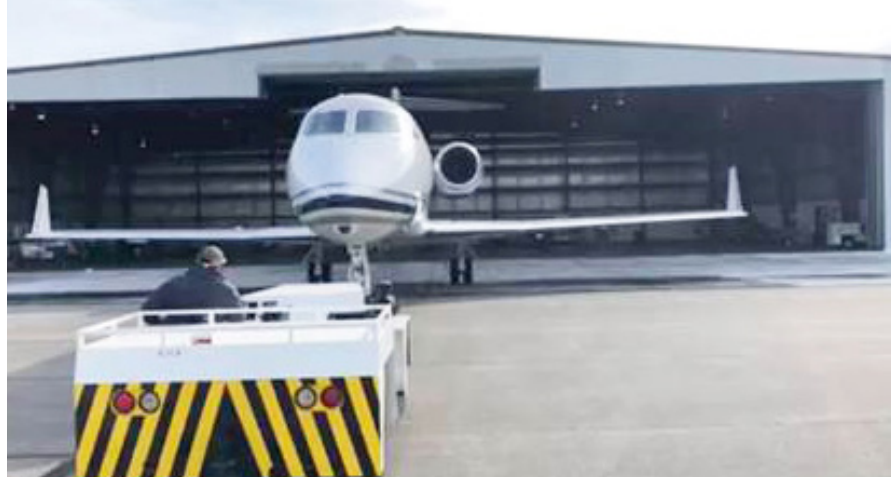




“RETROFIT HANGAR DOOR”

CASE STUDY

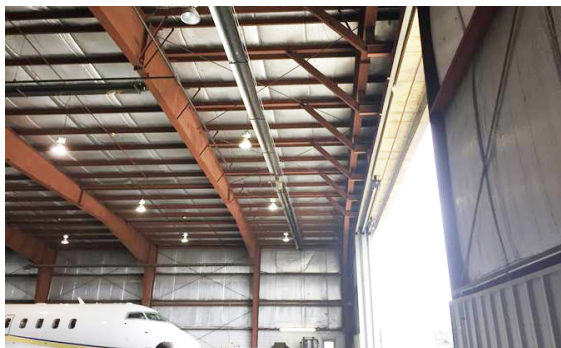
A customer faced a challenge with their existing hangar when attempting to upgrade to a larger aircraft. The new aircraft’s tail was taller than the existing door. Door Engineering was contacted to help find a door solution that would allow them to stay in their current hangar with the larger aircraft.



CHALLENGE

The height of the door in the existing hangar was not tall enough to accommodate the customer’s newly upgraded Gulfstream aircraft. In addition, the ramp located in front of the hangar has an existing slope which presented additional challenges by changing the total height of the aircraft’s tail when moving in and out of the hangar bay.

The existing hangar and hangar door would need to be inspected in order to verify the support structure of the building and to ensure proper clearances. All of this information would be taken into consideration when Door Engineering planned the modifications to the existing hangar door.



Interior shot of existing hangar door.



Exterior shot of existing hangar door.





Vertical lift tail door down, bottom rolling door open.



Backing in the new G IV aircraft.

PRODUCT SOLUTION

To meet the needs for this particular customer, Door Engineering would need to design a new vertical lift tail door that is 40' wide by 3' high, counterweighted with a matching track attached to the bottom, to work in conjunction with the existing bottom rolling hangar door.

Door Engineering inspected the existing building, beam locations, top track design for the hangar door, depth of the hangar bay and the layout of the new aircraft parked in the hangar bay. All electrical components were replaced on the existing bottom rolling hangar door and each door system was interlocked for complete safety. Door Engineering coordinated with their installation specialist for the demo and installation of the new vertical lift tail door.

By providing this door solution, this customer was able to not only stay in their hangar, but upgrade to the larger aircraft that they needed. While working with existing applications can propose challenges and obstacles, Door Engineering specializes in replacement and refurbishment and takes pride and joy in providing the solution that the customer needs.



Nose clearance.



Vertical lift tail door open.



Tail clearance.

