

General instructions for aluminium coating orders from Schüco International KG, Karolinenstraße 1 - 15, 33609 Bielefeld (hereinafter „Schüco“)

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Preamble

This document is aimed at Schüco customers and specifiers who prepare coating orders for Schüco and describes operational instructions for planning, commissioning and using coating services from Schüco. It will describe the specific procedure for this service portfolio.

1. Orders and required information and documents for the order

The order must indicate the ordering party as well their address, the delivery address (if different), the ordered surface finish/colour, the quantity to be coated by colour/surface finish and Schüco system articles.

An order for coating customer material must include the mandatory quantities in m² as well as all the information required for the coating process such as material, coating names, process data, information about hanging the units, thermal stability, incompatibilities, as well as details on delivery of the customer material to be coated. Schüco is not obligated to advise the ordering party of any missing information in this regard in the event that the order is placed for customer material. If this information and documentation are missing, the coating will be applied to the best of our knowledge and in line with the state of the art.

2. Specific instructions for surface finish technologies

Anodised

Anodised surface finishes are applied in accordance with DIN 17611.

Mechanical processing for EURAS E1 - E5 and stainless steel look:

Order confirmation after checking the profile geometry (maximum processing width, technical feasibility) and capacity. For technical reasons, mechanical processing is possible to a maximum width of 150 mm to 170 mm (depending on coater and process) on the main visible surfaces of the profiles.

Secondary and functional areas may be pre-treated in E0, depending on the process. Sheets and edge sections cannot be processed in EURAS E1 - E5 and stainless steel look.

In the case of anodising, an abrasive initial clean must be carried out before commissioning in order to remove any process residue or construction dirt.

For colour anodising orders, Schüco recommends that you agree binding control samples before the first anodising order.

SANDALOR: Due to the configuration of the tank and the tank stability in the colouring process (colour uniformity), the material (Schüco and, if applicable, customer material) must be coated in one batch. Customer material, in particular sheets, must originate from one manufacturer, and if possible from one batch, in order to minimise visual anomalies.

Anodised SG (*structural glazing*): Based on the approval guidelines, Schüco SG profiles (for series and project business) may only be coated by authorised Schüco partners and purchased via Schüco. The sale of mill-finish profiles suitable for SG is excluded. After anodising, the surface is imprinted with the coating date. The coated surface has a shelf life of 6 months from when it is stamped.

Once it has exceeded its shelf life, it may not be used for SG applications as the adhesive strength between surface finishes and SG adhesive is no longer guaranteed.

Powder coating

Unless otherwise expressly agreed, the powder coating is carried out to the quality level "façade quality" with chromium-free pre-treatment and a smooth surface finish. RAL colours are applied in satin finish as standard. Other quality levels such as "high weather resistance" and "maximum weather resistance" are possible following examination.

Powder coatings for an order/consignment are, by definition, coated with a batch of powder. If a project involves multiple orders but is to be delivered in one powder batch, the batch must be reserved in advance for a binding consignment volume. If coatings are applied with different powder batches, this may result in differences in appearance.

If pre-rolled profiles are used, the surface finish of the polymer bars is an unregulated coating surface. A complete coating free of air bubbles on the polymer bar is therefore not guaranteed here.

RAL colours:

The designation of an RAL colour with its RAL number alone does not guarantee conformity with any existing templates or old buildings (based on colour changes caused by weathering) It is therefore necessary to specify the powder supplier and the full powder code to facilitate precise colour specification.

Co-ordinating colours with existing building components must be agreed using control samples and approved by the clients in writing.

Special colours/coating with additional functions:

Special colours, such as effect & trend colours, functional coatings such as anti-graffiti surface finishes and SmartActive are not stock items, but are ordered and produced specific to each customer order, and therefore generally have a longer shelf life.

For special colours, after ordering and before fabrication of the first coating batch if necessary, we recommend requesting a control sample from the powder batch used for the project. Not all special colours have an approval from a quality association (GSB and Qualicoat).

Special surface finishes

Natural & Decoral surface finishes as well as mechanical processing before anodising (EURAS E1 - E5 & stainless steel look): in projects, the profile and sheet geometries need to be checked by Schüco for technical feasibility and visual effect due to the complexity of the coating.

On request, Schüco will send the relevant information, which forms the basis for ordering these services and which must be signed by the customer before processing and sent to Schüco.

Wet paint coatings

The wet paints used are solvent-based products which are produced, depending on the manufacturers' system, for a specific order on the basis of the order details.

Polyurethane and Duraflon wet paint coatings are usually single-layer coatings which are suitable for both profile shells and composite profiles with polyamide (PA) isolators.

PVDF wet paint coatings are possible based on a limited range of colours from the manufacturer. The selected colour will define how many layers are required (2 – 4 layers). Due to the curing temperature of approx. 240°C, composite profiles are not suitable for this coating.

3. Billing methods

Profiles are coated (coating, anodising and pre-anodising) on all surfaces and are invoiced accordingly.

Shaped sheets, edging and special sheets are coated on one side and are invoiced accordingly.

Anodising and pre-anodising are applied to the whole surface and invoiced accordingly.

Standard „FLUTZ“ profiles, e.g. angles, U-shaped profiles and flat profiles, are generally coated on one side.

The calculation is based on the total circumference.

Angles and U-shaped profiles are usually coated on the outside, unless the ordering party specifies otherwise.

As a rule, the ordering party should pre-drill holes in the sheets and edge sections for hanging the material. If no holes are present, they will be made by the coating company in accordance with the hanging requirements. Subsequent complaints from the ordering party will not qualify. The costs for making the holes will be invoiced separately at cost.

