FRONTIER

FORESTRY

SPRINKLER SYSTEM

USER GUIDE

FOR MORE INFORMATION CONTACT YOUR DISTRIBUTOR

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The items in the Frontier Forestry Sprinkler System are most useful for a home owner or cottager. Fire departments can also purchase this kit as a starter kit and add to it.

PROTECTING YOUR PROPERTY FROM WILDFIRE

What can you do? Ensure there is a defensible space—separation between the structure and surrounding forest fuels. Pine needles, leaves, branches and other debris within 30′ of the structure need to be raked. These accumulations can easily ignite and rapidly spread to the structure.

Check rain gutters, roof valleys, areas on top and below wood decks and steps. Are hazards like LP gas tanks, wood or brush piles located too near to your structures?

Additionally, sprinkler systems using ordinary lawn sprinklers and garden hose are a simple and effective way to increase the survivability of your home or cabin. Any system will help; the ideal system has sprinklers on the roof and all sides of the house. It is important to wet down areas that could be ignited by a firebrand (small pieces of burning wood). Firebrands are airborne and will land anywhere blowing leaves and needles do.

One of the best ways to help protect a structure from wildfire is to have a sprinkler system wetting down surrounding fuels prior to the fire arrival and creating a humid microclimate. Set up overlapping sprinkler heads to wet down the structure, surrounding forest fuel, firewood piles, LP tanks and other fire hazards. A gas powered portable pump should be used in the event of power interruptions or loss. It may also allow for larger diameter hose to be used with less friction loss and greater pressure; it should be set up in a fire safe area. Make sure that the sprinklers used can withstand the high pressure produced by a pump. It is helpful to determine how much pressure and the gallons per minute your water system provides.

100% spray coverage is best. Place sprinklers on the roof and ground with overlapping coverage. Take into consideration the wind direction and speed. Allow for drift. The priority will be on the side of the structure facing the wind and/or an approaching fire. Any wetting agent will be beneficial; even a few sprinklers spraying an area will help. Elevate the sprinkler or adjust the spray patterns so it covers the whole wall from eaves to the ground. Make sure to securely anchor all sprinkler heads because strong winds can be expected.

SYSTEM SET UP

Diagram 1
This method creates a microclimate of humid air. It provides better coverage and less sprinklers are needed when placed on the roof.

Diagram 2
The system can be split. It is likely that only 2-3 sprinklers can operate at one time, depending on water pressure and gpm flow.

On the ground prioritize and concentrate the hazards: accumulations of pine needles, leaves, branches, wood piles, and LP gas tanks in close proximity to the structure.

Diagram 3
Additions and modifications can be made by firefighters by adding a pump. Allows for higher pressure and the use of more sprinklers with less friction loss. Properly anchor sprinklers. Make sure the pump is in deep enough water for large wave action. Elevating sprinklers allows the walls to be wet from eaves to ground. Does not depend on local electric power source. Should have large enough fuel tank to run 4 hours. (Another alternative is an electric pump with back up generator.)

Be aware that small portable pumps may run for only one hour depending on its fuel tank size and how the throttle is set.

SPRINKLER SYSTEM COMPONENTS

(3) ground sprinklers
Part #710002152

(3) roof sprinklers
Part #710002153

(3) tripod sprinklers
Part #710002155

(2) GHT gated wyes
Part #710002538

(2) GHT straight shutoffs
Part #710002539

(2) QC water thiefs
Part #590001829

(1) QC x GHT adapter
Part #306512170

(2) 50′ x 38mm QC hose
Part #590003306

(5) 25′ patrol hose
Part #590003322

(4) 15′ patrol hose
Part #710001650

This document is intended solely as guidance. Diagrams & article courtesy Wisconsin Dept. of Natural Resources