

[www.pitchmasticpmb.com](http://www.pitchmasticpmb.com)

**PITCHMASTIC** PmB



# PmB Expansion Joints

World leaders in expansion  
joint technology

# High performance expansion joint solutions



**Pitchmastic PmB offers a comprehensive range of specialist services to the civil engineering and construction industries. For over 30 years Pitchmastic PmB has manufactured Highways Agency approved PmB waterproofing system, protecting over 7000 structures worldwide.**

This expertise has been utilised to develop a full range of expansion joints designed to complement our activities in bridges, car parks and buildings offering our clients the comfort of a 'one stop shop' solution.

Designed using well established knowledge and expertise and the latest concepts in expansion joint technology our range of Expansion Joints is now an integral part of Pitchmastic PmB's product portfolio, providing our client's with a comprehensive, cost effective single solution for structural protection.



# Expansion Joint Selector

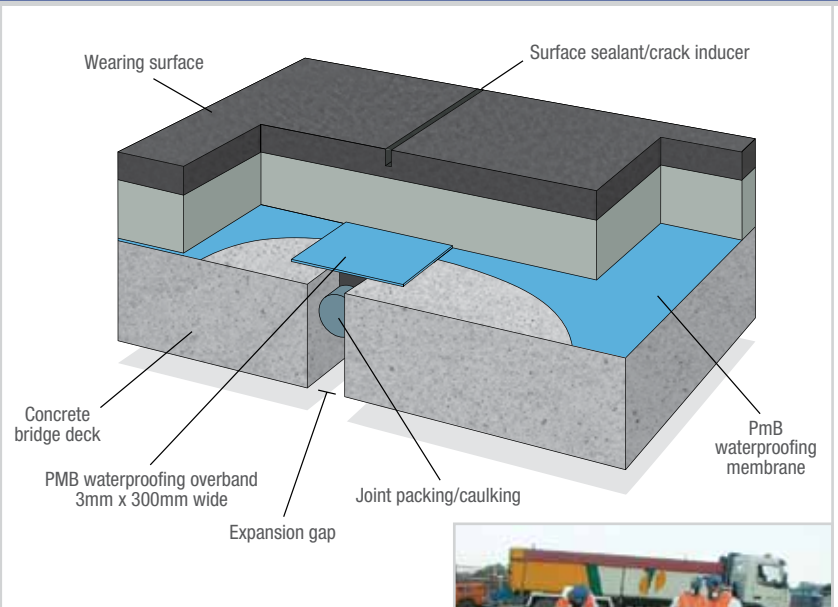
	MOVEMENT (mm)										AREAS OF USE				
	0	20	40	60	80	100	200	500	1000	2000	Road	Rail	Building	Car Park	Page No.
BP1		20									■	■	■		4
Hotfalt			40								■				4
Hotfalt HM			40								■			■	5
Advanced NJ			40								■		■	■	5
Advanced EMR							150				■				6
Possi									220		■	■	■		7
Multiflex										330	■		■	■	6
ACP					75									■	7

# BP1

## BD33/94 Type 1 Buried Joints for Use Under Continuous Surfacing

BPI is a buried joint, incorporating polyethylene, which is placed into the air gap flush with the concrete surface. The deck area is then primed using PMCS/01 and over the joint area. The whole area is then strayed with PmB 2mm nominal thickness waterproofing layer. Within 4 hours the 300mm overlay is sprayed on top of the existing 2mm waterproofing layer finally installing a saw cut to surface.

