



# Elevator Wire Rope

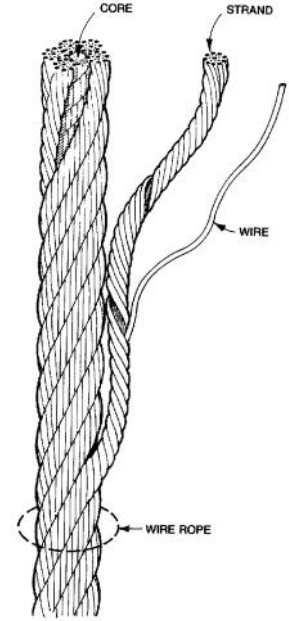
## Wire Rope Specification

Elevator Wire Rope is specified by its diameter, construction, finish, grade, lay, preforming, and core.

Diameter is expressed in inches or millimeters and is the diameter of the smallest circle which can be circumscribed about the rope. The rope construction is generally stated as the number of outside strands and the number of wires per strand.

A **Bright** finish, **Right Regular Lay**, and **Fiber Core** are understood to be specified unless otherwise stated.

Prestretching, galvanized finish, left lay, lang lay, special fiber core, non-preformed wire rope, and independent wire rope core are all available for special ordering.



## Technical Bulletins

Wirerope Works, Inc. (manufacturer of Bethlehem Elevator Wire Rope®) publishes service and technical bulletins on topics which affect the operation and service life of elevator wire rope. These include:

- 1. Elevator Rope Nomenclature
- 2. Elevator Rope Lubrication
- 3. Elevator Rope Rouging
- 4. Elevator Rope Slippage
- 5. Elevator Rope Stretch
- 6. Lubricant Build-Up
- 7. Traction Sheave Hardness
- 8. Tensioning
- 9. Fatigue
- 10. Sheaves and Grooves
- 11. Vibration
- 12. Moisture
- SB1. Elevator Rope Investigation #1
- SB2. Elevator Rope Investigation #2

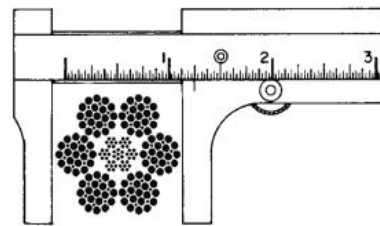


## Wire Rope Diameter

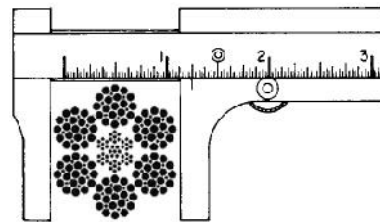
The first differentiation of wire rope is by diameter.

The diameter is measured at the diameter of the circle formed by the extreme outer dimensions of the strands (See figs. at right). New wire rope is manufactured to an oversized diameter of approximately 2-1/2%.

This allows for the normal reduction of diameter experienced when a new rope is placed under load because of constructional stretch.



The RIGHT Way



The WRONG Way