

# SLIDING DOOR SYSTEMS

## FIRE

American Metal Door's 3700 Series horizontal sliding, temperature rise-rated fire door systems are Underwriters Laboratories Listed and Factory Mutual Approved. The door systems are available with classification labels up to four hours. All LTH3700 Series horizontal sliding fire door systems are furnished complete in accordance with National Fire Protection Association (NFPA) 80 "Standard for Fire Doors and Windows". The 3700 series is available as single slide or bi-parting.

## INDUSTRIAL

The 3500 series by American Metal Door is perfect for a variety of industrial and commercial applications. The construction and design of the doors is meant to make installation easy due to the interlocking splice column which eliminates field welding. Appearances matter and the 3500 series will exceed your expectations. With no exposed fasteners and the wireless safety edges that eliminate draped wiring across the panel(s), the doors have a nice, clean look. They are available in both a single slide and bi-parting configuration also, giving you flexibility in design.



# LITE-FOLD DOOR SYSTEMS

## OPERATION

The Lite-Fold series by American Metal Door has much to offer over conventional overhead door systems. Lite-Fold doors offer high speed and high cycle operation. 14x14 doors open in 6 seconds and are designed for over 1 million cycles. Due to the Lite-Fold doors heavy duty hardware and simple design, maintenance requirements are minimal.

## APPEARANCE

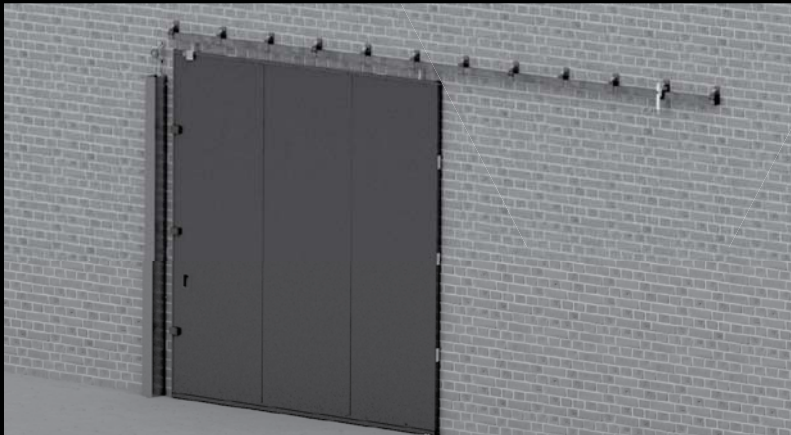
American Metal Door's Lite-Fold series doors are available in a variety of standard layouts. Standard glazing is 1" insulated low-e units which offer considerable energy efficiencies over conventional door systems. Panels are constructed with polystyrene core and include heavy duty hinges and hardware. Door panels are available primed or factory finished in a wide variety of standard colors.

For complete information and specifications, please call and speak with an American Metal Door representative.

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BI-PARTING SLIDING DOOR



SINGLE SLIDE DOOR



LITE-FOLD DOOR



**American Metal  
Door Company, Inc.**

# TOP HUNG SLIDING & BOTTOM ROLLING DOORS

## FEATURES

### Versatility:

These doors are designed for double-duty; they can act both as an everyday use door and fire rated system. No need to install two separate doors.

### Automation:

A variety of operators are available for a wide variety of applications including high cycle, hazardous, pedestrian and vehicle traffic.

### Egress:

Door Engineering's sliding and rolling doors can be fabricated with pass doors to allow for easy egress when the door is closed.

### Configurations:

Biparting, Single slide and multi-panel (tele-slide) configurations to meet a variety of sideroom requirements.



# TOP HUNG SLIDING & BOTTOM ROLLING DOORS

## CONSTRUCTION

**Hollow Metal:** Available on doors up to 12' tall. Its honeycomb or polystyrene construction allows for easy installation and assembly via a splice column with no exposed fasteners.

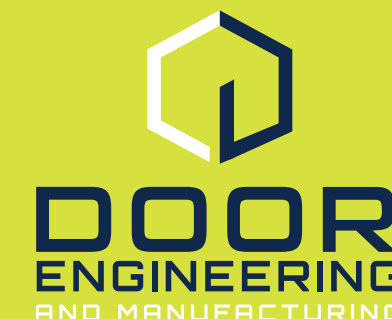
**Tube Frame:** Large Doors and/or high load applications call for a heavy duty tube frame panel with standard 14ga sheeting.

