



MINNESOTA-MADE BUILDING MATERIALS
RESOURCES FOR FINDING LOCAL PRODUCTS AND MATERIALS

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Minnesota-Made Building Materials *Resources for finding local products and materials*

In 2008 Dovetail Partners released a report titled “Made in Minnesota” which focused on the opportunities and benefits of using local building materials.¹ The report noted that at the time there were more than 40 green building standards in the United States; today (just two years later) there are more than 80. A common theme in nearly every green building program used in the United States is the preference for local materials.

Similar to the potential benefits of supporting local foods, the use of local building materials can help reduce environmental impacts, such as CO₂ and other emissions, by minimizing the transportation of materials, avoiding the externalization of environmental impacts to other parts of the world and providing support for the regional economy.

Several green building standards and initiatives, including the Architecture 2030 challenge aimed at achieving carbon neutrality in new buildings², promote the use of local building materials. Buying “local” can fit several definitions. For example purchasing from the United States or North America, from a regional area, from a certain state or even from a particular neighborhood are all plausible definitions of local. A number of green building programs, including the US Green Building Council’s LEED³ program, define locally sourced materials as those for which raw material extraction, processing and production of finished products all occur within a 500-mile radius of the building project location. The GBI Green Globes program and the National Green Building Standard also use a 500-mile radius as a definition of “local,” but widen the radius to 1,500 miles when transportation is primarily by rail or ship. The standard of measurement for defining local in the Minnesota Made project is identified in the name: “Made in Minnesota.”

As outlined in the 2008 report from Dovetail Partners, there are opportunities to maximize the benefits of green building efforts by focusing on the use of local raw materials and locally manufactured products. The possibility of using Minnesota-made materials to build a complete home is within reach.

This report summarizes the resources that are available to assist in identifying building products and materials that are Made-in-Minnesota, including a new database and online interactive maps developed by Dovetail Partners.

¹ *Green Building Materials: Made in Minnesota*, available at:

<http://dovetailinc.org/files/DovetailMNMade0508dx.pdf>

² http://www.architecture2030.org/2030_challenge/index.html

³ Leadership in Energy and Environmental Design, <http://www.leed.org>

What's Happened Since the First Report?

Since 2008, several developments have occurred to further support opportunities for locally-made building in Minnesota. In April 2008, the cities of St. Paul and Minneapolis came together to create the “Making it Green” Initiative in the Twin Cities.⁴ The majors of Minneapolis and St. Paul, in conjunction with environmental and labor interests, initiated the effort based on the belief that investments in solving critical environmental challenges represent strategic economic opportunities for the future. The goal of the initiative is to recommend policies and actions to position Minneapolis and St. Paul as national leaders in promoting and developing green manufacturing technologies and products while creating quality jobs. Some of the most significant areas for growth and development are in green manufacturing, with a strong focus on building products, renewable energy and transportation (Figure 1).

The following year, in 2009, a stakeholder engagement process and gap analysis was used to further inform and develop support for green businesses.⁵ The final report released in March 2010 identifies gaps and barriers to green economic development, including 1) limited marketing and economic development advocacy resources available in the state and region, 2) a lack of awareness of Minnesota and Twin Cities “green” attributes or resources, and 3) a lack of a cohesive, coordinated digital information source that could serve as the “welcome mat” to doing business in the region.

Recommendations for supporting growth in green jobs include:

- Develop a directory of local green manufacturers and suppliers.
- Use social media to connect researchers and businesses.
- Connect citizens and businesses by identifying actions and tools that can assist residents and businesses to be a part of the regions sustainability.
- Expand the use of technology to communicate progress on sustainability indicators.

The *Making it Green* report quantified the Minnesota jobs associated with building materials related to energy use reduction, sustainable materials, and indoor environmental quality. Based on employment data from the U.S. Census Bureau, approximately 45,000 jobs in the state are linked to these categories of building products.⁴ Minnesota’s building materials sector is well positioned to support local purchasing and the growth of green industries using local products.