- Movement range  $\pm 10\text{mm}$
- UK Highways Agency approved product
- Installed in conjunction with PmB waterproofing membrane

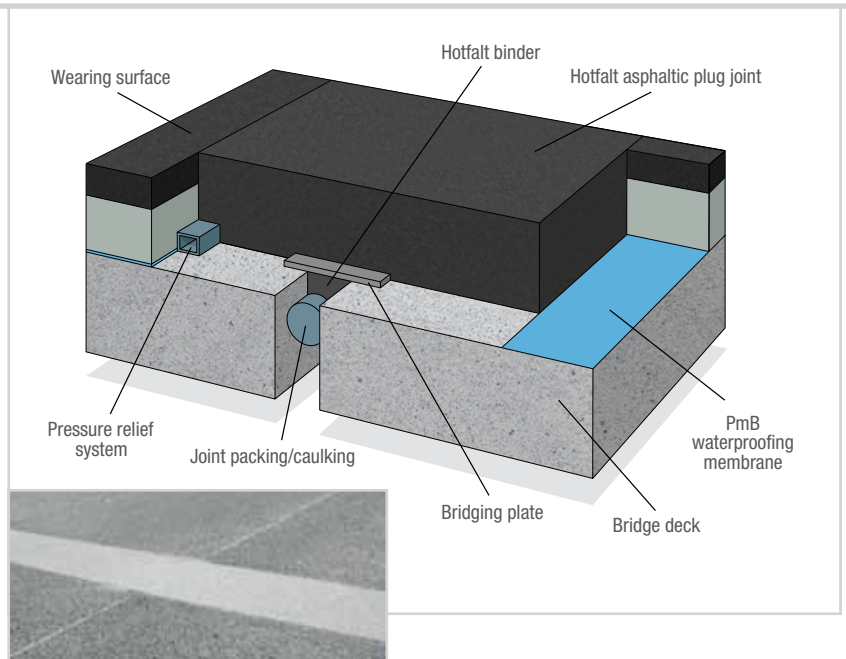


# Hotfalt

## BD33/94 Type 2 Asphaltic Plug Joint

A traditional asphaltic plug joint system, designed for full depth installations in completed asphalt surfacing. Suitable for both new and replacement works, the Hotfalt joint has been designed for rapid installation and can be applied in single lane working conditions.

- Movement range  $\pm 20\text{mm}$
- UK Highways Agency approved product
- Full depth asphaltic plug
- Cost effective
- Flexible, watertight and durable



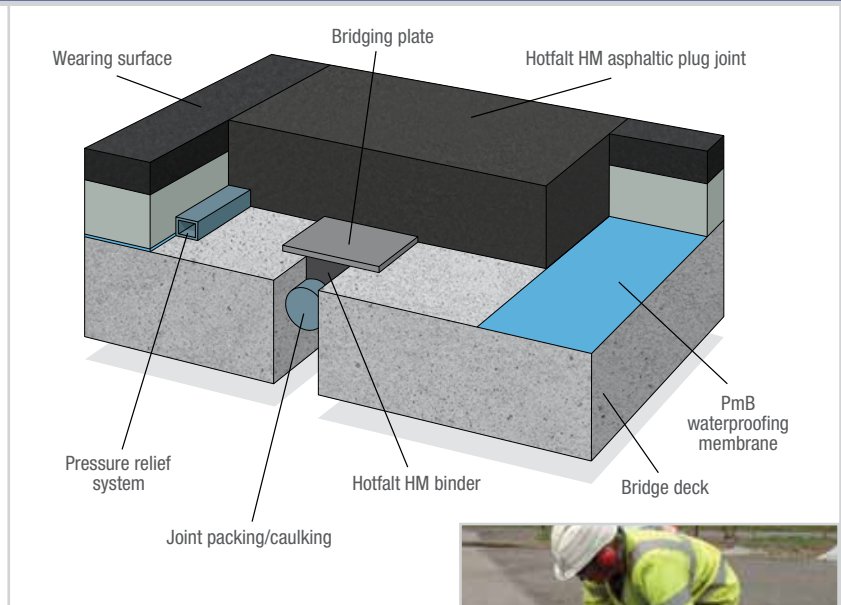


# Hotfalt HM

## BD33/94 Type 2 Asphaltic Plug Joint

A unique expansion joint designed to resolve the problems associated with traditional plug joints in high load situations. The advanced materials and design allows applications where traditional plug joints would fail including high loadings, constant standing traffic, inclines and corners. It is also designed for 'thin surfacing' applications (less than 5mm) and extra wide applications.

