



BriggsAmasco<sup>®</sup>  
roofing your world

# A Design & Technical Guide

## BriggsAmasco FlexiPhalte

Waterproof Vehicle Deck  
Surfacing Systems

Triple Protection Roofing &  
Structural Waterproofing Systems



**FlexiPhalte**<sup>®</sup>  
Waterproofing Systems



# Leading the way for more than 40 years

Flexiphalte products and systems are the established market leaders in the field of waterproof vehicle deck surfacing and have been used on hundreds of major projects across the country for more than 40 years.

The products and systems have an undisputed record of success and innovation and continue to deliver superior waterproofing solutions in both heavily trafficked and

more conventional roof deck situations that give excellent long term performance.

Many of the UK's most prestigious projects have used Flexiphalte products and systems – from the The Shard in London to Kent's Bluewater Shopping Centre. Flexiphalte continues to be specified by architects, main contractors and building owners who want the best.



# Contents

- 04** Introduction to BriggsAmasco  
Technical Design Service
- 05** Technical Advice
- 06** FlexiPhalte vs Alternative Systems
- 07** Roof Screeds, Falls & Details
- 08** Movement Joints
- 09** Hot Charge Technology Typical  
Plant Data
- 10** FlexiPhalte Vehicle Deck Surfacing  
Characteristics
- 11** Flat Roofs Without Vehicular Traffic
- 12-17** Specifications
- 18-22** Illustrations





## Introduction to BriggsAmasco

- First established by William Briggs in 1865, BriggsAmasco is the UK's leading industrial and commercial roofing company.
- Today BriggsAmasco is part of the international IKO group who are one of the world leaders in waterproofing, with manufacturing plants in the USA, Canada and across Europe.
- In the UK, the group of companies supplies and installs a complete range of Bituminous, Mastic Asphalt, Single Ply, Liquid Roofing and ancillary products to the roofing market.
- The company undertakes over 1,200 projects every year for a range of clients from the Met Office to McDonalds.
- All projects, from relatively small refurbishments to major multimillion pound contracts, are supported by BriggsAmasco's dedicated technical and maintenance department.
- The company has operated a quality system since 1988 and is registered to ISO 9001:2008, ISO 14001:2004 and BS OHSAS 18001:2007.

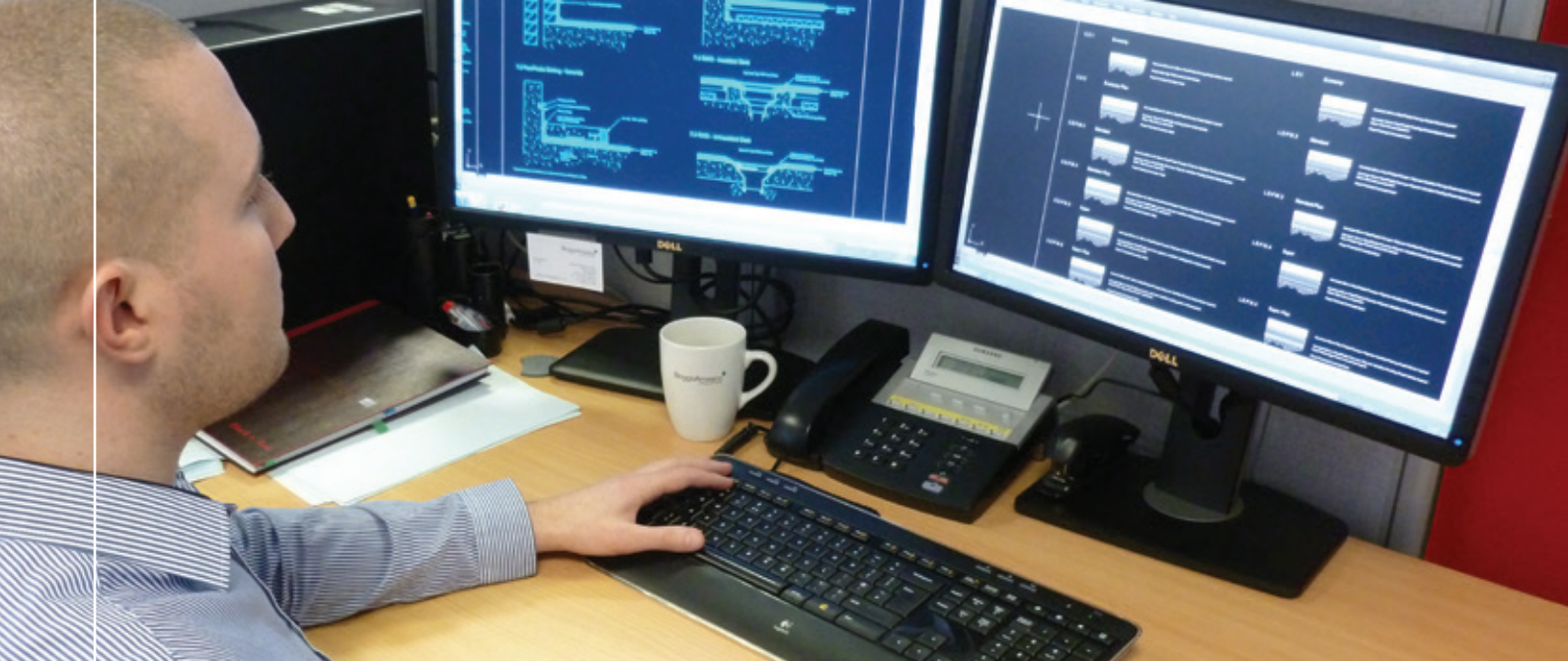
## Technical Design Service

BriggsAmasco offers a total service to its locality – surveying, estimating, contract management – and has the support of technical design teams with CAD facilities. For larger contracts, designated project management teams are established in order to ensure efficiency and co-ordination on site, and work with other interfacing contractors.

With branches located nationwide, BriggsAmasco can give a national roofing service backed with local knowledge and expertise. Each contract is supported by job specific method statements and risk assessments.

BriggsAmasco is also competent to act as Principal Contractor if a contract comes under the scope of CDM, and as planning supervisor if required.





# Technical Advice

## Surface Finish to Structural Slabs

Except where the main horizontal structural slab or deck is to directly receive roof screeds, in every other case the concrete shall be float finished without ridges, irregularities or protrusions. Drainage holes should be provided in the slab where 'wet' screeds are incorporated in the roof sandwich as recommended in BS 6229: 2003.

## Surface Finish to Ramps

The reverse condition applies to ramp surfaces, where an even cross tamped finish is required to a ridge depth of not more than 5mm, to provide a mechanical key for ramp surfacing treatments.

## Vertical Surfaces

Vertical concrete surfaces within skirting heights – including relevant column faces, curbs etc. – shall be bush hammered over the entire surface to present a coarse angular surface. Alternatively, these surfaces may be primed with proprietary keying agents.

For chases where skirtings are tucked to be pointed up afterwards by the main contractor, these must be not less than 25mm x 25mm. No lesser sized chase is acceptable and where inadequate sections of chase are dressed into by our operatives for the sake of continuity of the programme, then the performance of the detail shall not be the responsibility of BriggsAmasco. Chases should be cut straight and level for good appearance. Flexible skirtings are available as an alternative and do not require a chase.

## Movement Joint Attendance

The main contractor should rake out movement joint fillers to a depth of 6mm below the top surface of the structural slab.

Concrete shoulders of the movement joint must be level, square and true and have a steel float finish to classification U3, D.o.T. specification for Road and Bridge Works, Clause 1405 for a width of 300mm both sides of the joint. The difference in levels of the concrete each side of the joint for the 300mm width to be no more than  $\pm 1$  mm and the difference in levels along the length of the joint for the 300mm width to be no more than  $\pm 2$ mm in 1 metre.

