



# GROUNDWORKS

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THE SURFACE IS ONLY AS GOOD AS  
THE SUB-BASE BENEATH

## SAFETY SURFACING

### MULCH GROUNDWORKS

SURFACE DEPTH	CONCRETE	MACADAM	WETPOUR	FLAGS	SOIL / GRASS	MOT TYPE 1
40-60mm	✓	✓	✓	✓ *	✓	✓

Surface depth is dependent on quality of original surface. \* May require a fiber glass mesh prior to application of mulch to prevent fall-through of rubber shreds

### WETPOUR GROUNDWORKS

SURFACE DEPTH	CONCRETE	MACADAM	WETPOUR	FLAGS	SOIL / GRASS	MOT TYPE 1
20mm - wearing course only (no CFH)	✓	✓	✓	✗	✗	✗
30mm - 130mm - wearing & base course (CFH)	✓	✓	✓	✓ *	✗	40mm + ✓

Surface depth is dependent on quality of original surface. \* May require a fiber glass mesh prior to application of wetpour to prevent fall-through of granulate

### PLAY GRASS GROUNDWORKS

LAID TO	CONCRETE	MACADAM	WETPOUR	FLAGS	SOIL / GRASS	MOT TYPE 1
No Shockpad	✓	✓	✓	✗	✗	✗
15mm SBR	✓	✓	✓	✗	✗	✗
25mm SBR	✓	✓	✓	✓ *	✗	✓
Sand	✗	✗	✗	✗	✗	✓

Surface depth is dependent on quality of original surface. \* May require a fiber glass mesh prior to application of SBR to prevent fall-through of granulate

## DECORATIVE SURFACES

### BONDED GRAVEL GROUNDWORKS

SURFACE DEPTH	CONCRETE	DENSE MACADAM 6MM	RUBBER-GRAVEL	FLAGS	SOIL / GRASS	MOT TYPE 1
2-5mm	✓	✓	✗	✗	✗	✗

Surface depth is dependent on quality of original surface.

### BOUND GRAVEL GROUNDWORKS

SURFACE DEPTH	CONCRETE	MACADAM	RUBBER-GRAVEL	FLAGS	SOIL / GRASS	MOT TYPE 1
16mm - Pedestrian	✓	✓	✗	✗	✗	✗
18mm - Pedestrian	✓	✓	✓	✓ *	✗	✗
18-20mm - Vehicles	✓	✓	✗	✓ *	✗	✗
24mm+ - HGV	✓	✓	✗	✗	✗	✗
25-50mm - Tree Pits	N/A	N/A	✓	✗	✗	✓

Surface depth is dependent on quality of original surface. \* May require a fiber glass mesh prior to application of gravel to prevent fall-through



# STRUCTURAL SURFACES

## RUBBER-GRAVEL MIX GROUNDWORKS

SURFACE DEPTH	CONCRETE	MACADAM	WETPOUR	FLAGS	MOT TYPE 1	SOIL
25mm	✓	✓	✗	✓*	✓	✗
35mm	✓	✓	✓	✓*	✓	✗
50mm+	✓	✓	✓	✓*	✓	✓

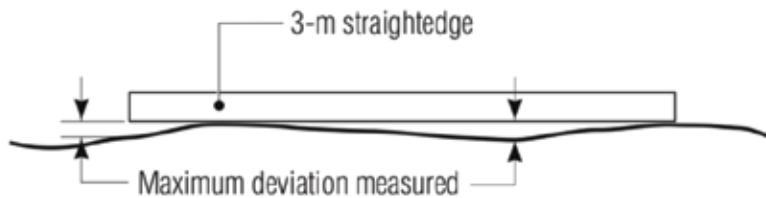
Surface depth is dependent on quality of original surface. \* May require a fiber glass mesh prior to application of rubber-gravel mix to prevent fall-through of granulate

# OTHER FEATURES

OTHER FEATURES	W/P	MULCH	GRAVEL	POLYMERIC	RUBBER-GRAVEL MIX	ARTIFICIAL GRASS
Mounds	✓	✓	✗	✓	✓	✓
Tree Pits	✗	✓	✓	✗	✓	✗

# GUIDE TO GOOD GROUNDWORKS

Use in conjunction with each products surfacing guide.



## APPLIES TO ALL SURFACES:

- ✓ Any deviations should be such that when a 3m long straight edge is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than  $\pm 6\text{mm}$ .
- Any undulations in the sub-base will require regulating with MOT stone or SBR rubber granules. This will incur additional costs in materials and time spent onsite



## MOT STONE GROUNDWORKS CHECKLIST

- ✓ The sub-base should be dry, level and compact all over
- ✓ The sub-base should be MOT Type 1
- ✓ The surface should have suitable drainage
- ✓ The surface should be clear of obstacles / piled debris
- ✓ A weed membrane should be installed beneath the stone
- ✓ Edges should be installed to the correct depth



## EXISTING CONCRETE GROUNDWORKS CHECKLIST

- ✓ The base should be dry, solid and crack free
- ✓ The base should be clear of obstacles / piled debris
- ✓ The surface should have suitable drainage (laid to falls)
- ✓ The base should be clear of weeds / moss
- ✓ Edges should be installed to the correct depth



## MACADAM GROUNDWORKS CHECKLIST

- ✓ The sub-base should be dry, solid and crack free
- ✓ The sub-base should be level
- ✓ The sub-base should be clear of obstacles / piled debris
- ✓ The sub-base should be clear of weeds / moss
- ✓ Edges should be installed to the correct depth

# GUIDE TO GOOD GROUNDWORK'S

Use in conjunction with each products surfacing guide.



