

Quality control

It is still considered that ‘painting’ can cover a poor substrate to make anything look good, but for the wise, for a limited time. Substrate preparation on any material is crucial for longevity of the applied finish, with a poorly executed substrate preparation, failures can often be seen within twelve months. The same can be said about powder coating. There are numerous companies in the architectural aluminium coating industry who can coat to a price; the problem is, the coating can look excellent at first, but time tells another story and one that can turn out to be very, very costly writes chair of Qualicoat Angus Mackie



The problem with any national quoted standard is that it can be claimed, but often cannot be substantiated without physically checking the product, or conducting a process review of the supplier. As a customer, how can you be sure you are getting the quality you specify? Most of you reading right now know that all quality powder coatings consists of a robust pretreatment followed by the application of powder coating, but, can you make a visit to every supplier in a contract prior to placing an order to check that this is being done?

The global Qualicoat label exists to offer transparency to all specifiers. The Qualicoat specification is updated in real time to accommodate results of research and the adoption of new technologies. The current specification is also available, without cost, from Qualicoat’s own website. To retain their membership, Qualicoat members receive twice yearly, unannounced, inspections from an independent test house. Members who fail this inspection can, and have, lost their licence to carry and display the Qualicoat accredited quality label.

As you would expect from the name of the association, consistency in supplying quality is paramount for the applicator licence holders. The secret to quality is only achieved by regular monitoring of the powder coating process through the member’s own test laboratory and this is where the laboratory technicians are crucial in the powder coating process.

Over the last few years Qualicoat has made it mandatory that all licence holder’s laboratory technicians attend a refresher training course at least once every two years. This is to ensure that the latest developments in the Qualicoat specification for production monitoring and production testing is implemented and maintained. This also ensures

compliance with the specification. For specifiers this is a key reason to specify Qualicoat for their architectural powder coating.

The yearly training meetings are organised by IFO who are Qualicoat UK & Ireland’s independent test house located in Germany.

The last training day took place in Daventry in November 2023 with a record number of 60 laboratory technicians attending. Testing equipment was made available for the testing of chrome-free analysis including photometers and a hand held x-ray spectrometer. Members came from all over the UK and Ireland to discuss the specification updates and listen to technical presentations.

A Q-SUN Xe-1 xenon arc chamber was brought to the event. This reproduces the damage caused by full-spectrum sunlight and rain. In use over a few days or weeks, the Q-SUN test equipment can reproduce the damage that occurs over months or years in the harshest of environments.

Oliver Boegler, head of inspections at IFO, gave an overview of coating various aluminium alloys, coating testing methods and an update on the latest Qualicoat specification and updates being introduced in 2024.

With several new powder coating applicators receiving their licences recently and further powder coating applicators currently undergoing training and review by IFO, the vast majority of quality architectural powder coaters in the UK & Ireland are now licensed to supply to the Qualicoat specification and carry the Qualicoat label. □



Angus Mackie

The up-to-date Qualicoat specification is available for download from the UK & Ireland Association website, qualicoatuki.org. The website carries an up-to-date list of licensed UK and Ireland powder suppliers, pretreatment suppliers and applicators including the applicators who carry the seaside class accreditation. Telephone support is available from Qualicoat UK & Ireland head office in the Midlands on 0330 240 9735