

FireSmart home owners manual

Protecting your home from interface fire



You and your neighbours can reduce the hazards of wildfire by following the simple preventative steps explained in this booklet.

Is your home at risk?

Complete the FireSmart Fire Hazards and Risks Assessment Checklist from page 10.



The interface reality



Don't be the cause of a wildfire



Get ready



A well thought-out FireSmart protection plan



Site preparation



FireSmart Fire Hazards and Risks Assessment Checklist

Acknowledgments

The National Rural Fire Authority wishes to acknowledge the contribution of the Sector Group Team in producing the 2004 publication of FireSmart: Protecting our Communities from Interface Fire. The addition of the Homeowner's edition of FireSmart will be a valuable tool in assisting homeowner's to keep their properties safe from interface fire.

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The interface reality



Where residential, industrial, or agricultural property is located in or next to vegetation, whether it is forest, scrubland, or a rural setting, it may be at risk from fire. Such areas are called a property/vegetation interface, or interface for short.

Interface fires can do tremendous damage, result in economic losses, and have significant social impact. Even the best-case scenario involves fire-fighting costs, the loss of adjacent vegetation cover, and some level of inconvenience. The worst-case scenario may involve community evacuation, as well as the loss of property and life.

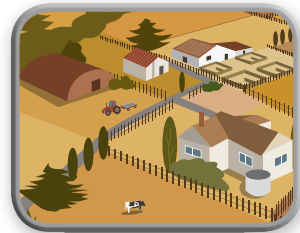
To reduce the potential of interface fire loss, we must all be more aware of the potential consequences of interface fire and share the responsibility for putting in place practical solutions.

Homeowners and residents are responsible for providing defensible spaces around their properties and introducing FireSmart strategies.

This FireSmart Homeowner's Manual can help you reduce your risk.



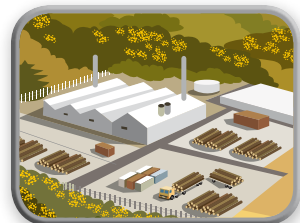
Suburbs



Farms



Rural Towns



Commercial

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Properly preparing your home and community doesn't guarantee that you will not incur fire damage but it does reduce the risks. Obtain insurance cover for all property at risk from fire.

Many of the fire-preventative measures cost very little and reduce fire risks by a great deal; others require planning and long-term commitment to change.

Let's look at three areas where you can apply FireSmart standards to protect or reduce the damage to your property should a wildfire occur.



Site preparation



Any kind of vegetation is potentially combustible.

Mature trees, scrub, shrubs, grass, even your woodpile, are all potential fuels that can easily ignite (increasing the chance of building ignition and loss). Managing space around your house and buildings is of prime importance.

Do you have a safety zone around your house and buildings?

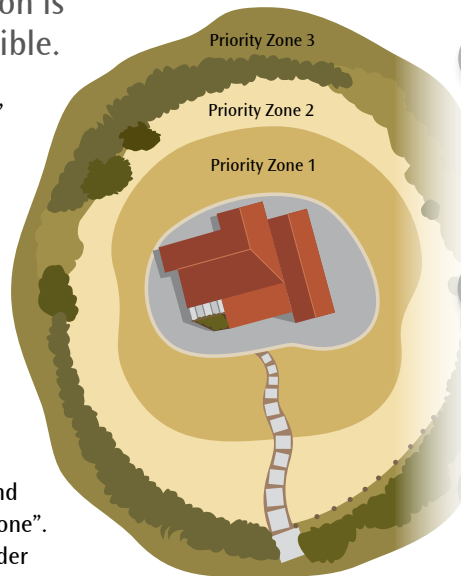
The first 10 metres of space around your home is your “priority zone one”. It’s the most critical area to consider for fire protection. A good fuel-free space gives firefighters a chance to save your home from advancing fire. A home without a good safety zone around it is difficult to defend and increases the potential of house ignition.

What to do?

Establish lawn, paths and drives. Remove any shrubs, trees, dead branches, twigs and leaves from this area and keep it mown and watered.

