

High Performance Door Tested by The Department of Fire Technology, Southwest Research Institute for Fire Performance Evaluation of H-O Overhead Door Assemblies in General Accordance with IMO Resolution A.754 (18), "Recommendation on Fire Resistance Tests for "A", "B" and "F" Class Divisions" November 4, 1993 Edition and ASTM E1529-93 "Standard Test Methods for Determining Effects of Large Hydrocarbon Pool Fires on Structural Members and Assemblies."

FIRE-TITE LABELING

The Oversize Certificate is authorized for rolling steel doors for the protection of openings in fire walls, vertical shafts and exterior walls where the area exceeds 162 square ft., or for openings in the above locations when width or height exceeds 13'-6" x12'. The maximum dimensions for doors for standard fire protection provided with the Oversize Fire Door Certificate is 56 ft. in width and 30 ft. in height. Fire doors exceeding 1,200 square feet must consult factory.

Doors are constructed to conform within requirements specified by Underwriter's Laboratories, Inc. (U.L.). Doors are automatic and self-closing through an isolating governing release system, Rated 4, 3, 1-1/2, 3/4 or oversized certificate.

Classifications:

- 3 hr Rating** - 3 hour approved for doors in dividing fire walls with openings not exceeding 162 sq. ft. in area. Sizes above 162 sq. ft. will be oversized.
- 1-1/2 hr Rating** - 1.5 hour approved for doors, in vertical shaft openings not exceeding 162 sq. ft. in area. Sizes above 162 sq. ft. will be oversized.
- 3/4 hr Rating** - 0.75 hour approved for doors in a corridor or a room-partition opening not exceeding 162 sq. ft. in area. Sizes above 162 sq. ft. will be oversized.
- 4 Hour Rated (Optional)**- Approved for doors with openings not exceeding 162 sq. ft. in area. Sizes above 162 sq. ft. will be oversized.

INSTALLATION

- *The opening preparation and the installation of the fire door shall be performed in strict compliance with NFPA-80.
- *Opening preparation, miscellaneous or structural metal work, access doors, finish or field painting, field electrical wiring, wire, conduit, fuses and disconnect switches are in the Scope of Work of other divisions or trades.



APPLICATION AND USE

ISO 9001 Registered Company
The Alpine Auto High Rise H-0 Fire-Tite Door is ideal for use in Off-Shore Oil Rig Platforms, Oil Drilling Platforms, Marine Bulkhead Doors, Chemical Storage Facilities, Ocean Vessels, Ships and Tankers.

THE ALPINE ADVANTAGE AND BENEFIT

- Alpine's Fire-Tite H-0 doors ensure security and fire protection and are listed and/or classified by:
 - Underwriter's Laboratories, Inc., (U.L.),
 - Underwriter's Laboratories of Canada, Inc. (U.L.C.),
 - Factory Mutual (F.M.) *Flame Drop Baffle Required*
- Make-To-Order manufacturing process. Alpine builds your product to the exact size specified by you.
- All of our products are constructed to have a rigid and compact design which provides for a more structural grade product while reducing overhead space and obstruction.
- Alpine builds trust by providing our products with a 2-year warranty on material and workmanship. As we also offer an optional five-year pro-rated warranty. Please call factory for more information on our pro-rated warranties.
- We are an ISO 9001 registered firm which ensures you that our products are built with true quality you can count on.

FUNCTIONAL BENEFITS

Rolling High Rise H-O Fire Doors manufactured by Alpine were tested for a period of 128 minutes (122 minutes and 15 seconds of continuous fire exposure) under the temperature conditions specified in ASTM E1529-93, "Standard Test Methods for Determining Effects of Large Hydrocarbon Pool Fires on Structural Members and Assemblies. Salty ocean water corrosion is greatly reduced by our Quality Powder Coating. Fumes and gases are maximally controlled from escaping into the environment

OTHER RELATED PRODUCTS





DOOR CONSTRUCTION

CURTAIN

The Curtain was constructed of interlocking, roll-formed 2 3/4", 22 gauge stainless steel flat slats. The curtain is equipped with a bottom bar consisting of two, 2" stainless steel plates, 14 gauge, which extend into the frames/guides. The bottom bar is designed to reinforce the curtain and to provide contact against the door sill when closed.

BRACKETS

Made from a steel plate 1/4" thick with ball bearings at rotating support points. When bolted to the wall the mounting angle supports the counterbalance assembly and forms an end enclosure.

HOOD HEXAGON (Square or Round OPTIONAL)

Manufactured from #22 gauge galvanized steel and formed to fit the contour of the brackets. Intermediate supports are used as required in order to prevent excessive sag. (Option: stainless steel)

GUIDES

Guides are designed using structural steel angles with a minimum thickness of 3/16", expansion slotted connections, and removable bellmount curtain stops to allow for curtain maintenance without removal of the guides. Bellmount stops shall be flush with the guide groove.

COUNTERBALANCED ASSEMBLY

Steel pipe barrel of a size capable of carrying a curtain load with a maximum deflection of 0.03" per ft. of door width. Heat treated helical torsion springs encased in a steel pipe and designed to include an overload factor of 25% to ensure minimum effort to operate. Sealed and prelubricated ball bearings are located at rotating support points. Torsion spring charge wheel is present for applying initial spring torque and for future adjustments. Option: stainless steel or hot dipped galvanized. Option: High Cycle Springs can be designed to satisfy from 10,000 through 400,000 life cycles.

OPERATION

Choice of push-up, hand chain, hand-crank, or motor operation. The door can be activated by a fusible link, a thermal sensor, a fire alarm system or a smoke detector without the need for a mechanical release device system.

LOCKING

Optional padlockable slide locks available for latching and locking the door on the coil side of the bottom bar. Electric Interlocks required with motorized doors.

