

REM Inc.

Service Maintenance Program: Weighted Wattles

Our goal at REM is to provide a complete storm water service package that incorporates specific inspections and maintenance programs that are tailored to each sites needs. Since every site is different, the first year's inspections and maintenance is very important in determining what each site's capacities are. After a complete year has been monitored and analyzed a more comprehensive program may be adopted to suit the specific sites needs. Weighted Wattles are very effective at reducing sediment & hydrocarbons from onsite runoff, although these devices cannot be effective without an approved yearly maintenance/inspection program in place. Below, is a listing of the recommended services and procedures provided in our yearly inspection/maintenance program.

Weighted Wattles: Description & Reference documents

Weighted Wattles are made with a flexible fabric housing and a dense filter media (Fractured Walnut Shell). Weighted Wattles are used for erosion control, storm water run off control, sediment control and hydrocarbon sorption.

For product specifications and performance data see documents:

REM_Walnut_Wattles_Spec_Sheet_4_2006

REM_Walnut_Hydrocarbon_Test Data_04_05_2007

Weighted Wattle: Installation, Inspection and Maintenance

Installation:

Weighted Wattle installation procedures are site and application specific. Weighted Wattles are manufactured in 4', 6' and 10' lengths. Each Weighted Wattle has a 4" diameter handle and a 120lb cable tie with thru hole installed on each end of the Weighted Wattle. The cable tie thru hole and 4" handle are intended to be used for fastening locations and handling during installation.

Listed below are recommended installation instructions:

A. *For installations of Weighted Wattles on permeable or soil surfaces:* Install the Weighted Wattles in a 0.5" - 1.0" trench, insuring that no gaps exist between the soil and the bottom of the Weighted Wattle. The ends of adjacent Weighted Wattles should be tightly abutted so that no opening exists for water or sediment to pass through. 120lb cable ties with thru hole ends are provided on the ends of each Weighted Wattle and can be used as tie down locations and for cable tying Weighted Wattles tightly together. Alternately, Weighted Wattles may be lapped, 4" – 6" and secured with 120lb cable ties to prevent sediment passing through the field joint.

B. Metal or plastic spikes, landscape staples and wooden stakes can be used to fasten Weighted Wattles to the soil. Spikes, or staples should be inserted thru the 120lb cable tie thru holes or handle ends of Weighted Wattles only. Weighted Wattles are manufactured in 4', 6' and 10' lengths and one of the fastening methods above should be applied at a maximum of each 10' length of Weighted Wattle installed. If wooden stakes are used, place the stakes adjacent to the Weighted Wattle on the down stream side as a minimum and/or both sides for added security. Fasteners should not be inserted thru the Weighted Wattle as they will cause holes and tears.

C. Terminal ends of wattles may be dog legged up slope to ensure containment and prevent channeling of sedimentation.

D. *For installation of Weighted Wattles on solid/non permeable surfaces:* Weight Wattles can be installed in and around: storm drain catch basins, property lines, V-ditches, parkway drains and various other configurations. Weighted Wattles are manufactured in 4', 6' and 10' lengths. Each Weighted Wattle has a 4" diameter handle and a 120lb cable tie with thru hole installed on each end of the Weighted Wattle. The cable tie thru hole and 4" handle are intended to used for fastening locations and handling during installation.

E. Use 120lb cable ties to fasten Weighted Wattles together and to fasten Weighted Wattles to objects: Fences, posts, catch basin protector bars, metal grates, installed eye bolts, etc.

F. Care shall be taken during installation so as to avoid damage occurring to the Weighted Wattle as a result of the installation process. Should a Wattle be damaged during installation, that Weighted Wattle should be replaced.

G. Field monitoring shall be performed to verify that the installation does not damage the Weighted Wattle.

Inspection and Maintenance:

A. Weighted Wattles shall be inspected after installation to insure that no gaps exist under the Weighted Wattles or between adjacent ends. Split, torn or unraveled Weight Wattle fabric should be noted and the damage Wattles should be replaced.

B. Wattles shall be inspected after significant rainfall events and on a reoccurring scheduled basis of at least 4 times per year.

C. Sediment deposits that impair the filtration capability of the wattle shall be removed when the sediment reaches one-third of the wattles functional freeboard height. Removed sediment shall be deposited within the project in such a way that the sediment is not subject to erosion by wind or water.

D. Hydrocarbon sorption levels can be determined by visually inspecting discoloration of the Weighted Wattle's walnut media. The Walnut shell sorption of hydrocarbons discolors the media from it's natural brown color to a dark gray color. Weighted Wattles with a 50% to 70% grey media color should be replaced.

D. Installed Wattles shall be removed and/or replaced as required to adapt to changing conditions.