- Movement range  $\pm 20\text{mm}$
- UK Highways Agency approved product
- 50% longer life than traditional plug joints
- Thin surfacing compatible (40mm minimum)
- Resistant to deformation
- No width limit

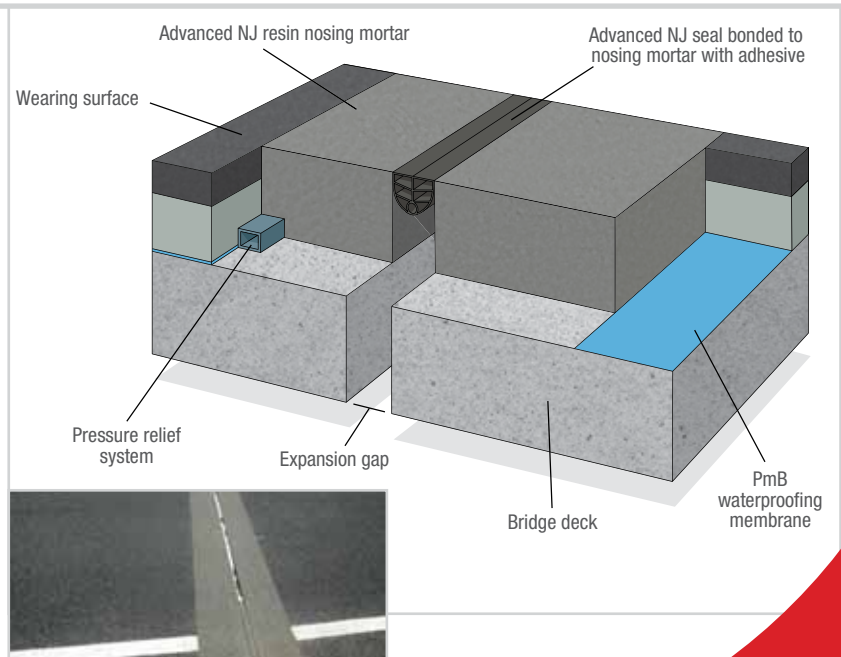


# Advanced NJ

## BD33/94 Type 4 Nosing with Preformed Compression Seal

Designed for small movements in high load and high wear situations, ANJ is a surface mounted nosing joint, comprising a central pre-formed compression seal, bonded between nosings of a high strength mortar, installed after the final surfacing has been placed. The nosing mortar is bonded directly to the concrete deck and a choice of heavy-duty seals provide for a range of movements and gap widths.

- Movement range up to 40mm
- UK Highways Agency approved product
- Rapid installation
- High strength elastomeric mortar
- For highways, bridges, car parks & buildings

