

# Ultimate Assurance Guarantee Design with Confidence

North American Green (NAG) hereby guarantees the performance of its Rolled Erosion Control Products (RECPs) sold hereunder, provided the NAG RECP used in the application is designed and specified by a qualified engineer or North American Green technical representative prior to product installation in accordance with the most recent version of the Erosion Control Materials Design Software (ECMDS®) and is installed in accordance with the installation guidelines. All conditions for product usage as stated within the ECMDS must be satisfied in order for the provisions of this guarantee to apply in full or in part. In order to qualify for this guarantee, the project and associated ECMDS erosion control design information must be registered with North American Green prior to installation of the product. Seedbed preparation, seed application, product installation and staple pattern must be in accordance with North American Green published and/or written recommendations. Vegetation species selection and seeding rates must be in accordance with North American Green recommendations or those made by a qualified agronomist or seed supplier. This guarantee expressly warrants the performance of NAG RECPs for controlling surficial erosion of soils due to the natural forces of rainfall and flowing water. Soil erosion caused or exacerbated by internal structural instability of the soil mass, slumping or settling of underlying soils, insufficient drainage of ground water, piping of ground water through the soil surface layer or erosion initiated and/or exacerbated by human activities following installation of the RECP, or act of nature beyond the scope of the design and specified intent is expressly excluded. Due to various uncontrollable environmental factors that affect seed germination, North American Green does not guarantee the germination of seed used with the RECP. Specific performance and failure criteria are exclusively defined within the following product categories.

### **GUARANTEED PRODUCT PERFORMANCE**

Temporary Erosion Control Applications: (Based on ECMDS Design with Unvegetated RECPs: S75, DS75, S75BN, S150, DS150, S150BN, SC150, SC150BN, C125, C125BN, SC250, C350, P300, P550, W3000, ShoreMax/Vmax):

**Temporary Slope Protection** - The RECP will reduce maximum soil loss to at or below the designated Soil Loss Tolerance (SLT) through the specified Protection Period up to 75% of the RECP's functional longevity (or 18 months, whichever is shortest), assuming the calculated Maximum Soil Loss (MSL

mat) for the RECP is less than or equal to the Soil Loss Tolerance; all factors used in the soil loss calculations are congruent with the actual application; and the slope is not subjected to rainfall conditions following RECP installation which exceed the projected R (rainfall) factor used in the calculations.

**Temporary Channel Protection** - The RECP will reduce soil loss to below 0.50 inches (1.27 cm) from the channel surface during the design storm flow event through a time period not exceeding 75% of the RECP's functional longevity (or 18 months, whichever is shortest), assuming the calculated Maximum flow-induced Shear Stress on the RECP does not exceed the RECP's (unvegetated) Permissible Shear Stress; all factors used in the shear stress calculations are congruent with the actual application; and the channel is not subjected to discharges following RECP installation which exceed the projected discharge (cubic feet or cubic meters per second) used in the calculations.

Permanent Erosion Control and Turf Reinforcement Applications (Based on ECMDS Design Vegetated SC250, C350, P300, P550, W3000, ShoreMax/VMax only)

**Permanent Slope Protection** - The RECP, in a fully vegetated state (as defined in the reference ECMDS analysis), will reinforce vegetation and reduce average soil loss to at or below the designated Soil Loss Tolerance (SLT) for a period of 5 years following installation, assuming the calculated Average Soil Loss (ASL mat) for the fully vegetated RECP is less than or equal to the Soil Loss Tolerance; all factors used in the soil loss calculations, including those defining the expected vegetative cover, are congruent with the actual application; and the slope is not subjected to rainfall conditions exceeding the projected Annual R (rainfall) factor used in the calculations.

Channel Protection - The RECP, in a fully vegetated state (as defined in the reference ECMDS analysis), will reinforce vegetation and reduce soil loss to below 0.50 inches (1.27 cm) from the channel's surface during the design storm flow event for a period of 5 years following installation, assuming the calculated Maximum flow-induced Shear Stress on the fully vegetated RECP does not exceed the fully vegetated product's Permissible Shear Stress; all factors used in the shear stress calculations, including those defining the expected vegetative cover, are congruent with the actual application; and the channel is not subjected to discharges exceeding the projected discharge (cubic feet or cubic meters per second) used in the calculations.

#### PRODUCT LONGEVITY WARRANTY

North American Green warrants the functional longevity of its permanent turf reinforcement mattings, including the P300, P550, W3000 and the synthetic turf reinforcement components of the Vmax3 SC250 and C350 composite turf reinforcement mats (C-TRMs), for a period of 10 years after product installation, assuming that all factors used in the ECMDS erosion control design process, including those defining the expected vegetative cover, are congruent with the actual application. The functional longevity of the RECP is defined as the minimum length of time, when exposed to naturally occurring chemical elements and UV (sunlight) radiation, the RECP will retain sufficient structural integrity and the necessary physical properties to enable it to provide the claimed level of erosion control and turf reinforcement.

# PRODUCT UPGRADE AND MATERIALS REPLACEMENT POLICY

In the event North American Green determines that the RECP was properly installed and failed, NAG shall provide the following materials for replacement of the failed RECP/s only in the specific area/s in which such failure occurred:

- As warranted, the next higher performance RECP/s in the NAG Erosion Control product line (example: If S75 is used and were to fail, it will typically be replaced with S150. Determination of product type/s for replacement of failed product/s is at the sole discretion of North American Green).
- ► Otherwise the customer's sole and exclusive remedy shall be for the repair or replacement of the failed RECP/s
- All necessary fasteners (original number and type of staples or stakes used)
- Originally applied topsoil, seed, fertilizers and other soil amendments that are lost directly because of the product failure

In no event shall North American Green be responsible or liable for any labor and/or equipment costs associated with topsoil placement, seedbed preparation, or installation of replacement RECPs or other materials. North American Green shall not be liable for any damages of any type or description, and its liability under this warranty shall be limited solely to the aforesaid replacement of materials.

## **PROJECT REGISTRATIONS**

All projects and associated ECMDS erosion control design information must be registered with North American Green prior to installation of the product. Project registration is available electronically through ECMDS and the NAG website, or may also be accomplished with a North American Green Ultimate Assurance Guarantee Project Registration Card available through the authorized NAG distributor, or direct from NAG. Upon receipt of the project registration information, North American Green will acknowledge registration of the project and reply with a Project Registration Number that must be retained by the customer for future reference.

### **CLAIM SUBMITTALS**

All claims under this warranty must be made within ten (10) days after a failure has occurred. All such claims must be in writing and include the Project Registration Number. All claims must be sent to the following address:

North American Green, Inc. Ultimate Assurance Guarantee Claims 5401 St. Wendel-Cynthiana Rd. Poseyville, IN 47633

Or send an email to: customerservice@nagreen.com

Upon receipt of written claim, North American Green and/or its authorized distributor will reply with a Guarantee Claim Form that must be completed by the claimant and returned to North American Green or its authorized distributor. Following receipt of the Claim Form, North American Green and/or its authorized distributor shall promptly inspect the installation and the subject RECP's and shall provide the customer with a written acceptance or denial of the claim within ten (10) days of such an inspection.

OTHER THAN AS EXPRESSLY SET FORTH HEREIN, NORTH AMERICAN GREEN DISCLAIMS ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. NORTH AMERICAN GREEN SPECIFICALLY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.



NORTH AMERICAN

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