Where our subcontracts include specialist metal reinforced rubber bridging sections normally anchored by 100 mm long bolts into the concrete and drilling for the bolts is obstructed by the steel reinforcement, the main contractor shall arrange for completion of the drilling at no cost to BriggsAmasco.

## Rainwater Outlets and Ancillaries

Rainwater outlets must be fixed permanently at the agreed level and provided with plugs to prevent blockage before our work commences. Similarly, items such as metal standards must be fixed before our work commences. If ancillaries are not in position, our operatives are thrown out of sequence and the stepping back of elements of the roof sandwich has both technical and cost implications.

## Protection

The main contractor should prevent access by other trades onto the areas on which we are working and shall adequately protect our works from damage by other trades. Finished asphalt should ideally be left to 'cure' for as long as possible before being trafficked.

# FlexiPhalte Vs Alternative Systems

Designers will often specify a waterproofing system at the structural deck level, overlaid with an appropriate thickness of inorganic insulation and then covered with a strong running plate, such as concrete.

However, burying roof waterproofing below substantial plate coverings which obstruct reasonable access to trace and correct problems in the waterproofing and associated details is a concern to BriggsAmasco. In the UK, there have been a number of failed installations involving concrete overlays. It is, therefore, vitally important to get the correct design advice in these situations, BriggsAmasco has vast knowledge in this regard and will happily assist with this advice.

FlexiPhalte modified paving grade mastic asphalt as a surfacing material contributes substantially to the watertightness of the deck, whilst it is subject only to reasonable deformation and impressions left by vehicle road wheels.

Substantial spillage of oil and fuel may cause localised softening and staining of mastic asphalt paving, but generally on open vehicle surfaces and parking areas, normal contamination can be disregarded and the proven advantages of the FlexiPhalte surfacing far outweigh these points. Occasionally bay joint cracks may occur and the stone aggregate in FlexiPhalte paving becomes visible – but this in no way compromises the performance or watertightness of the system.

Alternative systems, from sprayed or brush applied liquid skins to proprietary composite surfacing techniques, have come and gone. It is important that the designer looks for evidence of reliability when considering roofing specifications – with the subject now old enough for evidence of a significant history of performance of the principle of most alternative approaches to be investigated.







# Roof Screeds, Falls & Details

## Screeds General

When screeds are installed on vehicle trafficked roof decks, the application must fully support the Flexiphalte overlay. Despite the thermal insulation requirements, there will remain many open deck situations where little or no contribution to insulation is required and screeds will act simply to provide drainage falls.

Where roof screeds are not placed in our subcontract, we approve certain lightweight aggregate concretes, sand/cement screeds or concrete screeds, but cellular concrete of low density and other similar lightweight screeds of poor crushing strength are unsuitable.

## Flexiscreed for Roof and Car Decks

An exciting new and effective solution for forming drainage falls in line with BS 6229:2003 and levelling uneven or irregular surfaces to assist the flow of water to drainage outlets.

A totally 'dry' installation product, it is a mastic asphalt composition and laid in the same way, with fast track installation and enjoying a 'curing' period of approximately 1 hour to leave surfaces trafficable within a very short space of time.

## Insulated Decks

See the Specifications Section where generally 25 N Lytag Concrete is used as a thermal heat sink to the insulation and in certain circumstances can be laid to provide falls.

## Drainage Falls

It is imperative that drainage falls are incorporated in vehicle trafficked roof decks.

Like any other flat roofs, our systems require finished falls to be not less than 1:80 to allow water to drain properly. To allow for normal construction tolerances (e.g.  $\pm 7$  mm for our hand laid systems), a greater design fall is needed if freedom from ponding is to be ensured. BS 6229: 2003 and our Agrément Certificate recommend that in the absence of any detailed analysis of deflections under loads and construction tolerances, falls of twice the required finished falls should be assumed for design purposes.

Where two-directional falls intersect, the minimum finished fall should be maintained in the mitre. Similarly, the finished fall should be maintained along valley lines between outlets.

## Details

Getting the main area specifications right is only half the story. Flexiphalte works because its details have been proven in service. Like any specialist activity, success follows more easily with years of know-how.

The designer will meet many points of detailing traffic deck coverings around posts, buffers, thresholds, channels, columns etc. For special design situations, the BriggsAmasco technical design team is available to advise on appropriate solutions.

Typical details are shown in the Illustrations Section (Please note that these details may not be reproduced without the permission of BriggsAmasco).

# Movement Joints

## General

Flush movement joints need regular servicing. BriggsAmasco carefully monitors all available alternatives and improvements and can advise designers on preferred solutions. Good detailing combines the following features:

- Joints should be set at high points on roofs with surface water running away from the detail.
- The detail must normally take account of changes in direction, junctions and abutments with vertical conditions.
- In the event of servicing or repair being required, the detail should avoid complex accessibility or dismantling problems.







## Hot Charge Technology

Subject to contractual agreement, BriggsAmasco can be self-sufficient in the delivery of FlexiPhalte to the point of lay. This is achieved by the use of "hot charge" deliveries of molten material direct from our manufacturing plant with our fleet of modern 15-20 tonne capacity tankers.

Given suitable ramp access or site craneage facilities, material can be transported to the roof deck by special

1 tonne capacity dumper mounted asphalt mixers which are filled directly from the "hot charge" tankers. Total self-sufficiency by BriggsAmasco in this application avoids costly attendance and/or hoisting facilities being necessary and greatly minimises site space requirements and inconvenience to other activities, as well as greatly increasing production.

## Typical Plant Data

### 15 Tonnes Mixer Transporters

- Gross Vehicle Weight 32 tonnes
- Maximum Axle Load 9 tonnes
- Overall Length 11.5 metres
- Overall Width 2.5 metres
- Headroom Clearance:
- Mixer Horizontal 3.6 metres
- Mixer at maximum tip position 4.3 metres

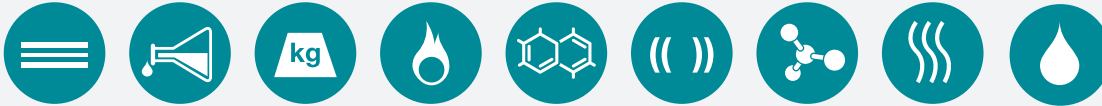
### 1 Tonne Mechanical Mixer Dumper

- Unladen Weight 1.42 tonnes
- Laden 2.42 tonnes
- Overall Length 2.7 metres
- Overall Width 1.57 metres
- Headroom Clearance 1.75 metres

### Lifting Frame

- Unladen Weight 0.75 tonnes

*(NB. Various sizes and weight of plant are available)*



# FlexiPhalte

## Vehicle Deck Surfacing Characteristics

### Surface Finish:

Flexiphalte modified paving grade mastic asphalt surfacing is hand floated between gauges of appropriate thickness and as standard, is sanded and crimped rolled.

### Liquid Spillage:

Mastic asphalt has an acceptable resistance to sump droppings, but diesel and petrol spillage should be avoided. Higher risk areas such as below the tractor area of HGVs in unloading bays can be treated locally with a suitable coating.

### Weight:

The mass of mastic asphalt varies with the differing proportions of constituents employed in any specific Flexiphalte installation but for practical purposes, the figure of 2.4 kg/m<sup>2</sup> per mm of thickness may be used.

