

# Duo 4 mm Bridges & Tunnels



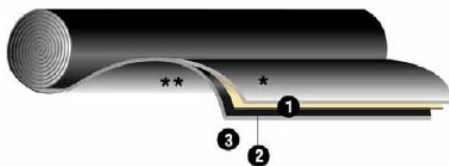
Technical approvals: BBA nr. 98/3537/C, BUTgb, ATG 1924, CTG 056

## Basic Uses:

For waterproofing of different locations including concrete car park roofs, ramps, basements, tunnels, bridges & other infrastructure works. For areas where the waterproofing is covered with soil, concrete or hot asphalt. For new and renovation application with demands on high heat resistance, elongation and strength.

## System:

Pre-formed torch-on membrane manufactured in an ISO 9001 controlled factory in Antwerp, Belgium. The membrane is designed to be fully bonded to the construction. The system withstands covering by hot asphalt. All materials can be delivered with a certificate of origin. The system is certified to resist high temperatures and mechanical stresses according to roadwork classification (SLBPM).



- \* Upper finishing: granular or PES
- 1. Upper coating in APAO modified bitumen.
- 2. Composition armature consisting of polyester and glass reinforcement.
- 3. Under coating in SBS modified bitumen
- \*\* Under finishing: polyethylene foil

## Composition:

Duo 4 mm B&T is a flexible waterproof membrane. The upper coating consists of polymer bitumen (APAO) and provides mechanical and heat resistance. The under coating consists of elastomeric bitumen (SBS) and provides strong adhesion and elongation. This membrane is double reinforced with a special designed inlayer of min. 250 g/m<sup>2</sup>, consisting of non-woven polyester, reinforced with glass-fibre scrim to provide strength and stability. The upper surface depends on the topping layer:

**Pouring asphalt:** A second heat resistant polyester reinforcement of 35 g/m<sup>2</sup> covers the surface of the membrane.

**Road asphalt or concrete:** granules pressed into the top coating. The under surface is finished with a polyethylene foil.

## Warranty

The client will receive a combined warranty on product and installation of the specialist applicator and manufacturer. The product warranty is insurance backed by AG-FORTIS under policy number 99.075.400

## Advantages:

- ◆ High-tech quality waterproofing membrane especially designed for infrastructure works.
- ◆ The produce is UV resistant and stays hard in high temperature conditions.
- ◆ The membrane delivers a strong and flexible waterproofing system to your precious investment, with a life expectation of at least 10 years.
- ◆ The product has been tested and certified on its heat resistant capacity and strength.

## Surface Preparation:

- ◆ All surfaces need to be cured and dry before application.
- ◆ Surfaces need to be smooth and clean, free of oil and grease.
- ◆ All necessary details like gutters, drains and sump pits need to be addressed before the laying of waterproofing membrane starts.
- ◆ Co-ordination with specialist applicator concerning these details is important.

## Method of Statement: Torch-on Application

The prepared substrate receives a solvent based, bituminous primer. When the primer is dry, Duo 4 mm B&T membrane is fully-bonded to the substrate. The membrane is cut to shape by means of a knife. A bitumen line of at least 5 mm needs to be flowing out of the overlap. Specialist tools like membrane trowel, overlap-torch and overlap roller may be required in some conditions to ensure a perfect finish. The Duo system can only be installed by trained DUO applicators, with certification from the factory in Belgium.

## Packaging:

Roll size: 1x10 m  
Roll weight: +/- 48 kg  
Number of rolls on a pallet: 18

## Approvals:

Technical approvals: BBA nr. 98/3537/C, BUTgb, ATG 1924, CTG 056



### Name

Duo 4.3 tropical AERO

Duo 4.3 tropical MECANO

Duo 4.3 tropical NO FLAME

Duo 4.3 tropical BRIDGES & TUNNELS

Duo 4.3 tropical FIRECARE

Duo 4.3 tropical LANDSCAPE

### Benefits

One layer anti-bubble waterproofing system.

Mechanical fastening system.

For safe installations without fire. Cold glue applied.

For areas with hot asphalt topping. (e.g. car park deck)

Fire retarding waterproofing system.

Anti-root system for landscape areas, roof-gardens.

### Technical Data

Total thickness

### Average values

4 mm

Reinforcement

Non-woven polyester of min. 250 g/m<sup>2</sup>,  
reinforced with a glass fibre grill of 8 g/m<sup>2</sup>

Ring & Ball

APOA: 150°C - SBS: 120°C

Coating penetration at 60°C

APAO: 70-130 - SBS 90-160

Tensile strength

Longitudinal: 1250 N - Transversal: 1150  
N

Elongation

Longitudinal: 50% - Transversal: >50%

Puncture resistance

Ø 10 mm

Max. load membrane penetration

250 N

Water vapour permeability

0,118 g/m 24 hours

Cold flexibility

APAO - 15°C - SBS - 20°C

UV resistance

100%

Resistance to hot asphalt topping

Class SLBPM

### Test methods

UEATC A, BDA PO1

UEATC A, BBA PO1

ASTM D 36-84, NBN T52-031, UEATC G

ASTN D5-83, NBN T52-030

ASTM D 412, NBN B46-201, BDA PO8,  
UEATC C

ASTM D 412, BDA PO8

SP 2190

SP 2190

BS 3177

ASTM D146, BDA PO6

ASTM 653-77, BDA P14

BUTgb ATG 00/2401

**Equus Industries Ltd**  
**PO Box 497**  
**Frankston 3199**  
**Victoria**  
**Phone: 03 9706 6226 Fax 03 9706 4880**  
**Email: tech-support@equus.com.au**  
**Web: www.equus.com.au**