How FireSmart is your “Priority zones two and three”

These zones should be environments that will not support high intensity crown fires. In this zone you need to reduce fuels by thinning and pruning so that combustion cannot be supported.



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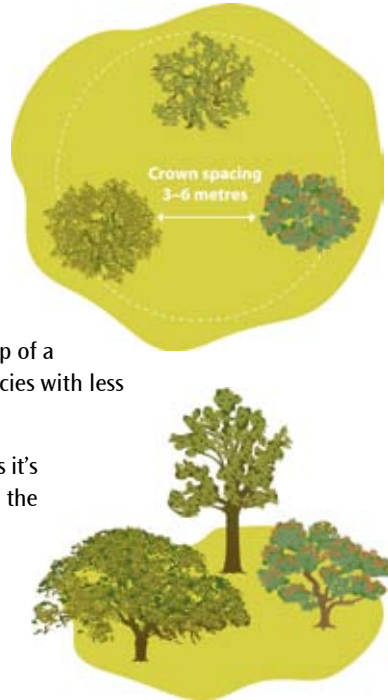


What to do?

Remove over-mature, dead or dying trees. Thin the understorey trees to reduce the chances of surface fires climbing into the canopy. Prune all large trees and remove all branches at least 2 metres from the ground. Remove trees and overhanging limbs that are close to powerlines. Get rid of slash from the pruning promptly to avoid the build-up of a fire hazard. Replace highly flammable species with less flammable species.

Because fire spreads more rapidly up slopes it's important to extend precautions further on the downhill slopes and windward exposures.

These are simple economic steps anyone can take to create a FireSmart home. For these actions to remain effective, they must be maintained.



Building Construction

Our second set of FireSmart guidelines deals with building materials and design standards. While it may not be practical or economical to apply all of them to an existing structure, many FireSmart modifications are easily accomplished.

Is your roof FireSmart?

The most fire resistant roofing materials are steel or tile. Ensure that your roof is free of combustible debris, with no leaf-clogged gutters and roof.

Are your exterior walls FireSmart?

Materials such as brick, tin and hardiplank offer superior fire resistance to wildfire. Timber walls are less effective.

Is your home vulnerable to firebrand ignition?

If you are designing your home, try and eliminate areas where airborne sparks and embers could accumulate and ignite siding, windowsills or trim. Eaves and vents are readymade openings that can allow heat and embers to enter a building. Ensure eaves are closed and all vents are screened.

Are your doors and windows FireSmart?

Remove concentrations of fuels that are within 10 metres of glazed openings. Consider both the size and materials used for your windows – smaller panes hold up better in their frames than larger ones; double glazed or tempered glass is better than single pane glass, and plastic skylights can melt.

Are your attachments (decks, balconies, trellises and fences) FireSmart?

Where possible, build decks, trellises and balconies using non-flammable materials. If not, ensure that there is no build-up of combustible materials like leaves or dead plant materials.



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Interface fires often start as small, accidental ignitions. FireSmart standards are aimed at helping to prevent interface fires from starting and damaging property.

FireSmart Incinerators

Incinerators should be of an approved type. Store fireplace ash in metal containers.

Powerlines

Trees and branches should be cleared at least 3 metres from powerlines. Remove dead or diseased standing trees within a tree length of the powerlines. Private powerlines need to be maintained by the owner.



