DETERMINE PLANTER BOX LOCATION

Determine how high on top of cinder blocks (and/or 4x4 blocks of wood) the planter box needs to be off the ground in relation to the stub.

- Bottom of the planter box needs to be a few inches higher than the stub
- Using a string level, determine planter box bottom height
- Underdrain hole needs to be 1 ¾ inches minimum from the bottom of the box

Determine planter box orientation and location based upon the following three (3) connections:

1. Diverter Connection
Two diverter options (convey water from the downspout into the top of the planter box):
   1. Garden Water Saver – planter box needs to be less than 4 feet from downspout
   2. Flexible – planter box needs to be located immediately adjacent to downspout so

2. Overflow Assembly
Overflow connection will be located at the back or side of the planter box.
   - Overflow hole is located approximately 8 inches from the top of the planter box
   - Overflow will convey water either:
     1. Directly (via 1” PVC Schedule 40 (PVC) pipe) to existing stub or
     2. Away from box and house via 1” PVC pipe (with 1 or 2 elbow joints) to a location in the yard away from the home
   - Make sure top of overflow is about 2” below top level of box.

3. Underdrain Assembly
An overflow connection should be located at the back or side of the box and will convey water either:
   1. Directly (via ball valve & garden hose leader) to existing stub or
   2. Directed water away from the house via 1” PVC pipe (with an elbow)
INSTALLATION STEPS

1. Have a lead advisor approve the planter box location/orientation & Underdrain Assembly parts/layout.

2. Level the ground below the planter box.

3. Place (5) five cinder blocks (and/or (4) four 4” x 4” wood blocks) in planter box location ensuring under drain pipe will be positioned a few inches higher than stub.

4. Install Underdrain Assembly – parts are delivered dry fitted and need to be glued together with 2-part adhesive provided. Zip tie white filter fabric to cover/enclose perforated section of the underdrain pipe.

5. Have lead advisor approve Underdrain Assembly & approve Overflow Assembly.

6. Install Overflow Assembly.

7. Add (3) three 50-lb bags of gravel to bottom of planter box (covering underdrain pipe).


9. Add 12 inches of engineered soil mix by pre-mixing the following in a provided tub:

   (8) eight 50-lb bags of all purpose sand

   (3) three 5-gallon buckets of compost

   (1) one 50-lb bags of top soil

10. Install plants – ask lead advisor for guidance (taller growing species in back, lower growing species in front)

11. Add (1) one 0.5-cubic feet bag of river stone as a top mulch/energy dissipater (Ensure top of stone is 2” below top of overflow)

12. Install Downspout Diverter
**Tool List:**

(1) Battery powered electrical drill (with extension cord)
   *Multiple uses (diverter attachments, drill holes in planter box for plumbing, etc.)*

(1) 1 3/8-inch drill bit
   *To drill out underdrain hole and overflow hole*

(1) Utility knife
   *To cut 2 holes (1. for underdrain and 1. overflow) in pond liner*

(2) Channel lock wrenches
   *To tighten plumbing attachments*

(1) Hack saw (to cut
   *To cut downspout for diverter attachment*

(1) Tape measure
   *Misc.*

(1) X foot height ladder
   *Diverter attachment*

(1) String (twine)
   *Leveling/height determination of planter box in relation to stub height*

(1) Line level
   *Leveling/height determination of planter box in relation to stub height*

(1) Survey stake
   *Leveling/height determination of planter box in relation to stub height*

(3) 5-gallon buckets
   *Transport compost from delivery truck to assembly area*
Flow Through Planter Box

Diverter
Overflow
Underdrain
Stub
Underdrain Assembly

- Flow valve
- 1” to ¾” brass reducer
- ¾” nipple
- Stub
- Downspout
Cleanout riser for underdrain
Underdrain assembly
Overflow assembly
Pond liner
1. Underdrain (w/fabric) & overflow plumbing installed.

2. Gravel filled to cover underdrain piping.


4. Soil mix (12 inches) installed with space for overflow stick up.