



Profile Soil Solutions Software (PS³)

The industry's first and only web-based design and selection tool that integrates erosion and sediment control engineering with agronomic excellence.



PS³ software is your single, comprehensive resource for designing and selecting the right products to address both the physical and chemical properties of soil and site characteristics. It will help you develop holistic, sustainable solutions for cost-effective erosion control, vegetation establishment and subsequent reductions in sediment and other pollutants from leaving disturbed sites and entering water bodies.

Develop Soil Solutions at ProfilePS3.com

- Industry's only resource that integrates the major erosion and sediment control disciplines:
 - → Hydraulically-applied Erosion Control Products (HECPs)
 - → Dry-Applied Erosion Control Products (DECPs)
 - → Rolled Erosion Control Products (RECP)
 - → Sediment Control Products (SCPs)
 - → Prescriptive Agronomic Formulations (PAF)
- Access to complete documentation, including product specifications, installation guidelines, CAD details and other pertinent technical information.
- 24/7 availability, offering design, diagnostics, product alternatives, explanations and guidance in creating sustainable erosion and sediment control solutions.
- Site solution calculations, including total product volumes required and estimated costs.

PS³ Addresses Five Critical Design Considerations for Immediate and Long-Term Vegetation

1. Soils: Erosion control projects should never proceed without a comprehensive evaluation of each type of soil to be treated. Failure to test for and address potential soil nutrient deficiencies, excessively acidic or alkaline soils and the presence of excessive salts or metals can spell disaster for any project. PS³ facilitates the testing of key soil properties such as texture, classification, pH, nutrient levels, organic matter content, electroconductivity, sodium absorption ratio and potentially elevated levels of harmful salts and metals. PS³ not only offers directions on proper soil collection for testing, it also assists in the interpretation of the soil test results and offers prescriptive application rates of various agronomic formulations.

PS³ allows you to evaluate site conditions, including but not limited to slope, channel and soil characteristics, to help assure the appropriate products are selected for each project.



Field- and Lab-Proven Methods and Products

PS³ uses widely accepted methodologies such as the Revised Universal Soil Loss Equation (RUSLE) for predicting soil loss on slopes combined with erosion control effectiveness, an international rainfall database, growth establishment rates and factors of safety to facilitate product selection for slopes.

Methodologies from the U.S. Federal Highway Administration's Hydraulic Engineering Circular Number 15 (HEC 15): *Design of Roadside Channels with Flexible Linings* (2005) are used for both unvegetated and vegetated channel design and product selection.

Additionally, performance data for Profile erosion and sediment control products has been obtained from the most prestigious U.S. universities and private testing laboratories and is the impetus for proper product selection. Once the appropriate product(s) and techniques have been selected, a detailed project summary report, along with a suite of supporting information, is available and includes: product brochures, installation guides, CAD details, MSDSs, example specifications, certification letters, case studies and other relevant material.



Green Design Engineering* is a holistic approach, combining environmentally beneficial design and ecologically sound products with agronomic and erosion control expertise, to provide the most effective, customized and cost-efficient solutions for erosion control and vegetative establishment.

2. Species Selection: It is also necessary to understand the plant species needed for sustainable growth and long-term erosion and sediment control. Soil properties, climate, moisture regimes, slope aspect, future land use and a host of other considerations contribute to proper species selection. PS³ links you directly with agronomic experts in your area who can recommend the most appropriate native, turf grass or ornamental plants.

A wealth of botanical information is also available from universities, specialized consultants and contractors, as well as federal, state and local agencies.

3. Erosion and Sediment Control Material Comparisons and Estimate: Once soil and basic agronomic considerations have been addressed, it is appropriate to begin analyzing site conditions for characteristics such as slope lengths and gradients, ditch and channel flow hydraulics, banks, levees, shorelines, wetlands and more.

Once product options are selected and the entire site solution is finalized, a product calculator will provide the total amount of each product required for a project given the Slope and Channel analysis, soil testing and plant species selection. It provides users with how much mulch, fertilizer, seed and amendment should be added into each hydroseeder load based on the working capacity of the hydroseeder. Users can also enter unit pricing received for all Profile product recommendations for the site to calculate a cost estimate.

- **4. Installation:** Proper installation practices are critical to the success of any erosion and sediment control measure. PS³ provides detailed installation guidelines and CAD details for all of our erosion and sediment control techniques, including Hydraulically-applied Erosion Control Products (HECP), Rolled Erosion Control Products (RECP) and Sediment Retention Fiber Rolls (SRFR).
- 5. Inspection and Maintenance: After the erosion and sediment control solutions have been installed, it's important to visually inspect and maintain them on a regular basis. The U.S. National Pollutant Discharge Elimination System (NPDES) Phase II regulations require that all active construction sites be routinely inspected and maintained after each significant precipitation or other potentially damaging event. PS³ provides inspection and maintenance documents for each of the erosion and sediment control disciplines.

Maximize the success of your project—sign up and try PS³ today at ProfilePS3.com!



