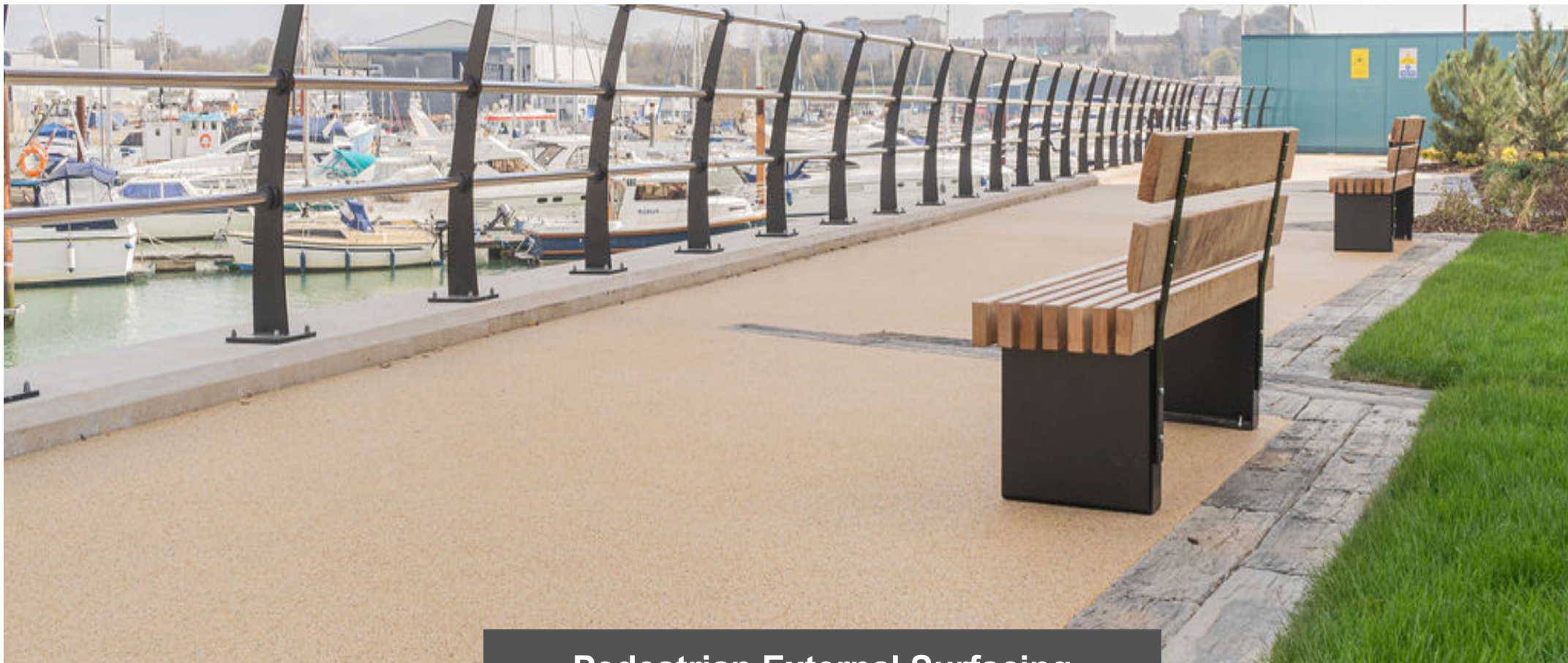


**Specification Guide**







**Pedestrian External Surfacing**

**“What a transformation! Everything was left clean and tidy in a prompt manner. It was a pleasure to work with you and your team.”**

## Public Pedestrian Use

SureSet surfaces are intended to be used by normal expected levels of pedestrian or vehicular traffic for which they have been designed. Protection should be provided wherever possible against abnormal usage. All base layers are to be constructed by others.

### SureSet surface

Aggregate size of 3mm requires a standard depth of 16mm  
Aggregate size of 6mm requires a standard depth of 18mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.

### Asphalt binder course

70mm minimum depth of maximum size AC 10 open graded asphalt.  
Max 100/150 pen to BS EN13108-1:2006 (Bituminous Macadam) or (recommended BBA approved polymer modified binder).

### Sub-base

175mm minimum depth of well compacted Type 3 granular sub-base to SHW clause 805 or 4/40mm, 4/20mm graded crushed concrete aggregate to BS EN12620 or locally available secondary or recycled aggregates which comply with the above specification blinded with 2/6.3mm graded crushed concrete aggregate to BS EN12620.

