

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE SPECIFICATION GUIDE SHEET  
WINDBREAK/SHELTERBELT ESTABLISHMENT  
(FEET)**

**CODE 380****DEFINITION**

Windbreaks or shelterbelts are single or multiple rows of trees or shrubs in linear configurations.

**PURPOSE**

- Reduce soil erosion from wind.
- Protect plants from wind related damage.
- Alter the microenvironment for enhancing plant growth.
- Manage snow deposition.
- Provide shelter for structures, animals, and people.
- Enhance wildlife habitat.
- Provide noise screens.
- Provide visual screens.
- Improve air quality by reducing and intercepting air borne particulate matter, chemicals and odors.
- Delineate property and field boundaries.
- Improve irrigation efficiency.
- Increase carbon storage in biomass and soils.
- Reduce energy use

For general guidelines on site preparation and planting see both Tree/Shrub Site Preparation (Code 490) and Tree/Shrub Establishment (Code 612) Practice Specification Guide Sheets.

**PRACTICE APPLIES**

Apply this practice on any areas where linear plantings of woody plants are desired and suited for controlling wind, noise, and visual resources. Use other tree/shrub

practices when wind, noise and visual problems are not concerns.

**ESTABLISHMENT**

Select species which are adapted to the site. Some trees and shrubs suited to Maine are:

Trees

White Spruce  
Red Spruce  
Red Pine  
White Pine  
Northern White-Cedar  
Eastern Redcedar  
Eastern Hemlock  
American Mountainash

Shrubs

Highbush Cranberry  
Gray Dogwood  
Nannyberry Viburnum  
Arrowwood Viburnum  
Willow spp.  
Dogwood spp.

Other trees and shrubs can be considered to fit special situations. Refer to [Conservation Tree and Shrub Database in eFOTG](#), Section I, Reference File, Plant Materials, for more species and their attributes.

Consideration will be given to choosing tree and shrub species that are beneficial to wildlife or provide ornamental beauty. Where the windbreak is around the homestead, the inner rows may be planted to ornamentals such as lilacs, azaleas, rhododendrons, highbush blueberry, or dwarf fruit trees.

Windbreak will be planted at right angles to source of damaging winds. Locate and plan windbreaks with care, as they may become a hazard if not properly located. Locate to protect two or three sides of farmstead or feedlot. Extend at least 100 feet beyond area to be protected, if possible. Leave at least 100 feet and not over 300 feet between the windbreak and the building or feedlot.

Do not fertilize trees and shrubs during planting.

If possible, plant on the contour or across the slope.

Single or multiple rows may be planted. If two or more rows are planted, staggering of plants in rows is desirable.

Spacing shall be approximately as follows:

Trees - within rows about 6 to 12 feet apart, between rows 12 to 16 feet

Shrubs -- within and between rows about 4 feet apart

Spacing may be varied to meet unusual conditions. If trees and shrubs are used in a multiple row windbreak, tall growing shrubs should be next to the trees, grading down to low growing shrubs in edge rows. Shrubs or shorter growing trees are planted on the windward side or can be on both sides of taller tree rows. Planting time: Spring plantings preferred - April 1 to June 1.

Maintenance will consist of replacing tree or shrub species, pruning, and fertilizing as needed to obtain desired protection.

Protect from livestock.

## DOCUMENTATION

The following design information (a MFS approved WoodsWISE program "Project Plan" may be substituted in most cases) is required:

1. Landowner and Design Preparer name and address.
2. Property Location, including town and county, and NRCS Field Office.
3. Practice name, code, justification, amount, estimated cost, and time schedule.
4. Description of specific work to be performed and its location and size, as well as written instructions for contractor and /or owner.

5. Maps of property and practice locations, including a lat/long for boundary corners and practices.

6. Legal obligations, including tax status and required permits if needed.

Windbreak practice design, installation and checkout shall include detailed written description and map including:

1. Location of area(s) where planting will take place (Lat./Long.)
2. Total feet and acreage to be planted.
3. Planting specifications including species scientific name and amount, stock type, spacing, and method of site preparation, planting, and maintenance.
4. Specifications for the protection of other natural resources including but not limited to water, soil, wildlife and non-target plants.