

SEED & EROSION CONTROL

2022 PRODUCT GUIDE



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Since 1932, the Ramy family has provided the upper Midwest with some of the highest quality seed materials available. That is over 85 years of serving our customers – we are proud of that. It says a lot about who we are as a company. We are here as a partner, not just a supplier because we know it is your success that will allow our success.

Our product line continues to expand with a focus on materials that insure our seed stays where you put it, establishes quickly, gets you paid, provides you referrals and keeps you coming back for more!

Our Mission

“To provide the highest quality seed and erosion control products to our customers at the best value price. In a rapidly evolving market, our staff and industry partners will consult, problem solve, educate and ultimately deliver the solutions that insure our customers success.”

More information Available Online



Please go to ramyturf.com for complete product listings, including the required information for material submittal, a soil test form, links to case studies, install guidelines and much more.

RTP HOUSE MIXTURES

Not all seed mixtures and blends are created equally, so choosing the right product for your next project is more important than you think. You can buy from a big box or national landscape supply house and get a “Sunny” mixture and it will grow. However, the odds are, that mixture was made to be sold from Illinois to Nebraska, not designed with varieties proven to perform in our demanding climate. Increase your customers’ long term satisfaction and word of mouth referrals to your business by letting our 85+ years of seed blending expertise work for you!

LAWN

Glencrest

PREMIUM SUN & SHADE

Comprised of only carefully selected, elite varieties of Kentucky bluegrass, perennial ryegrass and fine fescues. This mixture will provide your customers with a sod quality turf density and color while maintaining some diversity. Glencrest will look its best under medium to high management.

- 60% Kentucky Bluegrass (3 Varieties)
- 20% Perennial Ryegrass (2 Varieties)
- 20% Fine Fescue

Grounds Crew

ALL PURPOSE LANDSCAPE

The name kind of says it all – it’s designed to establish fast with 10% Annual Rye and works well for those areas that won’t receive a high level of inputs because of access, budget, etc.

- 40% Kentucky Bluegrass (2 varieties)
- 25% Fine Fescue
- 25% Perennial Ryegrass
- 10% Annual Ryegrass

Sandy Soil

When you have light, well-draining soils and it isn’t easy to keep water on it this mixture could be the answer. Comprised of 40% elite turf type tall fescue the root system of our Sandy Soil mixture digs deep to tap water that bluegrass and ryegrass can’t reach.

- 40% Turf Type Tall Fescue (2 varieties)
- 20% Fine Fescue
- 20% Perennial Ryegrass
- 20% Kentucky Bluegrass

Ingredient & varietal substitutions may be made based on market conditions and availability.

All mixes are available in 25lb and 50lb bags except where noted.

Shady Way

FULL TO PARTIAL SHADE

Formulated with a diverse group of elite varieties particularly suited for areas that receive less than four hours of sunlight per day. Other notable characteristics of Shady Way are its fine leaf texture, drought resistance and slower growth rate.

- 65% Fine Fescue
- 20% Kentucky Bluegrass
- 15% Perennial Ryegrass

Quick Start

RAPID GERMINATION

All seed companies have this mixture – because it works and it is affordable. It has some of everything so it is adaptable, it is great patch and over-seeder it is perfect for low maintenance areas.

- 25% Kentucky Bluegrass
- 25% Fine Fescue
- 25% Perennial Ryegrass
- 25% Annual Ryegrass

Cut-Less

LOW GROW FESCUE

A true Low Growing mixture, call it “Scottish Links” style or “Eco-Lawn”, the benefits of this mixture are many. Requires very little in the way of traditional inputs including water, fertilization and mowing. It grows slowly to approximately 12” but lays down giving the appearance of low profile. All of these characteristics help reduce the carbon footprint compared to a traditional turf mixture. (I can’t believe I just used the term carbon footprint).

- 100% Fine Fescue

Pro-Seeder

COMMERCIAL SUN & SHADE

Okay, this is the go to mixture for professional seeding contractors and landscapers. With hundreds of thousands of pounds planted it is trusted to perform in a wide range of conditions – sun, shade, high maintenance, low maintenance, high traffic, irrigated or non-irrigated, etc. With improved, locally grown varieties you can be sure Pro-Seeder will excel in our challenging environment.

- 50% Kentucky Bluegrass (3 varieties)
- 30% Fine Fescue

Low Light

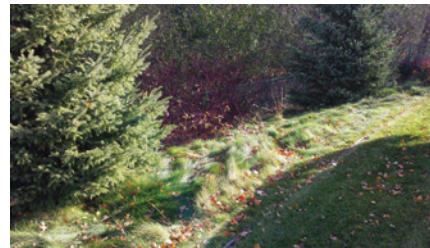
SHADE MIX

Designed to complement our Grounds Crew mixture when a more shade tolerant product is needed. This mixture uses some proven shade performers along with two Kentucky bluegrass varieties for dense turf and adaptability.

- 50% Creeping Red Fescue
- 20% Perennial Ryegrass
- 20% Kentucky Bluegrass (2 varieties)
- 10% Chewings Fescue



Cut-less grass



RTP HOUSE MIXTURES

ATHLETIC AND MANAGED TURF

Big 9

ATHLETIC FIELD

A traditional 60% Blue / 40% Rye athletic mixture, we have chosen products that excel in wear tolerance, recovery and green up and more utilizing the recent NTEP data (National Turf Evaluation Program). Big 9 will provide a dense, even playing surface limiting injuries and improving game play. This mixture is also well suited for other high traffic, managed turf or lawn situations.

60% Kentucky Bluegrass (3 elite)
40% Perennial Ryegrass (2 elite)

Sod Blends

We have two types, Gold and Platinum and like the credit card business Platinum is more prestigious. Both use elite, dark green, fine leaf texture, low cut bluegrasses, we just put some new genetic material in the Platinum version. Both use 4 varieties – please call for a current composition. You don't need the national guys, just keep it local with Ramy Turf Products.

Tuff Turf

ATHLETIC FIELD & HEAVY TRAFFIC

Designed with data collected from years of research at the U of M, Tuff Turf uses new generation, lateral spreading, fine leaf tall fescue along with the right amount of bluegrass. This mixture is extremely wear and drought resistant and matures to provide a very forgiving playing surface.

95% Lateral Spread Turf Type Tall Fescue (3 elite)
5% Kentucky Bluegrass

Tri-Play

PREMIUM RYEGRASS BLEND

Three Elite, Minnesota grown perennial ryegrass make this a perfect over-seeder product.

100% Premium Perennial Ryegrass Blend
(3 Varieties)



SPECIALTY/MISCELLANEOUS

Stabilization

Derived from the legendary MnDOT 500 mixture – Stabilization mix is a fast establishing, highly diverse mixture that achieves aggressively dense vegetation in a wide variety of soil types. Perfect for ditch use, development locations or anywhere that rapid erosion control and revegetation is needed.

30% Annual Ryegrass
23% VNS Perennial Ryegrass
20% Creeping Red Fescue
10% Timothy
10% Turf Type Tall Fescue
5% Slender Wheatgrass
2% White Clover

Street Side

BOULEVARD / SALT TOLERANT

For safety reasons, public entities and even home owners have to salt paved surfaces in the winter – it is just part of living in MN. Our Street Side mixture is able to withstand high salt loads without sacrificing color or texture. For patching damaged areas or for newly seeded areas where salt use is anticipated.

40% Kentucky Bluegrass (2 varieties)
20% Perennial Ryegrass
20% Improved Creeping Red Fescue
20% Alkali Grass

Erosion Control

Erosion Control Mixture is perfect for short / long term stabilization or other areas that will be disturbed and reseeded to permanent vegetation.

40% Spring Oats
12.5% Turf Type Tall Fescue
10% Creeping Red Fescue
10% VNS Perennial Ryegrass
7.5% Alsike Clover
.5% Timothy
7.5% Annual Rye
5% Kentucky Bluegrass

Bee Lawn

The Ramy Bee Lawn mixture is a cost-effective and practical option for new lawn establishments and overseeding of existing lawns. The combination of low maintenance, drought and shade tolerant fine fescues, along with Dutch white clover, make this the perfect mixture for pollinator nutrition. Designed with cost effectiveness and practical pollinator benefit in mind, this bee lawn mixture will germinate in as little as 4 days with proper watering.

