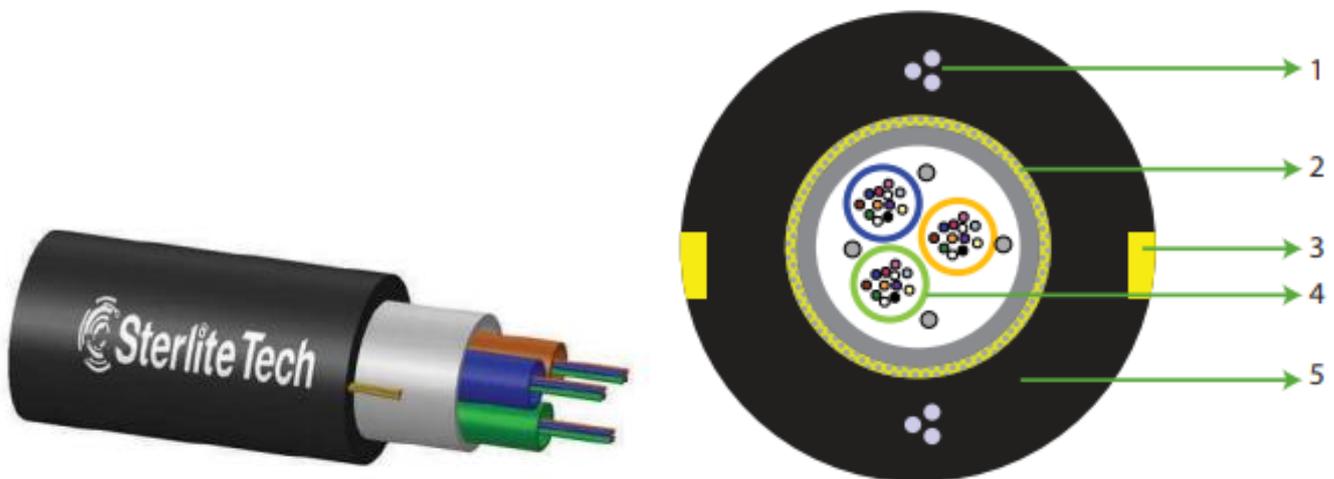


# Sterlite Tech's Work Safe Aerial Lite Drop Cable

Sterlite Tech's Work Safe Aerial Lite Drop Cable combines a predictable break load range of 1350N-1800N and Micro Module Buffer tubes. In the event of a vehicle strike, the former ensures the cable breaks first, avoiding damage to supporting pole structures and surrounding properties/people, and minimising service downtime/repairs. The latter reduces repair and maintenance requirements and costs.

## Typical Construction of Cable



1. EMBEDDED STRENGTH MEMBER
2. ARAMID YARNS
3. STRIPE MARKING ON SHEATH
4. SEMI DRY MICROMODULES WITH FIBRES
5. OUTER SHEATH



Overhead cables provide an unobtrusive, convenient and cost-effective way for data transmission but also come with drawbacks, such as susceptibility to external hazards like high winds, extreme temperatures, falling tree branches and vehicle accidents.

Consequently, robust tensile strength (resistance to breakage) and a host of other mechanical features are vital – but with this comes another risk. In the event of high-sided vehicle strikes on the poles or support structures, aerial cables' superior tensile strength means the cables don't break at the critical point, causing the aerial pole structures to collapse and potentially leading to lengthy and costly repairs to large parts of the infrastructure. In extreme cases, injury to personnel and damage to nearby properties is also possible.



To solve this problem and reduce operators' repair time and cost, Sterlite Tech has innovated its aerial cable with not one but two revolutionary features: a predictable break load range of 1350N-1800N and Micro Module Buffer tubes.

### **Innovation Without Compromise**

Extensively used in densely populated urban cities, aerial cables connect homes and businesses to fibre quickly and cost-effectively for long distance transmission. However, all aerial cables face the challenge of isolating damage caused by external impact – particularly vehicle strikes and falling trees. In these cases, the high minimum tensile strength and crush resistance of the cable means the cable doesn't break, resulting in the collapse of pole structures and potential damage to life and property. Due to their susceptibility to external hazards, tensile strength is a very critical mechanical feature of any aerial cable, meaning that compromising on this is not an option with any fragility likely to result in increased repair needs and bills.

To address this problem, Sterlite Tech used its expertise in fibre optic cables to produce a new type of aerial cable which has the best of both worlds – the required tensile strength and an optimum predictable point of breakage. With a minimum tensile strength sufficient to support installations up to 55m, the Sterlite Tech Work Safe Aerial Fibre Optic Cable has maximum crush resistance – but also has a predictable breaking load range of 1350-1800N, ensuring predictable cable failure or breakage. This predictable break load range is below the breaking strength of the pole structure, meaning that in the event of a vehicle strike, the cable will break first without damaging the supporting pole structure, surrounding property and working personnel.

### **Minimising Maintenance Costs**

Not satisfied with this single innovation, Sterlite Tech also wanted to address operators' ongoing maintenance requirements after recognising that fibre repairs often involved lengthy and costly operations.

Sterlite Tech's unique solution to this problem is its Micro Module Buffer tubes, which provide buffer tube-like organisation but are much smaller and flexible than regular buffer tubes. Made with very soft and flexible thermoplastic material, the tubes can be easily stripped off and removed without the use of tools. This is especially useful for ensuring easy mid span access for repair and maintenance requirements. Despite being soft and flexible, these micro modules are kink or twist resistant.

## **Applications**

- SUITABLE FOR USE AS A 55M SHORT SPAN AERIAL CABLE TO DELIVER FIBRE TO REMOTE LOCATIONS, DROP TO CUSTOMER, BUSINESS PREMISES IN FTTH APPLICATIONS
- EASY TO INSTALL FINAL INSTALLATION OVER STANDARD WOODEN POLE AERIAL SUPPORT STRUCTURES
- REDUCES THE COMPLEXITY OF NETWORK MAINTENANCE AND UPGRADES AND IMPROVES THE END USER EXPERIENCE.



## Features and Benefits

- Safe, compact, cost effective and easy to use.
- Reduced diameter micro-modules manufactured from soft and flexible elastomeric material.
- Diametrically opposed embedded metallic strength members provides predictable breaking load and excellent crush protection performance.
- Fibre micro-modules are kink resistant and easily removed without the need for tools.
- Fast and easy mid span access.
- Ultra-compact, easier storage and faster installation.
- Longitudinal moisture protection is enabled by water blocking compounds in tube and core.
- UV protected.
- Tightly controlled physical parameters.

The cable also complies to IEC.60794 series, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T Recommendations.

### About Sterlite Tech:

Sterlite Technologies Ltd [BSE: 532374, NSE: STRTECH], is a global technology leader that designs, builds and manages smarter digital networks. Sterlite Tech engages with customers in more than 100 countries, with a digital web-scale offering across products, services and software. The Company has global scale manufacturing facilities in India, Italy, China & Brazil and two Software Delivery Centres in India. Sterlite Tech is home to India's only Centre of Excellence for broadband research and Centre for Smarter Networks for next generation network applications. Projects undertaken by the company include intrusion-proof smarter data network for the Armed Forces, rural broadband for BharatNet, Smart Cities' development, and establishing high-speed Fibre-to-the-Home (FTTH) networks. For more details, visit [www.sterlitetech.com](http://www.sterlitetech.com) and [telecom.sales@sterlite.com](mailto:telecom.sales@sterlite.com)

