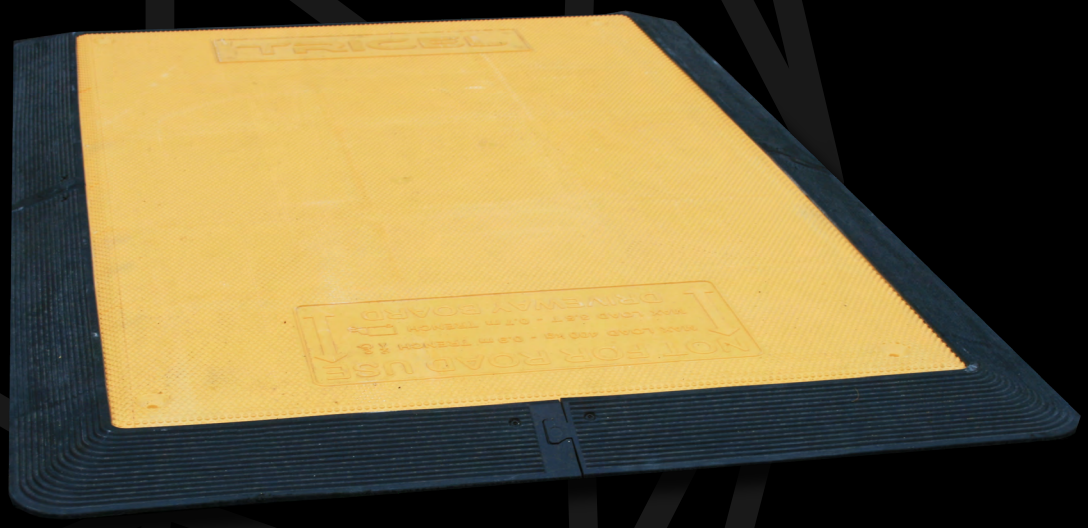
ROAD SAFETY
BY TRICEL

UK'S LEADING
DESIGNER & MANUFACTURER



SUREFOOT TRENCH COVERS

SUREFOOT 1600 (1665 X 1285MM)
SUREFOOT 1220 (1260 X 840MM)
SUREFOOT 1080 (1147 X 1147MM)

TECHNICAL DATA SHEET

STOCK CODE: SUREFOOT 1600: 104320, SUREFOOT 1220: 104319, SUREFOOT 1080: 102820

TRICEL
GENERATIONS OF INNOVATION

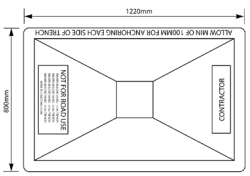
STOCK CODE:
1704001 1220x800MM
1701001 1080x1080MM
1703001 1600x1220MM

TRENCH COVER

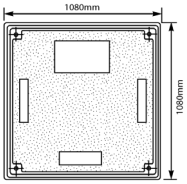
1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

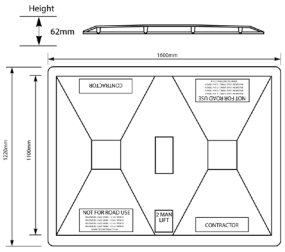
Provides safe access and passage over and around site excavations for pedestrian and light vehicle traffic.



TRENCH COVER
1220X800MM
174001



TRENCH COVER
1080X1080MM
1701001



TRENCH COVER
1600X1220MM
1703001

ROAD SAFETY
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DIMENSIONS

- 1220mm x 800mm: 13.5kg
- 1080mm x 1080mm: 17kg
- 1600mm x 1220mm: 27kg

KEY FEATURES

- Designed for covering holes and trenches during maintenance,
- construction and repair projects.
- Highest rated anti-slip in UK & exceeds HSE slip resistance
- Shock resistant
- Max load of 3 tonne (see load ratings below)
- Fully compliant with current UK & European Legislation
- Manufactured from SMC glass reinforced polymer, making it
- lightweight and durable
- High strength to weight ratio
- 3mm non-trip leading edge

SPECIFICATIONS

Load Rating:

- 1220mm x 800mm: 2 tonne vehicle loading over a 700mm trench
- 1080mm x 1080mm: 2 tonne vehicle loading over a 500mm trench
- 1600mm x 1220mm: 3 tonne vehicle loading over a 900mm trench