90% Fine Fescue
10% Dutch White Clover

Cattle & Hay Pasture

Alfalfa-Based Forage Mix is a dependable alfalfa based pasture mix designed for hay production where some grass is required. This mixture will produce high-quality forage over a 3-4 year rotation under good management and is best adapted to well drained soils with a pH of 7.0-7.5.

40% Alfalfa
20% Orchardgrass
20% Tetra-Mag Perennial Ryegrass
15% Forage Tall Fescue
5% Ladino Clover

Horse Pasture

For optimum grazing and animal this mixture is endophyte free, winter hard and fast establishing.

25% Orchardgrass
25% Forage Tall Fescue
20% Tetra-Mag Perennial Ryegrass
10% Bromegrass
10% Timothy
10% Forage Bluegrass

Ingredient & varietal substitutions may be made based on market conditions and availability.

All mixes are available in 25lb and 50lb bags except where noted.

RTP HOUSE MIXTURES

GOLF COURSE TURF

'Piranha' Cr Bent

SUPERIOR GENETICS

One of the best performing bentgrass varieties in recent national and local trials, Piranha creeping bentgrass provides exceptional quality and stress characteristics compared to other bentgrasses. This variety was bred to excel in high heat situations, maintaining high quality, disease resistance, and annual bluegrass competitiveness throughout the summer months. For utilization on greens, tees, and fairways, Piranha will not disappoint.

'Barracuda' Cr Bent

SPRING GREENUP, LOWER MAINTENANCE

Developed to excel in low input environments, Barracuda creeping bentgrass provides superior disease resistance, high shoot density, and outstanding quality on short cut surfaces, such as greens and fairways. Developed in cooperation with Rutgers University from nine unique parents, Barracuda demonstrated the highest rating for spring greenup in the most recent fairway NTEP among 16 other varieties.

'Shark' Cr Bent

QUICK ESTABLISHMENT

Touted as the "Superintendent Friendly" creeping bentgrass, Shark combines versatility with dependable performance. This variety has improved seedling vigor, translating to quicker establishment, combined with good color and a high shoot density. Shark is suited for all short grass surfaces and continues to outperform other varieties.

Piper & Oakley Cr Bent

NEW FOR 2022, LIMITED AVAILABILITY

Piper and Oakley are the latest bentgrass varieties to be released from Mountain View Seeds. Developed by Dr. Stacy Bonos at Rutgers University and in collaboration with the USGA, these two unique varieties were named in honor of the original USGA Green Section agronomists, Dr. Charles Piper and Dr. Russell Oakley. We are excited to get these new varieties into the marketplace.

Cut-Less 2

PREMIUM FINE FESCUE MIXTURE

Superior seed mixtures are created with variety performance data; our Cut-Less 2 fine fescue mixture is no exception. Containing the highest quality fine fescue varieties from Mountain View, Cut-Less 2 is low-growing mixture designed for utilization on golf course natural areas, rough and bunker-faces, and even down to 4/10th" on short grass surfaces. This mix establishes quick, excels in shade, and provides a beautiful wispy look that superintendents desire.

- 20% Hard Fescue
- 30% Chewings Fescue
- 30% SL Creeping Red Fescue
- 20% ST Creeping Red Fescue

Midwest Golf Mix

BLUEGRASS ENHANCED WITH FINE FESCUE

Golf course superintendents are constantly faced with pressure to cut costs without sacrificing playing conditions. At Ramy Turf, we get that. This mixture was designed with cost-consciousness in mind, without sacrificing quality. The Midwest Golf Mix will perform well in golf course rough, bunker faces, and even short cut surfaces. Combining fine fescue with Kentucky bluegrass improves establishment, genetic diversity, and playability.

- 60% Creeping Red Fescue (2 varieties)
- 80% Kentucky Bluegrass (2 varieties)
- 20% ST Creeping Red Fescue (1 variety)

Ramy Divot Mix-Bent

BENTGRASS + FINE FESCUE

For use in divot mixtures, tee and fairway overseeding, and shaded greens repair, the Ramy Divot Mix-Bent combines elite creeping bentgrass with Chewings and slender creeping red fescue to provide quick repair of divots and worn turf areas. This 80/20 Fescue/Bent mixture establishes as predominately bentgrass, depending on the environment, due to the fact that bentgrass contains roughly 20x more seeds per lb than fine fescues.

- 40% Chewings Fescue (1 variety)
- 40% SL Creeping Red Fescue (1 variety)
- 20% Creeping Bentgrass (1 variety)

Ramy Divot Mix-Blue

BLUEGRASS + FINE FESCUE

Designed to complement our Grounds Crew mixture when a more shade tolerant product is needed. This mixture uses some proven shade performers along with two Kentucky bluegrass varieties for dense turf and adaptability.

- 30% Chewings Fescue (1 variety)
- 30% SL Creeping Red Fescue (1 variety)
- 40% Kentucky Bluegrass (2 varieties)

Looking for something special? Just ask! As a seed distributor we have access to unique species and varieties, such as Poa trivialis and Colonial bentgrass. We mix our seed in-house and will work with you to create the exact mixture you are looking for.



SELECT THE RIGHT SEED

	Rate 1000 sq. ft.	Initial Germination	First Mowing*	Maintenance Level	Watering per Week*	Fertilizer Apps/Yr.	Mowing Height
Glencrest	3-5 lbs.	1 week	4 weeks	High	0.5"-1.5"	2+	1.5"-3.5"
Shady Way	3-5 lbs.	5-10 days	3-4 weeks	Mod.-High	0.5"-1.5"	2+	2.5"-uncut
Pro-Seeder	4-6 lbs.	1 week	3-4 weeks	Low-Mod.	0.5"-1.5"	1-2+	2.5"-uncut
Grounds Crew	4-6 lbs.	5 days	3-4 weeks	Low-Mod.	0.5"-1"	1-2	2.5"-uncut
Big 9 Athletic	3-5 lbs.	1 week	4 weeks	High		2+	2"-4"
Tuff Turf	5-7 lbs.	1 week	3-4 weeks	Mod.-High	0.5"-1"	2+	2.5"-4"
Tri-Play	5-7 lbs.	1 week	3 weeks	Moderate	0.5"-1"	1-2	1.5"-4"
Quick Start	4-6 lbs.	5 days	3 weeks	Low	0.0"-1"	1-2	2.5"-uncut
Low Light	4-6 lbs.	1 week	3 weeks	Low-Mod.	0.5"-1"	1-2	3"-uncut
Street Side	3-5 lbs.	1 week	3-4 weeks	Moderate	0.5"-1"	1-2	3"-uncut
Cut-Less	3-5 lbs.	1+ week	4 weeks	Low	0.0"-1"	0-1	3"-uncut
Cut-less 2	3-5 lbs.	1+ week	4 weeks	Low	0.0"-1"	0-1	3"-uncut
Stabilization	2-4 lbs.	4-6 days	3 weeks	Low	0.0"-1"	0	4"-uncut
Sandy Soil	4-6 lbs.	5 days	3-4 weeks	Low	0.5"-1"	1	4"-uncut
Blend Sod	1.5-3 lbs.	10-14 days	4+ weeks	High	0.5"-1.5"	Variable	2.5"-4"
Platinum Sod	1.5-3 lbs.	10-14 days	4+ weeks	High	0.5"-1.5"	Variable	2.5"-4"
Horse Pasture	1-3 lbs.	1 week	None	Low-Mod.	0.0"-1"	0-1	Uncut
Cattle & Hay	1-2 lbs.	1 week	None	Low-Mod.	0.0"-1"	0-1	Uncut

The information below regarding germination represents what is possible under ideal environmental conditions. Information regarding water, fertilizer and mowing are general recommendations – each individual site may vary.

SEEDING A LAWN

There are several good times for new seeding projects, from April – May, August 15 to September 20 and winter (dormant seeding). There are a few reasons to consider late summer.

Timing

Late summer lawn seeding is great for these reasons:

- There are fewer weed problems
- The soil is warmer
- The seed will germinate faster
- The onset of cooler temperatures encourage cool season grass growth

Site Preparation

It is a good idea to have the soil tested before establishing your new lawn. The soil test report gives the type and amount of fertilizer to apply to your lawn. This fertilizer (and lime, if required) should be worked into the top four to six inches of your soil.