Emergency response

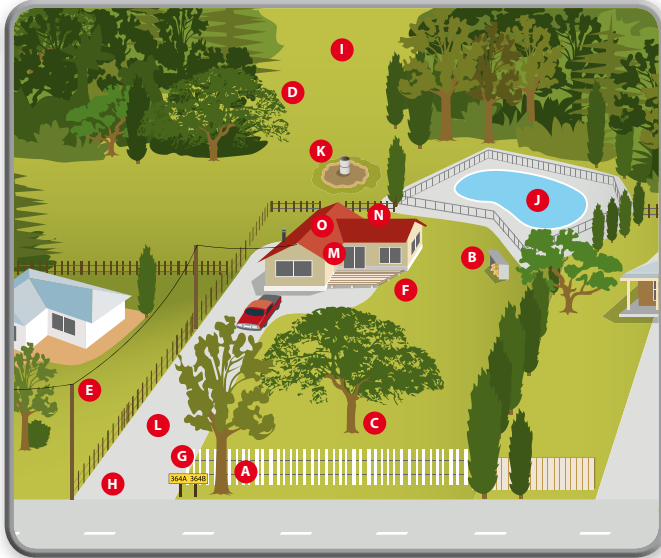
FireSmart building sites should have road access suitable for large emergency response vehicles. Properties should be identified by Rural Addressing Property Identification numbers (RAPID) at the entrance. Keep important contact telephone numbers by your phone. Water supplies should be maintained with good access and adequate signposting.

Preparedness

Every home should have smoke alarms installed, have escape plans identified, dry powder extinguishers available and garden hoses connected that reach around the house. Installation of home sprinkler systems in rural homes should also be considered. Understand the current fire danger and fire season status for your location.



A well thought-out FireSmart protection plan



- A** Prune tree branches to a height of 2 metres or more
- B** Store fire wood 10 metres or more from the house (avoid downslope location)
- C** Remove all trees, long grass, shrubs, logs branches, twigs and needles within 10 metres of house
- D** Thin trees (with 3 - 6 metres between crowns) for at least 30 metres from the house
- E** Contact your power company if trees or branches are not clear of power lines
- F** Clear vegetation within 10 metres of buildings by mowing or spraying to reduce fuel loading
- G** RAPID sign for quick identification by emergency services
- H** Driveway is wide enough to accommodate emergency vehicles
- I** Try to provide an alternate emergency access route to your property
- J** Pond or pool with emergency water supply
- K** An approved FireSmart incinerator
- L** Driveway clear of trees to a distance of at least 4 metres
- M** All eaves enclosed and screen all vents
- N** Undersides of balconies, decks clear of debris and leaf materials
- O** Use only fire resistant roofing materials and fire resistant exterior cladding

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FireSmart fire hazards and risks assessment checklist



If you live in an interface or in a rural home, use this checklist to help you manage your fire protection and fire preparedness.

How to use the checklist

- 1 For each hazards and risks feature or for each mitigation credits feature (in the left-hand column), choose the option that best describes your situation from the two or three options in the centre and right-hand columns in the same line.
- 2 Put the score from the relevant shaded column into the 'Score' column.
- 3 Add your hazards and risks score and enter as Subtotal A.
- 4 Repeat the process for mitigation credits and enter your negative score as Subtotal B.
- 5 Subtract Subtotal B from Subtotal A to get your final score.
- 6 To see what your score means, see 'Interpreting your score'.
- 7 To read more about any feature, refer to the relevant page number in the *FireSmart Partners in Protection* manual.

Hazards and risks						
Feature	Page	Options				Score
Structure location	13	Flat to gentle slope below structures	0	Steep slope below structures	6	
		Moderate slope below structures	3			
Roof material	13	Steel or tile	0	Wooden shingles	10	
Roof cleanliness	13	Clean of leaves and needles	0	Leaf clogged gutters and roof	4	
Walls	14	Brick, tin, hardiplank	0	Wooden	2	
Windows	14	No close vegetation	0	Close flammable vegetation	2	
Eaves, underside of decks and house	14	Well enclosed	0	Open and exposed	4	
Attachments: decks, balconies, fences, trellises	14	Non flammable or not attached to house	0	Wooden and attached to structures	2	
Firewood and stacked timber	17	None within 10 metres of structures	0	Stacked against or within 10 metres of structures	4	
Lawns	18	Mown and watered	0	Rank, or mown but brown and dry in summer	4	
Trees and shrubs within the section	17	Well spaced and more than 10 metres from structures	0	Dense, unmodified and within 3 metres of structures	6	
		Dense, unmodified and more than 3 metres from structures	3			
Power lines to property	17	Underground or overhead but in the clear	0	Overhead with trees overhanging or in close contact	4	

Continued over...

