



# Wet Pour Systems

For schools and nurseries where young people will be playing

**Wet Pour Surfacing Systems are becoming increasingly popular for schools and nurseries where young people play.**

**The surface can be installed in a number of different depths to meet specific Critical Fall Height (CFH) requirements.**

We can install play graphics on the areas to create fun, engaging and educational areas for the children to play on using a wide range of colours.

## What is a Wet Pour Surface?

This type of flooring is great for use underneath play equipment. We can work out the Critical Fall Height of the play apparatus and install the required product depth to ensure children are not at risk in the event of a fall from any play area equipment.

The surface can also be designed and installed using a range of colours that stand out to children and create a fun environment to play on. The system can also be used for golf pathways, gardens, sports and leisure spaces. If you have any questions please contact us and speak with our team.



# WET POUR SAFETY SURFACING

**Wet pour EPDM rubber surfacing is a two layer, porous, impact absorbing rubber safety surface system.**

Wet pour has a continuous appearance, which is generally installed to flat areas. The system can also be installed over mounded or ramped sub structures if required. Wet pour surfaces can be installed in black EPDM, single colour EPDM or as multi-coloured designs.

## Benefits of Wet Pour Surfacing:

- Safety: Tested to BS EN 1177
- Low-maintenance
- Durable: Tested to BS 7188 for Abrasive Wear
- All-weather
- Porous
- Options of many different colours with unlimited, bespoke design possibilities





**Wet pour rubber surfacing 'base course' or 'shock pad' is manufactured from 100% recycled SBR (Styrene Butadiene Rubber) rubber crumb.**

This rubber crumb is then mixed with a polyurethane resin binder. The impact absorbing base layer can be varied in depth to meet the required Critical Fall Height (CFH) of any play equipment and BS EN 1177:1998 requirements. Full system thickness varies between 25mm and 110mm.

Wet pour rubber surfacing 'wearing course' is an EPDM rubber crumb finishing layer which is mixed and bonded with a polyurethane resin and then levelled, rolled and floated by hand.



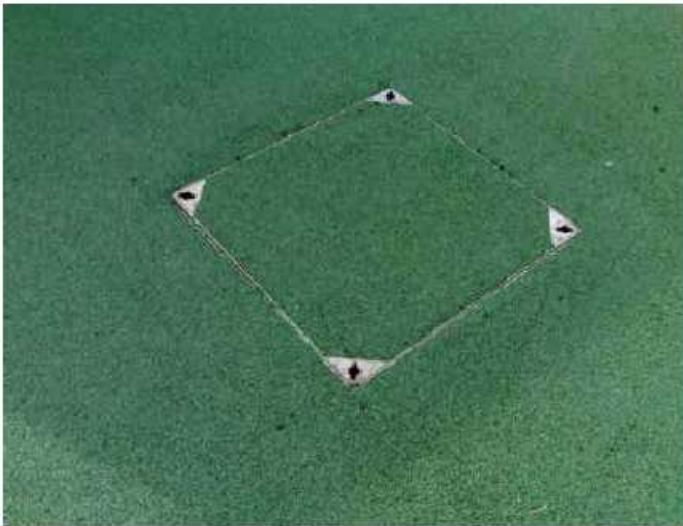
# MANHOLE COVERS

**There are several options when encountering inspection chambers or manhole covers within the wet pour surfacing area :**

