

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**CROSS WIND RIDGES  
(acre)  
CODE 589A**

**DEFINITION**

Ridges formed by tillage, planting or other operations 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.

It is best adapted on soils that are stable enough to sustain effective ridges and cloddiness, 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**

**General Criteria Applicable to All Purposes Named Above**

**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 management periods when wind erosion is expected to occur. Ridge roughness is discussed in the National Agronomy Manual Subpart 502.32 and K values are displayed in Exhibit 502-4 or 502-5. They are also found in section I-E of the MN eFOTG, Wind Erosion.

**CONSIDERATIONS**

Transport of wind-borne sediment and sediment-borne contaminants offsite can be reduced by this practice when used in a conservation management system.

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 (330) or Contour Buffer Strips (332).

**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.

Specifications shall be recorded using narrative statements in the conservation plan, or approved specification sheets, or job sheets.

**OPERATION AND MAINTENANCE**

Ridges shall be established or reestablished by normal tillage and planting equipment such as chisel plows, field cultivators, drills with hoe openers, row crop cultivators, or other similar implements which form a pattern of effective ridges and furrows across the field.

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.

**REFERENCE**

National Agronomy Manual, Third Edition, October, 2002, Part 502 - Wind Erosion.

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

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