The Vermont Shoreland Protection Act – Pervious Surfaces

What is a pervious surface?

The Shoreland Protection Act (Chapter 49A of Title 10 §1441 et seq.) regulates new impervious surface and new cleared area within 250 feet of the mean water level (the protected shoreland area) of lakes and ponds 10 acres or larger. Surfaces such as decks and patios are presumed to be impervious surfaces, in which precipitation runs off rather than infiltrates. However, decks and patios can be constructed so that precipitation infiltrates through the structure and into the subsurface soil layer, rather than generating stormwater runoff, potentially making them a pervious surface.

What do I need to do if I'd like to construct a pervious deck or patio within the protected shoreland area? Before beginning construction, a landowner must submit a Shoreland Jurisdictional Determination form describing how the project will be built and maintained in accordance with the five criteria below in order to demonstrate how the project will be a pervious surface. If additional aspects of a project involve the creation of cleared area or impervious surface, the landowner will need to submit a Shoreland Permit Application instead. Construction of a project prior to issuance of a final decision will be presumed to be the unauthorized creation of impervious surface.

What are the design criteria for a pervious deck or patio?

Pervious Surface Criteria:

- 1. Gaps
- 2. Open design
- 3. Foundation
- 4. Perimeter
- 5. Design & Maintenance

Open design: The pervious deck or patio must be an open design (e.g., a roof is not placed over the pervious surface).

Perimeter: The perimeter dripline of the pervious deck or patio must be vegetation, grass, or loose drainage stone, to manage for water infiltration.

Foundation: The ground underneath the pervious deck or patio allows for infiltration of stormwater (e.g., bed of loose stone or vegetation/grass lawn). The foundation must not be an impervious surface such as concrete, asphalt, or compacted dirt.

Gaps: Gaps between decking boards or patio surface (e.g., ¼ inch gaps) must allow passage of stormwater to the underlying substrate.

Design & Maintenance: Heavily trafficked surfaces, or surfaces on steep slopes (greater than 20%) may prevent the infiltration of stormwater runoff. A pervious surface requires regular maintenance to ensure adequate infiltration. A landowner wishing to convert a pervious surface to an impervious one (e.g., open deck to porch with roof) will require a Shoreland Permit.