

DOWLING COMMUNITY GARDEN

address DOWLING COMMUNITY GARDEN, PO BOX 6757, MINNEAPOLIS, MN 55406
telephone 651.255.6607
web WWW.DOWLINGCOMMUNITYGARDEN.ORG

Building Wheelchair Accessible Raised Garden Beds



Project Description

Four raised gardening beds, each 12' x 5' and 24" high (height suitable for wheelchair users) with 4' wide structural pathways around beds on all sides. Beds were built in fall 2000; in spring 2001, pathways were installed to allow easy wheelchair access. Beds are filled with a mixture of topsoil and compost. Water is supplied by a gravity-feed barrel that sits atop one of the beds and an attached hose; barrel is kept filled by volunteers. An on-site compost bin is provided, and emptied at the end of the season by volunteers.

Materials

For the Raised Beds:

- Recycled composite decking (12' x 6" x 1"), 12 boards per bed (ChoiceDek was used; other brands are available, see resources list)
- 24" slotted angle irons, 4 per bed
- 2.5" metal corner braces, 8 per bed
- 36" u-posts, 8 per bed
- 14 gauge galvanized wire
- galvanized deck screws

For the Pathway Paving:

- Geoblock brand porous pavement system
- weed barrier fabric
- galvanized deck screws
- finely ground wood chips

Process

Preparing the Site We leveled the area where the beds were to be installed. After the beds were constructed, soil was excavated 2" below ground level where pathway paving was to be installed, and leveled.

Building the Beds Lumber was cut to size, with 45-degree angles at ends. One rectangle of boards was laid in position, and slotted angle irons were attached to outside corners. Layers of boards were added and attached until bed was four boards high. Corner braces were attached on inside corners at the first and top course of boards. U-posts were positioned (three per side, evenly spaced, and one per end, centered), driven into the ground until just below top of bed, and attached to boards. Wire was strung through gaps between the second and third layer of boards, wrapped around the outside of the u-posts, and tightened. (This keeps beds from bowing outward when filled with soil.)

Beds were filled with a layered mixture of topsoil and municipal composted yard waste, in equal amounts.

A purchased rain barrel with outlet hose was placed on top of soil at one end of a bed.



Construction of the raised beds in fall 2000.



Building Wheelchair Accessible Raised Garden Beds continued



Installing the Pathway Paving Landscape fabric was applied to the bottom of the prepared path area. Interlocking Geoblock pieces were placed on the fabric, and attached to one another. When pathway was in place, ground wood chips were used to fill in the holes of the Geoblock until just flush with the block surface.

Maintenance

At the End of the Gardening Season Rain barrel is removed for safe-keeping, and compost bin is emptied.

Yearly Finely chopped wood chips are added to the Geoblock surface, to replace those lost to weather and deterioration. Soil and compost is added to top off beds.

Comments

Composite Decking Material This type of board is made from recycled plastic and wood fiber. The ChoiceDek brand composite decking used for our beds is quite flexible. Products now on the market have more lateral stability, which is desired. This type of material is more expensive than traditional lumber, but will last longer (manufacturers estimate useful life to be 50 years.) It weathers like cedar to a silvery color.

Paving Material Geoblock is a non-leaching recycled plastic, and is used extensively for wheelchair paving. It has a natural appearance when filled with the ground wood chips.

Weeds Although weed-barrier fabric is installed under the Geoblock, weeds do grow along the edge and sometimes through the fabric. Heavy duty fabric is desired, and pathways need to be weeded several times a season.

Water Water flow from the gravity-feed barrel is slow. A dedicated water supply next to raised beds is preferred.

Durability Beds and pavement have shown no signs of shifting or movement from extremes of weather over the past five years.

Adapting Design for Taller Beds for Seniors/Limited Mobility Two additional courses of lumber may be added to increase height 12". This makes a bed that may be gardened while standing. Increase slotted angle irons to 36" and u-posts to 48" in height. Increase number of corner braces to 12.



Installation of Geoblock surface in spring 2001 (top photo) and addition of new ground wood chips in spring 2003.



Taller raised beds, to be gardened while standing, were constructed in spring 2005.

Resources for Materials

Recycled Composite Decking:

ChoiceDek (Weyerhaeuser, www.choicedek.com) This material was used to build Dowling's beds; it is now available only at Lowe's.

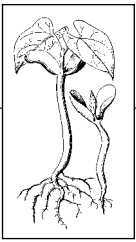
Everx/Lattitudes line (Universal Forest Products, www.ufpi.com)

Trex (www.trex.com)

many other manufacturers/products are available; search under "composite decking"

Pathway Paving:

Geoblock (Presto Products, www.prestogeo.com, 800/548-3424)



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Specifications for Wheelchair Accessible Raised Garden Beds

