

Jotun's History

100 PROUD YEARS OF BUSINESS



1920
Established by Odd Gleditsch sr.



1930s - '50s Domestic growth



The pioneer years and consolidation

1960s - '70s



1980s - '90s
Faster international expansion



Accelerating growth & consolidating leadership positions in various parts of the world

2000s



Breakthrough innovations and ambitious sustainability goals

2020s



JOTUNPROTECTS PROPER

Sustainability is an integrated part of our strategy.

We conduct business based on our values in the interest of our customers, suppliers, employees, shareholders, environment and society.



Loyalty



Care



Respect

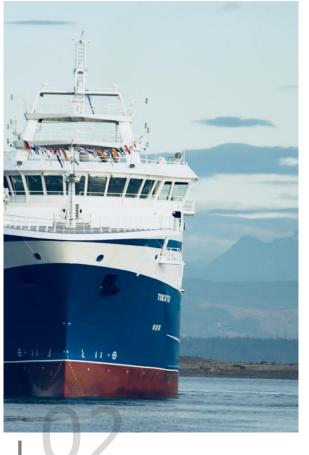


Boldness

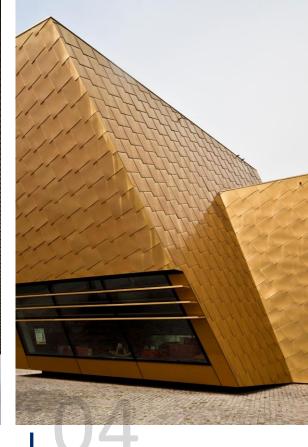


Powder Coatings









DECORATIVE PAINTS

MARINE PAINTS

INDUSTRIAL PAINTS

POWDER COATINGS



Jotun Locations





Jotun Head Office, Sandefjord Norway



Jotun Turkey: High Production Capacity in Two Factories

Paints and coatings: 44.000.000 Lt. per year

Powder coatings: 20.000 ton per year





Jotun GreenSteps -

We see sustainability as a long-term competitive advantage.

We have protected structures against decay and corrosion for many years with our products that we have developed by prioritizing the environment and human health.

Our sustainability policy focuses on recycling waste, reducing carbon footprints, using sustainable energy, avoiding the use of harmful substances, and limiting solvent emissions.













Why Jotun?

We are constantly developing new products and technologies for future. We develop all of our products by testing them in our laboratories around the world and in the field in harsh climatic conditions. **#JOTUN** Jotun Arctic Test Station - Svalbard



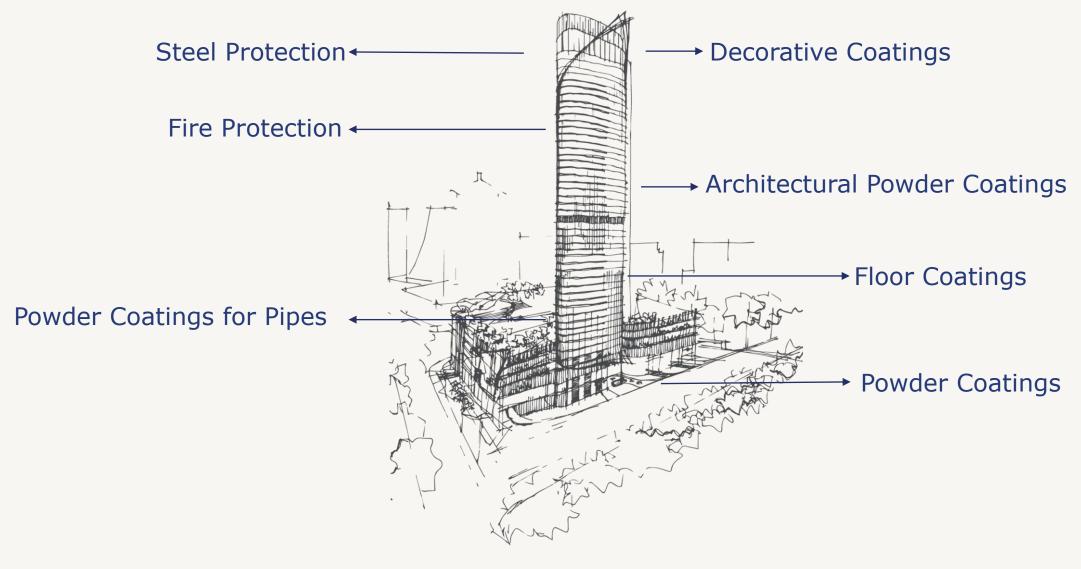
The use of chemicals may harm Jotun employees (operators and inspectors), paint professionals, customers, and the environment. Therefore, Jotun must identify chemical risks and manage them responsibly.

When new information is obtained about existing chemicals or a new chemical is used, its technical and economic effects should be evaluated.



