Small Scale Residential LID BMP Measures

Planter BoxFact Sheet





What could be better than a Best Management Practices component that adds so much to your environment? Planter box natural filtration systems not only provide exceptional water management but bring beauty and life to your property.

Are Planter Boxes Feasible at My Residence?

Planter boxes are appropriate where the following site characteristics are present:

- Roof areas with downspouts, or roof areas without downspouts that drain runoff to impervious surfaces.
- A level, firm surface away from retaining wall structures for support of the planter(s).
 Planters should only be elevated with solid construction materials, such as concrete, or wood for example. For sites within, immediately adjacent to, or discharging to an environmentally sensitive area, see the LID Manual for applicable criteria.

How Large Does My Planter Box Need to Be?

The total size of planter(s) necessary to capture run-off from a given roof area is shown in the table to the right. The table assumes a minimum planter depth of 2.5 feet, with 2 feet of soil and 0.5 feet of storage space, or "freeboard", above the soil surface.

Roof Area Tributary to Planter Boxes (sq. ft.)	Total Surface Area of Planter(s) (sq. ft.)
500 - 1000	32
1,001 - 1,500	52
1,501 - 2,000	108
2,001 - 2,500*	168

The table assumes that all runoff generated from the roof area will be directed to the planter(s). If a planter only extends across a fraction of a roof drip line for which it was designed to capture all runoff, one of the following methods shall be implemented:

- Additional planters shall be installed to extend across the entire roof drip line.
- Gutters or other devices shall be installed on the tributary roof to direct all runoff to the planter box(es).
- Additional LID BMPs shall be implemented to capture the runoff unaccounted for by the planter box(es).

Small Scale Residential LID BMP Measures

Planter BoxFact Sheet

Design Criteria and Considerations

When installing a planter box, the following criteria should be adhered to unless otherwise permitted by the City of Long Beach. The owner should check all boxes that will be complied with.

At locations without rain gutters, planters are placed directly below roof drip lines to capture runoff as efficiently as possible.
At least 6 inches of storage is present between the planting surface and the crest of each planter.
At locations implementing multiple planters, planters are placed directly adjacent to one another so as to minimize the impervious space between planters.
Planters are not located on uneven or sloped surfaces.
Planting soil is at least 2 feet deep.
Planting soil contains no more than 30% compost.
Planters have not been installed on elevated platforms, decks or porches without consulting local building code officials.
The project is in full compliance with all applicable sections of the current municipal code, including drainage requirements per the Long Beach Building and Safety Code.

Operations and Maintenance

Once a planter box is installed, the following criteria should be adhered to. The owner should check all boxes that will be complied with.

Planters will undergo annual plant and soil maintenance typical of landscape care procedures to ensure optimum filtration, storage, and drainage capabilities.
 Following rain events, planters will be inspected to ensure that standing water is not present in the planter for more

than 72 hours (3 days). Ponded water that is not completely

- drained after 72 hours can cause vector breeding.

 If vector breeding occurs as a result of contained stormwater or inadequately maintained BMPs,
 I understand that the City of Long Beach Department of Health and Human Services, Bureau of Environmental Health, has the ability to fine site owners for violating the California Health and Safety Code
- Pesticide additives will not be used in the planters.

(Section 2060 - 2067).

Vegetable gardens can effectively be used in planters.



For more information, contact Long Beach Development Services at

(562) 570.5237 or www.lbds.info

Owner Certification

"As the owner of the project property, I hereby certify that the above information is true, accurate, and complete, to the best of my knowledge."

Owner Signature: Date:

^{*} Projects adding roof or impervious areas in excess of 2,500 sq.ft. shall add 20 sq. ft. of planter box surface area per every 500 sq. ft. of additional area.