



A COMPLETE GUIDE TO

# SELECTING THE RIGHT GROUND PROTECTION MATS FOR YOUR NEXT PROJECT

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# INTRODUCTION

Site access can be one of the most challenging—and valuable—aspects of a construction or utility maintenance project, especially in remote locations without permanent roads.

#### SUCCESSFUL SITE ACCESS DEPENDS ON THREE KEY FACTORS:







#### SAFETY:

This is always the number one priority.

#### **FUNCTION:**

The crew and equipment must be able to access the jobsite.

#### **ENVIRONMENTAL SUSTAINABILITY:**

Leave the site as you found it with minimal disruption to the surrounding environment.

In order to meet these three key objectives, selecting the right access matting solution is essential.

# WHEN TO USE MATTING

Access mats can be used in a wide variety of situations, and the need for them should be evaluated on a case-by-case basis. Some of the most common scenarios include:

- 𝔆 Leveling uneven terrain
- Serviding ground protection
- ✓ Creating temporary roads
- Providing temporary access across swampy or muddy terrain
- Suilding work pads for equipment and materials
- Providing decking on temporary bridges
- Removing mud and other debris from equipment and vehicles

In mountainous terrain or areas where a gravel road can be installed, matting may not be required. However, in most other situations where a road doesn't exist, matting should at least be considered.



When determining whether or not matting is required, evaluate the three key elements of site access success:

#### SAFETY

What seems like a stable work surface under normal conditions could be dramatically different after it rains or snows. Creating a safe work environment literally starts from the ground up. If there is any risk of the ground becoming slippery, unstable, too soft, or unlevel, consider using access matting.

#### **FUNCTION**

Keeping a project on schedule requires efficiently moving people and equipment in and out of a site every day. If the right of way is too rugged, it slows the project down, increases risk, and puts unnecessary wear and tear on equipment. In addition to allowing more efficient access, using matting reduces the risk of equipment getting stuck and creating further delays.



What seems like a stable work surface under normal conditions could be dramatically different after it rains or snows.

## **ENVIRONMENTAL SUSTAINABILITY**

Projects in environmentally sensitive areas need matting to prevent erosion or soil compaction, protect plants, and minimize the overall impact. For projects that depend on a right of way, the costs to repair damaged property and replant areas can outweigh the expense of installing access mats. Even when the terrain is suitable for equipment to safely move back and forth, the reality is that equipment will tear up the ground and make a mess if the terrain is not protected. Access matting spreads out the load to leave the ground and plants—and your company's reputation—intact.

To help determine whether or not you need matting, ask yourself:

- 1 Are there any portions of the access route that may become unsafe?
- 2 Would installing matting make site access more efficient?
- 3 Will continual access to the site disturb the terrain?

If you answer "yes" to any of these questions, it's time to consider your access matting options.

# HOW TO CHOOSE THE RIGHT ACCESS MATS

Once you have determined that access mats are necessary for the project, the next step is to determine which ones to use. The more up-front planning you are able to do with your access matting partner, the better your plan will be. This is because matting companies have various mats placed throughout the country depending on demand. With advance notice and planning, specific mats based on the project and terrain can be placed in those regions to minimize costly freight concerns. On the other hand, tight timelines often require mats to be shipped from various locations throughout the country, creating costly freight charges.

There is no one-size-fits-all solution. In fact, some site access solutions may require multiple types of matting. Some of the factors to consider when selecting mats include the existing terrain, likely conditions, and your requirements for site access.

#### TERRAIN

Sometimes you can't get the full picture of the terrain until you're on the ground, but you can use data from Google Earth and other local maps to get a good sense of the landscape. This information can help inform the types of mats that would be suitable, how many are necessary, and what installation methods would make the most sense. In addition to analyzing maps, performing a site visit with your site access partner will help you gather more detail and refine estimates for matting.



## CONDITIONS

When evaluating the conditions of the site, think beyond your current status and do your best to predict what the project team might face in the future. Factors such as weather, seasonal changes, vehicle traffic, and local environmental regulations will influence which types of mats are most suitable for the project.

