

**KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF MATERIALS AND RESEARCH**

**KDOT'S Bureau of Design, Environmental Services Section has approved
the following material; to be supplied for Erosion Control Products under
Special Provision 90P-193**

**PQL – 34B - Revised 08/01/05
For Contracts Let After March 2000**

CMS MATERIAL CODE (187)

The Contractor has the option of utilizing the following approved products in accordance with the Class and Type as specified on the plans. Direct all questions to the KDOT Bureau of Design, Environmental Services Section, Eisenhower State Office Bldg, 700 SW Harrison, Topeka, KS 66612. Phone (785) 296-0853.

**CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type A - Slopes 1:3 or Flatter - Clay Soils:**

| | |
|---|----------------------------------|
| AEC Premier Straw | Landlok® BonTerra® EcoNet™ ENCS2 |
| Airtrol | Landlok® BonTerra S1 |
| Anti-Wash/Geojute | Landlok® BonTerra S2 |
| BioD-Mesh 60 | Landlok BonTerra CS2 |
| Carthage Mills Veg Net | Landlok BonTerra SFB12 |
| C-Jute | Landlok 407GT |
| Contech Standard | Landlok FRS 3112 |
| Contech Standard Plus | Landlok TRM 435 |
| Contech Straw/Coconut Fiber Mat w/Kraft Net | Maccaferri: Biomac S2 |
| Contech C-35 | Maccaferri MX287 |
| Conwed 3000 | Miramat TM8 |
| Conwed 3000 M-BFM | Multimat 100 |
| Curlex 1 | North American Green S150 |
| Curlex™-LT | North American Green S75 |
| Earth Bound | North American Green® S75 BN |
| EcoAegis™ | North American Green SC150 |
| Econo-Jute | North American Green® S150 BN |
| ECS Excelsior Blanket Standard | Pennzsuppress® |
| ECS High Velocity Straw Mat | Poplar Erosion Blanket |
| ECS Standard Straw | Soil Guard |
| EnviroGuard Plus | Soil Saver |
| Enviro-Matrix | SprayMat |
| Enviro-Shield | SuperGro |
| Formula 480 Liquid Clay | Terra-Control® |
| Futerra® | TerraJute |
| GeoTech TechMat™ SCKN | Terra-Mulch |
| Grass Mat | verdyol Ero-Mat |

CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type A - Slopes 1:3 or Flatter - Clay Soils:

| | |
|---------------------------------|---------------------------------|
| Greenfix CFS072R | verdyol Excelsior High Velocity |
| Greenfix WS05 | verdyol Excelsior Standard |
| Greenfix WSO72 | Webtec Terraguard 44P |
| Green Triangle Regular | Xcel Regular |
| Green Triangle Superior | Xcel Superior |
| Greenstreak Pec-Mat | Xcel SS-2 Superior |
| Landlok® BonTerra® EcoNet™ ENS2 | |

CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type B - 1:3 or Flatter - Sandy Soils:

| | |
|--|---------------------------------|
| AEC Premier | Landlok® BonTerra S1 |
| C-Jute | Landlok® BonTerra S2 |
| Carthage Mills Veg Net | Landlok® BonTerra CS2 |
| Contech Standard | Landlok® BonTerra®EcoNet™ENCS2™ |
| Contech Standard Plus | Landlok® BonTerra® EcoNet™ ENS2 |
| Contech Straw/Coconut Fiber Mat w/Kraft Net | Landlok FRS 3112 |
| Contech C-35 | Landlok 407GT |
| Conweb 3000 M-BFM | Landlok TRM 435 |
| Curlex 1 | Maccaferri: Biomac S2 |
| Curlex LT | Maccaferri MX287 |
| Earth Bound | Miramat 1000 |
| EarthGuard Fiber Matrix (<i>Conweb 1000 wood fiber and Tascon Pro Mat paper mulch</i>) | Miramat TM8 |
| ECS Standard Straw | Multimat 100 |
| ECS Excelsior Blanket Standard | North American Green S75 |
| ECS High Velocity Straw Mat | North American Green® S75 BN |
| EcoAegis™ | North American Green S150 |
| EnviroGuard Plus | North American Green SC150 |
| Enviro-Matrix | North American Green® S150 BN |
| Enviro-Shield | Poplar Erosion Blanket |
| Futerra® | Soil Guard |
| Greenfix CFS072R | Terra-Control® |
| Greenfix WS05 | TerraJute |
| Greenfix WSO72 | verdyol Ero-Mat |
| Geojute Plus 1 | verdyol Excelsior Standard |
| GeoTech TechMat™ SCKN | Webtec Terraguard 44P |
| Green Triangle Regular | Xcel Regular |
| Green Triangle Superior | Xcel SS-2 Superior |
| | Xcel Superior |

CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type C - Slopes Steeper than 1:3 - Clay Soils:

| | |
|---|-------------------------|
| Airtrol | Landlok® BonTerra S2 |
| Anti-Wash/Geojute | Landlok BonTerra CS2 |
| Carthage Mills Veg Net | Landlok® BonTerra SFB12 |
| C-Jute | Landlok 407GT |
| Contech Standard Plus | Landlok FRS 3112 |
| Contech Straw/Coconut Fiber Mat w/Kraft Net | Landlok TRM 435 |

CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type C - Slopes Steeper than 1:3 - Clay Soils:

| | |
|----------------------------------|---------------------------------|
| Contech C-35 | Maccaferri: Biomac S2 |
| Conwed 3000 | Maccaferri MX287 |
| Conweb 3000 M-BFM | Miramat TM8 |
| Curlex 1 | Multimat 100 |
| Earth Bound | North American Green S150 |
| Eco-Aegis | North American Green S75 |
| Econo Jute | North American Green SC150 |
| ECS High Velocity Straw Mat | North American Green® S150 BN |
| ECS Standard Straw | Pennzsuppress® |
| EnviroGuard Plus | Poplar Erosion Blanket |
| Formula 480 Liquid Clay | SprayMat |
| Futerra® | Soil Guard |
| Greenfix CFS072R | Soil Saver |
| Greenfix WS05 | SuperGro |
| Greenfix WSO72 | TerraJute |
| Green Triangle Superior | verdyol Excelsior High Velocity |
| GeoTech TechMat™ SCKN | Webtec Terraguard 44P |
| Greenstreak Pec-Mat | Xcel Superior |
| Landlok® BonTerra® EcoNet™ ENCS2 | Xcel SS-2 Superior |

CLASS 1 “SLOPE PROTECTION”
{PRIVATE}Type D – Slopes Steeper than 1:3 - Sandy Soils:

| | |
|--|---------------------------------|
| C-Jute | Landlok® BonTerra S2 |
| Carghage Mills Veg Net | Landlok® BonTerra CS2 |
| Contech Standard Plus | Landlok® BonTerra®EcoNet™ENCS2™ |
| Contech Straw/Coconut Fiber Mat w/Kraft Net | Landlok 407GT |
| Contech C-35 | Landlok FRS 3112 |
| Curlex 1 | Landlok TRM 435 |
| EarthGuard Fiber Matrix (<i>Conweb 1000 wood fiber and Tascon Pro Mat paper mulch</i>) | Maccaferri: Biomac S2 |
| ECS High Velocity Straw Mat | Maccaferri MX287 |
| ECS Standard Straw | Miramat 1000 |
| EnviroGuard Plus | Miramat TM8 |
| Futerra® | North American Green S150 |
| Greenfix CFS072R | North American Green SC150 |
| Greenfix WS05 | North American Green® S150 BN |
| Greenfix WSO72 | Soil Guard |
| Geojute Plus 1 | TerraJute |
| GeoTech TechMat™ SCKN | Webtec Terraguard 44P |
| Green Triangle Superior | Xcel SS-2 Superior |
| | Xcel Superior |

APPROVED PRODUCT LIST

ITEM 169 "SOIL RETENTION BLANKET"

