WILDFIRE CHECKLIST

YOUR HOME OR BUSINESS	REQUIRED ACTION OR RETROFIT	RELATIVE COST
ROOF COVERING - Your roof, both in terms of its covering and design, is the most vulnerable part of your home or business when considering exposure to wildfire.		
1. Do you have a non-combustible or Class "A" roof?	A professional roof inspection can help determine this. If not, replace your roof covering with a Class "A" fire-rated covering. Many styles are available.	$$$$
2. Do you have a tile or metal roof? If yes, are the gaps between covering and roof sheathing, which can occur at the edge and ridge, filled with either a bird stop or other material to seal the openings? Are there other roof openings?	Install bird stops. Plug any roof openings that are not functioning as vents.	$-$$
3. Do you have combustible siding where a lower level roof meets and on the upper level roof or wall?	Replace siding with a more fire-resistant material.	$$-$$$$
4. Has vegetative debris accumulated on your roof?	Ember accumulation at the roof-wall intersection increases the risk of fire exposure, particularly if combustible siding is present. The problem is exacerbated with a buildup of debris. Routinely remove debris from the roof. Consider hiring a professional to help with this task.	FREE
VENTS are vulnerable to wind-blown embers and flames from nearby vegetation, combustible siding that has ignited or if combustible materials are stored nearby that could potentially catch on fire. Maintaining appropriate defensible space will help minimize wildfire risks.		
1. Are your vents covered with ⅛-inch mesh metal screens?	There are many types of new vents on the market that are designed to reduce the risks of wind-blown embers getting inside. Consider installing new vents; availability and styles will vary by region. A less expensive alternative is to attach a minimum of 1/8-inch mesh metal screens over existing vents.	$
2. If your vents are not covered with metal screens, have you attached ⅛-inch mesh metal screens and have you prepared vent covers that can be easily installed when a wildfire is approaching?	Attach screens and/or prepare covers. Attaching a solid cover would provide additional assurance that large embers would be kept out of the attic or crawlspace. Since the primary purpose is to prevent embers from getting inside your vents, ½-inch plywood could be used. Keep the areas around the vents clear of vegetation and other combustible materials. Install covers before evacuation and remove them upon your return. Use caution when installing and removing covers over vents on higher floors.	$

3. Are you planning to replace vents?	Several ember-resistant vents were recently accepted for use under the strict new California Building Code. These are a good idea for any home or business owner in any wildfire-prone state. Find a list of accepted vents at: http://osfm.fire.ca.gov/	$$
GUTTERS - Debris can collect in gutters and become fuel for falling embers during a wildfire. It's then possible for the fire to burn into the attic space.		
1. Has vegetative debris accumulated in your gutters?	Clean out your gutters on a regular basis. Use caution when doing this or consider hiring a professional to complete the task.	FREE
2. Have you installed gutter cover devices that are available to help keep your gutters clear of debris?	Consider installing a gutter cover device to help manage debris buildup. A number of designs and devices are available. Devices can result in the accumulation of debris on the roof area behind the gutter, so maintenance is still required.	$$-$$$
EAVES - Eaves are vulnerable to flame and ember exposures and can provide a way for a wildfire to get into your attic.		
1. Do you have boxed-in or open-eave construction? Because of the gaps that typically occur between blocking and rafter tails, open-eave construction is more vulnerable in wildfire conditions. Are these gaps visible?	Plug openings in open-eave area with durable caulk, or install a non-combustible covering over blocking to eliminate openings. An alternative method is to enclose or box-in the eaves. This method may require that vents be installed in the soffit material to allow for excess moisture to be removed from attic and enclosed soffit spaces, particularly if combustible siding is present, combustible materials are stored adjacent to the building, or the nearby vegetation is poorly maintained.	$-$$$
2. If your eave area is boxed-in, is the soffit material non-combustible?	Replace with non-combustible or other material that is fire or ignition-resistant. Common soffit materials include those that are non-combustible, such as a fiber-cement product or exterior fire-retardant treated plywood, or combustibles such as plywood or solid wood boards. Vinyl soffit materials are not recommended due to the lower temperature at which it will deform and sag.	$$-$$$

Notes

WINDOWS - During a wildfire the most vulnerable window is one that is open. The most vulnerable part of a closed window is the glass. Close windows to prevent embers and flames from entering the home.		
1. Do you have single-pane windows?	At a minimum, install dual-pane windows, which will provide more protection from wildfire. Preferred are dual-pane, insulated glass windows, which have the added benefits of greater energy conservation and insulation during cooler and warmer months.	$$$-$$$$ Costs vary with the location and number of windows.
2. Does your window have tempered glass?	Tempered glass is about four times more resistant to breaking during a wildfire. When replacing single-pane windows consider dual-pane, tempered glass. This will provide significant wildfire protection against flames and wind-blown embers. The cost increases are relative to the opening size.	
3. Do your windows have shutters?	Shutters and pre-made covers will protect your window from wildfire exposures such as embers, the impacts of other airborne debris and radiant heat exposures. These devices would be installed prior to evacuation and removed upon returning to the property.	$-$$$
4. Have you made covers for your windows that can be easily installed prior to evacuation during a wildfire?	A less expensive alternative is ½-inch plywood. Before installation, clear the surrounding area of vegetation and other combustible materials that could ignite the plywood covers.	$$