### Fire:

Because of its high mineral content, mastic asphalt is virtually incombustible. Indicative tests have been performed on samples of insulated mastic asphalt roof decks in accordance with the procedures which were specified in (draft) European Standard prEN 1187-1 and prEN 1187-2. No significant flame spread was observed and no flame penetration occurred in either test. Mastic asphalt fulfils all the external fire resistance required for a roof covering and achieved the highest rating (P60) when tested as described in BS 476: PART 3:1975.

### Thermal Conductivity:

Mastic asphalt has a k value of between 0.43 and 1.15 W/m°C and does not significantly contribute to the overall thermal insulation of roofing. A k value of 0.50 W/m°C may be assumed for design purposes.

### Thermal Expansion:

Mastic asphalt is thermoplastic and is capable of accommodating normal movements encountered in well-designed building structures.

### Compressive Strength:

When mastic asphalt is fully confined it has the same compressive strength as the containing material. When not confined, the compressive strength is dependent upon a number of factors including the temperature to which it may be subjected.

### Toxicity:

Mastic asphalt is non-toxic and is generally suitable for use in contact with potable water.

### Odour:

Mastic asphalt is odourless after laying.

### Resistance to Water:

Mastic asphalt is impervious to water.

### Resistance to Biological Attack:

Mastic asphalt is vermin-proof and rot-proof.



# Flat Roofs Without Vehicular Traffic

## Flexiphalte Triple Protection Roofing & Structural Waterproofing Systems

Some designers, although liking asphalt as a material, do not favour the loose laid application of the material to the substrate and prefer a fully bonded system to eliminate any potential tracking of moisture in the unlikely event of a leak.

Combine Flexiphalte Pommar with a specially designed flexible polymer modified bitumen coated membrane which will accept the direct application of Flexiphalte Pommar, and you can have a system that is fully bonded to the substrate. This gives all the advantages of membranes and asphalt in one combination and is covered by our Agrément Certificate.

Various specifications are available. These start with a standard version of 10mm of Flexiphalte waterproofing combined with the high performance

membrane increasing, if situations dictate, up to 35mm of Flexiphalte with the membrane for heavier duty applications such as green roofs and roof gardens. For structural waterproofing for podiums and roadways, a layer of Flexiphalte paving grade asphalt can be incorporated giving a typical composition of membrane + 10mm of waterproofing grade Flexiphalte and 25mm paving grade Flexiphalte – providing an extremely robust installation designed to withstand the ‘rigours’ of the project ‘Construction Phase’

These specifications are designed to be laid ‘dead flat’, thereby eliminating the need for a screed or having to lay the structural slab to falls and, when fully protected and subject to normal service conditions, are guaranteed for 20 years and are intended to last for the designed life of the roof/substrate upon which they are installed.

## Lasting for Life

Assessed by the BBA as having the durability to last the designed life of the structure, Flexiphalte Triple Protection Roofing and Structural Waterproofing Systems are deemed to remain watertight for the designed life of the roof/substrate upon which they are installed (when fully protected and subjected to normal service conditions). These systems have great ‘buildability’ and are highly resistant to site damage, unlike many alternative systems.

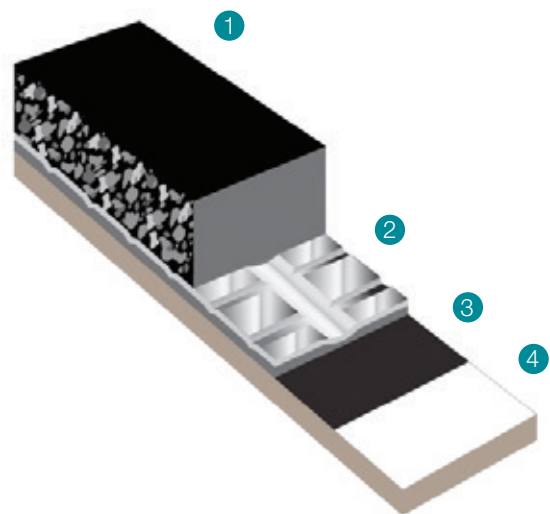
## Installed by Experts

Flexiphalte Triple Protection Roofing and Structural Waterproofing Systems are installed by BriggsAmasco’s team of skilled craftsmen which ensures a total unified responsibility package and total peace of mind.

## The Best Technical Support

BriggsAmasco offers an unrivalled level of technical support and expertise, including full specification support, CAD design and advice and guidance from specification to maintenance of the Flexiphalte system.

1. Flexiphalte Pommar polymer modified mastic asphalt
2. Flexiphalte Baryprene (B3A) high performance membrane
3. Primer
4. Float finish concrete



# Technical Specification

## 1 Product/Systems Data

1.1 Flexiphalte Triple Protection Roofing and Structural Waterproofing Systems consist of Flexiphalte Pommar and Flexiphalte Baryprene which are fully bonded to each other and to the substrate which should have a float finish.

1.2 Flexiphalte Pommar is manufactured by mixing an asphaltic cement with filler and coarse aggregate using conventional techniques. The asphaltic cement is made by blending bitumen, a polymer and other additives.

### Table of weights (Approximate)

Thickness	kg/m <sup>2</sup>
10mm	24
15mm	36
20mm	48
25mm	60
30mm	72

### 1.3 Flexiphalte High

Performance is a polymer-modified membrane reinforced with a 50gm-2 glass-fibre mat, with talc on the upper surface and sanded finish on the underside. The membrane is for use as a higher specification alternative to a traditional underlay and fully bonded using traditional pour and roll methods. The membrane has the nominal dimensions of:

thickness (mm)	2.5
length (m)	10
width (m)	1
weight per unit area (kgm <sup>-2</sup> )	3.05

### 1.4 Flexiphalte Baryprene

Plus (B3A) is a polymer-modified membrane with an embossed aluminium foil on the upper surface and a sanded finish on the underside. The membrane is for use as an alternative to the Flexiphalte High Performance membrane and is fully bonded using traditional pour and roll techniques. The membrane has the nominal dimensions of:

thickness (mm)	3.0
length (m)	10
width (m)	1
weight per unit area (kgm <sup>-2</sup> )	3.2

## 2 Characteristics

2.1 Durability BRE Digest 144 states that "Asphalt roofing properly designed and laid should be capable of lasting 50 to 60 years" Test data shows that Flexiphalte Pommar has improved high temperature stability and is more flexible at low temperatures than conventional mastic asphalt. On the basis of available data, Flexiphalte Pommar should have a life expectancy in excess of that of conventional grades of mastic asphalt used in waterproofing applications. This is confirmed by the BBA.

### 2.2 Fire Resistance Flexiphalte

Pommar fulfils all the requirements for a roof covering as given in BS 5588 'Fire precautions in the design and construction of buildings'

Part 1: Section 1.1: 1980 and achieves the highest rating (P60) under the test requirements of BS 476: Part 3: 1975 External fire exposure roof test'.

### 2.3 Compressive Strength

When Flexiphalte Pommar is fully confined it has the same compressive strength as the containing material... When not confined, the compressive strength is dependent upon a number of factors including the temperature to which it may be subjected.

### 2.4 Thermal Conductivity

Flexiphalte Pommar has a K value of between 0.43 - 1.15 W/m°C and does not significantly contribute to the overall thermal insulation of the roof. A K value of 0.50 W/m°C may be assumed for design purposes.

### 2.5 Toxicity Flexiphalte

Pommar is non toxic and is generally suitable for use in contact with potable water.

### 2.6 Odour Flexiphalte Pommar

is odourless after laying.

### 2.7 Vapour Resistivity The

vapour resistivity of Flexiphalte Pommar is very high and can be assumed to be not less than 100,000 Mn/gm.

