Reinforce Double Entry Doors
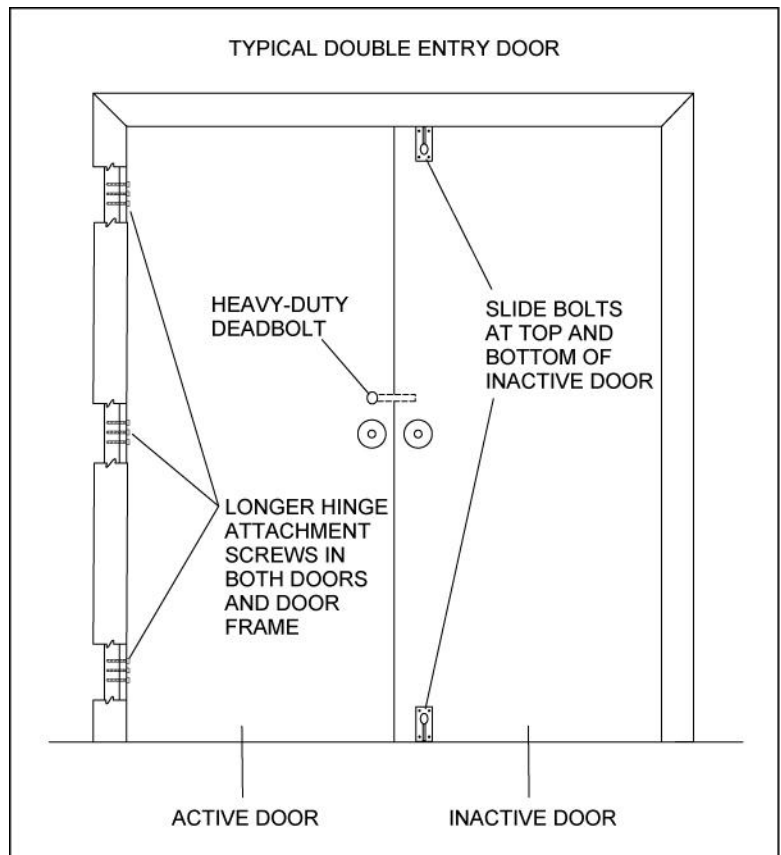
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PROTECTING YOUR PROPERTY FROM HIGH WINDS

Many structures are equipped with double entry doors. These doors typically consist of an "active" door (which is used when only one door is needed) and an "inactive" door (which usually remains closed but can be opened when necessary). These doors are convenient, but because they span a wider opening than a single door, they are usually not as strong as a single door and are therefore more susceptible to wind damage. If your doors fail under wind pressure, they will allow wind to enter your property, where it can cause more damage and possibly injure you or others.

The figure shows how you can reinforce double entry doors to make them less susceptible to wind damage. You can add a heavy-duty deadbolt or replace the existing deadbolt with a stronger one, add slide bolts at the top and bottom of the inactive door, and replace the existing hinge attachment screws, in both the doors and the door frame, with longer screws that extend further into the doors and frame.

TYPICAL DOUBLE ENTRY DOOR

HEAVY-DUTY DEADBOLT

SLIDE BOLTS AT TOP AND BOTTOM OF INACTIVE DOOR

LONGER HINGE ATTACHMENT SCREWS IN BOTH DOORS AND DOOR FRAME

ACTIVE DOOR

INACTIVE DOOR

BENEFITS OF UTILIZING THIS MITIGATION STRATEGY

- Helps to prevent door failure, which can lead to major damage of a structure and its contents

- Helps to prevent injuries to occupants

TIPS

Keep these points in mind if you plan to reinforce double entry doors:

✓ Hardware and home supply stores are good sources for slide bolts and other devices designed to make doors stronger and more secure.

✓ Heavy-duty deadbolt locks intended for use where extra strength is needed usually have thicker and longer bolts, heavier strike plates, and heavier mounting hardware. Locksmiths and hardware and home supply stores can advise you about selecting and installing stronger locks.

✓ If your doors are old or damaged, you should consider replacing them with stronger doors. Home supply stores and lumber yards can usually advise you about the relative strengths of alternative double-door systems.

- ✓ If you don't want to reinforce or replace your existing doors by yourself, you can hire a contractor or handyman to do the work for you. Also, home supply stores and lumber yards will often install the doors they sell.

- ✓ You can protect doors further by covering the door opening with temporary plywood covers bolted to the door frame. This can be especially helpful if the doors contain glass panels.

ESTIMATED COST

Reinforcing a set of double entry doors with slide bolts, longer hinge mounting screws, and a stronger lock will cost approximately $100. This figure covers only the materials you will have to buy and excludes the cost of any tools you use and the value of your time. If you hire a contractor or handyman to do the work, you will have to pay for time as well as materials.

OTHER SOURCES OF INFORMATION

FEMA 247, *Against the Wind: Protecting Your Home from Hurricane and Wind Damage*, December 1993, http://www.fema.gov/library/viewRecord.do?id=1641.

FEMA 488, *Hurricane Charley in Florida: Mitigation Assessment Team Report, Observations, Recommendations and Technical Guidance*, "Hurricane Recovery Advisories," April 2005, http://www.fema.gov/library/viewRecord.do?id=1444.

FEMA 489, *Hurricane Ivan in Alabama and Florida: Mitigation Assessment Team Report, Observations, Recommendations and Technical Guidance*, August 2005, http://www.fema.gov/library/viewRecord.do?id=1569.

FEMA 499, *Home Builder's Guide to Coastal Construction*, Technical Fact Sheet No. 22, August 2005, http://www.fema.gov/library/viewRecord.do?id=1570.

FEMA 549, *Hurricane Katrina in the Gulf Coast: Mitigation Assessment Team Report, Building Performance Observations, Recommendations, and Technical Guidance*, July 2006, http://www.fema.gov/library/viewRecord.do?id=1857.

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