

Protecting
YOUR HOME FROM
Wildfire Damage





Blueprint for Safety... A Blueprint for Life

When severe weather threatens, protecting life and property automatically becomes top priority for millions of Florida residents. Nothing is more important than making sure your friends and loved-ones seek safe shelter from an approaching storm, flood or wildfire.

Often, that "safe shelter" is your own home. Perhaps you've prepared an emergency readiness kit, complete with large supplies of water, non-perishable food items, first-aid supplies, flashlights, batteries – even a weather radio. All of these items provide basic safety and comfort in an emergency situation. However, they offer little protection to life and property if your home is weak and vulnerable in severe weather or a natural disaster.

Is Your Home Protected?

Without proper connections and coverings, high winds from a hurricane or tornado can demolish a home's garage door, blow out windows, and even rip off a roof. Roof coverings might fail in severe rain or hail, leading to costly water damage inside the home. Wildfire can claim a residential structure in no time without a "buffer zone" around the home. Even minor weather events can lead to serious injuries and expensive, time-consuming repair jobs.

Building or renovating your home using the latest and strongest building procedures available is the best way to protect your family and house from adverse weather. In Florida, that means building with Blueprint for SafetySM. It just might be the most important blueprint you'll ever see.

What is Blueprint for Safety?

Blueprint for Safety is not a product or service, and it's not for sale. Blueprint for Safety IS the most comprehensive set of disaster-resistant building techniques available in Florida today. Complete with an interactive Web site, free consumer guide and contractor's field manuals, Blueprint for Safety outlines techniques for protecting both new and existing homes against flooding, wildfire, hurricanes and tornadoes.

A blue-ribbon panel of architects, building professionals and engineers developed Blueprint for Safety. The Blueprint technical advisory committee, led by the Florida Alliance for Safe Homes – FLASH, Inc., a non-profit disaster safety education organization, worked for more than a year to create "code-plus" guidelines for single-family residential construction. Those guidelines now comprise Blueprint for Safety, and today, homeowners and homebuilders from the Florida Panhandle to the Florida Keys are using Blueprint to build safer, stronger, more disaster-resistant homes.

Do Safer Building Practices Cost More?

Building "disaster-resistant" means going beyond conventional building methods and adopting a "code-plus" approach – extra nails in the roof decking, hurricane clips on the structure framing and water barriers along the roof joints. These methods may cost more at the time of construction. However, safety experts, disaster victims and a growing number of homebuilders agree that building beyond the code before disaster strikes delivers priceless life and property saving value to homeowners who reside in harm's way.

Rebuilding homes after a disaster can take from one month to three years, bringing personal disruption, financial costs and relocation away from jobs and schools. While insurance will replace most possessions, it cannot replace cherished personal items like wedding albums and special family keepsakes.

Homeowners can find peace of mind and ensure long-term savings by following the Blueprint for Safety recommendations for wildfire resistance. Call **1-877-221-SAFE**, visit **www.blueprintforsafety.org** or e-mail **flash@flash.org** for free technical assistance today.





Blueprint for Safety Protecting Your Home From Wildfire

Adhering to the following Blueprint for Safety guidelines will help reduce the risk of wildfire damage to your new or existing home. Sharing this Blueprint for Safety pamphlet and its companion materials with your design professional and builder will start you on your way.

America's population has nearly tripled during the past century, with much of the growth flowing into traditionally natural areas. Cities have grown into suburbs and suburbs have blended into what was once considered rural America. Because people and natural elements interact, this expanding development is creating an extremely complex landscape, commonly known as "wildland/urban interface". This area usually consists of a varying mix of woodlands, forests, homes and other structures.

Wildfire Dangers in Florida

From the Florida Panhandle to the Everglades, many homes now stand in the wildland/urban interface – posing a much greater risk for property damage due to forest fire. Recent drought has also created a serious situation for residents, fire and forestry officials who live and work in wildland/urban interface areas. However, thoughtful planning, common sense landscaping, smart building practices and other "Firewise" practices outlined in the following Blueprint for Safety recommendations can dramatically reduce the threat of wildfire to a home. Communities designed with these concepts preserve not just houses, but homes, a cherished lifestyle and natural settings for wildlife and recreation.



Characteristics of A Wildfire

Wildfires typically start in drought conditions and will spread rapidly in areas with continuous fuels, thick vegetation and continuous overhead tree canopies. Wildfire can outpace initial firefighter response and use fuels to spread into populated areas. Ironically, some homes are more combustible than the wildland vegetation around



them. A rapidly spreading wildfire coupled with highly combustible homes can cause widespread destruction; but there are ways to reduce the risk of property damage due to wildfire.

Wildfire Prevention Strategies For The Home

Homes and structures in an interface area can be designed and maintained to increase the chances of wildfire survival. Since the weather and terrain surrounding a home cannot be changed, the best approach to reducing wildfire dangers focus on determining risk, addressing water supply and modifying and/or reducing the fuel density. These steps are highly valuable as many structures are more combustible than the vegetation that surrounds them.