## EXISTING FLAGS GROUNDWORKS CHECKLIST

- ✓ Flags should be dry, level and crack-free
- ✓ The surface should be clear of obstacles
- ✓ The sub-base should be clear of weeds / moss
- ✓ Flags should be clean of dirt and debris
- ✓ The surface should have suitable drainage (laid to falls)
- ✓ If required, a fiber-glass mesh can be installed to create a continuous surface over the paving



## SOIL / GRASS GROUNDWORKS CHECKLIST

- ✓ The sub-base should be dry, solid and compact (no soft spots)
- ✓ Long grass should be trimmed
- ✓ The sub-base should be clear of obstacles / piled debris and tree roots
- ✓ The surface should be dry
- ✓ Edges should be marked out where possible
- ✓ Undulations should be regulated



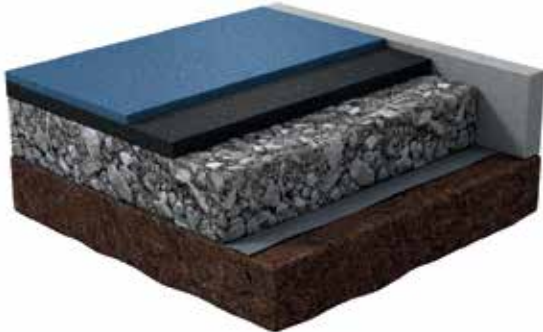
## EXISTING WETPOUR GROUNDWORKS CHECKLIST

- ✓ The sub-base should be dry and clean
- ✓ The sub-base should be clear of obstacles / piled debris
- ✓ The surface should be level - any undulations in the surface should be regulated prior to overlay

# SURFACE LAID DIRECT TO MOT TYPE 1 STONE

## PLAY / SAFETY SURFACING

### WETPOUR



#### BUILD UP

1. Min 15mm EPDM wearing course
2. 25mm SBR base course
3. Min 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile layer
5. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

### RUBBER MULCH



#### BUILD UP

1. Min 40mm Rubber Mulch
2. Recommended min 50mm MOT type 1 dependent on ground conditions
3. Geotextile layer
4. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

### PLAY / LANDSCAPE GRASS



#### BUILD UP

1. Artificial grass layer
2. 25mm SBR rubber shockpad
3. 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile
5. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

# SURFACE LAID DIRECT TO MOT TYPE 1 STONE

## STRUCTURAL SURFACING

### RUBBER-GRAVEL MIX



#### BUILD UP

1. 35mm rubber gravel mix
2. Min 100mm MOT type 1 dependent on ground conditions
3. Geotextile
4. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber



# MOT STONE PRE-INSTALL SPECIFICATION

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

## 1. SUB-BASE OF THE ENTIRE AREA MUST BE SOLID AND COMPACT



SUB BASE CONTAINS LARGE STONES WITH NO FINES



SUB BASE HAS TOO MANY FINES

### MOT TYPE 1 IS STRONGLY RECOMMENDED

MOT stone should be hard, clean, crushed and frost-resistant. The material should be laid in layers not exceeding 100mm, each layer being compacted before the next is laid. Wetpour should be graded 40mm down to achieve required depths.

The grading of the sub-base material must ensure that gaps are large enough to allow drainage, but fine enough to level the surface and prevent granules from falling through the sub-base.

The sub-base material should be well compacted such that, upon completion, there shall be no detectable movement.

### COMMON ISSUES:

- Edges haven't been compacted
- Sub-base stone used is too fine / large
- Sub-base is not dry

Leveling the area with a rake and crushing the stone with a whacker plate can create the fines required for a solid platform.



SUB-BASE IS NOT SOLID OR COMPACT - NEEDS TO DRY BEFORE INSTALL



EDGES REQUIRE COMPACTING

## 2. SUB-BASE MUST BE LEVEL



AREA LEVELLED WITH A RAKE BEFORE COMPACTING



WHACKER USED TO COMPACT STONE

Any deviations should be such that when a 3m long straight edge is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than +/-6mm.



UNDULATIONS ARE GREATER THAN 10MM



UNDULATIONS ARE LESS THAN 10MM



# MOT STONE PRE-INSTALL SPECIFICATION

## 7. EDGES SHOULD BE INSTALLED TO THE CORRECT DEPTH



HEIGHT OF EDGE IS EQUAL TO DEPTH OF NEW SURFACE



HEIGHT OF EDGE IS EQUAL TO DEPTH OF NEW SURFACE

Where edgings are used, the dimensions from the top of the edge to the top level of the sub-base should be equal to the depth of the surface to be laid on.

Edgings should be present on all sides of area to be installed. See product build-up to ensure correct height of edge.

When edges are not clean, durable or straight, the new surface is unable to achieve a cohesive bond with the surface.

This may cause shrinkage from the edges and invalidate the DCM warranty.