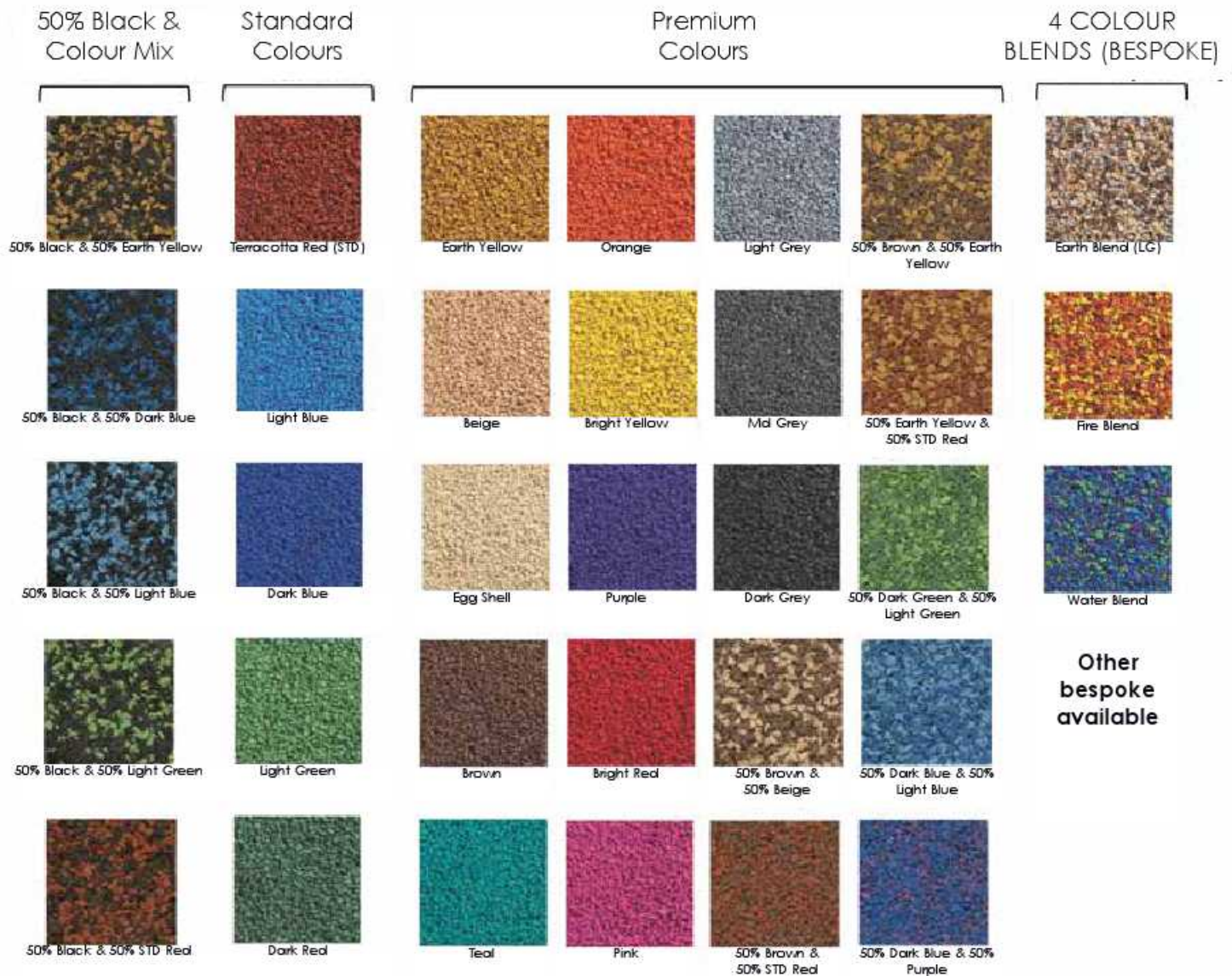
- a) Install a recessed manhole
- b) Overlay and mark with a graphic
- c) Raise existing manhole
- d) Grade surfacing down around it
- e) Cover over if redundant, or no access required

We would always strongly recommend a recessed manhole to be installed with a graphic overlay in order to identify the location of the drain cover for future use and maintenance.

Manhole covers should not be within the 'free space' of any fixed equipment so consideration should be given to this during the planning stage.



# COLOUR RANGE



**We can incorporate various contrasting colours in the wet pour surface finish.**

Here are some examples of the colours we offer that can be installed in the surface either as a feature or to complete a wet pour design. Above are standard colour ranges and other colours/ mixes are available upon request.