### Membrane

An impermeable membrane to convey water to retention/detention/storage systems etc

### OR

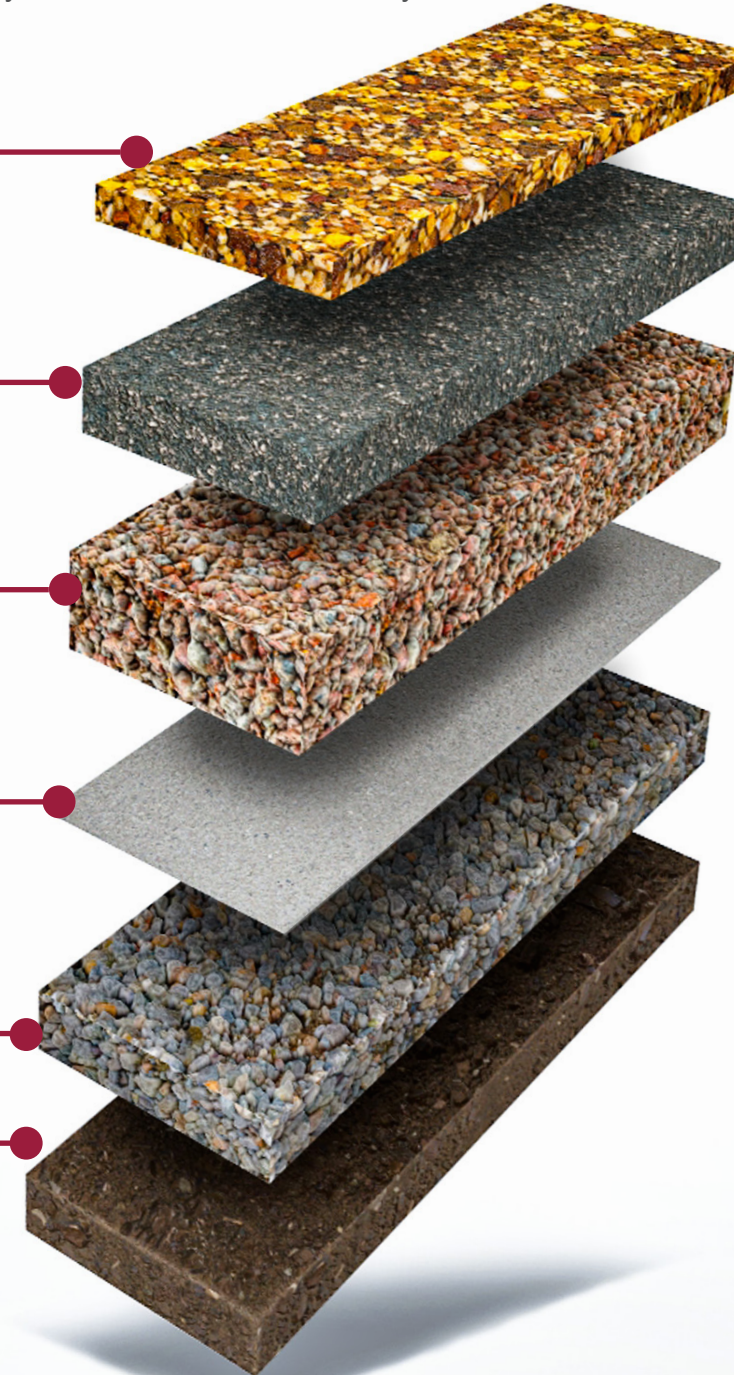
A geo-textile separation membrane to allow infiltration directly into sub-grade and to prevent upward migration.

### Capping/Improvement layer

If required, in one or more layers.

### Sub-grade

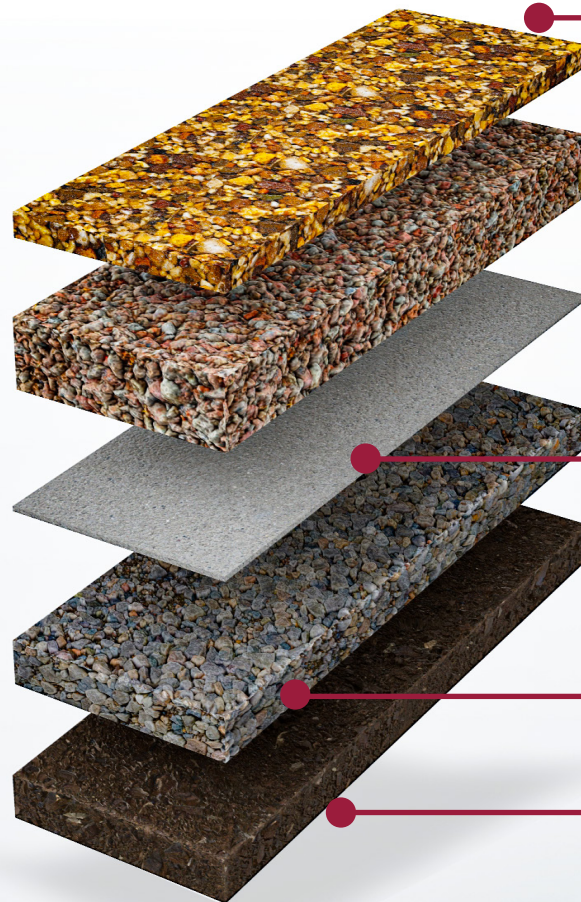
Top soil stripped back until organic and vegetative material has been removed.







## Rural Pedestrian Use



### **SureSet surface**

Aggregate size of 6mm requires a standard depth of 30mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.

### **Sub-base**

A 75-100mm minimum depth of well compacted Type 3 granular sub-base to SHW clause 805 or 4/40mm,4/20mm graded crushed concrete aggregate to BS EN12620 or locally available secondary or recycled aggregates which comply with the above specification blinded with 2/6. 3mm graded crushed concrete aggregates to BS EN 12620.

