



DURAFLON®
PREMIUM. GREEN.

DURAFLON® – the premium coating

DURAFLON® –
surfaces for metal
construction





Gymnasium Trudering, Munich
 DURAFLO[®] colours from the green-yellow and white-grey spectrums | Architect: felix schürmann ellen dettinger architekten, Munich | Photographer: Conné van d'Grachten

Cover page: XXXLutz, Kempten
 Colour: DURAFLO[®] Bright Copper | Architect: Blocher Blocher Partners, Stuttgart | Photographer: Conné van d'Grachten

A sustainable solution – both ecological and economical

The “green” coating

In this system, the highly developed material, together with state-of-the-art regenerative manufacturing technology, is the key to greatly reducing energy consumption and minimising CO₂ emissions. Consequently, DURAFLO[®] comes with an Environmental Product Declaration (EPD) in accordance with ISO 14025 and EN 15804 issued by the German “Institut Bauen und Umwelt e.V.” (IBU).

Furthermore, DURAFLO[®] is designed to achieve the aims of the German Sustainable Building Council (DGNB), making it the ideal surface coating for sustainable, economical, efficient, user-friendly buildings – a trump card when it comes to the awarding of building certificates such as those issued in accordance with DGNB, breem, and other recognised standards.



DURAFLO[®] is a fluoropolymer stove-enamel surface finish for window profiles and sheet metal façades that displays outstanding stability. Utilised as the surface of an aluminium façade construction, it is far superior to “highly weather-resistant” powder or PUR coatings in terms of both looks and durability.

Manufactured exclusively by qualified coaters

Only the right combination of coating materials and production processes guarantees the excellent quality of a premium-class coating.

High performance and sustainability

Durability is the primary aim of a DURAFLO[®] coating. Colour and gloss of the coating remain unchanged, even after many years of outdoor exposure.

UV-resistant

The durability of the surface is mainly due to the ability of the coating material to withstand UV radiation.

Chemically stable

DURAFLO[®] demonstrates its superior durability, even when faced with so-called aggressive media such as nearby industrial plants, or in the medical sector where disinfectants are frequently used.

Cleaning

Its dirt-repellent properties extend the usual cleaning intervals quite considerably, effectively minimising maintenance costs. That’s why the investment in DURAFLO[®] already pays off within a few years.

“Easy-to-clean” technology

The easy-to-clean surfaces make any cleaning work both quick and simple. Even graffiti can be effortlessly removed in most cases.

Bikini Haus, Berlin
 Colour: 15 DURAFLO[®] colours and four anodized colours | Architect: Hild und K Planungs GmbH & Co. KG, Munich | Photographer: Franz Brück





Rohde & Schwarz office complex MÜ 15, Munich
Colour: DURAFLON® RAL 9006 white aluminium | Architect: KSP Jürgen Engel architects, Frankfurt | Photographer: Rohde & Schwarz

Holistic building envelopes

Sophienterrassen, Hamburg
Colour: DURAFLON® Sapphire Silver | Architect: CARSTEN ROTH ARCHITEKT, Hamburg | Photographer: Cordelia Ewert, Hammoor/üb. Ahrensburg

The visible exterior of a building consists not only of sheet metal cladding, but also of profile elements that are equally exposed to weathering. We therefore recommend coating each individual part of the building envelope with DURAFLON®.

Window profiles and more

Every aluminium part of the building envelope (profiles, shutters, screens, etc.) is exposed to UV radiation and various other types of environmental stress. It therefore makes good sense to protect all visible parts of your building with DURAFLON®.

The result is an unmistakable, resilient, long-lasting, holistic building envelope.

Mullion-transom façades

DURAFLON® is not only highly suitable for coating conventional façades, but also for high-grade profile constructions such as mullion-transom façades.

Thermally separated profiles

The low maximum processing temperature of 180 °C also makes it possible to coat thermally separated profiles or welded aluminium sections.

Large and complex components

DURAFLON® can be applied to just about any type of surface. We are capable of coating structural elements weighing up to 2.5 tonnes and in sizes up to 8.6 x 2.4 metres.

Service Capability

Our production facilities are designed to handle high capacities and we are also equipped to implement even large-scale building projects.

