Safety Scala

Safety Scala Instructions

Thank you for purchasing the Safety Scala for soil testing. This device is designed to measure soil compaction and strength accurately. To ensure safe and effective use of the device, please read these instructions carefully and adhere to the guidelines set forth by the New Zealand Standard NZS 4402 Test 6.5.2:1988.

The Safety Scala works in the same way as a conventional Scala Penetrometer, and the same Standard Operating Procedures should be followed when using the device.

1. Preparation:

- Ensure the Safety Scala Penetrometer is clean, dry, and in working order.
- Identify and locate all underground services in the area to be tested before conducting any tests.
- Wear gloves, hearing protection, safety footwear, and safety glasses to protect yourself from potential hazards during testing.
- Connect the first extension rod. Tip: it is easiest to attach the first extension rod while the device is upside down.

2. Testing:

- Choose the testing location: Remove any surface rock or gravel that may be too hard to penetrate or that may damage the equipment.
- Holding the penetrometer in a vertical position, tap the hammer until the top of the cone is flush with the soil surface.
- Raise the hammer to the top and let it drop the full 510 mm. The preference is to record the number of blows taken to drive the penetrometer 50 mm or 100 mm rather than recording the distance travelled for each set of five or 10 blows.
- Use a Scala penetrometer lifter to extract the device from the ground. Back hammering is possible but not recommended because it increases the risk of damaging the extension rods and may cause injury to the user.

3. Maintenance:

- Clean the device after each use.
- Check the calibration of the cone tip regularly and replace if needed.

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Important Safety & Usage Disclaimer

- Only use the Safety Scala Penetrometer for indicative soil testing.
- This equipment must be used by trained and competent personnel only.
- The operator is responsible for verifying the calibration of the device before each use.
- Where applicable, units are calibrated prior to dispatch; however, field verification is still required.
- Calibration should be confirmed at regular intervals in line with NZS 4402 Test 6.5.2:1988 or relevant industry standards.
- Keep the device away from children.
- Identify and locate all underground services in the area to be tested before conducting any tests.
- Contact local utility companies to request utility markouts before testing.
- Hitting underground services can result in serious damage, safety hazards, and costly repairs.
- If you suspect that you have struck an underground service, stop testing immediately and notify the appropriate authorities.

User Acknowledgement

By using this device, you acknowledge that you have received, read, and understood the Safety Scala user instructions and accept responsibility for proper operation and calibration practices.

If you discover any defects in the design or manufacture of the Safety Scala Penetrometer—especially those affecting health and safety—please notify us immediately.

Reference Materials

The BRANZ 2022 Bulletin – "Using a Scala Penetrometer" provides a useful guide to using the device correctly. Contact the seller or manufacturer if you have any questions.

For the most up-to-date version of these instructions and other resources, scan the QR code below or visit:
www.safetyscala.com/instructions/

Yours sincerely,
The Safety Scala Team

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