2.8 Resistance to biological attack Flexiphalte Pommar is vermin proof and rot-proof

### 2.9 Thermal expansion

Flexiphalte Pommar is thermoplastic and is capable of accommodating normal movements encountered in well-designed building structures.

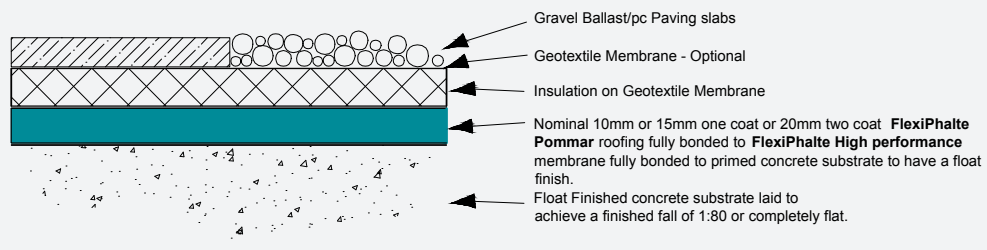
### 2.10 Resistance to water

Flexiphalte Pommar is impervious to water.

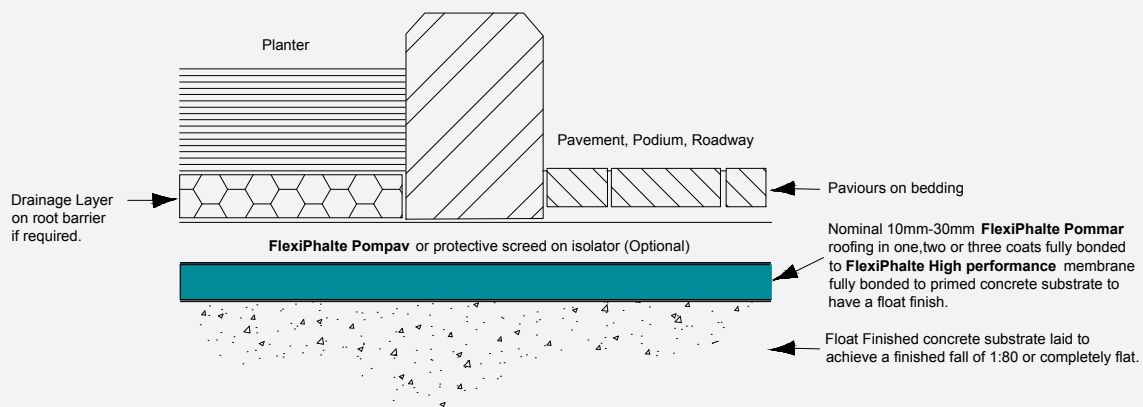


# • Design Specifications

## Fully bonded inverted roof systems



## Structural waterproofing for green roofs, roof gardens, podiums and roadways



# Specifications. Car/Light Van Decks

C.D.1

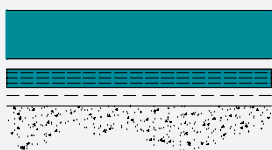
Economy



Nominal 25mm Or 30mm FlexiPhalte Paving Grade Mastic Asphalt  
FlexiPhalte High Performance Membrane  
Float Finished Concrete Deck

C.D.2

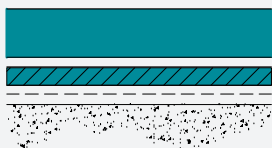
Economy Plus



Nominal 25mm Or 30mm FlexiPhalte Paving Grade Mastic Asphalt  
Nominal 10mm FlexiPhalte roofing grade mastic asphalt  
Glass fibre tissue separator  
Float Finished Concrete Deck

C.D.P.M.3

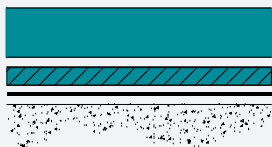
Standard



Nominal 25mm Or 30mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt  
Nominal 10mm FlexiPhalte Pommar Polymer Modified Roofing Grade Mastic Asphalt  
Glass fibre tissue separator  
Float Finished Concrete Deck

C.D.P.M.4

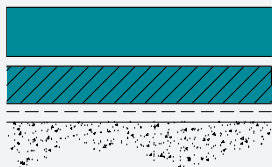
Standard Plus



Nominal 25mm Or 30mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt  
Nominal 10mm FlexiPhalte pommar polymer modified roofing grade mastic asphalt  
FlexiPhalte high performance membrane  
Float Finished Concrete Deck

C.D.P.M.5

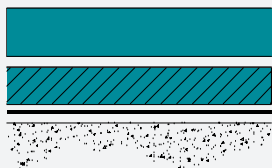
Super



Nominal 25mm Or 30mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt  
Nominal 20mm FlexiPhalte pommar polymer modified roofing grade mastic asphalt  
Glass fibre tissue separator  
Float Finished Concrete Deck

C.D.P.M.6

Super Plus



Nominal 25mm Or 30mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt  
Nominal 20mm FlexiPhalte pommar polymer modified roofing grade mastic asphalt  
FlexiPhalte high performance membrane  
Float Finished Concrete Deck

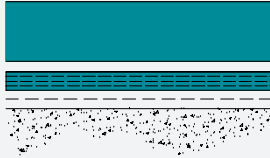


# Specifications. HGV Decks

\*(Maximum axle loads are currently 11.5T)

L.D.1

Economy



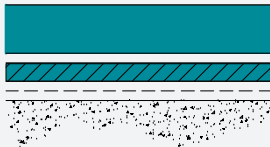
Nominal 40mm FlexiPhalte Paving Grade Mastic Asphalt

Nominal 10mm FlexiPhalte Roofing Grade Mastic Asphalt  
Glass fibre tissue separator

Float Finished Concrete Deck

L.D.P.M.2

Standard



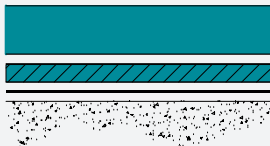
Nominal 40mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt

Nominal 10mm FlexiPhalte Pommar Polymer Modified Roofing Grade Mastic Asphalt  
Glass fibre tissue separator

Float Finished Concrete Deck

L.D.P.M.3

Standard Plus



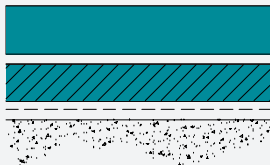
Nominal 40mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt

Nominal 10mm FlexiPhalte Pommar Polymer Modified Roofing Grade Mastic Asphalt  
FlexiPhalte High Performance Membrane

Float Finished Concrete Deck

L.D.P.M.4

Super



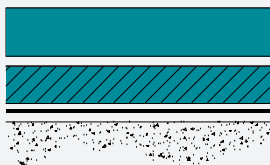
Nominal 40mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt

Nominal 20mm FlexiPhalte Pommar Polymer Modified Roofing Grade Mastic Asphalt  
Glass fibre tissue separator

Float Finished Concrete Deck

L.D.P.M.5

Super Plus



Nominal 40mm FlexiPhalte Pompav Polymer Modified Paving Grade Mastic Asphalt

Nominal 20mm FlexiPhalte Pommar Polymer Modified Roofing Grade Mastic Asphalt  
FlexiPhalte High Performance Membrane