### **Membrane**

An impermeable membrane to convey water to retention/detention/storage systems

### **OR**

A geo-textile separation membrane to allow infiltration directly into sub-grade and to prevent upward migration

### **Capping/Improvement layer**

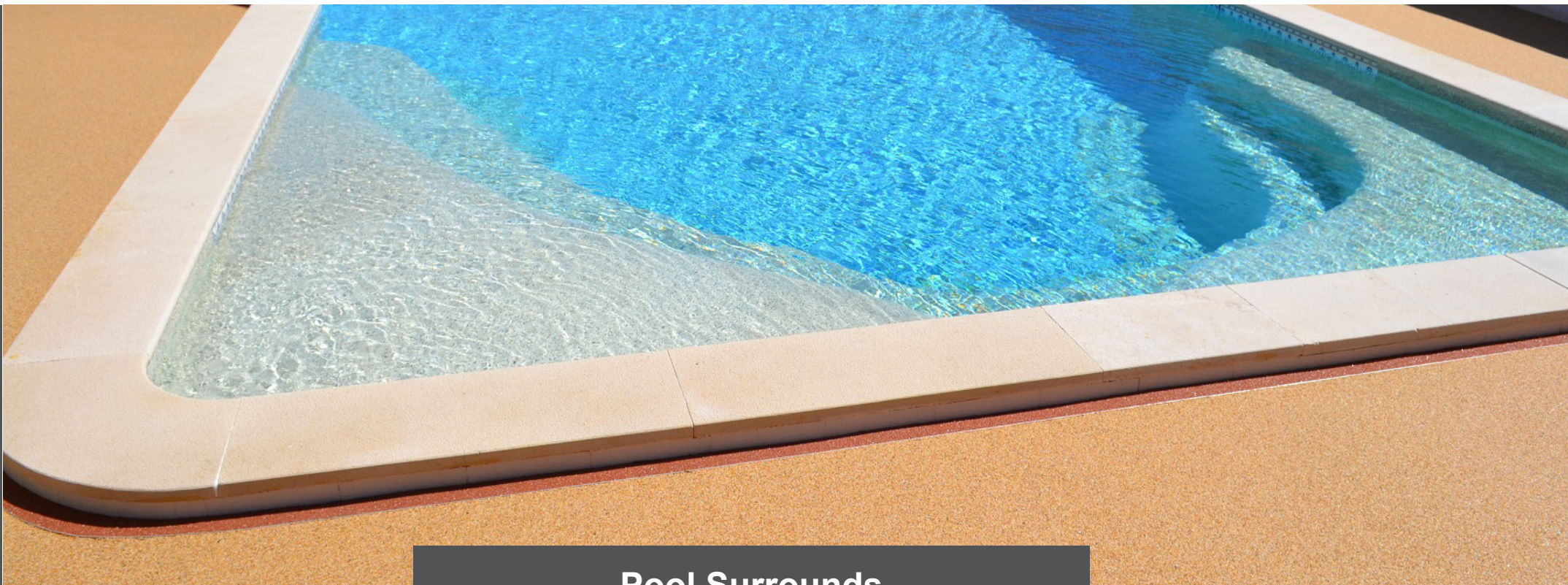
If required, in one or more layers.

### **Sub-grade**

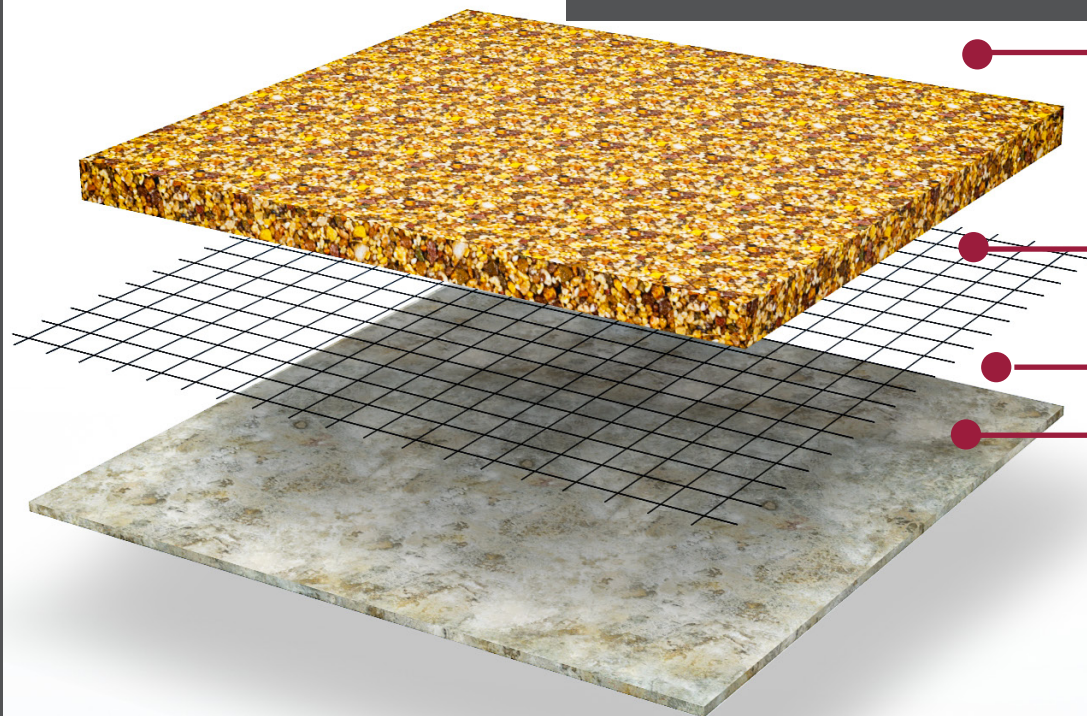
Top soil stripped back until organic and vegetative material has been removed.

