



heroyal SD

Surface designs



heroal SD – Surface designs with innovative coatings

heroal develops, manufactures and distributes systems for windows, doors, curtain walls, roller shutters, roller doors and sun protection, thus offering a wide range of individual design options for a major part of the building shell. With excellent coating technology, heroal meets the demand of investors, architects and planners for a colour-coordinated coating of the different systems offered.

Window and roller shutter systems are often installed as one unit. Since they require different coating techniques, this is a challenging task. heroal offers the best solutions for these product ranges, developed with competence, experience and a number of different coating options. heroal's hwr powder coating for extruded profiles and heroal's 2-layer thick paint for roll-formed elements are perfectly matched.

Classy wooden and concrete looks and numerous additional designs are made available by heroal Surface Design (SD). Not only does heroal SD offer you even more possibilities for individualisation, it is also characterised by its high-grade refinement. The combination of the coating processes heroal hwr powder coating and heroal SD outperforms the positive characteristics of film-coated profiles – and offers more freedom of design. When it comes to design, there are no limits to the profile geometry.

Explore the variety of heroal SD surface designs!





heroal SD

Classy surfaces with high-grade designs

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heroal SD

Classy surfaces with high-grade designs

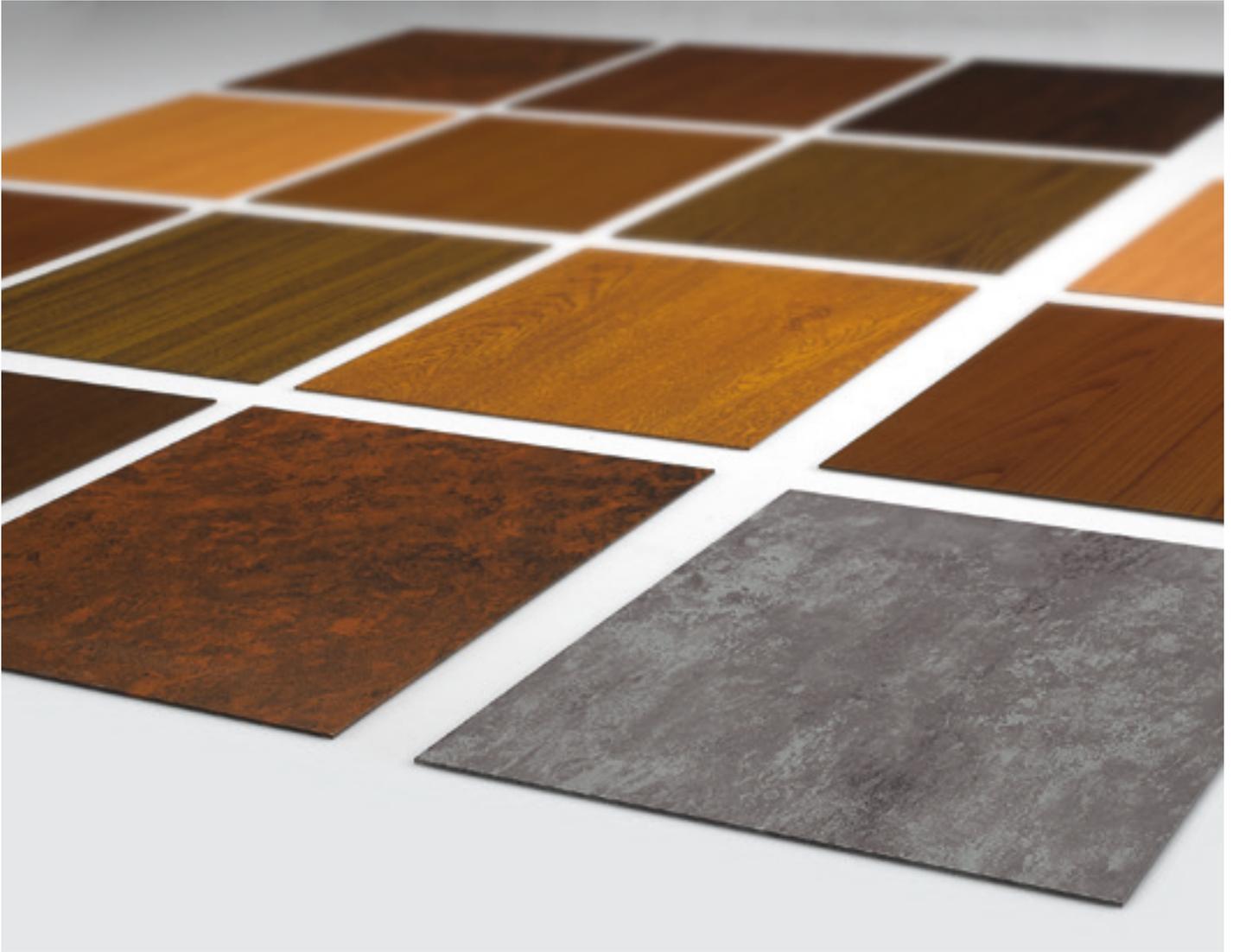
The natural look of oak and nutwood or the urban flair of concrete: heroal makes these striking surface designs available – enabling you to give your windows, doors, curtain walls, canopies and sun protection elements an especially classy appearance. And the coating process heroal SD allows you to create almost any desired decor: Your projects can be given