**Insulation:** Tube frame doors can be filled with a variety of insulation materials for superior energy efficiency.

**Weatherseals:** Brush and smoke rated seals available.

**Vision Lites:** Insulated, fire rated and impact glass available.

**Materials:** Prime painted, finish painted or stainless steel for harsh environments.



## RELY ON HORIZONTAL SLIDING DOORS FOR FIRE PROTECTION.

Our Horizontal Sliding door systems have the option of being manufactured fire-rated.

### FIRE RATED:

- UL Listed and FM approved for up to 4 hour fire label
- Top hung doors up to 40' wide and 20' tall
- Bottom rolling doors up to 40' wide and 40' tall
- Fire rated pass doors
- FM approved monorail cutouts
- Counterweight closing system
- Operators with UL Listed release devices
- Magnetic and Electro-mechanical releases to integrate with fire alarm or heat and smoke detectors
- Available in stainless steel

Consider the following key factors when choosing a fire door system for your specific requirements:

- OPENING SIZE
- INSULATION
- HOURLY RATING
- WALL CONSTRUCTION
- TEMPERATURE RISE RATING
- WIND-LOAD RATING
- SKIN TYPE AND GAUGE
- AVAILABLE CLEARANCES AND TYPES OF CLEARANCES
- TYPE OF CLOSING SYSTEM AND CLOSING SYSTEM REQUIREMENTS
- OPTIONAL REQUIREMENTS: MONORAIL NOTCH, VISION LITES, SECURITY DEVICES, ETC.

*Opening to Your Standards.*

## WHY IS A FOUR-FOLD DOOR RIGHT FOR YOU?

### SUPERIOR PERFORMANCE

The advanced design and construction of the Four-Fold door enables it to function under high cycle and other severe conditions, which create chronic service and maintenance problems for the conventional alternatives.

### SPEED

Four-Fold doors clear the opening at an average speed of 24 inches per second. Conventional overhead and coiling doors operate between 8 to 12 inches per second.

**14' x 14' Four-Fold Door = Less than 7 seconds to open**  
**14' x 14' Overhead Door = 14 to 21 seconds to open**

The high-speed operation of the Four-Fold door minimizes heating and cooling losses and reduces waiting time, increasing productivity and energy efficiency.

### HORIZONTAL MOVEMENT

The Four-Fold door moves horizontally rather than vertically. As a result, the door is visible throughout the opening motion allowing the driver to know the precise second the doorway is clear to exit. This allows an apparatus to more quickly and safely.

### MAINTENANCE

Standard preventative maintenance (PM) on Four-Fold doors includes applying grease to hinges and operators. With general yearly PM, Four-Fold door operators and components are designed to perform over 1 million cycles. Conventional sectional and coiling doors require constant spring and cable maintenance and replacement to keep them in safe working condition.

### MANUAL OPERATION

Manual operation is available with the Four-Fold door system. With the simple pull of a cord, manual operation is quick and easy. It requires no springs under tensions or time consuming chain hoists or heavy lifting.



## FOUR-FOLD DOORS

## DON'T SACRIFICE FORM FOR FUNCTION.

Get both with Four-Fold door systems.

### HIGH SPEED OPERATOR

Fully visible high speed operator with high cycle durability. Easy-to-operate manual release mechanism and low maintenance requirements.

### FULL PERIMETER SEALS

Keep the weather out and the climate control in.

### CUSTOMIZED PANEL

Choose from vision lites, grilles, decorative paneling, and wood/composite cladding.

### SALLYPORT SECURITY DOOR SYSTEM:

Four-Fold sallyport door systems are a must for high security applications. Heavy duty tube steel constructed panels are available solid sheeted, glazed with security glass or inset with security of louvers. Designed to resist forced entry, sallyport systems feature detention grade locking mechanisms, tamperproof fasteners, ballistic resistant armor sheeting options and high-speed operation to assure your facility is secure.

### TESTIMONIAL:

"Wonderful! That is the only way to describe the five, four-fold station doors manufactured by Door Engineering in our new \$7.1 million Fire Station 3...The doors have not only met, but have exceeded all of our expectations. After three years we have spent nothing on maintenance. Your product, attention to quality and customer service is to be commended, and we would like to thank you on a job well done."

