IGP POWDER COATINGS

POWDER COATINGS FOR FACADES

Four quality classes for high-end, hard-wearing surfaces

THE BASIS

QUALITY CLASSES FOR COATED COMPONENTS

PRODUCT QUALITY AND UPKEEP COSTS

When selecting the quality class, you are determining more than just the gloss and color stability. You are also defining the resistance to humidity and UV radiation, resistance to scratches, amount of cleaning required, and – in turn – the cleaning intervals for your object. By investing in a highly weather-resistant surface coating, you can ensure your component retains full gloss for years. Simply get in touch to find out more in a one-on-one talk with one of our architecture consultants.

Good to know

A higher-quality coat saves upkeep costs. The surface maintains its color and gloss for longer, is easier to clean, and enables the facade to retain its value.

CALCULATION BASIS

Two facade types – each with an axial spacing of 1.25 m, a story height of 3.40 m, and facade costs of CHF 850/m² (100%) – were assessed as the basis for the cost comparison. Both were coated inside and out with weather-proof, standard polyester powder coating, RAL 9006, **IGP-DURA®***face* 58.

Facade type 1: Mullion-transom facade with a glazed proportion of >70%, transom depth 160 mm, covering shells 50 x 25 mm, and surface facing of the ceiling fronts.
Facade type 2: Ribbon-window facade with a glazed proportion of around 40%, parapet cladding inside and out, drip plates and a coated installation channel on the inside.

The inside surfaces (profile half-shells and interior surfaces) are not included in the cost comparison because both facades types are coated with the same weather-proof polyester system categorized as Qualicoat Class 1 (GSB Florida 1):
IGP-DURA®*face* 58. Therefore, the higher costs in the table result from the choice of higher-quality coatings for the exterior.

Note: As in the comparison example, separate coating of the half-shells is only possible with thermally separated profile sections. A distinction is made between upkeep and thorough cleaning. Metal facades with a fairly high proportion of glazing generally cost less to clean than surfaces with a large coated proportion. The cleaning costs were calculated without scaffolding and can vary slightly according to wage levels. Costs and performance parameters depend on the color shade and article, and can vary. You can find binding details in the technical data sheets.

SYSTEM COSTS

In the table, we consider the examples of four IGP powder coating products, each representing significantly different performance categories.
As a rule, the differences between the material costs are balanced out by the wage, transport, packaging, and overhead costs of the coating services. For both facade types (with a low and high proportion of glazing respectively), we detail how the different coating costs affect the final costs of coated metal facades per m² compared to a weather-proof standard coating (series 58).

We show the added facade costs that result from choosing a higher-quality product in the bottom section of the table. These are stated as a percentage with reference to the costs of a facade with a standard coating (100%). Within the quality chart, possible extra costs for higher resistance to weathering and other factors are considered in connection with longer cleaning intervals and therefore lower upkeep costs, which offset the additional expense incurred for high-quality facade coatings within just a few years.

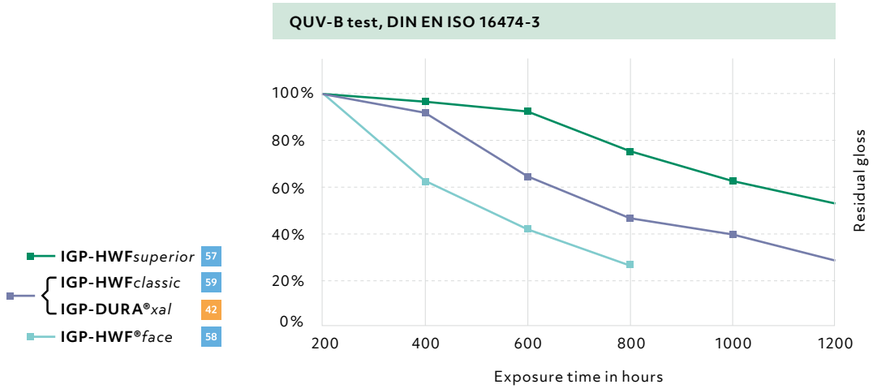
The IGP promise

WARRANTIES

On request, we can provide your coating company with long-term, project-specific warranties to cover objects and facades from the perspective of our tested IGP quality. Product liability can be extendedde-pending on the product quality selected, planned cleaning intervals, and location.

