

GET FIRE SAFE AT THE INTERFACE

Protect your home from wildfires



FIRE
EMERGENCY

NEW ZEALAND



Living at the interface

Urban/rural interfaces are areas where homes and other structures are near forest, bush, scrub or grasslands. Properties in these areas are at greater risk of wildfire due to the increased presence of nearby vegetation.

Between 2014 and 2018, there were 27 fires in interface areas that destroyed 37 homes and other structures. These fires had a major human, environmental and economic toll.

People living in high risk interface areas need to take this risk seriously and take steps to make their property fire safe.

This guide explains the most common fire risks for interface properties and provide you with ways to protect your home from wildfires.



Port Hills fire case study

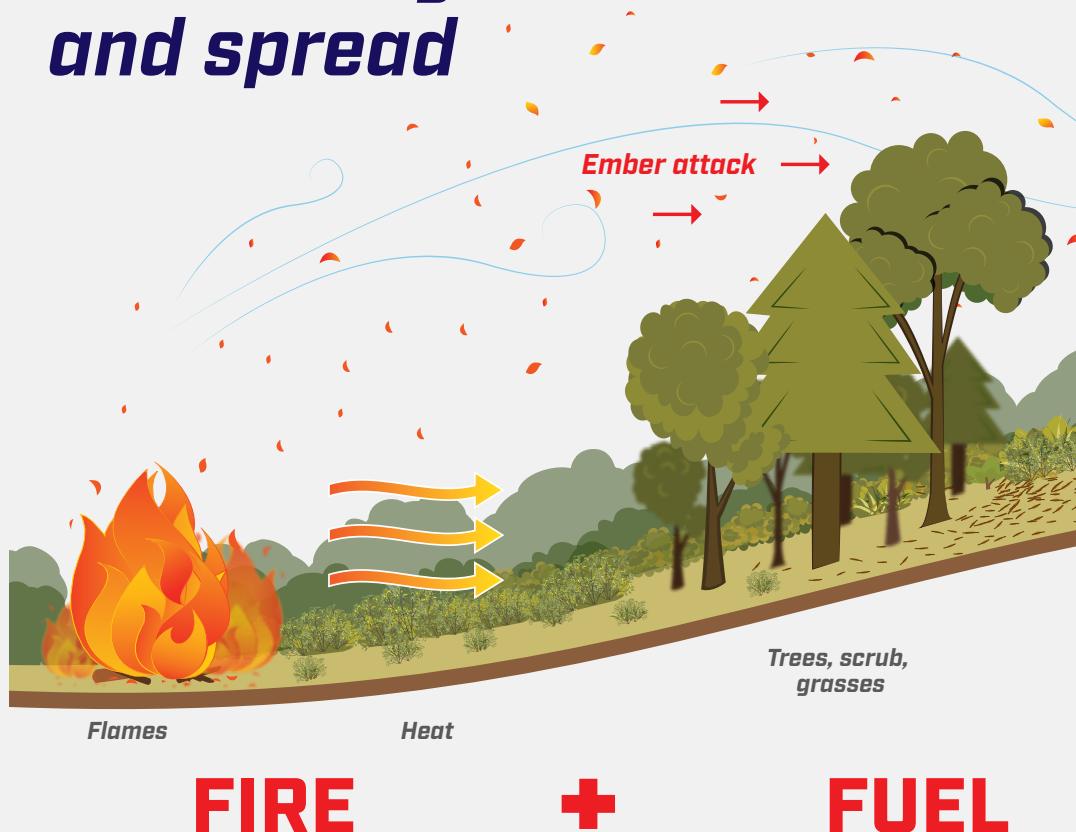


The safety zones around these Port Hills homes helped protect them during the fire.

In February 2017, wildfires burned through the Port Hills of Christchurch. Two separate vegetation fires started several kilometres apart and combined into one large fire. Over the course of three days, the fire burned 1600 hectares, destroyed nine homes and damaged five others.

More than 1,000 residents were evacuated over the course of the fire. The damage caused by the fires was exacerbated by a power outage that also caused firefighters to lose water access. The fire was officially declared extinguished after 66 days.