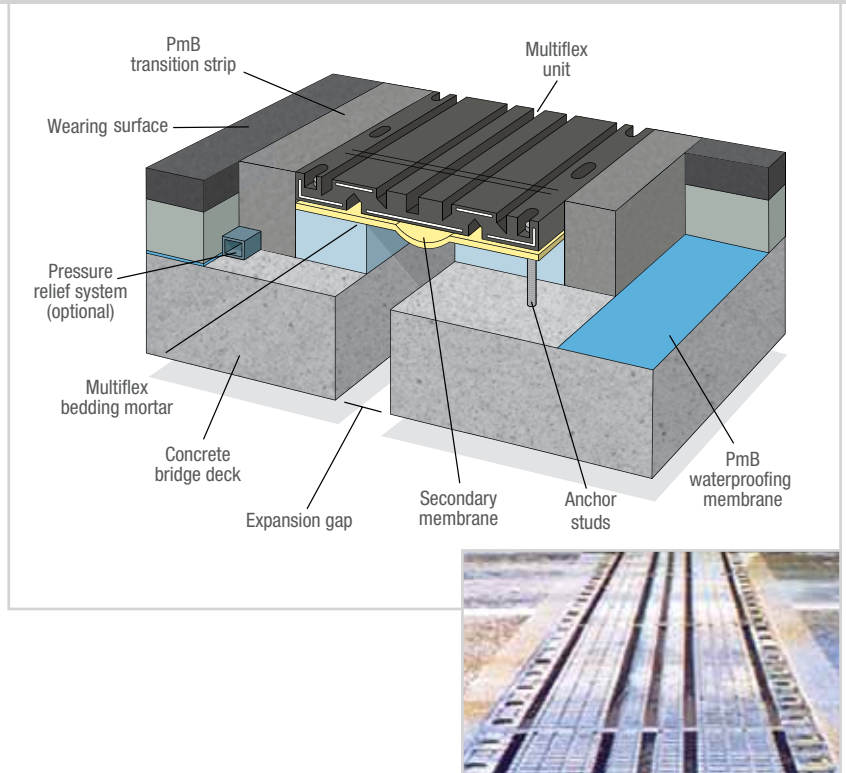


# Multiflex

## BD33/94 Type 5 Reinforced Elastomeric Joint

These pre-fabricated joints comprise metal reinforcing plates completely encapsulate inside a hardwearing elastomer. Bolted to the bridge deck the system provides an excellent ride quality and is suitable for high load situations in both new build and refurbishment schemes.

- For large movements up to 330mm
- UK Highways Agency approved product
- Suitable for all skew angles
- Fast to install

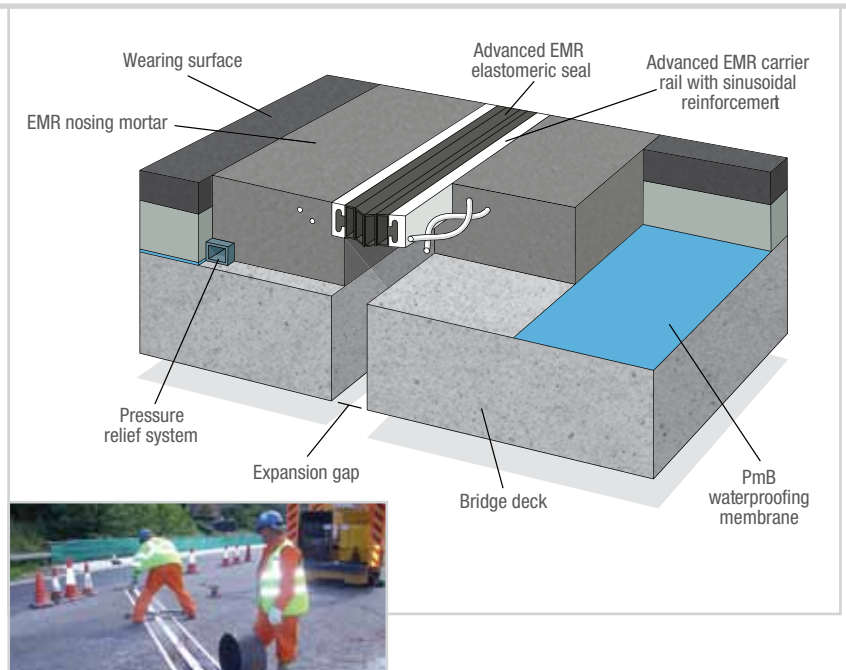


# Advanced EMR

## BD33/94 Type 6 Elastomeric in Metal Rails

A surface mounted mechanical system incorporating a central elastomeric seal inserted into two steel carrier rails which are bonded to the bridge deck with a fast setting high performance resin mortar, designed for high wear situations on both new build and refurbishment schemes.

- Movement range up to  $\pm 75\text{mm}$  dependent upon client requirements
- UK Highways Agency approved product
- Rapid installation and return to service
- Cost effective and low maintenance
- Range of load bearing seals to accommodate differing movements and gap widths