Ideally, cultivate the top, 4 to 6 inches of soil. This provides a deep uniform soil base for grass roots to grow. If you add top soil or peat, rototill it into the upper 4 to 6 inches of soil. This step can be combined with the fertilizer application. Use a lawn rake to level the soil. The lawn seedbed should be firm and free of

large lumps. To get more even seed distribution, use a seeder, such as a drop spreader or hydro seeder. Don't cover the seed with more than one-fourth inch of soil. Roll the surface lightly to improve seed-to-soil contact if a drop seeder was used.

If your home site is like most, it has both sunny and shady areas. You will want a mixture of Kentucky bluegrass and the fine-leaved fescues for home lawns. Kentucky bluegrass tends to predominate in the open, sunny areas. Fescues take over in the shade. Germination times vary as follows:

- Kentucky bluegrass germinates in 10 to 21 days
- Perennial ryegrasses germinate in 3 to 5 days
- Fine-leaved fescues germinate in 5 to 10 days

Once seed is planted, make sure that the soil is kept evenly moist. However, slight drying between waterings is not detrimental. After the seeds germinate, you can water more heavily but less frequently. It is then important to continue with daily watering (depending on environmental conditions) until the area is mowed twice. During the grow in time, if it isn't watered properly there may be increased pressure from weeds as they are always present in the soil and can become disturbed during soil prep. If weeds do become a problem, continue to care for the new lawn for 2 to 3 months and then apply a weed killer and reseed any larger open areas. Open areas of ½ square foot or less will fill in naturally.

CALL FOR YOUR FREE SOIL TEST BEFORE SEEDING!

Some restrictions apply.

PLANTING GUIDELINE CHART

Species	Rate/Acre #	Planting Dates
Alfalfa	10 to 20	Spring & Fall
Barley	80 to 100	Spring
Bentgrass, Creeping	20 to 40	Spring & Fall
BIG 9 - Athletic	90 - 130	Spring & Fall, Dormant
Birdsfoot Trefoil	4 to 8	Spring & Fall
Black Eyed Susan	2 PLS	Spring & Fall
Bluegrass, Kentucky, (Forage)	10 to 15	Spring & Fall
Bluegrass, Kentucky, (Turf)	150	Spring & Fall
Bluestem, Big	8 to 10 PLS	Late Spring & Late Fall
Bluestem, Little	8 to 10 PLS	Late Spring & Late Fall
Brome, Meadow	12	Spring & Fall
Brome, Smooth	15 to 20	Spring & Fall
Buckwheat	40 to 55	June & July
Buffalograss	40 to 50 PLS	Spring
Buffalograss, (Lawn)	130 PLS	Spring
Canada Milkvech	1 to 2 PLS	Spring & Fall
Canada Wildrye	10 to 12 PLS	Late Spring & Late Fall
Chicory	4 to 5	Spring & Fall
Clover, Alsike	7 to 8	Spring & Fall
Clover, Crimson	20 to 30	Spring & Fall
Clover, Kura	10	Spring & Fall
Clover, Ladino White	4 to 6	Spring & Fall
Clover, Mammoth Red	8 to 12	Spring & Fall
Clover, Medium Red	8 to 12	Spring & Fall
Clover, New Zealand White	4 to 6	Spring & Fall
Clover, White Prairie	8 PLS	Late Spring & Late Fall
Clover, Purple Prairie	8 PLS	Late Spring & Late Fall
Clover, White Dutch	6 to 8	Spring & Fall
Creeping Foxtail	5	Spring & Fall
Crownvech	20 to 40	Spring & Fall
CUT LESS - Low Growing	200 - 250	Spring to Fall, Dormant
Dropseed, Prairie	5 PLS	Spring
Dropseed, Sand	2 to 4 PLS	Spring
Fescue, Chewings	175	Spring & Fall
Fescue, Creeping Red	175	Spring & Fall
Fescue, Hard	5 to 10	Spring & Fall
Fescue, Meadow	8 to 12	Spring & Fall
Fescue, Sheeps	250	Spring & Fall
Fescue, Tall, (Forage)	10 to 30	Spring & Fall
Fescue, Tall, (Turf)	400	Spring & Fall
Festulolium	35 to 45	Spring & Fall
Flax	56	Spring
GLENCREST Sun & Shade	130 - 175	Spring & Fall, Dormant
GROUND'S CREW All Purpose	170 - 215	Spring & Fall, Dormant
Grama, Blue	8 to 10 PLS	Late Spring & Late Fall
Grama, Blue (Turf)	130 PLS	Late Spring & Late Fall
Grama, Sidoats	10 to 12 PLS	Late Spring & Late Fall
Gray Head Coneflower	3 to 4 PLS	Late Spring & Late Fall
Green Needlegrass	7 to 9 PLS	Spring & Fall
Hairy Vetch	20 to 25	Fall
Indiangrass	10 to 12 PLS	Late Spring & Late Fall
Leadplant	2 to 3 PLS	Spring & Fall

Species	Rate/Acre #	Planting Dates
Lespedeza, Korean (Hulled)	25 to 35	Spring
LOW LIGHT - Shade	175 - 215	Spring & Fall, Dormant
Maximillian Sunflower	5 PLS	Spring & Fall
Millet, Browntop	10 to 30	Spring
Millet, Foxtail (German)	20 to 25	Spring
Millet, Japanese	15 to 30	May - July
Millet, Pearl	15 to 25	May - July
Millet, Proso	20 to 30	May - July
Oats, Spring-Fall	90 to 120	Spring & Fall
Orchardgrass	15 to 20	Spring & Fall
Peas, Austrian Winter	30 to 40	Spring & Fall
Peas, Cow	75 to 120	Spring & Fall
Prairie Cordgrass	7 PLS	Spring & Fall
PRO-SEEDER - Commercial	150 - 250	Spring & Fall, Dormant
Purple Coneflower	8 to 12 PLS	Late Spring & Late Fall
QUICK START - Rapid Germ	130 - 215	Spring & Fall, Dormant
Rape, Dwarf Essex	5 to 8	Spring & Summer
Redtop	4 to 5	Spring & Fall
Reed Canarygrass	8 to 10	Spring & Fall
Rye Grain	90 to 120	Spring & Fall
Ryegrass, Annual	30 to 40	Spring & Fall
Ryegrass, Perennial (Forage)	30 to 40	Spring & Fall
Ryegrass, Perennial (Turf)	300	Spring & Fall
Sainfoin	20	Spring & Fall
SANDY SOIL - Light Soils	175 - 215	Spring & Fall, Dormant
SHADY WAY - Dense Shade	175 - 215	Spring & Fall, Dormant
Sorghum, Forage	10 to 20	May - July
Sorghum, Forage BMR	6 to 8	May - July
Sorghum, Grain	4 to 20	May - July
Sorghum, Sudangrass	35 to 40	May - July
Sorghum, Sudangrass BMR	25 to 30	May - July
STABILIZATION	130 - 175	As Needed
Sudangrass	20 to 45	May - July
Sunflowers, Peredovik	8 to 40	May - July
Swedes (Turnip)	2 to 3	Spring
Sweetclover, Y.B.	12 to 15	Spring & Fall
Sweetclover, W.B.	12 to 15	Spring & Fall
Switchgrass	5 to 8 PLS	Late Spring & Late Fall
Timothy	6 to 12	Spring & Fall
TRI-PLAY - Perennial Rye	215 - 260	Spring & Fall, Dormant
TUFF TURF - Athletic	175 - 225	Early Spring & Dormant
Triticale	90 to 120	Spring & Fall
Turnips (Purple Top)	2 to 8	Spring & Summer
Wheat (Spring, Winter)	90 to 120	Spring & Fall
Wheatgrass, Crested	10 to 12 PLS	Spring & Fall
Wheatgrass, Intermediate	10 to 12 PLS	Spring & Fall
Wheatgrass, Pubescent	10 to 12 PLS	Spring & Fall
Wheatgrass, Slender	10 to 12 PLS	Spring & Fall
Wheatgrass, Tall	10 to 12 PLS	Spring & Fall
Wheatgrass, Western	10 to 12 PLS	Spring & Fall
Wild Rye, Canada	12 to 15 PLS	Spring & Fall
Wild Rye, Virginia	15 PLS	Spring & Fall

WILDLIFE, WILDFLOWERS & NATIVES

WILDLIFE



Trophy Buck Hi-Protein

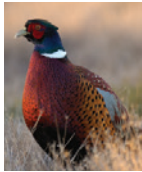
Available in 10 lb & 25 lb bags – 10 lbs covers 1 acre

Trophy Buck Hi-Pro Mix is a special mixture of legumes and brassicas that will come up fast and provide high quality forage for years to come. Its high protein content will provide the nutrition necessary for trophy antler growth and overall health. Regardless of zone or region, this mix will attract and hold deer to your property.