an individual and distinctive look. Create unique designs with heroal SD. Show your customers the additional options which heroal SD can offer to create unique looks: The extra refinement provides more creative freedom to select an individual design for structural elements.



Advantages at a glance:

- » profile lengths up to 7,200 mm
- » sheet metal for infill panels up to 1,400 x 3,500 mm, one-sided
- » edged parts with a flank height of up to 250 mm, sheet thickness up to 3 mm
- » surfaces with smooth finish or fine structure
- » no cracking when profiles are cut
- » coating possible from all sides
- » surface refinement on one or both sides
- » no limits to profile geometry, all cross sections of profiles can be coated
- » corrosion and weather resistance
- » high UV-resistance
- » more resistant than film coatings, also to solvents



The combination of the two coating techniques heroal hwr powder coating and heroal SD outperforms the positive characteristics of film-coated profiles – and also offers significantly more freedom of design. See for yourself:

Characteristic	Film-coating of profiles	heroal hwr powder coating and heroal SD
corrosion and weather resistance	+	++
high UV-resistance	+	++
resistance to solvents	+	++
no limits regarding profile geometry	0	++

heroal Coating Technology

The continuing trend towards greater awareness of quality leads to increased sustainability in the architecture of buildings. heroal hwr powder coating meets the highest architectural demands: First, the aluminium profiles are pre-treated, then the coating powder is applied in an electrostatic process. If increased protection against corrosion is required, the aluminium profiles are pre-anodised first. Colour stability, gloss retention,

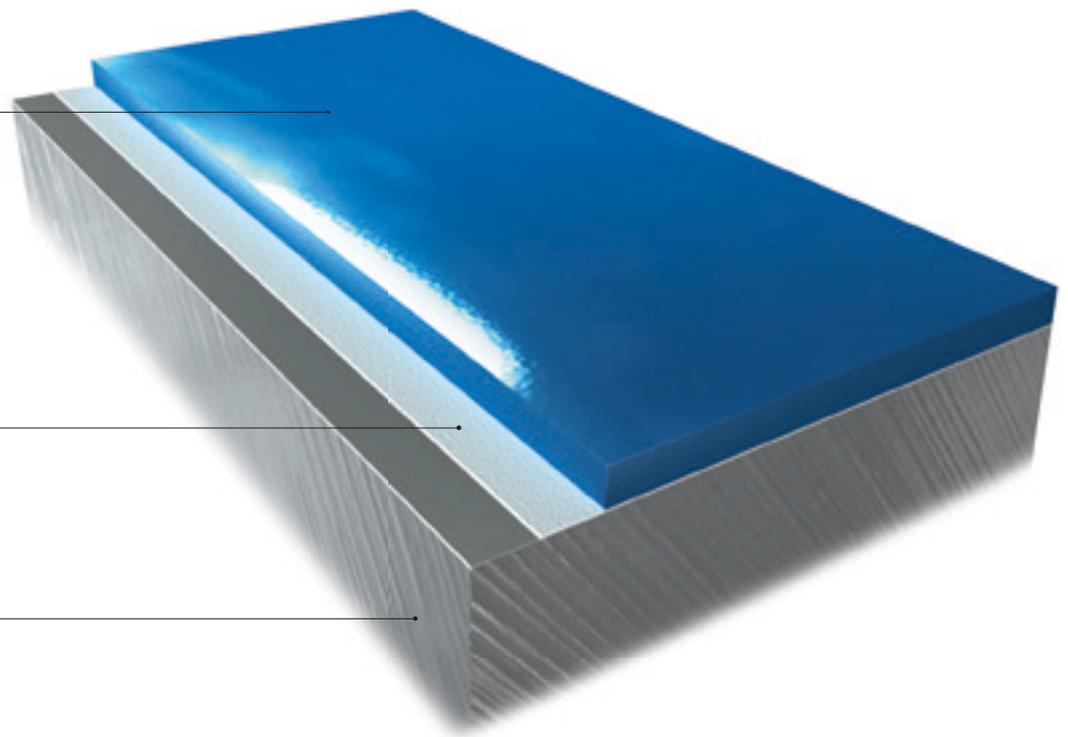
weather resistance and the protection against UV-radiation are excellent. heroal hwr powder coatings are very durable, even after years in industrial environments with high emissions. Architects and builders have a wide range of design options – all RAL chart colours are available and can always be perfectly reproduced.

