

Calculation Sheet for Green Roofs

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|----------------------------------|---------------------|
| Project Name: _____ | MSD Reviewer: _____ |
| Date Submitted: _____ | WM No. _____ |
| Property Address: _____ | |
| Development/Property Name: _____ | |
| GMP Number: _____ | |
| Design Firm: _____ | |
| Design Engineer: _____ | Telephone: _____ |
| | Email: _____ |
| KY PE No.: _____ | |

Step A. Site Planning Recommendation

Define goals and primary function of extensive green roof based on the Green Roof fact sheet in section 18.4.5. Refer to this section as needed throughout the remainder of this calculation sheet.

Step B. Calculate the Water Quality Volume Required (VR) of water to be removed by the Green Roof

The area of the green roof shall be considered pervious area and will not require additional water quality treatment. If a green roof covers at least 90% of a roof, the green roof shall be considered to treat 100% of the roof surface.

- 1. A = Area of the roof: _____ ft²
- 2. p = Media porosity (% void): _____ 40 %
- 3. M = Depth of the media: _____ ft
- 4. S = Storage depth of the drainage layer: _____ ft
- 5. $VP = (A)[(p)(M)] + (A)S =$ _____ ft³

Step C. Prepare exhibits A and B for long-term maintenance and operation agreement.