HEIGHT OF EDGE IS NOT EQUAL TO DEPTH OF NEW SURFACE



NEW SURFACE IS FLUSH WITH EDGE



EDGES ARE NOT STRAIGHT OR CLEAN. THIS PREVENTS A STRONG BOND WITH THE EDGE



WETPOUR CANNOT BE INSTALLED DIRECTLY TO THE EDGE



EDGING ARE NOT PRESENT ON ALL SIDES



EDGINGS ARE NOT EQUAL TO THE DEPTH OF THE NEW WETPOUR SURFACING - RAMP DOWN REQUIRED

# MOT STONE PRE-INSTALL SPECIFICATION

## 3. SUB-BASE SHOULD HAVE SUITABLE DRAINAGE



A DRAINAGE CHANNEL HAS BEEN INSTALLED. MOT STILL TO BE LEVELED



A DRAINAGE GULLY HAS BEEN INSTALLED. MOT STILL TO BE COMPLETED

An appropriate drainage bed can be laid prior to laying the MOT to ensure that water will drain away freely through the sub-base material, either into the natural sub soil or into the drainage system.

NOTE: Unless specifically highlighted prior to installation, existing manhole covers / access points will be ramped down or overlaid with surfacing.

Please advise if recessed manholes are required.

## 4. EVEN AND CONSISTENT TEXTURE



SURFACE IS NOT LEVEL UNDER EQUIPMENT



HOLES HAVE NOT BEEN BACKFILLED

Holes should be back-filled and there should be no ridges, grooves, creases or changes in the surface texture anywhere on the area that would be deemed to cause a trip hazard.

Note: Holes which have not been backfilled will require additional materials.

## 5. THE SURFACE MUST BE CLEAR OF OBSTACLES / PILED DEBRIS:



DEBRIS HAS NOT BEEN CLEARED FROM SITE



SURFACE IS CLEAN AND CLEAR OF DEBRIS

Piles of rubbish, debris, aggregate or other objects will mean DCM are on site longer which may incur additional costs.

## 6. THE SURFACE SHOULD BE CLEAN AND FREE FROM WEEDS / MOSS:



SURFACE IS NOT CLEAN OR CLEAR OF DEBRIS



SURFACE IS NOT CLEAR OF WEEDS / MOSS

The surface should be left clean - ideally no excess mud or dirt should be left on the area. The area should be free of weeds or moss and there should be no roots or rocks just below the sub-base.



# SURFACE LAID DIRECT TO MACADAM

## SPORT SURFACING

### ARTIFICIAL GRASS



Macadam should be laid at least 7 before installing the artificial grass shockpad.

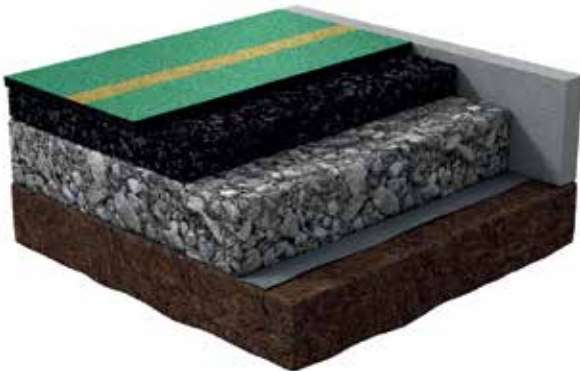
#### BUILD UP

1. Artificial grass layer
2. 15-25mm SBR rubber shockpad
3. 25mm open textured surface course macadam AC6
4. 50mm AC20/14 macadam
5. 150-300mm MOT type 1 dependent on ground conditions
6. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, and Ramp Down

### POLYMERIC ANTI-SLIP



Macadam should be laid min 7 days before installing polymeric surfaces.

#### BUILD UP

1. Anti-slip coating and line markings
2. 12-15mm EPDM rubber
3. 25mm open textured surface course macadam AC6
4. 50mm open textured binder course macadam AC20/14
5. 100-300mm MOT type 1 dependent on ground conditions
6. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, and Ramp Down

### POLYMERIC STRUCTURE SPRAY



Macadam should be laid min 7 days before installing polymeric surfaces.

#### BUILD UP

1. Line markings
2. 2-3mm of 0.5-1.5mm EPDM rubber granules (structured spray)
3. 10-15mm of 1-3mm SBR rubber shockpad
4. 50mm open textured binder course macadam AC20/14
5. 100-300mm MOT type 1 dependent on ground conditions
6. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, and Ramp Down



# SURFACE LAID DIRECT TO MACADAM

## DECORATIVE / STRUCTURAL SURFACING

### BOUND GRAVEL



Macadam should be laid at least 7 days before installing gravel.

#### BUILD UP

1. 16-24mm resin bound gravel
2. 50mm AC14 open texture binder course macadam
3. 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

**NOTE:** A sealant gel can be applied to the top layer of the bound gravel if a non porous surface is required. However, this will affect the warranty of the product as the surface can become slippery in wet conditions or hold water if there are no falls to nearby drainage facilities.

### BONDED GRAVEL



Macadam should be laid min 30 days before installing bonded gravel. As bonded gravel is laid to 3mm, all deviations will show if the surface is not completely leveled.