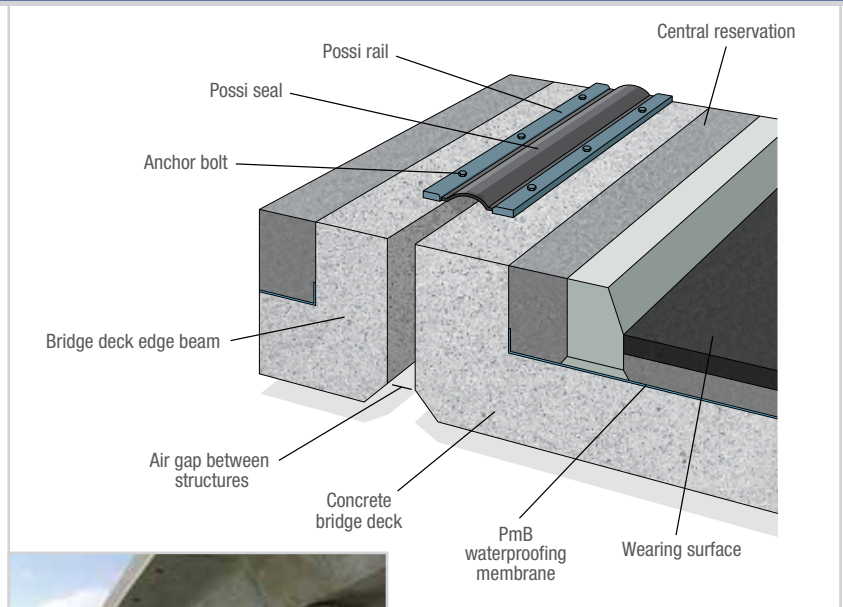


# Possi

## Longitudinal Expansion Joint

Designed for bridging gaps between adjacent structures, providing a watertight flexible seal in areas that are subject to direct traffic load. Cost effective, fast to install and fully compatible with the PmB bridge deck waterproofing membrane ensuring waterproofing continuity between structures.

- Gap width up to 220mm
- Movement range up to 220mm
- Vertical displacement up to 180mm
- Can be used as a gutter / soffit seal

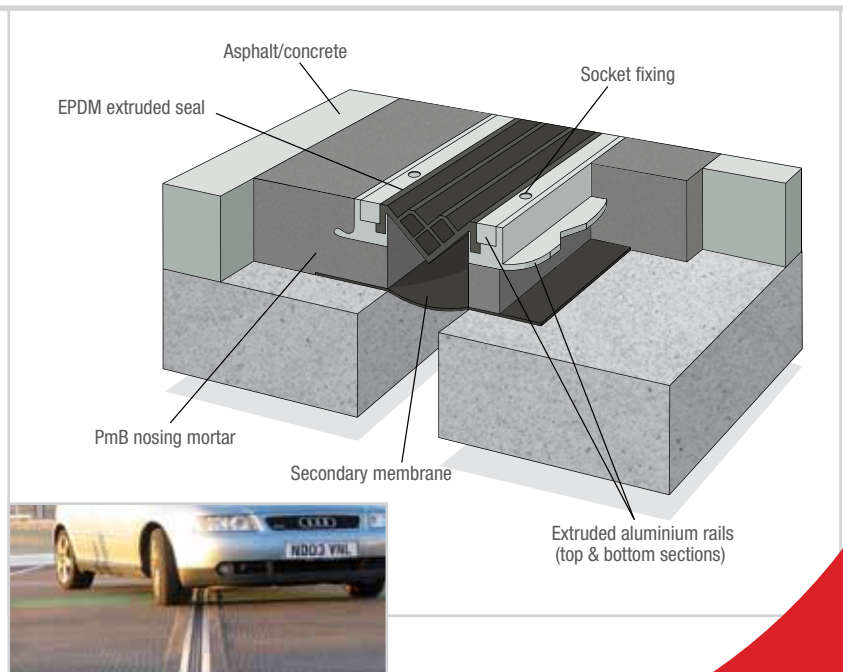


# ACP

## Car Park Expansion Joint

The Advanced ACP expansion joint utilises the qualities of the Advanced EMR bridge expansion joint but has been developed specifically for car parks and other pedestrian structures. The Advanced ACP range includes ACP 55 and 75 systems, which accommodate movement of 55cm ( $\pm 27.5$ mm) and 75mm ( $\pm 37.5$ mm) respectively.