Our advice is free and we would be happy to talk you through the various options and considerations for your scheme.

The use of MDI polyurethane binder may affect the finish colour in some instances, particularly when combined with light coloured and blue based EPDM. Any discoloration will diminish with exposure to strong sunlight.

**We can also help produce a bespoke design for your new surface.**

# GRAPHIC RANGE 1/2



Alphabet Snake - Measures Approx. 3m Long



Alphabet Caterpillar - Measures Approx. 4.5m Long



Numbered Snake - Measures Approx. 7m Long



Numbered Caterpillar - Measures Approx. 5m Long

# GRAPHIC RANGE 2/2



Sun  
500mm / 1m



Splash  
500mm / 1m



Target Set  
Available in 1m, 2m, 3m, 4m, 5m, 6m, 7m, 8m, 9m, 10m, 11m, 12m, 13m, 14m, 15m, 16m, 17m, 18m, 19m, 20m, 21m, 22m, 23m, 24m, 25m, 26m, 27m, 28m, 29m, 30m, 31m, 32m, 33m, 34m, 35m, 36m, 37m, 38m, 39m, 40m, 41m, 42m, 43m, 44m, 45m, 46m, 47m, 48m, 49m, 50m, 51m, 52m, 53m, 54m, 55m, 56m, 57m, 58m, 59m, 60m, 61m, 62m, 63m, 64m, 65m, 66m, 67m, 68m, 69m, 70m, 71m, 72m, 73m, 74m, 75m, 76m, 77m, 78m, 79m, 80m, 81m, 82m, 83m, 84m, 85m, 86m, 87m, 88m, 89m, 90m, 91m, 92m, 93m, 94m, 95m, 96m, 97m, 98m, 99m, 100m



Compass  
Available in 1m, 2m, 3m, 4m, 5m, 6m, 7m, 8m, 9m, 10m, 11m, 12m, 13m, 14m, 15m, 16m, 17m, 18m, 19m, 20m, 21m, 22m, 23m, 24m, 25m, 26m, 27m, 28m, 29m, 30m, 31m, 32m, 33m, 34m, 35m, 36m, 37m, 38m, 39m, 40m, 41m, 42m, 43m, 44m, 45m, 46m, 47m, 48m, 49m, 50m, 51m, 52m, 53m, 54m, 55m, 56m, 57m, 58m, 59m, 60m, 61m, 62m, 63m, 64m, 65m, 66m, 67m, 68m, 69m, 70m, 71m, 72m, 73m, 74m, 75m, 76m, 77m, 78m, 79m, 80m, 81m, 82m, 83m, 84m, 85m, 86m, 87m, 88m, 89m, 90m, 91m, 92m, 93m, 94m, 95m, 96m, 97m, 98m, 99m, 100m



Hopscotch Set - 100mm tile / 500mm tile



Footprints - Approx. 300mm / 100mm



Animal Prints



Crocodile Hopscotch - Measures 0.75m Approx.



Alphabet Capital Letters Set - Sizes 1000mm / 600mm / 400mm



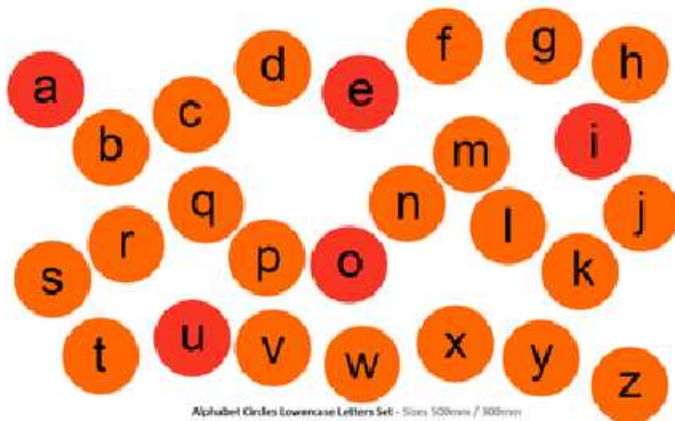
Alphabet Lowercase Letters Set - Sizes 1000mm / 600mm / 400mm



