



CLEARFIELD

Fiber to Anywhere.

FTTH: Product Application Examples

Note: these are examples of deployment applications. Clearfield offers multiple deployment methods that can be tailored to your specific network needs.

Deployment Scenario:

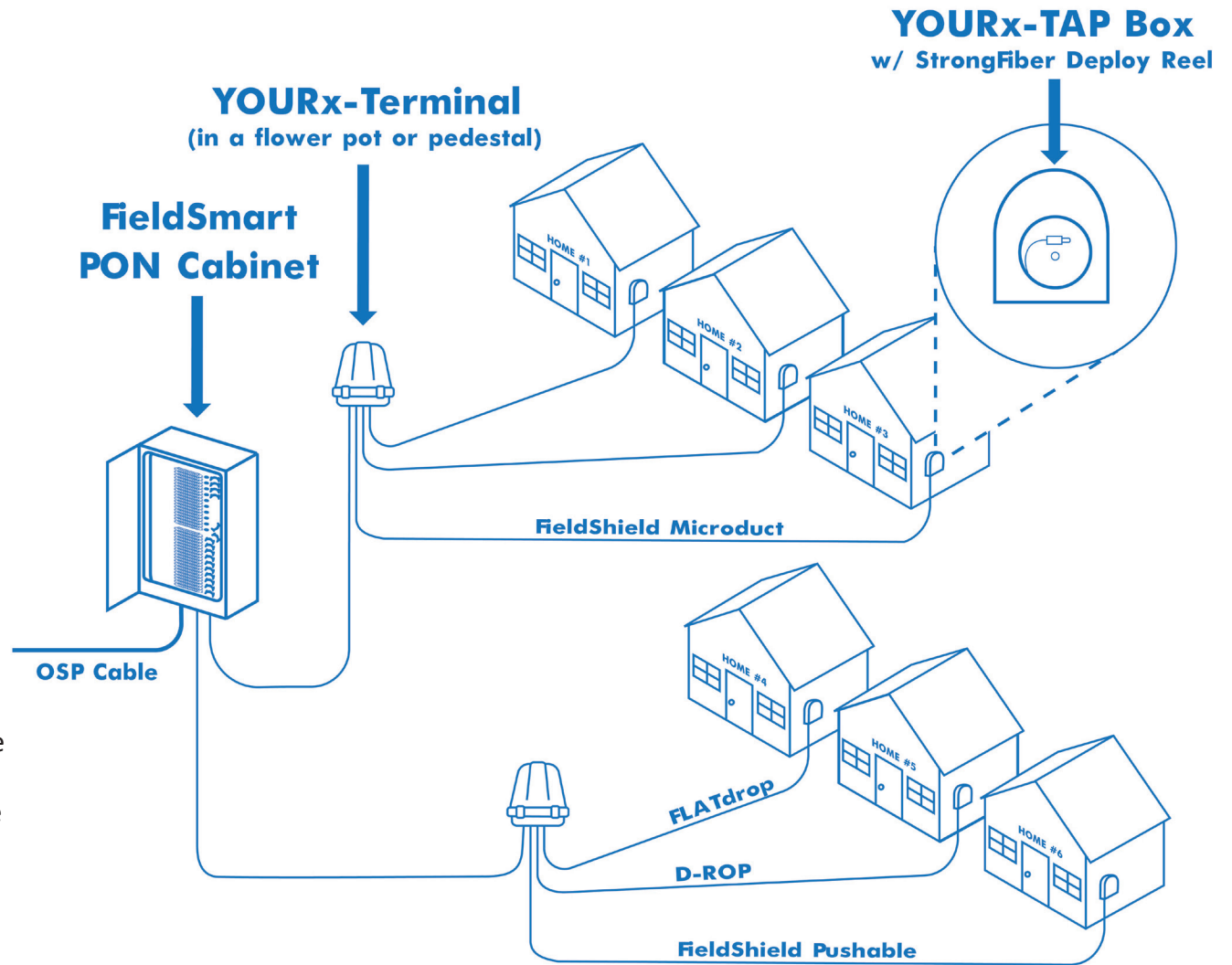
- Single, freestanding buildings
- Demarc location varies
- Distance from distribution point varies
- Variable landscapes

Challenges:

- Each home is constructed differently, even within the same neighborhood
- Fiber entry points vary greatly, requiring multiple drop options
- Driveways, sidewalks, planting beds, drainage and irrigation systems must be navigated
- Soil conditions of all types may be encountered

Solution:

- FieldShield microducts can be placed in a multitude of soil conditions, routed under sidewalks and driveways with or around existing utilities while providing a distinct pathway that can be repaired if damaged.
- FieldShield Pushable Fiber is terminated in the YOURx-Terminal and FieldShield drops leave the terminal to run and easily connected to the YOURx-TAP, located on the side of the home.
- Each FieldShield drop solution has the same pre-terminated and tested connector of the highest quality. The technician has only to snap on an inner and outer housing - completing the connection in minutes.