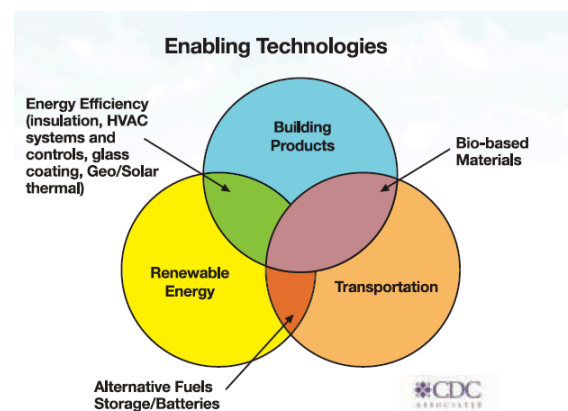
⁴ To view the “Making it Green” report, see Appendix E for building products employment data:

http://www.ci.minneapolis.mn.us/sustainability/docs/MakingItGreenReport_2008.pdf

⁵ The final report produced by the Minnesota Environmental Initiative is available at:

<http://www.mn-ei.org/projects/images/Green/GreenEconFinalReport.pdf>

Figure 1.



Source: “Making it Green” (2008)

Online Building Product Resources

Several databases and online resources have been developed that help support sourcing of Minnesota-made and other green building products. These resources are readily available and make it easier than ever to find sources of local building materials.

Midwest Home Magazine – Made in Minnesota

One of the available resources is an on-line database developed by Midwest Home magazine that was first published in 2009. This searchable database, “Made in MN”, includes over 300 Minnesota based companies that supply or manufacture building materials in Minnesota.⁶ The user can search products by city or by category. Categories include nearly everything needed to build a home: nails, bathtubs, shingles, gutters, lumber and much more. The database uses a rating system scored by 1-5 plus signs, which tells the end user how local the product is. Below (Box 1.) is a description of how the rating system works. A major shortcoming for those attempting to participate in green building programs is that most available building product databases do not include details about the source of raw materials to the extent required by green building programs.⁷ The Midwest Home “5-star” rating aids with identifying products that are locally available, locally assembled or manufactured, and that have significant raw material sourcing also from Minnesota.

Box 1. Midwest Home Magazine Rating System



***What do the plus signs mean?**

- + Products available through locally owned stores/distributors.
- ++ Products available through locally owned stores/distributors; vendor has corporate office or base operations in MN, but no assembly or manufacturing.
- +++ Products available through locally owned stores/distributors; vendor has assembly and/or manufacturing in MN, as well as other parts of the country or world.
- ++++ Products available through locally owned stores/distributors; vendor has assembly and/or manufacturing operations in MN only.
- +++++ Products available through locally owned stores/distributors; vendor has assembly and/or manufacturing operations in MN only. Vendor sources significant raw materials from MN.

<http://www.midwesthomemag.com/media/Midwest-Home/Marketplace/Made-in-Minnesota/>

⁶ The Midwest Home Magazine’s Made In Minnesota database is available at:

<http://www.midwesthomemag.com/media/Midwest-Home/Marketplace/Made-in-Minnesota/>

⁷ For example, the USGBC LEED programs require that “local materials” be harvested, sourced, processed, manufactured, and installed within a 500 mile radius of the project.

Additional publicly available online sources of green building material listings, include:

- **The ReUse Center:** A program of the Green Institute in Minneapolis that lists reclaimed building materials. Available at: <http://www.thereusecenter.com/>
- **Minnesota Building Materials Database:** Developed by the University of Minnesota's Center for Sustainable Building Research and offering a mechanism "to document, evaluate, and disseminate usable information on sustainable materials, products, systems, and services for the commercial and residential building construction industry in Minnesota." Available at: <http://www.buildingmaterials.umn.edu/>
- **Forest Stewardship Council – US:** Provides a listing of U.S. based retailers of FSC-products. More information available at: <http://fscus.org/productsearch/retailers/>
- **Sustainable Forestry Initiative:** Provides a listing of forest products and suppliers of SFI-certified building products. Available at: <http://www.sfiprogram.org/find-sfi-forest-products>
- **Energy Star:** Provides a listing of Energy Star Products, including appliances, building products, electronics, heating and cooling, lighting and plumbing. Available at: <http://www.energystar.gov/>



Specific to Minnesota-Made and locally-harvested wood products, True North Woods maintains an online database that links consumers with a network of suppliers who produce forest-based products from Minnesota's forests.⁸ Additionally, a subset of suppliers who are members of the True North Certified Supplier Network offer products certified to the standards of the Forest Stewardship Council (FSC). Products available through the True North Woods program include building, remodeling and construction products, custom furnishings and cabinetry, and commercial and industrial products.