Generally, low risk conditions exist if inspection reveals:

- ▲ Bare ground, improved pasture or widely spaced grassy clumps or plants
- ▲ Moist forest, mostly leafy trees, or mostly large trees
- ▲ Few plants growing low to the ground
- ▲ Oak leaves or other broad leaves covering the ground

Moderate risk areas include:

- ▲ Thick, continuous grasses, weeds or shrubs
- ▲ Continuous thin layer of pine needles and scattered pine trees
- ▲ Scattered palmettos or shrubs up to 3 feet tall separated by patches of grass or sand
- ▲ A clear view into or across the undeveloped area

High to Extreme risk areas include:

- ▲ A thick bed of pine needles and many pine trees
- ▲ Continuous palmettos, shrubs, or sawgrass more than 3 feet tall
- ▲ Vines and small-to-medium trees or palms beneath taller pine trees

- ▲ Impenetrable shrubs or young pines
- ▲ No clear view into the undeveloped area because of dense growth

Blueprint for Safety identifies the National Fire Protection Association's "Standard 299 Checklist" as the most effective means for determining risk. Homeowners, builders and community planners can make informed decisions regarding defensible space size, building materials and landscaping choices using "NFPA 299," available on-line at www.blueprintforsafety.org/wildfire/wildfire_graph.html. After determining risk, contractors and consumers may follow the Blueprint for Safety recommendations to reduce wildfire threat.



Determine wildfire risk profile using the NFPA 299 checklist mentioned above. If your home's risk profile is "low" to "moderate", a minimum of 30 feet of "defensible space" should surround the home. If your home's risk is "high" or "extreme", defensible space should be increased up to as high as 100 feet.

Homes must feature a non-combustible street number at least four inches high, on a contrasting background, visible from the road.

Driveways must be at least 12 feet wide with at least 15 feet of vertical clearance.

Drives longer than 150 feet must have turnarounds.

Drives longer than 200 feet must have both turnarounds and turnouts.

Gated driveways must open inward and have an entrance at least 2 feet wider than the driveway and be at least 30 feet from the road.

If secured, the gate must have a key box approved by the local fire department.

Water Supply

Water supply is critical to firefighters' ability to combat and control wildfires, and thereby protect lives and property. Elevated water tanks, portable water tankers, pools, ponds or other static sources of water should be available where there are no fire hydrants to provide a continuous water supply to firefighters. Regardless of source, Blueprint for Safety recommends that water supplies should be available within a twenty-minute round-trip from the fire in order to provide the best protection.

Fire-Resistant Building Materials

Homeowners and homebuilders should also consider using fire-resistant building materials when constructing a new home or conducting renovations on an existing structure in the wildland/urban interface.



Blueprint for Safety recommends that a non-combustible screening with a mesh size no greater than 1/4 inch be used to cover the fireplace chimney as well as the attic and sub-floor vents.

Eaves must be made of non-combustible material.

Undersides of aboveground decks and balconies must be enclosed with non-combustible material.

Roof assembly must have a Class A fire-resistant rating – wood shakes and wood shingles are not recommended.

Glazed panels in exterior windows, glass doors and skylights must be multi-layered or include solid exterior shutters.

Gutters and downspouts must be of non-combustible materials.

LP gas containers must be located at least 30 feet away from any structure and surrounded with 10 feet of clearance.





Creating A Defensible Space

Defensible space is either a natural or man-made area where trees, brush and other fire fuels have been cleared to create a "buffer zone" around an existing structure. Designing and maintaining a defensible space around a home in the wildland/urban interface will greatly reduce the threat of an advancing fire and will provide for a faster, more efficient response by firefighters.

Fuels within the defensible space should be maintained in a fire-resistant condition. One way to do this is to regularly water the entire defensible space. The area must be mowed, mulched and converted to compost at least once a year. Vegetation should be thinned and pruned to reduce fire intensity and all dead material, including trees, should be removed each year. Shrubs or vegetation under trees or "ladder fuels" should be pruned no higher than 6-10 feet to prevent wildfire from using the vegetation to travel up into the tree crown.



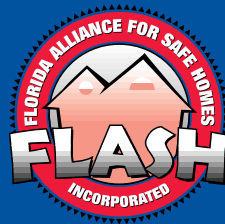
Blueprint for Safety recommends the use of fire-resistant plants in the defensible space. Examples include dogwood, viburnum, redbud, sycamore, magnolia, beautyberry, oak, red maple, wild azalea, sweet gum and fern.

Firewood must be stored at least 50 feet away from the home and other structures.

Blueprint for Safety also recommends the removal of flammable plants like saw palmetto, wax myrtle, yaupon holly, red cedar, and gallberry within the defensible space. These plants contain resins, oils, and waxes that burn readily and pose an unnecessary threat to your home in a wildfire.



Blueprint for Safety is the product of private and public interests working under the direction of the Florida Alliance for Safe Homes - FLASH, Inc., a non-profit, 501(c)3 charitable education organization dedicated to promoting home safety. FLASH founding partners include: the American Red Cross, FEMA, Florida Department of Community Affairs, Florida Insurance Council, Institute for Business & Home Safety, Nationwide, State Farm Insurance Companies and USAA.



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