#### **USE CASES**

One major factor in determining what type of matting to install is the way it will be used. Considerations include:

Types of equipment

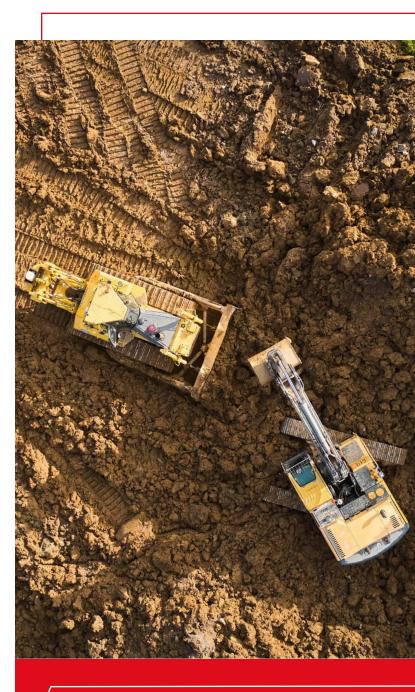
Weight of equipment



Frequency of travel



The project type may also play a role because there are different needs for construction, utility maintenance, ditchdigging, pipe-laying, and so on.



Think beyond your current status and do your best to predict what the project team might face in the future.

# YAK ACCESS HAS THE RIGHT ACCESS MATS



YAK ACCESS offers a variety of mat types from multiple manufacturers to address a broad range of site conditions and applications, including:

#### TIMBER MATS

Timber mats can be used on level or uneven ground for heavy equipment, crane, and vehicle traffic. This is the best hardwood mat when digging ditches or laying pipe off the side of an access roadway.

## 3-PLY LAMINATED MATS

These mats can be used on level or unlevel ground for heavy equipment and vehicle traffic.

## **CLT MATS**

Cross-laminated timber (CLT) mats are best suited for use on level terrain or flat surfaces. These mats weigh approximately two-thirds less than a standard hardwood mat.

## **BRIDGE MATS**

Bridge mats are best used as decking on existing temporary bridges to support heavy equipment and vehicles. These mats are very strong and sturdy with a rough surface that creates a safe traction area.

#### **CRANE MATS**

Crane mats are used on level or uneven ground to create roadways and platforms for heavy cranes and equipment.

#### **OUTRIGGER MATS**

Outrigger mats can be used on level or uneven ground for large cranes and large-scale machinery.

#### **RIG MATS**

Rig mats should be used on level ground for drill rig pads to provide load distribution and stabilization for heavy equipment.

## **EMTEK® WETLAND PROTECTION SYSTEM**

These heavy-duty, highly durable, engineered-hardwood access system are an excellent choice for projects that includes wetlands. The emtek wetland access system distributes weight over a large area, and floats on the vegetative layer of a wetlands, bogs, marshes, swamps, and waterlogged soil.



## TRANSITION MATS

Transition mats connect roadways from one level to another in any weather condition except ice.

#### TIMBERLITE<sup>™</sup> MIXED WOOD MATS

Combining the strength of hardwood with the lighter weight of soft woods, TIMBERLITE mixed wood mats offer a durable and lightweight solution for distributing loads.

## **MEGADECK® HD COMPOSITE MATS**

The MEGADECK<sup>®</sup> HD composite mat is the strongest modular matting system. This mat is specifically designed for high-traffic worksites, construction sites, oil rigs, and power transmission sites. The MEGADECK HD composite materials are inert, providing a non-conductive safe working platform.

## **TUFFTRAK® HEAVY-DUTY MATS**

TUFFTRAK heavy-duty access mats provide temporary roadways and access for machinery and vehicles. TUFFTRAK mats are ideal for construction applications as well as large outdoor events where ground protection is a concern.

## SURETRAK® LIGHT-DUTY MATS

SURETRAK light-duty access mats are designed for moving and operating equipment over soft or sensitive ground. SURETRAK offers mats that provide non-slip access for vehicles, construction equipment, and pedestrians.



### OUTRAK® TRACK-OUT MATS

OUTRAK mats are ideally used at the entrances and exits of projects to remove mud from trucks and equipment.

### SAFESTEP EPZ GROUNDING GRATES

EPZ Grounding Grates are galvanized steel grates, bonded together to create grounded equipotential zones to protect crews from step-potential and Grade 5 fault currents.

Refer to our **Access Mat Product Catalog** for more details about each product, including:

- Service And Antice Product dimensions
- 𝔆 Average number of mats per load
- S Average weight of each mat
- ✓ Recommended utilization

The catalog can also be used as a reference to help determine the number of mats required, calculate the weights of each load, and estimate how many trucks are needed.



Refer to our Access Mat Product Catalog for more details.

