

NEW ENGLAND BUILDING COMPONENTS

# NEBC TECHNICAL NEWS

FOR ARCHITECTS & SPECIFIERS

COVERING IMPORTANT TOPICS AFFECTING DOORS & ASSOCIATED COMPONENTS

## STAIR DOORS IN HIGH RISE BUILDINGS

FOR many years Architects selected hollow metal doors for 90 minute fire doors in stairwell applications.

The steel door product with the highest level of safety offers a temperature rise rating of 250°. This is a measurement of heat radiated from a door face on the opposite side of a fire. Obviously, it is safer to pass by a door in an egress stairwell that is radiating 250° than one that is radiating 450° or higher.

Now, due to the high cost of steel, you can select 90 minute wood fire doors that inherently provide a 250° temperature rise rating for less money.

Advantages – appearance (wood veneer or opaque paint on MDO substrate), fire safety and cost.

## DON'T GET “CAUGHT” SPECIFYING AWI AND WDMA FOR WOOD DOORS.

THE Industry Standards for wood doors are published by:

- WDMA (Window & Door Manufacturers Association) current editions are I.S. 1A-04 for Architectural Wood Flush Doors and I.S. 6A-01 for Architectural Stile and Rail Doors.
- AWI (Architectural Woodwork Institute) current edition for all doors & panels is the Eighth Edition, Version 2.0, 2005.

Do not incorporate both Standards into your Specification, they conflict.

Our recommendation:

- AWI Premium Grade for highest quality projects or feature areas in a project.
  - Example: Projects where appearance and quality of materials are the paramount criteria.

- Manufacturers: Eggers Industries and VT Ideal Door Division for flush doors. Add Maiman for stile and rail doors.
- AWI Custom Grade for most high quality projects.
  - Example: Hospitals, Colleges, Private Schools, Law Offices, etc.
  - Manufacturers: VT Industries, Algoma, Eggers, Marshfield Door Systems. Add Maiman for stile and rail doors.
- WDMA Premium Grade for most higher quality projects.
  - Example: Public Schools
  - Manufacturers: Same as AWI Custom Grade.

Note: Most high quality door manufacturers meet WDMA's "EXTRA HEAVY DUTY" Performance Level. You should specify it.

There are many differences in these Standards, they include veneer Grades, veneer component widths, veneer component assemblies, finish quality, etc. We will be happy to provide a matrix showing the differences, if you would like to have it.

We offer several good AIA/CES accredited programs relating to doors:

- Wood Door Construction
- Veneers for Wood Doors
- Life Safety – Positive Pressure Fire Test/Annual Fire Door Inspection
- LEED – Environmental Choices in Wood Doors
- Specialized Doors & Frames – Acoustic/Bullet Resistant/Blast Resistant, Etc.

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