- Versatile
- Watertight
- Installed quickly
- No drilling of deck required
- No mechanical fixings
- EPDM seal easily removed if required
- Provides quiet comfortable riding characteristics

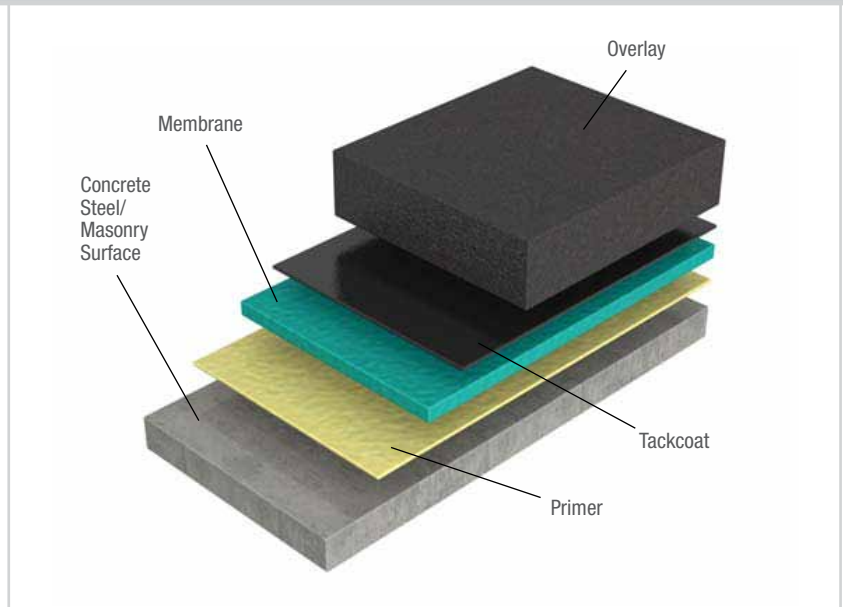


# PmB structural waterproofing solutions

## Durability and quality that lasts

PmB membrane is a two part, spray applied, durable corrosion protection and waterproofing material. The high performance system is 100% polyurethane containing no fillers or additives and is VOC free. Once applied, PmB has exceptional bond strength to all commonly used substrates, has excellent crack bridging capability and a life expectancy in excess of 30 years and holds British Board of Agrément approval.

The system has gained BBA approval for use as a damp proof waterproofing membrane for internal and external tanking. The system holds approvals in many other European countries, North America, the Middle and Far East.



For more information please visit: [www.pitchmasticpmb.com](http://www.pitchmasticpmb.com)

## Fast and easy installation

PmB membrane is fast and easy to install and is applied as a single coat or in multiple layers. The two component materials of the membrane systems are mixed at the spray gun and applied to the substrate using compressed air. The spray equipment allows complete mobility, spraying vertical surfaces, overhead, behind pipe bays or around corners and edges quickly and effectively. This is achieved due to the membranes ability to gel in seconds preventing curtaining and providing instant protection.

The membrane can accept foot traffic in minutes and vehicular site traffic within two hours.

## Key material performances

- Class leading adhesion to substrates
- Weather resistance
- Crack bridging
- Tear resistance
- Abrasion resistance
- Water vapour and gas permeability
- Chemical resistance
- Resistant to root and microbial attack
- Sound insulation
- Homogeneous watertight seal
- Low flammability rating





# Ancillary products

## ▪ Concrete Repairs

Pitchmastic PmB provides a nationwide facility for the survey, repair, restoration and strengthening of concrete, masonry, steel and cast iron structures. The company's multi-disciplined, professional and comprehensive services include civil, concrete repair works and waterproofing.

## ▪ Joint Sealants

Pitchmastic PmB has a wide range of joint sealants and fillers which can satisfy all expansion joint requirements including new construction, major refurbishment or maintenance projects.

Our specialised sealant products have been designed over a number of years to meet market requirements ranging from basic cladding seal through to a high performance jet fuel resistant sealant suitable for use in the most demanding and arduous of environments.

## ▪ PmB E- Primer

Under normal circumstances, the PmB system can only be applied to concrete that has been left to cure for around 7 days, this is to ensure the surface moisture is 6% or below. To combat this delay Pitchmastic PmB has formulated 'PmB -E Primer'. This coating is applied to new concrete between 6 and 24 hours after placement. The PmB System can then be applied after 3 or 4 hours, saving precious time.