Colours:

- Standard yellow. Some other colours are available to minimum orders
- Can be manufactured with permanent corporate logos

ROSPA Member

TRICEL
GENERATIONS OF INNOVATION

* Approximate dimensions.
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Tel: +44 1453 791616 | **Email:** constructionsales@tricel.co.uk | **www.tricel.co.uk**

IFS 1534080

STOCK CODE:
1704001 1220x800MM
1701001 1080x1080MM
1703001 1600x1220MM

TRENCH COVER

1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

ROAD SAFETY BY TRICEL

UK'S LEADING DESIGNER & MANUFACTURER

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MATERIAL COMPOSITION

All of our materials are routinely quality tested in bacthes under strict conditions. Tricel Trench boards are composed of:

1. Glass fibre reinforced polyester Resin **Sheet Moulding Compound (SMC)**

SMC is a high-strength composite material made from long glass fibres and unsaturated Polyester resins.

Material properties

- **Tensile Strength** of 32.7 MPa which complies to BS2782 Method 220E.
- **Flexural Strength** of 60 MPa which complies with BS2782 Method 335A
- **Flexural Modulus** of 7.5 GPA which complies with BS2782 Method 335A
- **Charpy Impact Strength** of 12 KJ/M² which complies with BS 2782 Method 59A
- **Heat Deflection Temperature** at 1.82 MPa (264 psi)
  200–260 °C (392–500 °F)
- Heat Deflection Temperature at 0.455 MPa (66 psi)
  115–180 °C (239–356 °F)
- **Density** 1.1–2.0 g/cm3 (69–125 lb/cu ft)
- **Thermal Expansion:** SMC has a low coefficient of thermal expansion
- **Dimensional Stability:** maintains their shape and dimensions even when exposed to extreme temperature fluctuations.
- **Mechanical Strength:** mantains mechanical strength and stiffness across a wide temperature range.
- **Chemical Resistance:** Resistent to chemical corrosion

2. Mild Steel Rebar Grade B500B complies with BS4449:2005

Mild steel rebar has a characteristic yield strength of 527N/mm² and was designated as Grade B500B in BS 4449 specification and the relevant CARES Quality and Operations Assessment Schedules for Carbon steel bars for the reinforcement of Concrete.

Ductility: Mild steel exhibits high ductility, meaning it can be stretched, bent, or twisted without losing its structural integrity.

Tensile Strength: The rebar provides maximum amount of tensile stress a rebar can withstand before fracturing. Tensile strength or yield strength is over 500n/mm².

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TRENCH COVER

1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

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SAFETY STANDARDS & TESTING

Independently tested under a performance criteria that conformed primarily to statutory and mandatory requirements of the Health and Safety Act and New Roads and Street Works Act. Consideration was given to size, effective working span, static loading, dynamic loading, slip resistance, and any other reasonable test that provided definitive results for report compilation.

- UKAS Accredited Testing Laboratory
- Accredited to Management Process ISO 9001
- Laboratory Process BS EN ISO/IEC 17025
- Laboratory Process BS EN 9001:2008

TEST ON BOARD

- Pendulum device number 1132
- Pre start checks taken
- Controlled environment.
- Warm ambient air temperature.
- Surface suitable for undertaking test.
- Test taken as procedure in wet conditions.
- Traffic flow direction not relevant.
- Test taken at 10:10
- Test taken left of centre of board from previous test in longitudinal direction
- Classification of PTV
  - High Slip Potential 0-24
  - Medium Slip Potential 25-35
  - Low Slip Potential 36+

OUTCOME:

- PTV (Pendulum Test Value) has been adjusted relating to temperature and achieved a result of 53 which would be considered as superior skid/slip resistance for a driveway rated footway board.