High Energy Fall Deer Grub

Available in 10 lb & 25 lb bags – 25 lbs covers 1 acre

Fall Deer Grub is formulated to provide deer with the energy they need to help them get through the rut and sustain them in winter. Deer Grub contains 25% turnips which provide greens through the fall, and bulbs deer love to dig up throughout the winter. Fall Deer Grub is primarily annual seed, and should be replanted each year.



Upland Nesting Cover

Available in 10 lb & 25 lb bags – 40 lbs covers 1 acre

Ramy's Upland Nesting Cover is an outstanding mixture of winter hardy grasses and legumes. This mix will provide excellent protection from predators and will attract large quantities of insects as a rich protein source for brooding hens and young chicks.

Upland Gamebird Grub

Available in 10 lb & 25 lb bags – 40 lbs covers 1 acre

Specially formulated to provide an excellent food source for pheasants and other game birds throughout the fall and winter. When most other food plots become drifted with snow, Game Bird Grub will stand with seed heads at or above the snow line providing a food supply even in the most severe winters.

NATIVE MIXES



Native grasses dominated the upper Midwest long before the earliest settlers moved to the area. Today, native grasses are being used to reclaim the look, feel, and ecological stability of that time. Native prairies provide excellent habitat cover for animals, birds and many other species. One acre of established prairie can absorb up to 9" of rain before runoff occurs.

Our Source Identified mixtures are produced with local eco-types. Custom mixes, CRP, WRP and other conservation mixes are also available. For full specifications and product submittal for all our products, please go to ramyturf.com/housenatives



Short Dry or Mixed Height Grasses

Soils that are sandy, light, rocky, dry, well draining. 1-3 & 1-5 ft. height. Drill seed at 8 lbs/acre. Spread at 10-12 lbs/acre. With or without forbs.

Dry Forbs

Sandy, light, rocky, dry, well draining soils. 1-3 ft. height. Seed rate/acre: 0.5-1 lb. with grass. 1-2 lb. without grass.

Mesic Grasses

Well draining yet moist soils. 2-5 ft. height. Drill at 8 lbs/acre. Spread at 10-12 lbs/acre. With or without forbs.

Mesic Forbs

Well draining yet moist soils. 1-4 ft. height. Seed rate/acre: 0.5-1 lb. with grass. 1-2 lb. without grass.



Wet Grasses

Wet to saturated soils. 2-6 ft. height. Drill seed at 8 lbs/acre. Spread at 10 lbs/acre. With or without forbs.

Wet Forbs & Sedges

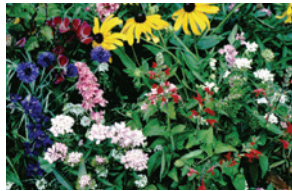
Wet to saturated soils. 2-4 ft. height. Seed rate/acre: 0.5-1 lb. with grass. 1-2 lb. without grass.

WILDFLOWERS

Our wildflower mixtures are formulated specifically for our Midwest climate and are designed to offer the widest range of color and bloom periods possible. These mixtures contain both native and non-native materials and are perfect for landscape, golf course, commercial and residential purposes.



Midwest Sunny Mix



Mid-West Pollinator



Midwest Shady Mix



Color Burst Annuals

MN SEED SPECIFICATIONS

The states we serve have some wildly different interpretations on how to best establish temporary and or permanent vegetative cover on disturbed or reclaimed sites. The seed mixtures specified by each state are formulated using design guidance from each environmental office for use in a prescribed site or function. For more details, pertinent links are provided at ramyturf.com/DOT.

Minnesota State Mixtures 2012/2013 Specifications

*All 30 Series Mixtures are packaged per 1/2 acre

CATEGORY	NUMBER	PLS Rate	NAME	REPLACES
Cover Crop				
50lb. Bulk Bag	21-111	100	Oats Cover Crop	MNDOT 110, BWSR UT1
50lb. Bulk Bag	21-112	100	Winter Wheat Cover Crop	MNDOT 100
50lb. Bulk Bag	21-113	110	Soil Building Cover Crop	MNDOT 130
Mid-Term Stabilization				
30.5 PLS Bag	22-111	30.5	Two-year Stabilization	MNDOT 150
40.0 PLS Bag	22-112	40.0	Five-year Stabilization	MNDOT 190
Non-Native Grassland				
30.5 PLS Bag	25-121	61.0	Sandy General Roadside	MNDOT 240
44.0 PLS Bag	25-131	220	Low Maintenance Turf	MNDOT 260
40.0 PLS Bag	25-141	59	Mesic General Roadside	MNDOT 250
45.0 PLS Bag	25-142	45	Agricultural Roadside	MNDOT 280
40.0 PLS Bag	25-151	200	High Maintenance Turf	MNDOT 270
Mid-term Stabilization Native				
1/2 Acre Unit	32-241	38	Native Construction	BWSR U12, BWSR U11
Storm water Facilities				
1/2 Acre Unit	33-261	35	Storm water South and West	MNDOT 310 & 328
1/2 Acre Unit	33-262	44	Dry Swale / Pond	BWSR W4
1/2 Acre Unit	33-361	35	Storm water Northeast	BWSR W7, MNDOT 310 & 328
Wetland				
1/2 Acre Unit	34-171	5.3	Wetland Rehabilitation	BWSR WT3
1/2 Acre Unit	34-181	5	Emergent Wetland	BWSR W1
1/2 Acre Unit	34-261	31.5	Riparian South & West	BWSR R1
1/2 Acre Unit	34-262	14.5	Wet Prairie	BWSR W3, MNDOT 325
1/2 Acre Unit	34-271	12	Wet Meadow South & West	BWSR W2
1/2 Acre Unit	34-361	31.5	Riparian Northeast	BWSR R1
1/2 Acre Unit	34-371	12.5	Wet Meadow Northeast	BWSR W2N
Native Grassland				
1/2 Acre Unit	35-221	36.5	Dry Prairie General	MNDOT 330
1/2 Acre Unit	35-241	36.5	Mesic Prairie General	MNDOT 350
1/2 Acre Unit	35-421	11	Dry Prairie Northwest	BWSR U2
1/2 Acre Unit	35-441	11	Mesic Prairie Northwest	BWSR U1
1/2 Acre Unit	35-521	12.5	Dry Prairie Southwest	BWSR U4
1/2 Acre Unit	35-541	12	Mesic Prairie Southwest	BWSR U3
1/2 Acre Unit	35-621	11	Dry Prairie Southeast	BWSR U6
1/2 Acre Unit	35-641	12	Mesic Prairie Southeast	BWSR U5
Woodland				
1/2 Acre Unit	36-211	34.5	Woodland Edge South & West	BWSR U7
1/2 Acre Unit	36-311	33.5	Woodland Edge Northeast	BWSR U13, BWSR U14
1/2 Acre Unit	36-411	35.5	Woodland Edge Northwest	
1/2 Acre Unit	36-711	35.5	Woodland Edge Central	

GOVERNMENT/STATE AGENCY SEED SPECIFICATIONS

Other interesting and useful references from the 2016 MnDOT Specifications & Seeding Manual

Found on Page 6 of the 2014 "MnDOT Seeding Manual

Seed Mixture Number	Spring	Fall
21-112	---	Aug. 1 - Oct. 1
21-111	May 1 - Aug. 1	---
22-111, 22-112*	April 1 - July 20	July 20 - Oct. 20
25-121, 25-131, 25-141, 25-151*	April 1 - June 1	July 20 - Sept. 20
25-142*	April 1 - Sept. 1	---
Any mix beginning with a 3	April 15 - July 20	Sept. 20 - Oct. 20
* For the portion of Minnesota north of and including T.H. 2, plant seed mixtures 22-111 to 25-142 from April 15 to September 20		

A.2a Seeding Dates

Plant seed mixtures during the seasons of planting for the various seed mixtures in accordance with Table 27575-1

Provide temporary stabilization when outside the season of planting dates of the specified permanent seed mixture request: to adjust dates in writing by no more than 10 calendar days to shorten or extend the exclusion dates when conditions warrant. The engineer may approve the request or direct the contractor to seed outside the seeding dates.

