PREFABRICATED VERTICAL DRAIN (PVD) TESTING SERVICES

Prefabricated Vertical Drains (PVD), commonly known as wick drains, are widely used in ground improvement projects to accelerate the consolidation of soft, saturated clay soils. By providing preferential drainage paths, PVD systems facilitate the dissipation of excess pore water pressure, reducing consolidation time and improving the stability of underlying ground.



Singapore Test Lab (STL) provides comprehensive laboratory testing services to evaluate the hydraulic, mechanical and filtration properties of PVD materials.

Accredited to ISO/IEC 17025, our testing services help assess product quality, verify material performance and support compliance with project specifications and applicable international standards

Testing services include Discharge Capacity Testing to determine the water flow capacity of the drain under specified hydraulic gradients and confining pressures. This evaluates the drain's ability to maintain effective water flow under simulated ground conditions.

Tensile Strength Testing is conducted to assess the mechanical strength and elongation characteristics of PVD materials, providing an indication of their resistance to tensile forces during handling and installation.



Puncture Resistance Testing to evaluate the material's resistance to penetration by measuring the maximum force required to puncture the specimen. This test provides measurable evidence of the material's puncture resistance.

Additional testing includes Water Permeability Testing to evaluate the hydraulic properties of the filter jacket, and Apparent Opening Size (AOS) Testing to determine its soil retention characteristics and suitability for filtration applications.

Where required, Discharge Capacity Testing can also be performed under different confining pressures and specimen configurations, including straight and kinked conditions, to assess the potential effects of deformation on drainage performance.

STL's PVD testing services support material approval, quality control and verification of compliance with project specifications and applicable international testing standards.

Backed by a team of experienced professionals, reliable testing procedures and an ISO/IEC 17025 accredited laboratory, STL is committed to delivering accurate test results and comprehensive technical reports.

We aim to support geotechnical engineers, consultants, contractors and PVD manufacturers in assessing material quality and evaluating product performance for ground improvement applications.

Contact Singapore Test Lab for more information about Prefabricated Vertical Drains (PVD) testing.

SINGAPORE TEST LAB
TESTED • INSPECTED • CERTIFIED

For more information about STL's PVD Testing Services, please contact us at contact@singaporetestlab.sg

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