COMPARISON

FOUR QUALITY CLASSES FOR ARCHITECTURE



IGP product ranges		IGP-DURA®*face* 58	IGP-HWF*classic* 59	IGP-DURA®*xal* 42	IGP-HWF*superior* 57
Area of application		Standard facade quality Standard weather-proof powder coating	Standard/object quality Highly weather-resistant powder coating	Object and design quality Highly weather-resistant powder coating	High object quality Highly weather-resistant PLUS
Performance	**Tests**				
Chemical resistance	Mortar resistance according to GSB and Qualicoat	Slight visual changes possible for metallic coatings	Slight visual changes	Slight visual changes possible for metallic coatings	Slight visual changes possible for metallic coatings
	Acids, alkalis, neutral cleaning agent	To be checked on a case-by-case basis, good	To be checked on a case-by-case basis, good	To be checked on a case-by-case basis, good	To be checked on a case-by-case basis, good
Minimum corrosion resistance requirement	Condensate test	1,000 h, DIN EN ISO 6270-2	1,000 h, DIN EN ISO 6270-2	1,000 h, DIN EN ISO 6270-2	1,000 h, DIN EN ISO 6270-2
	Acetic & neutral salt spray mist test (abbreviated to AASS = acetic acid salt spray)	1,000 h / GSB; 1,000 h / QC DIN EN ISO 9227	1,000 h / GSB; 1,000 h / QC DIN EN ISO 9227	1,000 h / GSB; 1,000 h / QC DIN EN ISO 9227	1,000 h / GSB; 1,000 h / QC DIN EN ISO 9227
Weathering	Florida weathering / certification bodies	1 year exposure / GSB & QC	3 years of exposure / GSB & QC	3 years of exposure / GSB & QC	5 years of exposure / GSB
	Residual gloss value in %	1 y: ≥ 50%	1 y: ≥ 75%, 2 y: ≥ 65%, 3 y: ≥ 50%	1 y: ≥ 75%, 2 y: ≥ 65%, 3 y: ≥ 50%	5 y: ≥ 50%
	Color stability depending on color shade in accordance with	GSB standard, Sec. 4.5 Qualicoat Class 1, Appendix A7	GSB Master, Sec. 4.5 Qualicoat Class 2, Appendix A7	Qualicoat Class 2, Appendix A7	GSB Premium, Sec. 4.5 Qualicoat Class 2, Appendix A7
	WOM, accelerated weathering test	Residual gloss after 1,000 h ≥ 50%	Residual gloss after 1,000 h ≥ 90%	Residual gloss after 1,000 h ≥ 90%	Residual gloss after 1,500 h ≥ 90%
	UV-B weathering	Residual gloss after 300 h ≥ 50%	Residual gloss after 600 h ≥ 50%	Residual gloss after 600 h ≥ 50%	Residual gloss after 1,000 h ≥ 50%
Certification bodies	GSB / Qualicoat / Qualisteelcoat / AAMA (test reports)	GSB standard / Qualicoat Class 1 / Qualisteelcoat SD2, HD2 / AAMA 2603	GSB Master / Qualicoat Class 2 / AAMA 2604 test design	Qualicoat Class 2 / AAMA 2604 test design	GSB Premium / Qualicoat Class 2 / AAMA 2605 test design
Areas of application with increasing corrosiveness		**Weathering stability**			
Warranty period depending on: ◦ Location ◦ Substrate ◦ Pretreatment ◦ Coating structure	Rural areas, low pollution, dry	WA max. 10 years, 1-coat structure	WA max. 15 years, 1-coat structure	WA max. 15 years, 1-coat structure	WA max. 20 years, 1-coat structure
	Urban and industrial climate with moderate pollution	WA max. 5 years, 1-coat structure	WA max. 12 years, 1-coat structure	WA max. 12 years, 1-coat structure	WA max. 17 years, 1-coat structure
	Urban and industrial climate with increased pollution	WA max. 5 years 2-coat structure with **IGP-KORROPRIMER**	WA max. 10 years 2-coat structure with **IGP-KORROPRIMER**	WA max. 10 years 2-coat structure with **IGP-KORROPRIMER**	WA max. 15 years 2-coat structure with **IGP-KORROPRIMER**
	Industrial area, high humidity and/or aggressive climate, coastal area	WA max. 5 years, pre-anodization for alu. recommended, 2-coat structure with **IGP-KORROPRIMER**	WA max. 5 years, pre-anodization for alu. recommended, 2-coat structure with **IGP-KORROPRIMER**	WA max. 5 years, pre-anodization for alu. recommended, 2-coat structure with **IGP-KORROPRIMER**	WA max. 12 years, pre-anodization for alu. recommended, 2-coat structure with **IGP-KORROPRIMER**
Coating and maintenance costs (Single-coat structure)	Glazed proportion approx. 40% or > 75%	40% / 75%	40% / 75%	40% / 75%	40% / 75%
	Influence on facade costs	100% / 100%	100.8% / 100.4%	101.2% / 100.8%	102% / 101.6%
	Payback period	– / –	42 months / 30 months	60 months / 60 months	60 months / 72 months
	Cleanability	Good	Very good	Very good	Excellent
	Cleaning intervals, example: urban area, moderate pollution	Upkeep cleaning every 18 months Thorough cleaning every 7 years	Upkeep cleaning every 24 months Thorough cleaning every 8 years	Upkeep cleaning every 24 months Thorough cleaning every 8 years	Upkeep cleaning every 30 months Thorough cleaning every 10 years

