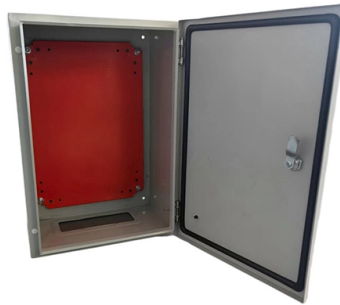


What happens if the cable tailpiece isn't laid flat



Overview

Handling Cable and Cable Drums Instruction – Do's and Don'ts Drums should never lie flat. Drums lying on the side could possibly cause damage to the cable.

Key Takeaways

If a cable tailpiece isn't laid flat, it can lead to increased heat, voltage imbalance, mechanical stress, and potential long-term damage to the cable.

Electrical Implications

When single-core cables are not laid flat, the spacing between phases may be inconsistent, which can increase magnetic interference and voltage drop due to the alternating magnetic fields generated by each conductor. In flat formations, the central phase is particularly susceptible to higher running temperatures and voltage imbalance if the cables are not properly aligned. This can reduce the current-carrying capacity and affect overall system efficiency.

Mechanical and Installation Risks

Improperly laid tailpieces can introduce torsion, bending, or tension in the cable, especially near bends or connection points. This can cause damage to the cable sheath or armour, including splits, bird-caging, or compression of internal conductors. Over time, these mechanical stresses may lead to premature failure, particularly under fault conditions where electromechanical forces act on the cables.

Operational and Safety Concerns

A tailpiece that isn't flat may compromise heat dissipation, leading to localized overheating. This can accelerate insulation degradation and increase the risk of electrical faults. Additionally, misaligned cables may not be adequately supported by cleats or trays, increasing the likelihood of movement during operation, which can further stress the cable and its connections.

Best Practices

Ensure the tailpiece is laid flat and in contact with adjacent sheaths to minimize inductive reactance and voltage drop. Use proper cleats and supports to maintain alignment and prevent movement under normal and fault conditions. Avoid excessive bending or twisting during installation, and respect the minimum bend radius specified by the manufacturer.

Protect cut ends with heat-shrinkable caps to prevent moisture ingress, which can exacerbate damage if the tailpiece is misaligned. Properly laying the cable tailpiece flat ensures optimal electrical performance, mechanical integrity, and long-term reliability of the installation.

Article Content

Handling Cable and Cable Drums Instruction – Do's and Don'ts

Drums should never lie flat. Drums lying on the side could possibly cause damage to the cable. The weight of cable could possibly flatten the cable during transportation. If there are several drums, take

Cable Placing Checklist and Handling: Squirting, Tangling ...

There are two common causes of cable squirting: dimensional instability of the reel and unequal tensions along the cable. Dimensional instability most often results when the flange bolts

Wire Cable Handling and Installation Engineering Guide

If the cable needs to be pulled through the trench, the best way to do so is to support the cable on temporary rollers so that the cable does not drag over the soil or sand bed.

Wire & Cable Handling and Installation Engineering Guide

The cable rollers should be contoured so that the cable will not ride off the end of the roller or be “pinched” into a sheave contour diameter that is smaller than that of the cable.

Cable Handling And Testing Procedures: Hipot & IR

Failure of the cable or cable accessories may result unless the voltage is rapidly reduced. Otherwise, the leakage current should stabilize after about 5 minutes.

Pocket guide to cable management

Before insertion in the cable tray or track, and before use of overhead suspension, it is important that the cable(s) be laid out or hung prior to installation long enough to relax any stresses and remove any

CABLE HANDLING, LAYING AND RECOVERY

Catenary With Slack performs a stationary cable lay analysis. With bottom slack, the cable bottom tension is zero, resulting in a straight line lay configuration.

Keep the cable protected until it is used

Limit rolling distance to five metres. If it is rolled beyond this limit, the cable wind will come too tight and cut off the rope holding the cable end. This may deform the cable and make it unfit for use. Once

Top Dos and Don'ts – Cable Delivery, Pulling and Installation

Some cable is initially pulled in one direction, then the remaining cable is laid out from the drum before being pulled in another direction. This approach can cause significant damage to a cable that cannot

A Guideline for Laying of Cables and Installation of Sleeves

Multiple bending occurs mainly during the laying process. Cables are laid under tension around deflector rolls. The particular stress of multiple bending lies in the alternating stress on the materials, which

Acoustic Guitar

A normal flat top guitar has strings angled back over the bridge saddle to the pins, and that takes care of it. If you took a flat top guitar and set it up with a tailpiece instead of bridge pins, you'd need to make

What to do When Your Tailpiece Inserts Come Loose

It primarily happens with brands like Epiphone, but not exclusively. Here is a relatively easy method of correcting the problem It doesn't cost much to have the repair done by a professional.

7 Guidelines for Cable Installation

Proper cable installation is crucial to achieving maximum cable performance and extending service life. Following a few simple, easy-to-implement installation best practices can mean the difference

Keep the cable protected until it is used Drum handling and storage

Keep the cable protected until e correctly, the drum and in turn the Cable wound over it can be damaged. At times, damage might not be discovered until The purpose of this guide is to illustrate,

Luthier question: bridge v. tailpiece

This is a question for the builders here. I've been wondering about the one-piece bridges most flat top acoustics have today v. the bridge + tailpiece many archtops have. As I understand it,

POWER CABLE INSTALLATION GUIDE

USING THIS GUIDE Southwire Company's Power Cable Installation Guide provides installation information for extruded dielectric power cable systems. This guide covers copper and aluminum

Sink Drain and P-Trap Doesn't Line Up

Quick Column Summary: Drain tailpiece does not line up Flexible tailpiece barely fits Find the right fitting Jesse Shumate, who decided she wanted to be a master plumber like me, wrote: "I installed new

Cable Placing Checklist and Handling: Squirting, Tangling ...

AEN165, Revision 5 This Applications Engineering Note (AE Note) addresses common issues regarding cable pay-off during outside plant installations known as cable squirting, cable

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