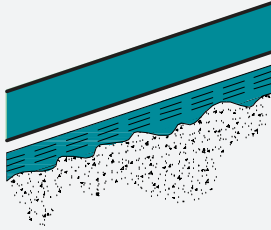
Float Finished Concrete Deck

# Specifications. Ramps

Ideally Not Exceeding 1 in 10 Gradient

## C.R.1 Unheated

### Standard



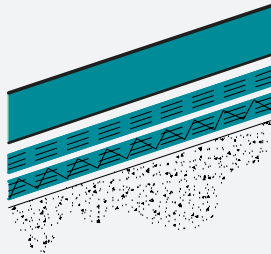
Nominal 25mm FlexiPhalte Paving Grade Mastic Asphalt or Dense Bitumen Macadam or Hot Rolled Asphalt

Nominal 10mm FlexiPhalte Roofing Grade Mastic Asphalt

Concrete Ramp Tapered to Ridge Depth of 5mm

## W.R.1 Heated

### Standard



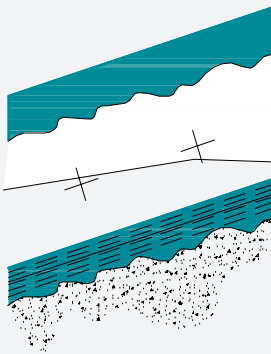
Nominal 25mm FlexiPhalte Paving Grade Mastic Asphalt or Dense Bitumen Macadam or Hot Rolled Asphalt

Nominal 10mm FlexiPhalte Roofing Grade Mastic Asphalt

Binding Coat of FlexiPhalte Roofing Grade Mastic Asphalt in Low Voltage Expanded Metal Mat Anchored to Concrete Ramp

## W.R.2 Heated

### Standard



Nominal 25mm FlexiPhalte Paving Grade Mastic Asphalt

75mm Concrete Screed Containing Heating Elements

Nominal 20mm FlexiPhalte Roofing Grade Mastic Asphalt

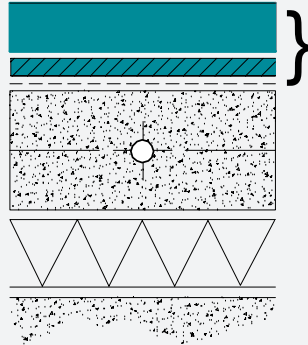
Concrete Ramp Tapered to Ridge Depth of 5mm

Note: Because Granited Paving Grade Mastic Asphalt is Prone to Slump at its Laying Temperature of Around 200°C+, Undulations Can be Expected in Finished Ramp Surfaces.

# Specifications Car/Light Van Insulated Decks

C.D.1-6  
Prefixed  
Insulated

Economy to Super Plus



FlexiPhalte Waterproof Surfacing as C.D options.

Lyttag Concrete Grade 25 with Steel Mesh to BS 4483 Type A142 (or steel fibres) Which can be Laid to Falls if No Falls in the Structural Deck

Insulation to Meet Designed 'U' Value

Float Finished Concrete Deck with 25mm dia. Drainage Holes by Others

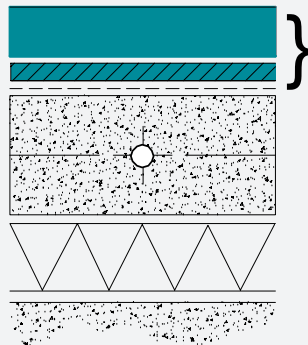
## Notes:

1. Grade 25 Lytag Concrete, Minimum 28 Day Crushing Strength 25N/mm<sup>2</sup> Density 1820kg/m<sup>3</sup>. Thermal Conductivity K=0.79W/mk.
2. Steel Wire Fabric to BS 4483 Type A 142 6mm Dia. Wire, 200mm Mesh. On Ramps the Steel Wire Fabric Needs to be Fixed to Protruding Hoops Cast into Ramp Surface by Others.
3. As a Precautionary Measure the Grade 25 Concrete Roof Screed Should be Contained by the Structural Concrete at Head of Ramps, Adjacent to Movement Joints or Any Other Like Situation Where Abutments with Elements of the Structure do not Contain the Roof Sandwich. Posts, Standards, Buffers, etc, should be Connected to the Main Structure.
4. For Technical Reasons Standard Dense Concrete is Used on Insulated Ramps in Lieu of Lytag Concrete.
5. In Certain Circumstances, Standard Dense Concrete Can Also be Used on the Horizontal Areas in Lieu of Lytag Concrete.

## HGV & PSV Insulated Decks

L.D.1-5  
Prefixed  
Insulated

Economy to Super Plus



FlexiPhalte Waterproof Surfacing as L.D Options for Routine HGV (\*Currently max 11.5T Axle Load) use, But Consult BriggsAmasco re Long Term Parking e.g. Trailers on Dolly Wheels and Coach Stops etc.

Grade and Thickness of Reinforced Concrete Screed to Suit Service use of Deck

Insulation to Meet Designed 'U' Value

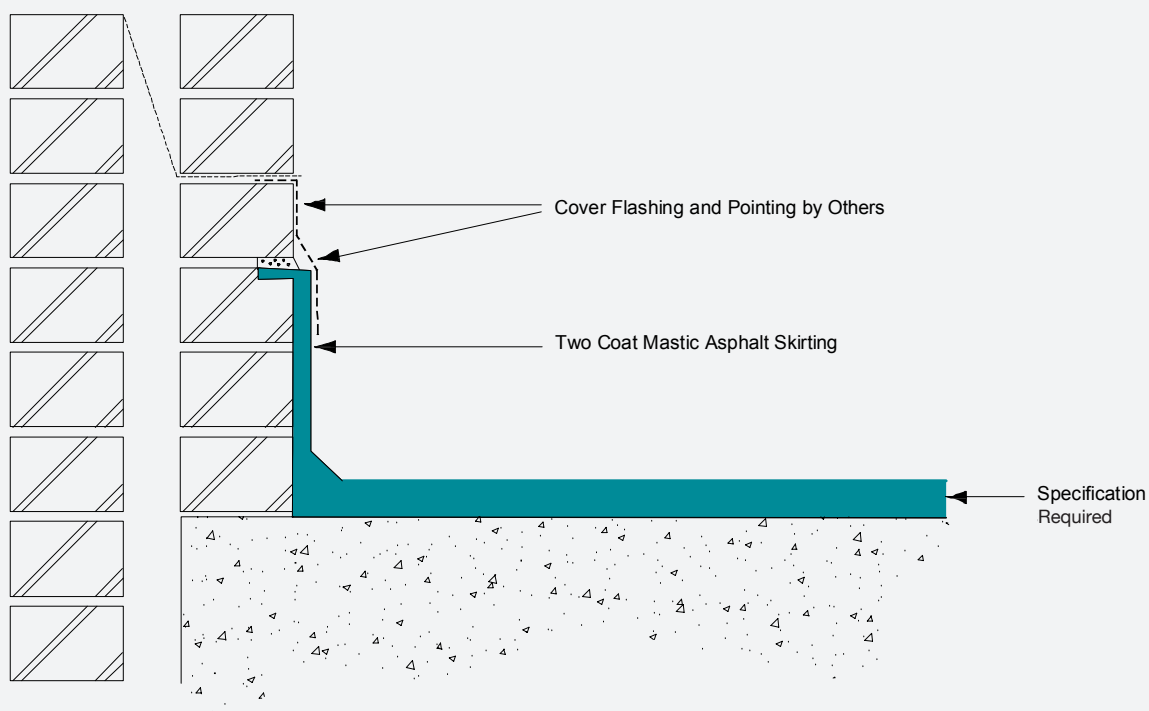
Float Finished Concrete Deck with 25mm dia. Drainage Holes by Others



