OVERVIEW

The following sag chart may be used to determine the minimum recommended installation sag for TFC 0.500 inch messengered cable. The chart includes sag for three sizes of messenger (i.e., 0.109 inch, 0.134 inch, and 0.1875 [3/16] inch) for various span lengths.

MINIMUM SAG

The chart, developed from calculations, is based on cable in a heavy loading district (i.e., 0.5 inch radial ice, 4 pounds/square foot wind, and at 0°F). Since all of the elements of the messengered cable are essentially bound together, they all act to support the cable. However, the cable must be cut and separated from the steel to install taps. Any load on the cable is diverted to the steel, thus loading the steel wire further. Therefore, the calculations were based on limiting the maximum tension on the entire assembly to 60 percent of the breaking strength of the steel wire.

The sags are not meant to be those which one should attempt to obtain. Rather they should be considered the tightest sags for the cable to perform reliably. Wherever possible, additional sag should be used.

CAUTION

The chart is meant to minimize excessive stress on the cable. However, other factors that may apply should be considered, such as clearance restrictions with other utilities and state, local, or other safety codes.

Minimum Installation Sag

For Times Fiber 1/2 Inch Messengered Cable