**"WONDERFUL!"** - Fire Chief Nyle Zikmund

### DOOR ENGINEERING SOLUTIONS:

Door Engineering and Manufacturing has been offering industrial, commercial, fire rated, aviation and specialty door solutions for over 40 years. Door Engineering's complete door systems can meet the most challenging and unique requirements. From standardized systems to custom designs, let Door Engineering and Manufacturing put their years of door system experience to work for you on your next project.



\* Hurricane Rated: FBC Approved for 65 +/-, including approval for HVHZ FBC #FL8446

\* Designed and tested for over 1 million cycles.

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**FOUR-FOLD  
DOORS**



**FOUR-FOLD  
DOORS**



Top Hung Sliding • Tip Up • Bottom Rolling • Vertical Lift • Specialty/Custom

**TIP-UP CANOPY** DOORS ARE BUILT TO ENDURE THE HEAVIEST OF WIND LOADS.

**SUPERIOR PERFORMANCE**

This door system provides a weather-tight seal and maintains a quick, yet stable motion. Get maximum access for your facility with minimal side room requirements, all with the benefit of long-lasting dependability.

The one piece Tip-Up Canopy door system has multiple wire rope pick-up points attached to the front of the door framing that are run to the counterweight and floor mounted operator assembly. The wire rope provided has a minimum safety factor of 5:1 at each of the pick-up points.

Tip-Up doors arrive to your facility complete including the side tracks, curved top tracks, the operating hardware, pre-wired electrical controls, wire rope pick-up brackets, the automatic sill locks, side and top roller assemblies.

**SPEED**

Tip-Up Canopy doors clear an opening at a quick rate of speed. This door system is available in up to 130'W x 32'H.

**120' x 30' Tip-Up Door = 45 Seconds to Open**

**75' x 20' Tip-Up Door = 38 Seconds to Open**

The high-speed operation of the Tip-Up door minimizes heating and cooling losses and reduces waiting time, increasing productivity and energy efficiency.

**VERTICAL MOVEMENT**

The opening vertical rise movement is followed by a simultaneous tilting and rising motion to the horizontal full open position, with the bottom portion of the door projecting outside to form a canopy.

**FEATURES**

- FAST OPERATION
- MAXIMIZES HANGAR BUILDING SPACE
- MANUAL OPERATION CAPABILITIES



**TESTIMONIAL:**

"Three doors, 14 years and no problems! It just makes sense! The door for North Star Aviation opens on an average of 10 times a day, 365 days a year, and we never have to call for service!"

**"IT JUST MAKES SENSE!"**

- Mark Smith, President of North Star Aviation

\*Tip-Up Canopy Doors are shop fabricated in modular assemblies to minimize field installation costs.

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## BOTTOM ROLLING DOORS

# AVIATION

DOOR ENGINEERING AND MANUFACTURING'S **BOTTOM ROLLING DOORS** ARE THE MOST POPULAR AND VALUED HANGAR DOOR SYSTEMS AVAILABLE TODAY!

### VERSATILITY

Architectural flexibility is once again awarded here as multiple configurations are available. Each door section is bottom rolling and top guided. Configurations include: uni-directional, bi-parting, individually operated, 3-way traveling group and anchored group systems. These options allow you to choose what will best fit your needs. With the Bottom Rolling system, there is also the choice of bumper-pick or cable-reeve opening and closing system.

Bottom Rolling hangar doors are an excellent application for corporate, FBO, charter and airline hangars. By working closely with architects, contractors and owners, we can manufacture a system that meets your specific needs or can retro-fit to meet the needs of an existing structure.

### SUPERIOR PERFORMANCE

The Bottom Rolling hangar door system is built to endure massive wind loads and withstand strong weather conditions. The poly foam filled vertical weather seal bulbs offer the tightest, most reliable all-weather protection allowing for long-lasting performance reliability. A stable operating movement is maintained due to the quality of the bottom rails and the top tracks using telescoping top roller assemblies. 3-year standard warranty with an available 5-year optional warranty.



