Fire Resistance Testing

Southwest Research Institute® (SwRI®) is a worldwide leader in fire research and testing for compliance with building codes, maritime codes and government specifications.

As an accredited organization, SwRI evaluates the fire performance of a variety of materials, products and construction elements to meet requirements specified in codes and standards such as:

- ASTM International
- International Building Code
- International Fire Code
- National Fire Protection Association
- Safety of Life at Sea
- MIL Specs

Capabilities

SwRI’s three furnaces (large-scale vertical, large-scale horizontal and small-scale horizontal) and jet-fire apparatus are used to meet the needs of the construction, marine and off-shore industries for fire testing of:

- Wall and bulkhead assemblies
- Floor, ceiling and deck assemblies
- Windows and doors
- Columns and beams
- Cable, pipe and duct penetration fire stops
- Passive fire protection materials
- Energized cables
- Pressurized hoses
- Fiber-reinforced plastic gratings
- Aircraft walkway elements

The large-scale furnaces are used for qualification testing and the small-scale furnace is used primarily to support engineering evaluations or screening tests. Custom fire scenarios can also be accommodated.

Facilities

Features of SwRI’s furnace testing facility include:

- Large-scale vertical furnace
  - 12 x 12 ft opening
  - Flat flame burners
  - Structural loading up to 100,000 lbs (10,000 lb/ft over 10 ft)
- Large-scale horizontal furnace
  - 12 x 16 ft opening
  - 6-ft deep chamber
  - Structural loading up to 130,000 lbs (722 lb/ft² over 180 ft²)
- 2500°F capacity
- Thermal imaging capabilities of unexposed surfaces
- Side ports for internal furnace camera
- Multiple LCD displays in furnace control room for real-time data and sample observation

Exceeding clients’ expectations by providing world-class, innovative fire research, testing and product certification services
We welcome your inquiries.
For additional information, please contact:

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