

Case Study

Liquid Telecom - A Zimbabwe Success

Location: Zimbabwe, Africa

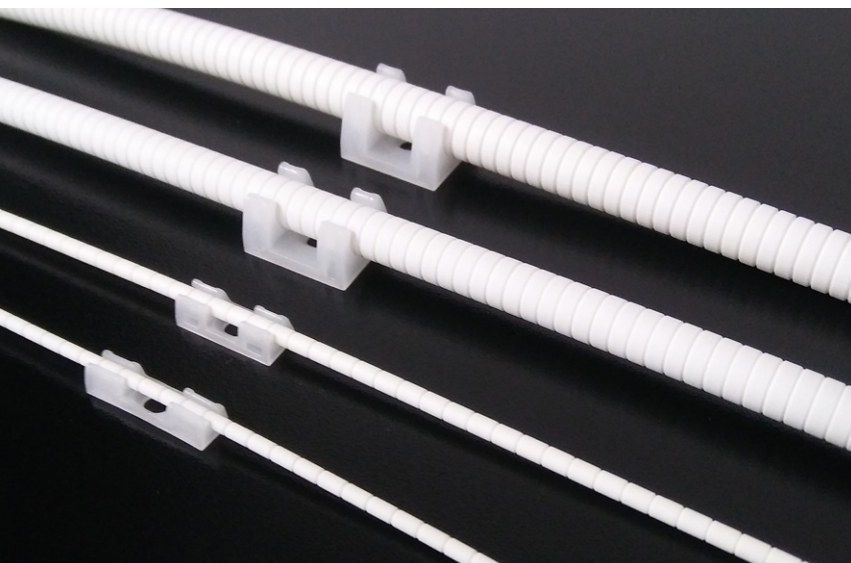
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Deploying Miniflex Pushable Fiber to more than 100,000 FTTH users in Zimbabwe

Background

Liquid Telecom has built Africa's largest independent fiber network, which runs from the north of Uganda to Cape Town, covering Africa's fastest-growing economies, where no fixed network has ever existed before. The network currently spans over 50,000 km across borders and includes The East Africa Fiber Ring, and the first regional fiber ring on the continent and operates throughout Botswana, DRC, Kenya, Lesotho, Mauritius, Rwanda, South Africa, Uganda, Zambia, Zimbabwe and in the UK under a number of different wholesale, enterprise and retail brands.

Liquid Telecom's ground-breaking work was recognized at Capacity Magazine's Annual Telecoms Industry Awards when they were named Best African Wholesale Carrier six years in a row. They have also gained recognition at the AfricaCom Awards, SatCom Stars Awards and the Global Telecom Business awards.



Miniflex® hinge technology offers unique strength and flexibility performance



Products Used

- ✓ Miniflex® fiber cable
- ✓ 2-Fiber cable
- ✓ 12V pushable fiber install unit
- ✓ Fusion Field Splicer
- ✓ Indoor customer termination box

OTP Installer

QuipHire Africa

Synopsis

Installing 4-Core fiber to the home (FTTH) in challenging environmental conditions, while meeting tough business case targets and tight deployment timescales.

Run Lengths

25 m up to 1,600 m

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Benefits

- ✓ 5x faster deployment time
- ✓ 10x stronger fiber protection
- ✓ Removal of need for skilled technicians
- ✓ More robust, easier to handle cable
- ✓ Lower capex than traditional installations
- ✓ Completely compatible products

Scenario

Liquid Telecom Zimbabwe's deployment sets the standard for the design, implementation and execution of FTTH networks in Africa. Liquid Telecom has transformed the landscape in Harare, passing over 100,000 homes, with an additional 30,000 homes expected within 2018/2019. Additionally, it plans to expand the network nationwide.

From the outset, Liquid Telecom had two key aims. Firstly, it understood the need for careful planning to allow for large scale expansion. This was combined with the requirement for high quality materials to enable installation teams to deliver on its high expectations. These aims were the driving factor in selecting PPC's Miniflex® 2-Core drop cable exclusively for the last drop to all its current 30,000 customers.

Faced with the challenge of building a network from scratch, Liquid Telecom used a combination of 7, 12, and 24-way ducts, breaking off into each home via a dedicated 5 & 8 mm microduct. This allowed the company to respond efficiently to customer demands, with a proven network design that maximized return on investment.

One of the keys to success was the adoption of PPC's Miniflex products. This enabled local installers and contractors to reduce installation times by up to a factor of five, and virtually removed installation cable faults and the need for remedial work.



QuipHire Africa installation team installing at Liquid Telecom Zimbabwe customer premises

FTTH Scope

Liquid Telecom adopted the traditional methodology of using blown fiber with installation distances from the manholes to premises varying from 25 to 1,600 m (25 to 5,249 ft). In many cases there were numerous ducting joints that meant the Miniflex drop cable had to be tough, flexible and lightweight in order to cover these distances.

Additionally, the drop cable had to be able to withstand the demands of the Zimbabwean environment, yet blend into the customer's home without the need for additional trunking. Liquid Telecom therefore standardized on the white 2-Core Miniflex, which offers unrivalled 3,500N crush resistance, combined with 5x installation bend radius, yet weighs less than 8 kg (17.6 lb) per km (3,281 ft). The clean white colour blends into most homes.

Hand pushable Miniflex for FTTH installations

A unique benefit of the patented Miniflex cable is its ability to be pushed by hand into 5 & 8 mm microducts, up to a distance of 150 m. This has further helped installation teams improve performance. It dramatically reduces the time required onsite, while freeing up more valuable equipment to be used for longer installations.

"Miniflex increased the productivity of my installation crews by up to 500%," says Tendai Choto, Managing Director of QuipHire. "From the moment Liquid Telecom introduced Miniflex for the final customer connection, I was immediately impressed with the cable's quality, strength and flexibility - not to mention how its unique, rugged design easily handles the environmental challenges of the FTTH in Zimbabwe."

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Driving Return on Investment

“Once the distribution cable had been deployed, it was imperative that Liquid Telecom quickly connected end users in order to rapidly expand their footprint and to maximize their return on investment,” says Simon Roberts, Sales Director of Africa and the Middle East. “All our FTTH customers to date have found that being first to market was key to their success and by selecting Miniflex® fiber cable they were able to increase installation efficiency by up to five times, something no other fiber cable can offer.”

Miniflex® fiber cable has been designed and tailored to specifically meet the demands faced by installers when deploying FTTH customer connections - namely how to quickly and efficiently get fiber into the customer premises without sacrificing quality and network longevity. Miniflex® fiber cable delivers a true outdoor/indoor performance through its UV stable white cable solution, and gives a clean customer finish.

“PPC uses only the highest quality raw materials to give the ultimate in fiber protection, while our live hinge technology gives unrivalled bend performance,” continues Roberts. “We are very happy to be the Liquid Telecom Group’s exclusive partner over these past four years, and to be such an integral part of the fiber revolution that is taking place in Zimbabwe. Through its network Liquid Telecom is transforming the economy and empowering local Zimbabweans, by allowing them to reach out and benefit from the services and information that only fiber can deliver.”

“We are privileged to have the opportunity to work with Liquid Telecom not just in Zimbabwe, but throughout the region,” says Roberts. “To see Miniflex® empowering local companies is very rewarding, as is knowing Zimbabwe’s FTTH customers are benefitting from one of the highest internet speeds in the world.”



Miniflex® cable being pushed through 5 & 8 mm microduct over distances greater than 150 m

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