

Accreditation to Improve Restoration (AIR) FAQ's

Last updated 8.31.23

Q: Is using black cloth/weed block to cover the ground an acceptable substitute to using a gravel layer? The guidelines mention many materials to cover the ground, but well-respected BMP nurseries tend to have thick gravel layers, some with weed block underneath. Weed block over drain rock (for leveling) is easier to keep weed free than a gravel surface, but would this quickly wear through with regular foot traffic?

The question references this section in the Nursery Phytophthora BMPs:

Manage surfaces underneath benches, in walkways, driveways, and elsewhere in the clean area to prevent puddles, eliminate potential for splash, and remain free of weedy vegetation. Maintain adequate drainage and use gravel, landscape fabric, pavers, concrete, or other materials to keep underlying soil covered and avoid having exposed wet soil or mud.

The objectives of this BMP are to: (1) avoid having mud or plant debris in the propagation areas where it can be tracked around; (2) reduce the potential for puddles to form in areas where the water could be splashed onto plants; and (3) eliminate or reduce the splash height created by rain, irrigation leachate, hose nozzles, etc. The BMPs provide a range of suggestions but do not specify what type of materials to use because different materials may be preferable at different nurseries and even among sites within a nursery, e.g., concrete walkways and gravel under benches. The table below outlines the Pros and Cons of various surface materials for side-by-side comparison.

Surface Material Option	Pros	Cons
Hard Pavement	<ul style="list-style-type: none"> - Easy to clean - Excludes weed growth - Permanent and durable 	<ul style="list-style-type: none"> - Expensive - Potential for puddles if not sloped properly - Generates high splash compared to soft surfaces
Gravel Layer	<ul style="list-style-type: none"> - Prevents puddles (assuming proper thickness, smooth ground surface underneath, and adequate sloping for draining) - Irregular surface reduces total splash compared to pavement - Can add weed-suppressing geotextile layer to reduce compaction into wet soil and suppress weed growth 	<ul style="list-style-type: none"> - Difficult to clean - Weeds can grow through - Buildup (from plant debris, potting material, etc.) can reduce drainage capacity - Can compact with foot and equipment traffic - A harder material that can generate greater splash heights - Loose or deep gravel layers can make it more difficult to roll loaded nursery carts
Plastic Landscape Fabric	<ul style="list-style-type: none"> - Relatively easy to clean - Suppresses weeds - Softer, textured surface reduces splash heights - Easier to roll carts over than plain gravel 	<ul style="list-style-type: none"> - Less durable - Requires good drainage to prevent pooling underneath - Holes can develop from sharp edges when applied over gravel*

*this type of wear can be reduced by rolling the gravel surface as flat as possible and using a thick nonwoven filter fabric type of geotextile between the gravel layer and the landscape fabric in pathways.