



## **BOLD & GOLD® GREENROOF POLLUTION CONTROL BIOSORPTION ACTIVATED MEDIA**

### **1.1 Description**

Bold & Gold® Greenroof Pollution Control (GPC) media is a Biosorption Activated Media (BAM) for storm water treatment in conjunction with other structural or non-structural stormwater BMPs. Bold & Gold® (B&G) is a patented product developed at The Stormwater Management Academy at The University of Central Florida. Environmental Conservation Solutions, LLC. is the licensed provider of the Bold & Gold® media. Contact Environmental Conservation Solutions, LLC. for a price quotation.

Environmental Conservation Solutions, LLC.  
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### **1.2 Responsibility**

The contractor shall be responsible for the satisfactory delivery, stockpiling, installation and maintenance of the Bold & Gold® GPC media during construction based on information provided in the Contract Documents and as provided by the supplier. The Bold & Gold® GPC media shall be purchased from an approved source.

### **1.3 Material**

**1-3.1 Composition:** The Bold & Gold® GPC media shall be manufactured with mineral materials and no organic materials. The final product will have more than 1 % but less than 4 % passing the 200 sieve. The mix will be composed of 80% expanded clay and 20% sorption materials by volume. The sorption material is composed of recycled tire crumb with no metals. Percentages shall be determined by in place volume. The mix will have an average dry weight of non-compacted media greater than 36 pounds per cubic foot and be non-flammable up to 482° F. Water passing through the media must not exhibit acute or chronic toxicity and not change the pH of the filtered water by more than 1.0 unit. The material will have a water holding capacity of at least 5% and total porosity of 36% as measured by porosity. The permeability as measured in the laboratory must be greater than 65 inches per hour at maximum compaction. The Bold & Gold® GPC media has a dissolved phosphorus (DP) removal capacity that exceeds 0.02 mg DP/gram of media as measured in the laboratory during normal operating conditions. Environmental Conservation Solutions, LLC. will provide certification of authenticity on the above composition and performance.

**1-3.2 Storage and Handling:** At the contractor's option, the Bold & Gold® GPC media will be delivered pre-mixed and ready to install. Pre-mixed material shall be stored in a covered and well-drained area. Material shall not be stockpiled longer than 30 days before installation to prevent separation of the material due to rainfall.



## 1.4 Construction

1-4.1 **Premixed Delivery:** Bold & Gold® GPC will be mixed by Environmental Conservation Solutions, LLC. and delivered to the jobsite ready for installation. The material can be delivered in bulk or in super sacks. The delivered material is certified to meet the patent requirements.

1-4.2 **Installation:** The Bold & Gold® GPC media shall be installed at the depth specified by the design engineer (minimum 2" depth). The surface on which the Bold & Gold® GPC media is placed shall be reasonably smooth and within  $\pm 0.1$  of the elevations shown in the plans. The surface of the Bold & Gold® GPC media is to be placed or shall be compacted to meet the requirements as specified by the design engineer. The Bold & Gold® GPC media shall not be installed until all areas that drain to it have the final stabilization in place. If the installed Bold & Gold® GPC media becomes contaminated with sediment it shall be removed and replaced at the contractor's expense. Placement of the Bold & Gold® GPC media will not occur until the surface has been prepared and all areas draining to it have been permanently stabilized.

## 1.5 Applications

1.5.1 Recommended for use in greenroof applications for pollution control.

