
EC-104 Turf Reinforcement Mat

(This section last updated 05-27-22)

Turf Reinforcement Mat (TRM) types are described in Article [4169.10, E](#) of the Standard Specifications. Use the attached Permanent Erosion Control Matrix to determine which type of TRM to use in channel applications such as ditches. For slope applications, Type 1 and Type 2 are used on 1:1 or flatter slopes and Type 3 and Type 4 are used on 1:1 or steeper slopes. Contact the [Agronomist](#) with additional questions regarding choosing which type of TRM to choose.

Iowa Department of Transportation Permanent Erosion Control Matrix

Type of Erosion Control	Ditch Grade																		Comments
	< 3%			3% - 4%			4% - 6%			6% - 8% *			8% - 10% *			10% - 10+% *			
	Max Length (ft)			Max Length (ft)			Max Length (ft)			Max Length (ft)			Max Length (ft)			Max Length (ft)			
	300	600	1200	300	600	1200	300	600	1200	300	600	1200	300	600	1200	300	600	1200	
Seed with properly Anchored Mulch																			Seed and anchor per specifications.
Special Ditch Control																			Used in conjunction with seedbed preparation and temporary permanent seeding
TRM Type 1																			Used in conjunction with 1" of top soil placed over mat, temorary and permanent seeding and wood excelsior
TRM Type 2																			Used in conjunction with 1" of top soil placed over mat, temorary and permanent seeding and wood excelsior
TRM Type 3																			Used in conjunction with 1" of top soil placed over mat, temorary and permanent seeding and wood excelsior
TRM Type 4																			Used in conjunction with 1" of top soil placed over mat, temorary and permanent seeding and wood excelsior
Rock Check Dams																			Used in conjunction with engineering fabric. Can be either temporary or permanent structures.
Rock Ditches																			Used in conjunction with engineering fabric. Can be either temporary or permanent structures.
KEY																			
<div></div>						Cost effective range of erosion control device													
<div></div>						Device applicable but may not be cost effect													
TRM						Turf Reinforced Mat													
*						Use of additional BMP's may be required													