More sustainable, more durable

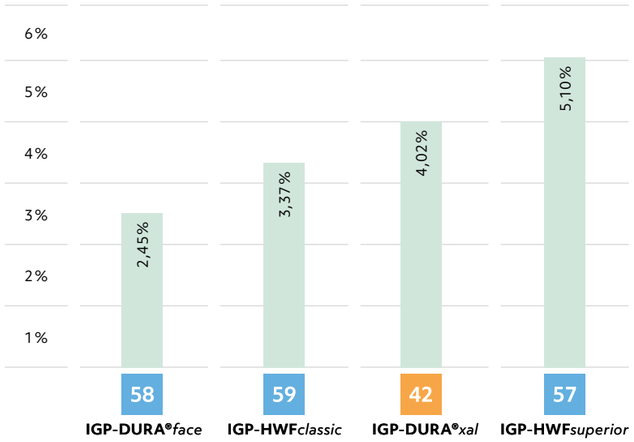
TEST

POWDER COATING AND FACADE COSTS

THE IMPACT OF POWDER COATING COSTS

When the overall facade costs are considered, the different material costs of powder coatings become less significant. This is because the share of the coating in the costs is usually in the lower single-digit percentage range. Nevertheless, weather-resistant coating systems are one of the biggest factors affecting a building's ability to sustain its aesthetic impact and retain its value.

SHARE OF COATING IN THE FACADE COSTS

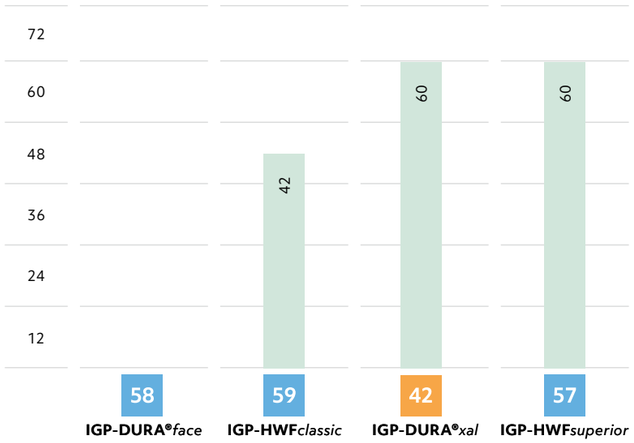


Powder coated ribbon-window facade, 36% glazed proportion, same standard coating on inside shell

CLEANING INTERVALS

Vehicle and industrial emissions combined with UV radiation put a strain on facade coatings and lead to visible changes in the decorative and protection layers. With regular cleaning and preservation, it is possible to strengthen the color retention, effect, gloss level, and protective function of the coating for a long period of time.
This is why we advise architects and planners to inform their customers about the cleaning recommendations of the certification bodies (e.g. www.grmonline.de oder www.szff.ch) that help with retention of value.

PAYBACK PERIOD IN MONTHS*



** due to longer cleaning intervals*

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