Based in Aitkin, Minnesota, *The Upper Mississippi Certified Forest Products Group* is "a collection of independent, local companies dedicated to the well being of the forestland and wilderness of Minnesota" who have an online supplier directory of companies offering locally-harvested and locally-made FSC-certified products.⁹



⁸ <http://www.truenorthwoods.com>

⁹ <http://www.mncertifiedwood.com>

Dovetail Partners' Minnesota Made Building Materials Database

Following on the Dovetail report released in 2008, the Minnesota Made Building Materials Database was compiled to offer an additional user-friendly online database for consumers, which includes a full range of categories of buildings materials, and available information about raw materials sources.

The information is provided in a standard database format (Microsoft Excel) to allow information to be sorted and re-arranged by the user and for general compatibility and ease of use with potential users. The database development process included exploring pre-existing publically available sources such as the Center for Sustainable Building Research, Midwest Home Magazine, and True North Woods among other online resources for business information that fit the criteria of locally made. Each of these databases was thoroughly reviewed to identify companies to be added to the Minnesota Made database. After these databases had been exhausted, the search turned to other online sources, including search engines, Angie's List, and individual contacts to find additional businesses. Companies were contacted directly via e-mail and/or phone to get additional information about products and raw material sources.

The information is sorted by what products each company manufactures or supplies. Each company's name and address is listed, along with product description(s), the location of known manufacturing facilities, sources of raw materials, and contact information including phone number and website address. The categories used to sort the different businesses and organize important information are shown below.

Product	Company	Address	Product(s) Description	Manufacturing	Raw Materials	Contact Information	Website Address	Business Status
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It should be noted that a major obstacle in obtaining complete information was finding or confirming the source of raw materials for products. Consumer demand and green building program requirements could help increase the availability of this information.

Businesses listed in the database are color-coded into various groups indicating the level of information available about the source of raw materials and the location of manufacturing.

	MN raw material extraction	MN manufacturing
white	✓	✓
yellow	✓	?
orange	?	✓
red	?	?

Below is a screenshot of the Minnesota Made Building Materials database:

Product Category	Company Name	Address	NEED BETTER DESCRIPTION	City	State	Phone	Website	Notes
Modular Homes	Nelson Co.	1040 24th Avenue SW, Cambridge, MN				763-689-4004	No Website	On True North Woods website, need further info.
Outdoor Fireplaces	Heat & Glo	215th Street West, Lakeville	Wood burning, gas and electric also speciality units for kitchen and patio	Lakeville, MN	Don't know	800-669-4328	www.heatnglo.com	
Paint	Amazon Environmental, Inc.	7180 West Commerce Circle, Fridley, MN	Recycled Paint	Fridley, MN	Minnesota	763-572-0800	www.amazonpaint.com	
Paint	Conklin	alley Park Drive, Shakopee	Cleaning supplies, wood sealers, exterior and interior paint, caulks, sealants, and waterproof coatings	Shakopee, MN	Don't know	952-445-6010	www.conklin.com	
Paint	Hirshfeld's	Lyndale Ave. N. Minneapolis	Interior and Exterior Paints, Stains, and Specialty Finishes, Wall coverings, Window Coverings	Minneapolis, MN	Don't know	612-522-6621	www.hirshfelds.com	
Paint	Master Coating Technologies	7 Eagan Dale Blvd. Eagan,	Scuffmaster brand paint	Eagan, MN	Don't know	800-898-0219	www.scuffmaster.com	
Paneling (Wood)	Aitkin Hardwoods	45216 State Hwy 210 West, Aitkin, MN 56431	Millwork, Doors, Trim etc	Aitkin, MN	Cass Lake, MN	218-927-6515	www.aitkinhardwoods.com	
Paneling (Wood)	opperhead Road Logging and Lumb	Great River Road, Palisad	Custom sawn Flooring, paneling, rustic fireplaces	Palisade, MN	Aitkin, MN	218-845-2823	www.joescarvingwood.com	
Paneling (Wood)	Hedstrom Lumber	Gunflint Trail, Grand Marais	Hardwood Lumber, Paneling, and Shingles	Grand Marais, MN	Don't know	218-387-2995	www.hedstromlumber.com	
Paneling (Wood)	Manomin Resawn Timbers	52 Freeland Avenue, Hugo	Submerged logs, old mills and barns, etc. Reclaimed wood	Hugo, MN	Manomin, MN / other MN	888-207-6072	www.mrtimbers.com	
Paneling (Wood)	Renneberg Hardwoods	Hwy. 87 W. Menahga, MN	Paneled doors, tongue and groove paneling, and flooring	Menahga, MN	the world but if you specify, it car	218-564-4912	www.thebestwood.com	
Patio Doors (Vinyl)	Thermo Tech Windows	38th Ave. NE, Sauk Rapids	Fit in Vinyl windows and doors, casements, double hung, half rounds, transoms, and bays As well as garden doors and sliding patio doors.	Sauk Rapids, MN	Don't know	320-529-4012	www.thermo-techwindows.com	
Patio Heaters	Schaefer Ventilation Equipment	al Blvd., Suite 101 Sauk Ra	Heater for farmers, restaurant owners, Commercial and residential, specifically portable and also natural gas and electric quartz heaters.	Sauk Rapids, MN	Don't know	320-251-8696	www.schaeferfan.com	Where do the products come from?
Pavers (Concrete)	TCC Materials	2025 Centre Pointe Blvd. Suite 300, Mendota Heights, MN	Stucco, Mortar, Grout, Concrete, Concrete pavers	Mendota Heights, MN	500 miles of St. Paul	651-688-9116	www.twincityconcrete.com	
Pavers	VAST	Marshall ST. NE Minneapolis	Landscape and decking pavers made from 95% recycled materials. Features permeable	Maple Plain, MN	95% of materials are recycled	612-234-8958	www.vastpavers.com	
Plastics	DiaServe, Inc.	526 3rd St. NE Blooming Prairie, MN	Custom plastics	Blooming Prairie, MN	DON'T KNOW	866-874-0097	www.diaserve.com	Where do raw materials come from?
Plumbing	Central Marble Products	1266 105th Street NW, Rice, MN	Fabricates sink bowls, countertops, bathtubs, shower bases, tub decks, and fireplace surrounds	Rice, MN	DON'T KNOW	320-393-2085	www.centralmarbleproducts.com	Need to ask where the cultured marble comes from?
Plumbing	Franks Plumbing	Minneapolis, MN	Reclaimed Plumbing	Minneapolis, MN	Minnesota	612-338-7609	No website	Get more information about company!
Plumbing	Pearl Baths	9224 73rd Avenue North, Minneapolis, MN	Bath tubs, shower basins	DON'T KNOW	DON'T KNOW	800-328-2531	www.pearlbath.com	Need to ask where manufacturing and materials happens
Radiator Covers (Custom)	Anderson Millwork	Shady Oak Rd. Eden Prarie	Custom Cabinets, Built ins, and radiator covers	Eden Prarie, MN	Don't know	952-938-5066	www.andersonmillwork.com	Where does the wood come from?
Railings	Elias Metal Studio	an Buren St. NE Minneap	Lighting, fencing, gates and fireplace screens	Minneapolis, MN	Don't know	612-362-9570	www.eliasmetalstudio.com	Where does the metal come from?

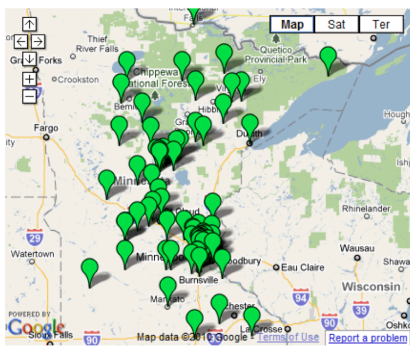
The complete Minnesota Made Building Materials database can be downloaded and is available at this webpage: <http://www.dovetailinc.org/content/minnesota-made-materials>

Also available at the webpage is a directory of companies included in the database.