Jotun Protects Iconic Buildings All Over The World





Single Source Solutions (SSS)



Advanced Projects Group



APG



Architect



PMO

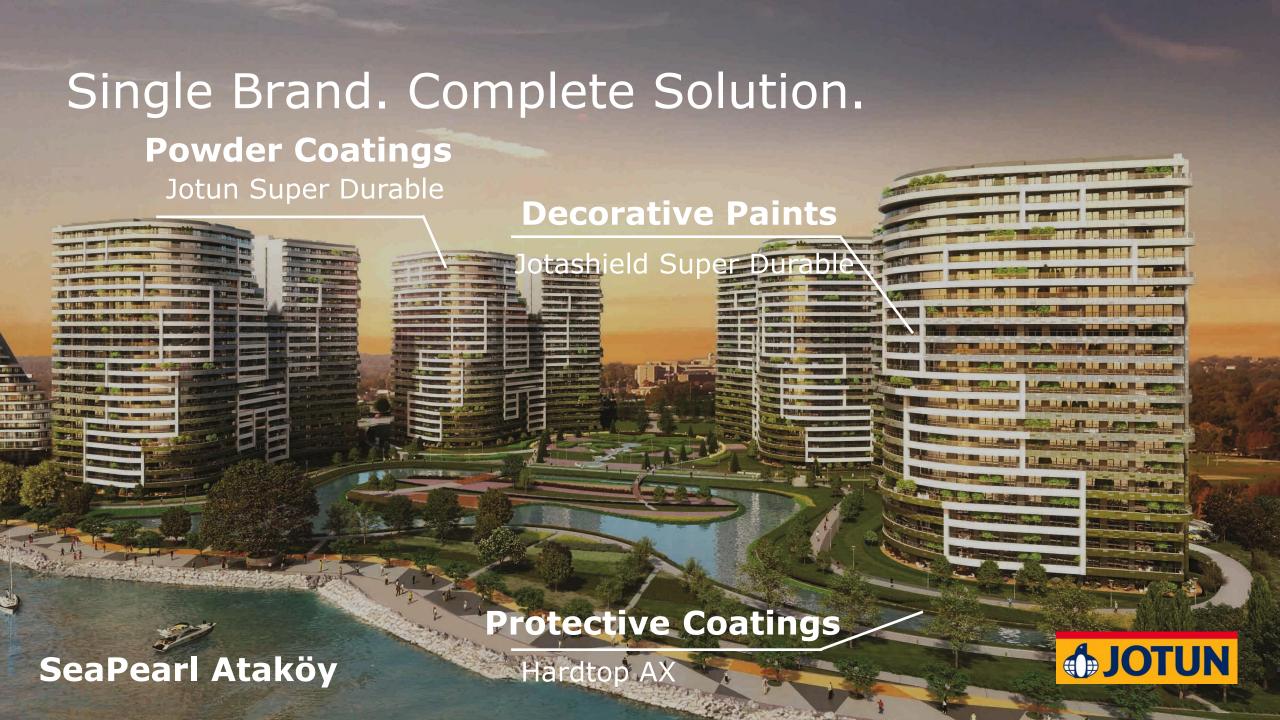


Investor



Contractor





Single Brand. Complete Protection.

