

Positive vs Neutral Pressure: Reading Specifications

When reading specifications, there are several key words, phrases, testing methods or codes that may be referenced to indicate when positive or neutral pressure fire doors are required. Some of these key indicating phrases are outlined below for your reference:

KEY PHRASES INDICATING POSITIVE PRESSURE:

1. Codes:
 - a. UBC 7-2-1997 – Code (References UBC 7-2 Fire Test)
 - b. IBC 2015 – Code (references test methods UL 10-C and NFPA 252 for positive pressure)
 - c. NFPA 5000 Code (references test methods UL 10-C and NFPA 252 for positive pressure)
 - d. CAN/ULC S104
2. Test Methods:
 - a. UBC 7-2
 - b. UL 10-C
3. Wording:
 - a. Category A
 - b. Category B
 - c. After 5 minutes into the test the neutral pressure plane should be at 40"
 - d. Shall meet positive pressure requirements
 - e. Intumescent seals – “implies” that it is Positive Pressure
 - f. “S” Label (comes from part 2 of UBC 7-2-1997)

KEY PHRASES INDICATING NEUTRAL PRESSURE:

1. Codes:
 - a. UBC 7-2-1997
2. Test Methods:
 - a. UL 10-B
 - b. UBC 43-2
3. Phrases:
 - a. Tested at atmospheric pressure
 - b. Neutral Pressure
 - c. Negative Pressure

PHRASES THAT DON'T TELL YOU IF IT IS POSITIVE OR NEGATIVE PRESSURE

1. Phrases:
 - a. a.NFPA 101 – Life Safety Code
 - b. b.NFPA 105 – Smoke and Draft Control Document
 - c. c.NFPA 252 – Fire Test method which gives the option to be positive or negative
 - d. d.UBC – With no date given could be either positive or negative
 - e. e.UL 1784 – Air Leakage Test for Door Assemblies
 - f. f.NFPA 80 – Installation standard for fire doors and windows

Source: WDMA Technical Bulletin Positive Pressure Fire Doors
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