



CONTACT
OKTAY ŞAHMAN 0 505 492 04 91
oktaysahman@mavifiber.com
www.mavifiber.com

### **FTTH**

Apartment Fiber Optic Connection Termination Application Problems and Mavi fiber Solution Application

### **Current Fiber Applications in Apartment**





OKTAY ŞAHMAN 0 505 492 04 91 oktaysahman@mavifiber.com

In FTTH projects, generally **Drop Cable in G.657.A2** standard is used.

Since, this cable does not provide enough flexibility for in-socket termination, the termination is done by 2 methods.



METHOD-1 Terminating the fiber coming out of the socket by mechanical connector.



**METHOD-2** Terminating the fiber coming out of the socket in Subscriber Termination Box (STB) with fusion splice.

These methods require more labor and material costs in investments, and also lead some operational difficulties.

#### General problems of both methods.





- ❖ When G.657.A2 standard Drop Cable is used, between the building system room and indoor socket (system room-shaft-weak current panel-junction-socket), the signal level attenuation because of the bendings at the route.
- **High service interruption rates, due to mechanical connector workmanship defects.**
- Requirement of labor for fusion splicing in termination box.
- Creating visual pollution due to installation of additional box on the surface or mechanical connector cable suspended from the socket on the wall.
- Furthermore, bending-induced service interruptions occurrence due to G.657-A2 interconnect fiber patchcord cable between the termination box and ONT (Optical-Electrical Converter) is in user intervention environment constantly.





# **Solution Proposal**

CONTACT
OKTAY ŞAHMAN 0 505 492 04 91
oktaysahman@mavifiber.com

## Mavi fiber Solution Application Ultra Bend-Optimized Optical Cable



The implemented solution, to eliminate **all the disadvantages** mentioned in both methods currently used

# Mavi fiber - Ultra Bend-Optimized Optical Cable



#### **Fiber Socket & Fabricated Connector**

**m**avi fiber





### **M**avi **f**iber Ultra Bend-Optimized Optical Cable

#### **Fiber Socket & Fabricated Connector**



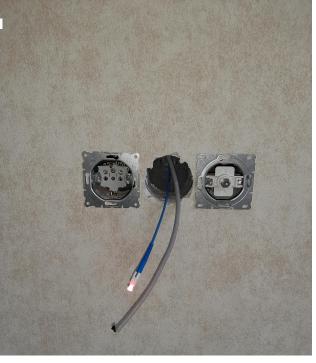


- ❖ Instead of G.657.A2, when special-production mavi fiber Ultra Bend-Optimized Optical Cable used in indoor fiber cable installation, even with bends up to 180 degrees 3mm diameter, there is only 1-2 db slimming; so termination can be done by inserting SC Fiber socket into the current data socket.
- **Because of no fusion splice box and mechanical connector are used, labor and material costs are saved.**
- ❖ Signal attenuation, communication interruption etc. problems do not happen in montage and operation processes due to cable bending.

















## mavi fiber

Ultra Bend-Optimized Optical Cable Application

Ultra Bükülmeye Optimize Edilmiş Optik Kablo Uygulama



## **REFERENCES**



- 1500 Konut EMLAK KONUT\_PASİFİK ÇİFTAY REZİDANS AVM MERKEZ ANKARA Projesi Yenimahalle –
   ANKARA
- 80 Housing KARDELENKÖY VİLLALARI Alacaatlı ANKARA
- 186 Housing BULVAR 1011 KONUTLARI İskitler ANKARA
- 48 Housing MERVE İNŞAAT KONUTLARI Şentepe ANKARA
- 22 Housing YILKINER İNŞAAT KONUTLARI Solfasol-Hasköy ANKARA
- 62 Housing **MEGA İNŞAAT KONUTLARI** Güneşevler ANKARA
- 6 Housing **BAHADIR İNŞAAT KONUTLARI** Yükseltepe ANKARA
- 30 Housing Zeytindalı Cad No 16 Ayrancı ANKARA
- 55 Housing **OVVA Konutları** Ovacık ANKARA
- 56 Housing 15 Office ELIZ KULE Ovacık ANKARA

- CONTACT
- OKTAY ŞAHMAN 0 505 492 04 91
- oktaysahman@mavifiber.com
- www.mavifiber.com
- Yenibatı Mah. 1820 Cadde Granit Sitesi 16/30 Batıkent/ANKARA/Türkiye
- Kardelen Mah. 2060 Sokak Çağlar Çarşısı No:25 Batıkent/ANKARA /Türkiye