

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSTRUCTION SPECIFICATIONS**

**CROSS WIND STRIPCROPPING**

**1. Scope**

The work shall consist of growing crops in alternating strips to offset adverse wind affects.

**2. Field Layout**

Parallel planted strips or alternating planted and fallow strips will be laid out across the field at an angle from 65 to 90 degrees to the direction of prevailing erosive winds as shown on the drawing and specified on the Practice Requirements Job Sheet.

Strips will be designed for width and direction according to procedures as described in the National Agronomy Manual, 3<sup>rd</sup> edition, June 2002, Part 502, Section 502.34, or utilizing the Kansas version of the WEQ (Wind Erosion Equation) Excel Spreadsheet to meet the wind erosion control and/or the crop tolerance (Table 502-4 or The National Agronomy Manual, 3<sup>rd</sup> edition, June 2002, or Table 1 of Conservation Practice Standard 589B, Cross Wind Stripcropping) objectives.

The width of strips shall not exceed the width specified on the Practice Requirements Job Sheet as determined by the use of the WEQ or other approved wind erosion prediction technology.

The maximum strip width will be 660 feet and will be measured along the prevailing erosive wind direction for the critical wind erosion management period.

Strip widths will be compatible with planting equipment widths.

Strips of growing crops susceptible to wind erosion must be alternated with strips having a protective cover that is resistant to wind erosion. Strips of protective cover may be the same width as erosion susceptible strips, but shall not be less than 25 feet.

Strips will be approximately uniform in width; however, field edge strips widths may be irregular.

When narrow strips of tall growing wind tolerant crops are planned to protect wider strips of wind sensitive crops, the width between the protective strips shall be no more than 20 times the height of the barrier strips.

Protective cover strips shall be growing crops or crop residue, which provide protective cover during periods when wind erosion is expected to occur. Acceptable protective cover includes growing crops, grasses, legumes, grass-legume mixtures, standing stubble, or tilled residue (ridge roughness or random roughness will be include as tilled residue).

Protective cover will have a near zero predicted wind erosion rate. Tables 1a and 1b show the amount of Flat Small Grain Equivalent needed to achieve a near zero rate of erosion.

See Exhibit 502-10 of the National Agronomy Manual for Small Grain Equivalent tables for various crops.

**Table 1a**

(Approximate WEQ lbs./ac. of Small Grain Equivalent required to have a protected condition)

K=1.0

	<b><u>I = 48</u></b>	<b>I = 56</b> (lbs./ac.)	<b>I = 86</b> (lbs./ac.)	<b>I = 134</b> (lbs./ac.)	<b>I = 250</b> (lbs./ac.)
<b>60</b>	1500	1750	2000	2500	2750
<b>80</b>	2000	2000	2250	2750	3000
<b>100</b>	2000	2000	2500	2750	3500
<b>120</b>	2000	2250	3000	3000	4000

**Table 1b**

(Approximate WEQ lbs./ac. of Small Grain Equivalent required to have a protected condition)

K = 0.5

	<b><u>I = 48</u></b>	<b>I = 56</b> (lbs./ac.)	<b>I = 86</b> (lbs./ac.)	<b>I = 134</b> (lbs./ac.)	<b>I = 250</b> (lbs./ac.)
<b>60</b>	1250	1250	1500	2000	2250
<b>80</b>	1250	1500	1750	2000	2750
<b>100</b>	1500	1500	2000	2250	2750
<b>120</b>	1500	1750	2000	2500	2750

**3. Maintenance**

Strips shall be established each year in a manner that provides the designed widths and vegetative covers during the critical wind erosion period(s) specified on the Practice Requirements Job Sheet.

**4. Other Requirements**

Operations shall be done in such a manner that erosion and air and water pollution are minimized and held within legal limits.

The owner, operator, contractor, and other persons shall conduct all work and operations in accordance with proper safety codes for the type of equipment and operations being performed with due regard for the safety of all persons and their property.