

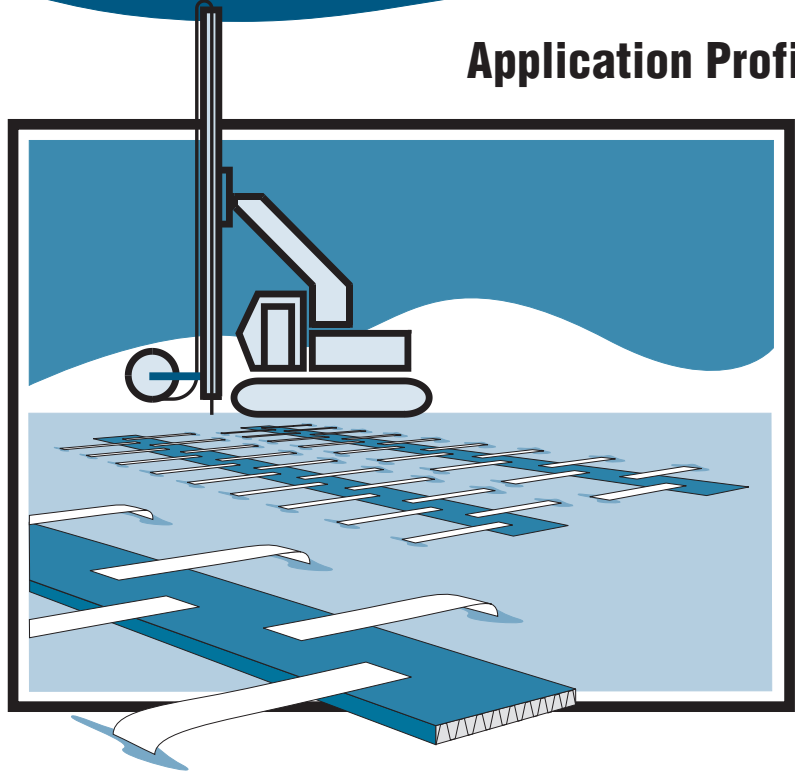
Horizontal Strip Drains

Lateral Drainage

Application Profile

Horizontal Strip Drains - The use of Nilex Nudrain™ composite strip drains for lateral drainage on wick drain projects can provide a cost-effective, positive, and quantifiable alternative to the use of a sand or granular drainage blanket.

Strip drains or corrugated pipes are placed under the surcharge to receive the flow from the vertical drains and conduct it laterally to discharge points at the edge of the surcharge. In most cases the installation of these alternatives are less expensive than a granular drainage blanket.



Horizontal Strip Drain Applications

- Light Weight
- Low Cost
- Engineered, Proven Performance
- Simple to Install
- Replaces Granular Materials

Lateral Drainage For Vertical Drain Systems

By providing a low resistance drainage path for relief of excess pore water pressures, vertical prefabricated drains (wick drains) drastically shorten consolidation times in soft cohesive soils. Used with a surcharge load, vertical drains are a cost-effective method for improving these soils.

For vertical drains to function properly, a drainage path must be provided to receive flow from the drains and conduct it from under the surcharge to appropriate discharge points. This lateral drainage system must perform without applying excessive backpressure to the vertical drains, thus delaying the consolidation process. The traditional method of providing lateral drainage has been to install a sand layer, usually about 1 m (3 ft.) thick, under the surcharge.



Wick drains and strip drains being covered by surcharge layer.

Most of the conventional analyses overestimate the flow capacity of sand drainage blankets resulting in inadequate lateral drainage that, in a number of cases, has compromised the function of the vertical drain system.

The use of composite strip drains or corrugated plastic pipe can provide a very cost-effective, positive, and quantifiable alternative to the use of a sand or granular drainage blanket. Strip drains or corrugated pipes are placed under the surcharge to receive the flow from the vertical drains and conduct it laterally to discharge points at the edge of the surcharge. In the majority of cases the installation of these alternatives are significantly less expensive than a granular drainage blanket.

Nilex engineers will be glad to provide more information or assist with specifications and design of an efficient horizontal drainage system.

Nilex Applications

- Roads / Pavement
- Erosion Control
- Drainage
- Containment
- MSE Walls / Slopes
- Ground Improvement

Nilex Services

- Design Support
- Distribution
- Fabrication & Installation
- Construction Services
- Project Management

Nilex Products

- Geotextiles
- Geogrids
- Pre-fab Drains
- Geomembranes
- Vertical Wick Drains
- Road Stabilizers
- Silt/Safety Fence
- Erosion Control Blankets
- Geo-Ridge®
- Retement Systems

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