



PEA RIDGE FIRE DEPARTMENT

CORE COMPETENCY DRILL



Building Construction—Windows

DESCRIPTION AND EXPECTED PERFORMANCE: Properly identify different types of windows. Identify the different fire ratings that certain windows may or may not offer.

Length: 2 HOURS

REFERENCE: NFPA Building codes current edition.

Equipment, Props, Information or Other Resources Needed: Fire Doors, Computer, PowerPoint, and a training environment.

INSTRUCTIONS FOR THIS CORE COMPETENCY DRILL

[Windows PPT](#)

Fire Rated Windows:

Heat tested to 1600 Degrees Fahrenheit for 20-90 minutes.

You can't usually tell the difference from a non-rated and fire-rated window. However, a fire-rated window will hold up under extreme heat and smoke.

Fire-rated windows will not shatter if suddenly cooled with water.

Tempered VS Fire-Rated

Fire-Rated Window uses:

Can be used as fire blocks to prevent the spread of fire from the initial fire room.

Allows more time for evacuation.

Prevents offices, schools, hotels, and other large commercial structures from fire breakouts.

Possibly prevents wildfire spread into a structure. (this will only play a small role in fire prevention in the case of a wildfire)

TEMPERED Glass can withstand temperatures up to 500 Degrees Fahrenheit.

(Commonly seen in hurricane heavy areas)

WIRED Glass:

Polished wire glass is the original fire-rated glass. Wired glass is often confused with impact-resistance glass.

Wired glass will almost always be 45-minute rated glass.

Fire-rated Glass can withstand temperatures up to 1600 Degrees Fahrenheit.

Automatic Fire-rated Window Shutters:

As the name mentions they will descend when the system detects fire. Usually can be controlled with a remote.

Made of steel and can also be used to help with theft protection