#### BUILD UP

1. 3mm resin bonded gravel
2. 25mm AC6 dense surface course macadam
3. 50mm AC 20/14 dense binder course
4. 100-300mm MOT type 1 dependent on ground conditions
5. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

### RUBBER-GRAVEL MIX



Macadam should be laid min 7 days before installing rubber-gravel mix.

#### BUILD UP

1. 25-50mm rubber gravel mix
2. 50mm AC14 open texture binder course macadam
3. 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

# SURFACE LAID DIRECT TO MACADAM

## PLAY SURFACING

### WETPOUR



Macadam should be laid min 7 days before installing wetpour.

#### BUILD UP

1. 20 -130mm wet pour dependent on CFH.
2. 50mm open textured binder course macadam AC10 or AC14.
3. 100-300mm MOT Type 1 dependent on ground conditions
4. Geotextile layer
5. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

### RUBBER MULCH



Macadam should be laid min 7 days before installing rubber mulch.

#### BUILD UP

1. 40mm mulch layer dependent on CFH.
2. 50mm open textured binder course macadam AC10 or AC14.
3. 100-300mm MOT Type 1 dependent on ground conditions
4. Geotextile layer
5. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

# MACADAM PRE-INSTALL SPECIFICATIONS

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

Macadam should be laid at least 7 days before installation to allow the oils in the materials to dissipate (30 days when installing bonded gravel). If installed earlier, there is a risk that the sub-base may not bond correctly to the new surface, or oils in the macadam will seep through and stain the wearing course.

## 1 SUB-BASE MUST BE LEVEL



UNDULATIONS ARE GREATER THAN 10MM

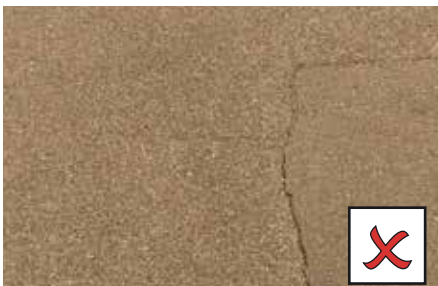


UNDULATIONS ARE LESS THAN 10MM

Any localised bumps or hollows should be such that when a 3m long stringline is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than 6mm.

Additionally, there should be no ridge, grooves, creases or changes in the surface texture anywhere on the area that would be deemed to cause a trip hazard.

## 2 SUB-BASE MUST BE OF SOUND CONSTRUCTION



MACADAM NOT OF SOUND CONSTRUCTION MAY CRACK



REFLECTIVE CRACKING FROM MACADAM SUB-BASE

If macadam is not laid to the correct specification, it may cause reflective cracking in the new surface.

## 3 SURFACES SHOULD BE CLEAN AND FREE FROM WEEDS / MOSS:



EQUIPMENT HAS NOT BEEN CLEARED FROM SITE



DEBRIS HAS BEEN CLEARED FROM SITE

The surface should be hosed / jet washed before laying to retain the porosity of the new surface.

NOTE: Ponding can occur where the area has not been cleaned.



# MACADAM PRE-INSTALL SPECIFICATIONS

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

## 4 POROSITY / DRAINAGE



SURFACE IS CLOGGED WITH DIRT -  
AREA IS NO LONGER PERMEABLE



SURFACE IS CLOGGED WITH DIRT

Where Macadam is used as a base for a permeable product such as bound gravel, the sub-base must also be permeable (ideally AC10 open textured).

Where Macadam is used as a base for a non-permeable product, such as bonded gravel, the sub-base must also be non-permeable (ideally AC6 dense macadam).

Macadam should be hosed with a jet wash prior to application to ensure that surface remains porous.

## 4 EDGING



HEIGHT OF EDGE IS NOT EQUAL TO  
DEPTH OF NEW SURFACE



SOME SECTIONS OF EDGES ARE NOT  
LEVEL

Where edgings are used, the dimensions from the top of the edge to the top level of the sub-base should be equal to the depth of the surface to be laid on.

When edges are not clean, durable or straight, the new surface is unable to achieve a cohesive bond with the surface.

This may cause shrinkage from the edges and invalidate the DCM warranty.

## SURFACE LAID DIRECT TO COMPACT SOIL / GRASS

### RUBBER MULCH



#### BUILD UP

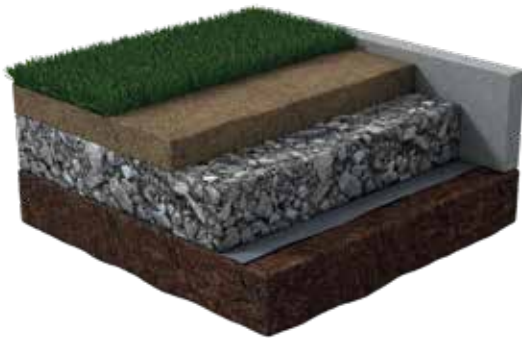
1. Min 40mm Rubber Mulch (dependant on Critical Fall Height)
2. Geotextile layer:
3. Grass
4. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber and Chase Cut

## SURFACE LAID DIRECT TO SAND

### SAND



#### BUILD UP

1. Artificial grass layer
2. 50mm sand
3. 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile
5. Soil

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

# SOIL / GRASS PRE-INSTALL SPECIFICATIONS

To achieve best results, it is recommended that Mulch is laid onto existing sub-bases of dry, sound condition.