CLASS 2 - "FLEXIBLE CHANNEL LINER

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{PRIVATE}Type E - Shear Stress Range 0 - 96 Pascal (0 - 2 Pounds Per Square Foot):

| | |
|---------------------------------|---|
| Campbell Sod Inc. | Landlok® BonTerra® SFB12 |
| Contech TRM C-45 | Landlok® BonTerra® S2 |
| Contech C-35 | Landlok TRM 435 |
| Contech C50 | Landlok TRM 450 |
| Contech Coconut/Poly Fiber Mat | Landlok TRM 450 X3 |
| Contech Coconut Mat w/Kraft Net | Landlok TRM 1050 |
| Curlex® II Stitched | Landlok TRM 1060 |
| Curlex® III Stitched | Maccaferri: Biomac C |
| Curlex® Channel Enforcer I | Maccaferri MX287 |
| Curlex® Channel Enforcer II | Miramat TM8 |
| Earth-Lock | Multimat 100 |
| Earth-Lock II | North American Green C125 BN |
| ECS High Impact Excelsior | North American Green C350 Three Phase |
| ECS Standard Excelsior | North American Green SC150 BN |
| ECS High Velocity Straw Mat | North American Green S350 |
| Enkamat 7018 | North American Green® P350 |
| Enkamat 7020 | North American Green S150 |
| Enkamat Composite 30 | Pyramat® |
| Enkamat Composite NPK** | Recyclex TRM |
| Enviromat | StayTurf |
| Geotech TechMat™ CP 3-D | SS2 Superior Straw |
| Geotech TechMat™ CKN | SureTurf® ST 1000 |
| Greenfix CFG 2000 | Webtec Terraguard 44P |
| Greenfix CFO 72RP** | Webtec Terraguard 45P |
| Greenfix CFO 72RR | Xcel PP-5-10 |
| Greenstreak Pec-Mat | Xcel SS-2 |
| Koirmat™ 700 | |
| Landlok® BonTerra® C2 | ** According to the manufacturer, this product is no longer being manufactured. The Contractor may utilize this product under this Class and Type only until existing supplies are exhausted. |
| Landlok® BonTerra® CP2 | |
| Landlok® BonTerra®EcoNet™ENC2 | |
| Landlok® BonTerra®SFB™ | |

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type F - Shear Stress Range 0 - 192 Pascal (0 - 4 Pounds Per Square Foot):

| | |
|-----------------------------|---------------------------------|
| Campbell Sod Inc. | Landlok® BonTerra® S2 |
| Curlex® II Stitched | Landlok® BonTerra® EcoNet™ ENC2 |
| Curlex® III Stitched | Landlok® BonTerra®SFB™ |
| Curlex® Channel Enforcer 1 | Landlok® BonTerra SFB12 |
| Curlex® Channel Enforcer II | Landlok TRM 435 |
| Contech C50 | Landlok TRM 450 |
| Contech TRM C-45 | Landlok TRM 1050 |
| Contech C-35 | Landlok TRM 1060 |

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type F - Shear Stress Range 0 - 192 Pascal (0 - 4 Pounds Per Square Foot):

| | |
|---------------------------------|---|
| Contech Coconut/Poly Fiber Mat | Maccaferri: Biomac C |
| Contech Coconut Mat w/Kraft Net | Maccaferri MX287 |
| Earth-Lock | Miramat TM8 |
| Earth-Lock II | Multimat 100 |
| ECS High Impact Excelsior | North American Green C125 BN |
| ECS High Velocity Straw Mat | North American Green C350 Three Phase |
| ECS Standard Excelsior | North American Green SC150 BN |
| Enkamat 7018 | North American Green S350 |
| Enkamat Composite 30 | North American Green® P350 |
| Enkamat Composite NPK** | North American Green S150 |
| Enkamat Composite P/T** | Pyramat® |
| Enviromat | StayTurf |
| Geotech TechMat™ CP 3-D | StayTurf® ST 1000 |
| Geotech TechMat™ CKN | Webtec Terraguard 44P |
| Greenfix CFG 2000 | Webtec Terraguard 45P |
| Greenfix CFO 72RP** | Xcel PP5-10 |
| Greenfix CFO 72RR | |
| Greenstreak Pec-Mat | ** According to the manufacturer, this product is no longer being manufactured. The Contractor may utilize this product under this Class and Type only until existing supplies are exhausted. |
| Koirmat™ 700 | |
| Landlok® BonTerra® C2 | |
| Landlok® BonTerra® CP2 | |

