7603 Glass 5M Hydro

TECHNICAL TEST DOCUMENTATION

Photocatalytic and Hydrophilic Surface Performance

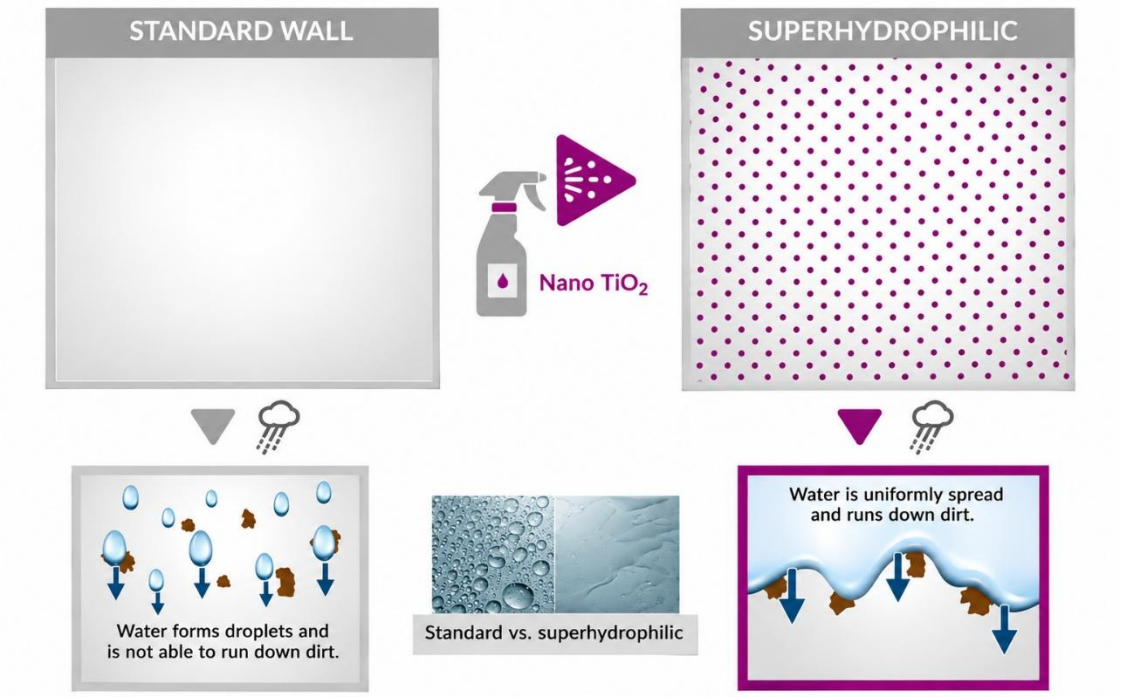
Supplementary presentation of selected test and demonstration results. Product features, applications and processing parameters are described in the separate CCM product sheet.

CONTACT ANGLE AND ACTIVATION

Contact angle measurements illustrate changes in surface wettability. A smaller contact angle indicates greater wetting; in the test shown, 0° corresponds to complete spreading.

Test condition	Contact angle
Uncoated galvanized steel	70°
Coated, before activation	57°
Coated, after activation	0°
Coated, contaminated with oleic acid	90°

The measurements were obtained using coated galvanized steel test panels. They are not universal target values for all substrates or operating conditions.

