



# TPG Heavy



QMS Certified Firm

## Bridge Deck Waterproofing Membrane Dual Reinforcement-APP Modified Bitumen

### Introduction

**TPG Heavy**, torch applied membrane, with double reinforcement made of heavy non-woven polyester, and fiber glass mat is used when a high dimensional stability, toughness and impact resistance are required. This special product, 4 or 5 mm thick, is designed to be used for waterproofing BRIDGE DECKS as it can bear severe stresses, due to its outstanding technical characteristics.

### Description:

**TPG Heavy** waterproofing membrane is manufactured from high quality distilled bitumen and polymers which give the membrane excellent flexibility at very low temperature  $-5^{\circ}\text{C}$ , and the ability to withstand high temperatures  $+155^{\circ}\text{C}$ .

The dual reinforcement, Heavy 225 g/m<sup>2</sup> non-woven spunbond polyester and 60 g/m<sup>2</sup> glass fiber give the membrane superior strength and dimensional stability.

The underside is finished with a burn off polyethylene film, and the upper side is finished with polyethylene film, or fine sand.

Total thickness of the material is nominally 4 or 5mm.

### Field of Application:

**TPG Heavy** is a special waterproofing product designed for use in road works such as:

- Bridge Decks.
- Viaducts.
- Airport Runways.
- Roof Parking.



### Advantages:

- High dimensional stability.
- High softening point  $+155^{\circ}\text{C}$ .
- Puncture and tear resistance.
- Impact resistance.
- Fuel resistance.

### Instruction for Use:

- TPG Heavy** can only be installed by approved contractors with over 10 year experience.
- The modified bituminous membrane should adhere completely to the bridge deck (substrate), to prevent sliding or creep of the surface materials under heavy braking.
- Side laps 100 mm and end laps 150 mm to be reheated and smoothed on with a hot round tipped trowel.
- Excessive heating may damage the reinforcement.

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## Technical Specifications

Property	Result	Test Method
Dimension, m/roll	1x10	
Thickness, mm	4 or 5	ASTM D5147
Weight per roll, Kg	48 or 58	UEAtc MOAT 30
Reinforcement	Nonwoven spunbonded polyester 225 g/m <sup>2</sup> and Reinforced fiberglass mat 60 g/m <sup>2</sup> .	BS 747
Penetration at 25°C, dmm	≤ 20	ASTM D5
Softening point, °C	≥ 155	ASTM D36
Heat Resistance	No flowing after 2 hours at 130 °C.	UEAtc MOAT 30
Cold Pliability	No cracking at -5 °C	UEAtc MOAT 27
Tensile Strength, N/5cm.		ASTM D5147 & D146
Long.	900	
Transv.	800	
Ultimate Elongation, %		ASTM D146
Long.	40	
Transv.	40	
Lap Joint Strength, N/5cm.		UEAtc MOAT 27
Long.	950	
Transv.	850	
Static Indentation Resist.	Not perforated at 25 kg. (Class L4).	BS 747
Water Pressure Resistance	No leakage at 1000 mm water head/24 hrs.	UEAtc MOAT 27
Water Vapor Transmission	0.2 g/m <sup>2</sup> per day	ASTM E96
Resistance to Chemicals	Resistant to alcohol, salt solutions, dilute acids and alkalis.	

- Acceptable deviation according to UEAtc.
- This Technical Data are the average results of tests, measurements and trials carried out by LAMA's own laboratory and RSS laboratories according to international standards such as ASTM, B.S and UEAtc.
- This product data sheet supersedes all previous data publications pertaining to this product.
- This data may be changed, improved or modified by LAMA, in accordance with the Client's requirements, availability of raw material, without advance notice.