A.2b Sodding Dates

Sod growing days are any calendar day exclusive of the days from November 1 to April 15. Sodding shall be avoided during June 10 to August 10 for Bluegrass dominated sod. Sodding shall be avoided during June 10 to October 31 for Fescue dominated sod.

The engineer may adjust these dates by no more than 15 calendar days, to shorten the excluded periods when conditions are favorable to active growth or to lengthen the excluded period when conditions for establishment are unfavorable.

A.3 Winter Season

During the winter season, perform erosion control operations to protect the site through the end of the spring snowmelt season. Such practices include dormant seeding and sodding, snow seeding and mulching and frozen ground mulching. Both dormant seeding and sodding are performed during the early winter season. Early winter season is the period when soil temperatures will not allow seeds to germinate and when normal plant rooting will not occur.

More information can be found on page 683 of the Spec. Book, Including detail on floating silt curtain.

Silt Fence Type	Width in (mm)	Grab Tensile (machine direction), lb (kg)*	Apparent Opening Size	Puncture Strength †	UV Stability 500h, % ‡	MAX Permittivity #	Flow Rates gpm/sq. ft (L/min/sq. m)
MS, HI woven geotextile §	36 (915)	130 (59)	No. 30 sieve (0.60 mm)	--	70	1.0 s ⁻¹	100 (4,073)
PA woven geotextile	36 (915)	100 (45)	No. 30 sieve (0.60 mm)	--	70	0.1 s ⁻¹	5 (170)
SD woven or non-woven geotextile**	36 (915)	100 (45)	No. 30 sieve (0.60 mm)	--	70	--	--
TB polyester or polyvinyl fabric	60 (1524)	200 (91)	--	90 lb (41 kg)	70	Impervious	--

Values in table are Minimum Average Roll Values (MARV)

* ASTM D 4632

|| ASTM D 4751 Maximum average roll value.

† ASTM D 4833

‡ ASTM D 4355

ASTM D 4491

§ Provide MS, HI woven geotextile with monofilament in both directions. Do not make substitutions.

** The contractor may use poly/poly-reinforced sheeting with a thickness of at least 6 mil (0.152 mm) or an equivalent.

More Information can be found on page 508 of the Spec. Book

Method	
1	Type 1 mulch placed at a rate of 2 ton per acre (4.5 tonne per ha) with disc anchoring.
2	Type 3 mulch placed at a rate of 1.5 ton per acre (3.4 tonne per ha). 3884, Stabilized Fiber Matrix, placed at a rate of 750 lb/acre (835 kg/ha).
3	3884, Stabilized Fiber Matrix, placed at 330lbs. per 1000 gallons of slurry mixture (150kg per 3.8 cubic meters of slurry mixture). Seed mixture 22-111 placed at a rate of 10lb. per 1,000 gal (4.5 kg per 3.8 cu. m) of slurry mix. Type 3 Slow Release Fertilizer 10-10-10 placed at a rate of 50lb. per 1000 gal (22.7kg per 3.8 cu. m) of slurry mix. Water Placed at a rate of 875 gal per 1,000 gal (3.3 co. m per 3.8 cu. m) of slurry mix. Apply mixture at a rate of 6,000 gal per acre (56 cu. m per ha).
4	Category 3 erosion control blanket. Seed mixture 22-111 placed at a rate of 2 lb per 100 sq yd (1.1 kg per 100 cu. m). Type 3 Slow Release Fertilizer 10-10-10 placed at a rate of 8 lb per 100 sq yd (3.6 kg per 84 sq m).
5	Rip Rap Class II. Geotextile Type III.

M. Rapid Stabilization

Work consists of operations necessary to rapidly stabilize small contiguous exposed areas, each less than 2 acres, temporarily to prevent off site sedimentation in AES and near resource waters and keep in conformance to MPCA construction storm water permits. Perform rapid stabilization at any time when work is stopped temporarily and there is a risk that sediment will enter the resource waters due to storm water runoff. Provide the materials for the methods of rapid stabilization in accordance with Table 2575-3:

South Dakota DOT Mixtures

Component	PLS Lbs / Acre
Type A Native 18 PLS Lbs/Acre	
Western Wheatgrass	7
Green Needlegrass	4
Sideoats Grama	3
Blue Grama	2
Canada Wildrye	2
Type B Native 18 PLS LBS/Acre	
Western Wheatgrass 7	
Switchgrass	3
Indiangrass	3
Big Bluestem	3
Canada Wildrye	2
Type C Native 18 PLS LBS/Acre	
Western Wheatgrass	16
Canada Wildrye	2
Type D Turf 6 PLS LBS/1,000 SF	
Kentucky Bluegrass	1.5
Perennial Ryegrass	1.5
Creeping Red Fescue	1.5
Alkaligrass	1.5
Type E Native 20 PLS LBS/Acre	
Western Wheatgrass	7
Green Needlegrass	4
Sideoats Grama	3
Blue Grama	2
Canada Wildrye	2
Forbs Package	2
Type F Native 26 PLS LBS/Acre	
Western Wheatgrass	7
Green Needlegrass	4
Sideoats Grama	3
Blue Grama	2
Oats/Wheat	10
Type G Native 26 PLS LBS/Acre	
Western Wheat	7
Switchgrass	3
Indiangrass	3
Big Bluestem	3
Oats/Wheat	10

Wisconsin DOT Mixtures

Mix	Description	Lbs / Acre
General		
#10	General Roadside	65.4
#20	General Roadside - Sandy	130.7
#30	General Roadside Salt Tolerant	87.20
#40	Residential / Commercial Turf	87.20
#60	Cover / Nurse Crop	65.4
Native		
#70	Native Upland	17.5 PLS
#70A	Native Upland Sandy Soil	17.5 PLS
#75	Native General	30.5 PLS
#80	Native General Salt Tolerant	34.9 PLS

North Dakota DOT Mixtures

Grass Species	Variety	PLS Lbs / Acre
CLASS I – 19 PLS / Acre		
Kentucky Bluegrass	Park	4.0
Perennial Ryegrass	-	5.4
Blue Grama/Thickspike	Bad River	2.4
Sideoats Grama	Killdeer, Pierre, Butte	7.2
CLASS II – EARLY at 23.8 PLS / Acre		
Western Wheatgrass	Rodann, Rosanna, Walsh, Flintlock, WR Poole, Recovery	9.6
Switchgrass	Dakota, Forestburg, Sunburst, Summer	3.2
Green Needle Grass	Lodorm, AC Mallard, Fowler	2.4
Sideoats Grama	Killdeer, Pierre, Butte	3.6
Slender Wheatgrass	Revenue, Primar, Adanac, Pryor, Firstrike	5.0
CLASS II – LATE at 25 PLS / Acre		
Western Wheatgrass	Rodann, Rosanna, Walsh, Flintlock, WR Poole, Recovery	9.6
Switchgrass	Dakota, Forestburg, Sunburst, Summer	1.6
Green Needlegrass	Lodorm, AC Mallard, Fowler	3.6
Canada Wild-Rye	Mandan	5.2
Slender Wheatgrass	Revenue, Primar, Adanac, Pryor, Firstrike	5.0
WETLAND SEED MIX		East West
Prairie Cord Grass	Spartina Pectinata	1.1 1.1
American Slough Grass	Beckmannia Syzigachne	0.2 0.2
Fowl Bluegrass	Poa Palustris	0.2 0.2
Fox Sedge	Carex Vulpinoidea	0.2 0.2
American Manna Grass	Glyceria Grandis	0.2 0.2
Fowl Manna Grass	Glyceria Striata	0.1 0.1
Bluejoint Grass	Calamagrostis Canadensis	0.1 0.1
Virginia Wild-Rye	Elymus Virginicus	2.0 -
Canada Wild-Rye	Elymus Canadensis	- 1.3

American, Fowl, or both may be used. If only one is used the seeding rate of other species does not need to be increased. Seed may not be available and can be removed without increasing the seeding rate of other species.

