**How to Collect an Arena Footing Sample**

Thanks for your interest in testing your footing !
The most important part of your test is to start with a consistent sample. The directions below can be used to collect a fair sample for testing. As always, call us with any questions or concerns and we will be happy to walk you through it.

Items Needed:

* Gallon sized ziplock bag
* Bulb cutter *(Marked at 4 inches)* or other dedicated soil sampler.
* Bucket, 5 gallon
* Sharpie/permanent marker
* Hand trowel *(Small garden spade)* If needed.

1: Make sure your footing (arena) is maintained as if you were getting ready for an event. The idea here is that the ground is moist, leveled, and conditioned such that there are no material separations or variations in profile depth. If an indoor arena where the cushion soil is removed and stored, there is a different method for soil sampling from a stockpile.

2: After determining the sub-sample location, pack the soil by foot at the sampling location. Then, use a bulb cutter (or a dedicated soil sampler) to push down through your cushion and sub-cushion/pad layer *(to the depth marked at 4 inches),* remove soil sub-sample and collect in a bucket *.*See note #1. The idea here is that an equal volume sub-sample is collected from each location and that an equal amount of soil by depth (an equal amount of 0-2” soil profile as from the 2-4” soil, for example). If the cushion is deeper than 4 inches, the total depth of cushion may be sampled but do not vary sampling depth by location unless a shallower depth of cushion is encountered in a particular sampling location. Use the hand shovel for soil collection if needed but use caution to assure equal volume soil collection from each sub-sample site. If the sub-sample soil will not hold within the ‘bulb cutter’ during removal, it may be necessary to insert the cutter into the soil and then excavate around it and insert hand shovel under cutter to hold the soil sub-sample within the cutter as it is removed and placed in your sampling bucket.

3: We recommend getting at least 6-8 sub-samples from your arena (up to 20 sub-samples preferred). Gather the sub-samples from random areas in the arena *(Ex: One by the chute, some by the sides, some in the middle)* but in general the sites should represent all of the arena area. For example, do not collect the majority of sub-samples from one end/side of the arena over the other. All the sub-samples are added to the sampling bucket as the sampling process progresses.

4: If you feel you have a specialized issue in an arena, we can test the one area to see if there are any problems with the composition but the sample from this area should be handled separately.  This is a separate run from the composite sample and requires the same one-gallon sized sample for the best reading. In general, avoid including sub-samples from localized area of contrasting materials within the overall composite sample. Contact us for further direction.

5: Once you’ve collected all the sub-samples from your locations, thoroughly mix all the samples together in your bucket to form one composite final sample.

6: Fill a gallon sized zip lock bag with your composite sample and discard any excess soil. Label the sample bag using a permanent marker. To protect against spillage during shipping, it is preferable to double bag the sample after labeling.

7. Prepare a submittal/transmittal letter indicating what the sample represents (that it is a rodeo arena), venue name, full contact information including email, and any other pertinent details and include that within the shipping box.

**Send sample(s) to:**

**Environmental Technical Services**

**Attn: Michael DePew**

**835 Herricksville Rd
Tekonsha, MI 49092**

**NOTE #1 - The depth of your arena should be more than 4 inches in depth. If it is shallow in any subsample location then when collecting the sub-sample do not include any of the base material in it. Base material is usually clay, gravel/stone, concrete, asphalt or some other hard forming material. That base material should not be included in the sample. Testing and composition of base materials may be an important factor but the sampling/testing of the base material should be mixed in with the overlying soil material.**