

Equipment needed for scrub tests (washability, wet abrasion resistance)

For scrub tests Zehntner offers the model ZAA 2600.SW - Zehntner-Automatic Scrub Tester. Other models of the ZAA 2600 (e.g. Zehntner-Automatic Film Applicator, article No.: 2600.A) are also suitable for carrying out such tests when equipped with the optional accessory ACC1286 modification set „Scrub Tester“.

In order to carry out scrub tests, at least one friction set is required. Some standards and test procedures also specify additional equipment and accessories.

Please find below a list of equipment and accessories for carrying out scrub tests in accordance with most common standards:

ASTM D2486 - Standard Test Methods for Scrub Resistance of Wall Paints - Method A & B



- ACC1460 friction set for ASTM D2486
- Reference paint (only for Method B)
- Applicator e.g. ZWA 2121.S1.135.175.180, ZUA 2000.S1S.135
- conditioning chamber
- Black plastic panel 432 mm x 165 mm x 0.25 mm (17" x 6.5" x 0.01") e.g. made by Leneta
- Abrasive scrub medium e.g. made by Leneta

Based on ASTM D3450 - Standard Test Method for Washability Properties of Interior Architectural Coatings



- ACC1462 friction set for ASTM D3450
- U-shaped film caster
- Applicator e.g. ZFR 2040.S1S.76.76.76.76
- Vacuum plate (recommended but not compulsory)
- Colorimeter in accordance with ASTM E1347
- Analytical balance with accuracy 1 mg
- Grindometer (e.g. ZGR 2020)
- Black plastic panel 432 mm x 165 mm x 0.25 mm (17" x 6.5" x 0.01") e.g. made by Leneta
- Masking tape
- Soilant medium

ASTM D4213 - Standard Test Method for Scrub Resistance of Paints by Abrasion Weight Loss



- ACC1464 friction set for ASTM D4213
- black scrub test panels (white for dark coloured paints)
- Applicator e.g. ZWA 2121.S1.135.175.180, ZUA 2000.S1S.135
- Non-abrasive scrub medium e.g. made by Leneta
- Analytical balance with windshield enclosure, resolution: 0.1 mg, accuracy: 1 mg
- Oven
- Calibration panels, e.g. made by Leneta
- Pycnometer

Based on ASTM D4828 - Standard Test Methods for Washability of Organic Coatings



- ACC1466 friction set for ASTM D4828
- Soil and stain applicator
- Analytical balance with accuracy 1 mg
- Weight 100 g (e.g. ACC1484, please check if it fits on your soil and stain applicator)
- Applicator (e.g. ZUA 2000.150)
- Black plastic panel, e.g. made by Leneta
- Masking tape
- Straight-edge ruler with a length of approx. 430 mm
- Cotton tipped swabs
- Pipette
- Vacuumplate (recommended but not compulsory)

EN 13300 - Wet scrub resistance tests of water-borne coating materials and coating systems for interior walls and ceilings

- Glossmeter 60° or 85° in accordance with EN ISO 2813 (e.g. ZGM 1130.268)

EN 13300 requires wet scrub resistance test in accordance with ISO 11998 but with less wet scrub cycles. Therefore you need the following:



- ACC1468 friction set for ISO 11998
- Test panel made of PVC
- Automatic Film Applicator with an applicator having a film width of at least 60 mm (E.g. 2600.SW with ACC1339, ZAA 2600.A, ZAA 2600.HA or ZAA 2300; with e.g. ZUA 2000)
- Washing liquid
- Soiling agent
- Analytical balance with accuracy of 1 mg
- Straight-edge ruler, with 0.5 divisions

ISO 11998 - Determination of wet-scrub resistance and cleanability of coatings



- ACC1468 friction set for ISO 11998
- Test panel made of PVC
- Automatic Film Applicator with an applicator having a film width of at least 60 mm (E.g. 2600.SW with ACC1339, ZAA 2600.A, ZAA 2600.HA or ZAA 2300; with e.g. ZUA 2000)
- Washing liquid
- Soiling agent
- Analytical balance with accuracy of 1 mg
- Straight-edge ruler, with 0.5 divisions

Customized tests according to your own specifications

For special customer requirements, where the scrub test do not need to be in accordance with a standard, you can assemble your own test tool.

For this purpose, Zehntner offers the ACC1469 universal holder which can be fitted as follows:

- Clamp the abrasive medium between the two parts.
- Mount the desired weight and tighten the screw.

Zehntner offers the following options:

- ACC1469 universal holder
- ACC1482 weight 50 g
- ACC1484 weight 100 g
- ACC1486 weight 500 g

You can use flat abrasive mediums having a dimension of approx. 135 mm x 39 mm (5.31" x 1.54") with a thickness up to max. approx. 5 mm (0.20).