**“We have always been impressed by the quality of the products and efficiency of the service.”**





## Pool Surrounds



**SureSet surface**

Aggregate size of 3mm requires a standard depth of 12mm.

**Crack reduction membrane**

To reduce possibility of cracks propagating up from the base.

**Primer**

**Tiled concrete base**

Well compacted layers to a minimum fall of 1.5% (1:66) to drainage and in accordance with design requirements. A 100mm minimum depth of PAV1 designated fibre reinforced concrete to BS 8500 or as specified by the engineer. Tamped and lightly brushed finish. New concrete should be left to cure for at least 7 days and primed with a polymer primer.





## **Vehicular External Surfacing**

**“SureSet have an overwhelmingly meticulous work ethic.  
I seen my drive come to life and looking brand new.”**



## Heavy Vehicular Use

### SureSet surface

Aggregate size of 3mm requires a standard depth of 18mm  
Aggregate size of 6mm requires a standard depth of 20mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.

### Asphalt binder course

40mm minimum depth of maximum size AC 10 open graded asphalt.  
Max 100/150 pen to BS EN13108-1:2006 (Bituminous Macadam) or  
(recommended BBA approved polymer modified binder).

### Road Base

Laid by others in well compacted layers. A 100mm minimum depth of maximum  
AC 20mm open bin asphalt concrete max 100/150 pen to BS EN13108:2006  
(Bituminous Macadam) or BBA approved polymer modified binder).

### Sub-base

300-650mm minimum depth of well compacted Type 3 granular sub-base to  
SHW clause 805 or 4/40mm, 4/20mm graded crushed concrete aggregate to BS  
EN12620 or locally available secondary or recycled aggregates which comply with  
the above specification blinded with 2/6.3mm graded crushed concrete aggregate  
to BS EN12620.

### Membrane

An impermeable membrane to convey water to retention/detention/storage  
systems etc

### OR

A geo-textile separation membrane to allow infiltration directly into sub-grade and  
to prevent upward migration

### Capping/Improvement layer

If required, in one or more layers.

### Sub-grade

Top soil stripped back until organic and vegetative material has been removed.



For use up to approximately 7.5 tonne gross vehicle weight or  
similar weight vehicle.



## Light Vehicular Use



### **SureSet surface**

Aggregate size of 3mm requires a standard depth of 16mm  
Aggregate size of 6mm requires a standard depth of 18mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.

### **Asphalt binder course**

70mm minimum depth of maximum size AC 10 open graded asphalt.  
Max 100/150 pen to BS EN13108-1:2006 (Bituminous Macadam) or (recommended BBA approved polymer modified binder).

### **Sub-base**

175mm minimum depth of well compacted Type 3 granular subbase to SHW clause 805 or 4/40mm, 4/20mm graded crushed concrete aggregate to BS EN12620 or locally available secondary or recycled aggregates which comply with the above specification blinded with 2/6.3mm graded crushed concrete aggregate to BS EN12620.

### **Membrane**

An impermeable membrane to convey water to retention/detention/storage systems etc

### **OR**

A geo-textile separation membrane to allow infiltration directly into sub-grade and to prevent upward migration.

