

Adhesive Mats



NanoTek
ISO 3.4 (Class 1-10)



MicroTek
ISO 5-6 (Class 100 - 1,000)



MacroTek
ISO 7+ (Class 10,000+)



Valutek's multi-layered low-density polyethylene adhesive mats are designed to effectively capture dirt and dust from foot traffic and equipment wheels before they enter a cleanroom or controlled environment. Each removable layer of the Valutek adhesive mats features a specially developed adhesive coating that provides an efficient means of reducing contamination by trapping and preventing the transfer of particles.

Application

Valutek offers mats suitable for MacroTek, MicroTek, and NanoTek applications. These mats are ideal for a wide range of applications, including entrances to cleanrooms, gowning rooms, laboratories, or workstations that require high levels of contamination control. Adhesive mats are extensively used in various industries, such as semiconductor, biotechnology, medical device, pharmaceutical, aerospace, automotive, and construction.

Part Number: VTXXX/4P30L-B/W/G

Storage and Environmental Conditions

Correct Storage Orientation

Valutek adhesive mats should be stored horizontally and stacked carefully to prevent damage. Storing them vertically or with heavy objects on top may cause the mats to become damaged or distorted.

Signs of damage include the presence of bubbles and veins between the mat layers. Such imperfections can lead to an uneven surface, resulting in the mat peeling away from the floor and a decrease in its performance.

Storage and Product Shelf Life

When stored improperly—such as vertical placement or outside of a climate-controlled environment—adhesive performance can degrade rapidly.

The shelf life of the adhesive strength specified below may diminish from years to just months due to incorrect storage. Valutek is not responsible for improper storage once a product leaves our manufacturing and storage facilities.

Environmental Conditions

Care and consideration must be given to the environmental storage conditions of adhesive mats. Valutek mats employ a water-based adhesive, which can be compromised by extreme temperatures.

Exposure to extreme cold can harden the adhesive, rendering it ineffective. While short-term exposure to cold will not cause permanent damage, the mat must be allowed to re-equilibrate or 'warm up' to a minimum of **32°F (0°C)** before installation and use.

On the other hand, exposure to extreme heat can cause the adhesive to break down, leading to irreversible damage to the mat at temperatures exceeding **105°F (40.5°C)**.

Product Performance

To ensure optimal performance of Valutek adhesive mats, it is important to change the mat layers at a frequency determined by several factors: the number of operators, the number of "passes" (defined as one person walking across the mat one time, with each foot making full contact with the mat once), the class of the environment, and the quantity of particles captured.

Valutek recommends changing a mat layer after every 50 passes.



Gloves



Wipers



Apparel



Adhesive Mats



Cleaning & Maintenance



Documentation



Glove Liners



ESD

Valutek Adhesive Mats

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Mat Physical Properties

Attribute	Value (Metric Units)
Adhesive	Acrylic (Water Based)
Film Thickness	
First Cover Sheet (clear)	0.04 mm (40 micron) \pm 0.004mm (4 micron)
Disposable Sheet (colored)	0.04 mm (40 micron) \pm 0.006 mm (6 micron)
Bottom Cover Sheet (clear)	0.04 mm (40 micron) \pm 0.004 mm (4 micron)
Adhesive Strength	
Active Layer Adhesive Strength	400 \pm 50 g/25mm
Mat Backing Adhesive Strength	600 \pm 50 g/25mm
Tensile Strength	
Horizontal	10 Mpa
Vertical	8 Mpa
Elongation	
Horizontal	> 150%
Vertical	> 200%
Heat Resistance	60°C/48 Hours
Cold Resistance	-13°C/48 Hours

Sizes, Colors and Packaging

Available Sizes	Standard Color	Special Order Color	Packaging
18" x 36"	White/Blue	Grey	30 sheets / mat, 4 mats / case
18" x 45"	White	Grey/Blue	30 sheets / mat, 4 mats / case
24" x 36"	White/Blue	Grey	30 sheets / mat, 4 mats / case
26" x 45"	White/Blue/Grey	-	30 sheets / mat, 4 mats / case
36" x 36"	White	Grey/Blue	30 sheets / mat, 4 mats / case
36" x 45"	White/Blue	Grey	30 sheets / mat, 4 mats / case
36" x 60"	White/Blue	Grey	30 sheets / mat, 4 mats / case
36" x 72"	White/Blue	-	30 sheets / mat, 4 mats / case



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