## RISKS OF CHOOSING THE WRONG MATTING TYPE

Mats are more than just a line item on the budget. They are often a critical part of keeping projects on schedule and on budget. Without the appropriate site access solution, you could be putting your project at a disadvantage.



#### **SAFETY ISSUES**

In some cases, using the wrong type of mat could cause safety issues. For example, if you need a heavy-duty mat and instead install a light-duty one, it could affect the stability of the access route. Specialized situations also call for certain types of matting, such as grounding grates for utility projects. The texture of the mat surface is also an important factor because the decking of some mats becomes slippery in certain conditions. Additionally, certain terrain needs a more solid or heavier mat so that it doesn't move on the ground in wet conditions. Lighter-weight mats can move on the ground, causing shifting, which could be hazardous.





#### FAILURE TO MEET FUNCTIONAL REQUIREMENTS

If you use the wrong mat, you can actually destroy the ground you are trying to protect. This can lead to environmental issues, extra costs, and even damage to your company's reputation. Specific environmental mat systems should be used based on the terrain and area being accessed. Work with an access consultant to determine the best solution because a poor mat choice can lead to inefficiencies and delays if it doesn't allow you to easily access the site or if you have to replace mats during the course of the project.

## COST AND WASTE

Ordering too many mats or a more expensive matting solution than is necessary could cause you to overspend. In some cases, there may be areas where no mats are needed at all or where you can use a mat mix to optimize the cost. You may also be able to use installation techniques such as leap-frogging to save on mat costs and improve efficiency of mat installation. This takes expertise and a matting service partner that is skilled and experienced in determining the best installation methods throughout the entire scope of the project to get the maximum use of mats.

# COMMON MISTAKES WHEN CHOOSING MATTING

Even the most seasoned professionals make mistakes when choosing matting, which is one reason it's so important to work with a provider that has specialized expertise. These are some of the most common mistakes we see:

#### USING THE SAME MATS FOR ALL PROJECTS

It's important to remember that even if you have used matting on previous projects, you can't assume that the same approach will work on the next project. Different site conditions call for different matting solutions. You may need a heavier- or lighter-duty mat, matting made from a different material, or a different combination of mat types throughout the right of way or project site. You may not use just one type of mat on a project if it makes more sense to use a mat mix based on the terrain of the right of way.



#### NOT CONSIDERING INSTALLATION METHODS

Many project managers assume that there is only one installation method for mats and that the entire access route should be matted from beginning to end. One way to optimize matting costs is to look at the big picture. There might be areas that don't need mats at all. You might be able to move mats to an active area once work is completed in another area. Working with a consultant to choose your matting solution could result in significant savings.

#### ORDERING THE WRONG QUANTITY OF MATS

It can be challenging for people who don't have expertise in matting to estimate the number of mats they need. In addition to the cost of the mats, freight costs can quickly add up. When you over-order, you waste money and cut into the project budget. By contrast, shortages can cause project delays that also cost money. The best way to get an accurate estimate is to work directly with your access partner to perform a site visit. By looking at the ground conditions, slope, and type of land, you can better understand the mat and access demands.



There might be areas that don't need mats at all. You might be able to move mats to an active area once work is completed in another area.

## **BENEFITS OF WORKING** WITH YAK ACCESS

YAK ACCESS is more than just a mat supplier. We also provide expert consultation to ensure that you're getting the right matting and using the best installation methods for your project.

We have a vast catalog of matting solutions to meet every project's needs. We also consider ourselves to be mat-agnostic, which means that we don't have loyalty to any particular brand or type of mat. Our primary goal is to help you select the right site access solution for your project every time.

In addition to providing mat expertise, we also consider factors such as product location. If there is suitable inventory closer to your site, we can help you choose the solution that will save on freight costs.



Rather than just having you call and place an order, we walk you through a consultative process with the goal of helping you achieve site access success through:

#### SAFETY:

Our **SAFETY MATTERS** program always keeps safety top of mind.



#### **FUNCTION:**

Our vast catalog offers solutions for any type of project, and our consultative process ensures you get the right mat mix for your project.



#### LEGACY

When we help you choose the right mats, you can be confident that the environment is protected with the most cost-effective solution.

Every customer also has access to our YAK TRAK app, which allows you to receive notifications about deliveries, connect with one click, reconcile invoices, and more.

It all starts with a conversation. Give us a call to talk about your next project, and we'll work together to determine the site access solution that makes the most sense.










Contact team to learn how we can help with your next access project.

CALL US: 844.925.2377 | info@yakaccess.com