### **Capping/Improvement layer**

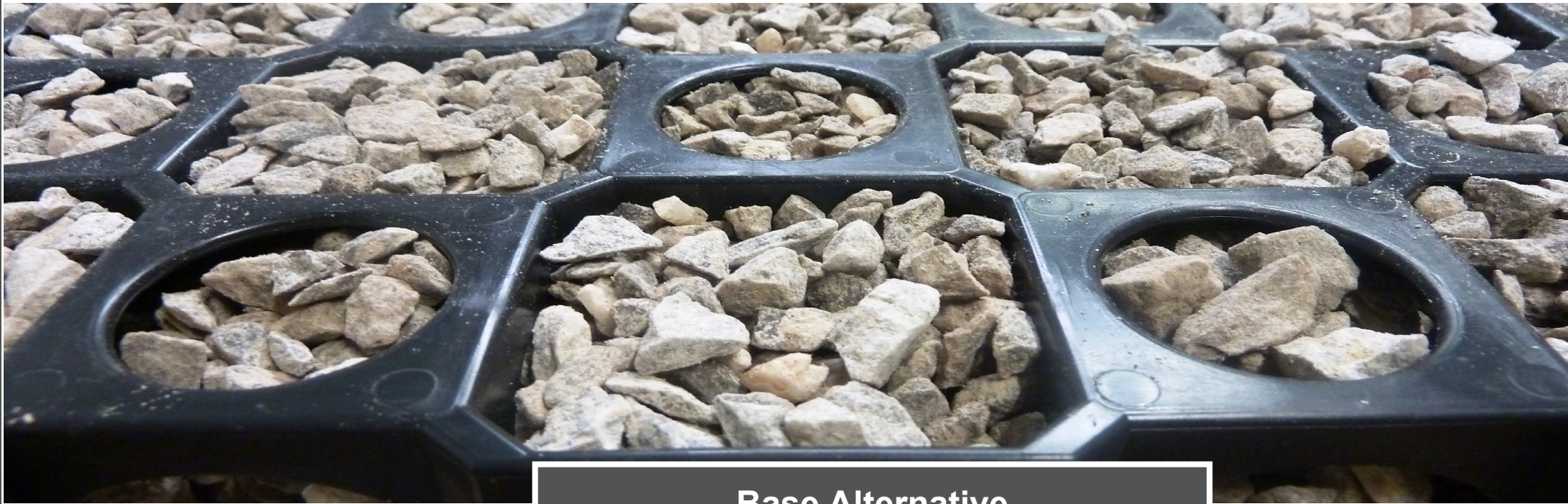
If required, in one or more layers.

### **Sub-grade**

Top soil stripped back until organic and vegetative material has been removed.

For residential driveways use.





## Base Alternative



### **SureSet surface**

Aggregate size of 3mm requires a standard depth of 24mm  
Aggregate size of 6mm requires a standard depth of 24mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.



### **SureCell**

52mm depth fully connected cellular reinforcement structure infilled with well compacted 4/10mm graded crushed aggregate to BS EN12620



### **Sub-base**

A minimum 75-150mm depth of well compacted Type 3 granular sub-base to SHW clause 805, or 4/40mm, 4/20mm crushed aggregate to BS EN12620 or locally available secondary or recycled aggregates which comply with the above specification blinded with 2/6.3mm graded crushed concrete aggregate to BS EN12620.



### **Membrane**

An impermeable membrane to convey water to retention/detention/storage systems  
**OR** A geo-textile separation membrane to allow infiltration directly into sub-grade and to prevent upward migration.



### **Capping/Improvement layer**

### **Sub-grade**





## Tree Surround External Surfacing

**“SureSet were committed to ensuring that the best-finished product was achieved, on a project where precision was paramount. Professional, helpful and polite throughout, from concept to aftercare.”**



## Tree Surround Use

### SureSet surface

Aggregate size of 6mm requires a standard depth of 24-30mm  
Aggregate size of 10mm requires a standard depth of 30mm  
Fine grit is lightly cast onto an uncured surface.

### Choose 1 of 3 base options below

#### 1. SureCell

Installed by SureSet or others. 52mm depth fully connected cellular reinforcement structure infilled with well compacted 4/10mm graded crushed aggregate to BS EN12620.

