



# Material Specifications

## WinterStraw™ HV

**HVG - Double Net -Green**

**HVW - Double Net -White**

**HV Bio - Double Net - Jute**



**WinterStraw™ HV** (High Velocity) Double Net Products are short term, single top & single bottom net erosion control blankets that are machine-assembled using 100% agricultural straw fibers. The straw fibers are evenly distributed across the entire area of the blanket to a rough thickness of 3/8" and stitched between your choice of netting using high strength degradable thread. Biodegradable thread is used on our Bio (Jute) Products

Each blanket is covered on the top and bottom with a photodegradable polypropylene or jute net. Net openings are approximately 1/2" wide x 1/2" long and are stitched on 1 1/2" centers for increased performance capabilities.

### Netting options:

Green Net – Standard photodegradable polypropylene netting.

White Net – Rapidly degrading, polypropylene netting with a UV degrader additive.

Jute Net – Biodegradable fiber netting

All WinterStraw™ blankets are individually labeled and shrink-wrapped to protect against the weather and damage.

### Materials:

100% Certified Weed Free Straw

Photodegradable polypropylene Netting or Jute Netting

Degradable polypropylene Thread or Biodegradable Thread

### Roll Sizes:

Area:	100 yd <sup>2</sup>	200 yd <sup>2</sup>	500 yd <sup>2</sup>
Width:	8 feet	16 feet	8 feet
Length:	112.5 feet	112.5 feet	562.5 feet
Weight:	50 lbs	100 lbs	250 lbs

### Physical Characteristics:

Fiber:	100% Certified Weed Free Agricultural Straw
Unit Weight:	0.50 lb/yd <sup>2</sup> ± 10%
Thread Material:	High Tensile Polypropylene or High Tensile Biodegradable Thread
Thread Pattern:	1.5" wide x 4" long
Netting:	Polypropylene (green or white) or Jute Netting
Net Openings:	1/2" wide x 1/2" long
Net Configuration:	1- Top & 1- Bottom

### Performance Characteristics:

Winterstraw™ blankets are designed to provide temporary ground cover to reduce erosion, protect seeding, enhance germination, and speed re-vegetation. Functional longevity is between 3 and 12 months depending on soil conditions, climate, geography, and choice of netting. Testing shows HVG, HVW, and HV Bio blankets are suitable for the following applications:

**Slopes:** up to 2:1      **Channel flows:** up to 4.5 ft per second      **Shear Stress:** up to 1.63 lbs/ft<sup>2</sup>.

All figures are based on product at the time it is manufactured.

# WinterStraw™ ~ Double Net Performance Data Sheet

WinterStraw™ blankets are constructed of 100% Natural Straw fibers stitched between two photodegradable polypropylene nets using degradable thread. WinterStraw™ HVBio blankets offer biodegradable Jute netting and high tensile biodegradable thread. Our blankets are designed to protect against erosion by providing temporary ground cover while enhancing seed germination and assisting with vegetation establishment. Functional longevity is as short as 45 days and up to 12 months depending on product used and site conditions. Soil erosion is controlled by the root system, stem and leaf structure of the mature vegetation after the blankets degrade.

WinterStraw Double Net blankets are rated for channel flows up to 4.5 feet per second and 1.63-lbs/ft<sup>2</sup> shear stress. Additionally, our blankets have a design C-Factor of .042 and are typically appropriate for up to 2:1 slopes.

## Additional Physical Properties as tested and observed:

Property	Test Method	Typical Values*
Mass per Unit Area	ASTM D 6475	8 oz/yd <sup>2</sup>
Thickness	ASTM D 6525	0.366 inches
Light Penetration	ASTM D 6567	11%
Water Absorption	ASTM D 1117/ECTC-TASC 00197	403%
Swell	ECTC Guidelines	22%
Resiliency	ASTM D 6524	61%
MD Tensile Strength	ASTM D 4595	132 lb/ft
MD Elongation	ASTM D 4595	16%
TD Tensile Strength	ASTM D 4595	144 lb/ft
TD Elongation	ASTM D 4595	24%

## ECTC Bench Scale Testing \*\*

Description of Test Method	Test Method	Results
ECTC Method 2 -Determination of un-vegetated RECP ability to protect soil from Rain Splash and associated runoff.	<u>2 in. (50mm)/hr for 30 minutes</u>	<u>Soil Loss Ratio = 4.60</u>
	<u>4 in. (100mm)/hr for 30 minutes</u>	<u>Soil Loss Ratio = 6.10</u>
	<u>6 in. (150mm)/hr for 30 minutes</u>	<u>Soil Loss Ratio = 8.00</u>
ECTC Method 3 - Determination of un-vegetated RECP ability to protect soil from Hydraulically Induced Shear stress.	Shear Loss Curve Intercept	1.63 psf@ 1/2" soil loss
ECTC Method 4 - Determination of Temporary Degradable RECP performance in encouraging seed germination and plant growth.	% Improvement/Increased Biomass	443%

\* Index values may vary from measurements taken at the time of manufacturing due to environmental conditions affecting gains or losses in moisture.

