CENTREX

HANGAR DOORS:
What is right for you?

With over 50 years of experience, we have custom-built numerous unique hangars tailored to specific project or aircraft requirements. Choosing the right door is one of the most critical decisions in designing a custom hangar. Factors to consider include style, type, material, functionality, and size, among others. We have compiled essential considerations and key points to help you make informed decisions that best suit your needs.

	BOTTOM ROLLING	ROLL-UP FABRIC	UPLIFTING BI-FOLD	SWING	MANUAL STACK
SPAN	100+ ft.	100+ ft.	Up to 100 ft.	Up to 100 ft.	Less than 80 ft.
DURABILITY	Best	Best	Best	Best	Good
DEPENDABILITY	Best	Good	Good	Best	Best
OPENING HEIGHT	Best	Good	Moderate	Good	Best
MAINTENANCE	Least	Most	Most	More	Least
ENVIRONMENT	Good for any environment. Cold weather may require a heated door track.	Good for cold weather climates.	Restricted in windy environments.	Restricted in windy environments.	Good for most environments.
COST	$$$	$$$$	$$$	$$	$
OTHER	Sacrifice width of opening.	Requires increased hangar height.	Many manufacturers to choose from.	Needs object clear area outside the hangar.	Manually operated.
BOTTOM LINE	Best for large clear span, heavy-use hangars.	Good for large clear spans, cold weather climate, semi-translucent.	Maximizes door width.	Maximizes door width.	Best for small hangars.

Bottom Rolling

1: Not All Doors Are Created Equal

Bottom Rolling is ideal for large clear spans (+100ft) and heavy-use hangars. It has a durable, dependable and classic design. These door systems require a substantially wider hangar than other door types.

Roll-Up Fabric doors are ideal for large clear spans (+100ft). Uniquely suitable for cold weather climates, they can be more expensive and require more hangar height than other door types.

Uplifting Bi-Fold doors are ideal for small to medium spans (</= 100ft). Easy to use, various manufacturers to choose from, and maximized clear width are a few strengths. These doors are limited to windy operation and require backup power should power be lost.

Swing doors, another great option for small to medium spans (</= 100ft), are designed for easy use and simple maintenance. Their ability to maximize clear width and height provides a sense of spaciousness, while their more restrictive operating wind limitations are a reminder of the need for caution. It's important to note that they will require an 'object clear area' outside the hangar when operating.

Manual Stack doors are a very simple and low-maintenance option. Ideal for small-span hangars (less than 80' wide and 18' high). Maximizes door height but sacrifices width due to stacking volume. Manual operation simplifies operation, but they do require some energy to open and close.

2: The Wider & Higher Door Dilemma

One of the key reflections that often arises for hangar developers is the realization that a wider and higher door would have been beneficial. It's a wise move to consider this early in the development process. The fleet mix, the type of airport (a crucial strategic consideration), future use and resale of the hangar, airport climate, ideal end-user, marketing goals, competitive advantage, return on investment, and aesthetics are all important considerations. To help you focus, consider the following three questions:

1. What is the maximum width of aircraft this hangar can accommodate? Consider adjacent taxi lanes, access and the overall width of the space. Use this as a starting point to determine the minimum height required to accommodate said aircraft.

2. Does the door need to be over 28 feet high? A door of this height will likely necessitate an additional fire suppression system for your hangar. This decision should be made with careful consideration, as it can significantly impact the entire development process.

3. Is my hangar's ease of use and marketability (top-line revenue) a priority over lower upfront costs?

Uplifting Bi-Fold

3. There is no perfect door . . . really, there isn't.

All hangar doors have their concessions. The right hangar door for you and your project will require a compromise. Most importantly, the hangar door you choose needs to work best for your current fleet mix, be the best possible to handle future fleet mix and operate dependably with minimum or no downtime due to maintenance, weather, etc. Doors must be carefully integrated into the entire building's engineering and design, with little room for modifications or changes later.

4. What door will provide me with the best value?

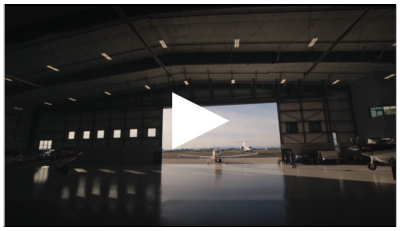
This depends on your current and future “mission” for the hangar. Consider the hangar door types available to you carefully and early in development. Many of these door types have several manufacturers to choose from and always seek advice from experts who have experience with all doors and the associated manufacturers to recommend a starting point. Identify the ideal aircraft for your hangar and consider where you see this fleet mix growing. By doing this exercise, you may find that adapting what you initially thought was the best possible width and height makes all the difference! The door you choose is one of the most essential steps in developing an aircraft hangar. It is a critical element that will serve the hangar tenant/operator for the entirety of its lifespan and will largely determine what aircraft can or cannot be supported by the facility.

Manual Stack

Choosing the right door for your aircraft hangar is critical as you balance span, opening height, dependability, cost and more. Involve experts early to guide your decision and to help weigh the hangar’s current and future needs and the aircraft types it will accommodate. Centrex supports customers throughout the hangar project to ensure the best decisions are made for the facility’s long-term functionality.

Ready to take the next step?

Our team is here to support you through every stage of your hangar project. Contact Centrex today to start making your vision a reality.



See hangar door video at centrex.cc/therightdoor.