Effective Date: June, 2009
Replaces all previously published until superseded.

3M™ S-605 Hood
Assigned Protection Factor

On August 24, 2006 the Occupational Safety and Health Administration (OSHA) amended its regulation for respiratory protection by adding definitions and requirements for Assigned Protection Factors (APFs). According to OSHA 29 CFR 1910.134 (d)(3)(i)(A), APF Table 1 foot note 4, “The employer must have evidence provided by the respirator manufacturer that testing of these respirators [hoods and helmets] demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF [Workplace Protection Factor] or SWPF [Simulated Workplace Protection Factor] study or equivalent testing…..” The following study was conducted to support of an APF of 1000 for the S-605 hood with neck collar.

<table>
<thead>
<tr>
<th>Respirators Tested¹</th>
<th>S-605 hood with the S-950 suspension, BT-20L and BT-20S breathing tubes, and GVP Powered Air Purifying Respirator (PAPR) set at 6 CFM.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Type</td>
<td>Small particle (NaCl) quantitative performance testing</td>
</tr>
<tr>
<td>Test subjects</td>
<td>25 Member Los Alamos Grid Panel</td>
</tr>
</tbody>
</table>
| Exercises performed² | Normal breathing  
Deep breathing  
Head movements  
Stair climbing  
Callisthenic arm movements  
Reading rainbow passage  
On hands and knees- turn head side to side  
Tire pumping  
Normal breathing |
**Criteria**

95% or more of test subjects must achieve >10,000 fit factor

**Conclusion**

All test criteria above were met; therefore this testing supports an APF of 1000 for the S-605 hood.

**For Information**

Contact 3M OH&ES Technical Service at 1-800-243-4630

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1. Additional approved system combinations (powered air purifying and continuous flow supplied air) were tested in smaller supplemental panels to confirm similar performance.

2. Selected from exercises outlined in: NIOSH CET-PAPR-STP-CBRN-0553, *Determination of Laboratory Respirator Protection Level (LRPL) Quantitative Medium Flow, Deep Probe, Corn Oil, Fit Factor Performance Test for CBRN Loose-Fitting PAPR and NIOSH PAPR or RCT-APR-STD-0005-05a-06, Determination of Qualitative Isoamyl Acetate (IAA) Facepiece Fit, Air-Purifying Respirators.*