#### 2. Tree sand

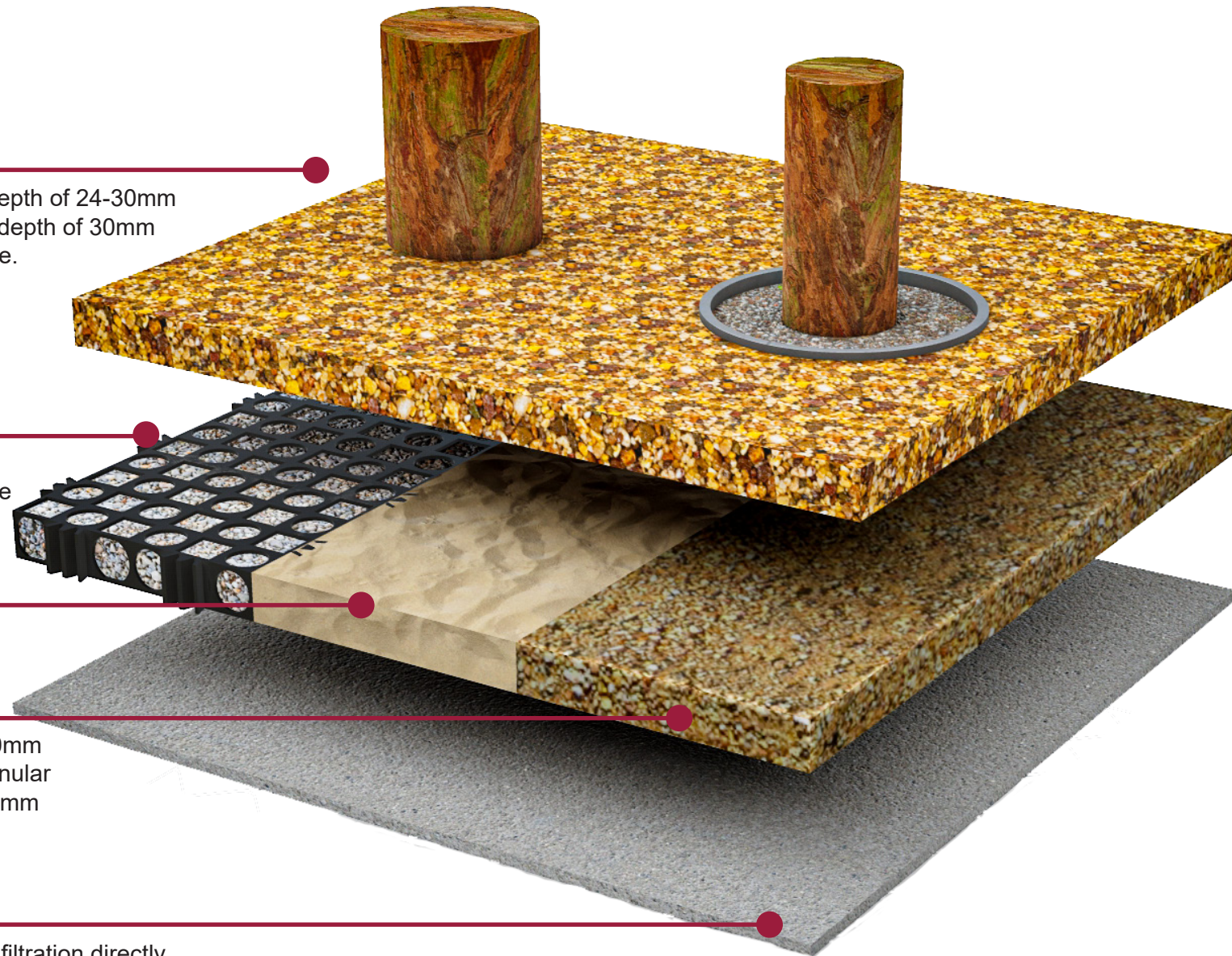
Laid by others in well compacted layers to Arborist's specification.

#### 3. Granular sub base

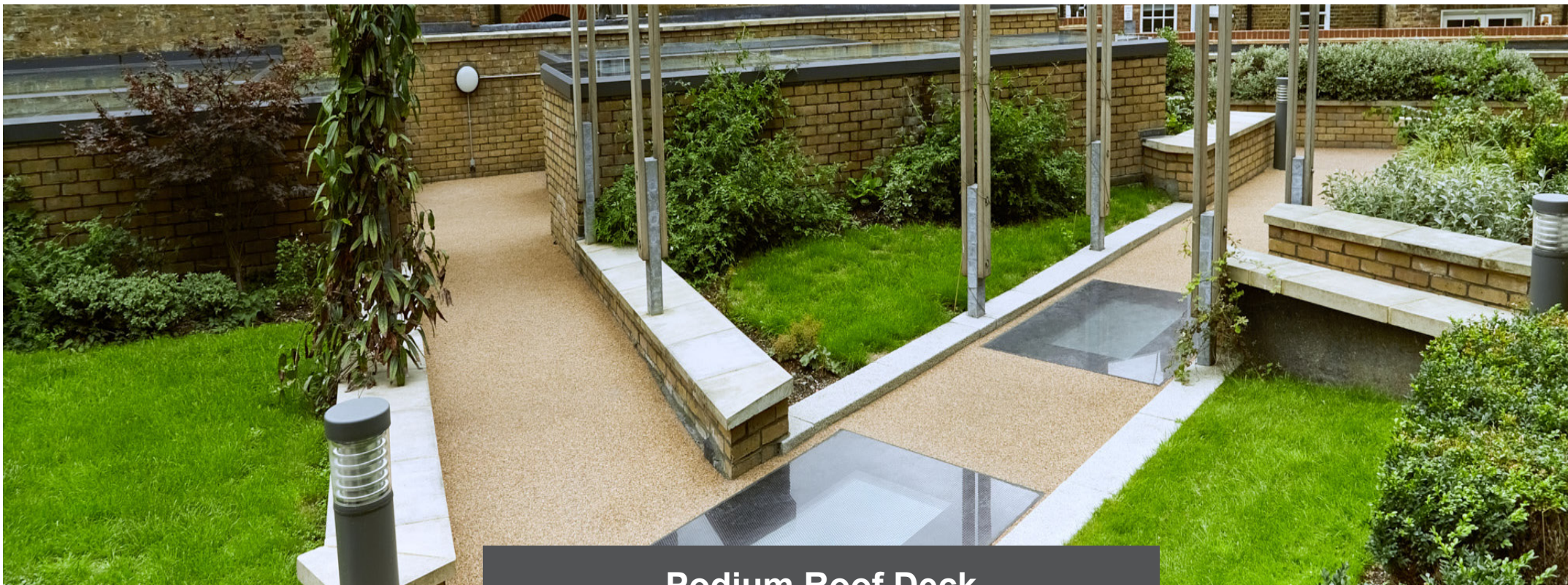
Laid by others in well compacted layers. A 150mm minimum depth of well compacted Type 3 granular subbase to SHW clause 805 or 4/40mm, 4/20mm blinded with 2/6.3mm crushed stone graded concrete aggregate. EN12620.