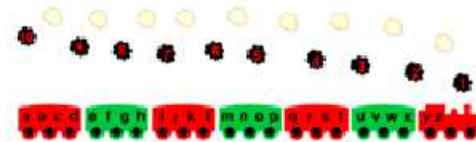
1-10 Number Set - Sizes 1000mm / 600mm / 400mm



Alphabet Shapes Capital Letters Set - Sizes 500mm



Alphabet Circles Lowercase Letters Set - Sizes 500mm / 300mm



Alphabet Train - Measures Approx. 8m long  
Steam Clouds = 1 to 10 530mm  
Steam Clouds - No Numbers 130mm



Train Tracks - 300mm x 200mm



Rocket - Approx. 4.5m Long

OTHER GRAPHICS ARE AVAILABLE, CONTACT US TODAY TO DISCUSS YOUR REQUIREMENTS

# BASE-WORK SPECIFICATION AND GUIDANCE SHEETS - No 1

## Wet Pour MOT Type 1 Base-work Specification

1. Excavate to a depth of 125mm plus depth of wet pour surfacing to be laid (minimum of 40mm depth)
2. Lay 150mm x 50mm PCC edges (flat top) haunched with concrete on both sides, alternatively flexi safety edging or treated timber edges
3. Lay and compact 125mm of MOT Type 1 stone to a level tolerance of +/- 5mm under a 3m straight edge. The dimension from the top of the edge to the sub base **MUST NOT** be greater than the depth of the surfacing ordered

**NOTE:** Base construction is a vital part of safety surfacing installation. The provided notes are produced for **guidance only** and may require variation due to specific site conditions.

## WET POUR MOT TYPE 1 – BASE WORK SPECIFICATION

### Edging Types:

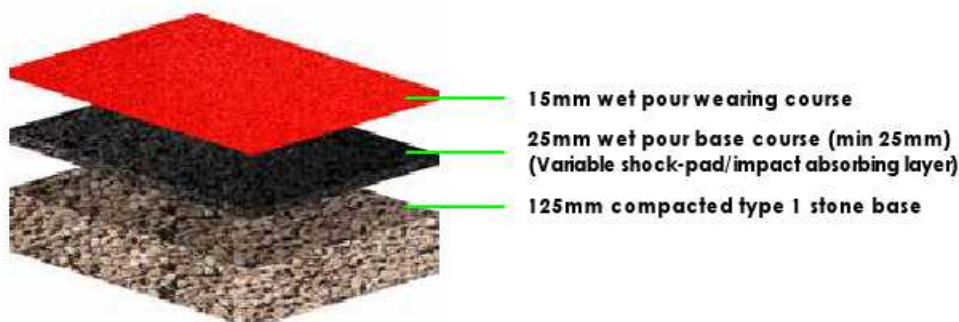
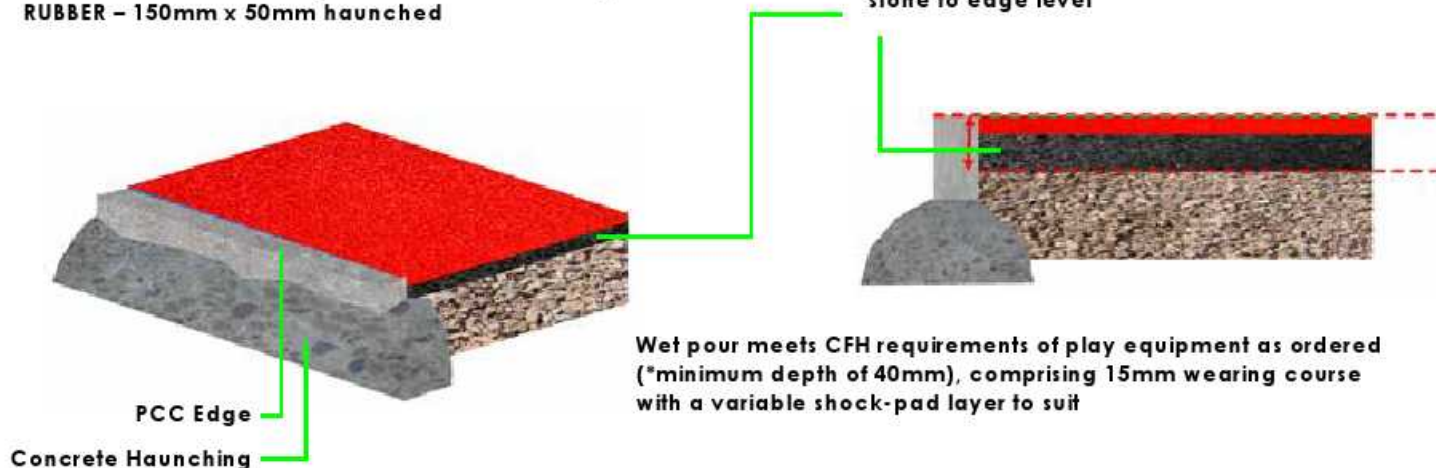
**PCC** – Pre-cast concrete 150mm x 50mm flat top haunched (shown)

