

STEPPING STONE PATHWAYS AND SMALL PATIOS

06

INFOSHEET

Stepping stones are versatile and durable ground surface components used to create outdoor play and learning settings. They can be installed linearly as secondary pathways in sensory gardens. Wide stepping stone pathways with fragrant, "stepable" plants between the stones create sensory pathways for crawling infants. Select durable stones and, if possible, from a local quarry to represent local geology and reduce expense. Stones should be smooth and flat to avoid becoming tripping hazards, and 1-2 inches thick (depending on the stone) to prevent cracks.

TYPES OF STONE

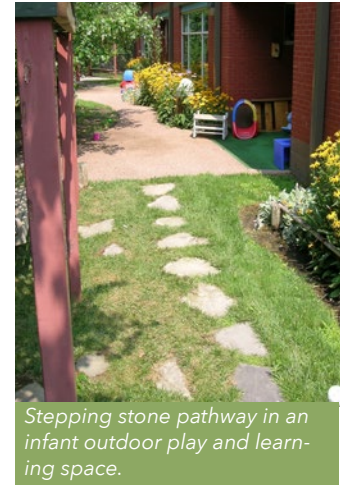
Flagstone is highly recommended for stepping stone pathways because it is generally smooth and appropriately sized. Flagstone typically comes in a variety of thicknesses, from 1-4 inches. Soft and porous stone, such as sandstone and limestone, is better suited to warm areas. If working in an area that regularly freezes, select a dense stone, such as granite or bluestone. These stones are less likely to crack as they freeze and thaw with winter temperatures.

STEPS

1. Lay out the stones along desired path based on your design. Make sure they are closely spaced (12-18 inches on center) so that a child can easily step from one to the next.
2. Use a garden trowel or shovel to cut and mark the soil around the edge of each stone.
3. Remove the stone. Excavate as deep as the stone is thick, plus one inch to allow for the sand base. For example, if the stone is 2 inches thick, excavate 3 inches (Figure 1A).
4. Level and compact the existing earth where the stone will be placed.
5. Spread, level, and compact 1 inch of sand to create a stable base (Figure 1B).
6. Place the stone back in place. The top of the stone should be flush with the surrounding lawn, mulch, or soil (Figure 1C).
7. Fill between existing soil and stepping stone with sand and compact to create an even surface (Figure 1D).

MATERIALS & TOOLS:

- Flat stones, 2 inches thick
- Garden trowel or shovel
- Leveling tool
- Sand for leveling
- Grass seed or small, durable plants
- Work gloves



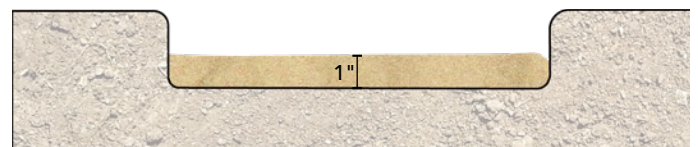
Stepping stone pathway in an infant outdoor play and learning space.



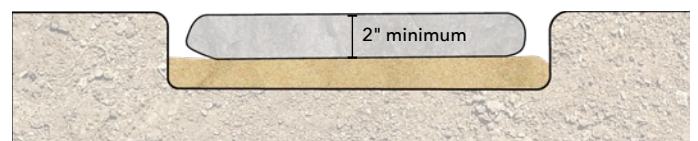
Checking sand to ensure it is level.



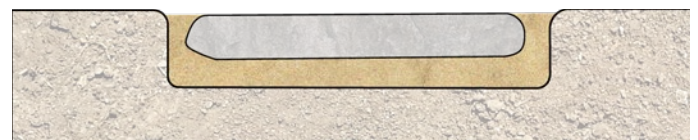
1A. Excavate soil a minimum of 3" for a 2" thick stone



1B. Compact 1" of sand in the trench to create a stable base



1C. Place stone in the trench, flush with the soil level



1D. Fill in area around stepping stone with sand

Figure 1: Installation diagram for stepping stones.

8. Spread grass seed or install small plants between stepping stones for added sensory value.

Installing a small patio

To broaden the pathway into a small patio, space stepping stones 12-18 inches apart on center and follow steps 2-8 (p1).

HEALTH AND SAFETY

- Before digging on site, call 811 to check for underground utilities. The service is free but can take several days, so call in advance before starting a project.
- Wear sturdy boots and gloves during installation.

Disclaimer: The Natural Learning Initiative (NLI), NC State University, its partners, and supporting entities assume no responsibility for consequences arising from physical interventions using information contained in this InfoSheet. Under no circumstances will liability be assumed for any loss or damage, including without limitation, indirect or consequential, incurred during installation, management, and use of such interventions. Highly recommended is adherence to relevant local, state, and national regulatory requirements concerning but not limited to health and safety, accessibility, licensing, and program regulation.



Flagstone secondary pathway creates a small patio suitable for crawling infants and a bench for caregiver comfort.



Stone patios provide textured, multi-sensory play for infants.



Stone pathway through a garden provides close contact with plants.



Flagstone patio connects adjacent settings.