Protective Coatings

Pilot WF

Powder Coatings

Primax PR 9085 Grey Smooth Jotun Facade RAL 7038 Smooth

Decorative Paints

Jotashield Super Durable

Avrasya Tunnel







Powder Coatings



Building Components



Furniture



Pipeline



Appliance



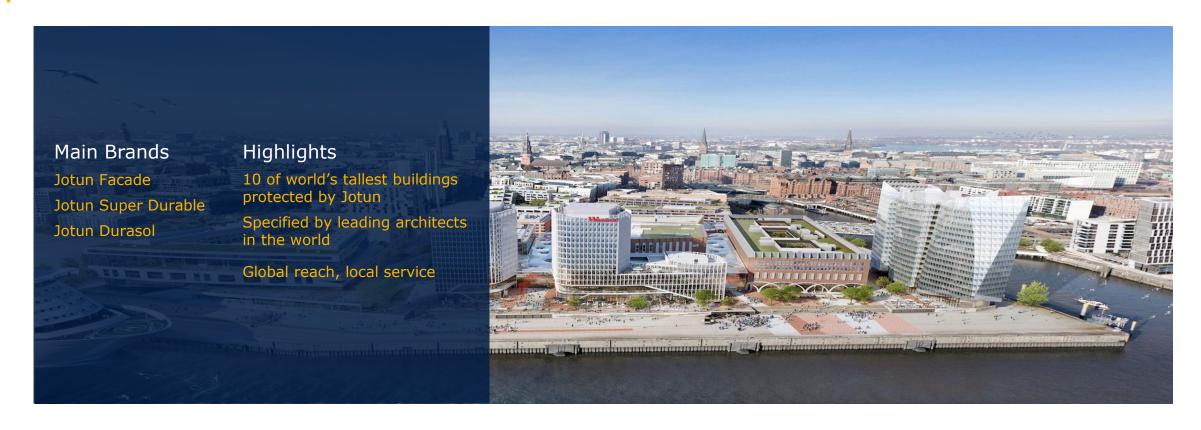
General Industry





Building Components

For buildings people remember



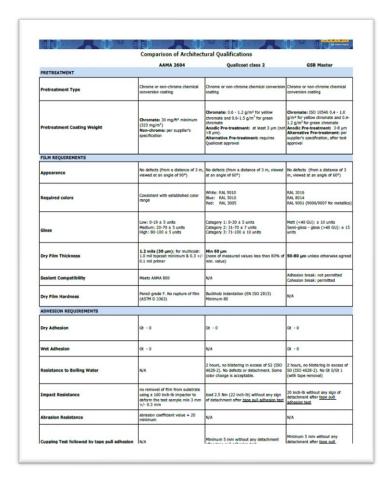


Architectural Qualifications

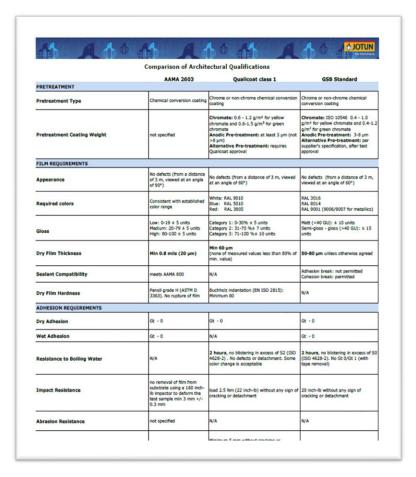
Category	Standard	Florida Test	Coating System
	GSB Standard	5° South – 1 year	Standard Polyester Powder Coatings
Category 1	Qualicoat Class 1	5° South – 1 year	
	AAMA 2603	45° South – 1 year	
Category 2	GSB Master	45° South – 3 years	Super Durable Polyester Powder Coatings
	Qualicoat Class 2	5° South – 3 years	
	AAMA 2604	45° South – 5 years	
	GSB Premium	45° South - 5 years	
Category 3	Qualicoat Class 3	45° South – 10 years	Fluoropolimer Powder Coatings
	AAMA 2605	45° South – 10 years	PVDF



Standard Comparisons



	Comparison of Architect	tural Qualifications	
	AAMA 2605	Qualicoat class 3	GSB Premium*
PRETREATMENT		•	
Pretreatment Type	Amorphous chromium phosphate or amorphous chromate treatment	Chrome or non-chrome chemical conversion coating	Chrome or non-chrome chemical conversion coating
Pretreatment Coating Weight	Chromate: 40 mg/ft ³ minimum (431 mg/m ³) Non-chrome: per supplier's specification	Chromate: 0.6 - 1.2 g/m² for yellow chromate and 0.6-1.5 g/m² for green chromate. Anodic Pre-treatment: at least 3 µm (not >8 µm). Alternative Pre-treatment: requires Qualicost approval	Chromate: ISO 10546 0.4 - 1.0 g/m² for yallow chromate and 0.4 1.2 g/m² for green chromate Anodic Pre-treatment: 3-6 µm Alternative Pre-treatment: per supplier's specification, after test approval
FILM REQUIREMENTS			
Appearance	No defects (from a distance of 3 m, viewed at an angle of 90°)	No defects (from a distance of 3 m, viewed at an angle of 60°)	No defects (from a distance of 3 m, viewed at an angle of 60°)
Required colors	Consistent with established color range	Blue Light grey Metallic color	RAL 3016 RAL 8014 RAL 9001 (9006/9007 for metallic
Gloss	Low: 0-19 ± 5 units Medium: 20-79 ± 5 units High: 80-100 ± 5 units	Category 1: 0-30 ± 5 units Category 2: 31-70 ± 7 units Category 3: 71-100 ± 10 units	Matt (<40 GU): ± 10 units Semi-gloss - gloss (>40 GU): ± 1 units
Dry Film Thickness	1.2 mils (30 µm); for multicoat: 1.0 mil topcoat minimum & 0.3 +/ 0.1 mil primer	Min 50 µm (none of measured values less than 80% of min, value)	50-80 µm unless otherwise agree
Sealant Compatibility	meets AAMA 800	N/A	Adhesion break: not permitted Cohesion break: permitted
Dry Film Hardness	Pensil grade F. No rupture of film (ASTM D 3363)	Buchholz indentation: Minimum 80 (EN ISO 2815)	N/A
ADHESION REQUIREMENTS			
Dry Adhesion	Gt = 0	Gt - 0	Gt - 0
Wet Adhesion	Gt - 0	N/A	Gt - 0
Resistance to Boiling Water	N/A	2 hours, no blistering in excess of \$2 (ISO 4628-2). No defects or detachment. Some color change is acceptable.	2 hours, no bilistering in excess of S0 (ISO 4628-2). No Gt 0/Gt 1 (with tape removal)
Impact Resistance	no removal of film from substrate using a 160 inch-lb impactor to deform the test sample min 3 mm +/- 0.3 mm	load 2.5 Nm (22 Inch-lb) without any sign of detachment after tape pull adhesion test	20 inch-lb without any sign of detachment after tape pull ashesion test
Abrasion Resistance	abrasion coefficient value = 40 minimum	N/A	N/A
Cupping Test followed by tape pull adhesion	N/A	Minimum 5 mm without any detachment after tape pull adhesion test	Minimum 5 mm without cracking of detachment after tape pull adhesion test







Advantages of Powder Coatings



- VOC-free
- Environmentally and human-friendly
- Generates almost negligible waste
- The most efficient coating system
- Offers limitless options for colours, gloss levels and surface finishes
- Provides enhanced physical, chemical and corrosion resistance

