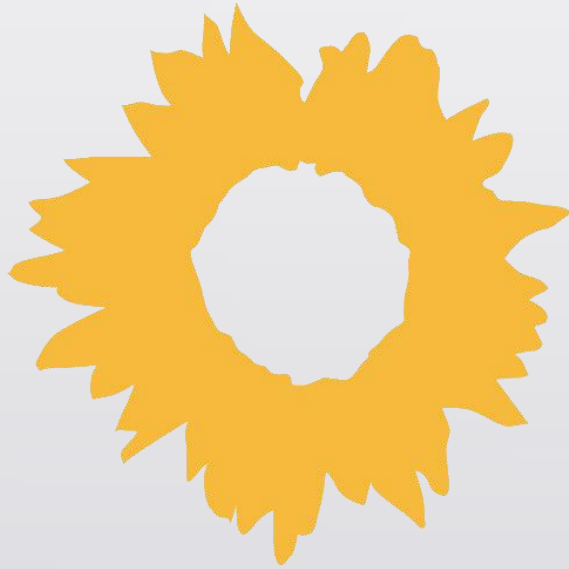

Tournesol Siteworks Bioretention Planters



*Turnkey solutions for on-structure
stormwater filtration*



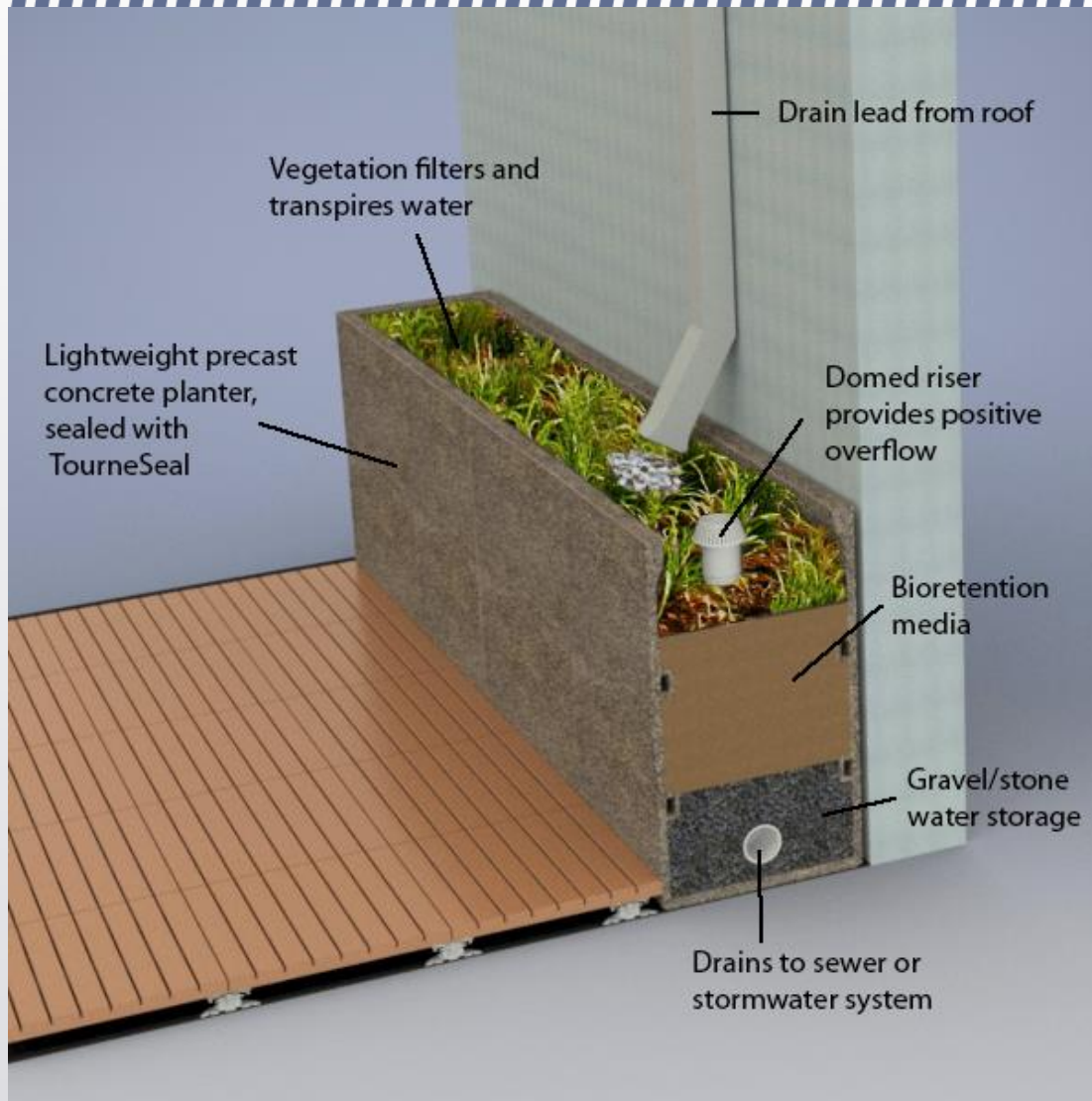
On-Structure Bioretention



- Many municipalities have code requiring that 100% of stormwater be routed through a soil and plant-based filtration bioretention garden
- Where runoff needs to be filtered and then transferred into the stormwater system, a bioretention- or flowthrough-planter is used. This typically occurs next to or on top of buildings, or draining roof areas.
- Pollutants are removed as runoff passes through biotreatment soil mix, and is collected in an underlying drain rock layer containing a perforated drain. The filtered runoff is directed to a storm drain or other discharge point.



Tournesol Siteworks Bioretention Planter System Design



- Tournesol Siteworks turnkey bioretention planter comes complete with lightweight sealed GFRC container, internal 4" dia. Drainage plumbing
- Bioretention media is typically specified by local authorities or to code
- Typical installation includes 12" of gravel or stone, 18" of bioretention media, 6-10" of ponding depth
- Plant varieties will vary depending on climate zone and building microconditions
- May be ganged or connected for larger water inflow requirements