Special constructions, e.g. arched profiles, welded constructions and particularly small parts, are generally coated on request (based on the drawing from the ordering party). Requests that have not been provided in advance will be charged at cost.

4. Packaging and storage of surface-finished material

The packaging of coated Schüco products is determined by Schüco and serves purely as transport packaging.

The coated material must be stored indoors by the ordering party/recipient so that it is protected from the weather and other negative influences such as dirt from material typically found on a building site such as dust, mortar, cleaning agents etc.

Surfaces that are protected by a Schüco protective film have a shelf life of no more than 3 months following delivery/application of the film when stored indoors in an area that is protected from the weather. Due to the large number of surface finishes with different structures, chemical basis and functionality, the Schüco protective film is not equally suitable for all surface finishes.

After processing, the coated profiles must not be stacked directly on top of one another.

Between each layer there must be a packing layer of soft wood (such as poplar) or stiff cardboard of the same thickness, in sufficient quantity, at least 4 pieces for a 6 m bar. However, the coated surface must also be protected against scuff marks from wood or cardboard and must therefore be individually wrapped in fleece or film. Negative effects on the coating due to outgassing of plasticisers or other liquid components must be prevented.

Before further processing, the surface of the profiles should be carefully cleaned to remove processing residues (swarf, adhesive residues, etc.).

Coated profiles must not be exposed to the sun when packed.

The coated product must be stored so as to enable ventilation to regulate the moisture content in the packaging.

The coated product must be protected from the weather and rainwater too. This will prevent marks on the profiles.

5. Quality and usage restrictions for the coated articles

Unless otherwise agreed or advised in our documentation, the quality of the surface finishes covered by the contract will be judged in accordance with the latest standards of the current quality and testing regulations for piecework coating of aluminium components from GSB International e. V., Schwäbisch Gmünd, and/or the current applicable regulations for wet-paint and powder coating of aluminium for architectural applications (Qualicoat/VOA-Verband für Oberflächenveredelung von Aluminium e.V.), and/or the current applicable regulations for anodising aluminium for architectural applications (Qualanod/VOA-Verband für Oberflächenveredelung von Aluminium e. V.). References to technical standards are made only for the purpose of describing the product and may not be interpreted as a guarantee of quality. Schüco reserves the right to make alterations to the design, material, style and profile construction and any other changes required for reasons of technical progress, within the bounds of what is reasonable, at any time and without prior notice.

Ensure that the coated surfaces are not subjected to ongoing heat exposure of over 70°C (with the exception of solar radiation). Changes to the surface finish due to this kind of heat exposure do not constitute defects.

Unless otherwise agreed or indicated in our documentation, the surface finish is only suitable for areas where the usual natural weathering conditions for central Europe prevail. Ensure that the coated surfaces are not used in areas directly influenced by emission sources (within an approx. 100-metre radius) which could damage the paint on the coated surface. Emission zones also include areas within 500 metres of bodies of water (salt or fresh water). The appearance of filiform corrosion is not a defect unless the material was pre-anodised before coating. The ordering party must request the pre-anodising in writing.

Ensure that the surfaces are maintained properly and regularly in accordance with the regulations of the Gütegemeinschaft für die Reinigung von Metallfassaden e.V. (GRM), or VMRG in the Benelux countries. The Schüco fabricator must ensure that the clients are given written instructions on how to properly clean and maintain the coated surfaces at regular intervals.

Proper care involves cleaning, inspecting and maintaining the coated surfaces in accordance with the regulations of the Gütegemeinschaft für die Reinigung von Metallfassaden e.V. (GRM), or VMRG in the Benelux countries. The coated material must be cleaned at least once a year. A record of all cleaning work must be kept.

Damage caused on site by improper welding work/insulation work/plaster or concrete work, or non-neutral sealing profiles/sealing compounds, or cleaning agents that damage the paint, must be avoided during installation on the building site, even if this does not fall within the area of responsibility of the ordering party.

Direct or indirect contact with aggressive media on the building structure such as de-icing salt, acids, alkalis, copper roofing or planking must also be avoided, as these may attack the coated surface.

Colour and surface finish variations with coatings made at different times in the same surface finish/colour cannot be avoided in fabrication and are therefore not defects. This also applies in the event that the ordering party subsequently changes the original quantity of material to be coated for a consignment.

The uniformity of surface coatings on different surfaces (e.g. galvanised steel, cast parts) cannot be guaranteed. Variations caused by this are therefore not defects.

If the ordering party commissions another third party to coat material in addition to Schüco, there may be variations in the same colour/surface finish for production reasons. These variations are not defects. Schüco cannot assume any guarantee that the colours will be uniform. This is also the case if Schüco processes the coating ordered with Schüco via the same third party.

For customer material, the ordering party must ensure that the ordered coating can actually be applied without damaging said material. Schüco assumes no guarantee for this. Schüco will only consider the ordering party's concerns in the event of obvious errors which would have been apparent to Schüco in light of its professional knowledge. If, at the request of the ordering party, Schüco supplies raw material for coating such as powder or paint, Schüco assumes no responsibility for the suitability of this raw material for the intended coating or the area of use for the materials coated with the raw material. Furthermore, any guarantee or liability for the supplied raw material for coating is excluded, regardless of the legal reason.

Liability for defects when coating customer material does not include defects in the surface finish quality which can be attributed to the poor quality of the customer material, for which Schüco is not responsible. Schüco is not obligated to perform a goods inward check of the customer material.

Scratches and small areas can be touched up with a special paint. This paint can be purchased from Schüco in several shades. Other shades can be mixed on request. Absolute colour and gloss uniformity is not ensured here.