Landfill Road Mats - New Technology

Composite and geo-block mats are an interlocking mat system made of high performance plastic and look to be a promising new technology for use as portable roads (for landfills, around communities etc.). The heavy duty mats can withstand the weight of heavy equipment, are a dust-free alternative to gravel roads, are designed to protect the tundra, last a long time, can be used year-round, and can be moved for temporary use as emergency roads, rerouted for a new site access, or relocated for a new landfill. The difference between Durabase and Geoblock mats is that Geoblock mats are usually porous and thus permeable to water, allowing natural groundwater replenishment, and can also allow plants to grow through the open squares construction (see photos below). We will add more information that we find about road mats to this page as we collect it.



Durabase composite mats: Photo Courtesy: Compositech



Geoblock mats: Photo Courtesy: Geochem, Inc.

Mat Distributors

There are different types of road mats to choose from. Durabase composite road mats and Geo-block mats are highlighted in this document. Take time to view the websites and contact the various distributors below to determine what will work best for your situation. They are available for purchase and most vendors also offer them for rent.

Alutiiq Oilfield Solutions

Durabase mats for sale or rent Contact: Robert Christian, 456.4433 3452 Trailer Street Fairbanks, AK 99709 www.alutiigoilfieldsolutions.com

Newpark Mats and Integrated Services

Durabase mats for sale or rent For questions about purchasing DURA-BASE Mats contact:

Michael Sparks <u>msparks@newpark.com</u> or Keith Pearson <u>kpearson@newpark.com</u> Tel. 877-628-7623

http://www.newparkmats.com/

Geochem, Inc.

Geoblock mats for sale 3464 Newcomb Dr Anchorage, AK 99508 Tel. 562-5755

http://www.geocheminc.com/products.htm

Bridgewell Resources

Durabase mats for sale or rent Contact Justin Thelin, (503) 872-3427 10200 SW Greenburg Rd., Suite 500 Tigard, OR 97223

http://www.bridgewellresources.com/mats/



Photo Courtesy: Geochem, Inc.

Presto Geosystems

Geoblock mats for sale

670 N Perkins Street, PO Box 2399
Appleton, Wisconsin USA 54912-2399
Tel. 800-548-3424
http://www.prestogeo.com/porous_paveme

<u>nt_systems</u>

DuraDeck Mats

Durabase mats for sale or rent 50 East 42nd Street, 14th Floor, New York, NY 10017 Tel. 800-709-8151 www.duradeckmats.com

The Mat Source

Durabase mats for sale or rent http://www.thematsource.com/ (877) 867-6287

Mabey, Bridge, & Shore, Inc.

Durabase mats for sale or rent 6770 Dorsey Road Elkridge, MD 21075 Tel. (800) 956-2239 http://www.mabey.com/

Safety Box

Durabase mats for sale or rent
Contact: David Loveman (cell: 216-2724422 or email: david@safety-box.com)
5455 Perkins Road
Bedford Heights (Cleveland), Ohio
1-800-568-3626
http://www.safety-box.com/durabase.html

More Information about Road Mats

This is an article about Hooper Bay's Geoblock system: http://www.adn.com/2011/03/28/1780189/trail-for-atvs-helps-heal-hooper.html

This link has several examples of geo-block road mat applications in different communities around Alaska and contains articles and video. Scroll down the page of this site to read all the examples: http://www.geocheminc.com/geoblock.htm

Communities Using Composite Mats

Chevak

Contact: Cynthia Paniyak, 858-7827

CVRF, as part of their building plan for the community service center, installed some geoblock mats a few years ago. They were placed over an old trail that connects a dirt road to the school. The community requested the mats be put down because the kids were taking a short cut to school and tearing up the tundra. They were placed over some black tarp road cover and have a water-draining pipe system to prevent flooding. The mats work pretty well and the community would ultimately like to use them on the ATV subsistence trails that go out of Chevak.

Kwigillingok

Contact: Pat Andrew, 907-588-8912

Kwigillingok received funding from the Denali Commission to install a 2,700 ft long geoblock subsistence ATV trail. The ATV trail leads from the main boardwalk in the village to the mouth of the Kuicuaq slough. The trail was installed July 21, 2010. The material works well with the ATVs and there is almost no impact to the ground. They recommend the Geoblock ATV trail system to anybody out there interested.



Kwigillingok, AK. Photo Courtesy: Cory Schneider.

For more information on Kwig's system, see:

http://www.geocheminc.com/pdf/Tales_from_the_tundra_0211_fi_tundra_trailb.pdf

Hooper Bay

Contact: Gabe Moses, 758-4122

Hooper Bay requested help from the USDA Natural Resources Conservation Service, who assisted with planning. They reimbursed the SeaLion Corporation for expenses on installing the geoblock trail. The ATV trail is 2-3 miles long and was installed a few years ago. The residents are very happy with the great improvement in the tundra's condition since the trail was put down. The trail keeps the land from getting torn up and previous damage is slowly healing. It provides much easier access to subsistence areas. Hooper Bay is hoping to extend the trail in the coming years.



Photo Courtesy: Geochem, Inc.

See this link for more information: http://www.geocheminc.com/pdf/Trail_Helps_Alaska.pdf
Also see video at http://www.geocheminc.com/geoblock.htm

Tununak

Contact: James James, 652-6527

Tununak applied for funding to the Denali Commission for two projects—a 6.3 mile geoblock mat ATV trail to Toksook Bay and some geoblock mats for the city streets. They received the grants and are currently working with DOT, who is doing the environmental reviews and engineering reports and who has been working with the corporation on the public easement process. The projects are set to begin in FY12.

Chefornak

Contact: Nellie Abraham, 867-8303

As part of their building plan for the community service center, CVRF also purchased and installed some geoblock mats in Chefornak. The trail is about 500 ft.

Atmatluak

Contact: Louisa Pavilla, 553-5335

Atmatluak received a Denali Commission grant to purchase durabase mats to replace the old boardwalk on the road to the dump. They were installed in 2007-2008.

Nunapitchuk

Contact: Sophie Chaliak, 527-5730

Nunapitchuk purchased geoblocks a few years ago for a trail to the dumpsite. They used IGAP funds. It has improved access to the dump, as well as self-haul rates, helping the community a lot. There was no trail there before the geoblocks were installed.



Atmatluak, AK. Photo Courtesy: Atmatluak IGAP



Funding for Road Mats

See this link for Grant Opportunities for Roads/Transportation www.zendergroup.org/docs/road_mat_funding.pdf