HYDRAULIC MULCHES



Profile Blend

Combines Profile's proprietary Tacking Agent 3 with industry exclusive 100% thermally refined wood fibers with the highest quality cellulose (paper) available.

- Delivers 15% greater yield verses competitive blend products.
- Tacking Agent 3 is a three-dimensional blend of polymers and polysaccharide, proven to reduce soil erosion and runoff.
- The lubricating effect of Tacking Agent 3 allows for more efficient equipment operation, increase pumping distance and reduced clogs.
- DOT Approval: MnDOT Hydraulic Matrix "Type Mulch"



Profile Wood

Contains 100% of the highest quality, thermally refined, recycled wood fiber with Tacking Agent 3.

- 50% more water holding capacity compared to competitive, atmospherically refined fiber with all of the additional benefits of Terra Blend w/Tack.
- DOT Approval: MnDOT Hydraulic Matrix Type "Mulch"



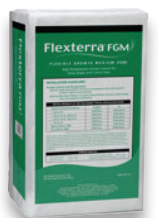
Terra Matrix

Terra-Matrix™ SMM is specially formulated to provide cost-effective stabilization of soils on active construction and building sites. Unlike polymeric stabilizers comprised of flocculants that need to be blended on site, the pre-blended combination of Thermally Refined™ Wood Fibers, proprietary crosslinked tackifiers and activators anchor the fiber matrix to the soil surface. DOT Approval: MnDOT Hydraulic Matrix Type "Stabilized Fiber Matrix (SFM)"



ProMatrix / Spray Matt

Profile-quality, engineered fiber matrix that also offers class-leading erosion control effectiveness and a 600 percent minimum increase in initial germination based on independent testing. With a recommended 60 pounds per 100 gallons of water, ProMatrix is the highest-loading product among Bonded Fiber Matrices (BFMs). It is a cost-effective alternative to BFM and Stabilized Mulch Matrix (SMM) products. ProMatrix is best suited for projects needing to effectively reduce turbidity and runoff for up to 12 months. DOT Approval: MnDOT Hydraulic Matrix Type "Bonded Fiber Matrix (BFM)"



Flexterra-HP FGM / Spray Matrix

Flexterra® offers better protection on slopes than rolled erosion control blankets (ECBs) and bonded fiber matrix (BFM) products—with the speed and cost savings of a hydraulically applied product.

Flexterra Flexible Growth Medium™ (FGM™) erosion control products are made of Thermally Refined™ Wood Fibers, crimped interlocking fibers and additives that are engineered to perform under extreme conditions. Flexterra can also be combined with other erosion control technologies to accommodate a broad range of conditions. DOT Approval: MnDOT Hydraulic Matrix Type "Reinforced Fiber Matrix (RFM)"



Seed Aide Aero

Seed Aide® Aero™ may be applied dry or hydraulically, making it a versatile and cost effective solution where conventional erosion control equipment access is limited or unavailable, or for small-scale jobs using jet-agitated hydroseeders. It is ideal for a range of conditions, including: remote sites, dryland reclamation, post-fire reclamation, pipeline restoration, drilling pads and aerial applications.

- Flexible application — apply aerially, hydraulically, with a high-volume drop spreader, large-opening broadcast spreader or by hand
- Secure soil binding — upon wetting, the mulch granules expand and release linear anionic soil flocculant to bind soil particles, increase water infiltration/retention and reduce sediment loss



EZ Straw

EZ-Straw® seeding mulch are made with the highest quality straw available to ensure the customer of amazing results.

- Processed Straw
- Bonding agent gives straw a tackiness which holds it together, protects grass seed from heavy washout and windy areas
- Speeds up germination



EZ Mulch

Replace messy straw with Green Choice EZ Mulch. Green Choice EZ Mulch is a user-friendly alternative to straw. It contains no weed seeds and contains much less dust than straw. Typically, 50 to 70 pounds covers 1000 square feet.



EZ Mulch +

Green Choice EZ Mulch+ is a user-friendly alternative to straw. It contains no weed seeds and contains much less dust than straw. Typically, 50 to 70 pounds covers 1000 square feet.

Green Choice EZ Mulch+ contains 1.5% tackifier for greater soil adherence and erosion control, especially on sloped terrains.



Cover Grow

Cover Grow is a new advancement in pelletized mulch technology. Made from recycled wood and paper fibers, Cover Grow is designed to be applied by hand, with a spreader or by using hydro mulch equipment. Once activated by water, Cover Grow expands quickly to provide erosion protection and water holding capability right where it is needed most — around the seed.



EROSION BLANKETS & STABILIZATION MATS

The upcoming pages contain some general information on some of our core, non-seed materials. It is difficult to list everything so, as always, our website will be more complete but there should be enough information to get an overview.



ERO-GUARD

Made right here in MN, Ero-Guard is the leading regional manufacturer that producing a FULL line of rolled erosion control and turf reinforcement mats (TRM's). From a basic rapid degrade straw to a long term synthetic TRM - including the increasingly important Jute (Natural Net) materials - we've got you covered.



Profile HYDRO MULCH MATERIALS

Mulch materials are a very important part of our offering and making sure we bring you the best possible products for your money is why we are proud to partner with Profile; using Green Design Engineering™ Profile helps us deliver cost-effective and earth-friendly erosion control solutions. With proven products, breakthrough technology and unparalleled support, we'll help you achieve superior erosion control through faster and denser vegetation establishment!



Futerra® by PROFILE

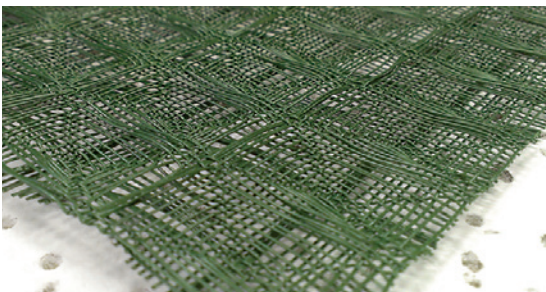
Futerra blankets have proven to deliver the fastest germination and highest effectiveness rating when compared to straw and excelsior blankets. Perfect for fine/managed turf or residential application, Futerra is available with or without netting. The 100% weed free and lightweight wood fiber material bonds more intimately with the soil to prevent seed migration and sediment loss.



ENKAMAT

Developed in 1972, Enkamat is arguably the most specified TRM/ESM on the planet today and is so because of its unique 95% open matrix which, supplements nature's own erosion control by reinforcing the plant root system. With products that when fully vegetated can withstand water velocities greater than 20 ft/sec and shear of 10 lbs/sf - Enkamat is suited for even the most critical sites.

See Green Armor System on Page 16



PP5-HD and PP5-Xtreme



We are also proud to offer PP5-HD and PP5-Xtreme from Western Excelsior. These products are similar in physical properties to Pyramat (registered) and Landlok 300® making them ideal high flow channels, flood mitigation berms and other areas where it may not be possible to maintain full vegetative cover.

For certain TRM/ESM design requirements longer pins, staples or percussion anchors may be required. We have them all – please call!

ROLLED EROSION CONTROL, TRM'S & KOIR PRODUCTS

SHORT TERM ROLLED EROSION PRODUCTS

Product	Composition	Longevity	Roll Size in SY
Futerra Netless	Refined Wood Fiber	(≤ 90 Days)	
Futerra Environet	Refined Wood Fiber	90 Days	50 & 100
EG 1S-RD	100% Straw - Rapid Degrade Poly	90 Days	100, 200, 500 & 1000
EG 1S	100% Straw - Standard Poly	Up To 12 Months	100, 200, 500 & 1000
EG 1S - NN	100% Straw - Natural Net	Up To 12 Months	100, 200, 500 & 1000
CurLex Net Free	100% Wood - Bio-Stitching	90 Days	80, 488
EG 1X - NN	100% Aspen - Natural Net	Up To 12 Months	90, 180, 400 & 800
EG 2S-RD	100% Straw - Rapid Degrade Poly	90 Days	100, 200, 500 & 1000
EG 2S	100% Straw - Standard Poly	Up To 12 Months	100, 200, 500 & 1000
EG 2S - NN	100% Straw - Natural Net	Up To 12 Months	100, 200, 500 & 1000
EG 2X	100% Aspen Fiber - Standard Poly	Up To 12 Months	90, 180, 400 & 800
EG 2X - NN	100% Aspen Fiber - Natural Net	Up to 12 Months	90, 180, 400 & 800