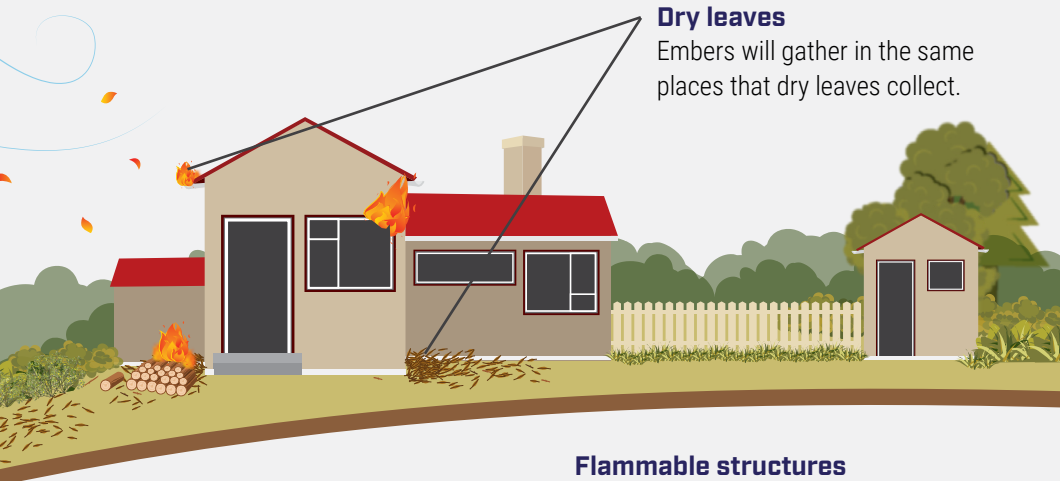
How fires grow and spread



It's important to understand how fires grow and spread so you can take steps to reduce the risks around your home. Direct flames can ignite anything flammable in their path so it's important to have breaks in the path to reduce this threat.

Embers can travel more than two kilometres from a fire. Your greatest risk is that these embers reach your home and find ready fuels to ignite a fire.

“Embers can travel more than two kilometres from a fire.”



Surface fuels

Wood piles and accumulated dead plants, leaves, grasses, twigs and rubbish provide fuel.

Flammable structures

Flammable building materials include: PVC gutters, butynol and rubber compound roofing, wood and vinyl cladding. Attached wooden fences and decks can provide a path of fuel directly to your home.

= WHY HOMES BURN

Other risks to consider:

- › Slope – fire travels faster uphill. Homes on a steep slope or at the crest of a hill are at greater risk.
- › Dense bush or forest – fires spread quickly and directly from tree to tree and produce sparks and embers. Dense vegetation also produces fine fuels (leaves, twigs and pine needles) that easily ignite.

Fire safe maintenance and construction in the safety zone

Spouting/gutters

Clear regularly and consider screening with metal mesh. Embers can easily ignite dry material that collects in gutters.



10m

Zone 1 - your priority zone

Safety Zone

Your safety zone should be free of materials that could easily ignite from a wildfire.

Establishing a 10-metre safety zone around your house involves fire-safe choices for construction and landscaping as well as regular maintenance.

Proper maintenance and the right landscaping will typically achieve the

greatest impact for the least cost. However, if you are building a home or making improvements, consider using fire-resistant products.

Use these construction and maintenance tips to reduce the risk of fire to your home. The next section provides advice on landscaping.

Roof

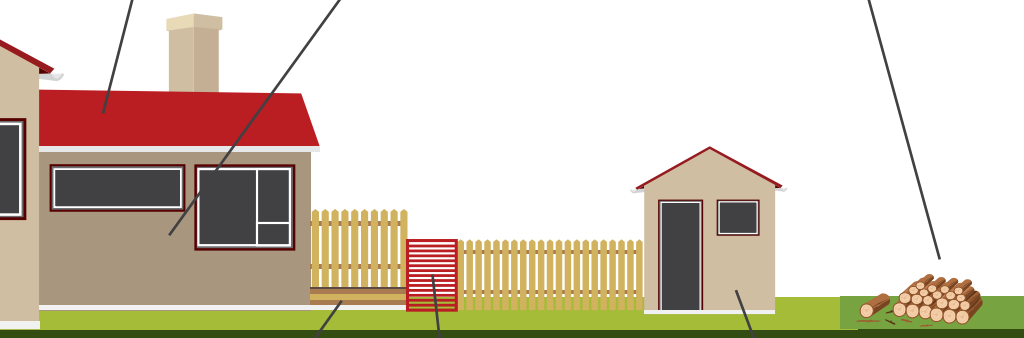
Use fire-resistant material such as steel or tile. Avoid butynol and rubber compounds.