**TIMBER** – Pre-treated 150mm x 50mm

**ALUMINIUM** – Various height finishes to suit most applications

**RUBBER** – 150mm x 50mm haunched

Leave correct clearance to receive full depth of wet pour system from top of compacted stone to edge level



The above specification is the minimum industry standard. Our recommendation would always be that the surface be laid on a porous solid surface i.e. Concrete or Bitmac with PCC edges where budgets allow.

Wet-pour is a porous system and drainage provisions should also be allowed for at base level.



# BASE-WORK SPECIFICATION AND GUIDANCE SHEETS - No 2

## MOT Type 1 with Concrete Plinth – Base-work Specification

1. Excavate to a depth of 125mm plus depth of wet pour surfacing to be laid (minimum of 40mm depth)
2. Lay 150mm x 50mm PCC edges (flat top) haunched with concrete on both sides
3. Lay and compact 125mm of MOT Type 1 stone to a level tolerance of +/- 5mm under a 3m straight edge
4. A 200mm (min) wide band of concrete graded from 15mm below the top of the kerb edge and then tapered to sub base level around the whole of perimeter edge. This will assist the wet pour to form a perimeter bond at sub base level reducing the risk of the edges lifting in extreme conditions

**NOTE:** The full wet pour system thickness (**for the required CFH**) should be maintained within the free space area of any equipment.

The dimension from the top of the edge to sub base **MUST NOT** be greater than the depth of the wet pour surfacing ordered.

**Wet-pour surface meets CFH requirement of play equipment (min depth of 40mm) comprising 15mm wearing course with a variable shock pad layer.**

Shock pad layer



Concrete haunching with approx 200mm wide concrete band for bonding rubber to, graded from 15mm below top of kerb edge.



Base construction is a vital part of safety surfacing installation. This information is produced to assist you and should be used for guidance only and may require variation due to specific site conditions.

The above specification is the minimum industry standard. Our recommendation would always be that the surface be laid on a porous solid surface i.e. Concrete or Bitmac with PCC edges where budgets allow.

Wet-pour is a porous system and drainage provisions should also be allowed for at sub base level.

