

Similar-Fit Model Pairings of 3M Filtering Facepiece Respirators

How to Use This Information




This information can help organizations plan for both immediate respirator acquisition and use, and for future respirator needs, stockpiling, and contingency planning. It is not intended to supplant or contradict regulatory requirements. This information is valid as of the date of publication. However, the comparability of 3M respirator models may change in the future. This is a living document, and the content may be updated. Please always use the 3M Personal Safety Division URL to access the PDF through a web browser to access the most up-to-date version.










Background

Employers need to consider the fit characteristics of each respirator model when respirator availability changes. Certain pairs of 3M respirator models have similar-fit characteristics. Within specified respirator model pairings listed in the table below, a fit test outcome for the model in column A can help predict the fit test outcome for the model(s) in column B.

Selecting Alternate Models of Filtering Facepiece Respirator (FFR)

Employers considering incorporating additional respirator models into their respiratory protection program may want to identify models that are similar in construction to the ones familiar to their employees. When respirators and fit testing supplies are constrained or not available, it may be preferred to use a respirator with similar construction and fit characteristics than providing a “non similar” model. 3M laboratory testing indicates respirator models with similar construction may be more likely to fit a worker similarly. During the lab testing process, respirator fit tests are conducted on a panel of human subjects with a distribution of facial length and width based on the National Institute for Occupational Safety and Health (NIOSH) bivariate panel. The results of this testing are run through statistical tests including an equivalency test and a non-inferiority test. An equivalency test validates if the crosswalk can go in both directions between models. A non-inferiority test validates if the crosswalk only goes in one direction. Through analysis of the construction of the respirator, the fit panel, and statistics, 3M can determine similar fit model pairings. For example:

A. A fit test outcome for this respirator model...	B. can help predict a fit test outcome for this respirator model(s).**
3M™ V-Flex™ (2-panel flat fold)	
1804 (Surgical N95)	 *1805 (Surgical N95)
*1805 (Surgical N95)	 1804 (Surgical N95)
Small 3M™ V-Flex™ (2-panel flat fold)	
1804S (Surgical N95)	 *1805S (Surgical N95)

A. A fit test outcome for this respirator model...		B. can help predict a fit test outcome for this respirator model(s).**
*1805S (Surgical N95)		1804S (Surgical N95)
Cup Style		
1860 (Surgical N95)		8210 (Standard N95) 8210Plus (Standard N95)
8210 (Standard N95)		1860 (Surgical N95) 8210Plus (Standard N95)
8210Plus (Standard N95)		1860 (Surgical N95) 8210 (Standard N95)
Small Cup		
1860S (Surgical N95)		8110S (Standard N95)
8110S (Standard N95)		1860S (Surgical N95)
3M™ Aura™ (3-panel flat fold)		
1870+ (Surgical N95)		9210+ (Standard N95) 9205+ (Standard N95)
9205+ (Standard N95)		1870+ (Surgical N95) 9210+ (Standard N95)
***9210+ (Standard N95)	X	Not applicable — fit test outcomes for 9210+ are not expected to help predict fit test outcomes for any other model.
*1870 (Standard N95)	X	Not applicable — fit test outcomes for 1870 are not expected to help predict fit test outcomes for any other model.
Valved Cup		
8511 (Standard N95)		8511P (Standard N95)
8511P	X	Not applicable — fit test outcomes for 8511P are not expected to help predict fit test outcomes for any other model.

*Discontinued

** The information in this table may change over time. If pairings change in the future, lot numbers of respirator models included in these pairings will be specified.

*** The 9210+ Aura respirator, while nearly identical to other Aura respirator models, has different headbands, which may impact the fit characteristics. Fit test pass rates for the 9210+ can be expected to be fairly similar to fit test pass rates for other Aura respirator models - however, fit test outcomes for 9210+ may not help predict fit test outcomes for other Aura models.

For Further Information

For further information see [3M Technical Bulletin - Surgical N95 vs. Standard N95 – Which to Consider?](#), the CDC's [Frequently Asked Questions about Personal Protective Equipment](#), and OSHA's [Hospital Respiratory Protection Program Toolkit](#).

3M Respirator Fit Testing Resources

- [3M Quick Reference Guide to Qualitative Fit Testing \(OSHA\)](#)
- [3M Fit Testing Video](#)
- [3M Fit Testing Video \(Healthcare\)](#)
- [3M Fit Testing FAQs](#)
- [3M Technical Bulletin Quantitative Fit Testing of Respirators](#)
- [3M Technical Bulletin - Fit Test Hygiene During COVID-19 Pandemic](#)

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