
**Textile floor coverings — Laboratory
cleaning procedure using spray
extraction**

*Revêtements de sol textiles — Méthode de nettoyage en laboratoire par
injection-extraction*



Reference number
ISO 11379:2009(E)

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Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11379 was prepared by Technical Committee ISO/TC 219, *Floor coverings*.

This second edition cancels and replaces the first edition (ISO 11379:1997), which has been technically revised.

Textile floor coverings — Laboratory cleaning procedure using spray extraction

1 Scope

This International Standard describes a laboratory-scale textile-floor-covering cleaning procedure using a spray-extraction technique. This International Standard is applicable to all kinds of textile floor coverings, both machine-made and hand-made.

NOTE Depending on the characteristic under investigation, test specimens subjected to this cleaning procedure can be evaluated for many properties, e.g. ease of soil (dirt) removal, changes in appearance, effects of cleaning materials and durability of floor covering finishes.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1957, *Machine-made textile floor coverings — Selection and cutting of specimens for physical tests*

3 Principle

Test specimens of textile floor coverings are treated in a controlled manner with a spray-extraction cleaning machine.

4 Apparatus and materials

4.1 Spray-extraction cleaning machine, capable of applying $(3,75 \pm 0,25)$ l/m² of cleaning solution to the surface when the cleaner wand is moved across the surface at a rate of (40 ± 5) mm/s.

NOTE This may be achieved by using a machine with a wand width of (100 ± 5) mm and an application rate of $(0,9 \pm 0,1)$ l/min or by using a machine with a wand width of (200 ± 10) mm and an application rate of $(1,8 \pm 0,2)$ l/min. An antifoam agent may be used in the waste tank of the spray-extraction machine but shall not be used in the delivery tank.

4.2 Suitable base, e.g. bench, table top or floor.

4.3 Floor-covering adhesive or pressure-sensitive adhesive tape.

4.4 Suction-only cleaner, canister-type, giving an air flow of (25 ± 5) l/s through the suction-only nozzle with a suction surface of (125 ± 25) mm × $(15 \pm 2,5)$ mm.

4.5 Cleaning solution, prepared according to the manufacturer's instructions.

A specific cleaning agent should be advised when using this test method to evaluate whether a surface treatment was applied to the textile floor covering; the choice of the specific cleaning agent is dependent on the nature of the surface treatment or intended subsequent test procedure.

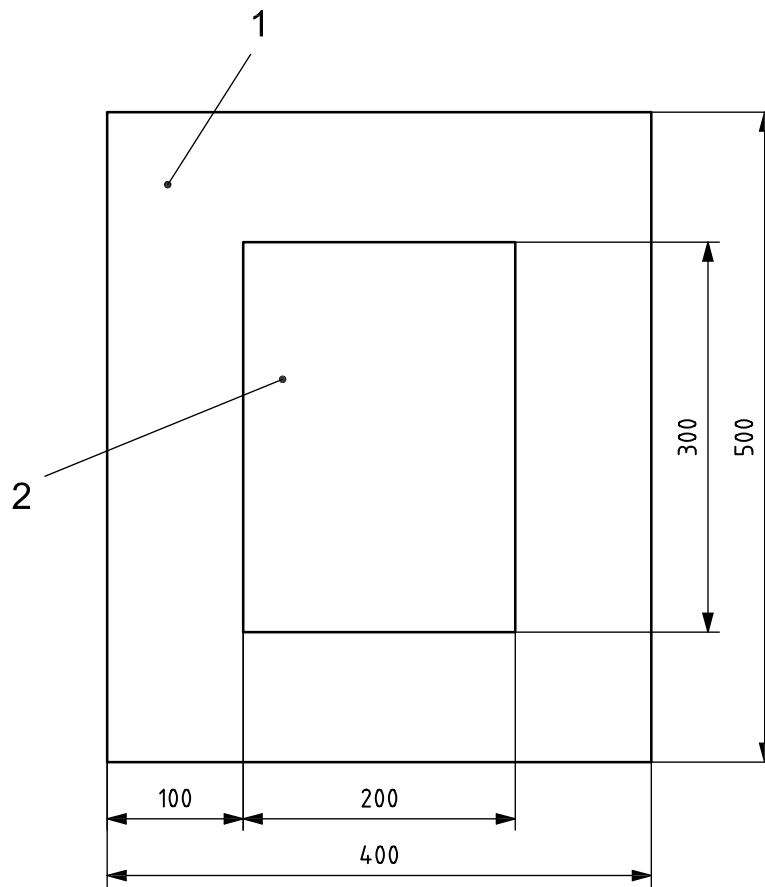
5 Conditioning

Condition the test specimens in one of the standard atmospheres described in ISO 139 for a minimum of 24 h.

6 Preparation of test specimens

Sample and select the test specimens in accordance with ISO 1957. Cut a test specimen of suitable dimensions from each sample, e.g. (200 × 300) mm, with the longer side in the manufacturing direction as shown in Figure 1.

Dimensions in millimetres



Key

- 1 surround of textile floor covering
- 2 test specimen

Figure 1 — Example of dimensions of test specimen and mounting arrangement

Mount the test specimen on a suitable base (4.2) using a floor-covering adhesive or pressure-sensitive adhesive tape (4.3). Surround the test specimen with a material of comparable construction and thickness and of dimensions at least 100 mm greater than those of the test specimen secured to the base using the floor-covering adhesive or pressure-sensitive adhesive tape (4.3) (see Figure 1). Ensure that this material is colourfast to prevent bleeding into the test specimen.

NOTE In some cases, the test specimen will be of predetermined dimensions, as it will have been used for other procedures, e.g. soiling, and the mounting arrangements will have to be adjusted accordingly.

7 Procedure

7.1 Use the suction-only cleaner (4.4) to clean the test specimens, using two double strokes, i.e. twice backwards and twice forwards, in order to give all parts of all specimens equal treatment, as follows.

The first two double strokes shall be made with the vacuum cleaner suction slot approximately 50 % on the buffer textile floor covering and 50 % over the test area. Each subsequent series of strokes is made parallel to the first series with 50 % overlap, ending when the buffer strip at the other side is included in the overlap.

7.2 Prepare the cleaning solution (4.5). Pour the cleaning solution into the spray-extraction cleaning machine (4.1). Attach the cleaner wand and run the machine prior to cleaning to obtain stable conditions, including temperature, at the point of delivery.

7.3 Spray and extract the test specimen by drawing the cleaner wand at a speed of (40 ± 5) mm/s, necessary to obtain the required application per unit area (see 4.1), in the length direction both with and against the pile lay. For the first stroke, position the cleaner wand approximately 50 % over the surround of textile floor covering and 50 % over the test specimen.

For each subsequent stroke, allow 50 % overlap per stroke, finally ending when the opposite side of the surround of textile floor covering is included in the overlap. Do not use a scrubbing action.

7.4 Turn the test specimen through 180° and repeat the process described in 7.3.

7.5 Dry the test specimen to approximately constant mass and then condition in the standard atmosphere (see Clause 5) for a minimum of 24 h, or proceed to the conditioning process required by any subsequent test procedure.

7.6 Suction clean the test specimen as described in 7.1 with the last stroke in the direction of the pile lay.

8 Test report

The test report shall include the following information:

- a) a reference to this International Standard: ISO 11379:2008;
- b) identification of the textile floor covering;
- c) description of the spray-extraction machine used;
- d) conditioning atmosphere used;
- e) identification and concentration of the cleaning product;
- f) application rate and temperature at point of delivery of the cleaning solution;
- g) date of test;
- h) reason for carrying out the procedure.

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