Cladding

Stucco, metal siding, brick, concrete and fibre cement cladding are more fire resistant than wood or vinyl cladding.

Firewood

Store firewood and other combustibles as far as possible from any house or store in a closed shed.



10m

Under the house and decks

Enclose the base of the house, decks and balconies with fire-resistant material or fire mesh to reduce the risk of embers getting beneath your house and igniting it.

Fences

Fences can create a direct path from the fire to your house. Use fire resistant fencing material or separate your house from a wooden fence with a metal gate to slow the advance of a fire. Cut the grass along the fence line to reduce fuel for a fire.

Sheds and outbuildings

Give any structure within 10 metres of your house the same fire safe considerations as you do your home.

“You can minimise or reduce fire hazards around your home by using fire-resistant plants in your safety zones.”

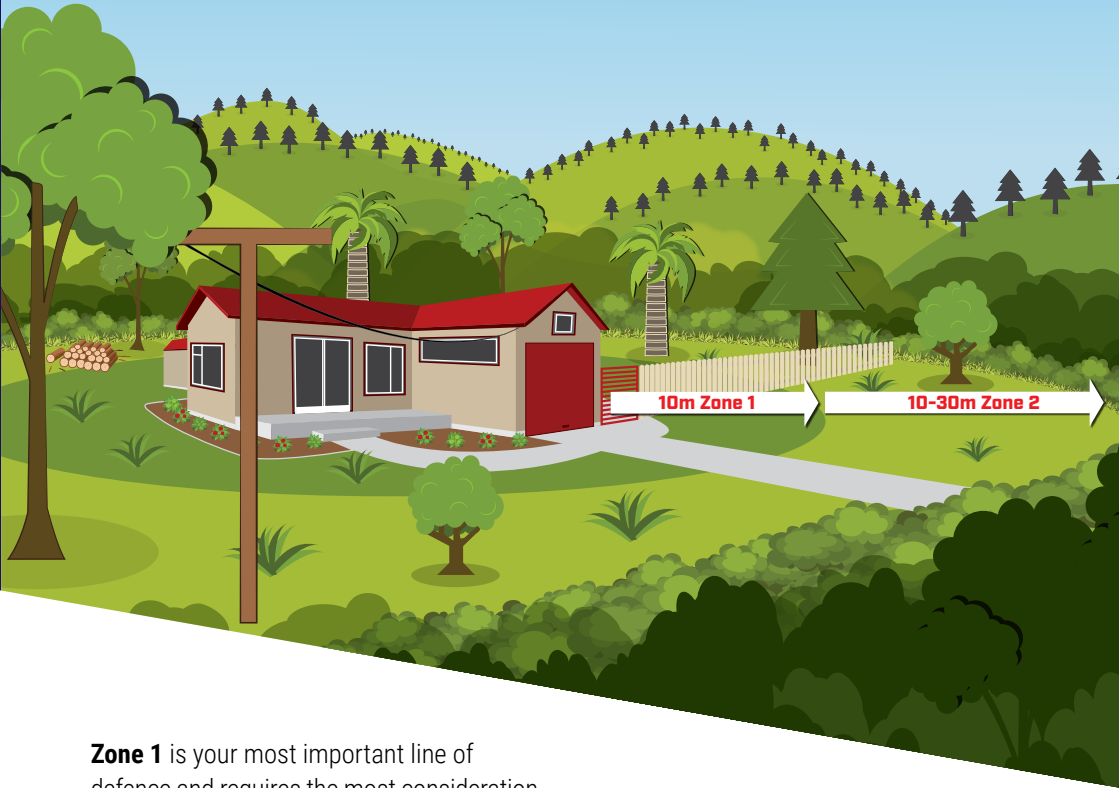
Fire safe landscaping

Your landscaping choices and maintenance practices have the greatest impact on protecting your home from fire.