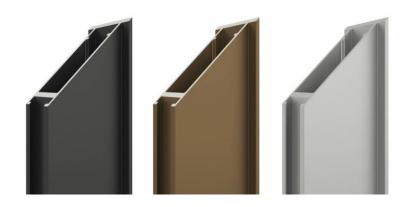


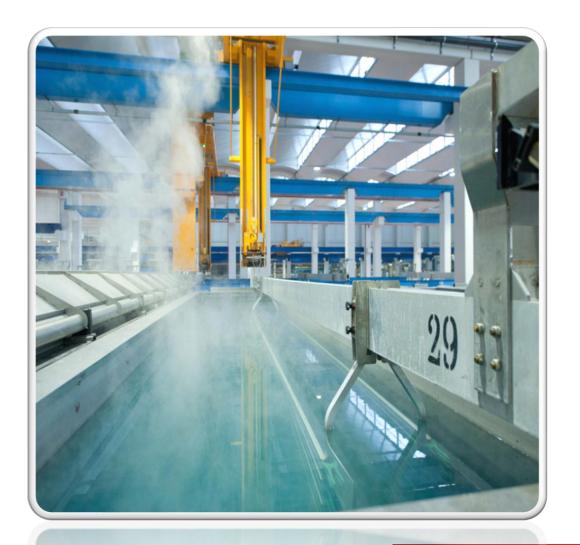


What is Anodizing?

Anodized is an electrochemical process used to create a very thin oxide layer on the metal surface.

At the end of the coating, a colourless aluminum oxide layer (Al2O3) of about 15-20 microns is formed. A sulfuric acid solution is used in the process.







Powder Coatings

- Powdered paint is thrown onto the surface in special cabinets.
- The material enters the oven.
- Powder paint melts and adheres to the surface.
- It is environmentally friendly.

Anodizing

- It is an electrochemical process.
- Very thin oxide layers form on metal surfaces.
- It is applied by washing method in very large pools.
- Sulfuric acid is used in the process.
- The operation is harmful to operation and human health.



Powder Coatings

- Unlimited colour options
- Variety of smooth, textured and project-specific finishes
- Colour consistency
- Easy to retouch

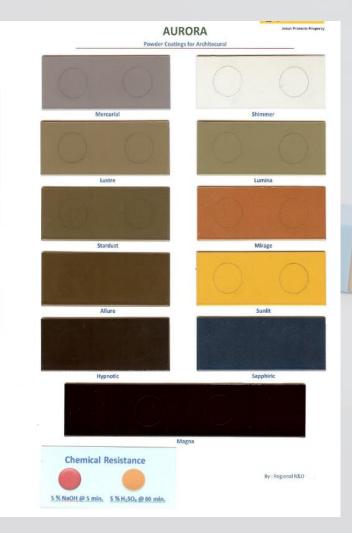
Anodizing

- Few colour options
- Limited finish option
- Colour difference in profiles of the same structure
- Difficult to retouch



Chemical Resistance: Comparison between Powder Coatings and Anodizing



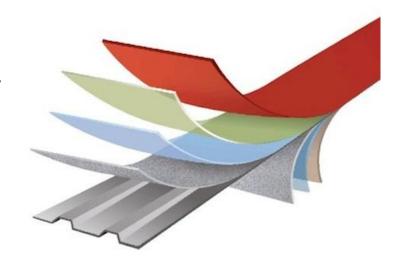


Test conditions : 5% NaOH 5% H-SO4 Test period : 45 min to 3 hours Substrate : Aluminum Aurora Silver 1205185 **Anodized Silver Matt** After 45 minutes Left side NaOH Right Side 5% H2SO4 After 3hrs Left side 5% NaOH Right Side 5% H₂SO₄ Tested by:



What is PVDF?

- A liquid coating with a very high level of solvent (30 70%).
- A thermoplastic fluoropolymer composed of Polyvinylidene Difluoride.
- Originally a two layers system but being replaced due to durability questions.
- Multiple (4) layer systems common but add to production complexity with longer processing time and a greater chance for things to go wrong.
- **Increasing amount of solvent**, where 30 70% of the product evaporates to the environment and does not go on the aluminium.



Relative application cost per sq. m aluminium (coating + application):

Super Durable	PVDF (4 layer)	Durasol
0.3	1.0	0.6



Powder vs. PVDF

Description	Powder Coatings	PVDF
Environmentally Friendly (VOC)	High (no solvent)	Low (30 - 70 % solvent)
Colour Selection	150 colours, can be designed on request	A more limited range
Gloss and Finish / Design Flexibility	Glossy, matt, smooth, metallic and textured finishes	Smooth matt finish only (Brightness is achieved by multiple layers and metallic finish)
Number of Coats	Single coat	Up to 4 needed if toughness or gloss is required
Mechanical Properties	Excellent scratch and abrasion resistance	Poor (not recommended in high-traffic areas) unless multiple layers
Primer Required	No	Yes
Speed of Application	Fast	%20 slower
Approved Applicators	Many	Few
Guarantee	25 to 30 years for all colours	Depends on product and supplier, max 20 years
Waste Generation	%99 + < %1 loss as it is recyclable	%40-80 waste due to solvent and excessive spray losses
Relative Application Cost (Coating + Application)	0.3 / 0.6 (Super Durable / Durasol)	1 (3 layers)



Are all PVDFs durable?