Notes

SIDING - Fire from ignited siding can spread into the stud cavity and up the wall into the eave and the soffit area. Vertical fire spread up the wall also can expose the windows to flames.		
1. Is your siding made of a noncombustible material?	Re-siding is an expensive, and can be a worthwhile proposition, particularly if the surrounding defensible space is inadequate or if the building is 15 feet or closer to surrounding properties that, if ignited, could spread the flames. Panelized products have fewer lap joints, so can be considered less vulnerable. Wood siding shingles and plain bevel lap joints are the most vulnerable to flames. Since noncombustible siding won't ignite, vertical flame spread will not be a problem unless you have stored combustible materials or planted highly flammable vegetation next to the wall. Vertical flame spread also will be minimal when ignition-resistant material (e.g. exterior fire retardant-treated wood) is used. Siding products and assemblies that are better able to resist the penetration of flames into the stub cavity can be found at http://osfm.fire.ca.gov/strucfireengineer/pdf/bml/wuiproducts.pdf	$$$$
2. If you have a combustible siding product (e.g., wood siding), is it a panel or horizontal lap product?		
3. If you have a combustible horizontal lap siding product, does it have a simple lap joint, such as a plain bevel joint?		

Notes

YOUR SURROUNDINGS	REQUIRED ACTION OR RETROFIT	RELATIVE COST
DEFENSIBLE SPACE - This is the area within 100 feet of your home or business or to your property line and should be thought of in three sections: 0-5 feet, 0-30 feet and 30-100 feet. The purpose of defensible space is to modify the landscape through pruning and maintaining it to keep a wildfire from getting too close to the structure.		
0 to 5 feet	Plants adjacent to combustible siding, as well as plants under or next to windows or interior corners present the greatest hazard. Embers may still be able to ignite individual islands of plants, so plant selection and maintenance is most critical in this zone. Avoid plants with the following characteristics: 1. Generate ground litter from bark, leaves, or seeds that slough off 2. Have (very low moisture content) dead material within the plant 3. Have small branches and needles that can easily ignite 4. Have a high resin or volatiles content	
0 to 30 feet	In this zone, the goal is to prevent any surface fire from burning up the building. Prune lower branches in trees and remove nearby shrubs (ladder fuels) to prevent the fire from moving back into the tree crown, Separate groups of non-tree vegetation to make it more difficult for fire to move horizontally.	FREE - $
Do you have vegetation that is close to, adjacent to or under vents, soffits or windows?	Carefully maintain or remove. All vegetation needs to be maintained, but ground cover or small plants will be less of a problem here. Larger plants, particularly those that tend to generate an abundance of dead material will pose a significant threat to your home or business.	FREE

Notes

TREES		
1. Do trees or branches hang over your home or business?	Prune back to a minimum of 10 feet from your home or business.	FREE-$
2. Are your trees pruned to eliminate ladder fuels? Ladder fuels are those that will allow fire to climb up the bark and into the upper portion of the tree	Prune trees to eliminate ladder fuels.	FREE-$
Has vegetative debris accumulated in the areas that connect the deck and walls, under the deck or at the base of exterior walls or fencing?	Inspect for and clear all vegetative debris on a regular basis.	FREE
LP Tank - If fire comes too close to exterior liquefied petroleum (LP) tanks, a leak can develop at the pressure relief valve, resulting in a column of flame. Flame impinging on the upper surface of the tank can result in an explosion, particularly when the fuel level is lower.		
Is your LP tank located within 30 feet of your home or business?	Relocate your LP / Propane tank.	$$-$$$

Notes

Have you created a defensible space around it?	Created 10 to 15 feet of defensible space around your LP / Propane tank.	FREE - $
DECKS - If ignited, decks will lead a wildfire directly to your home or business. The flames can burn siding, break the glass in nearby windows or sliding glass doors, and ignite the eaves and vents. All of these scenarios result in fire moving into your structure.		
1. Are your deck boards made of combustible material? (i.e., solid wood or one of the wood plastic composite products). There are a limited number of metal (non-combustible) deck boards. Exterior fire-retardant treated lumber can also be used to decrease the vulnerability of the deck to wildfire.	When it's time to replace the deck, choose a fire- or ignition-resistant material. As previously mentioned, the new California Building Code requirements pay strict attention to wildfire risks. Learn more about how to choose wildfire-resistant decking materials at http:// osfm.fire.ca.gov/strucfireengineer/pdf/bml/wuiproducts.pdf	$$$-$$$$
2. Do you have combustible materials stored under or on top of your deck?	Move this material to an enclosed area away from your home or business. If you choose to enclose the underside of your deck, be sure to address moisture management issues through drainage and ventilation.	FREE-$$

Notes

FENCES		
Does a fence come within 5 feet of your home or business, or come into direct contact with it?	Replace with a noncombustible fence or use noncombustible components such as heavy wire mesh in a wood frame. Noncombustible fencing (at least a 5-foot span) should be used in locations where the fence is directly attached to the building.	$-$$$
YARD STRUCTURES – Any fuel source, decorative or functional, within 30 feet of your home or business.		
Do you have any playground equipment, firewood, trellises or other yard features that could bring flames too close?	Combustible structures should be moved 30 feet to 50 feet from the home or business.	FREE

IBHS is a non-profit applied research and communications organization dedicated to reducing property losses due to natural and man-made disasters by building stronger, more resilient communities.

Institute for Business & Home Safety
4775 East Fowler Ave.
Tampa, FL 33617
(813) 286-3400
DisasterSafety.org

030810IBHS