# BASE-WORK SPECIFICATION AND GUIDANCE SHEETS - No 3

## Bitmac Base-work Specification

1. Excavate to a depth of 150mm plus depth of wet-pour surfacing to be laid
2. Lay 150mm x 50mm PCC edges haunched with concrete on both sides
3. Lay and compact 100mm of MOT Type 1 stone
4. Lay and screed off 50mm of open textured porous Bitmac base Macadam to a level tolerance of  $\pm 3$ mm under a 3m straight edge
5. The dimension from the top of the kerbs to the top of the base work should be no greater than the surface to be laid. The dimension from the top of the edge to sub base **MUST NOT** be greater than the depth of the surfacing ordered

Wet-pour surface to be min 30mm\* depth



\*min 30mm or to meet with CFH requirements

Concrete haunching with approx 200mm wide concrete band for bonding rubber to, graded from 15mm below top of kerb edge



Base construction is a vital part of safety surfacing installation. The below notes are produced for guidance only and may require variation due to specific site conditions.

The above specification is an industry standard. Our recommendation would always be that the surface be laid on a porous solid surface i.e. Concrete or Bitmac with PCC edges where budgets allow.

Wet-pour is a porous system and drainage provisions should also be allowed for at sub base level.

# BASE-WORK SPECIFICATION AND GUIDANCE SHEETS - No 4

## No-Fines Concrete Base-work Specification

1. Excavate to a depth of 175mm plus depth of wet-pour surfacing to be laid
2. Lay 150mm x 50mm PCC edges haunched with concrete on both sides or treated timber edges
3. Lay and compact 100mm of Type 1 stone
4. Lay and screed off 75mm of no-fines concrete to a level tolerance of  $\pm 3$ mm under a 3m straight edge
5. The dimension from the top of the kerbs to the top of the base work should be no greater than the surface to be laid

### Typical No-Fines Composition:

No-fines concrete typically comprises of 10-20mm coarse aggregate mixed with cement paste at a ratio of around 8:1.

Wet-pour surface to be min 30mm\* depth



Base construction is a vital part of safety surfacing installation. These notes are produced for guidance only and may require variation due to specific site conditions.

The above specification is an industry standard. Our recommendation would always be that the surface be laid on a porous solid surface i.e. Concrete or Bitmac with PCC edges where budgets allow.

Wet-pour is a porous system and drainage provisions should also be allowed for at sub base level.

# WATER INFILTRATION RATE – GUIDANCE ONLY

## Water Infiltration Rate for Wet-pour / Polymeric Surfacing

The products are tested to the method given in BS EN 12616:2003 - "Surfaces for sports areas. Determination of water infiltration rate"

The results are for guidance and will be dependent on the play area site and conditions at sub base level and dependent on maintenance to the surfacing keeping it clean and clear from moss and / or similar.

The results indicate the porosity to be in excess of 8 times better than the requirement of BS EN 15330-1:2007. There would never therefore be an issue with regards to holding any water as long as there is sufficient drainage underneath to allow the water to soak away.

**THIS INFORMATION HAS BEEN PRODUCED FOR GENERAL GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE.**

| BLACK EPDM                         | UNITS       | RESULT |
|------------------------------------|-------------|--------|
| WATER INFILTRATION RATE            | MM PER HOUR | 1720   |
| BS EN 15330-1:2007<br>REQUIREMENTS | MM PER HOUR | ≥180   |

| COLOURED EPDM                      | UNITS       | RESULT |
|------------------------------------|-------------|--------|
| WATER INFILTRATION RATE            | MM PER HOUR | 1590   |
| BS EN 15330-1:2007<br>REQUIREMENTS | MM PER HOUR | ≥180   |



# WET-POUR DEPTHS AND CRITICAL FALL HEIGHTS (CFH)

## Sub Base – Tarmac



### 20mm

20mm wet pour safety surfacing comprises of a 20mm wearing course layer. This offers a compliant surface for equipment with a CFH of 1.00m or less when installed on to tarmac.



### 40mm

40mm wet pour safety surfacing comprises of a 15mm wearing course layer and a 25mm base layer. This offers a compliant surface for equipment with a CFH of 1.25m or less when installed on to tarmac.



