

GUYING  
INSULATED WIRES

1. GENERAL

1.01 This section covers the guying requirements for B Urban and B or C Rural wire which are currently standard for use in this area.

1.02 The guying requirements for these wires will vary depending upon type and number of facilities, span lengths and stringing tensions involved.

1.03 Where guying is required for these wires, except as noted in this section, determine the size of the guys by using the wire equivalents in the following table for each Urban or Rural wire placed.

| WIRE EQUIVALENTS      |                       |              |
|-----------------------|-----------------------|--------------|
| Span Length<br>- Feet | B Rural or Urban Wire | C Rural Wire |
| Up to 250             | 3                     | 2            |
| 250 - 450             | 4                     | 2 1/2        |
| 450 - 600             | 5                     | 3            |

1.04 Where Urban or Rural wire and telephone cable or open wire are terminated from opposite directions, guying for this wire is not required unless its wire equivalent exceeds the wire equivalent of the cable and/or open wire terminated in the opposite direction.

1.05 The size of guys required for wire loads with values intermediate or less than those shown on the Guy Rule may be determined as not less than one tenth of the guying that would be required for ten times the load.

Example: For a wire equivalent of three, determine by the Guy Rule the guying required for 3x10 or 30 wires and place not less than one tenth the amount of guying required for the 30 wires.

**2. PLACED AT DOUBLE RECOMMENDED SAG**

2.01 When Urban or Rural wire is placed at span lengths of 200 feet or less at double the recommended sag and the poles at the corners and at dead-ends are class 5 or larger NO GUYING is required for the following conditions:

- (a) When using one of these wires at corners not exceeding 50 feet of pull or at a dead-end.

Note: For the purpose of this paragraph a dead-end is equal to 50 feet of pull.

- (b) When the number of these wires times the pull of the corner in feet does not exceed 50.

Example: Two of these wires will not require guying for a corner with 25 feet of pull or less.

**3. PLACED AT RECOMMENDED SAG**

3.01 Where Urban or Rural wire is placed on a pole line and there is no paralleling telephone aerial cable or open wire the required guys shall be placed at all dead-ends and at corners where the pull exceeds 10 feet.

3.02 Where Urban or Rural wire is placed paralleling a telephone cable on the same pole line and the lead is guyed in accordance with the standard guying practices NO additional guying is required under the following conditions:

- (a) If the strand tension at 60°F with cable in place as measured or as shown in other practices is less than the tension given in the following table NO additional guying for these wires will be required at corners or cable dead-ends.

**MAXIMUM STRAND TENSION - CABLE IN PLACE**  
For Adding Insulated Wires

| WIRE NUMBER | B Urban or B and C Rural |                |
|-------------|--------------------------|----------------|
|             | 1 Wire                   | 2 Wires        |
| Strand      |                          |                |
| 6M          | 2000 Lbs.                | 1400 Lbs.      |
| 10M         | 4000 Lbs.                | 3400 Lbs.      |
| 2-6M        | Avg. 2300 Lbs.           | Avg. 2000 Lbs. |

Note: Where additional guying is required due to the addition of Urban or Rural Wire to a cable lead, it will usually be more economical to place a separate guy for the wire.

3.03 Where Urban or Rural wire is placed paralleling telephone open wire on the same pole line, convert all facilities to equivalent number of wires to determine whether existing guys are adequate for the loads or the amount of additional guying required.