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type G - Shear Stress Range 0 - 287 Pascal (0 - 6 Pounds Per Square Foot):

| | |
|--------------------------------|---|
| Campbell Sod Inc. | Landlok® BonTerra SFB12 |
| Contech TRM C-45 | Landlok TRM 1050 |
| Contech C-35 | Landloc TRM 1060 |
| Contech C50 | Landlok TRM 435 |
| Contech Coconut/Poly Fiber Mat | Landlok TRM 450 |
| Curlex® Channel Enforcer II | Multimat 100 |
| Earth-Lock | North American Green C350 Three Phase |
| Earth-Lock II | North American Green S350 |
| Enkamat 7018 | North American Green® P350 |
| Enkamat Composite 30 | Pyramat® |
| Enkamat Composite NPK** | StayTurf |
| Enkamat Composite P/T** | StayTurf® ST 1000 |
| Geotech TechMat™ CP 3-D | Webtec Terraguard 44P |
| Greenfix CFG 2000 | Webtec Terraguard 45P |
| Greenfix CFO 72RP** | |
| Greenstreak Pec-Mat | ** According to the manufacturer, this product is no longer being manufactured. The Contractor may utilize this product under this Class and Type only until existing supplies are exhausted. |
| Koirmat™ 700 | |
| Landlok® BonTerra® CP2 | |
| Landlok® BonTerra®SFB™ | |

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type H - Shear Stress Range 0 - 383 Pascal (0 - 8 Pounds Per Square Foot):

| | |
|--------------------------------|---------------------------------------|
| Campbell Sod Inc. | Landlok TRM 1060 |
| Contech TRM C-45 | Multimat 100 |
| Contech C-35 | North American Green C350 Three Phase |
| Contech C50 | North American Green S350 |
| Contech Coconut/Poly Fiber Mat | North American Green® P350 |
| Curlex® III Stitched | Pyramat® |
| Geotech TechMat™ CP 3-D | StayTurf |
| Landlok® BonTerra SFB12 | StayTurf® ST 1000 |
| Landlok TRM 435 | Webtec Terraguard 44P |
| Landlok TRM 450 | Webtec Terraguard 45P |
| Landlok TRM 1050 | |

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type I - Shear Stress Range 0 - 479 Pascal (0 - 10 Pounds Per Square Foot):

| | |
|----------|-------------------|
| StayTurf | StayTurf® ST 1000 |
|----------|-------------------|

CLASS 2 - "FLEXIBLE CHANNEL LINER

{PRIVATE}Type J - Shear Stress Range 0 - 575 Pascal (0 - 12 Pounds Per Square Foot):

| | |
|----------|-------------------|
| StayTurf | StayTurf® ST 1000 |
|----------|-------------------|

CELLULOSE FIBER MULCHES

{PRIVATE}Clay or Tight Soils:

Agri-Fiber
American Fiber Mulch
American Fiber Mulch (with Hydro-Stick)
Conwed Hydro Mulch
Enviro-Gro
Enviro-Gro Fiber Mulch
Evercycle™ Hydro-Mulch
Excel Fibermulch II (with Exact-Tac)
Lay-Low Mulch
Lonestar Hydro-Grass Oasis Fiber Mulch
Pennzsuppress®
Pro Mat
Pro Mat (with RMBplus)
Pro Mat X
Pro Mat XL
Second Nature Regenerated Paper Fiber Mulch
Second Nature Regenerated Wood Fiber
Silva Fiber Plus

CELLULOSE FIBER MULCHES

Sandy or Loose Soils:

American Fiber Mulch
American Fiber Mulch (with Hydro-Stick)
American Fiber Mulch with Stick Plus
Conwed Hydro Mulch
Enviro-Gro Fiber Mulch
Evercycle™ Hydro-Mulch
Excel Fibermulch II
Excel Fibermulch II (with Exact-Tac)
Lay-Low Mulch
Lonestar Hydro-Grass Oasis Fiber Mulch
Pennzsuppress®
Pro Mat
Pro Mat (with RMBplus)
Pro Mat X
Pro Mat XL
Second Nature Regenerated Paper Fiber Mulch
Second Nature Regenerated Wood Fiber