Most homeowners want to create a landscape that complements their home and has variations in colour, texture, flowers and foliage. When deciding what to plant, consider the flammability of plants, particularly if your home is located near a forest, dense bush, scrub or grasslands.

You can minimise or reduce fire hazard around your home by using fire-resistant plants in your safety zones.

Equally important is where you plant, how plants are spaced and ongoing maintenance. When done correctly, you can create a fuel break and help protect your home by blocking intense heat.



Zone 1 is your most important line of defence and requires the most consideration. Zone 1 extends to 10 metres from your home, where you should:

- › mow lawn and plant low-growing fire-resistant plants
- › thin and prune trees and shrubs
- › avoid tall trees close to the house
- › use gravel or decorative crushed rock instead of bark or wood chip mulch
- › remove flammable debris like twigs, pine needles and dead leaves from the roof and around and under the house and decks
- › remove dead plant material along fence lines and keep the grass short
- › remove overhanging branches near power lines in both zones.

Zone 2 extends from 10 to 30 metres of your home:

- › remove scrub and dead or dying plants and trees
- › thin excess trees
- › evenly space remaining trees so the crowns are separated by 3-6 metres
- › avoid planting clusters of highly flammable trees and shrubs
- › prune branches up to two metres from the ground.

Choose fire-resistant plants and trees

Fire-resistant plants aren't fireproof but they do not readily ignite. They typically have the following characteristics:

- moist, supple leaves that decompose quickly
- slow-growing with loose open branches
- plant doesn't accumulate dead wood and dry material
- watery sap that doesn't have a strong odour
- low levels of sap or resin.



Photo by Phil Bendle



Marbleleaf (left) and broadleaf (above) are fire-resistant New Zealand native species.

Most deciduous trees and shrubs are fire-resistant. Some of these include:

- poplar ➤ birch
- maple ➤ willow.
- ash

Plants to avoid in the safety zone

Highly flammable plants can have the following characteristics:

- › accumulates fine, dry, or dead material such as twigs, needles and leaves
- › aromatic leaves, twigs, and stems contain volatile waxes, terpenes or oils
- › blade leaf or needle-leaf evergreens
- › stiff, leathery, small or fine leaves
- › sap is gummy, resinous and has a strong odour like turpentine
- › loose, flaky or papery bark.

Eucalyptus (below) and kānuka (right) are highly flammable and should not be planted in the safety zone.



Eucalyptus and many conifers are highly flammable and should not be within 10 metres of your home. Some species to avoid in your safety zone include:

- | | | |
|-----------|-----------|-----------|
| › pine | › fir | › spruce |
| › cypress | › larch | › kānuka |
| › cedar | › redwood | › mānuka. |

Landscaping advice

Learn more about the flammability of native New Zealand species at:

www.fireandemergency.nz/firesafelandscaping

Neighbouring properties

If nearby properties are part of your safety zone, talk with the owners about how you can work together to minimise your fire risks.

Fire safety is a community concern. We're all better protected when everyone understands the risks and takes action. Your local Fire and Emergency staff can help to explain these risks and help your community with solutions.

If you're concerned that a neighbouring property poses a serious fire risk due to unmanaged vegetation – especially during times of extreme fire danger – contact Fire and Emergency for advice.

Most times education about the problem will get it resolved. However, legal action can be taken to address serious, legitimate fire risks. Fire and Emergency can help by assessing the situation.

To report a fire hazard, call us at **0800 347 346** or visit **www.firehazard.nz**

Property Access

In order to help you, our fire trucks need 4m by 4m clearance to access your property. Clear any branches blocking your drive and entry and ensure there is space to turn around.

Make sure your street number or RAPID rural property identification number is clearly signposted and visible from the road.

**CALL 111 IMMEDIATELY
IF YOU ARE CONCERNED
ABOUT A RISK TO
PEOPLE, PROPERTY OR
THE ENVIRONMENT.**



Outdoor fires

- › Make sure you **have a hose handy** to extinguish any outdoor fires like BBQs, chimineas and fire pits
- › Keep your fire at least **three metres** from anything flammable
- › Some outdoor fires such as braziers and fire pits have **additional rules** and are banned during a prohibited fire season
- › Visit **www.checkitsalright.nz** to find out the current fire season and the rules for the type of fire you want to light.