## BOTTOM ROLLING DOORS

### FEATURES:

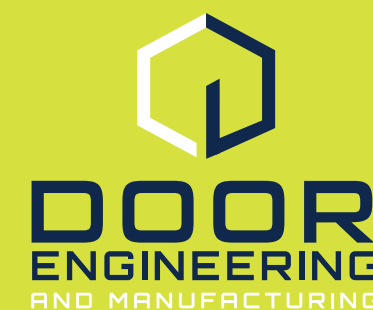
- Northern and Southern stacking options.
- Vehicle entry doors, remote/radio controls and rough framed openings for personnel doors
- Vision lites
- Built-in operator, Drop-In or Door Driver add-on operators

### ADVANCED DESIGN

Bottom Rolling hangar doors are manufactured in sizes up to **500'W x 80'H**. True telescoping top roller assemblies can be fabricated to tolerate almost any header deflection requirements. The factory-installed, dual opposing bulb vertical weather seals provide dramatically superior sealing in comparison to single or dual-flap weather seals. Internal wiring to the powered door section is completed and tested at the factory.

Top guides and quick set bottom rails are shipped in factory-fabricated sub-assemblies including the bottom rail forms on every project. The door sections arrive to the jobsite in pre-assembled sub-sections from the factory to ensure the proper building interface.

The electric motor operators are powered up by the provided draped S/O cord equipped with looped thimbles factory set to fit the cord hanger brackets in the field. The "Quick Disconnect" feature at the motor operator allows manual operation of the hangar door in case of an electrical power outage.



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## BOTTOM ROLLING DOORS: DOOR DRIVER OPERATOR OPTION

# AVIATION

### DOOR DRIVER OPERATOR IS MANUFACTURED WITH DISENGAGE MECHANISM FOR POWER OUTAGE SITUATIONS.

In 1994, Door Engineering began researching an add-on operating system that could fit the needs of a wide variety of bottom rolling and top hung door systems as well as a variety of sizes. Our sales and engineering departments designed the Door Driver 500, 750 and 1000, a self contained, completely enclosed, electrically operated, pneumatic tire driven door operator.

This operator emulates the same outstanding versatility, design and performance as Door Engineering's other product lines. Completely enclosed and factory preset makes installation fast and easy. Simply attach the Door Driver to the bottom of your door, plug it in, and turn the switch.

The fully active suspension system ensures the pneumatic tire provides excellent traction, allowing for 4-inches of vertical travel over debris or irregularities in the floor. It is powerful enough to open the largest sliding door. 115, 208/230 VAC, 60 Hz, single-phase brake motor.

The back, sides and top of the enclosure are 7-gauge steel for solid construction, while the door is 10-gauge steel. Cabinet and steel components are factory primed.

**41 5/8" wide\* by 43 3/4" high x 14 1/2" deep. The bottom of the operator is located 2 1/4" above the floor. \*Add 2-inches to each side for mounting brackets.**

#### ADDITIONAL OPTIONS INCLUDE:

- 208/230 or 460 VAC, 60Hz, three phase brake motor with control panel, push button station, magnetic reversing starters, thermal overload protection, control circuit transformer and NEMA 4 enclosure.
- Limit switches and cams.
- Door section bumper pick-up system brackets.



## APERTURE DOOR SYSTEMS

### APERTURE SYSTEMS ARE A UNIQUE ENHANCEMENT TO AN AIRCRAFT HANGAR AND ARE PERFECT FOR RETRO-FIT PROJECTS.

Door Engineering has developed numerous integrated, pre-engineered components, which are the building blocks for specialty door systems. Aperture door systems commonly consist of a three-part system where part of the plane's fuselage (main body of the aircraft) and tail are exposed on the exterior of the hangar. Door Engineering can provide several, custom fabricated aperture designs to meet your specific project requirements, whether designed for single or multiple fuselage profiles.

#### VERSATILITY

The Aperture Door system is designed to fit and meet your specific application. Fixed, manual and automatic adjusting panels are available. Flexibility ensures the perfect fit all the time...every time.

#### ADVANCED DESIGN

Rotating aperture door panels allows up to three different aircraft to use the same hangar facility. The rotating aperture door (counterweighted) adjusts up, down and side to side providing the perfect seal at each fuselage profile. The Closure door seals off the opening when the aperture door is not required.

#### SUPERIOR PERFORMANCE:

Much like Door Engineering's other products, the aperture door system has a solid reputation and exemplifies excellence. A valuable benefit of this system is that it is power operated. The pressure sensing panels automatically adjust to the fuselage's position. Ease of operation is amazing. The free-floating, counterweighted panels move with the push of a finger. Designed for wind load and energy conservation requirements, this system demonstrates impressive strength. 3-year standard warranty with an available 5-year optional warranty.

Whether your door systems are standard or unique, our technical sales team, skilled designers and certified installers will ensure quality from illustration to installation.



*Opening to Your Standards.*