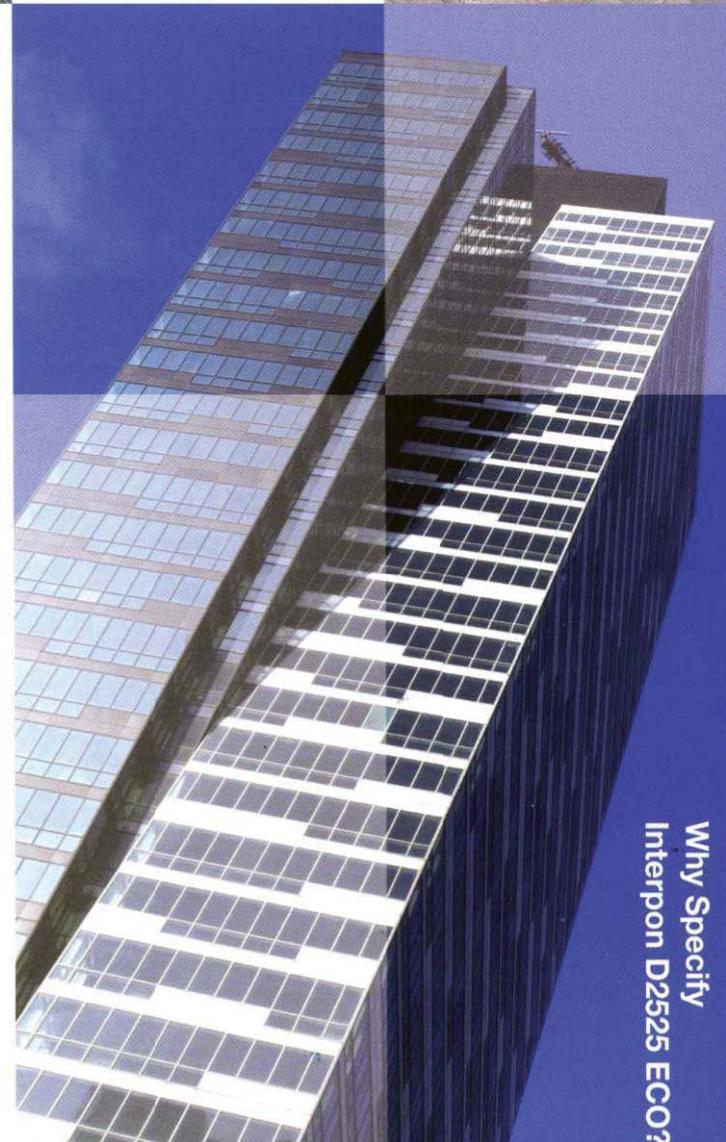
## Mission Hospital Measured Results

Interpon D2000	After 21 years exposure	AAMA 2604-05 limit (5 years test Florida)
Color Retention	Delta $\Delta E = 3.18$	Delta $\Delta E < 5$
Gloss Retention	59%	> 30%

## The most reliable 25 year guarantee

The **Interpon D2000** series of powder coatings from AkzoNobel includes the regional variations: **Interpon D2525** and **Interpon D2015**. These series products are available globally from AkzoNobel Powder Coatings and are supplied with the most reliable warranty, guaranteed up to 25 years.

The **Interpon D2000** series has the longest and most extensive track record of any super durable powder coating, it's exceptional reliability making it the specifier's choice.



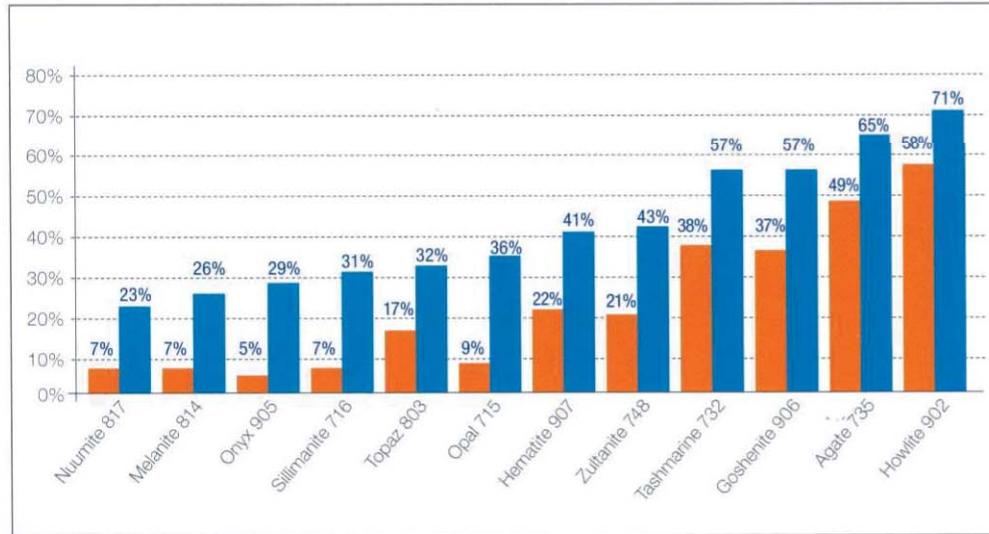
Why Specify  
Interpon D2525 ECO?



## Exceptional heat reflective performance

Total Solar Reflectance (TSR) measures the heat reflectance performance of a coated surface. The graphs below show how **Interpon D2525 ECO** technology may improve TSR factors for the **Eternity Collection** colors. The TSR value of Onyx 905 is improved by 539% and the relative value of Opal 715 by 27% absolute TSR units. This significantly reduces the overall heat reflectance and the actual temperature on the coated surface, and therefore the inside building temperature.