## ▪ Antiskid Surfacing

Pitchmastic PmB offers a combined waterproofing and antiskid system which is suitable for use on footbridges, car parks and lightweight bridge structures. The antiskid surface layer is a polyurethane product which when broadcast with aggregate provides a tough, durable and highly resistant surface which can be installed to meet with all levels of traffic.

## ▪ Silane

Pitchmastic PmB offers Silane, a treatment of concrete to provide an invisible water repellent layer. The deeply penetrating formula of Silane reacts with the inorganic substrate in the presence of moisture under acid or alkaline conditions to form a chemically bonded water-repellent barrier. Suitable for Highway Works. Different versions are available including water based which are less weather susceptible.

## ▪ Anti graffiti coatings

Water based low odour environmentally friendly ant graffiti clear coating for internal and external application which is non yellowing and weather resistant for the protection of a wide range of surfaces.

## ▪ Aggregated thin overlay and bond coats

Two component polyurethane resins broadcast with 3mm aggregate which provides excellent, shear adhesion to asphalt, concrete and resin surfaces.

## Technical & Specification Support

Pitchmastic PmB is committed to providing its clients with comprehensive technical support, from design through to project completion. With a dedicated technical support team, Pitchmastic PmB are able to offer a free advice service and are able to assist in every aspect of the project. Detailed technical drawings are readily available and once a particular project has begun Pitchmastic's team are available for on-site technical assistance if required.



## Approved Contractors

Pitchmastic PmB offers their clients the comfort of a supply and fit service (UK, Ireland and special projects) for their specialist range of expansion joints. Pitchmastic's contracting department has vast experience, integrity and commitment to quality lending over 30 years experience in the bridge expansion joint field.

Pitchmastic's global operations are coordinated by a network of locally based partner companies who are on hand to advise customers on their structural requirements and work with them to deliver Pitchmastic PmB's range of civil engineering and construction products.

## Our commitment to quality

At Pitchmastic PmB we understand that our goal of zero defects in all our operations can only be reached if an effective quality system is in place throughout the company.

Pitchmastic PmB operates a Quality Management System (QMS) which complies with the requirements of BS EN ISO9001: 2000 and is regularly audited by BM Trada.

In addition the PmB Waterproofing system holds British Board of Agreement (BBA) certificates in Roads and Bridges and Tanking.

The site installation of the system is carried out in strict accordance with the guidelines set out in the certificate.

All of Pitchmastic's sub contractors and suppliers are made aware of the requirements within our quality plan.



## PmB Spray Applied Waterproofing

- Bridge decks
- Foot bridges
- Rail
- Airports
- Roofing
- Water Supply
- Basements
- Tunnels
- Car Parks

## Concrete Repair and Protection

- Rapid setting mortars
- Anti graffiti systems
- Anti carbonation coatings
- Silane

## Expansion Joints

- Roads
- Footbridges
- Rail
- Car Parks
- Structures
- Joint Sealants

## Anti-Slip Surfacing

- Pedestrian crossings
- Cycle tracks
- Walkways
- Ramps
- Footbridges



**PITCHMASTIC** PmB



Head Office, Panama House, 184 Attercliffe Road, Sheffield, S4 7WZ, UK | T: +44 (0) 114 270 0100 | F: +44 (0) 114 276 8782  
E: [info@pitchmasticpmb.co.uk](mailto:info@pitchmasticpmb.co.uk) | [www.pitchmasticpmb.com](http://www.pitchmasticpmb.com)

Pitchmastic PmB (Dubai Branch), PO Box 54220, Dubai, United Arab Emirates | T: +971 4 324 3050 | F: +971 4 324 3052  
E: [info@pitchmasticpmb.co.uk](mailto:info@pitchmasticpmb.co.uk) | [www.pitchmasticpmb.com](http://www.pitchmasticpmb.com)

## A GLOBAL NETWORK OF APPROVED PARTNERS