\*\* Soil Loss Ratios, as reported by NTPEP = Soil Loss Bare Soil/Soil Loss with RECP (Note: soil loss is based on regression analysis)





## Material Specifications

### WinterStraw™

SNG - Single Net-Green  
SNW - Single Net-White  
Bio - Single Net-Jute



**WinterStraw™** Single Net Products are short term, single top net erosion control blankets that are machine-assembled using 100% agricultural straw fibers. The straw fibers are evenly distributed throughout the entire area of the blanket to a rough thickness of 3/8" and stitched to your choice of netting using high strength degradable thread. Biodegradable thread is used on our Bio (Jute) products.

Each blanket is covered on the top with a single photodegradable polypropylene or jute. Net openings are approximately 1/2" wide x 1/2" long and are stitched on 1 1/2" centers for increased performance capabilities.

#### **Netting options:** **Functional Longevity**

Green Net – Standard photodegradable polypropylene netting.	12 Months
White Net – Rapidly degrading, polypropylene netting with a UV degrader additive.	45-90 Days
Jute Net – Biodegradable jute fiber netting.	12-18 Months

All WinterStraw™ blankets are individually labeled and shrink-wrapped to protect against the weather and damage.

#### **Materials:**

100% Certified Weed Free Straw  
Photodegradable polypropylene Netting / Biodegradable Jute Netting (Leno Weave)  
Degradable polypropylene Thread / Biodegradable Cotton Thread

#### **Roll Sizes:**

Area:	100 yd <sup>2</sup>	200 yd <sup>2</sup>	500 yd <sup>2</sup>	1000 yd <sup>2</sup>
Width:	8 feet	16 feet	8 feet	16 feet
Length:	112.5 feet	112.5 feet	562.5 feet	562.5 feet
Weight:	50 lbs.	100 lbs.	250 lbs.	500 lbs.

#### **Physical Characteristics:**

Fiber:	100% Certified Weed Free Agricultural Straw
Unit Weight:	Minimum of 0.50 lb./yd <sup>2</sup>
Thread Material:	High Tensile Polypropylene or High Strength Biodegradable Thread
Thread Pattern:	1.5" wide x 4" long
Netting:	Polypropylene (green or white) or Jute Netting
Net Openings:	1/2" wide x 1/2" long
Net Configuration:	Top Side Only

#### **Performance Characteristics:**

Winterstraw™ blankets are designed to provide temporary ground cover to reduce erosion, protect seeding, enhance germination, and speed re-vegetation. Functional longevity is between 3 and 12 months depending on soil conditions, climate, geography, and choice of netting. Testing shows SNG, SNW, and Bio blankets are suitable for the following applications:

**Slopes:** up to 3:1      **Channel flows:** up to 4.5 ft per second      **Shear Stress:** up to 1.5 lbs./ft<sup>2</sup>.

All figures are based on product at the time it is manufactured.



# WinterStraw™ ~ Single Net Performance Data Sheet

WinterStraw™ blankets are constructed of 100% Natural Straw fibers stitched to a single photodegradable polypropylene net using degradable thread. WinterStraw™ Bio blankets offer biodegradable Jute netting and high tensile biodegradable thread. Our blankets are designed to protect against erosion by providing temporary ground cover while enhancing seed germination and assisting with vegetation establishment.

Functional longevity is as short as 45 days and up to 12 months depending on product used and site conditions. Soil erosion is controlled by the root system, stem and leaf structure of the mature vegetation after the blankets degrade.

WinterStraw Single Net blankets are rated for channel flows up to 4.5 feet per second and 1.55 lbs./ft<sup>2</sup> shear stress. Additionally, our blankets have a design C-Factor of .05 and are typically appropriate for up to 3:1 slopes.

## Additional Physical Properties as tested and observed:

Property	Test Method	MARV*
Mass per Unit Area	ASTM D 6475	8.32 oz./yd <sup>2</sup>
Thickness	ASTM D 6525	0.33 inches
Light Penetration	ASTM D 6567	35 %
Water Absorption	ASTM D 1117/ECTC-TASC 00197	399%

## ECTC Bench Scale Testing \*\*

Description of Test Method	Test Method	Results
ECTC Method 2 -Determination of un-vegetated RECP ability to protect soil from Rain Splash and associated runoff.	2 in. (50mm)/hr. for 30 minutes	Soil Loss Ratio = 4.80
	4 in. (100mm)/hr. for 30 minutes	Soil Loss Ratio = 6.59
	6 in. (150mm)/hr. for 30 minutes	Soil Loss Ratio = 9.05
ECTC Method 3 - Determination of un-vegetated RECP ability to protect soil from Hydraulically Induced Shear stress.	Shear Loss Curve Intercept/ Bench Scale	1.55psf@ ½" soil loss
ECTC Method 4 - Determination of Temporary Degradable RECP performance in encouraging seed germination and plant growth.	% Improvement/Increased Biomass	133%

\* Minimum Average Roll Values (MARV) are calculated as an average of values of rolls taken during quality assurance testing.

\*\* Soil Loss Ratios, as reported by NTPEP = Soil Loss Bare Soil/Soil Loss with RECP (Note: soil loss is based on regression analysis)