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Hazards and risks						
Feature	Page	Options				Score
External surrounding vegetation	17	Grazed farmland or scattered scrub or forest	2	Continuous scrub, forest or rank grass to section boundary	4	
Seasonal drought	19	Regular summer rainfall with no droughts	0	Regularly subject to drought, high temperatures and dry winds	15	
		Can be subject to drought, high temperatures and dry winds	7			
Region has history and risk of fire occurrence	19	No	0	Yes	6	
Subtotal A						

Mitigation credits						
Feature	Page	Options				Score
Nearest fire response		Within 15 kilometres	6	Greater than 15 kilometres	0	
Signposting and rural addressing and numbering system	18	Implemented	1	Not implemented	0	
Driveway access for large fire appliances	18	Yes	2	No	0	
Fire-fighting equipment, hose, ladder, shovel		Yes	2	No	0	
Multipurpose dry powder extinguishers	15	Yes	2	No	0	

Continued over...

Mitigation credits						
Feature	Page	Options				Score
Owner understands fire danger and fire seasons	18	Yes	2	No	0	
Burns materials only in an approved incinerator		Yes	2	No	0	
Safety zones prepared around structures	16	Prepared greater than 10 metres	4	Not done	0	
Water supplies for fire fighting	18	Present, useable and adequate	2	None	0	
Section maintenance: dead vegetation	16	All dead and cured vegetation removed or composted	4	Dead and cured vegetation present	0	
Fire resistant native species	17	Section planted	4	Not done	0	
Roof and guttering	13	Regularly cleaned	2	Not done	0	
Non flammable materials next to structures	17	Yes	2	No	0	
Smoke alarms installed and operating	15	Yes	2	No	0	
Identified and practised escape plans	15	Yes	2	No	0	
Domestic home sprinkler system	15	Installed	6	No	0	
Subtotal B						
(Subtract Subtotal B from Subtotal A) Final Score						

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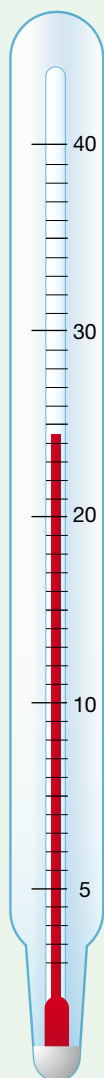
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Interpreting your score



Extreme fire hazard and risk

The chances of your home and outbuildings being damaged or destroyed by an interface fire or wildfire are high and increasingly so if a fire should occur at the worst time. Have a look on the form for areas where you score low. Some sensible improvements will make your property safer. Even small changes could make a difference between losing and saving your home.

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High fire hazard and risk

The chances of your home and outbuildings being damaged or destroyed by an interface fire or wildfire are moderate. Have a look on the form for areas where you score low. Some sensible improvements will make your property safer.

23 to 30

Moderate fire hazard and risk

The chances of your home and outbuildings being damaged or destroyed by an interface fire or wildfire are low. Minor improvements will make your property safer.

15 to 22

Low fire hazard and risk

The chances of your home and outbuildings being damaged or destroyed by an interface fire or wildfire are remote. You don't need to do much to make your property safer.

Minus to 14

To report any fire dial 111

- For more detailed information on protecting your home from the spread of vegetation or interface fire, get a copy of the National Rural Fire Authority manual “FireSmart – Partners in Protection” by contacting National Rural Fire Authority phone 04-4963600.
- For information on undertaking burning, fire danger and fire season status contact your local territorial authority or closest office of the Department of Conservation.
- To obtain your Rural Addressing Property Identification number (RAPID) contact your local territorial authority.
- For more information on Fire Safety in your home contact your nearest New Zealand Fire Service brigade or visit www.fire.org.nz or www.nrfa.org.nz.
- For information and advice on installing home sprinklers visit homesprinklers.fire.org.nz.

Be FireSmart



Photo courtesy of The Marlborough Express