EXTENDED TERM ROLLED EROSION PRODUCTS

EG 2S/C	70% Straw / 30% Coconut	12 To 24 Months	100, 200, 500 & 1000
EG 2S/C - NN	70% / 30% w/Natural Net	12 To 24 Months	100, 200, 500 & 1000
EG 2C	100% Coconut	24 To 36 Months	100, 200, 500 & 1000
EG 2C - NN	100% Coco w/Natural Net	12 To 24 Months	100, 200, 500 & 1000
ETX2-HVBN	100% Aspen Fiber (.76lbs/sy) NN	Up To 24 Months	80, 160, 400 & 800

LONG TERM EROSION STABILIZATION MAT

EG 2P-8	8 oz/sy - 100% Polypropylene	Permanent	100, 200, 400 & 800
EG 2P-10	10 oz/sy - 100% Polypropylene	Permanent	100, 200, 400 & 800
EG 2P-12	12 oz/sy - 100% Polypropylene	Permanent	100, 200, 400 & 800
ENKAMAT 7010	10mm Thick - 100% Nylon	Permanent	8' x 169' - 150 sy
ENKAMAT 7020	20mm Thick - 100% Nylon	Permanent	8' x 112.5' - 100 sy
ENKAMAT - S	100% Nylon	Permanent	39" x 197' - 71 sy
ENKAMAT R45	100% Nylon w/8 series Geo Grid	Permanent	8' x 90' - 80 sy
PP5 - HD W-TRM	100% Synthetic, 8 mm thick	Permanent	Confirming ...
MacMAT - R	Wire Reinforced Nylon	Permanent	6.5' x 82' - 60 sy

BIODEGRADABLE - WOVEN COIR MAT & COIR LOGS

KOIRMAT 700	20 oz/sy - 100% Coconut	Up To 24 Months	6.56' x 165' - 120sy
KOIRMAT 900	26 oz/sy - 100% Coconut	Up To 36 Months	6.56' x 165' - 120sy
12" x 10' COIR LOG	9 lb/cu.ft - 100% Coconut	24 To 60 Months	N/A

At the time of printing the above was approved. In the meantime, there may have been updates. Please call for a current list.

SPECIFIED FOR DOT USE AS:				
MN	SD	ND	WI	IA
-	-	-	-	-
-	-	-	-	-
-	TYPE 1	ECB 1	-	-
-	TYPE 2	-	-	Slope
Cat 10	-	-	-	-
Cat 15	-	-	-	-
-	-	-	-	-
-	TYPE 2	ECB 2	I - B	Slope
Cat 20	-	-	-	-
-	Type 2	ECB 2	-	-
Cat 25	-	-	-	-
-	Type 3	ECB 3	-	Slope
Cat 30	-	-	-	-
-	Type 4	ECB 4	-	Ditch/Slope
-	-	-	-	-
Cat 35	-	-	-	-
-	Type 1	TRM 1	-	-
-	Type 2	TRM 2	-	-
-	Type 3	-	-	-
-	-	-	III - B	-
-	-	-	III - C	-
-	-	-	III - D	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
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EG 2S - 1000 sy roll installation



EG 2S & Green Armor on a ravine site

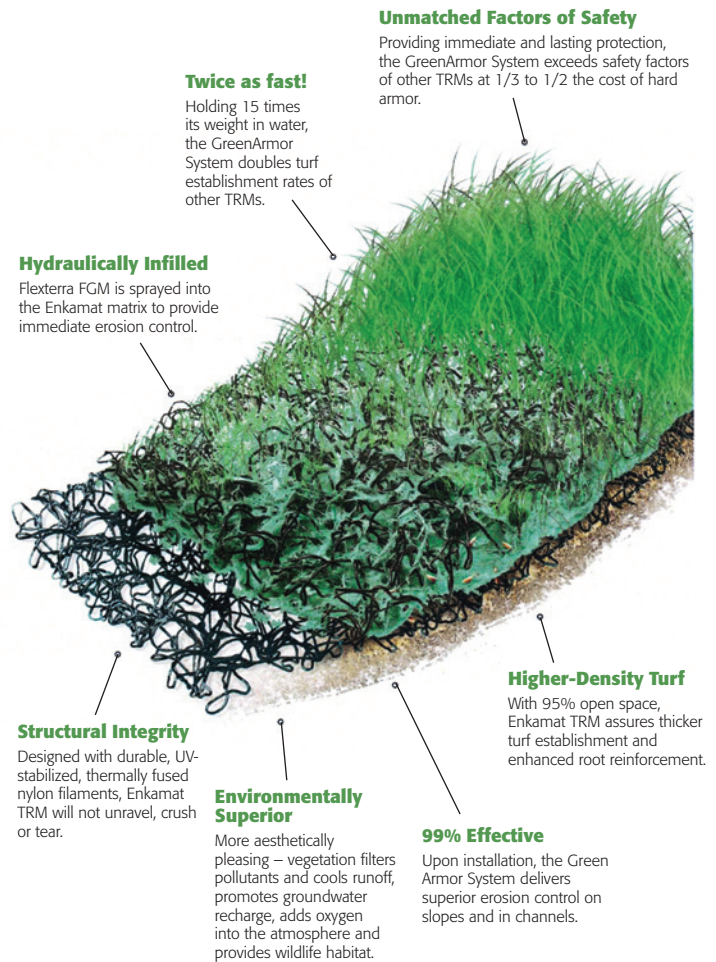


EG 2C-NN & Koir Log on a stream bank site

RTP ADDITIVE SYSTEM

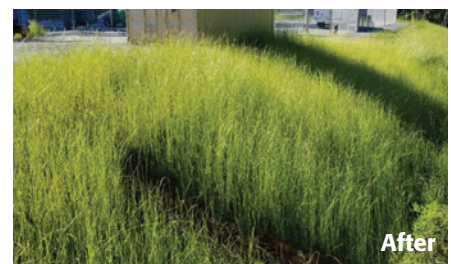


Brings together the rapid growth establishment capabilities of Flexterra HP – FGM with the dimensional stability of the TRM/ESM standardbearer – Enkamat. This unique combination of individually superior products has been proven to provide immediate erosion control, speed vegetative growth & establishment and deliver unprecedented performance for – Steep Slopes – Landfill Diversion Channels – Earthen Dams/Spillways – Storm Water Conveyance Channels – Streambank/Shoreline Stabilization sites and more. Green Armor is a revolutionary alternative to traditional “hard armor” solutions.



New ProGanics DUAL is a hydraulically applied Biotic Erosion Control Matrix (BECM) that combines the soil-building properties of ProGanics® Biotic Soil Media™ (BSM™) with the erosion control performance of a Bonded Fiber Matrix (BFM). It accelerates development of depleted soils and vegetative establishment while simultaneously providing highly effective erosion protection in a consolidated, one-step application.

- Best for sites with:
 - Poor soil conditions, including low organic matter content
 - Low to moderate erosion potential (slopes up to 2H:1V)
 - Limited access where multiple applications add significant cost or are not feasible
 - Large projects where application efficiency is paramount
- Reduces total number of tank loads and application time without sacrificing results
- Simplifies complex projects by reducing the number of products to get the job done
- Features the highest water-holding capacity and erosion control effectiveness of any “all-in-one” product





The RTP Additive System was developed in part by you, the customer. After years of working with hydro-seeders, listening to issues that seemed to repeat themselves from customer to customer and job site to job site, we knew we could help. That is why we developed the RTP Hydro-Additive System; a full line of cost effective tackifiers, fertilizers, bio-stimulants and more. You no longer have to roll the dice on your projects success, our products are tested, effective and affordable! Try them on your next project, if you don't think they are better than what you've been using, we'll give you your money back... **Guaranteed!**

Generate XR 15-44-9

Water Soluble Starter Fertilizer - Available in 25lb Buckets

Low Rate New Formula Rapid Germ

- A low rate of 8.3 - 12.5 lbs/acre means less product to purchase
- Extends the green up period for up to 4 weeks after germination
- Formulated to provide the optimum amount of phosphate to nitrogen to potash

Push Biostimulant

Proprietary combination of humates, seaweed extract and wetting agents Available in 2.5 gal. containers

