



## FW-20, FX-45, FX-60 and FC-90 fire door cores

### Product Data

#### Properties:

FyreWerks FW & FX family of door cores consist of inorganic intumescent compounds combined with additional water based ingredients and binders to provide a highly fire resistant, intumescent board that is bonded on both sides with high density fiberboard, allowing common wood adhesives to be used in door construction.

When exposed to the heat generated in a fire, FyreWerks FW & FX door cores expand due to the intumescent properties of the panel. This expansion creates an inorganic mass of rigid cellular foam that insulates the non-burning side of the door. Using different combinations of our intumescent panels, binders and high density fiberboard, FyreWerks is able to provide the door industry with rated cores that range from 20 minute ratings up to 90 minute ratings.

The intumescent compounds used in our core have been proven in the marketplace for 25 + years and have been used in rated building products ranging from door cores to ceiling tiles. Using the proven, tested technology of FyreWerks FW & FX family of cores provides confidence that your doors will stand the test of time.

FW & FX core dimensions:

FW-20, 20-minute core:	5/16" thick x 43" wide x 97" long.
FX-45, 45-minute core:	1/2" thick x 44" wide x 97" long.
FX-60, 60-minute core:	1/2" thick x 44" wide x 97" long.
FC-90, 90-minute core:	5/8" thick x 43" wide x 96.5" long.

#### Test Standards:

FW, FX & FC door cores have been tested by Intertek Testing Services for compliance with the following standards and carry the Warnock Hersey certified component label.

- UL 10(6)
- UL 10(C), CAN/ULC S104
- ASTM E2074
- UBC 7-2 (1997) Part 1
- NFPA 252

#### Handling:

The edges of the finished core can be sharp. It is important to wear protective eyewear and gloves when machining or handling FyreWerks FW & FX door cores.

## **Machining:**

FyreWerks FW & FX door cores are machined with standard carbide cutting tools and **contain no metal wire or stainless steel mesh** as do many other core products on the market. Wear eye protection.

## **Pressing:**

It is recommended that you press the core between the door panels at a pressure not to exceed 45 psi. It is also recommended that you not exceed 150 degrees F when using a heated platen. Press time should be set as per your adhesive manufacturer's recommendation.

**RF Pressing:** When using an RF press care must be taken to not overheat the intumescent core. Adjustment of frequency and press duration will be required to ensure that the intumescent material does not begin to react.

## **Storage:**

FyreWerks FW & FX door cores must be stored in a cool, dry, flat location. FW & FX cores will have a tendency to bow if heavy objects are stacked on top of them without the use of a top sheet of at least 1" thick MDF, particle board or plywood. In the event that a bow is observed, the panel can be flattened by placing it in a heated press at 100 degrees Fahrenheit under light pressure (5 psi).

The core can be affected by atmospheric moisture. It is recommended that the core be used in production as quickly as possible. If it is necessary to store the cores for extended periods of time then we recommend the use of a plastic cover sheet to prevent contamination with atmospheric moisture. Once the panel is used within a door this concern is eliminated.

## **MSDS:**

Available upon request.

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