

1) Application

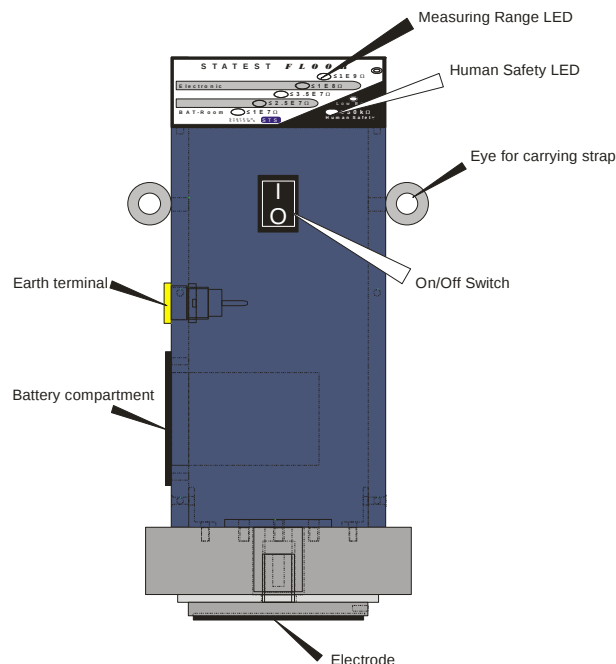
The STATEST-FLOOR is a quick tester for periodic testing of conductive floors. It can also be used for quick testing of tabletop coatings, trolleys, etc.

Caution : The STATEST FLOOR is not suitable for use in potentially explosive atmospheres !

2) Technical specifications

Operational voltage:	100 V DC (stabilized) $\pm$ 5 V
Current:	$\leq$ 10 mA
Power supply:	9 V battery
Display:	2-colour LED
Measuring accuracy:	$\pm$ 5%
Electrode diameter:	63 mm
Electrode:	Graphited rubber (60 Shore A $\pm$ 10 %)
Total weight:	2.3 kg
Enclosure:	Anodized aluminium
Base:	Stainless steel
Standards:	Meets or exceeds IEC 61340 and ANSI/ESD-S4.1

3) Operator controls



4) Components fitted

- 1 Statest Floor test unit
 - 1 battery, 9 V
 - 1 carrying strap
 - 1 carry case
 - 1 test certificate
- Optional:
- 1 cable reel with 25 m cable and T12 connecting cable
 - 1 moisture meter and thermometer
 - 1 ring electrode, 2.3 kg (for surface resistance measurement)

5) Getting started

5.1) Fitting the battery

Gently press the battery compartment cover to the left (direction of arrow) to open it. Insert the battery (9 V block battery, type 6LR61), observing its polarity and push the cover shut again until it engages.

5.2) Earthing

Connect the earthing conductor to the earth terminal of the *Statest Floor*. Connect the other cable end to a reliable earth point. Check that there is continuity to earth.

5.3) Lamp test

Hold the device in such a way that the electrode does not touch any other object. Switch on the device. All measuring range LEDs should light up red and the human safety LED must light up green. If the battery is low, the **Low Bat** LED lights up. In that case replace the battery.

6) Taking readings

6.1) Testing the earth connection

To test the earthing, place the device on a reliably earthed object, such as a radiator or blank machine panel. All measuring range LEDs should now light up green and the human safety LED should light up red.

6.2) Measured value

Check which reading applies to your test. The maximum measured value will depend on the floor's function.

6.2) Taking readings

Firmly and carefully place the device on the test object, for example the floor covering. The tested areas must be larger than the electrode. Make sure that the device is standing **vertically** and the test surface is level and free any dirt. Let the carrying strap hang down loosely. Now read off the measuring range.

6.3) Reading the display

The LEDs for all applicable ranges light up green and the ranges that do not apply light up red. **Make sure that the human safety LED is always green.**
(See also section 9.3)

Caution: Never pull the test unit across the test surface as this may damage the electrode and leave black marks on the test object.

To save the battery, switch off the device if you will not use it for a longer period. When the device is not in use, it switches itself off automatically after one to two minutes.

7) Cleaning and maintenance

Clean the enclosure with a damp (but not wet) cloth.

Check the electrode for dirt after a few measurements clean it with a dry cloth or with alcohol if necessary.

Caution: Do not clean the electrode with water. Any residual moisture can affect the measured value!

Do not use petroleum as the electrode is not petrol resistant.

To make sure that your *Statest Floor* tester continues give accurate readings, it must be calibrated regularly.

Check the electrode for damage. If it is damaged, replace it at once. The electrode has a stainless-steel support and is simply screwed on for quick replacement.

8) Readings (guideline values)

(The values below are non-binding guideline values!
For values and measuring methods, see the latest editions of the standards and regulations that apply to your country and application.

Floor and tabletop coatings

Electronics (existing floors):	$\leq 1 \times 10^9 \Omega$
Electronics (recommendation for new floors):	$\leq 1 \times 10^8 \Omega$
Explosion protection:	$\leq 1 \times 10^7 \Omega$

System measurement

Electronics areas (person–shoes–floor):	$\leq 3.5 \times 10^7 \Omega$
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Other

Conductive shoes as primary earthing	$\leq 3.5 \times 10^7 \Omega$
Conductive shoes as additional protection	$\leq 1 \times 10^8 \Omega$
Conductive chairs	$\leq 1 \times 10^9 \Omega$

Human safety (national regulations apply)

9) Troubleshooting

9.1) Range indicator **flickers between red and green**:

- The test surface is uneven, and the electrode is not in full contact with it.
- The object's resistance value is exactly at the threshold of the indicated value.
- The electrode is dirty.

If the display flickers more than twice in 25 every measurement, have the object tested with a precision tester.

9.2) **Low Bat** lights up red:

The battery is flat. Replace the battery at once to prevent reading errors.

9.3) **Human safety** lights up red.

The resistance is $\leq 50 \text{ k}\Omega$! In many countries, a value of $50 \text{ k}\Omega$ or less is not permitted for personnel protection! Consult your national safety regulations.

9.4) If the device was exposed to moisture, for example due to strong temperature fluctuations, dry it before use to prevent reading errors.

10) Our services

- Periodic calibration
- Replacement electrodes
- Repairs

11) Guarantee

Two years factory guarantee on the test unit (as laid out in our General Terms and Conditions of Sale). The guarantee does not cover consumables – such as batteries, electrodes, etc. – and damage to the device or any other form of damage caused by incorrect use.

12) General information

The *STATEST-FLOOR* device is a technical instrument and must be operated only by or under supervision from trained personnel.

Operator manual

STATEST-*FLOOR*

Type LFP 4051

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