## 1. SOLID AND COMPACT GROUNDWORKS:



DUE TO HEAVY RAINFALL, SOIL IS SOFT UNDERFOOT



SOFT SPOTS CAN BE CREATED WHEN MULCH IS LAID ONTO WET SOIL / GRASS

Laying on any ground that may latterly move or get washed away may result in post install undulations and / or soft spots in the surface. Where CFH's are required, the existing ground should be compacted and a stone sub-base installed to avoid any future movement.

## 2 LONG GRASS MUST BE STRIMMED



AREA IS CLEAR OF DEBRIS AND GRASS HAS BEEN STRIMMED



AREA IS CLEAR OF DEBRIS AND GRASS HAS BEEN STRIMMED

Long grass should be strimmed short but not killed off altogether. Shallow excavation / scabbing off the vegetation can be carried out, but care must be taken to fully compact the ground as laying on softer subsoils can lead to future deviations of the levels.

## 3. SITE MUST BE CLEAR OF OBSTACLES / PILED DEBRIS & TREE ROOTS



DEBRIS HAS NOT BEEN CLEARED FROM SITE



SURFACE IS NOT CLEAR OF TREE ROOTS

Piles of rubbish, debris, aggregate or other objects will mean DCM are on site longer which may incur additional costs.

Laying onto tree roots may affect the Critical Fall Height in some areas



# SOIL / GRASS PRE-INSTALL SPECIFICATIONS

To achieve best results, it is recommended that Mulch is laid onto existing sub-bases of dry, sound condition.

## 4. SURFACES SHOULD BE DRY



SURFACE IS NOT DRY / COMPACT



TEXTURE OF SOIL IS INCONSISTENT

The surface should be left clean - ideally no excess mud or dirt should be left in the area.

## 5. EDGINGS



MARK OUT EDGES WHERE POSSIBLE



MARK OUT EDGES WHERE POSSIBLE

When installing directly onto grass a chase cut is required to finish.

Please mark out edges where possible. This helps to ensure that the area is as per the customers design, and reduces time spent onsite.

## NOTE: WEED CONTROL

Whilst a geotextile or weed control fabric is normally used to control weed growth; rubber mulch leaves no space for light to penetrate. Therefore, weed growth through the surface is never an issue.

However, a geotextile is used as a physical barrier so that stones and other debris do not get into the mix whilst it is being spread.



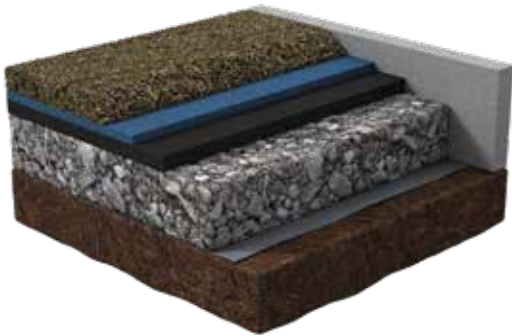
GEOTEXTILE LAYER LAID IN ADVANCE TO PREVENT WEED GROWTH



WEEDS ARE A RESULT OF WIND BLOWN SEEDS WHICH CAN EMBED INTO THE SURFACE

# SURFACE LAID DIRECT TO EXISTING WETPOUR OR RUBBER-GRAVEL MIX

## RUBBER MULCH



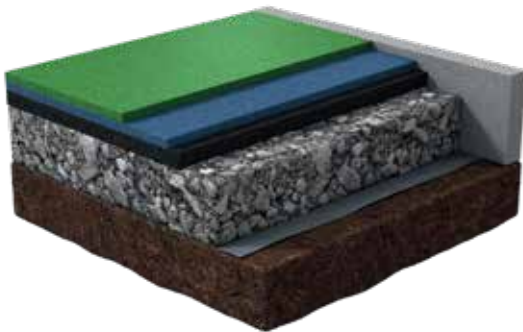
### BUILD UP

1. New mulch layer - min 40mm
2. Existing EPDM wearing course (regulate with EPDM where required)
3. Existing SBR base course

### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

## WETPOUR



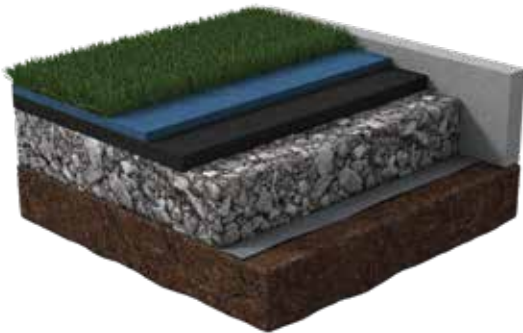
### BUILD UP

1. New wetpour layer - min 15mm EPDM wearing course
2. Existing EPDM wearing course (regulate with Black EPDM where required)
3. Existing SBR base course

### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

## ARTIFICIAL GRASS



### BUILD UP

1. Artificial grass layer
2. Existing EPDM wearing course (regulate with Black EPDM where required)
3. Existing SBR base course

### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

## BOUND GRAVEL - LAID ON NEW RUBBER-GRAVEL MIX



### BUILD UP

1. Min 20mm resin bound gravel
2. Min 35mm Rubber Gravel mix
3. 100-300mm MOT type 1 dependent on ground conditions
4. Geotextile
5. Soil

### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

**NOTE:** A sealant gel can be applied to the top layer of the bound gravel if a non porous surface is required. However, this will affect the warranty of the product as the surface can become slippery in wet conditions or hold water if there are no falls to nearby drainage facilities.