Schematic representation of a profile with heroal hwr powder coating

heroal hwr powder coating

Chromium-free passivation

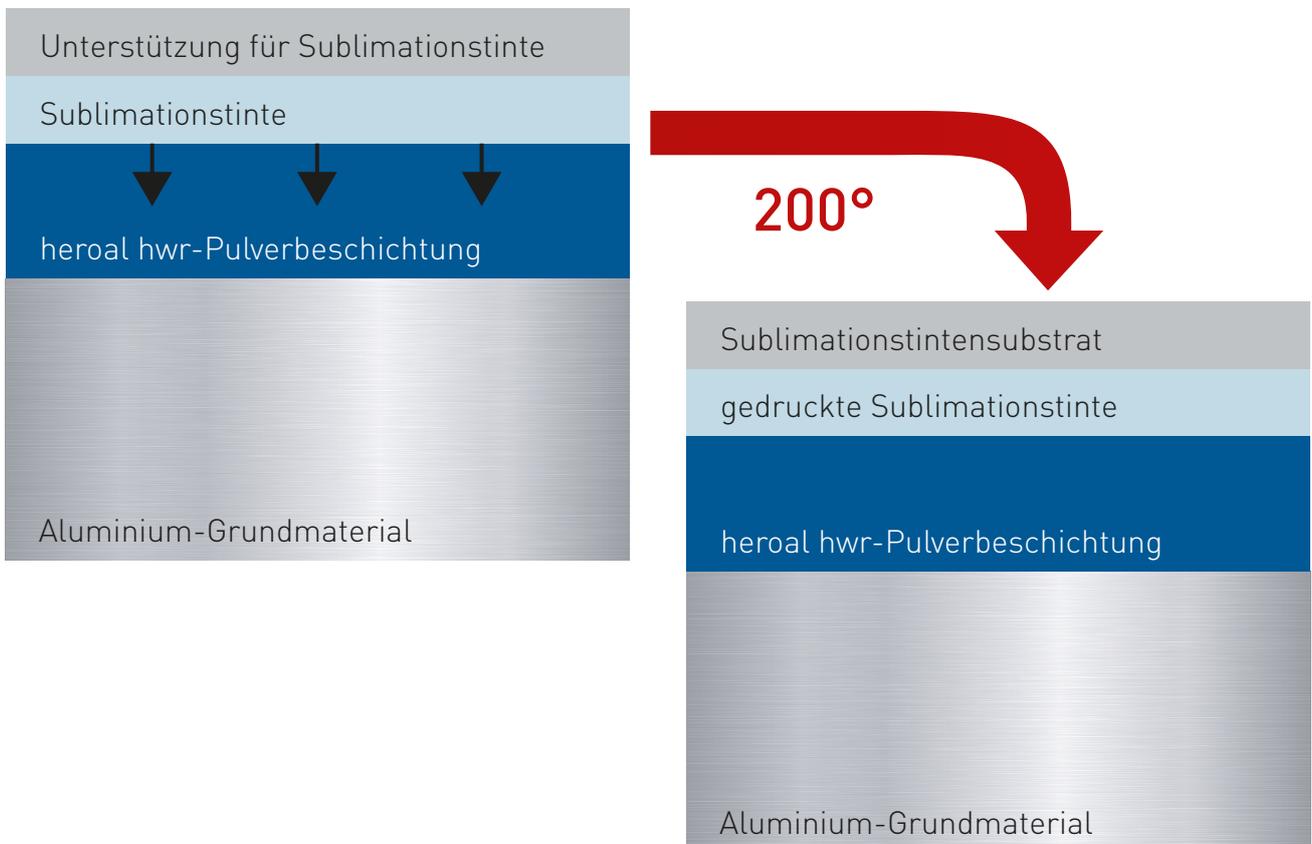
Aluminium base material



heroal SD extends your creative freedom: after the profiles have been heroal hwr powder-coated, the coating process heroal SD follows. The profiles are wrapped in a transfer foil with sublimation ink. In a vacuum process, they are then shrink-wrapped - at a temperature of 200° C, the ink cures into the powder coating.

Once the foil has been removed, the surface refinement is revealed in all its aesthetic appearance. The bonding between the imprinted designs and the powder coating underneath is excellent from all sides: the combination of heroal coating techniques creates surfaces of first-class quality.

Schematic representation of the heroal SD coating process



Resistance: heroal SD withstands chemicals

Medium	Temperature / Time	Changes
Super petrol	25° C / 60 minutes	none
Regular petrol	25° C / 60 minutes	none
Diesel oil	25° C / 60 minutes	none
Acetic acid	25° C / 60 minutes	none
Brake fluid	25° C / 60 minutes	none
Methyl ethyl ketone	25° C / 60 minutes	none
Hydrochloric acid 0.1 N	25° C / 4 hours	none
Sodium hydroxide solution 0.1 N	25° C / 4 hours	none

Quality Tests and GSB Specifications