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1703001 1600x1220MM

TRENCH COVER

1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

ROAD SAFETY BY TRICEL

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ROSPA Member

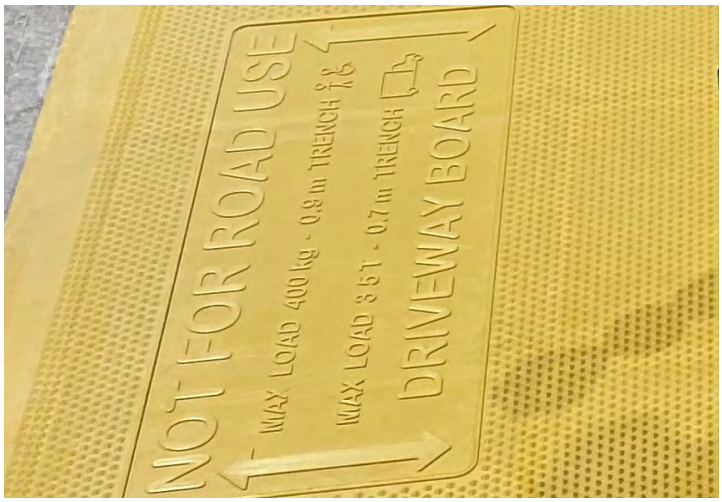
SAFETY STANDARDS & TESTING

TEST ON TEXT & INFORMATION AREA ON BOARD

- Pendulum device number 1132
- Controlled environment
- Warm temperature
- Surface suitable for undertaking test
- Test taken as per procedure in wet
- conditions
- Taken over text and information area of
- board
- Test taken at 10:21
- Test taken 150mm from edge of board over
- text area
- Classification of PTV
  - High Slip Potential 0-24
  - Medium Slip Potential 25-35
  - Low Slip Potential 36+

OUTCOME:

- PTV (Pendulum Test Value) result of 55 which would be considered as superior skid/slip resistance for a driveway rated footway board and provides evidence to show information text area is not detrimental to slip resistance.



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STOCK CODE:
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1701001 1080x1080MM
1703001 1600x1220MM

TRENCH COVER

1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

ROAD SAFETY BY TRICEL

UK'S LEADING DESIGNER & MANUFACTURER

ROSPA Member

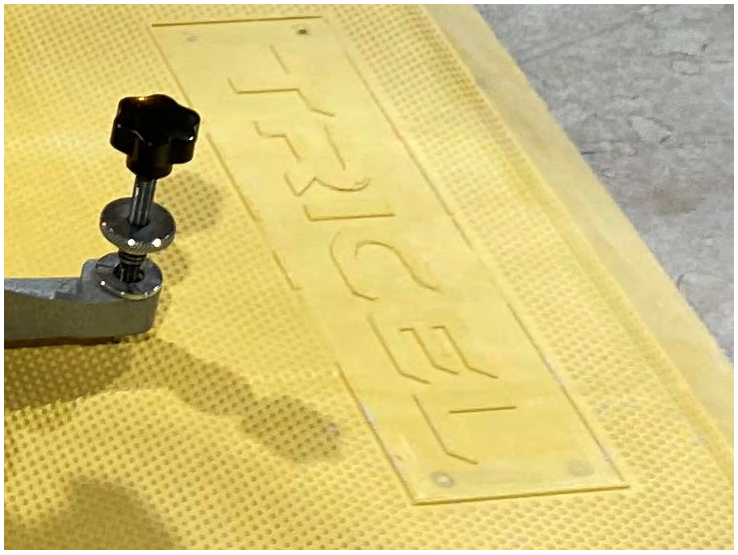
SAFETY STANDARDS & TESTING

TEST ON TRICEL LOGO AREA

- Pendulum device number 1132
- Controlled environment
- Warm ambient temperature
- Surface suitable for undertaking test
- Test taken as per procedure in wet
- conditions
- Test taken over TRICEL logo area
- Test taken at 08:47
- Test taken 150mm from edge of board
- Classification of PTV
  - High Slip Potential 0-24
  - Medium Slip Potential 25-35
  - Low Slip Potential 36+

OUTCOME:

- PTV (Pendulum Test Value) result of 54 which would be considered as superior skid/slip resistance for a driveway rated footway board and and demonstrates logo is not detrimental to purpose in terms of slip resistance.