# LAYING ONTO EXISTING WETPOUR SURFACES

Overlaying existing wetpour is not advised and will limit the guarantee to structural integrity only. We do not guarantee the bond between the old and new surface and any movement which may occur in the existing wetpour surface.

## OVERLAYING MULCH OR WETPOUR ONTO WETPOUR OR POLYMERIC

### 1. THE SURFACE MUST BE CLEAN AND CLEAR OF OBSTACLES / PILED DEBRIS AND WEEDS:



DEBRIS HAS NOT BEEN CLEARED FROM SITE



DEBRIS HAS BEEN CLEARED FROM SITE AND AREA IS CLEAN AND LEVEL

Piles of rubbish, debris, aggregate or other objects will mean DCM are on site longer which may incur additional costs.

Where wetpour is overlaid, the site should first be cleaned with a hose or jet wash to ensure the new surface remains permeable.

Ideally no excess mud or dirt should be left on the area.



AREA IS NOT CLEAN - RISK OF PONDING



SURFACE IS CLOGGED WITH DIRT - AREA IS NO LONGER PERMEABLE



AREA IS NOT CLEAR OF OBSTACLES



AREA IS NOT CLEAR OF OBSTACLES



# LAYING ONTO EXISTING WETPOUR SURFACES

WHERE THE ORIGINAL SURFACE IS UNEVEN, MULCH IS THE MOST COST-EFFECTIVE SOLUTION FOR OVERLAYING.

## 2. SUB-BASE MUST BE LEVEL



DUE TO REGULATING REQUIRED,  
MULCH WOULD BE LOWER COST



DUE TO REGULATING REQUIRED,  
MULCH WOULD BE LOWER COST

When using wetpour to overlay wetpour, any localised bumps or hollows should be such that when a 3m long stringline is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than 6mm.

Additionally, there should be no ridges, grooves, creases or changes in the surface texture anywhere on the area that would be deemed to cause a trip hazard.

When the area is not level, mulch is recommended for use as it will follow the undulations of the surface.

NOTE: As overlaying wetpour is not guaranteed, DCM can surface overlay mulch or wetpour to any edge.



DUE TO REGULATING REQUIRED,  
MULCH WOULD BE LOWER COST

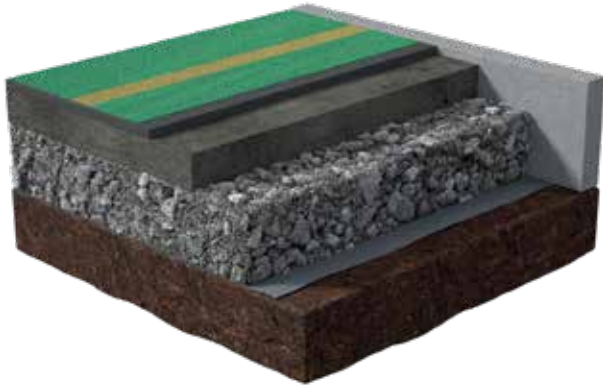


MULCH REQUIRED AS AREA EXTENDS  
ONTO GRASS

# SURFACE LAID DIRECT TO EXISTING CONCRETE

## SPORTS SURFACING

### POLYMERIC ANTI-SLIP



#### BUILD UP

1. Anti-slip coating and line markings
2. 12-15mm EPDM rubber
3. 50mm concrete with drainage

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

### POLYMERIC STRUCTURE SPRAY



#### BUILD UP

1. Line markings
2. 2-3mm of 0.5-1.5mm EPDM rubber granules (structured spray)
3. 10-15mm of 1-3mm SBR rubber shockpad
4. 50mm concrete with drainage

#### Edge options:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

### ARTIFICIAL SPORTS GRASS



#### BUILD UP

1. Artificial grass layer
2. 15-25mm SBR rubber shockpad
3. 50mm concrete with drainage

#### Edge options:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

# SURFACE LAID DIRECT TO EXISTING CONCRETE

## DECORATIVE / STRUCTURAL SURFACING

### RUBBER-GRAVEL MIX



#### BUILD UP

1. 25-50mm rubber gravel mix
2. Existing concrete laid to falls

#### Edge options:

Rubber, Concrete, Aluminium, Timber, Ramped Down and Chase Cut

### BOUND GRAVEL



#### BUILD UP

1. 16-24mm resin bound gravel
2. Existing concrete laid to falls

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

**NOTE:** A sealant gel can be applied to the top layer of the bound gravel if a non porous surface is required. However, this will affect the warranty of the product as the surface can become slippery in wet conditions or hold water if there are no falls to nearby drainage facilities.

### RESIN BONDED GRAVEL



As bonded gravel is laid to 3mm, all deviations will show if the surface is not completely leveled. Non-Permeable concrete should be laid to falls.