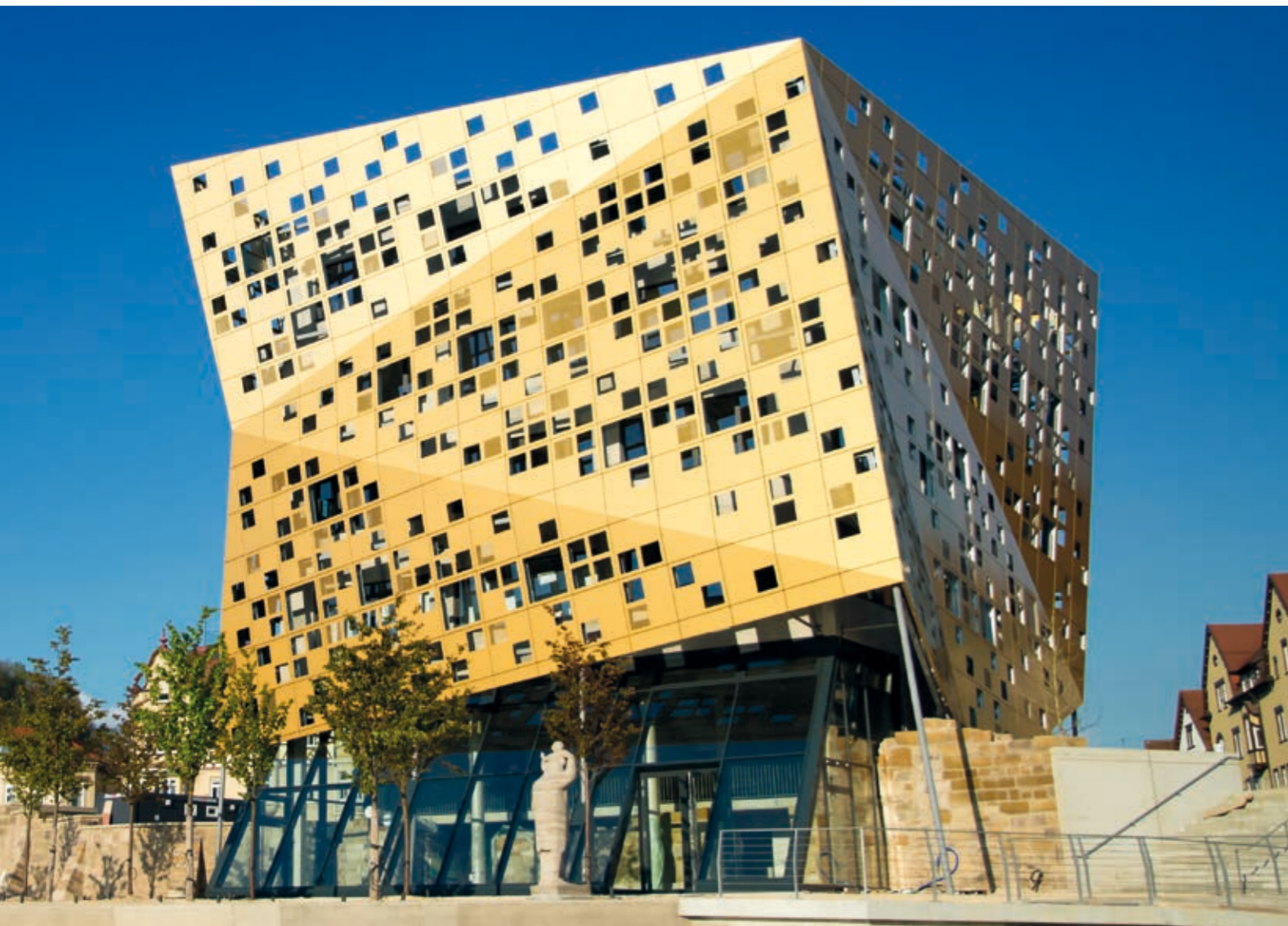




Skyline Plaza, Frankfurt
Colour: 59 NCS colours in DURAFLO[®] | Architect: Jourdan & Müller Projektgruppe Architektur und Städtebau, Frankfurt | Photographer: Jens Kirchner

Unlimited creativity

Forum Gold und Silber, Schwäbisch Gmünd
Colour: DURAFLO[®] similar to EV3 gold | Architect: Isin +Co. GmbH & Co. KG, Aalen | Photographer: David Stifani



Give your building an unmistakable appearance! Combined with various colours and effects, DURAFLO[®] offers a practically unlimited range of design options.

Colours

DURAFLO[®] can be manufactured in almost any colour, which is usually determined by using colour cards (such as RAL, NCS, Sikkens, etc.). However, we can offer you a lot more than that – even the finest colour gradations are feasible, making it possible to visually integrate the façade in the surrounding environment or adapt it precisely to match your company's corporate design.