Get ready for a wildfire

Go to Civil Defence 'Never Happens? Happens.' **www.happens.nz**

In this website you will learn;

- › about disasters and how to keep safe
- › how to create and practice a household emergency plan
- › assemble and maintain emergency survival items
- › about having a getaway kit in case you have to leave in a hurry.

Wildfire Evacuation

- › Don't rely on an official warning to leave. Wildfires can start quickly and threaten lives and homes within minutes
- › Check the radio, internet and social media for updates and evacuation advice from Fire and Emergency
- › If you plan to leave early, then you must leave your home well before a Wildfire threatens and travelling by road becomes hazardous
- › Implement your household emergency plan, and take your getaway kit with you
- › If you've evacuated, don't return home until you're advised that it's safe
- › Call family and friends or use social media to let them know you're safe.

Make your home fire safe

Use this checklist to spot risks or hazards to make your home safer from interface wildfire ember attack and radiant heat.

EXTERIOR OF YOUR HOME

- ☐ Non-combustible cladding and roofing
- ☐ Roof and spoutings are clean and free of flammable debris
- ☐ Decks, trellises, fences and balconies are not flammable or detached from house

LIGHTING OPEN FIRES

- ☐ Visited www.checkitsalright.nz for fire season status and outdoor fire rules

SAFETY ZONES

- ☐ Woodpile is away from your home or in an enclosed shed
- ☐ Lawn and fire-resistant plants are within **zone 1** (10 metres) of your home
- ☐ Reduce fire hazard within **zone 2** (10 to 30 metres)
- ☐ Under house and deck are enclosed or kept free of leaves, twigs and other combustible material
- ☐ Trees and shrubs are well-spaced and not in contact with each other

EVACUATION AND PREPAREDNESS

- ☐ Visit 'Never Happens? Happens.' www.happens.nz
- ☐ Household evacuation plan
- ☐ Get away kit

ACCESS AND WATER SUPPLIES

- ☐ Clearance for fire trucks to access your property (4 metre wide by 4 metre high)
- ☐ Ready water supply (if not on town water, this could be a water tank with a 100m female floating suction coupling, a pond or swimming pool).

More information

- Fire seasons and permits: www.checkitsalright.nz
- Home fire safety visits: **contact your local fire station**
- For more home fire safety information, visit our website at www.fireandemergency.nz and search for 'Make your home and family fire safe'.

Use this checklist to spot risks or hazards that might cause a fire within your home.

SMOKE ALARMS AND FIRE EXTINGUISHERS

- ☐ Install hard-wired or long-life photoelectric smoke alarms in every bedroom, living area and hallway.
- ☐ Use a heat alarm in your kitchen, bathroom or laundry. Smoke alarms in these locations are prone to false alarms.
- ☐ Get a fire extinguisher or fire blanket and learn how to use them. Ask Fire and Emergency for advice
- ☐ Have an escape plan. Go to www.escapemyhouse.co.nz

LEADS AND CORDS

- ☐ Plug in no more than one appliance per wall or multi-board socket.
- ☐ Never put extension cords under carpets or mats. Don't use them if they are tightly coiled.

HEATING

- ☐ Use the 'heater-metre rule.' Keep furniture, curtains, clothes and children at least one metre from heaters and fireplaces.
- ☐ Dispose of ashes in a metal bucket with a lid, then douse with water. Ashes can stay hot enough to start a fire for up to five days.

APPLIANCES

- ☐ Turn off appliances when not in use. If practical, unplug them at the wall as well.

ELECTRIC BLANKETS

- ☐ Replace worn blankets or have an electrician check them.
- ☐ Replace electric blankets every five years.
- ☐ Lay electric blankets flat on the bed and ensure the controls or cords are not twisted.

MATCHES, LIGHTERS AND CANDLES

- ☐ Always keep matches and lighters well out of reach of children.
- ☐ Use a candle stick holder, never leave lit candles unattended and keep them away from anything flammable.

KITCHEN & LAUNDRY

- ☐ Ensure the clothes dryer is in a well-ventilated location. Clean the lint filter after every use.
- ☐ Never leave cooking unattended.

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SERVING OUR PEOPLE

www.fireandemergency.nz