#### Membrane

A geo-textile separation membrane to allow infiltration directly into sub-grade and to prevent upward migration.







## Podium Roof Deck

**“Every order we have placed with SureSet has been dealt with in a friendly and timely manner. Couple that with a top quality product and fantastic aftercare, means we don’t go anywhere else”**



## Podium Roof Deck

### SureSet surface

Aggregate size of 3mm requires a standard depth of 24mm  
Aggregate size of 6mm requires a standard depth of 24mm  
Fine grit is lightly cast onto an uncured surface.



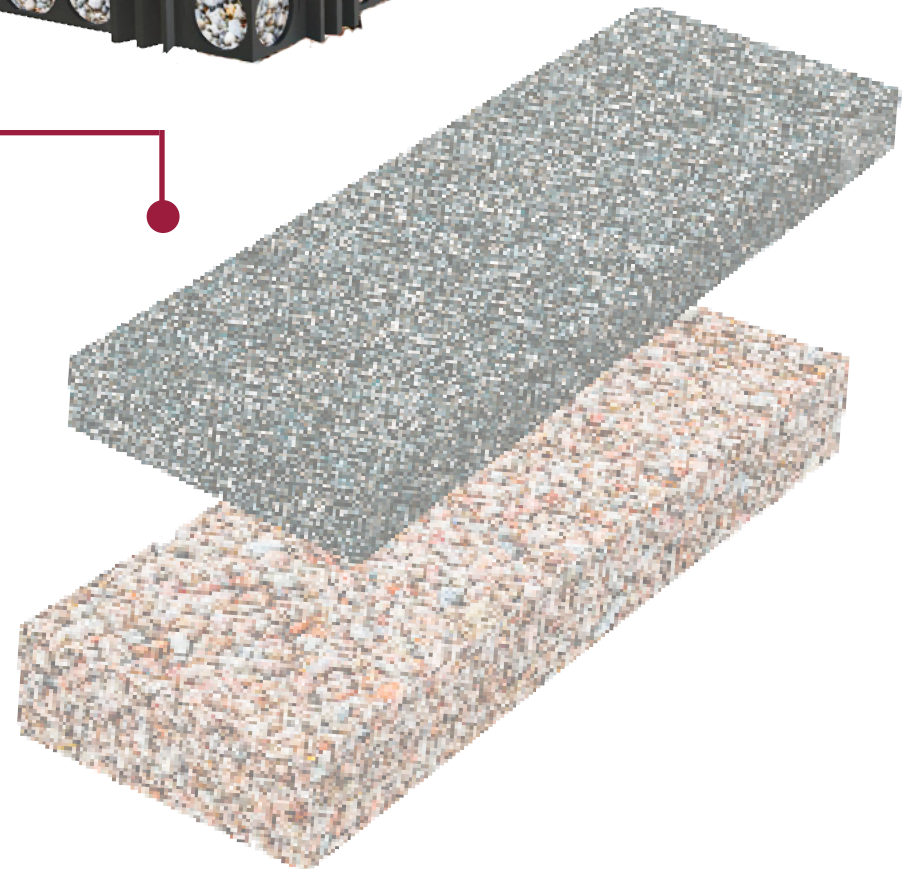
### SureCell

Installed by SureSet or others. 52mm depth fully connected cellular reinforcement structure infilled with well compacted 4/10mm graded crushed aggregate to BS EN12620.



### Sub base and Concrete deck

Both have varying requirements and should be installed by others to a podium roof engineers specification.