Commercial-grade PVDFs before and after weathering testing using the HE WXM weatherometer





? Perhaps not all PVDFs are the same!







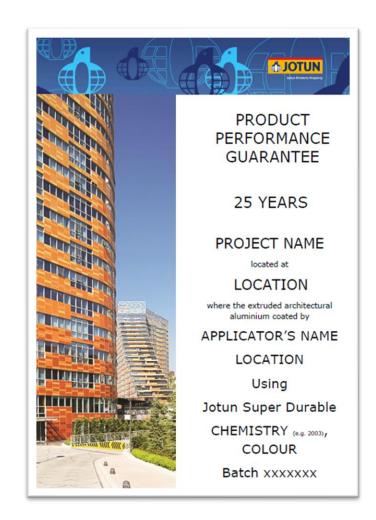
Durability of Aluminum Portfolio

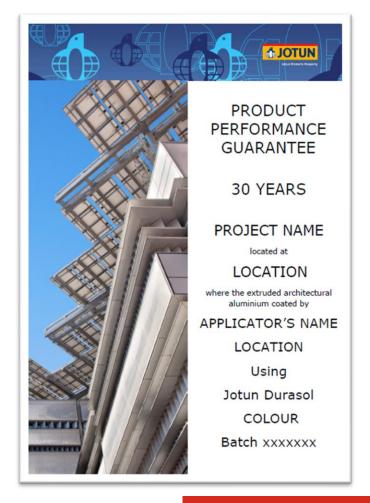
Standard	Guarantee	Product
Qualicoat Class 1 AAMA 2603 GSB Standard	15 years product performance guarantee	Jotun Facade
Qualicoat Class 2 AAMA 2604 GSB Master	25 years product performance guarantee	Jotun Super Durable
Qualicoat Class 3 AAMA 2605	30 years product performance guarantee	Jotun Durasol



Product Performance Guarantee









Jotun Facade Qualicoat Class 1, AAMA 2603, GSB Standard

- Product performance guarantee up to 15 years against harsh climatic conditions
- Perfect appearance
- Reduction in application cost due to improved surface coverage
- Eco-friendly solution for sustainable architectural projects
- Reduction in building energy consumption with Cool Shades Collection



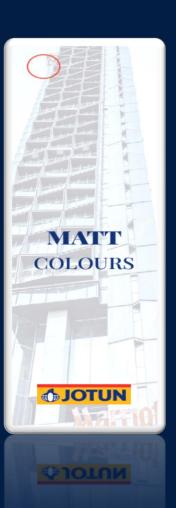
Jotun Facade Collection













Jotun Super Durable Qualicoat Class 2, AAMA 2604, GSB Master

- 25 years product performance guarantee against harsh climatic conditions
- Impact resistant
- Perfect appearance
- Design friendly with special textures and wide colour options
- VOC free, environmentally friendly
- Reduction in building energy consumption with Cool Shades Collection



Jotun Durasol

Qualicoat Class 3, AAMA 2605

- Excellent protection against harsh climatic conditions with a product performance guarantee of 30 years.
- Superior resistance to scratching and impact.
- Excellent appearance for many years with superior color and gloss resistance.
- Low dirt holding.
- VOC free, environmentally friendly.



Collections









ULTIMATT







EVOKE



Jotun Cool Shades Collection

Heat Reflective Powder Coatings

- Reduces surface and indoor temperatures.
- Contributes to human comfort and safety.
- Reduces the energy consumption of buildings in regions with hot climates.
- Helps reduce the heat island effect in cities and therefore contributes to a LEED score when used in roofing and shading systems.



Jotun Aurora Collection

High performance meets sustainable architecture and a stylish appearance

- Provides a flawless metallic effect
- Minimizes the impact on the environment
- Provides high performance durability



