

Hydrostatic Pressure Test

The Hydrostatic Pressure test is designed to evaluate a material's resistance to water penetration. This test is used for 510(k) submissions to the FDA.

Table 1. The AAMI gown classification according to the levels of barrier performance

BARRIER PERFORMANCE	BARRIER PROTECTION	RESISTANCE MEASURES	TEST STANDARDS	TEST CRITERIA	ACCEPTABLE QUALITY LEVEL
Level 1	Minimal	Liquid penetration	AATCC 42	Water impact \leq 4.5g	4%
Level 2	Low	Liquid penetration	AATCC 42	Spray impact \leq 1.0g	4%
			AATCC 127	Hydrostatic pressure \geq 20cm	4%
Level 3	Moderate	Liquid penetration	AATCC 42	Spray impact \leq 1.0g	4%
			AATCC 127	Hydrostatic pressure \geq 50cm	4%
Level 4	High	Liquid and vial penetration	ASTM F1671	Pass	4%

STEMart provides comprehensive hydrostatic pressure test for products such as gowns, drapes, and barrier fabrics in accordance with AATCC 127, ISO 811, AAMI PB70, and EN 13795.

Applicable Standards

- AATCC 127 Water Resistance: Hydrostatic Pressure Test
- AAMI PB70 Liquid Barrier Performance and Classification of Protective Apparel and Drapes Intended for Use in Health Care Facilities

- EN 13795 Requirements and Test Methods for Surgical Drapes and Gowns
- ISO 811 Textile Fabrics - Determination of Resistance to Water Penetration - Hydrostatic Pressure Test

STEMart provides you with a thorough and accurate BFE and VFE tests that limit risk for your business and your customers. If you want to learn more detail about our service, or would like to consult with the experts at STEMart, please feel free to [contact us](#).