

**Project No.** 150457

**Client:** Council of the Isles of Scilly

**Tender Issue** 10/11/2017

**STRIDE TREGLOWN**  
ARCHITECTURE

## Carn Gwavel School

**10 November 2017**

**This document includes:**

Code	Section	Revision	Dated
Z33	Anodizing		

## **Z33 Anodizing**

### **To be read with Preliminaries/ General conditions.**

- 110 ANODIC COATING
- Anodizer: Select one only of the following: Contractors Choice.
  - Selected anodizer: Submit details before commencement of anodizing, including:
    - Name and contact details.
    - Details of accreditation schemes.
    - Technical data of product including current Agrément certificates.
- 210 WORKING PROCEDURES
- Standard: To BS 3987 for anodic coatings on wrought aluminium.
- 220 ANODIZER REQUIREMENTS
- Processing:
    - Approved: By the Aluminium Finishing Association.
    - Certified: To BS EN ISO 9001.
    - Anodizing plant: Each anodizer to use only one plant.
- 230 GUARANTEES
- Anodizer guarantees: Submit sample copies before commencement of anodizing.
  - Project specific guarantees: Submit signed copies on completion of work.
  - Guarantees to cover:
    - Life expectancy.
    - Colour: Opacity and consistency.
    - Texture: Gloss, satin or matt.
    - Quality of coating.
- 240 CONTROL SAMPLES
- Sequence: Prior to ordering materials for the works, obtain approval of appearance for:
    - Anodic coated samples: Showing colour and texture variation.
    - Fabrication samples: Showing joint assembly, how anodic coating is affected and how cut metal edges are finished and protected.

**250 INDEPENDENT INSPECTION AT PLANT**

- Requirement: Contractors/ suppliers of the following designated components must commission an approved Independent Inspection Authority to carry out acceptance inspections to confirm that anodic coating application complies with this specification.
  - Designated components: Curtain Walling Section H11.
- Acceptance inspections: Carry out for each variation of colour and finish of each component work package at anodizer's plant prior to any fabrication of units, in accordance with the following:
  - Where three or more production runs are required for application of coatings, not less than three acceptance inspections must be carried out in accordance with BS 6001-1, general inspection level 2, with an acceptance quality limit of 1%.
  - Where less than three production runs are required for application of coatings, one acceptance inspection must be carried out in accordance with BS 6001-2, with a limiting quality of 5% where the probability of acceptance is 10%.
- Components failing inspection: Reprocess or replace and reinspect.
- Inspection reports: Independent Inspection Authority must submit copies.

**255 QUALITY ASSURANCE SYSTEM**

- Requirement: Powder and coating application to the following designated components is to be tested and approved in accordance with the Qualanod system.
  - Designated components: section H11.

**270 COMPONENT DESIGN**

- Condition of components to be anodized:
  - To comply with relevant recommendations of BS 4479-1, and -5.
  - Of suitable size to fit plant capacity.

**310 PRETREATMENT**

- Condition of components to be anodized:
  - Free from corrosion and damage.
  - Suitable for and compatible with the pretreatment and anodizing process.
- Process: In accordance with the specification requirements for the finish.

**410 EXTENT OF ANODIC COATINGS**

- Application: To visible component surfaces, and concealed surfaces requiring protection. Coated surfaces will be deemed 'significant surfaces' for relevant BS 3987 performance requirements.

**420 APPLICATION OF ANODIC COATINGS**

- Surfaces to receive anodic coatings: Clean.
- Commencement of anodic coating: To be continuous from pretreatment.
- Jig points: To be agreed. Not on visible areas of anodic coated components.
- Use of touch-up paint: Not acceptable.

**430 PERFORMANCE AND APPEARANCE OF ANODIC COATINGS**

- Standard: To BS 3987.
- Visual inspection after anodizing: Significant surfaces to be free from visible coating/ defects when viewed from a distance of not less than 5 m for external and 3 m for internal applications.

440 FABRICATION

- Units may be assembled:
  - Before anodizing, providing sufficient drainage holes are included in components to fully drain components.
  - From components anodized after cutting to size.
  - Where approved, from components anodized before cutting to size.
  - Exposure of uncoated background metal: Not acceptable.
  - Assembly sealants: Compatible with anodic coatings. Obtain approval of colour if sealants are visible after fabrication.

450 DAMAGED COMPONENTS - REPAIR/ REPLACEMENT

- Before delivery to site: Check all components for damage to anodic coatings. Replace damaged components.
- Site damage: Submit proposals for repair or replacement.

510 PROTECTION

- Anodic coated surfaces of components: Protect from damage during handling and installation, or by subsequent site operations.
- Protective coverings: Must be:
  - Resistant to weather conditions.
  - Partially removable to suit building in and access to fixing points.
- Protective tapes in contact with anodizing to be:
  - Low tack, self adhesive and light in colour.
  - Applied and removed in accordance with tape and anodizers recommendations.
- Inspection of protection: Carry out weekly. Promptly repair any deterioration or deficiency.

530 DOCUMENTATION

- Submit the following information for each batch of anodic coated components:
  - Supplier.
  - Trade name.
  - Colour (if required).
  - Batch and reference number.
  - Statutory requirements.

540 COMPLETION

- Protection: Remove.
- Cleaning and maintenance of anodic coatings: Carry out in accordance with procedures detailed in anodizer's guarantees.