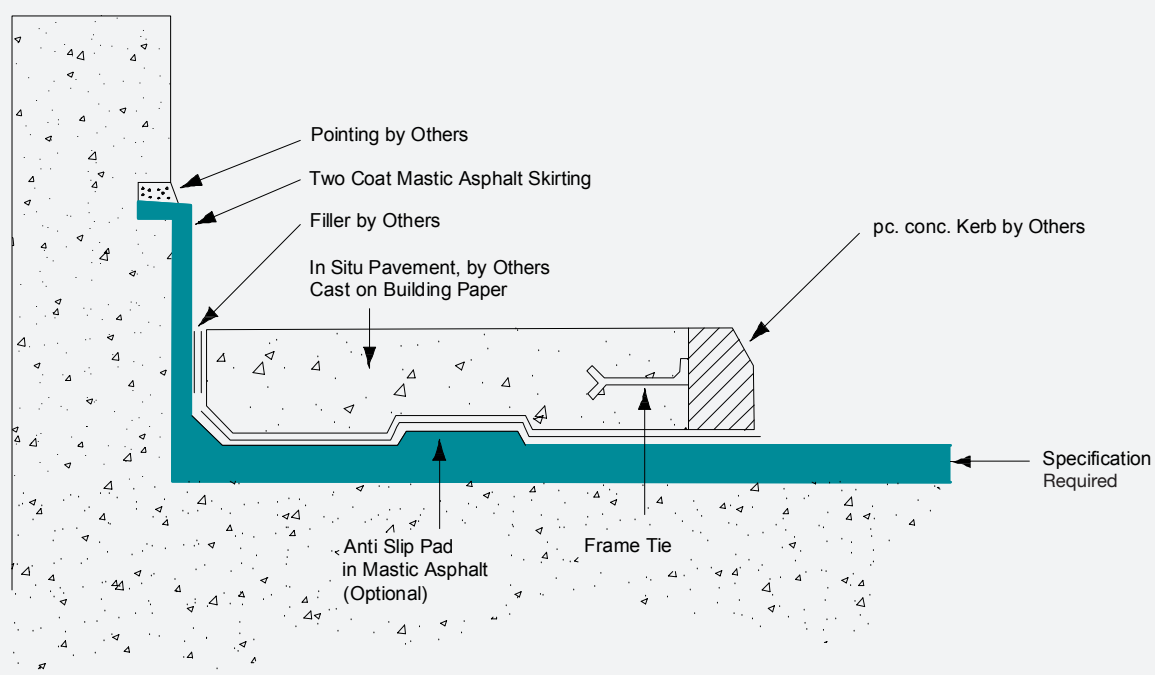
# Illustrations

## Car Park Details

### 1 FlexiPhalte Skirting - Brickwork

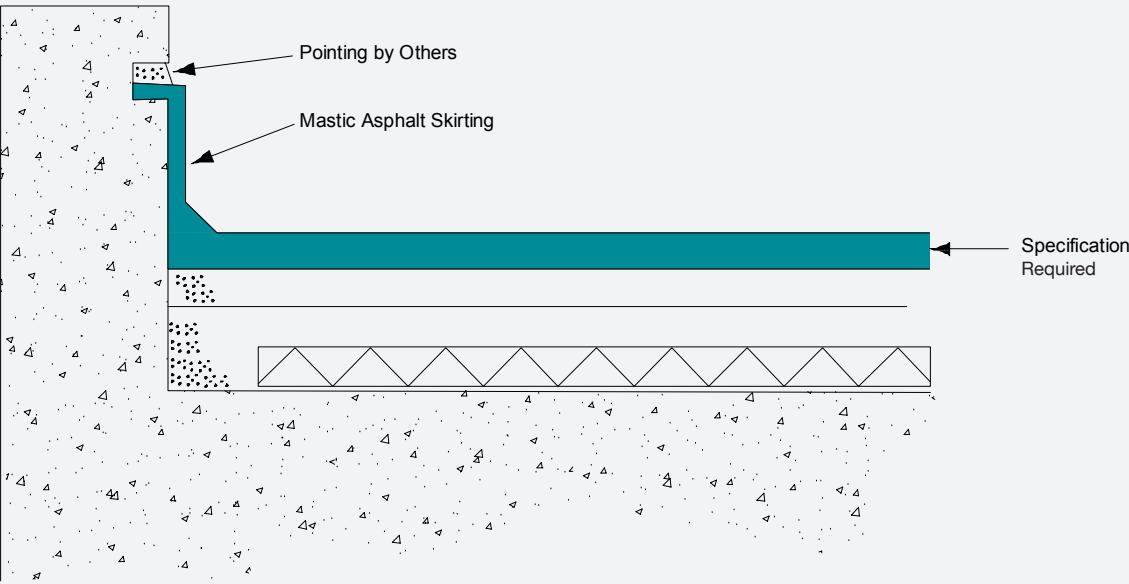


### 2 FlexiPhalte Skirting - Concrete

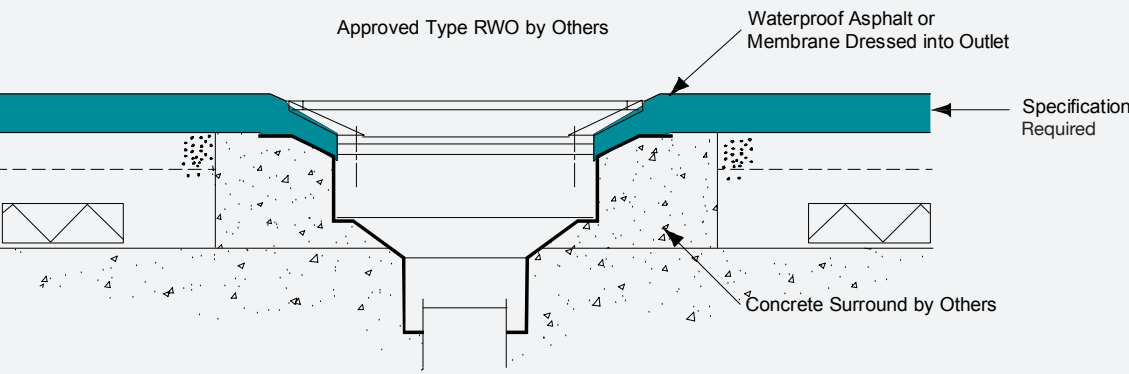


ie Skirtings are Available as an Alternative and do not Require a Chase.