#### BUILD UP

1. 3mm resin bonded gravel
2. Non-permeable concrete

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber



# SURFACE LAID DIRECT TO EXISTING CONCRETE

## PLAY SURFACING

### WETPOUR



#### BUILD UP

1. Min 15mm EPDM wearing course
2. 25mm SBR base course
3. Existing concrete laid to falls

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

### RUBBER MULCH



#### BUILD UP

1. Min 40mm Rubber Mulch
2. Existing concrete laid to falls

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber, Ramp Down and Chase Cut

### PLAY GRASS



#### BUILD UP

1. Artificial grass layer
2. 15-25mm SBR rubber shockpad
3. Existing concrete laid to falls

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

# EXISTING CONCRETE PRE-INSTALL SPECIFICATIONS

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

## 1. SUB-BASE MUST BE SOLID AND CRACK FREE



**SURFACE IS NOT OF SOUND CONSTRUCTION**



**SURFACE IS OF SOUND CONSTRUCTION**

There should be no cracks, ridges, grooves, creases or changes in the surface texture anywhere on the area that would be deemed to cause a trip hazard.

## 2. SUB-BASE MUST BE LEVEL



**CONCRETE BASE IS NOT LEVEL**



**CONCRETE BASE IS LEVEL**

Any localised bumps or hollows should be such that when a 3m long stringline is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than 6mm.

## 3. THE SURFACE MUST BE CLEAR OF OBSTACLES / PILED DEBRIS AND BE CLEAN AND CLEAR FROM WEEDS



**AREA IS NOT CLEAR OF WEEDS**



**AREA IS CLEAR OF WEEDS**

Weeds, piles of rubbish, debris, aggregate or other objects will mean DCM are on site longer which may incur additional costs.

# EXISTING CONCRETE PRE-INSTALL SPECIFICATIONS

## 4. EDGING



HEIGHT OF EDGE IS NOT EQUAL TO DEPTH OF NEW SURFACE



HEIGHT OF EDGE IS EQUAL TO DEPTH OF NEW SURFACE

Where edgings are used, the dimensions from the top of the edge to the top level of the sub-base should be equal to the depth of the surface to be laid on.

When edges are not clean, durable or straight, the new surface is unable to achieve a cohesive bond with the surface.

This may cause shrinkage from existing edges and invalidate the DCM warranty.

## 5. DRAINAGE



HEIGHT OF EDGE IS NOT EQUAL TO DEPTH OF NEW SURFACE



EDGES ARE NOT CLEAN AND DURABLE. THIS MAY PREVENT A COHESIVE BOND

Concrete may be constructed from a permeable, 'no-fines' concrete which is obtained by eliminating the fine material sand from the normal concrete mix. This allows water to drain in the same way as open textured macadam.

When normal concrete is used as a sub-base for a permeable product, concrete should be laid to falls. Alternatively, drainage holes can be drilled into the surface at regular intervals and filled and leveled with pea gravel.



CONCRETE HAS NOT BEEN LAID TO FALLS



CONCRETE HAS BEEN LAID TO FALLS



# SURFACE LAID DIRECT TO EXISTING FLAGS

## PLAY SURFACING

### ARTIFICIAL GRASS



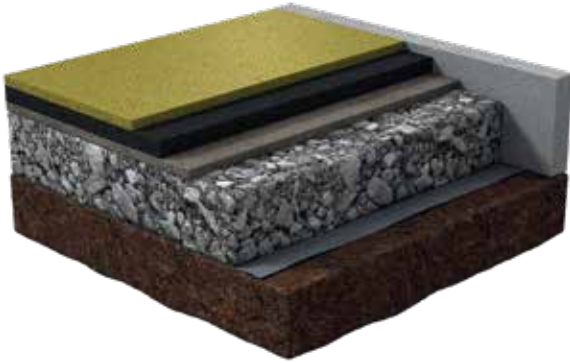
#### BUILD UP

1. Artificial grass layer
2. 25mm SBR rubber shockpad
3. Existing flush and consistent flags - regulating where required. Ground stabilisation mesh may be required.

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

### WETPOUR



#### BUILD UP

1. Min 15mm EPDM wearing course
2. Min 25mm SBR base course (dependant on Critical Fall Height)
3. Existing flush and consistent flags - regulating where required. Ground stabilisation mesh may be required.

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

# SURFACE LAID DIRECT TO EXISTING FLAGS

## DECORATIVE / STRUCTURAL SURFACING

### BOUND GRAVEL



#### BUILD UP

1. Min 18-20mm resin bound gravel
2. Fiberglass mesh - dependent on quality of flags
3. Existing flags with gaps - regulating where required

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

**NOTE:** A sealant gel can be applied to the top layer of the bound gravel if a non porous surface is required. However, this will affect the warranty of the product as the surface can become slippery in wet conditions or hold water if there are no falls to nearby drainage facilities.

