

Guide to Face Mask Selection and Use

A variety of styles help meet the individual needs of health care workers

Choosing the appropriate mask for a particular task is essential. Although masks may appear similar, each type is uniquely manufactured and possesses different performance levels for fluid resistance, filtration efficiency, and ease of breathability.



ASTM 3

Ideal for any procedure where light to moderate amounts of fluid, spray, and airborne particles are expected.

Pictured: iMask™ Earloop Face Masks Level 3

Fluid Resistance: 160 mmHg

Bacterial Filtration Efficiency: ≥98%

Particle Filtration Efficiency: ≥98%

Differential Pressure: $\geq 5.0 \text{ mm H}_2\text{O/cm}^2$

Flame Spread: Class 1



Reoder#: MASKT-06



ASTM 7

WITH SHIELD

Perfect when heavy amounts of fluid, spray, and aerosols are expected and eye protection is needed.

Pictured: iMask™ Earloop Face Masks Level 3

Fluid Resistance: 160 mmHg

Bacterial Filtration Efficiency: ≥95%
Particle Filtration Efficiency: ≥95%

Differential Pressure: ≥5.0 mm H₂O/cm²

Full-Face Coverage: Yes
Fog-Free Eye Shield: Yes



Reoder#: MASKT-06ES



Disposable Protective Face Masks

Ideal for daily activities and office use as a comfortable physical barrier over the face.

Pictured: iMask™ Disposable Protective Face Masks

Tissue Utility Mask

Physical Barrier Only

Unrated Performance Levels

Filtration Efficiency: N/A



Reoder#: MASKT-10



ASTM 3 FOR LEVEL 3

Ideal for any procedure where light to moderate amounts of fluid, spray, and airborne particles are expected.

Pictured: iMask™ Earloop Face Masks Level 3

Fluid Resistance: 160 mmHg

Bacterial Filtration Efficiency: ≥98%

Particle Filtration Efficiency: ≥98%

Differential Pressure: ≥5.0 mm H₂O/cm²

Flame Spread: Class 1



Reoder#: MASKT-KB

UNDERSTANDING ASTM FACE MASK PERFORMANCE LEVELS

FEATURE	EXPLANATION		
Fluid Resistance	Resistance of face masks to penetration by pressurized synthetic blood Higher resistance = Better protection		
BFE - Bacterial Filtration Efficiency	Percentage of aerosol particulates filtered at a size of 3 microns Higher percentage = Better filtration		
PFE - Particle Filtration Efficiency	Percentage of aerosol particulates filtered at a size of 0.1 micron Higher percentage = Better filtration		
Differential Pressure	Resistance to airflow while wearing a face mask Higher resistance = Better filtration but less breathability		
Flame Spreadv	Measurement of the material's propensity to burn and spread flame Lower class rating number = More difficult for flame to spread		



Face Mask Comparison

	Disposable Protective Face Mask	ASTM Surgical Face Mask
Intended Use and Purpose	 Simple physical barrier Protects wearer during daily activities and office work 	 Fluid resistant Protects wearer from sprays, splashes, and aerosols of body fluids Filters micron-sized particles
Filtration	Unrated	Denoted by ASTM level
Fluid Resistance	Unrated	Denoted by ASTM level
Leakage	Leakage around edges of mask	Some leakage around edges of mask
Breathability	High	Moderate
Straps	Stapleless ultrasonic-welded earloops	Stapleless ultrasonic-welded earloops
Fit	Loose-fitting	Loose-fitting
Seal Check Requirement	No	No
Flame Spread	Unrated	Class 1

SOURCE: 'American Society for Testing and Materials Standard Specification for Performance of Materials Used in Medical Face Masks. ASTM F2100-11(2018) Standard. 'American Society for Testing and Materials Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood (Horizontal Projection of Fixed Volume at a Known Velocity). ASTM F1862/F1862M-17 Test.

Follow CDC guidelines for wearing face masks. Face coverings act as a physical barrier to help prevent the spread of respiratory disease by hindering infectious aerosol particles or droplets from traveling into the air and onto other people when the wearer coughs, sneezes, or talks. This protection is only effective when the mask covers both the nose and mouth. The outside of masks is likely to become contaminated during wear. Do not touch the outer surface with wet gloves or hands. Such cross-contamination may put the mask barrier in jeopardy by increasing migration of germs through the mask layers.

CAUTION: Face masks should not be worn by children under 2 years of age, anyone who has trouble breathing, or by those who are unconscious, incapacitated, or unable to remove the mask without assistance.

Pac-Dent, Inc. makes no expressed or implied guarantee that these products will fully protect the user from exposure to hazardous fluids or prevent the contracting of infectious diseases. It is the employer's due diligence to select the appropriate protective mask to meet the expected level of exposure in accordance with OSHA regulations.

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