40x less water

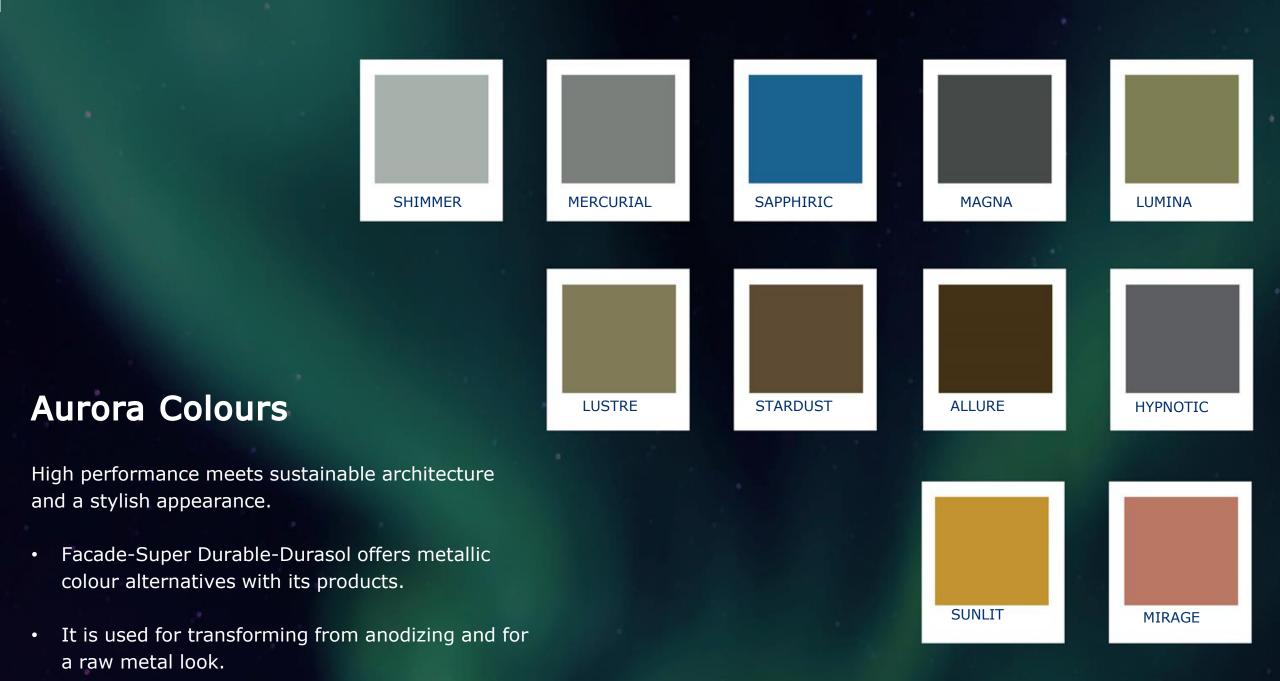


20% less gas



10x less electricity





Jotun The Sahara Collection

Easy To Clean Fine Texture Powder Coating

- Aesthetically attractive, robust, and practical
- Hide surface imperfections such as die lines and welds.
- Scratch resistant
- High dirt-repellent resistance



Jotun The UltiMatt Collection

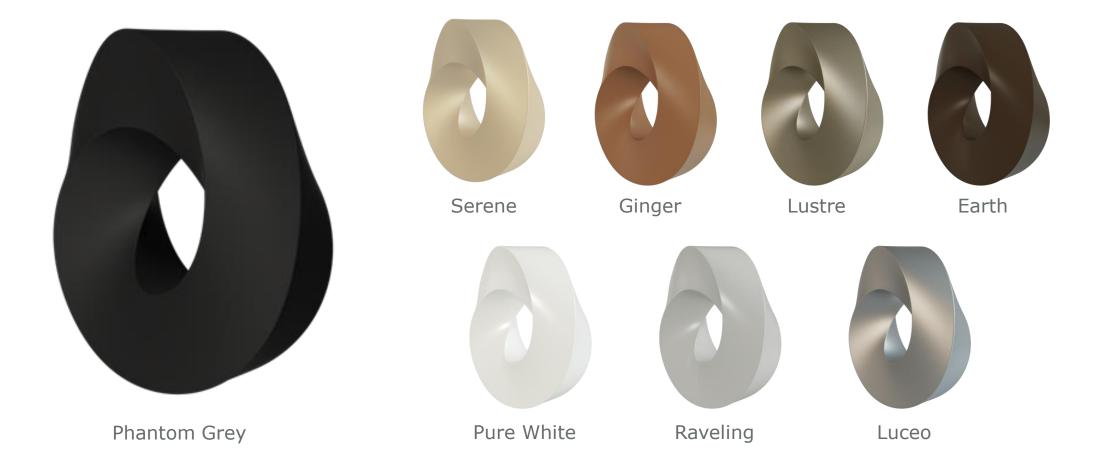
The World's Deepest Matt Powder Coatings

- Pure matt surfaces are the perfect complement to natural building materials.
- Contributes to obtaining credits in LEED and green building standards.
- Super Durable 2900 SMO is Qualicoat class 2 certified and AAMA 2604 compliant for 25 years of protection.
- EN 13501:Fire tested and approved to A2 rating.



TRUE NATURAL COLOURS

WITH SMOOTH FINISH





TRUE NATURAL COLOURS

WITH TEXTURE FINISH





Jotun The Cosmos Collection ANODIZED LOOK

OUR CLOSEST MATCH TO THE ANODIZED ALUMINIUM COLOURS

- Attractive, deep matt and metallic effect finishes
- Stylish appearance
- Anodized aluminium colours
- Superior colour consistency and gloss retention



Jotun The LifeShine Collection

MOMENTS THAT TRULY SHINE

METALLIC EFFECT FOR EVERY MOMENT

- High sparkling effect bold statement
- Shimmering effect humble shine
- Consistent beautiful shine (due to bonded technology, consistency in application, consistency after recycling)