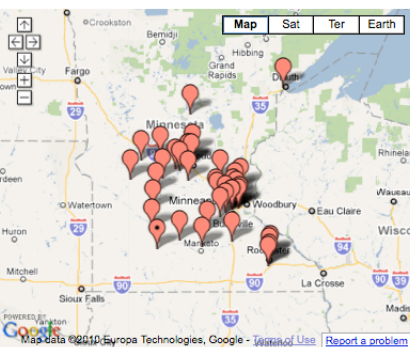
Figure 2. MN-Made Maps

<http://www.dovetailinc.org/content/minnesota-made-materials>

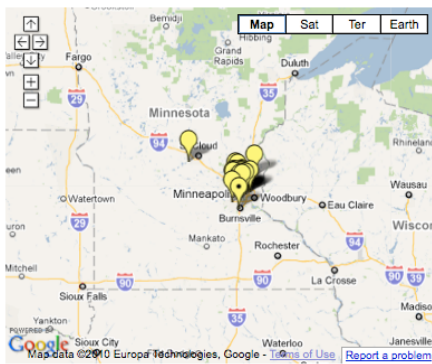
MN-Made Wood Products & Timber



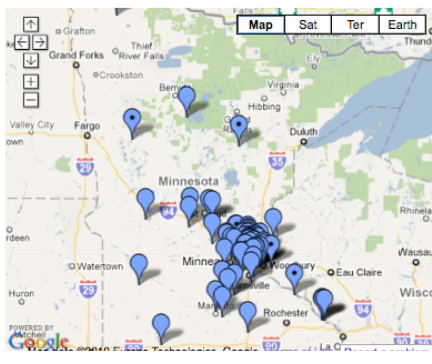
MN-Made Concrete, Stone, & Masonry Products



MN-Made Tile, Glasswork, & Metalwork



MN-Made Building Materials, Lighting, Appliances & Home Accessories



The businesses and building products included in the Minnesota Made Building Materials Database have been divided into four categories and then mapped by category.

The categories include:

1. *MN-Made Wood Products and Timber Products*
2. *MN-Made Concrete, Stone and Masonry Products*
3. *MN-Made Tile, Glasswork and Metalwork Products*
4. *MN-Made Building Materials, Lighting, Appliances and Home Accessories*

For each category there is a Google map (Figure 2) that is marked with each business location. The Google maps allow consumers to search for a product based on location and to calculate distance from a project site. An example of the information for MN-Made Wood Products and Timber map is shown in the first image of Figure 1. In the map, each green pin indicates a Minnesota business that either manufactures or supplies wood or timber products. By clicking on one of the pins, the business name, address, products they carry and link to their website appears. Consumers also have the option to click below the map on a link that will open a directory to all of the businesses available under each category. Additionally, there is a spreadsheet available at the Dovetail webpage that features each business across all categories.¹⁰ The spreadsheet information allows consumers to refine their search results by choosing a specific location, product or business.

The Future of the Minnesota Made Database

Dovetail Partners will continue to operate and maintain the website and perform periodic checks for information accuracy. Dovetail will, in addition, look for ways to expand and improve the database and to more effectively use this to better inform green building efforts and consumer behaviors.

If a Minnesota business would like to be added to the list, they can contact Dovetail and provide the necessary information to be added to the database(s) and map(s).

Over time Dovetail will explore the opportunity for collaboration with partners in further development of the database. Dovetail has also considered the possibility of taking the database beyond Minnesota borders to define “local” as something similar to the 500-mile radius concept.

A further possibility for expanding the usefulness of an online tool is to incorporate information regarding health impacts and life cycle information for products. An existing tool that

¹⁰ Available at: <http://www.dovetailinc.org/content/minnesota-made-materials>).

contains such information is an online building material database developed in 2003 by the Center for Sustainable Building Research at the University of Minnesota, with grant funding from the State of Minnesota (see page 5). The website (www.buildingmaterials.umn.edu) gives users the ability to select and research various topics such as substructure, shell, interiors or concrete, metals, wood and plastics materials. When a user selects a building material such as ceramic tile, or wood flooring, they can review a summary of the product, sourcing information, health pros and cons, end use and a lifecycle assessment. The idea behind the database is very progressive; however it has not been updated since 2004.

The Bottom Line

The benefits of supporting local businesses reach far beyond what most consumers see or experience directly. The goal of the Minnesota Made project has been to present architects, designers, builders and other consumers with tools that can make the process of local consumption easier. With business and consumer participation these resources can support the use of locally manufactured building materials. Readily available resources for identifying Minnesota-Made building products include a number of online directories, and a new database and mapping resource developed by Dovetail Partners (<http://www.dovetailinc.org/content/minnesota-made-materials>).

References and Resources

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Smith, L., Hogin, J., Rubenstein, G., Harley, M., Carlson, J., Robbins, A., and Larson J. March 2010. *Minnesota Environmental Initiative Green Economy Partnership Process Final Report*. Available at: (<http://www.mn-ei.org/projects/images/Green/GreenEconFinalReport.pdf>)

Minnesota Building Materials Database: A Tool for Selecting Sustainable Materials (<http://www.buildingmaterials.umn.edu/>)

Made in Minnesota – Midwest Homes Magazine (<http://www.midwesthomemag.com/media/Midwest-Home/Marketplace/Made-in-Minnesota/>)

True North Woods (www.truenorthwoods.com)

The Upper Mississippi Certified Forest Products Group (<http://www.mncertifiedwood.com>)

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