### 50mm

50mm wet pour safety surfacing comprises of a 15mm wearing course layer and a 35mm base layer. This offers a compliant surface for equipment with a CFH of 1.50m or less when installed on to tarmac.



### 60mm

60mm wet pour safety surfacing comprises of a 15mm wearing course layer and a 45mm base layer. This offers a compliant surface for equipment with a CFH of 1.75m or less when installed on to tarmac.



### 80mm

80mm wet pour safety surface comprises of a 15mm wearing course layer and a 65mm base layer. This offers a compliant surface for equipment with a CFH of 2.20m or less when installed on to tarmac.



### 110mm

110mm wet pour safety surfacing comprises of a 15mm wearing course layer and a 95mm base layer. This offers a compliant surface for equipment with a CFH of 3.00m or less when installed on to tarmac.



Please use this table for guide purposes only. CFH ratings may vary depending on the sub base and we would be only too pleased to clarify your specific site requirements. Wet-pour surfacing is a porous system and so consideration should be given to site drainage requirements.

# WET-POUR SURFACING MAINTENANCE

Maintenance procedures are designed to ensure the following:

- The playing surface is kept clean
- The playing surface gives consistent performance

These objectives are achieved by:

- Sweeping leaves and other debris from the surface
- Brushing the surface to prevent any tendency to form an impervious skin on the surface that may impair drainage
- Ensuring appropriate footwear is used on the surface (i.e. no high heeled shoes)
- Inspecting surface for signs of damage and arranging remedial repairs promptly

## KEEPING THE SURFACE CLEAN

Leaves, trees, flowers, pine needles and other debris should not be allowed to remain on the surface for any length of time. If this happens the system will rapidly rot down forming a drainage-inhibiting 'skin' within the surface and providing a growing medium for algae, moss and weeds which may allow moisture to be held within the surface. This may cause issues during cold/freezing conditions due to expansion/contraction. Periodic cleaning by hosing down or light power-washing and copious amounts of water followed by scrubbing with a stiff brush should be all that's necessary to remove pollution and surface debris.

## STAIN REMOVAL

Most stains can easily be removed with a solution of hot (not boiling) water and household detergent e.g. washing-up liquid. The removal of chewing gum can be effected using a freezing aerosol. Heavy oil marks can be removed with a cloth and methylated spirits.

## WEEDS

No matter how much care is taken, weeds may occasionally appear on the surface usually as a result of wind blown seeds. Small weeds can be removed by hand without damaging the surface. In damp and shaded areas the surfacing may attract moss. Any pathway moss killer can be used. Localised areas of self-set weeds can be treated with domestic weed-killers without causing damage to the surface. Oil-based weed killers should not be used. Care must be taken in the application of weed killers because of a possible hazard to children.

## SNOW AND ICE

Snow and ice are not harmful and can be permitted to melt through. Brushes or rubber edged scrapers may be used to remove snow. Metal shovels or scrapers may damage the surface and should not be permitted. Solvent based chemical de-icing agents should not be used.

If heavy rain falls immediately after a very cold spell, the surface may become flooded for a few hours, however, the ice will soon melt and the surface will then drain normally. Salt and / or grit may leave the surface stained as well as acting as an abrasive, so must not be used. Use a playground surfacing-friendly liquid de-icer, contact us for information.

## MAINTENANCE SCHEDULE

### DAILY

Check for visual evidence of vandalism, accidental damage and excessive wear.

### WEEKLY

Clear leaves, rubbish and debris from the surface, hosing down with water as necessary. Deal with any new weeds, moss or algae. Inspect whole surface for signs of damage, seek advice from manufacturer as required.

### TWICE A YEAR

Check for moss and algae growth, food stains, shoe marks etc. and rectify as appropriate. Thoroughly clean down the area.

Inspect whole surface for signs of damage, seek advice from manufacturer as required.