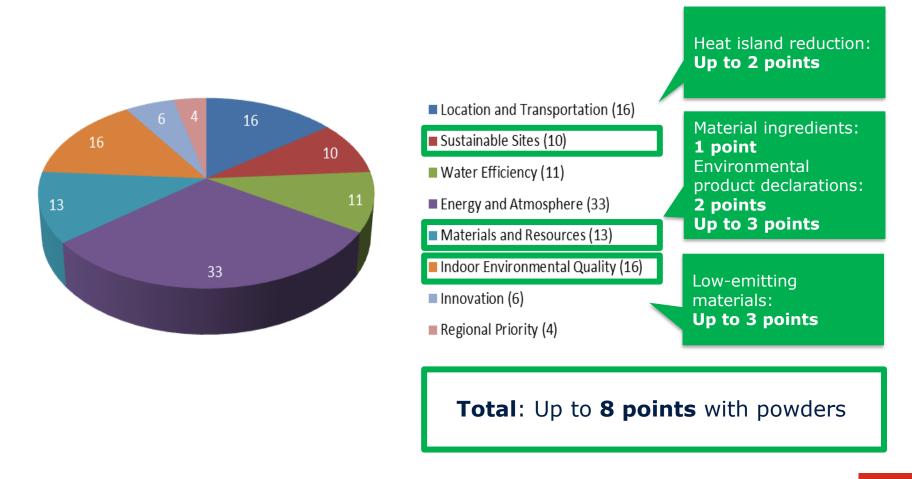
BRIGHT METALLICS







Powder Contribution To LEED V4 Points





Powder - The Ideal Solution for Protection of Steel





Powder Coatings Tools

- Coating comparison tables and panels
- Third-party laboratory data
- Product guarantee documents
- Jotun Paint approved applicators
- Information articles (PVDF, anodizing, etc.)
- Project coordination
- Brochures and Colour Cards
- Jotun Panel Wall
- Envelopes and labels
- Jotun Academy
- Jotun Online Platform (Digital colours library, Sample Panel Request, documents, brochures)











■ Menü 🕹 🧡 Q

Homepage > Useful Content > Powder Coatings Contents





You can fill out the form to create a Sample Panel

Details



Powder Coatings Brochures

Powder Coatings Brochures are available here.

Details



Powder Coatings Documents

Powder Coatings Documents are available here.

→ Details



Powder Coatings Digital Colours

Powder Coatings Digital Colours are available here.

Details







Atlantis Hotel (The Palm)

Front: Southwest (221°)

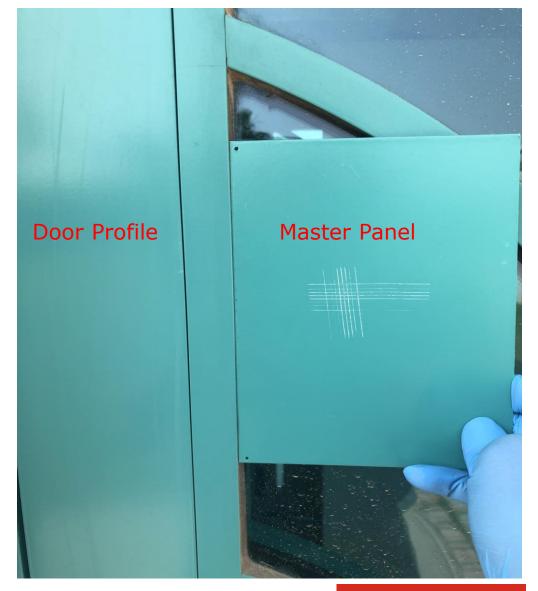
Colour: RAL 6033

Jotun Super Durable 2003

Project Start: 5 – 2007				
	After 13 Years			
1. Gloss (QC)	35			
Gloss (Before Cleaning)	26 – 28			
Gloss (Dry Cleaning)	40 - 43			
Gloss (Dirt-removed, No gloss)	49			
Colour Differences	After Clean	After Dirt Removal		
ΔL	+1.06	+0.26		
Δa	+1.07	+0.56		
Δb	-1.19	-1.06		

1.92

ΔΕ





1.23



Shoreline Apartment (The Palm)

Front: South (199°)

Colour: RAL 1014

Product: Jotun Super Durable 2003

Project Start: 12 - 2005

	After 15 Years		
1. Gloss (QC)	42		
Gloss (Before Cleaning)	27 - 38		
Gloss (Dry Cleaning)	40 - 44		
Gloss (Dirt-removed, No gloss)	45 - 48		
Colour Differences	After Clean	After Dirt Removal	
ΔL	-0.18	-0.30	
Δа	-0.14	-0.06	
Δb	-1.02	-0.86	
dE	1.05	0.92	







Comparison: 19 Years

Product: Jotun Super Durable 2003

Colour: RAL 5011





Burj Al Arab (Jumeirah)

Front: West

Colour: Ral 5011 (Exterior)

Jotun Super Durable 2003

Project Start: 12- 1998

roject Start. 12 1990		
	After 19 Years	
1. Gloss (QC)	38	
Gloss (Before Cleaning)	10-12	
Gloss (Dry Cleaning)	20-22	
Gloss (Dirt-removed, No gloss)	32-34	
Colour Differences	After Clean	After Dirt Removal
ΔL	-2.62	-0.73