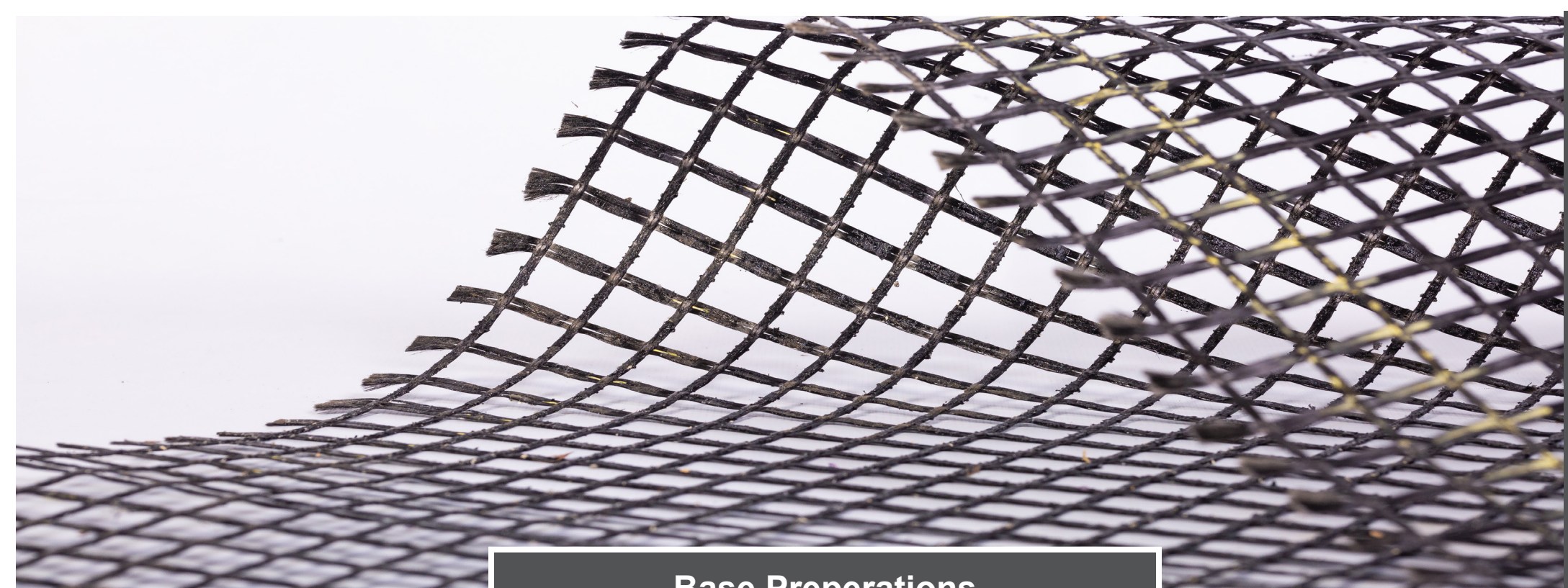
### Note

The 24mm depth SureSet layer combined with the SureCell layer have been tested as a system to Broof(t4) certification. This buildup did not include any underlying layers and any full system inclusive of all the layers will need to be designed by an engineer and will require approval by Building Regulation or an appropriate authority on a case by case basis.

Scan for roof testing results >







## Base Preparations

### **CRM Crack Reduction Membrane**

Crack Reduction Membrane (CRM) is used on asphalt, concrete and other compacted base types to successfully control distortion due to expansive soils and to help reduce reflection cracking in resin bound overlays.

CRM is an exceptionally strong geosynthetic reinforcing mat. It consists of glass fibre strands, arranged in a grid structure, covered, and impregnated with a polymer adhesive.

### **Application**

The CRM can be either laid over the complete surface or just applied in strips along existing cracks/joints depending on the assessment of the condition of the surface. CRM is applied directly to a clean and dry asphalt surface and pressure applied underfoot or with a small roller so that it adheres in place.

Concrete surfaces should be primed, and the CRM then applied. On unbound surfaces the CRM may need to be pinned or weighted to hold it in position. Any joints in the CRM should be overlapped by at least 150mm and widths should be at least 150mm either side of a crack/joint. SureSet surfacing is then applied as normal over the CRM.



## Surface Maintenance

### Tyre Marks

SureSet surfaces can be marked by tyre residue and bitumen or dirt and dust tracked onto them from other surfaces. Marking can be reduced by avoiding turning 'on the spot', and other manoeuvres that cause scuffing of the surface. To clean tyre marks from the surface, use detergent and a stiff broom.

### Ice or Frost

The removal of ice or frost from the surface can be achieved by the application of rock salt. The area can also be treated with rock salt prior to cold weather to prevent freezing occurring in the first place. When the weather has returned to normal, (non freezing conditions) the surface should be well rinsed with clean water to remove any traces of the salt.

### Washing

Washing can be carried out by hand using a portable cold water pressure washer (typically up to 150 bar rating) for smaller areas, providing care is taken not to damage the SureSet with excessive pressure by holding a lance too close to the surface or with a narrow jet focused on a single spot. Stubborn stains should be removed by lightly scrubbing the affected area with warm water and detergent using a plastic or natural fibre bristle brush. We would recommend the use of a rotary type patio cleaner over a wand for improved cleaning consistency. For larger areas mechanical brush, pressure washer cleaning can be used provided that precautions are taken to keep the pressure and frequency of application to a minimum whilst being consistent with cleaning of the surface. We would always recommend that the particular method to be used is trialed before extensive use.

### Notes

- SureSet can be laid onto existing sound asphalt or concrete surfaces of suitable construction for the traffic expected.
- Movement joints/construction joints in concrete should be extended up to the surface of the SureSet. Cracks should be broken out if necessary and filled with a polymer/cement crack filling material.
- It is recommended that all concrete bases are primed with SureSet primer prior to installation.
- Areas that may be trafficked by light and heavy vehicles should have structural layers designed according to Highways Agency requirements.
- The maximum deviation of the binder course should not exceed 3mm under a 1 metre straight edge.
- The maximum deviation of the sub-base layer should not exceed 5mm under a 1 metre straight edge.
- The thickness of the sub-base layer required is dependent on sub-grade soil conditions and expected loading.
- If plastic or silty sub-grade is present (CBR <2%) then a granular capping layer may be necessary.
- Any sub-base should be laid in a damp condition and compacted using multiple passes of a vibrating plate compactor or suitable vibrating roller.
- SureSet can be overlaid onto existing soil of an established tree, providing the soil is free draining.

For further information on any of the above please contact SureSet Technical Sales on 01985 841180



# SureSet

## Resin Systems



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