FINISHES (Optional)

Finish on steel to be shop coated primer, except galvanized surfaces. Stainless steel, #2B, #4 satin, polished or mill finish. Call for color options and finishes.

GALVANIZING

To be applied to the guides, brackets, pipe shafts and gears in addition to the standard specifications. Applied where conditions of extreme or unusual atmospheric contamination is present. (In accordance with ASTM: A123)

FIRE PERFORMANCE EVALUATION

Fire Performance Evaluation of the Alpine H-0 Overhead Door Assembly was conducted in accordance with IMO Resolution A.754, (18), "Recommendation on Fire Resistance Tests for A, B, and F Class Divisions and ASTM E1529-93.

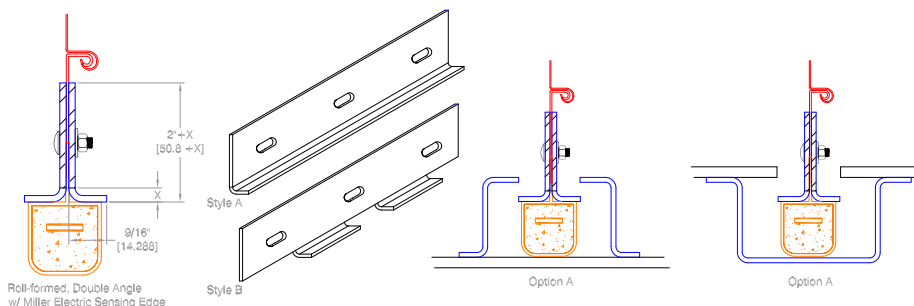
The test door dimensions were 10' X 8' ft. The door was installed in a representative bulkhead section which was constructed in general accordance with IMO Resolution A.754 (18).

The door edges were stiffened with 2.5" x 2.5" x 1/4" reinforced angles. The exposed face of the bulkhead was insulated to an A-60 rating, provided by two, 2-in. layers of Delta Marine Board insulation.

The Alpine H-0 Overhead Door and assembly was tested for a total of two hours and 8 minutes and was exposed to continuous fire exposure for a total of 122 minutes and 15 seconds. The Alpine H-0 Overhead Door maintained its structural integrity by remaining closed for the entire duration of this fire test.

ANITI-WARPING BOTTOM BAR EDGE

A specialized bottom bar and steel edge to maximize containment of fuel and oil spills.





ADDITIONAL FEATURES

COVERS

Gear covers and operator covers are required for exterior mounted fire doors or when gears or operators are set below 8' ft in height from floor.

LOCKING

Optional padlockable slide locks available for latching and locking the door at the bottom bar. (Motor operated doors utilizing slide locks require Electric Interlocks)

SENSING DEVICES

Electrical sensing edge and/or photo-eyes are designed to prevent the door from closing in case of an obstruction. Sensing edges are only available for motor operated doors. *Please See Alpine's Obstruction Sensing Page (www.alpinedoors.com/ObstructionSensing.htm)*

RELEASE DEVICES

The Fire-Tite doors are automatically closed and are activated by either the alarm system and/or fusible link system. Release devices, battery backup release devices, time delayed release devices, thermal sensors, sounder/strobe devices, voice annunciation system (VAS) and smoke detectors are available for tying fire door into the alarm system. *Please See Alpine's Release Device Page (www.alpinedoors.com/RediRelease.htm)*

OPERATION STYLE

HAND CHAIN: Redi-Reset MC™, Redi-Reset CMX™, Redi-Reset GC™

HAND CRANK: Redi-Reset MK™

MOTOR OPERATOR:

Non Fail Safe Model: Redi-Reset NF™:

- Non fail safe operators will only close in the event of the fusible link system melting and/or in the event that the alarm system is set off.
- Door will remain open when power is lost.
- With no power, door will only closing by the melting or release of the fusible link system.
- With the utilization of a sensing edge, and power is on, the fail safe model is preprogrammed to cycle three times before coming to a full close position if an obstruction is apparent.

Fail Safe Model: Redi-Reset FS™

- The fail safe operator will close automatically when power is lost.
- Battery back up system is available and will hold door open in the event of a power outage for up to 24 hours. The battery back up system is most commonly used in areas where power outages are common.
- With the utilization of a sensing edge, and power is on, the fail safe model is preprogrammed to cycle three times before coming to a full close position if an obstruction is apparent.

Programmable Fail Safe Model: Redi-Reset FDC™, Redi-Reset FDCL™

Operator can be supplied with battery backup system and a sensing edge, thus having the ability to cycle open then reclose if there is an obstruction in the opening.

Please See Alpine's Motor Operator Page (www.alpinedoors.com/Reset_Operators.htm)

BATTERY BACK UP: This option is utilized for the, Redi-Reset FDC™, and Redi-Reset FRDCL™ operators and allows the operators to remain open during a power failure for up to 24 hours. Utilizing the battery back up feature also acts as a source of power for thermal sensors, smoke detectors and other warning devices utilized on the fire door.

ACCESS CONTROLS: Optional control stations are available as Push Button Control Station or Key Control Stations. Special Control Stations are also available, please consult factory. *Please See Alpine's Access Controls Page (www.alpinedoors.com/AccessControls.htm)*

FINISHES (Optional)

Exo-Shield™: The Powder Coat Finish is available for all of Alpine's Products and are available in over 188 standard colors with the option for custom colors and environmental requirements. *Please See Alpine's Release Device Page (www.alpinedoors.com/Colors_Standard.htm)*

Hot-Dip Galvanizing: Galvanizing is available for steel components.

Stainless Steel: Available in 300 series with options of mill finish #2B, or #4 satin finish.