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TRENCH COVER

1200X800MM, 1080X1080MM, 1600X1220MM

EDGED FOOTWAY BOARD

ROAD SAFETY BY TRICEL

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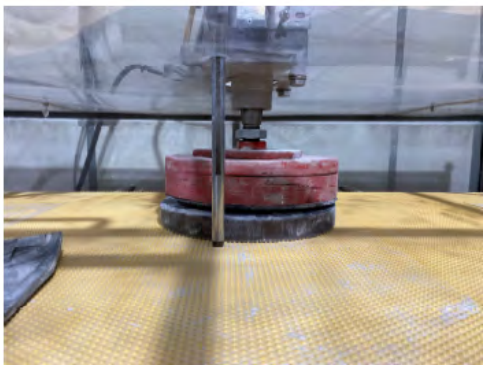
ROSPA Member

SAFETY STANDARDS & TESTING

The board is designated as not for road use but will allow for standard passenger vehicles traversing the footway in order to gain access to properties or driveways. Where such boards are correctly placed and utilised the measurements provided will show that considerable skid resistance applies where such vehicles may encounter this situation.

Although not a UKAS accredited method, the board was witnessed as being subjected to a deflection test across an 800mm bearing gap at weight of approximately 400Kg (882lbs) with a deflection providing a measurement of 4mm from Ø datum which was set at 10mm on deflection scale (see images). Subsequent to the deflection test being carried out at 400kg the test rig was adapted to apply 800kg of pressure which provided a deflection over 800mm as 6mm from Ø datum set at 10mm.

OUTCOME:
The provided board tested meets all the criteria as set out in Part 3 of Safety at Street Works and Road Works (Ed2 – Oct 2013) Pages 98-99 when applied in the correct manner on-site or in working conditions.



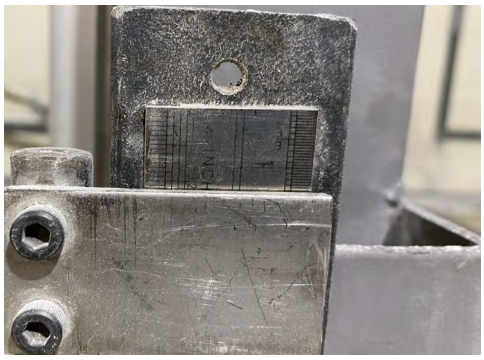


Image showing deflection across 800mm gap at 4mm with 400kg pressure

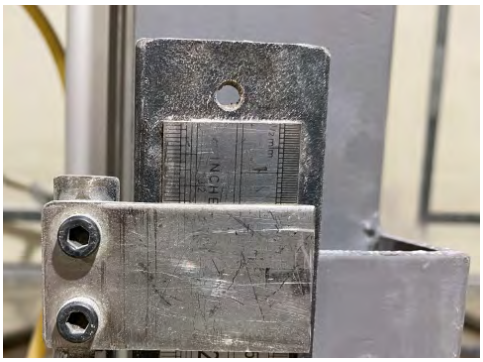


Image showing deflection across 800mm gap at 6mm with 800kg pressure

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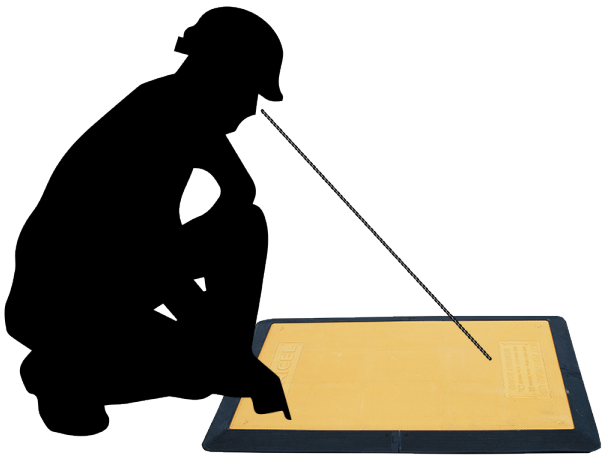
MAINTENANCE & INSPECTION

CHECK FOR SIGNS OF DAMAGE

Ensure that the product is lying flat on the ground. If there are **cracks in the yellow section or a visible bend on the board** this indicates improper use has caused damage.

Any boards displaying this kind of damage should be disposed of.



Inspect each product for signs of damage, between every installation.

