# System overview

# Triflex ProTerra Insulated (BIS)

Insulated build-up for trafficked walkways, balconies and terraces

Driven by the increasing demands of Part L of the Building Regulations to reduce heat loss and improve energy efficiency in areas that are over occupied spaces, it is sometimes necessary to choose a balcony, walkway or terrace waterproofing and surfacing system that not only provides reliable protection and attractive design but also offers increased thermal performance. Triflex ProTerra Insulated is the ideal solution, featuring high quality warm roof insulation, an impact resistant topping and a durable and decorative waterproofing and surfacing layer. All elements of the system are ultra fast curing and cold liquid applied, allowing installation to be completed quickly, without the use of hot works, and with minimal impact on users. Triflex ProTerra Insulated is available in four unique surface finishes allowing you to completely tailor the colour, texture and finish of your project.



#### **System highlights**

#### One stop shop

With Triflex you get the complete, one stop solution. Featuring a high performance warm roof insulation, a thin section, lightweight, impact and water resistant topping and the market leading Triflex ProTerra waterproofing and surfacing system. Threshold height requirements are minimised as the build-up above the insulation is much thinner than traditional construction.

## Maximum thermal performance

Our proven, high quality system offers a cost effective solution that ensures the requirements of Part L of the Building Regulations are exceeded. Maximising insulation values, reducing heat loss and increasing energy efficiency is simple to achieve.

#### Cold applied system

There is no risk from hot works during installation as all our materials are applied in a totally cold liquid form, curing to create a solution that lasts.

#### Fast curing with rapid installation

Rapid curing and easy to install, Triflex allows buildings to remain occupied during installation, limiting access restrictions and unnecessary disruptions to everyday life.

#### Tough and durable protection

The demands of the walkway, balcony and terrace environment are no issue for Triflex ProTerra Insulated. The system is unaffected by ponding water and resistant to chlorides (salts), carbon dioxide ingress, and approved de-icing and cleaning products. Protection that's built to last, with a low lifecycle cost.

#### Safety and environmental

Our solvent and isocyanate free resin technology has been assessed under BREEAM principles and can contribute to A+ ratings.

#### Versatile design

Available in four surface finishes, choose the perfect colour, texture and finish for your project - refer to Triflex colour card.

### **Application areas**

External walkways, balconies, terraces, pedestrian bridges and other pedestrian trafficked areas over occupied premises

### Compatible substrates

- · Asphalt and polymer modified asphalt
- Concrete, concrete repair materials and screeds
- Existing membranes
- Steel
- Structural plastics
- Timber

#### **Suitable constructions**

- · Cast in situ concrete
- Permanent formwork with in situ concrete
- · Precast concrete planks with or without structural topping
- Precast double tee units with or without structural topping
- Steel / galvanised steel / structural plastic / timber constructions

## **Approvals**

#### Approvals (Triflex ProTerra waterproofing and surfacing system)

Fully certified to the highest UK and European standards and classifications, including:



BBA certified - Certificate 13/5051 Product sheet 3

Durability: Under normal service conditions the system will have a service life of at least 15 years



EN 1504-2 certified (full system - large quartz):



25 year expected working life



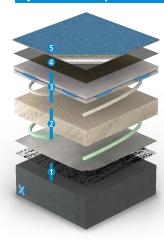
Root and rhizome resistant (reinforced waterproofing membrane): FLL Certified: Root and rhizome resistant

- Fire performance:
  - EN ISO-11925-2
  - EN ISO-9239-1
  - EN 13501-1
- NHBC accepted

# **Manufacturer certification**

- ISO 9001 Quality Management
- ISO 14001 Environmental Management
- ISO 50001 Energy Management

# System build-up and consumptions



Layer		Product	Consumption (1)	Aggregate / Broadcast	Overcoat / traffic (2)
0	Vapour control layer (if required)	Triflex Spray FastPrime with Triflex SA Vapour Control Layer	Primer: 0.08Kg/m² Vapour Control Layer: 1.08m²/m²	-	Primer: 20 minutes Vapour Control Layer: Immediate
2	Insulation	Triflex Insulation Adhesive with Triflex Insulation	Adhesive: 0.150 - 0.225L/m² Insulation: 1.00m²/m²	-	Immediate
8	Impact resistant substrate	Soudal Fix All Spray with Aquapanel Cement Board Floor	Adhesive: 0.04L/m² Aquapanel: 1.00m²/m²	-	Immediate
4	Primer	Triflex Cryl Primer 276	0.80Kg/m <sup>2</sup>	-	45 minutes
6	Available in four surface finishes - refer to relevant Triflex ProTerra system over  Triflex ProTerra Quartz Design Triflex ProTerra Colour Design Triflex ProTerra Chips Design Triflex ProTerra Stone Design				:

<sup>(1)</sup> Minimum consumption assuming a smooth, even, non-absorbent substrate.

#### Primary test data

#### Anti-skid

Tests carried out wet on new indicative samples in accordance with UKSRG Guidelines (2011). Based on HSE and UKSRG guidance a surface with a PTV of 36+ is classified as having a low slip potential.