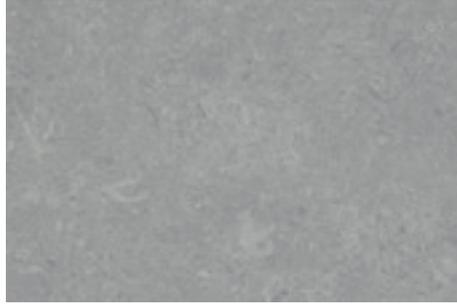
Test	German Industry Norm (DIN)	Result
Resistance to mortar	Acc. to ASTM D 3260	Minimum requirements are exceeded.
Mandrel flex test	ISO 1519 and DIN 53152	No flakings with a 5 mm mandrel.
Indentation resistance	Buchholz ISO 2815 and DIN 53153	Buchholz hardness 80 with a 60 µm thickness.
Erichsen cupping	ISO 1520	Powder coating 3 mm
Gloss	ISO 2813 and DIN 67530; angle of incidence 60°	Gloss rates range from matt to glossy, depending on the powder.
Adhesive strength	Cross-cut test acc. to ISO 2409 and DIN 53151	Value Gt 0
Condensation - constant climate	DIN 50017 KK	No identifiable blistering after 1,000 hours. The infiltration at the X-cut was less than 1 mm.
Condensation - changing climate	ISO 3231 and DIN 50018 SFW 0.2; 24 cycles	No blistering, no infiltration at the X-cut of more than 1 mm.
Machu test	Short-term corrosion test	Maximum infiltration at the X-cut of 0.5 mm.
Layer thickness	ISO 2360 and DIN 50984	The layer thickness on the visible surface exposed to weathering must not fall below 50 µm or exceed 120 µm.
Artificial weathering	ISO 2809 and DIN 53231	Residual gloss: > 50 % of the initial value
Resistance to boiling water	Pressure cooker	After two hours in boiling purified water, there was no identifiable blistering or decrease in adhesion.



