



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



HANGAR DOORS



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06-24

BOTTOM ROLLING DOORS



VERSATILITY

Bottom Rolling hangar doors are an excellent door system 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.

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. This door system is built to endure massive wind loads and withstand strong weather conditions. Electrical components are factory tested & configured for ease of installation.

SUPERIOR PERFORMANCE

A stable operating movement is maintained due to the quality of the bottom rails and the top tracks using telescoping top roller assemblies. The top guides and quick set bottom rails are shipped in factory-fabricated sub-assemblies including the bottom rail forms on every project.

WEATHERSEALS

The factory-installed, dual opposing bulb vertical weather seals provide dramatically superior sealing in comparison to single or dual-flap weather seals.

MANUAL OPERATION

The "Quick Disconnect" feature at the motor operator allows manual operation of the hangar door in case of an electrical power outage.

EXTRAS

- Vision lites
- Vehicle entry doors
- Remote/radio controls
- Rough framed opening for personnel doors

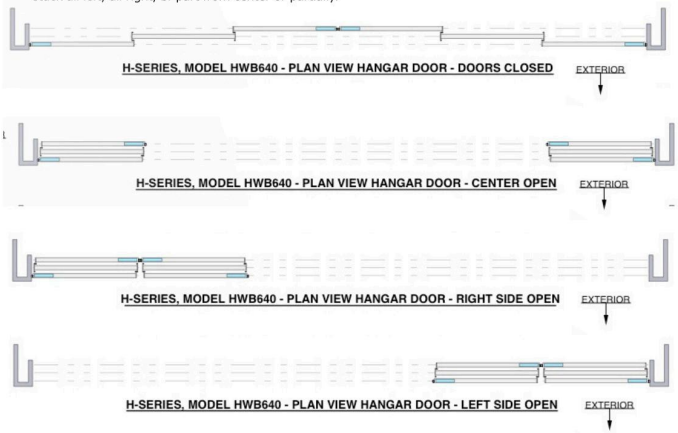


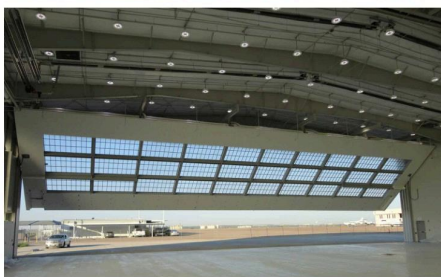
CONFIGURATIONS
 Available in 5 configurations: uni-directional, bi-parting, individually operated, 3-way traveling group and anchored group systems with each door section bottom rolling and top guided. These options allow you to choose what will best fit your needs. You also have the choice of bumper-pick up or cable-reeve opening and closing system along with Northern and Southern stacking options.



DOOR ENGINEERING'S SMART RAILS

Bottom Rolling "Smart Rails" Door System does not require door pocket space because there is no defined stacking point. Operators on the leading and trailing panels of each grouped section allow door sections to stack all left, all right, bi-part from center or partially.





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. Tip-up canopy doors are built to endure the heaviest of wind loads.

SAFETY

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.

FEATURES

Doors are shop fabricated in modular assemblies to minimize field installation costs. The 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

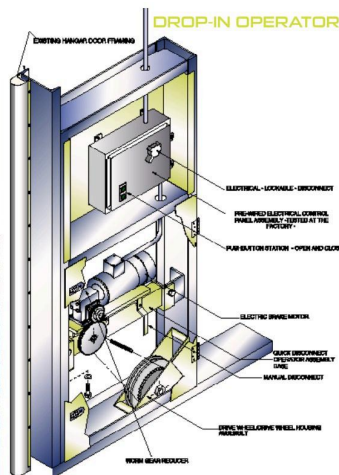
The opening vertical rise movement is followed by a simultaneous tilting and rising motion to the horizontal full open position, with the bottom portion of the door projecting outside to form a canopy.



Door Engineering is the expert and your perfect resource for hangar rehabilitation and/or replacement. We will consult with the customer, provide onsite inspections, design, scope of work specifications, that will ensure the client's requests are met. All new door components will integrate with the existing building, door system and opening.

We offer a full range of replacement components for a refurbishment project including, but not limited to:

- Weatherseals
- Bottom rails
- Wheels and housings
- Top tracks
- Top roller assemblies
- Bumper assemblies
- Electrical feed rail and fittings
- Draped S/O cord
- Motors and brake motors
- Door driver operator
- Complete operation assemblies

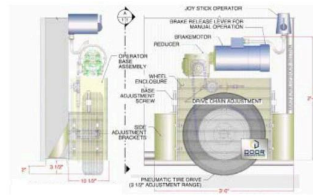


The same operator used in our new door systems is also available as an addition to existing hangar door systems! The Drop-In Operator is the ideal solution for facilities that have a manual door and want to update their system. Unlike the Door Driver Series, the Drop-In Operator does not require additional space on the outside of the hangar door; instead it is installed within the existing door framing.

Unique to Door Engineering and Manufacturing, the single lever disengage mechanism completely separates the motor drive assembly from the drive wheel for easy non-electrical powered operation. This system eliminates the possibility of any damage to the gear reducer and electric motor. It also does not require release of the electric motor brake.

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

Engineered to meet the needs of a variety of bottom rolling door systems in a wide range of sizes, Door Engineering designed the Door Driver Lite, as an alternative to the Drop-In operator system. It is a self contained, electrically operated, pneumatic tire driven operator. The driver is highly engineered to withstand even the most extreme environments.



RETRO-FIT
Converting an existing bottom rolling hangar door to an aperture door system is an easy way and cost effective way for a hangar to accommodate a larger aircraft than initially designed for.

CONFIGURATIONS
Fixed, manual and automatic adjusting panels are available. Rotating aperture door panels allows up to three different aircraft to use the same hangar facility. The Closure door seals off the opening when the aperture door is not required.

SUPERIOR PERFORMANCE
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.