Conventional TSR values in comparison with the TSR values for **Interpon D2525 ECO**

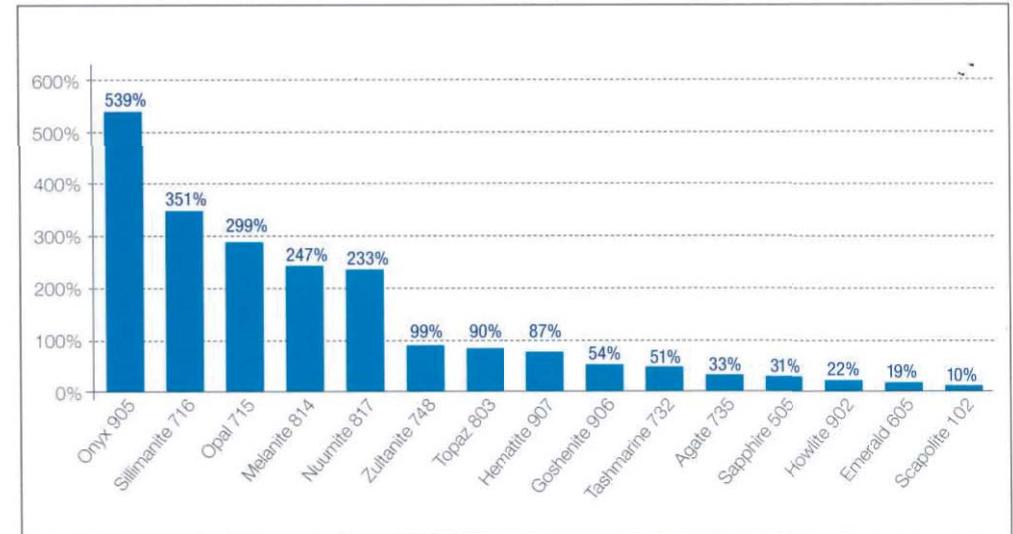


■ Conventional TSR values
 ■ Interpon D2525 ECO TSR values

## Be SMaRT – Improve your LEED scoring accreditation

AkzoNobel Powder Coatings is the FIRST coatings company worldwide to be officially recognized as **SMaRT**, with sustainable platinum certification. **SMaRT**, launched in 2002, is the ultimate standard for product sustainability. Based on the Leadership in Energy & Environmental Design (LEED) model, **SMaRT** certification is to products what LEED is to buildings. **SMaRT** certified products contribute positively to LEED “green building” accreditation. Moreover, **Interpon D2525 ECO** products may contribute significantly, directly and indirectly, to it.

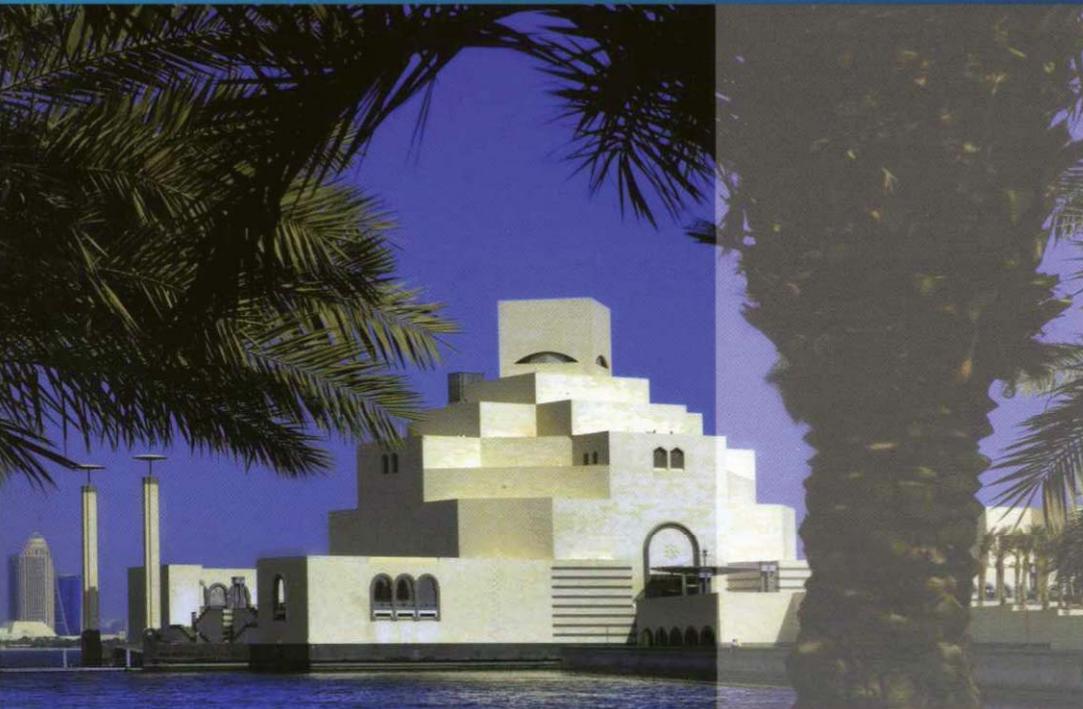
TSR factor improvement %



\*All TSR measurements according to ASTM G713 testing standards



For more information on **Eternity -  
the Essential Collection for Green Building**  
speak to your AkzoNobel Powder Coatings  
representative or visit our website at  
[www.interpon.com](http://www.interpon.com)



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**Interpon**  
powder coatings  
**EVERY COLOR IS GREEN**

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