

## TECHNICAL ACCEPTANCE CONDITIONS FOR COATINGS

### A. Technical requirements to be met by components intended for powder coating

1. The size and weight of a single painted product should not exceed the working dimensions (length x width x height): 8.2 x 1.5 x 2.4 m
2. The weight of a single product should not exceed: 450 kg
3. The painted product shall be made of structural steel of similar chemical composition.
4. The surface of the product must not be painted with any paint, covered with grease or temporary protection agents containing silicones.
5. The product must not be wet. Internal spaces must be free of water or other chemical agents or materials (e.g. grease, mineral wool, wood, polystyrene)
6. For welded, seamed, riveted structures the following is important:
  - welds shall be continuous, without porosity and without weld spatter
  - there must be no parts (e.g. sections, sheet metal) which are adjacent to each other in planes, as this leads to the formation of micro cracks which are a source of corrosion without the possibility of painting. Additional galvanization does not protect such gaps and pores either.
  - the structure must not bend or break under its own weight
7. Each individual product must be suspended or supported during painting, so suspension points or holes must be provided which will be unpainted and will be touched-up. Touch-ups are made in standard colours. For orders in non-standard colours, touch-ups are the responsibility of the customer or can be agreed with the sales department. A list of standard colours is annexed to the TAC of the paint shop.
8. All sharp edges and openings should be deburred on delivery.
9. In the case of fitted parts, the process play associated with the paint thickness (approx. 0.1 mm) must be taken into account
10. Threads, holes and other areas that should not be painted should be agreed with FAM as to the form of protection and cost.
11. For previously hot-dip galvanized products the following is important:
  - the components shall not be made of non-galvanizing steel with silicon contents between 0.03-0.13% and more than 0.25%. If the customer is not able to determine whether this condition is met, the paint shop may paint the products, but the possibility of aeration of the galvanised surface and a

visible roughness of the surface must be taken into account. There is also a risk of too thick a zinc coating falling off.

- there shall be no white corrosion on the surface of the elements.
- the use of touch-ups with high zinc paint is not permitted
- galvanized components should be free of sharp icicles, traces left by emerging from the zinc bath and traces left by suspension wires.
- components moving relative to each other must not be flooded with zinc.

**12.** In crevices and internal parts of profiles there is a possibility of accumulation of abrasive residues from mechanical preparation of the structure for painting. In order to prevent the occurrence of efflorescence from corrosive abradant, the construction should be designed in such a way that it is possible to remove the residual shot.

**13.** In the case of spatial constructions wider than 0.6 m (due to the impossibility of carrying out a complete surface preparation process), paint defects may occur.

## **B. Requirements to be met by coatings**

Paint coatings on powder coated galvanised products should meet the requirements of EN 13438: "Paints and varnishes. Powder coatings for galvanised or sterilised steel products for construction purposes"

## **C. Conditions for acceptance of paint coatings.**

**1.** The appearance of the coating is assessed on a substantially important surface to be agreed with the Customer. Edges, recesses and inner surfaces are not included in the relevant surface. The coating on the relevant surface shall not have any scratches extending into the metal of the substrate. When the relevant surface is viewed at an angle of 60° the following defects must not be visible at a distance of 3m: excessive roughness, runs, blisters, inclusions, craters, dull spots, pores, pits, scratches. The coating must have an even color and gloss. These criteria must be met under the following assessment conditions:

- for components used outdoors: viewed from a distance of 5 m.
- for components used indoors: viewed from a distance of 3 m

Attention: Flashes and corrugations on the galvanised surface are treated as a natural consequence of the galvanisation and therefore do not represent a defect on the painted surface.

**2.** Gloss definition: "Matt, semi-matt, satin, semi-gloss, gloss" are approximate names and are only a basis for agreement with the customer. The colors are determined on the basis of the RAL palette.

**3.** Coating thickness should be measured in 5 measuring areas. For powder coatings it shall not be less than:

- 60µm – for components used outdoors
- 50µm – for components used indoors.

4. The adhesion of the coating shall meet the requirements of EN ISO 2409. The criterion is the cross-cut grid measurement, distance between knives 2 mm. The result must be 0

5. No claims can be accepted for efflorescence from shot residue in cracks and profiles which are difficult to access.

#### **D. Packaging of painted products**

1. The products are placed on the packaging, the pallet supplied with the product to be painted.

2. Recommended packaging: Products of uniform shape and relatively small dimensions should be placed on a pallet after being covered with a layer of foam or wooden spacers. Finally, the pallet is fastened to the stacked parts with polyester tape. The number of layers depends on the type of material, but attention should be paid to the stability of the goods during transport.

3. Products with large dimensions (e.g. balustrades) and non-standard shapes are packed according to individual arrangements with the customer.

#### **E .Final arrangements**

1. If you have special expectations or are unable to meet the conditions in section A, you must inform Customer Service in writing.

2. The paint shop is not responsible for defects in the paint coating applied with the paint provided by the customer.

3. The paint shop shall not be liable for any damage occurring during transport, storage and assembly of products painted outside the premises of FAM Sp. z o.o. A signed Stock Issue Confirmation (CI) document confirms the qualitative and quantitative acceptance of the painted material.

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