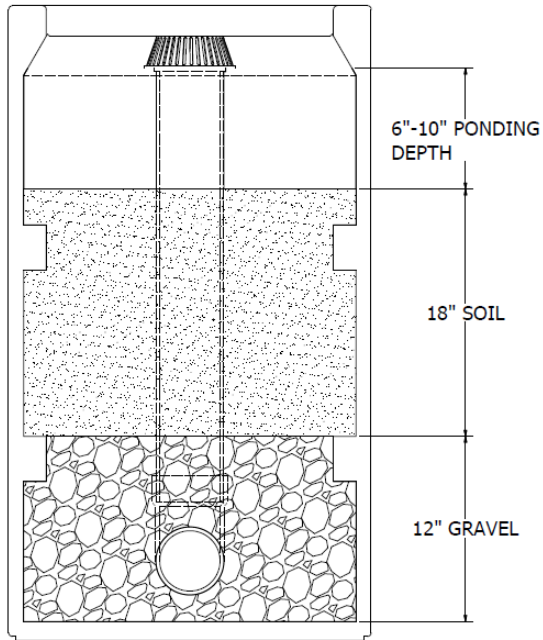


Features of the turnkey Bioretention Planter System

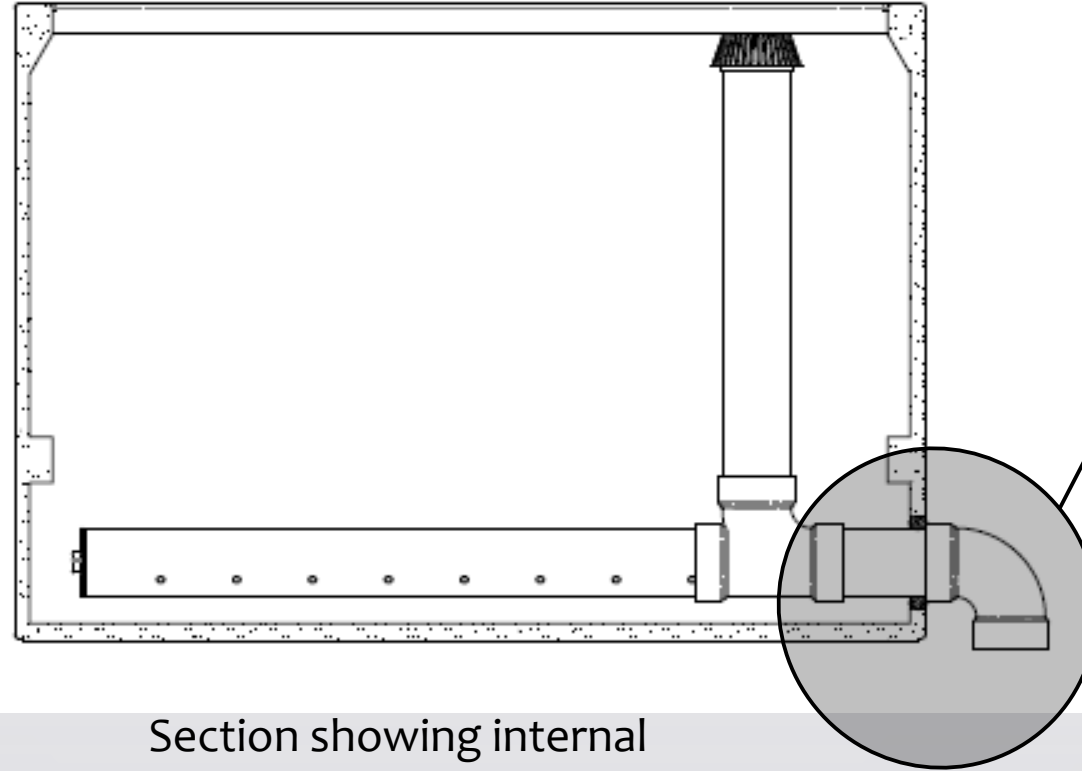
- The first standard turnkey pre-cast bioretention planters on the market today
- Allows the use of reliable monolithic membrane waterproofing below, while avoiding complicated and expensive cast-in-place construction.
 - Low lifetime maintenance
 - Lightweight containers, easy to get on site and install
- Engineered pre-cast planters in GFRC concrete
 - Variety of standard sizes and custom configurations available
 - TourneSeal impermeable interior coating
 - Mix & match with Tournesol's wide range of standard conventional pots
 - May be connected or ganged for expanded stormwater processing
- Turnkey plumbing system – just add media & plants
 - 4" sidewall output
 - Partially assembled, simple easy-to-follow instructions
 - Easy and fast to specify



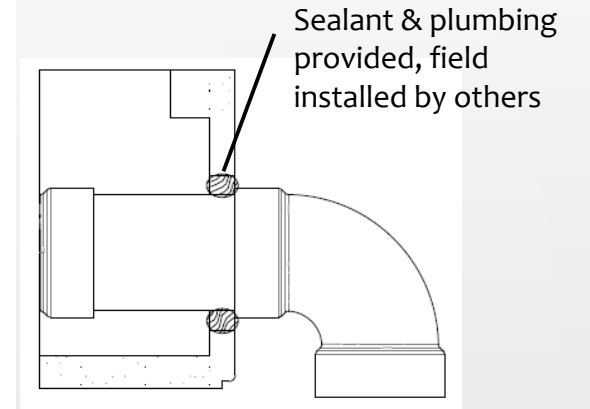
Stand-alone Bioretention Planter – typical details



