

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
SOUTH DAKOTA SUPPLEMENTS ITALICIZED**

CROSS WIND RIDGES

(ac)
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 *sandy loams, and soils high in clay and silt content.*

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 Prediction (Table 3 and 10) of the South Dakota 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.

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, approved specification sheets, job sheets, 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.

REFERENCE

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

Conservation practice standards are reviewed periodically and updated if needed. The current version of this standard is posted on our website at www.sd.nrcs.usda.gov or may be obtained at your local Natural Resources Conservation Service.