

Installation Data for High-Flex Cable in a Cable Track

When selecting cable for cable track the following criteria should be taken into consideration:

Environmental Conditions

Different materials are designed for different environmental conditions. The following list is some of the most common environmental conditions to be considered:

- Abrasives
- Acids
- Alcohols
- Alkali'
- Cold/Hot Temperatures
- Flame
- Indoor/Outdoor use
- Moisture
- Petroleum Products/Gasoline
- Oxidation
- Oils
- Ozone
- Sunlight

Other Factors to Consider

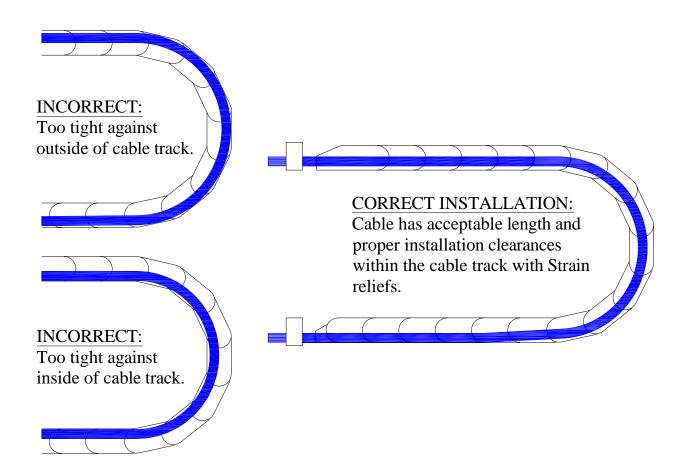
- Traveling Speed and Distance
- Frequency of Operation
- Minimum Bend Radius
- Shielding

Successful installation will greatly increase by following these guidelines:

- 1. Do not exceed the recommended minimum bend radius of the cable. This is based on a general application at a normal operating temperature. Many times a larger bend radius than the minimum will increase the service life of the cable.
- 2. Prepare the cable for torsion-free installation without twists, bends or kinks. Always unwind the cable from the outside layer of the reel or spool. Never pull a cable from a coil. Lay out the cable or hang it for 24 hours prior to installation. This will relax any remaining stresses resulting from production, transit, or storage. If the cable cannot be unstressed and still maintains a 'coil memory', shake it out by grasping the cable at its middle and vigorously shake the cable as you move to each end.
- 3. Once the cable is ready, wrap each end of the cable with non-residue producing identification tape and indicate the top of each cable end. Maintain this alignment throughout installation. This reduces the possibility of twist in the cable during installation.

- 4. Evaluate the weight and size of each cable. The cables, by weight, must be evenly distributed in the track. Place the heavier cables toward the outside of the track and the lighter ones toward the center. For a cable track that is side mounted, always place the larger cables toward the outside and the smaller cables toward the inside of the track.
- 5. Place the cables in the track in a 'working position' and loosely side by side. As a rule, allow at least 10% more of the cables diameter within the internal dimensions of the cable track. Do not weave the cables between or around other cables in the track. If spacers are provided in the track, separate the larger cables from smaller cables.

Important - Cables must not push tightly against the inner or outer curve of the track and never fasten cables to the track or each other.



- 6. Locate the proper attachment points for saddle clamps and affix at both ends of the cable track. Do not over tighten. The purpose for saddle clamps is to distribute the pressure evenly over a larger area of the jacket which reduces the possibility of crushing the conductors.
- After the cable is installed, it should be cycled through several flex operations. During these
 initial flex operations observe cable movement and check for freedom from binding, rubbing,
 and pulling. It is critical that all cables move with complete freedom, throughout the cable
 track.