#### **Quartz Design**

- With 0.7 1.2mm quartz:
  - PTV approx. 75 (Four S rubber / Slider 96)
  - PTV approx. 68 (TRRL rubber / Slider 55)
- With 0.4 1.2mm quartz:
  - PTV approx. 73 (Four S rubber / Slider 96)
  - PTV approx. 70 (TRRL rubber / Slider 55)
- With 0.4 0.8mm quartz:
  - PTV approx. 62 (Four S rubber / Slider 96)
  - PTV approx. 58 (TRRL rubber / Slider 55)
- With 0.3 0.6mm quartz:
  - PTV approx. 61 (Four S rubber / Slider 96)
  - PTV approx. 42 (TRRL rubber / Slider 55)

# **Colours and finishes**

Available in a wide range of colours - refer to Triflex colour card.

#### **Next steps**

To ensure a thorough understanding of the construction, the substrate and to determine the most appropriate specification, Triflex carries out free of charge surveys, testing, investigations and analysis prior to preparing a bespoke project specification proposal. To arrange a meeting or site visit please contact Triflex Customer Services.

The advice we provide on the application of our products is based on extensive development work as well as many years of experience and is given to the best of our knowledge. However, the wide variety of requirements for a building under the most diverse conditions means that it is necessary for the Contractor to test the product for suitability in any given case. Triflex reserve the right to make alterations in keeping with technical developments or improvements.

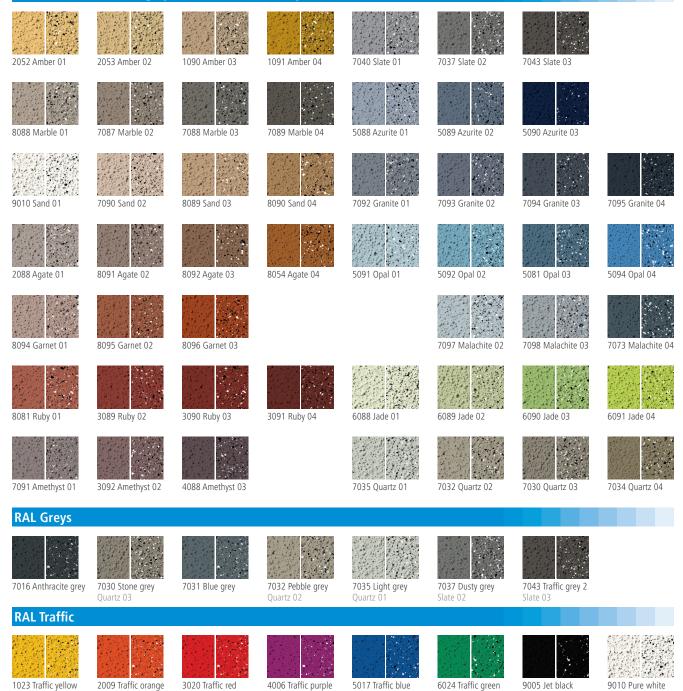
 $<sup>^{(2)}</sup>$  The times stated are based on  $+20^{\circ}$ C – the times will not be significantly extended at low temperatures.

# Triflex ProTerra Insulated (BIS) Quarz Design

Notes: There may be slight variations in shade between actual colours and those shown below. RAL colours are approximate.

Special colours can be produced to order.

### Finish colours (including optional Triflex MicroChips): Triflex colours



Colour card

# Triflex ProTerra Insulated (BIS) **Colour Design**

Notes: There may be slight variations in shade between actual colours and those shown below.

# Optional finish colours: Coloured surface dressing













A724 Red Orange

A729 Stone Red

A727 Creme Beige



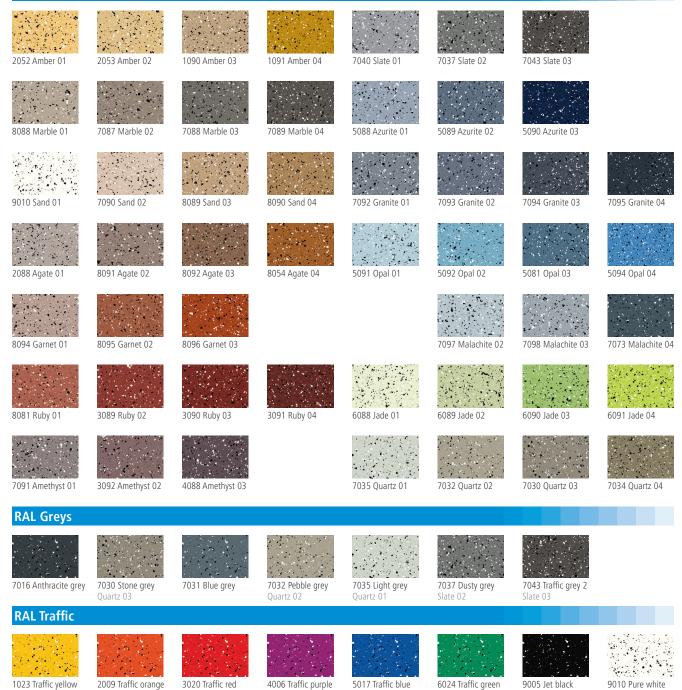
A720 Blue

# Triflex ProTerra Insulated (BIS) Chips Design

Notes: There may be slight variations in shade between actual colours and those shown below. RAL colours are approximate.

Special colours can be produced to order.

# **Optional finish colours: Triflex colours**



# Colour card

# Triflex ProTerra Insulated (BIS) **Stone Design**

Notes: There may be slight variations in shade between actual colours and those shown below, texture is indicative only.

# Stone Design finish colours

# Granite

















S100 | Giallo Sienna

S200 | Breccia Pernice S300 | Rosso Verona

S800 | Marrone