

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATIONS**

**STRIPCROPPING
(Acre)
CODE 585**

DEFINITION

Growing row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips across a field.

GENERAL SPECIFICATIONS

- A stripcropping system shall consist of two or more strips.
- All tillage and planting operations will follow the strip line established.
- Vegetation in a stripcropping arrangement consists of crops and/or forages grown in a planned rotation.
- No two adjacent strips shall be in an erosion-susceptible condition at the same time during the year. However, two adjacent strips may be in erosion-resistant cover at the same time.
- Erosion-resistant strips shall be crops or crop residues that provide the needed protective cover during those periods when erosion is expected to occur.
- Acceptable protective cover includes a growing crop, including grasses, legumes, or grass-legume mixtures, standing stubble, residue with enough surface cover to provide protection, or surface roughness sufficient to provide protection.
- A vegetative cover shall be selected that is tolerant of the anticipated depth of sediment deposition.
- When the erosion-resistant strip is in permanent vegetation, the species established shall either be tolerant to herbicides used on the cropped strips or protected from damage by herbicides used on the cropped strips.
- The required width of strips shall be determined using currently approved

erosion prediction technologies to achieve the planned erosion reduction.

Specifications - Reduction Soil Erosion from Water and Transport of Sediment and Other Water-borne Contaminants

- Strip boundaries shall run parallel to each other and as close to the contour as practical.
- Base strip widths on the planning objective and the approved erosion prediction technology. Erosion-susceptible strip widths shall not exceed:
 - ◆ 50 percent of the slope length used for erosion prediction or 150 feet whichever is less where 10-year EI storm values exceed 30.
 - ◆ 50 percent of the slope length used for erosion prediction or 250 feet whichever is less where 10-year EI storms are equal to or less than 30.

A guide for maximum strip spacings for Arkansas:

Percent Slope	Maximum Width (feet)
1 - 2	100 - 130
2 - 4	90 - 100
4 - 8	70 - 90
8 - 12	60 - 80

- The erosion-resistant and erosion-susceptible strips shall be of approximately equal width. If a correction strip is required, that strip may vary in width but shall be no narrower than the widest working field implement used to traverse the strip. Width of grass strips should not be less than 15 feet for all grasses except

sericea lespedeza which shall have a minimum width of 30 feet.

- Where field contours become too sharp to keep machinery aligned with the contour during field operations, establish sod turn-strips on sharp ridge points. These strips shall be wide enough to allow the equipment to be lifted and/or turned and meet the same rows across the turn strip. Mow sod turn-strips at least once each year. Avoid mowing or harvesting during the primary nesting period of April 1st through June 15th of each year.
- Strips susceptible to erosion shall be alternated down the slope with strips of erosion-resistant cover. Erosion-susceptible strips are generally defined as consisting of row crops or fallow with less than 10 percent surface residue cover and little surface roughness during the period of time when erosion potential is the greatest. An erosion-resistant strip generally consists of dense grasses and/or legumes, hay crops nearing the end of the first year, or row crops with surface cover greater than 75 percent during the period of time when erosion potential is the greatest. In conditions where little surface cover is present, surface roughness will be considered erosion resistant if roughness depressions are at least 7 inches in depth during the period of time when erosion potential is the greatest.
- Row grades for soils with slow to very slow infiltration rates (soil hydrologic groups C or D), or for crops sensitive to ponded water conditions for periods of less than 48 hours, shall be designed with positive row drainage of not less than 0.2 percent on slopes where ponding is a concern.
- The row grade shall be aligned as closely as possible to the contour to achieve the greatest erosion reduction, but still be practicable to operate equipment.
- The maximum grade of rows shall not exceed 5 percent or 0.50 times the up and down hill slope percent used for erosion prediction, whichever is less (see Considerations specific to erosion by water).
- The ridge height shall be sufficient to reduce

soil erosion compared to rows oriented up and down the slope. As a minimum, this practice shall create at least a 0.5 to 2-inch ridge height during the period of the rotation that is most vulnerable to soil erosion. The required ridge height will be determined using on-site conditions and current erosion prediction technology.

- The minimum ridge height is not required for strips of close-grown crops, such as small grains or meadow.
- The minimum ridge height is not required where the practice *residue management, no-till/strip-till* is used parallel with the strip boundaries if at least 50 percent surface residue is present between the rows after planting.
- The computation of critical slope length shall be determined using approved water erosion prediction technology.
- When *stripcropping* is applied in conjunction with *contour farming*, the critical slope length is 1.5 times the critical slope length determined for *contour farming*.
- A stripcropping layout shall not occur on a slope longer than the critical slope length unless supported by other practices that reduce slope length below critical (e.g., diversions, terraces).
- Stable outlets shall be established as necessary where runoff results in concentrated flow erosion. Acceptable stable outlets include *grassed waterways, field borders, filter strips, water and sediment control basins, or underground outlets for terraces and diversions*.
- On fields where row crops and tillage are a part of the rotation, headlands/end rows with a slope steeper than the maximum allowable row grade for that field shall be maintained in permanent sod or planted using *residue management, no-till/strip-till*.

Specifications - Reduction Soil Erosion from Wind

- Strip boundaries shall run parallel to

each other.

- Strips shall be oriented as close to perpendicular to the prevailing wind erosion direction as practical.
- The width of strips shall be determined using the currently approved wind erosion prediction technology. Calculation shall account for the effects of other practices in the conservation management system.
- The effective width of strips shall be measured along the prevailing wind erosion direction for those periods when

wind erosion is expected to occur and for which the system is designed.

- When the orientation of erosion-susceptible strips deviates from perpendicular to the prevailing wind erosion direction, the width of these strips shall be correspondingly reduced as per direction given in Wind Erosion section of the National Agronomy Manual.