SIGNATURE SYSTEMS

HOW TO WORK ANYWHERE:

A Composite Matting Guide for T&D Specifiers

Power Companies are specifying composite mats because of their safety, project efficiency, and environmental compatibility. Use this guide to help you choose the right composite mat for your next transmission and distribution project.

THE CHALLENGE:

Safe, Efficient Access to Job Sites

Utility crews are often challenged with creating reliable access to remote job sites through rough terrain and wet, soggy, or other tough ground conditions that increase the risk of expensive machinery and equipment getting stuck or damaged.

MegaDeck® HD was used to create a 30,000 sq. ft. platform that supported more than 500,000 pounds of equipment to install a new 220 ft. monopole. The platform was installed less than 30 ft. from the Nanticoke River.

THE SOLUTION:

Composite Mats

Composite mats are made from High-Density Polyethylene (HDPE), and are used to create a safe, stable working surface and provide reliable access to remote job sites.

- ✓ **Signature's interlocking composite mats are engineered to create safe, reliable, non-shifting temporary access roads and work platforms that will not crack, rot, or degrade.**
- ✓ **Water is not required to prep the ground for composite matting in dusty conditions, saving time, money, and natural resources.**
- ✓ **Anti-static additives reduce static buildup and composite materials reduce the risk for fire.**
- ✓ **Signature's composite construction mats are made from a non-toxic material that eliminates cross-contamination between worksites, protects vegetation, and controls soil compaction, reducing the time needed for costly clean-up efforts.**

Why Specify Composite Mats Instead of Wood Mats?

Composite Mats Provide a Stable Surface for Crews and Rolling Equipment

Composite mats provide a non-shifting surface that reduces the risk of accidents over challenging ground conditions. MegaDeck® HD's overlapping flanges, interlocking design, and secure connection system creates one continuous surface that prevents drifting and separation under heavy rolling loads and provides a stable work platform that can be used for staging, constructing, repairing, and maintaining towers.

Composite Mats Reduce Fire Hazards

Working in dry conditions elevates the risk for fire and wood mats enhance the risk of an equipment spark causing a fire to occur. Unlike wood, Signature's composite mats are made from non-conductive materials with anti-static properties, helping reduce the risk of fire.

Composite Mats Provide a Significant Return on Investment

Wood mats degrade and need to be replaced after several uses. With proper care and maintenance, composite mats can be easily cleaned with a pressure washer and used on multiple projects for up to 10 years and then recycled.

Composite Mats Reduce Project Costs

Composite mats provide reliable site access that keep jobs on schedule, helping to reduce project costs. Additionally, mats are made from a non-toxic material that protects vegetation and environmentally sensitive areas and will control soil compaction, preventing time consuming and expensive remediation efforts.

MegaDeck® HD provided reliable temporary access to a powerline while safely supporting crews, equipment, and heavy machinery over extremely soft ground with standing water.

MegaDeck® HD was used to create a temporary road with turning pads at each end to access a powerline that crossed a farm field. The composite mats allowed utility crews to safely access the tower with no damage to the ground, keeping reinstatement costs to a minimum.

Features to Consider When Specifying a Temporary Roadway Solution

Safety

An interlocking design that improves stability, creates a smoother surface for wheeled equipment, and does not hop when equipment is driven over it.

Project Efficiency

A solution that provides a clean, clear, sand afe access road ready for equipment and crews, helping eliminate project delays and downtime.

Environmental Protection

A mat that does not absorb chemicals, contaminates, or invasive species, and protects sensitive areas and native land from damage.

Sustainability

A long-lasting mat made of environmentally friendly, sustainable materials that can be recycled at its end of life.

Applications for Composite Mats

Temporary Roadways

Create temporary roadways that provide reliable access to remote power lines and won't cause damage to private or environmentally sensitive land.

Work Platforms & Laydown Yards

Stabilize work zones by creating a firm foundation over any substrate, which allows for safe storage areas for equipment and material construction.

Support for Heavy Equipment

Prevent over-sized, heavy equipment from sinking into soft, wet, or muddy ground.

MegaDeck® HD was used to create a stable work platform that safely supported a fleet of bucket trucks, cranes and loaders filling the area to replace an electrical transmission tower in a marsh.

Selecting the Best Composite Construction Mats for Your Job

Signature Systems' heavy-duty composite mats support the heaviest loads over the toughest terrain in the most challenging environments. Our composite matting solutions are engineered for service vehicles, construction equipment, and utility components to access off-road sites when performing routine maintenance, upgrading power lines and cables, repairing storm damage to lines and power grids, and when laying new power lines.

Use these questions to help determine the right composite matting solution for your job:

- ✓ What are the ground conditions like?
- ✓ What is the terrain?
- ✓ What type of equipment will you be using on the project?
- ✓ How heavy are the loads the equipment will be carrying?

Composite Mats for Transmission & Distribution

MEGADECK® HD

Heavy-duty temporary roadways, work platforms and laydown yards

SIZE:
7.5 ft L x 14 ft W x 4 in H
(2.3 m x 4.3 m x 10.2 cm)

WEIGHT:
1,095 lbs. ea. (496.7 kg ea.)

LOAD CAPACITY:
4,500 tons / 600 psi

SQUARE FOOTAGE/40' ISO HC:
3,380 ft^2 (314 m^2)

SIGNAROAD®

Quick installing temporary roadways, access matting and support for vehicles and equipment

SIZE:
6.8 ft L x 10 ft W x 2.5 in H
(2.1 m x 3 m x 6.4 cm)

WEIGHT:
496 lbs. ea. (225 kg ea.)

LOAD CAPACITY:
1,950 tons / 400 psi

SQUARE FOOTAGE/40' ISO HC:
5,180 ft^2 (481 m^2)

DURADECK®

Light-duty matting for near-instant access, roadway and equipment support

SIZE:
4 ft L x 8 ft W x .5 in H
(1.2 m x 2.4 m x 1.3 cm)

WEIGHT:
87 lbs. ea. (40 kg ea.)

LOAD CAPACITY:
Up to 80 tons / 200 psi

SQUARE FOOTAGE/40' ISO HC:
16,000 ft^2 (1,486 m^2)

Our team can help you specify composite mats for your next project. Contact us for a consultation to determine the best mat for your job.

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