Section showing typical Layer depths



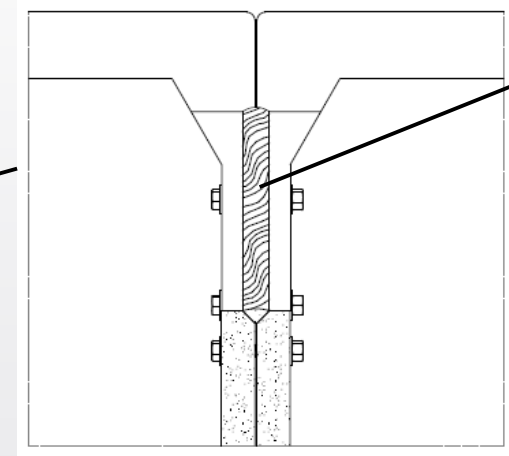
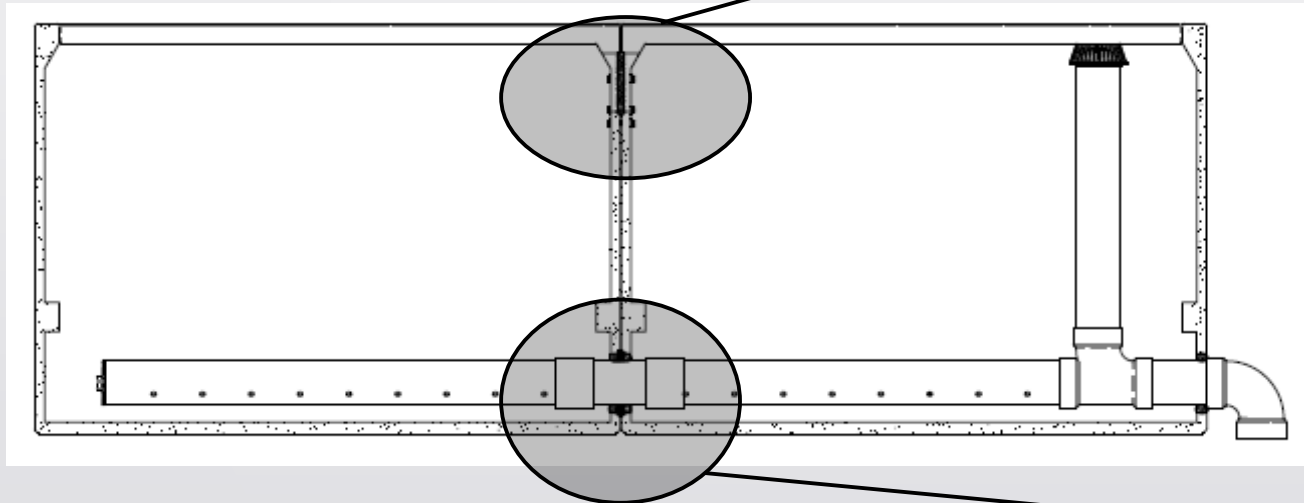
Section showing internal plumbing configuration



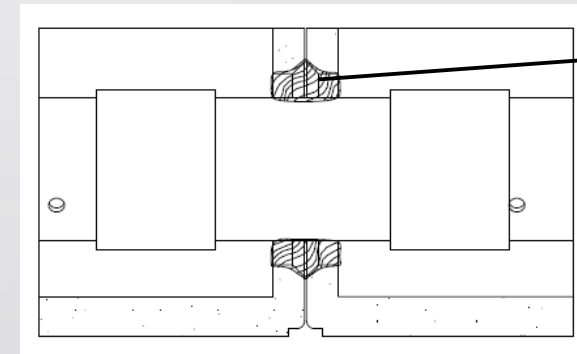
Connected or Ganged Bioretention planters

Using Tournesol Siteworks “Scoop” connections, multiple bioretention planters may be ganged together.

