

## Concrete/ Asphalt Substrate Base Detail Requirements

### **OUR SUGGESTED SPECIFICATIONS:**

#### **SLOPE:**

1% nominal slope for drainage

#### **CURING REQUIREMENTS:**

All newly poured concrete slabs must cure for a minimum of 14 days prior to the start of the installation of the rubber surfacing system. In some areas, the Pacific Northwest as an example, 30 days or more could be involved.

#### **DRAINAGE:**

Drainage at the low end of the site is of the utmost importance. Any brick or concrete walls or curbs at the low end of the area to receive the play surface must have drainage access via weep holes. Weep holes must extend a minimum of 1 inch above the top of the new concrete slab and a minimum of 1/8" below the top of the new concrete slab.

The latter is necessary because the rubber surfacing system is porous and water will permeate (drain downward) to the concrete slab.

#### **CONCRETE:**

4" Minimum Thickness.

#### **ASPHALT:**

Required minimum thickness (2" to 4") for non-weight bearing loads and a 1% slope is recommended.

#### **DRAINS:**

Drains should be installed at the low point of the asphalt/concrete sub surface flush.

#### **FINISH:**

Concrete should be finished with a light broom unsealed.

## Compacted Stone Base Requirements

### **Base Option #1:**

A homogeneous mixture of fine and medium stone is applied in multiple layers and compacted using a mechanical compactor and/or roller to provide an even plane. The crushed stone base must be tightly compacted and smooth. A 2% slope is recommended.

- 95% Standard Proctor Compaction is of critical importance.
- Stone for the base must be a homogeneous mix of ¾" stone down to fines and you need to achieve a 95% compaction.
- The minimum depth of the crushed stone base is 4". Typical thickness range is 4" – 6". Crushed stone base layers thicker than 6" are more challenging to achieve the necessary 95% compaction rate throughout the base.
- Finish slope of porous aggregate should be 2% from the centerline of the area to the perimeter, and the grade should not vary more than a quarter inch (1/4") in ten feet (10')
- Crushed stone base must be fully contained when appropriate
- Crushed stone is not an acceptable sub-base for any mounded area. In these areas, the stone would need to be skim-coated with concrete to make it more stable.
- Stone profile is subject to change based on drainage requirements
- **If installing turf over foam pad system, please include 1" layer of finish stone graded within a ¼" tolerance over a 10-foot radius**

### **Base Option #2: (Applies when French drains or drainage tile is required)**

#57 Clean Stone to be installed over all drainage tiles

The minimum depth of #57 Clean Stone base is 4". Typically thickness range is 4" – 6".

Additionally, balance to meet up with crush and run:

A homogeneous mixture of fine and medium stone is applied in multiple layers and compacted using a mechanical compactor and/or roller to provide an even plane. The crushed stone base must be tightly compacted and smooth. A 2% slope is recommended.

- 95% Standard Proctor Compaction is of critical importance.
- Stone for the base must be a homogeneous mix of ¾" stone down to fines and you need to achieve a 95% compaction.
- The minimum depth of the crushed stone base is 4". Typical thickness range is 4" – 6". Crushed stone base layers thicker than 6" are more challenging to achieve the necessary 95% compaction rate throughout the base.

- Finish slope of porous aggregate should be 2% from the centerline of the area to the perimeter, and the grade should not vary more than a quarter inch (1/4") in ten feet (10'
- Crushed stone base must be fully contained when appropriate
- Crushed stone is not an acceptable sub-base for any mounded area. In these areas, the stone would need to be skim-coated with concrete to make it more stable.
- Stone profile is subject to change based on drainage requirements
- **If installing turf over foam pad system, please include 1" layer of finish stone graded within a ¼" tolerance over a 10-foot radius**

END OF DOCUMENT