### TABLE 8—AIR-SUPPLY-LINE REQUIREMENTS AND TESTS—Continued

<table>
<thead>
<tr>
<th>Specific requirements</th>
<th>Requirements for the air-supply lines of the indicated type of supplied-air respirators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tightness .......................</td>
<td>No air leakage shall occur when the hose and couplings are joined and the joint(s) are immersed in water and subjected to an internal air pressure of 35 kN/m. 2 (5 pounds per square inch) gage.</td>
</tr>
<tr>
<td>Permeation of hose by gasoline.</td>
<td>Leakage of air exceeding 50 cc. per minute at each coupling shall not be permitted when the hose and couplings are joined and are immersed in water, with air flowing through the respirator under a pressure of 173 kN/m. 2 (25 pounds per square inch) gage applied to the inlet end of the air-supply hose, or at twice the maximum respirator-supply pressure that is specified by the applicant, whichever is higher.</td>
</tr>
<tr>
<td>Detachable coupling ......</td>
<td>A hand-operated detachable coupling by which the wearer can readily attach or detach the connecting hose shall be provided at a convenient location. This coupling shall be durable, remain connected under all conditions of normal respirator use, and meet the prescribed tests for strength and tightness of hose and couplings.</td>
</tr>
</tbody>
</table>

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**Subpart K—Non-Powered Air-Purifying Particulate Respirators**

### § 84.170 Non-powered air-purifying particulate respirators; description.

(a) Non-powered air-purifying particulate respirators utilize the wearer’s negative inhalation pressure to draw the ambient air through the air-purifying filter elements (filters) to remove particulates from the ambient air. They are designed for use as respiratory protection against atmospheres with particulate contaminants (e.g., dusts, fumes, mists) that are not immediately dangerous to life or health and that contain adequate oxygen to support life.

(b) Non-powered air-purifying particulate respirators are classified into three series, N-, R-, and P-series. The N-series filters are restricted to use in those workplaces free of oil aerosols. The R- and P-series filters are intended for removal of any particulate that includes oil-based liquid particulates.

(c) Non-powered air-purifying particulate respirators are classified according to the efficiency level of the filter(s) as tested according to the requirements of this part.

1. N100, R100, and P100 filters shall demonstrate a minimum efficiency level of 99.97 percent.
3. N95, R95, and P95 filters shall demonstrate a minimum efficiency level of 95 percent.

### § 84.171 Non-powered air-purifying particulate respirators; required components.

(a) Each non-powered air-purifying particulate respirator described in § 84.170 shall, where its design requires, contain the following component parts: