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## How Wind Forces Cause Damage

Wind forces can break the building's load path or punch a hole in the building envelope. Sometimes the actual force of high winds can cause a door or window to break open.

Other times nearby debris can be picked up in the wind and projected against the building envelope. Roof shingles from a neighbor's home, branches from fallen trees, or unsecured yard furniture are examples of potentially dangerous wind-borne debris.

Once wind forces create an opening in the building envelope, the dangers of structural failure greatly increase. Water intrusion is another damaging effect of wind driven rain.

If your house is in an unobstructed location or within 1,500 feet of open water, you are more susceptible to damages caused by high winds. Proper landscaping may help to shield your home and divert winds around the building.

## Hurricane and Tornado Resistance

Check with your local building official to determine the wind-borne debris region of your location. Use the protections that will help your home resist the design wind speed of your region. It is a good investment to build or renovate beyond minimum code requirements. This may provide additional damage resistance, peace of mind, increased market value, and help you qualify for current or future incentives such as property wind insurance discounts.

- **Fortified...for safer living** is a home certification program of the Institute for Business and Home Safety (IBHS), a research and educational organization of property insurance companies. A *Fortified...for safer living* designation means that a qualified inspector has confirmed that the house is designed and built to withstand the perils commonly experienced in the area. Some insurance companies offer premium discounts on wind coverage for certified Fortified

homes. For more information, visit [www.ibhs.org](http://www.ibhs.org)



- **Blueprint for Safety** is an educational program of the *Federal Alliance for Safe Homes (FLASH)*, a non-profit, charitable education organization dedicated to promoting home safety. The program offers guidelines and builder training designed to provide reliable information about disaster-safety building techniques and features for floods, wildfires, and windstorms. For more information, visit [www.blueprintforsafety.org](http://www.blueprintforsafety.org) and [www.flash.org](http://www.flash.org)



## References and Resources

Federal Emergency Management Agency | Disaster Prevention and Preparation Library  
[www.fema.gov/library/prepandprev.shtm](http://www.fema.gov/library/prepandprev.shtm)

Florida Division of Emergency Management | Information Page  
[www.floridadisaster.org/DEMinformation.htm](http://www.floridadisaster.org/DEMinformation.htm)

Texas Tech University | Wind Science and Engineering Research Center  
[www.wind.ttu.edu](http://www.wind.ttu.edu)

University of Florida | Disaster Handbook  
<http://disaster.ifas.ufl.edu/>