Effects

Treat your façade to that little bit of something extra – with a glossy, shimmering or structured effect. DURAFLO[®] effects can be created in practically any colour and in excellent quality. Our liquid coating system produces brilliant light reflections that convey an impression of depth – on a permanent basis.

Functions

It is also possible to integrate particles with a broad range of functions in the DURAFLO[®] surface coating, such as heat absorption or light dispersion. All of our function or effect coatings are, of course, manufactured in premium quality.

For more information, please go to www.duraflo.com

The subtle difference

Costs ✓ Gloss ✓ Colour ✓ Value ✓

Resistance to Weathering

GSB quality levels are grouped into three different classes. Standard, Master and Premium. Facing the so-called "Florida Test", coated parts are exposed to the harsh environment of Florida for periods of up to five years.

A "Standard" Coating is required to retain 50 % of its initial gloss and a maximum color difference of 5 NBS after 1 year of exposure. Standard systems are often used for interior applications where color and gloss retention is not demanded.

A Class "Master" coating should maintain the same values in terms of gloss and color retention after 3 years of Florida Exposure.

GSB Premium

In order to get a final approval for metallic, mica and solid colors, a weathering time of 5 years must be documented by GSB International, demonstrating a residual gloss of 50 % and a maximum color difference of 5 NBS.

AAMA 2605

AAMA 2605 is the high-performance exterior specification. The weathering time in Florida is even extended to 10 years.

Looking at the current research results of the paint manufacturer as a whole, exclusively coating systems based on fluoropolymers such as DURAFLON® are capable to resist this degree of exposure.

What is the actual difference between a premium-quality coating such as DURAFLON® and a standard or master-class product? Quite simply, it is the resin and the production process. It is important to know that a fluoropolymer coating produced by a GSB-certified expert is superior to a comparable product manufactured by a coater without a valid GSB licence, even if GSB-approved premium-class materials are used. In other words, certain processes should be left to qualified professionals.

An overview of coatings (in accordance with GSB standards)

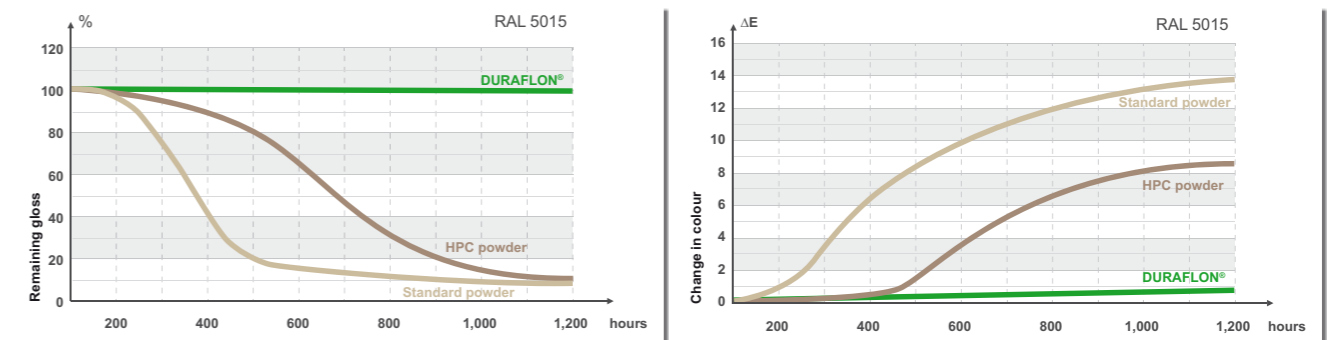
Quality classes	STANDARD	MASTER	PREMIUM
Powder coating systems	Standard powder	HPC powder	FP powder
Liquid coating systems	PUR liquid coating	HDP liquid coating	FEVE (DURAFLON®) / PVDF
Coil coating	PE / PUR	HDP	FEVE / PVDF
Repair coating	PUR 2-component coating	HDP 2-component coating	FP 2-component coating

Important to know:

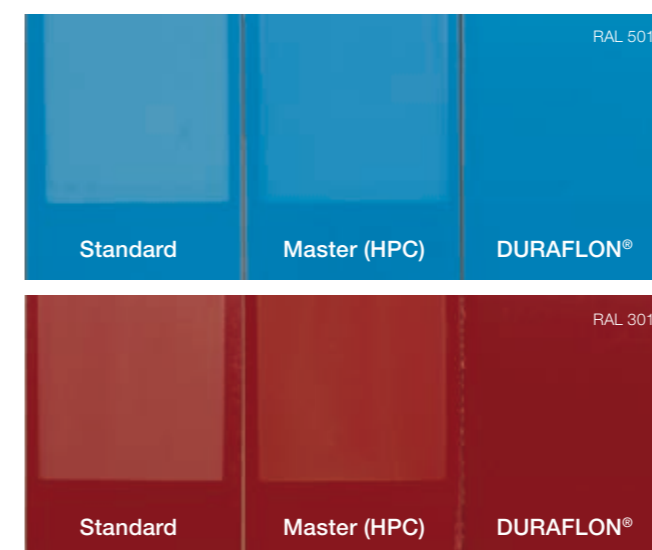
Terms such as "highly weather-resistant" and other similar descriptions are not precisely defined and do not describe binding quality classes of recognised quality associations.

Based on results from short-term tests, "preliminary" approvals are granted, which are an indication, but not a guarantee that the preconditions for a definitive approval have been fulfilled.

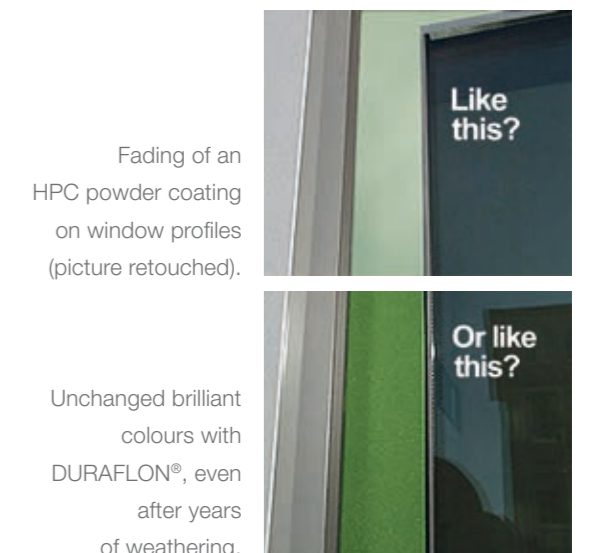
Results of accelerated weathering test in accordance with QUV-B (1,200 hours, RAL 5015 and RAL 3011)



Visual impression



Don't forget the profiles!





Linde AG Office Center, Pullach
Colour: DURAFLO[®] Sapphire Silver | Architect: Ritter Bauer Architekten GmbH, Aschaffenburg | Photographer: Michael Heinrich, München

Well advised with DURAFLO[®]

Marrahaus, Heilbronn
Colour: DURAFLO[®] RAL 9003, 1021, 7004, 7044, 1015 + 46 different RAL design colours | Architect: Alexander Schleifenheimer, Coburg | Photographer: Conné van d'Grachten

To sum up, DURAFLO[®] retains both pigmentation and gloss for many years and is available in practically all colours as well as with special effects or structures. Its surface is very easy to clean, resistant to UV exposure and chemicals and ecologically friendly to manufacture. Need more information? Just contact us.

Tendering

If you want to have your product coated with DURAFLO[®] you need to take several details into account when calling for tenders. The pre-treatment of the aluminium profiles and sheet metals must be performed in accordance with DIN EN 12487 for components subject to normal exposure. If chrome-free pre-treatment is required or if there is a possible danger of filiform corrosion, a pre-anodization (conversion layer created by means of anodization) in accordance with GSB-International guidelines must be specified when tendering. The coating material should be specified as a fluoropolymer (FEVE) liquid coating

(one-component coating with thermal hardening between 150 °C and 180 °C) and must meet the standards of the GSB International Premium quality class. The company performing the coating requires GSB International Premium standard approval.

Recommended quality:

DURAFLO[®] coating system selection.

For reasons of ecological sustainability, the production plant must be technically certified as not polluting the environment with VOC emissions during manufacturing. In this case, the finished DURAFLO[®] coating contains absolutely no VOCs.

You can find a prewritten tender specification at www.duraflon.com.

Consultation

A DURAFLO[®] stove-enamel finish is a highly versatile solution. You need to see and feel these surfaces in order to appreciate the uniqueness of this coating. We will be happy to assist you with advice, right from the start, and gladly offer you support when planning your building envelope. We can also provide you with initial profile or sheet metal samples, to give you an accurate idea of how the product will look.





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presented to you by:

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