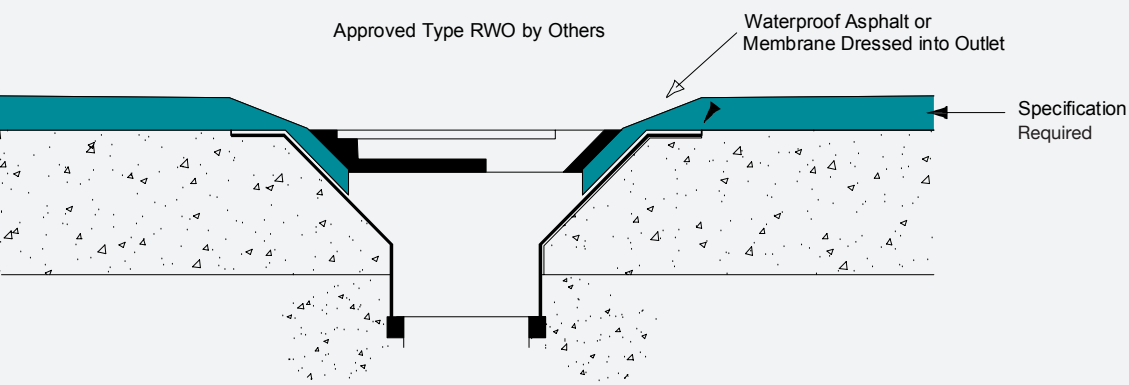
3 Skirting - Insulated Deck



4 RWO - Insulated Deck

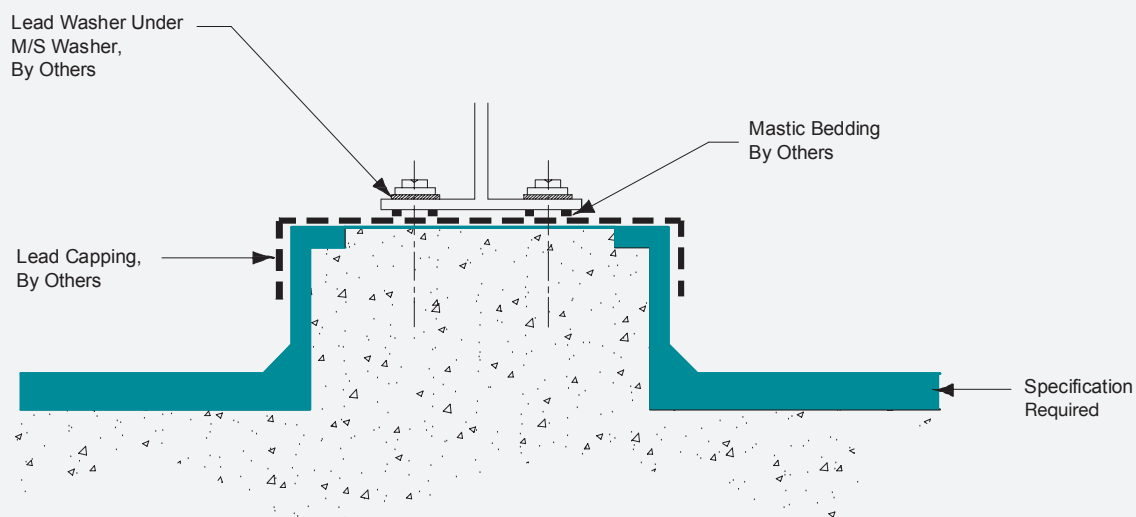


5 RWO - Uninsulated Deck

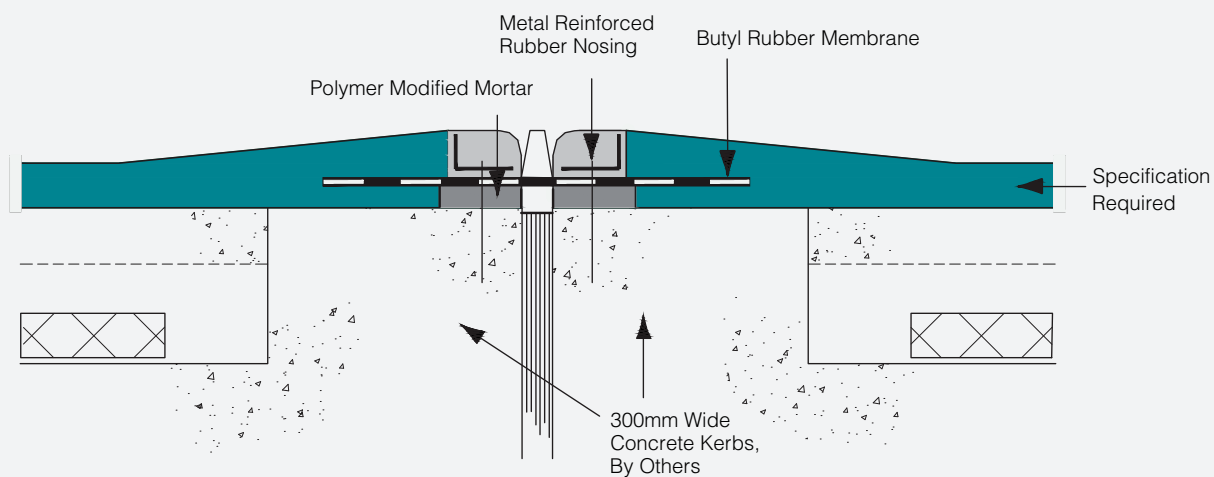


# Illustrations

## 6 Support Plinth

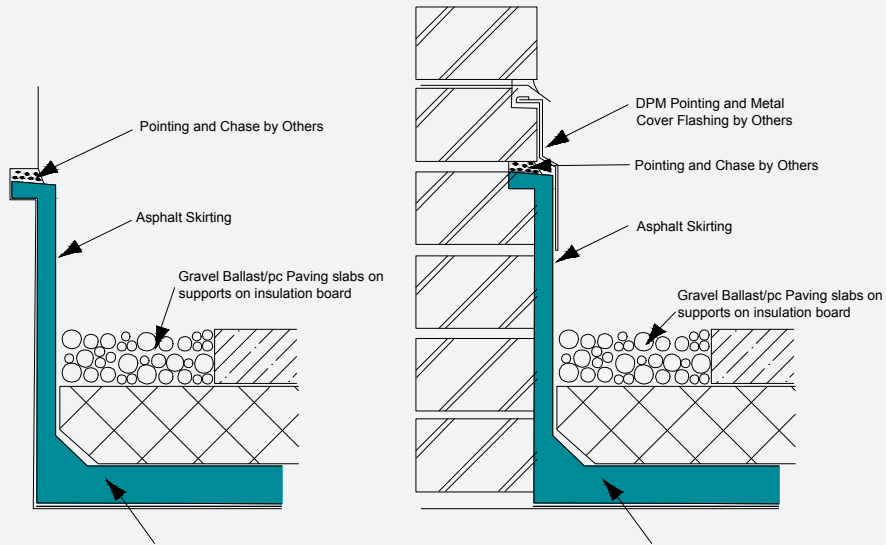


## 7. Expansion Joint





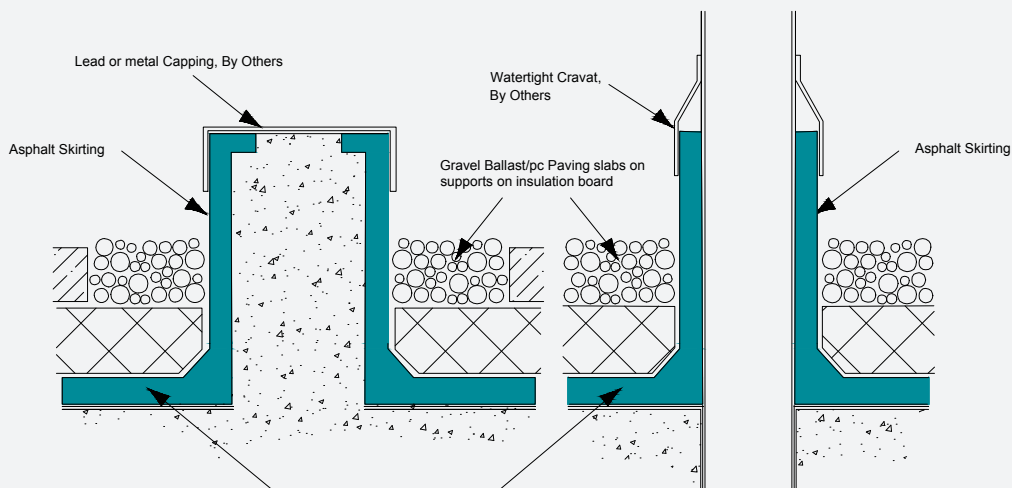
# Typical installation details using triple protection



FlexiPhalte Pommar Roofing on FlexiPhalte Baryprene Membrane Fully Bonded to Substrate

