



Rub-I Infiltrometer Components Checklist

This checklist is for building a Rub-I Infiltrometer for use in determining in-situ hydraulic performance of High Flow Rate Bioretention Media on newly-placed bioretention systems. The Rub-I Infiltrometer measures the entire media profile under saturated conditions to insure a reliable and accurate result.

Infiltrometer Components

- White schedule 40 PVC pipe (X inches long x 6 inch)
 - X= Depth of media to be tested + 2 inch pipe into UD + 3 inch pipe above media (example: for a 12 inch media depth you would need a 17 inch pipe)
 - 2 inch bevel at bottom end
 - 2 opposite holes sized for rebar drilled one inch from the top
- Rebar (12 inch) for insertion through 2 drilled holes for removing the pipe from media after testing
- Clear schedule 40 PVC cylinder (5 ft. long x 6 inch)
- Gate Valve (6 inch) with pull handle designed to fit schedule 40 PVC
- Tube of silicone caulking

Hammering Components

- Pressure treated wood board (4 inch thick by 8 inch wide by 24 inch long)
- Sledge hammer 5#-10#

Water Storage Components

- Clear graduated 5 gallon bucket
- 2 Sealed plastic 55 gallon drums with the following:
 - At least 1 screw cap lid to prevent air lock in each drum
 - Plastic barb with gasket placed at bottom of each drum for water discharge
 - Plastic shut off valve placed at end of hose to control flow at test location
 - Garden hose connector attached to barb in drums to control flow and connect hose
 - Garden hose with screw-on shut off valve at flow end

Other Materials

- Water
- Manhole lifter or crow bar for use on rebar to remove pipe from media after test completion
- Light weight oil or petroleum jelly with dry wipes for application
- Level
- Stopwatch
- Rake/shovel
- Measuring tape
- Large stones (~2 inch; see Figure 6)
- Flashlight
- Clipboard with pencil and Table 1 from this document