### RUBBER-GRAVEL MIX



#### BUILD UP

1. 25 - 50mm rubber gravel mix depending on quality of flags
2. Existing flush and consistent flags - regulating where required

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

### RUBBER MULCH



#### BUILD UP

1. Min 40mm Rubber Mulch
2. Existing flush and consistent flags - regulating where required

#### EDGE OPTIONS:

Rubber, Concrete, Aluminium, Timber

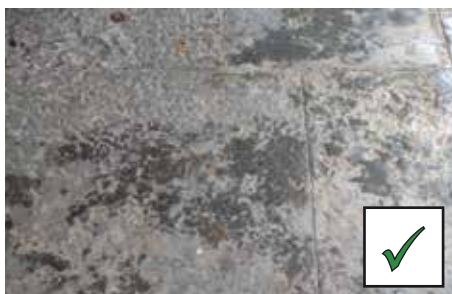
# FLAGS PRE-INSTALL SPECIFICATIONS

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

## 1 SUB-BASE MUST BE LEVEL AND CRACK FREE:



FLAGS ARE NOT FLAT, LEVEL OR CRACK FREE



FLAGS ARE LAID FLUSH AND LEVEL

Flags must be laid flush together with no cracks, localised bumps or hollows. When a 3m long stringline is placed in any position on the surface, the gap between the straight edge and the surface shall at no point be greater than 6mm.

Additionally, there should be no ridge, grooves, creases or changes in the surface texture anywhere on the area that would be deemed to cause a trip hazard.

## 2 THE SURFACE MUST BE CLEAR OF WEEDS, OBSTACLES AND PILED DEBRIS:



AREA IS NOT CLEAR OF WEEDS



AREA IS CLEAR OF WEEDS

Piles of rubbish, debris, aggregate or other objects will mean DCM are on site longer which may incur additional costs.

The area should also be free of weeds or moss.

## 3 SURFACES SHOULD BE CLEAN



AREA IS NOT CLEAN



AREA IS CLEAN

The surface should be left clean - ideally no excess mud or dirt should be left on the area.



# FLAGS PRE-INSTALL SPECIFICATIONS

To ensure maximum longevity of the surface, it is the responsibility of the groundworker / contractor to ensure that all surfaces are laid onto existing hard sub-bases of dry, sound condition. Groundworks should be prepared to the correct tolerance, less the thickness of the surface.

## 4 DRAINAGE



FLAGS LAID TO FALLS



FLAGS LAID TO FALLS

When flags are used as a sub-base for a permeable product, flags should be laid to falls.

Alternatively, drainage holes can be drilled into the surface at regular intervals and filled and leveled with pea gravel.

## 5 EDGES

Where edgings are used, the dimensions from the top of the edge to the top level of the sub-base should be equal to the depth of the surface to be laid on. When edges are not clean, durable or straight, the new surface is unable to achieve a cohesive bond with the surface. This may cause shrinkage from the edges and invalidate the DCM warranty.

# MOUNDS

## MOUNDS



Mounds are shaped using MOT type 1 stone. This is capped with concrete to prevent the structure from moving during play.

### BUILD UP

1. Min 15mm EPDM wearing course
2. 25mm SBR base course
3. Mound capped with concrete
4. Min 100mm MOT type 1 dependent on ground conditions
4. Geotextile layer

## MOUNDS

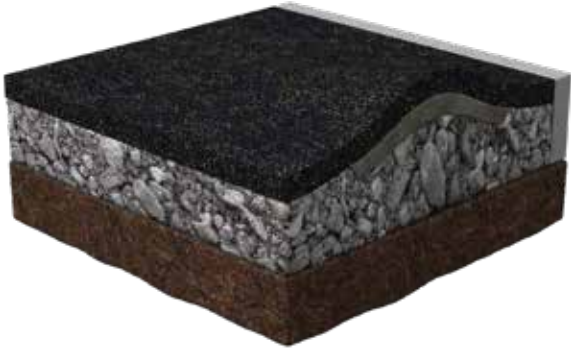


Mounds are shaped using MOT type 1 stone. This is capped with concrete to prevent the structure from moving during play.

### BUILD UP

1. Min 40mm Mulch
2. Mound capped with concrete
3. Min 100mm MOT type 1 dependent on ground conditions
4. Geotextile layer
5. Soil

## MOUNDS



Mounds are shaped using MOT type 1 stone. This is capped with concrete to prevent the structure from moving.

### BUILD UP

1. 25-50mm rubber gravel mix
2. Mound capped with concrete
3. Min 100mm MOT type 1 dependent on ground conditions
4. Geotextile layer
5. Soil

## MOUNDS



Mounds are shaped using MOT type 1 stone. This is capped with concrete to prevent the structure from moving during play.

### BUILD UP

1. Artificial grass layer
2. 25mm SBR base course
3. Mound capped with concrete
4. Min 100mm MOT type 1 dependent on ground conditions
5. Geotextile layer

# TREE PITS

## RUBBER MULCH



### BUILD UP

1. Min 40mm Rubber Mulch
2. Recommended min 100mm MOT type 1 dependent on ground conditions
3. Geotextile layer
4. Soil

## RUBBER-GRAVEL MIX



### BUILD UP

1. Min 35mm Rubber-Gravel mix
2. Recommended min 100mm MOT type 1 dependent on ground conditions
3. Geotextile layer
4. Soil

## BOUND GRAVEL



### BUILD UP

1. Min 50mm Resin Bound Gravel
2. Recommended min 100mm MOT type 1 dependent on ground conditions
3. Geotextile layer
4. Soil