

Sleeves vs Wire Rope Clips

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Fehr Bros has been making safety cables for the Stage Lighting Industry for many years and we have significant experience in the good practices that should be used in securing equipment overhead, such as fans, lights and rigging beams.

Our experience and significant testing have shown that using swage sleeves on assemblies that are machine closed or tool closed, will provide a minimum strength rating equal to 100% of the cable being used. It is important to verify the swage with a Go/No-Go gauge to ensure that the fitting is closed properly. Copper swage sleeves tend to provide more resistance to cable slippage over Aluminum swage sleeves, when subjected to the types of shock loads a safety cable might experience.

Wire Rope clips are never recommended for overhead lifts and should only be used in securement when a swaged fitting is not an option. When using wire rope clips for overhead securement, forged fittings should always be used. It is important that the clips are attached correctly, tightened to the proper specifications (supplied by the manufacturer), using the correct cable turnback and minimum number of clips. Proper wire rope clip installation also requires that the assembly be placed under load, inspected and then retightened to the correct torque. Wire Rope clips should be inspected periodically for distortion, cracks and proper torque. Provided all of the above requirements are met, the assembly will reach approximately 80% of the strength rating of the cable.

The main benefits to using sleeves instead of clips are:

1. More cost effective
2. Stronger assemblies
3. Little to no post installation maintenance
4. Takes up less room than wire rope clip assemblies.
5. Better post installation appearance