Low Rate Key Benefits

- A low rate of 2 gal/acre or 6 oz/1000 sq.ft. means less product to purchase.
- Improved seed germination
- Improved stress tolerance
- Increased soil biological activity
- Increased efficiency of fertility
- Increased root mass and depth
- Uniform root zone moisture management

Hypertack (PAM)

Available in 25lb Buckets and 50lb Bags

Low Rate Long Lasting Easy Handling Compatible

- A low rate of 6 lbs/acre or 2 oz/1000 sq.ft. means less product to purchase
- Hypertack is a polymer that lasts 5-6 weeks and is broken down by sunlight
- No dust or clogging, simply add to a well agitated 1/2 full tank
- Use with mulches, fertilizers, surfactants and biostimulants

RX-3 Guar-tack

Available in 25lb Buckets and 50lb Bags

Key Benefits

- Apply at a rate of 50lbs - 150lbs per acre
- Lubricates fiber allowing for greater spray range from turret or hose runs
- Allows pumping coarser fibers that would otherwise clog a typical Hydroseeder
- Improves fiber dispersal on soil contact making a uniform erosion resistant cover
- Holds fiber, seed and other additives in place until vegetation stabilizes surface
- 100% Organic. - D.O.T. Approved

Retain (Hydro-Crystals)

Designed to aid establishment and reduce stress by helping retain moisture around newly and recently seeded areas.

- Reduces heat stress, improves establishment rates and plant health
- Absorbs 5 times its weight in water – helps reduce water needs
- Reduces labor costs on seeded/sodded areas when under maintenance contract

1-2 Punch

NEW! This high potency, water soluble mixture is designed to hold the mulch in place while supplying the seed with the nutrients it needs. This blend is compatible with any size unit, jet or mechanical.

- Hypertack Tackifier
- Low application rate
- Low rates mean less product purchasing and less cost
- Long Laster, Hypertack is a polymer that last 5-6 weeks and is broken down by sunlight
- Easy to handle
- Compatible, Hypertack is compatible with mulches, fertilizers, surfactants and biostimulants

ADDITIONAL PRODUCTS

Some products that deserve honorable mention



Tube Socks by Ero-Guard

PERIMETER CONTROL

Silt Fence – Commercial & DOT products, 3' & 4' Height available.

Straw Wattles – 6", 9", 12" standard and custom to 24" diameter.

Compost Filter Logs – We call them Tube Socks.

Coir Logs – 12" diameter, 7 lb. and 9 lb. High Density product.



SILT FENCE, STAKES & POSTS

Wattle Stakes – Pointed Wood 1"x1"x24" & 2"x2"x24"

Silt Fence Stakes – Pointed Wood 2"x2"x48"

Steel T-Posts – 200 ct. – .95 lb/ft by 5'



Silt Fence Stakes



STAPLES, PINS & ANCHORS

U-Shaped – 6", 8" both 11 ga and 8 ga.

Round Top Pins – 6", 8" both 11 ga, 8 ga and BIODEGRADABLE.

T-Top – 18" Long, Heavy Gauge for Severe Slopes & TRM Products.

Percussion Anchors – Various Sizes available.

INLET PROTECTION



Dandy Curb Sack: Various sizes available to fit any casting – round, square or rectangle. Over-flow protection for safety. Available with or without curb log. We stock 22" round, 24" square and 24"x36" with and without curb log.

Dandy De-Watering Bags: Capable of capturing the suspended solids in turbid water during dewatering applications. Available in 6' x 6', 10' x 15' and 15' x 15' sizes. Technical specifications and guidance is available online.



SedCatch: Inlet Protection Products sit under the drainage grate, which leaves no unsightly or jumbled mess of material – and the street is clean after every rain. A diverter is used on combination inlets where there is a grate and throat opening in the curb. The diverter sits in front of the curb opening and directs water through the grate and into the basket for filtering. It also acts as a barrier for heavy sediment that is being pushed along by water during heavy rains to avoid street flooding.

- SedCatch baskets are made to fit specific grates, making installation foolproof.
- Removal of sediment takes minutes and only requires one person, because of the proprietary design of the Dump Basket.
- The geotextile fabric and durable design ensures product longevity; during testing it held 153.4 pounds.
- SedCatch baskets are independently tested, unlike many on the market, to guarantee the effectiveness of sediment removal.

GEO-TEXTILES

Non-Wovens – Comprised of high strength polypropylene fiber, our complete line of needle punched non-wovens provides superior performance in applications of filtration, separation, drainage and erosion protection.

Benefits:

- Durable, chemical resistant and UV stabilized.
- Excellent puncture and tear resistance.
- Fine pore structure and permittivity.
- We stock: 4 oz. 3', 7.50', 12.5' and 15' x 360' | 6 oz. 12.5" x 360' and 15' x 300' | 8 oz. by 7.5', 12.5' and 15' x 300'

Wovens – Manufactured of high tenacity polypropylene yarns woven to form a dimensionally stable network, which allows the yards to maintain their relative position. Our 200 lb. material resists ultraviolet deterioration, rotting and biological degradation and provides stabilization and separation preventing base aggregates from migrating into the sub-grade.

- Durable and stable fabric.
- Low elongation to resist construction damage like tearing and puncturing.
- We stock: 12.5' x 432' | 15' x 360' | 17.50' x 309
- We can also provide competitive pricing on high performance fabrics for other applications. Please call for information.



BX 11 & BX 12 GEOGRID – BX 11 and BX 12 is a punched and drawn polypropylene geogrid product that is integrally formed into a biaxial grid. BX 11 and BX 12 resists ultraviolet deterioration, rotting and biological degradation and is inert to commonly encountered soil chemicals. Used commonly on roads, reinforced foundations and working platforms.

BX 11 is 12.95 x 246' / 354 sy per roll
BX 12 is 12.95 x 164' / 236 sy per roll

500 XT and 800 XT GEOGRID – 500 XT and 800 XT is manufactured with high tenacity multi-lament polyester yarns that are woven under tension and -nished with a PVC coating to form a dimensionally stable network that allows the yarns to maintain their relative position. 500 XT and 800 XT resists ultraviolet deterioration, rotting and biological degradation and is inert to commonly encountered soil chemicals. Used commonly on mechanically stabilized earth applications including engineered walls and slopes other landscape retaining wall applications.

500 XT is 12 x 150' / 200 sy per roll
800 XT is 12 x 150' / 200 sy. per roll

HOT NEW ITEM!



A new staple gun that will change the way you install erosion blanket, turf reinforcement mats, sod and even geo-textile materials. The process is faster, more efficient and easier on the installer.

- The Wasp holds 50 staples
- Weight without staples is only 11 lbs.
- Made of aluminum and hardened steel
- Easy to remove jam plate keeps your workers moving without down time
- Youtube "staple wasp" for a demo video
- Call us and say "you'd like to try the Wasp"



EZ - Stapler A spring loaded, one staple at a time driver for the efficient install of 4", 6" and 8" U-Shaped Staples.

SetterTech A magnet driver for the efficient install of 4", 6" and 8" U-Shaped Staples.

RamRod A magnet driver for the efficient install of 6" and 8" Round and V-Top Staples / Pins (Steel only).

Round Top Driver A gravity feed, one at a time driver for the efficient install of all Round and V-Top Staples / Pins including Bio-degradable.

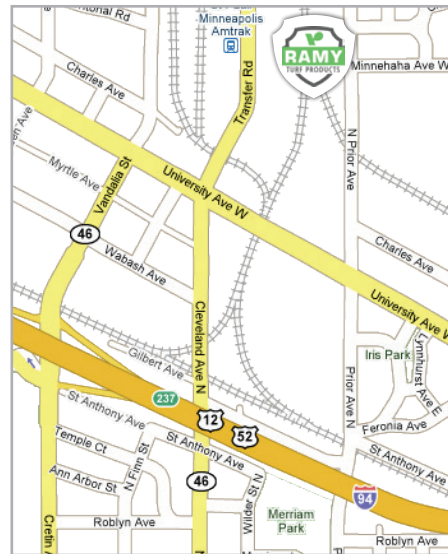


Our slogan is... It starts with the seed! We know it ends with you. That is why we pledge to go farther, work harder and do more than any of our competition. If you don't feel we do, let us know and we'll make it right. That is our promise to you, our valued customer!

**Corporate Office
Mankato, Mn**



**Sales & Distribution
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