

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

CROSS WIND RIDGES

(acre)

CODE 589A

DEFINITION

Ridges formed by tillage or planting and aligned across the prevailing wind erosion direction.

PURPOSE

This practice may be applied as part of a conservation management system to reduce soil erosion from wind.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to cropland, or other land where crops are grown.

It is best adapted on soils which are stable enough to sustain effective ridges, such as clayey, silty, and sandy loam soils.

It is not well adapted on unstable soils such as sands, loamy sands, and certain organic soils.

CRITERIA

Ridge height, spacing, and direction:

Acceptable combinations of ridge height, spacing, and direction are those having Ridge Roughness K values equal to 0.8 or less during those periods when wind erosion is expected to occur. K values are displayed in Section I Erosion Prediction Wind Erosion of the Nebraska Field Office Technical Guide

CONSIDERATIONS

Transport of wind-borne sediment and sediment-borne contaminants offsite can be reduced by this practice when used in a conservation management system in conjunction with other wind erosion control practices. This can include practices such as Windbreaks, Cross Wind Trap Strips, Cross Wind Stripcropping, and Herbaceous Windbarriers that reduce unsheltered distance. It can also include Crop Rotations, Cover Crops and

Residue Management that provide vegetative cover at the appropriate time.

Where water erosion along the furrows formed by ridges is a concern, the hazard can be reduced by farming across the slope according to the standards for Contour Farming and Contour Buffer Strips.

PLANS AND SPECIFICATIONS

Specifications for establishment and maintenance of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation & Maintenance described in this standard. Ridge height, timeframe and ridge/row direction will be detailed.

Specifications shall be recorded using Nebraska Conservation Planning Sheets, approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Ridges shall be established or reestablished by normal tillage and planting equipment such as chisel plows, drills with hoe openers, or other similar implements, which form effective ridges.

After establishment, ridges shall be maintained through those periods when wind erosion is expected to occur, or until growing crops provide enough cover to protect the soil from wind erosion.

If ridges deteriorate and become ineffective due to weathering or erosion, they shall be reestablished unless doing so would damage a growing crop.

REFERENCES

National Agronomy Manual, Second Edition, March 1988, Part 502-Wind Erosion.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.