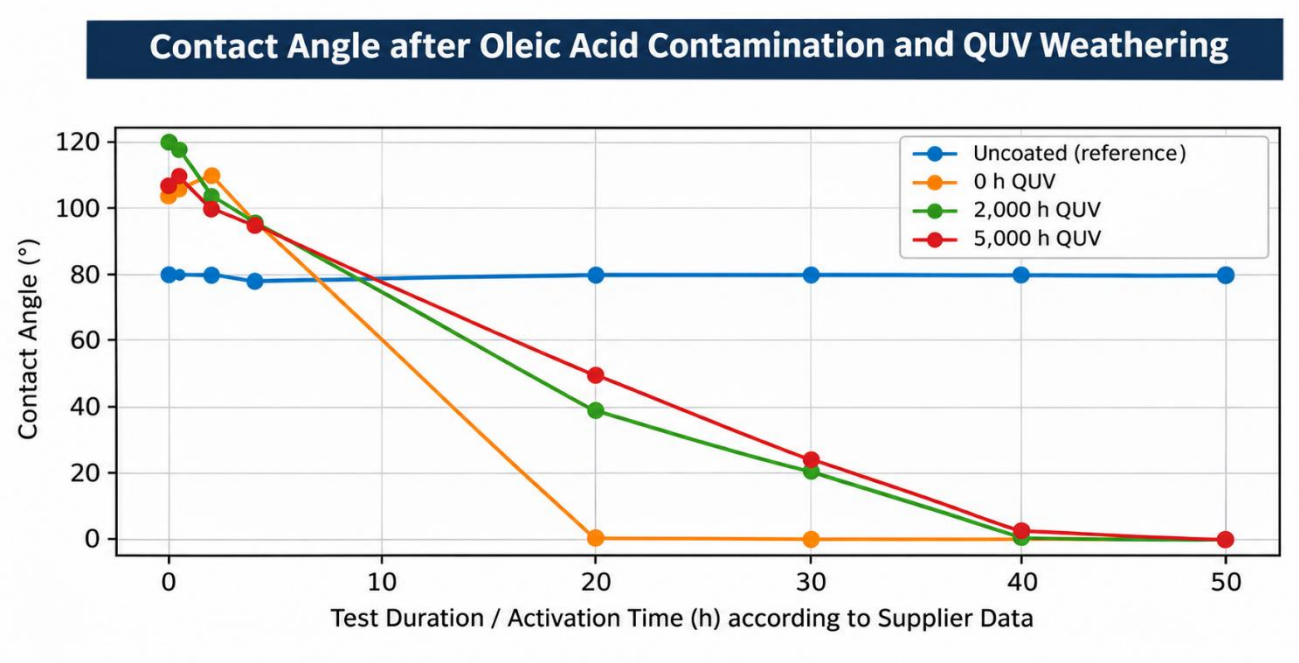


Schematic illustration: uniform water wetting and removal of loose dirt (original test illustration, without third-party branding).

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QUV WEATHERING: RETENTION OF PHOTOCATALYTIC PERFORMANCE

The laboratory test examined the recovery of a low contact angle after contamination with oleic acid. Coated samples underwent different periods of accelerated weathering (0, 2,000 and 5,000 hours QUV) before performance testing.



Contact angle during activation (hours) following different levels of QUV pre-exposure; data reproduced from the original test chart.

After 48 hours of activation, coated samples in all three QUV groups reached a contact angle of 0°. The uncoated reference remained at approximately 80°. After 5,000 hours QUV, the contact angle decreased more slowly than on the unweathered sample.

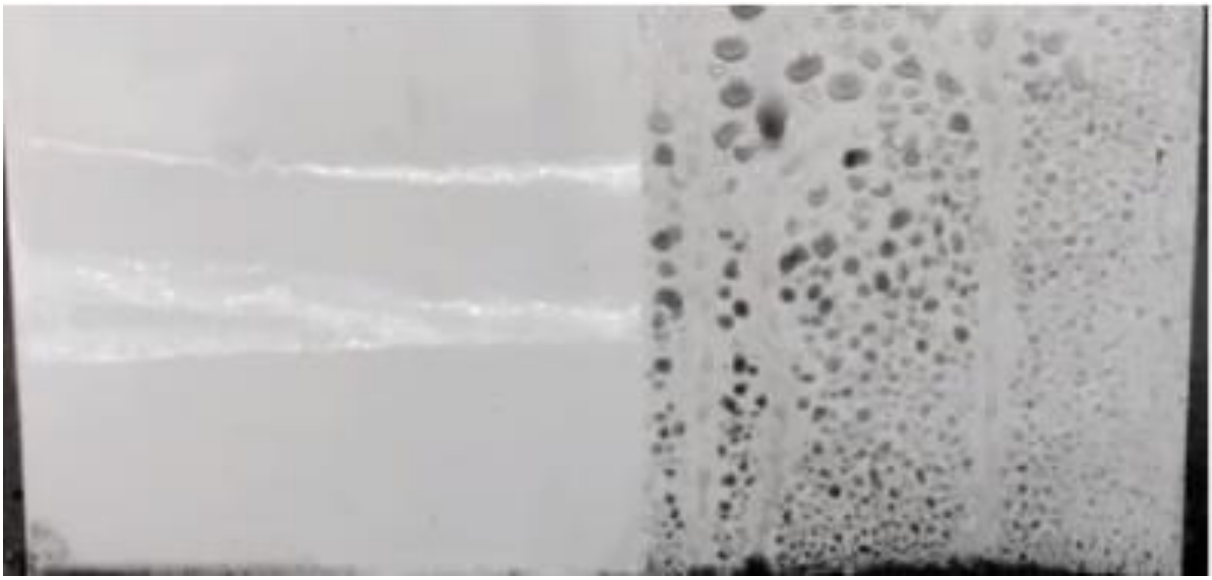
Interpretation: 5,000 hours QUV represents an accelerated laboratory exposure period and must not be converted into a fixed number of outdoor service years without a separate correlation study.

