

















**Legend / Product Symbols:**

-  Fire
-  International positive-pressure standard
-  Smoke and Draft Control Gasketing
-  Air Seal
-  Sound Seal
-  Light Seal
-  Handicap Accessibility
-  Slip Resistant
-  Door Opening Force
-  Water Infiltration
-  **UL LISTED** Underwriters Laboratories
-  Intertek Warnock Hersey

**Regulatory Standards**

- Fire**
-  **UL10B** Standard for Fire Tests of Door Assemblies
  - UL10C** Standard for Positive Pressure Fire Test of Doors
  - UBC 43-2** Fire Test of Door Assemblies
  - UBC 7-2-97 PART I** Fire Test Standard for Swinging Fire Doors
  -  **ASTM E152** Method of Fire Test of Door Assemblies
  - ASTM E2074** Standard Test Method for Fire Tests of Door Assemblies, including Positive Pressure Testing of Side Hinged and Pivoted Swinging Door Assemblies
  - IBC 2000** International Building Code
  - NFPA 80** Standard for Fire Doors and Fire Windows
  - NFPA 101** Life Safety Code
  - NFPA 105** Recommended Practice for the Installation of Smoke and Draft Control Door Assemblies
  - NFPA 252** Standard Method of Fire Tests of Door Assemblies
  - BS476 Part 22 1987** Methods for Determination of the Fire Resistance of Non Load-Bearing Elements of Construction (British)
  - SDI 118** Basic Fire Door Requirements
  - JIS-A1311-3** Method of Fire Protecting Test of Fire Doors for Buildings (Japan)
  - The Ministry of Construction Notice No.1125 of 1990** Fireproof Performance Test (Japan)
  - Building and Regulatory Test AS 1530.4** Fire Resistance Test (Australia / New Zealand)

**Smoke**



- UL1784** Standard for Air Leakage Tests of Door Assemblies
- IBC 2000** International Building Code
- UBC 7-2-97 PART II** Method of Smoke and Draft Control Tests of Door Assemblies
- BS476 Part 31 Section 31.1 1983** Methods for Measuring Smoke Penetration Through Doorsets and Shutter Assemblies (British)

**Air Leakage**



- ASTM E 283** Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ANSI/UL 1784-1997** Air Leakage Tests of Door Assemblies
- ANSI/ASHRAE/IESNA** Standard 90 P Energy Conservation in New Building Design *Section 4*
- IBC 2000** International Building Code

**ADA Access**



- ADAAG-1998**
- ICC/ANSI A117.1-1998** Standard for Accessible and Usable Buildings and Facilities
- IBC 2000** International Building Code

**Acoustic**



- ASTM E90** Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
  - ASTM E336** Standard Test for Measurement of Airborne Sound Insulation in Buildings
  - ASTM E413** Standard Classification for Rating Sound Insulation
  - ASTM E1332** Standard Classification for Determination of Outdoor-Indoor Transmission Class
  - ASTM E1408** Standard Method for Laboratory Measurement of Sound Transmission Loss of Door Panels and Door Systems
  - SDI 128** Guidelines for Acoustical Performance of Standard Steel Doors & Frames
  - IBC 2000** International Building Code
- All acoustical tests of Zero products are conducted by laboratories accredited by the National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP)

**Slip Resistant**



- ASTM F-609** Standard for Safety for Slip Resistance of Floor Surface
- MIL-D 23003 A** Deck Covering Compound, Non-Slip, Rollable
- UL 410** Standard for Safety for Slip Resistance of Floor Surface

**Water Infiltration**



- ASTM E-547** Water Penetration Resistance of Exterior Doors by Cyclic Static Air Pressure Differential
- ASTM E 331** Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference

**Door Opening Force**



- ANSI A117.1-1986** Door Opening Force Test Standard