To maintain anti-slip properties, make sure to clean product between every installation and remove any visible debris.

When fitting the product in place, never drop the product, gently lower it in place. Never lift or move with machinery. Never walk the product leading edge.

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INSTALLATION & MANUAL HANDLING GUIDELINES

Always carry out a risk assessment to ensure that the usage of a Trench Cover is a suitable solution for your scenario.

	PRODUCT	DIMENSIONS	LOAD RATING	MAX TRENCH WIDTH FOR VEHICLE CROSSING	MAX TRENCH WIDTH FOR PEDESTRIAN CROSSING	HOW MANY PEOPLE TO LIFT?
UNEDGED	TRENCH COVER	1080x1080	2 TONNE VEHICLE	OVER 500MM	OVER 700MM	
UNEDGED	TRENCH COVER	1220x800	2 TONNE VEHICLE	OVER 700MM	OVER 900MM	
UNEDGED	TRENCH COVER	1600x1220	3 TONNE VEHICLE	OVER 900MM	OVER 1100MM	
EDGED	SUREFOOT 1080	1080x1080	2 TONNE VEHICLE	OVER 500MM	OVER 700MM	
EDGED	SUREFOOT 1220	1285x862	2 TONNE VEHICLE	OVER 700MM	OVER 900MM	
EDGED	SUREFOOT 1600	1665x1285	3 TONNE VEHICLE	OVER 900MM	OVER 1100MM	

Overhang for Trench minimum 150mm on unedged and 180mm on edged boards

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INSTALLATION & SAFE HANDLING

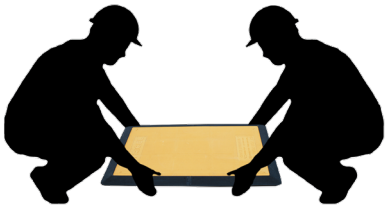
Follow the process below for safe and effective installations.

Risk assessments should be carried out to ensure the usage is suitable for the scenario.

Ensure **to bend at the knees** when lowering the trench cover in place.

One person lift

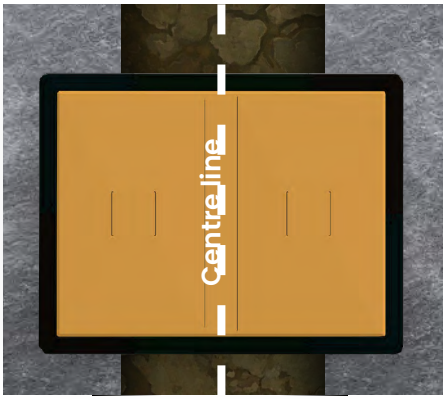
- **1080x1080**
- **1220x800**



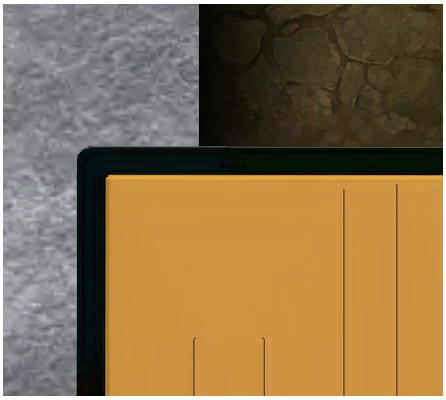
Ensure **to bend at the knees** when lowering the trench cover in place.

Two person lift

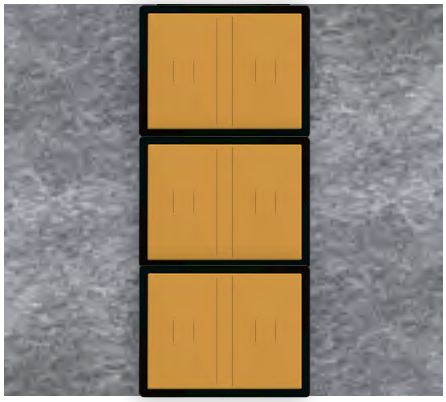
- **1600x1220**



Always position the trench cover board **centrally** over the trench as illustrated.



Overhang for Trench minimum 150mm on unedged and 180mm on edged boards.



Repeat until the **whole trench is covered.**

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