

**Table 4.1**  
**Test program**

Tests	Air ducts		Air connectors	Joining materials
	Rigid	Flexible		
Surface Burning Characteristics	X	X	X	-
Flame Resistance	-	-	-	X
Flame Penetration	X	X	-	-
Burning	X	X	X	-
Corrosion <sup>a</sup>	X	X	X	X
Mold Growth and Humidity	X	X	X	X
Temperature	X	X	X	-
Puncture	X	X	-	-
Static Load	X	X <sup>b</sup>	X <sup>b</sup>	-
Impact	X	X	-	-
Erosion	X	X	X	-
Pressure	X	X	X	-
Collapse	X	X	X	-
Tension	-	X	X	-
Torsion	-	X	X	-
Bending	-	X	X	-
Leakage	X	X	X	-

X Test applicable.  
- Test not applicable.

<sup>a</sup> Applicable to parts of metals not inherently corrosion resistant.

<sup>b</sup> Test applicable for flexible air ducts and air connectors that incorporate vapor barriers supported by grommets or other means of field support.

## 5 Tests for Surface Burning Characteristics

5.1 Representative samples of air ducts and air connectors shall be evaluated for surface burning characteristics and classified according to the requirements in 5.2 and 5.3.

5.2 Class 0 material shall have surface burning characteristics of zero (flame spread and smoke developed).

5.3 Class 1 material shall have a flame-spread index of not over 25 without evidence of continued progressive combustion and a smoke-developed index of not over 50.

5.4 Tests for surface burning characteristics are to be conducted as specified in the Standard for Test for Surface Burning Characteristics of Building Materials, UL 723.