

Messers

Drop cable installation for FTTH

-The Construction & Examples of installation for FTTH-



Telecommunication Cable System Department
Telecommunication Division

Item

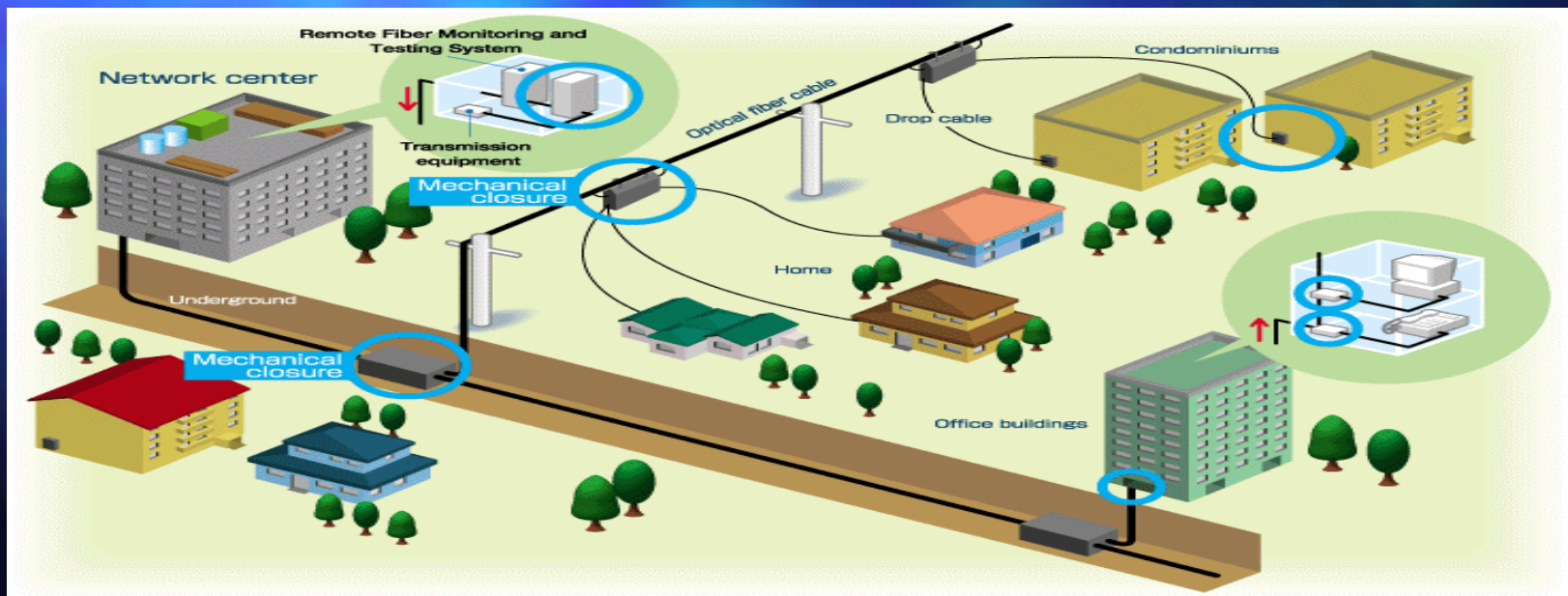
■ 1. Introduction -----	3
■ 2.The Construction of drop cable -----	4
■ 3. Installation at a Single Residential Unit - Overall View - -----	5
■ 3.1 - Drop Point with photo - -----	6
■ 3.2 - Clamping Point with photo - -----	7
■ 3.3 - Lead-in Point - -----	8
■ 4. Installation at a Multi Dwelling Unit - Overall View - -----	9
■ 4.1 - Drop Point - -----	10
■ 4.2 - From MDF to IDF - -----	11
■ 4.3 - Lead-in Point - -----	12

1. Introduction

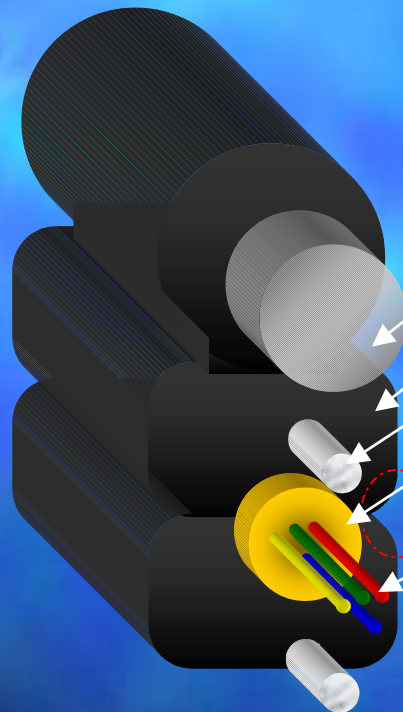
In recent years, the demand for high-speed and broad-band informational communication is rapidly increasing.



Fiber To The Home, what is called “**FTTH**” is valuable means for construction of advanced information networks.



2. The Construction of drop cable

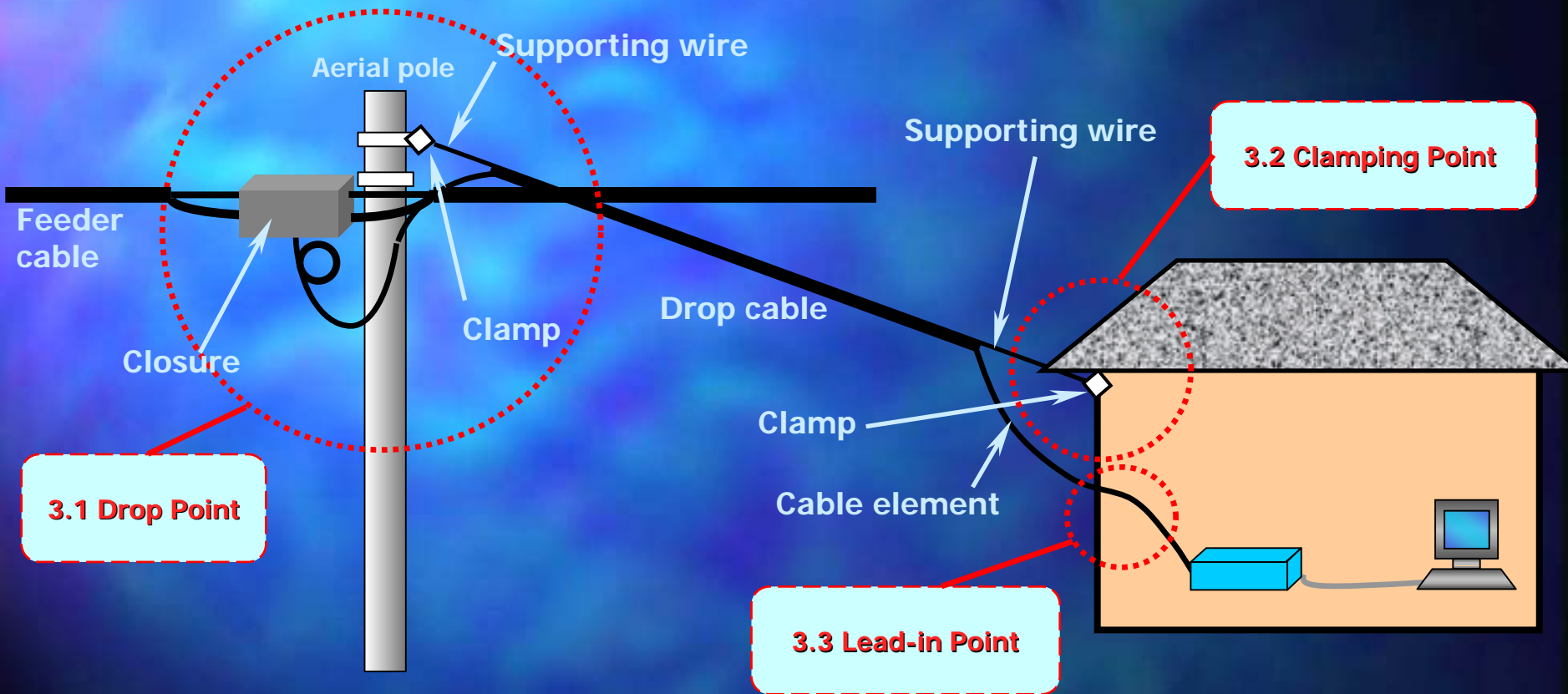


- Supporting wire
- Flame retardant polyethylene sheath
- Strength member (FRP)
- Filler (if necessary)
- Notch for pick up the fibers
- Optical fiber (up to 12 fibers)

Features

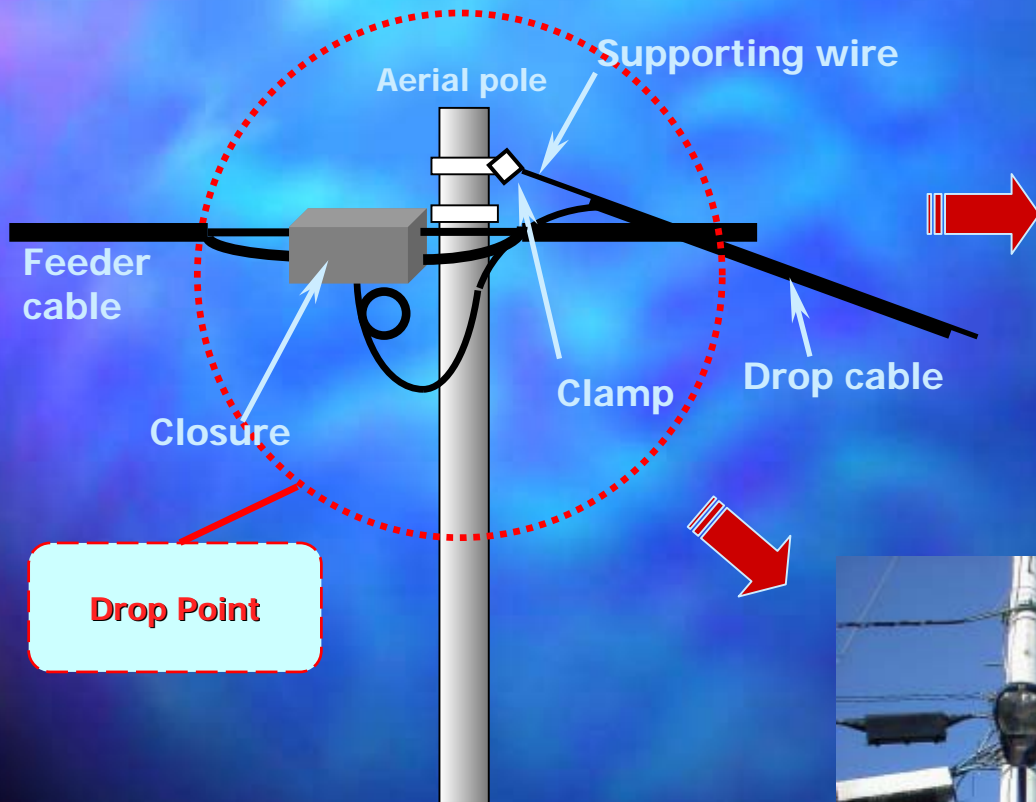
- Small diameter and Light weight
- Economical cost for overall system (Installation & Cable)
- Easy to pull out the optical fibers from the cable
- Directly installed into the house

3. Installation at a Single Residential Unit - Overall View -



Drop cable can reduce optical components and installation work with excellent performance of easy separation and quick pick up for the fiber. Drop cable can be easily installed directly into houses.

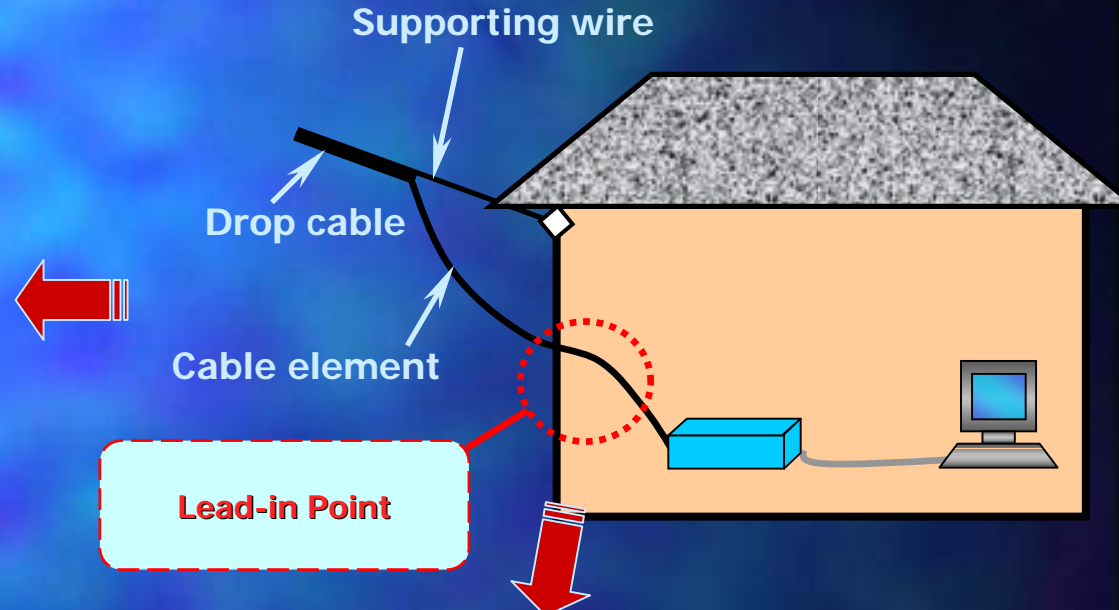
3.1 - Drop Point with photo -



3.3 - Lead-in Point with photo -



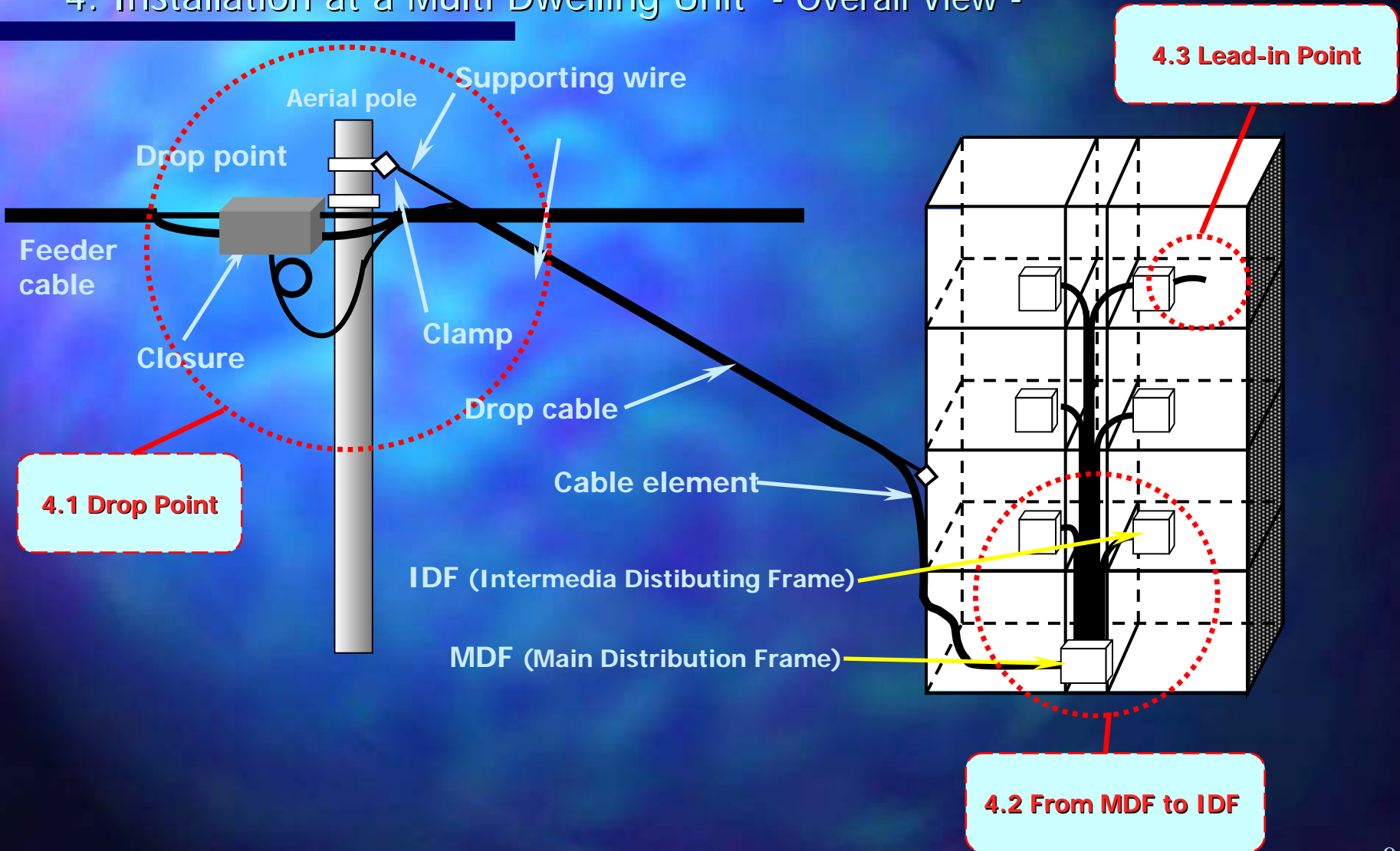
Cable element



Indoor subscriber Termination Box

Cable element

4. Installation at a Multi Dwelling Unit - Overall View -



4.1 - Drop Point with photo -



1. Installation of closure



2. Splicing within closure



3. Running along with feeder cable



4. Supporting wire of drop cable is fastened to building

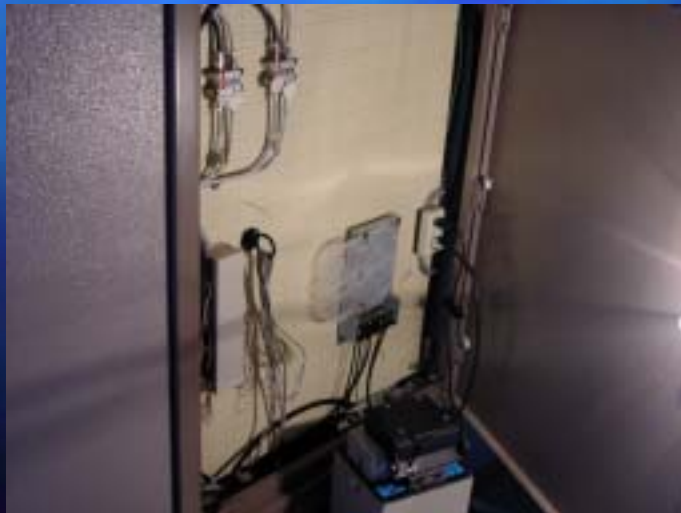
4.2 - From MDF to IDF with photo -



5. Connected to a 1x8 splitter within the MDF



6. Cable pulled through vertical conduit from MDF to IDF



7. Fusion splicing



8. Distributed from IDF to each subscriber's home

4.3 - Lead-in Point with photo -



9. Drawn into each subscriber's home



10. Connected to ONU of E-PON



11. ONU is fixed on to the wall

- This multi-dwelling unit adopted E-PON system.
- 2-fiber drop cable is dropped from an aerial closure into MDF.
- Fiber is split by 1x8 splitter in MDF.
- From MDF into each subscriber's home, 1-fiber drop cable with supporting wire is installed.