Maximum outflow (restricted by 4” pipe) occurs at 14’ in length



Sealant & connection bolts provided, installed in field by others

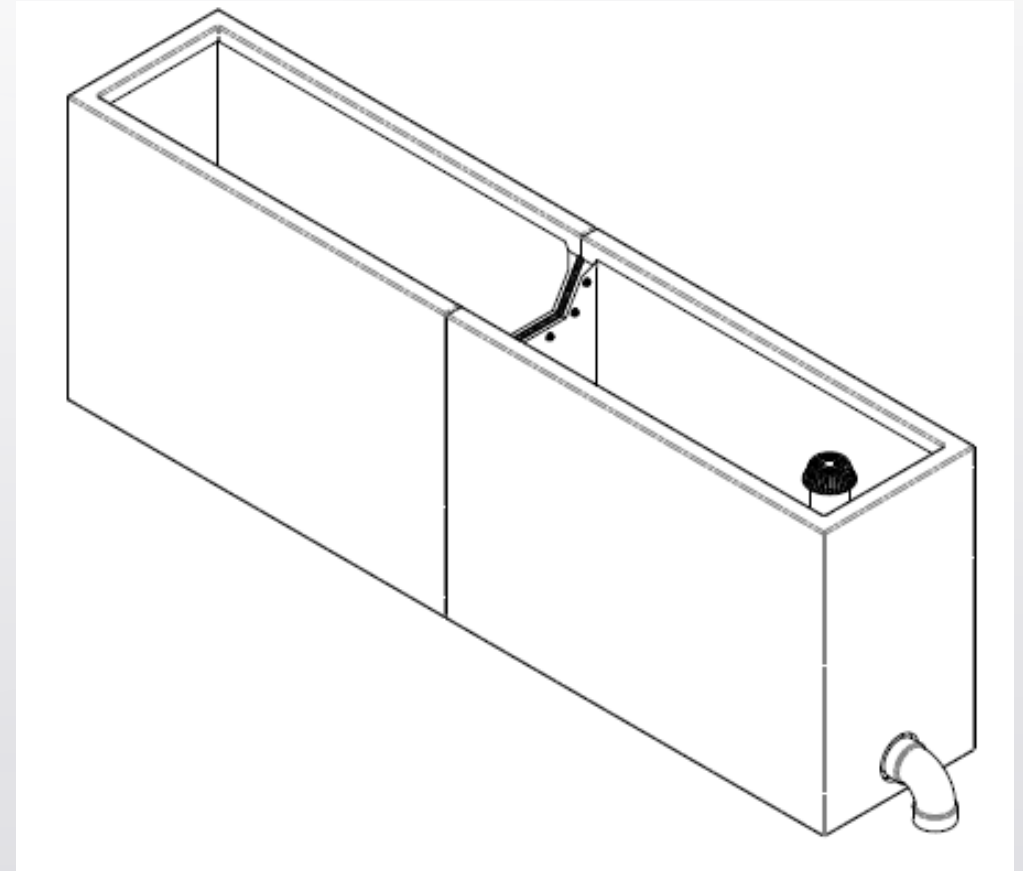


Sealant & plumbing provided, installed in field by others



Bioretention Engineering Support

- You provide typical flow calculation requirements (specified by code), including:
 - Ponding depth
 - Bioretention media flowthrough drainage rate
 - Maximum inflow rate
- We can provide:
 - Estimated discharge rates
 - Required area
 - Quantity of planters, location support



Specifying Tournesol Bioretention Planters

- Turnkey bioretention planter systems manufactured by Tournesol Siteworks
- Standard sizes

Model No.	Length	Width	Height	Surface Area (sq. in)	Max ponding volume (gal)	Treatment Volume Rate (gal/hr) *
WFT-484842	48"	48"	42"	2116	91	45.8
WFT-724842	72"	48"	42"	3220	139	69.7
WFT-964842	96"	48"	42"	4324	187	93.6

* Calculated based upon 5"/hr flowthrough rate, 10" ponding depth, 18" soil & 12" sand

- Delivered complete with plumbing assemblies, 4" side discharge port (slip connection)
- Optional scoop configuration allows for ganging of multiple bioretention planters
- Custom sizes and configurations available – discuss with your Tournesol Siteworks salesperson
- Details and drawings can be found at tournesolsiteworks.com/bioretention.html