Concrete

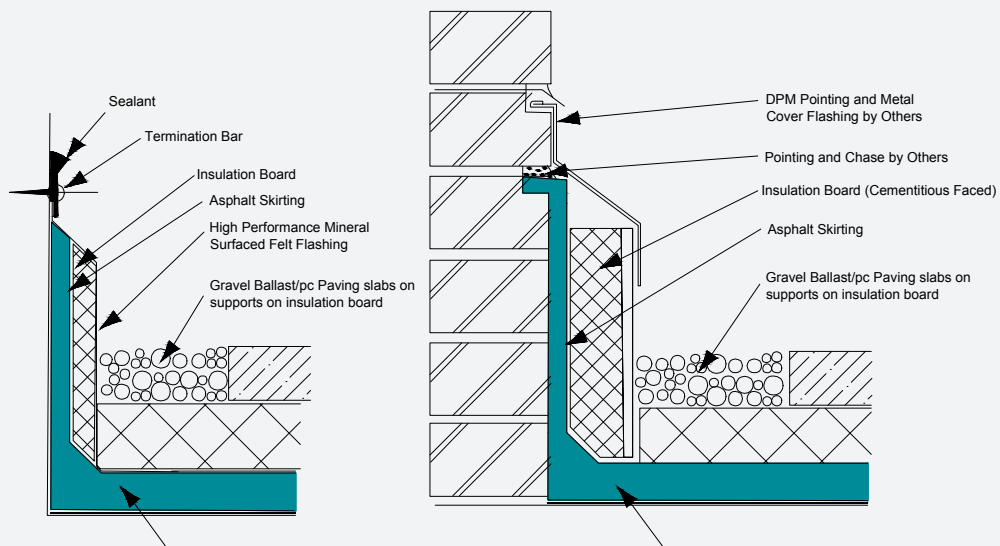
Brickwork



FlexiPhalte Pommar Roofing on FlexiPhalte Baryprene Membrane Fully Bonded to Substrate

Plinths (Such as Cradle Track Plant Bases)

Pipes (Such as Handrails)

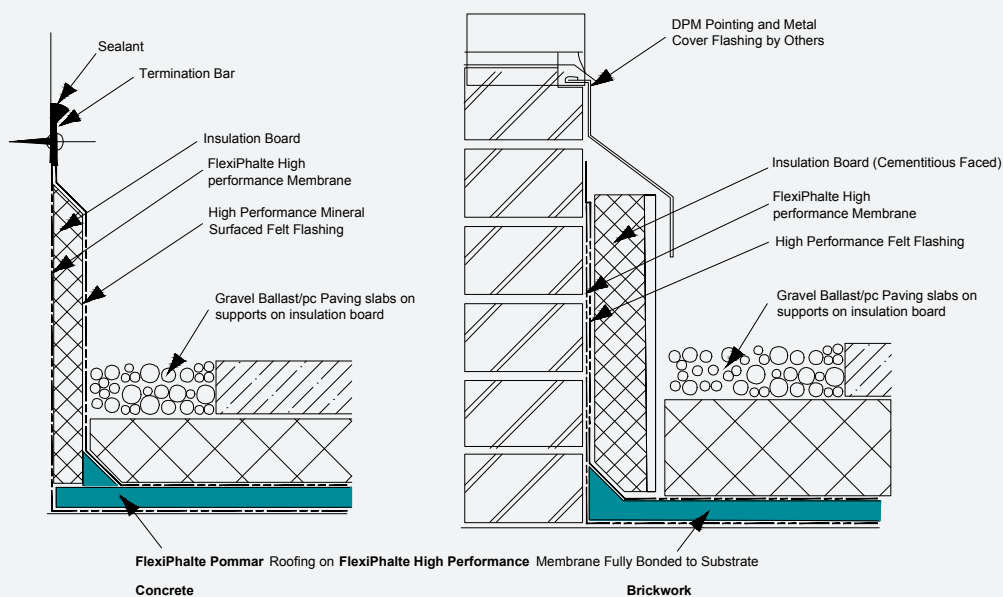
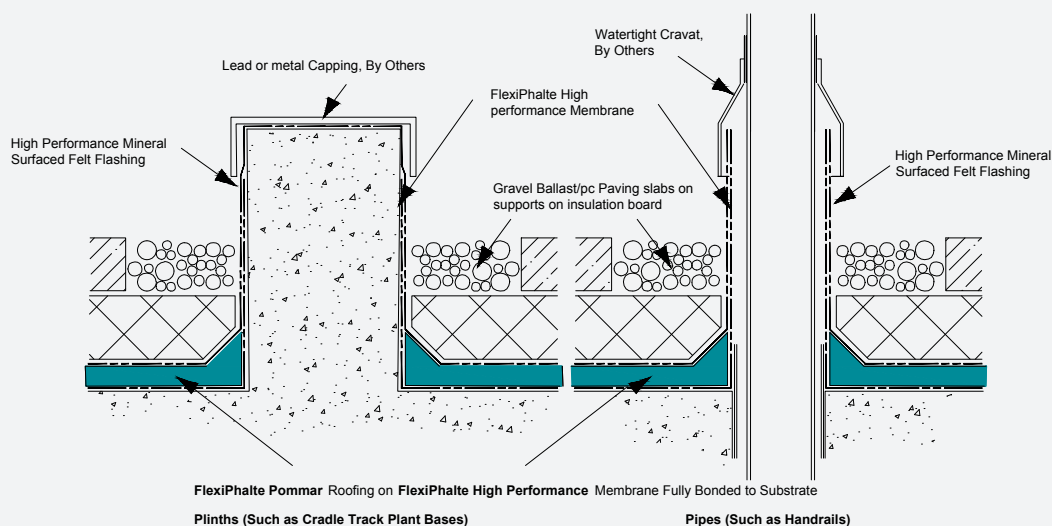
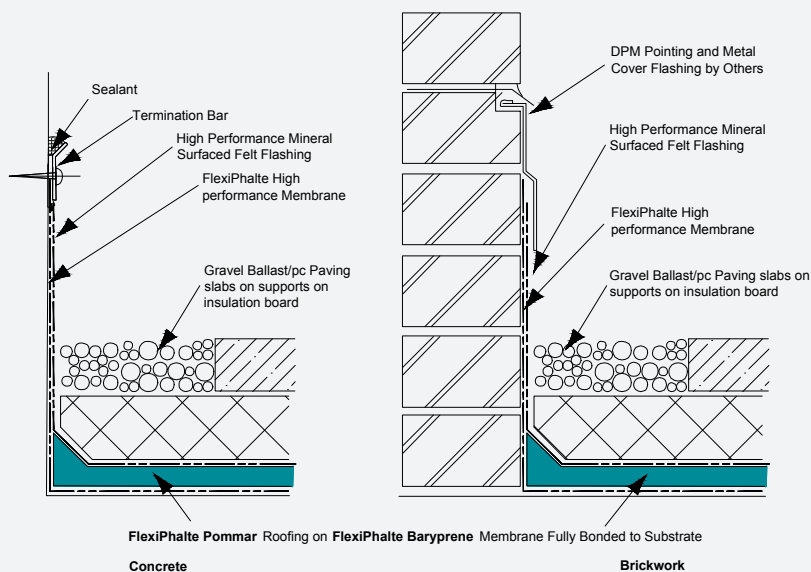


FlexiPhalte Pommar Roofing on FlexiPhalte Baryprene Membrane Fully Bonded to Substrate

Concrete

Brickwork

# Typical installation details using high performance membranes









**FlexiPhalte**  
Waterproofing Systems

**BriggsAmasco**  
roofing your world



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