Design variety



312 | rust



313 | concrete



347 | slate



301 | raw walnut



304 | walnut



302 | light cherry



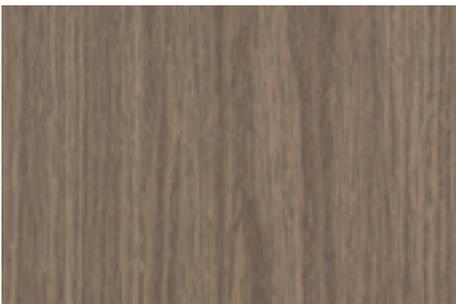
305 | dark douglas



306 | light douglas



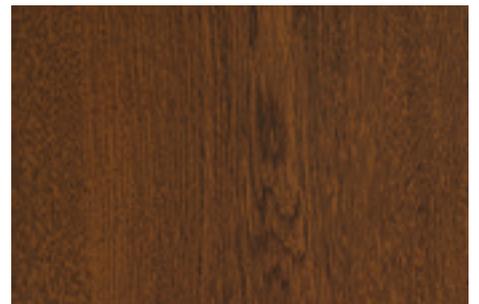
314 | mountain pine



319 | AnTeak



308 | nutwood



338 | nutwood V 0955 R



330 | swamp oak R



327 | golden oak R



345 | desert oak



329 | sapeli R



335 | oregon 0957 R



340 | siena PN noce R



341 | mahogany 0950 R



337 | dark oak R



342 | natural oak



346 | winchester XA

Due to printing techniques, the colours shown here may differ from the original designs. The complete range of heroal SD designs is on display in colour fans.

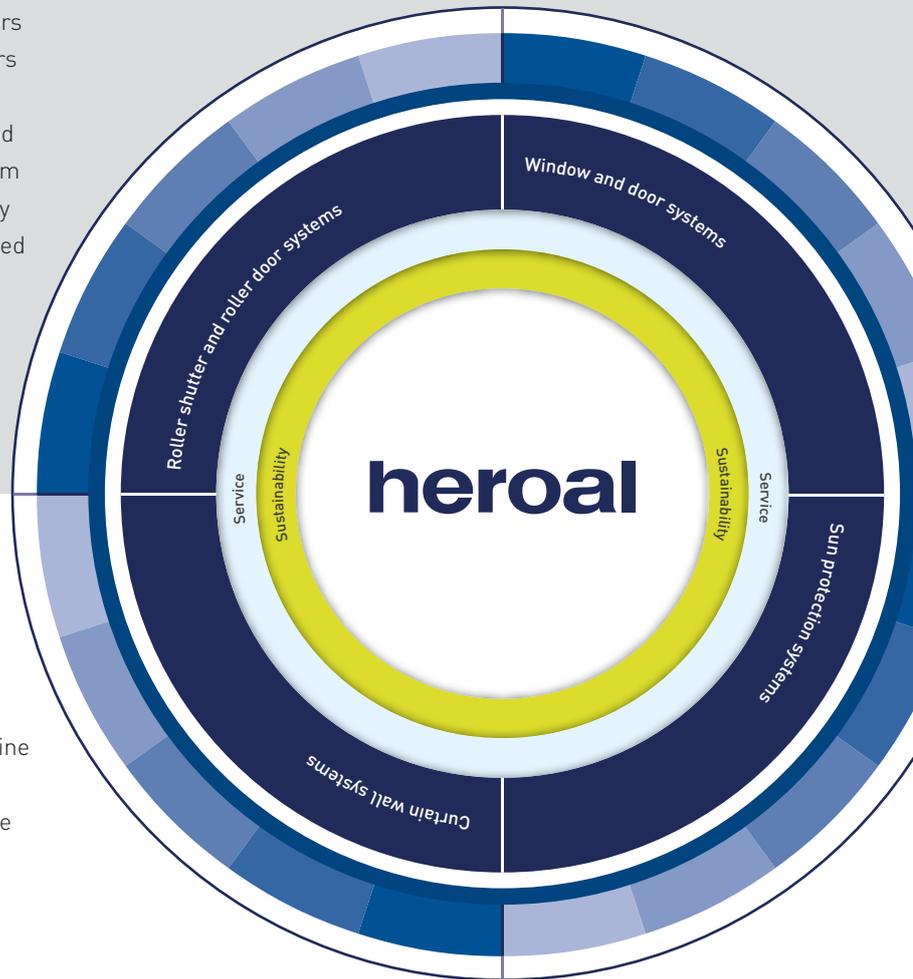
heroal – the aluminium systems provider

As one of the leading suppliers of aluminium systems, heroal develops and produces perfectly aligned systems for windows, doors, curtain walls, roller shutters, roller doors and sun protection, as well as folding and sliding shutters insect protection, patio roofs and carports.

Thanks to low energy consumption during production and maximum energy savings during operation, heroal system solutions make a significant contribution to sustainability in construction, while at the same time providing improved efficiency during processing and increasing the value of buildings.

Innovation, service, design, sustainability

The heroal brand stands for system solutions that combine practical innovations, industry-leading service, comprehensive sustainability and high-quality design that can be integrated into any architectural concept.



Roller shutters | Sun protection | Roller doors | Windows | Doors | Curtain Walls | Services

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