dE

+0.09

+3.22

4.15

12		
1		
	i i	



Δa

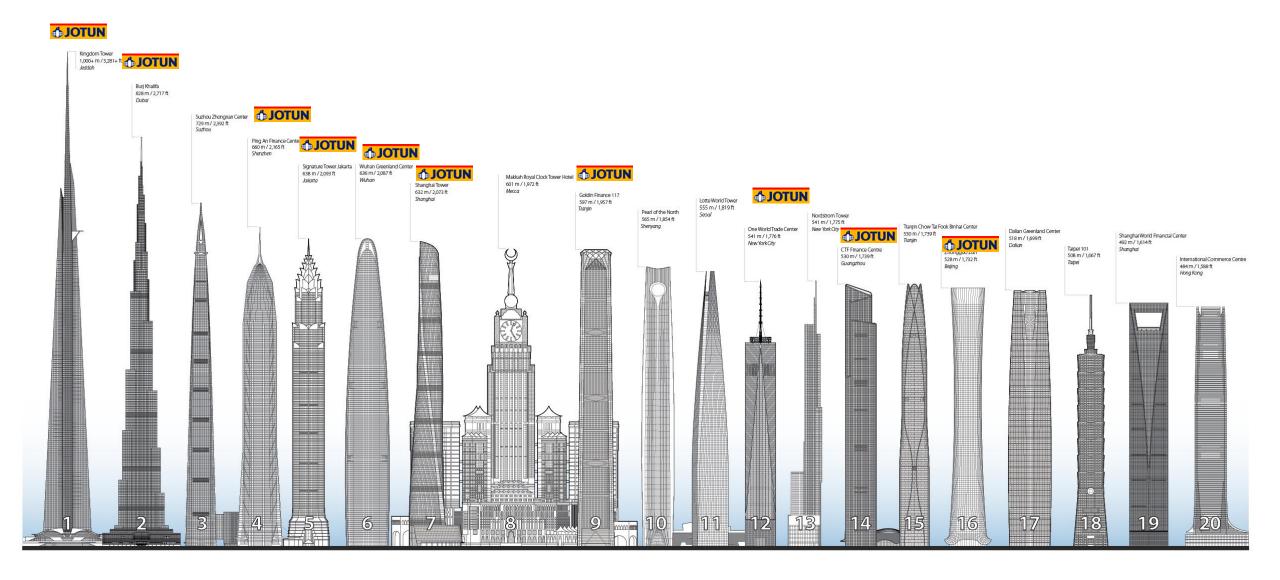
Δb

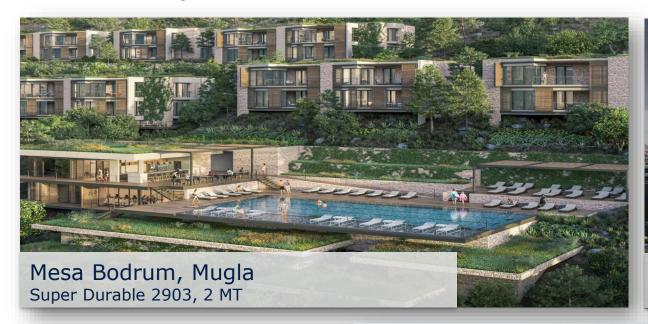
-0.08

+2.64

2.74

The Highest 20 Skyscrapers



























































Financial Center, Istanbul



































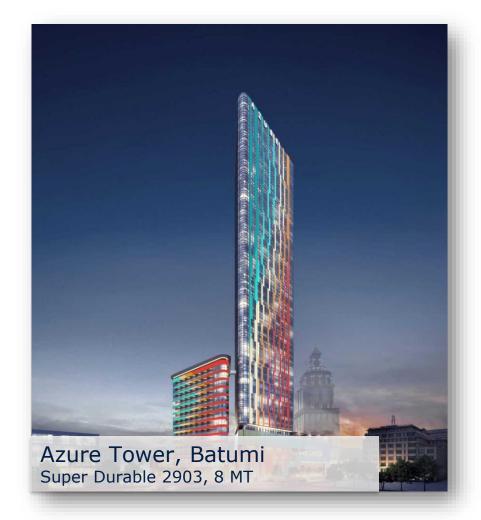
















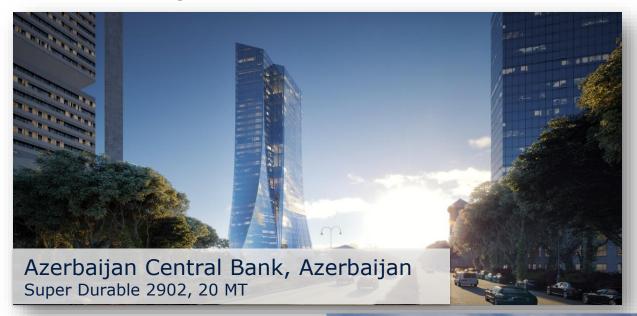
















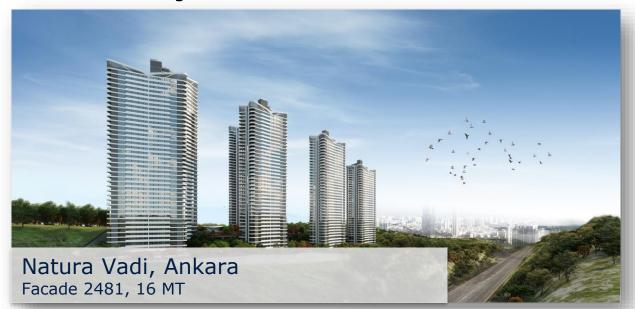




















Jotun Protects Property