WATER WETTING – COATED VERSUS UNTREATED

The visual comparison demonstrates differences in water distribution on vertical test surfaces. Water spreads more uniformly on the treated surface, while more pronounced droplet formation remains visible on the untreated surface.



Photographic record: test on a treated surface.

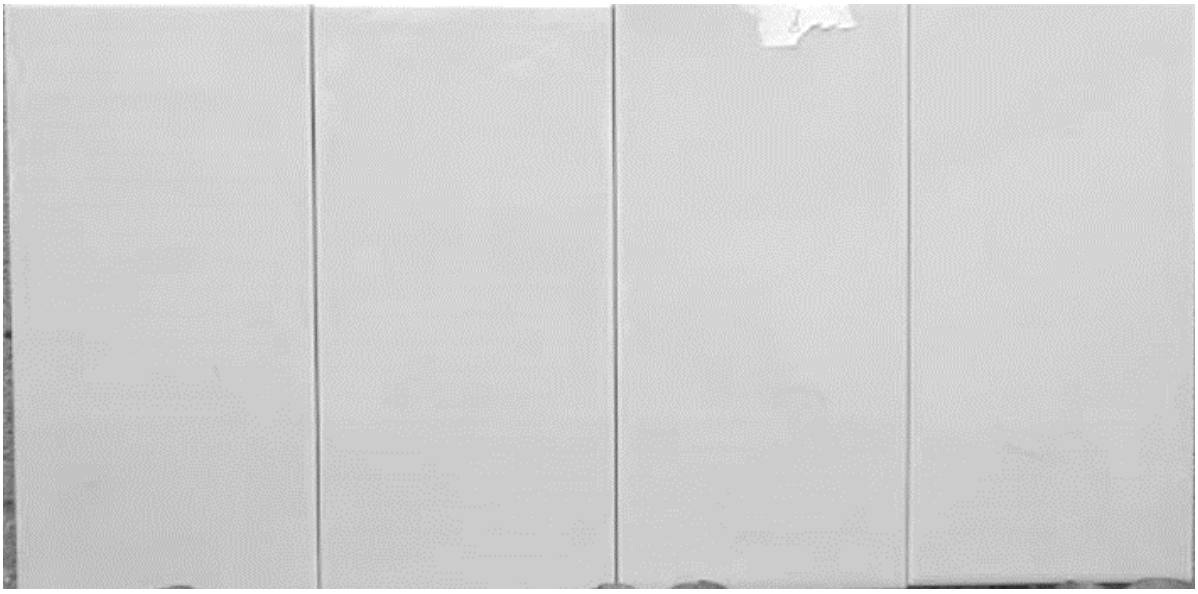


Photographic record: untreated comparison surface.

These photographs are qualitative demonstrations, not quantitative measurements of cleaning performance or antistatic properties.

PHOTOCATALYTIC DEMONSTRATION TESTS

Marking tests using methylene-blue-containing ink were among the methods used to illustrate photocatalytic activity. The reduction in visible colour intensity demonstrates oxidative action under the respective test conditions.



Photographic record of a marking test after four hours (original test setup).

This observation is not a standardized demonstration of the breakdown of every type of contaminant, does not substantiate disinfection claims and does not quantitatively demonstrate air purification.

INTERPRETATION AND ATTRIBUTION OF RESULTS

The selected measurements and demonstrations relate to the non-porous coating variant or to the test surfaces specified in the experiments. Test examples involving the separate variant for porous substrates have intentionally not been presented as performance evidence for 7603.

The images and chart data illustrate performance observed under the stated conditions. Actual performance depends on substrate, surface preparation, light exposure, contamination and weathering.