FTTH - GARDEN STYLE/CONDO



Deployment Scenario:

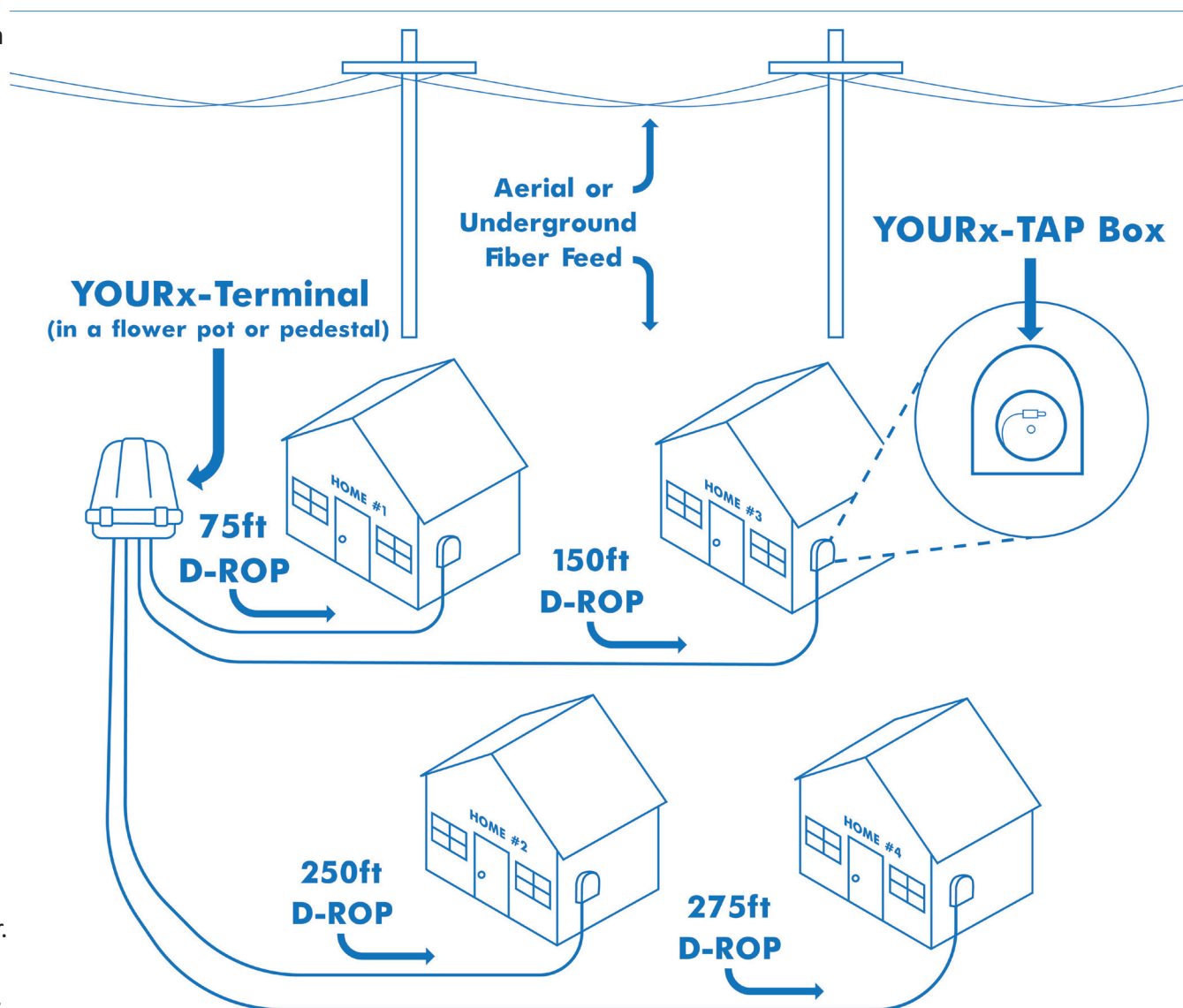
- Single story, ground level units that share common walls
- No common Demarc
- Buildings may be fed from same distribution terminal at the street
- Soil conditions of all types may be encountered

Challenges:

- Location of Demarc may be on opposite sides of building
- Most are fed from common terminal at the street leading to long drop lengths
- Some may require additional fiber from Demarc into individual living units
- Multiple building clusters and variable building orientations in same community
- Driveways, sidewalks, planting beds, drainage and irrigation systems must be navigated
- Soil conditions of all types may be encountered

Solution:

- Option to feed the FieldShield MPO assembly to the YOURx-Terminal aerially from a YOURx-Aerial Terminal or buried from a FieldSmart PON Cabinet.
- The YOURx-Terminal provides a single distribution point for FieldShield D-ROP pre-terminated cable assemblies to the YOURx-TAP on each end of the building cluster.
- Solution provides individual points of demarcation and testing for each living unit. The technician has only to snap on an inner and outer housing to complete the connection.



Deployment Scenario:

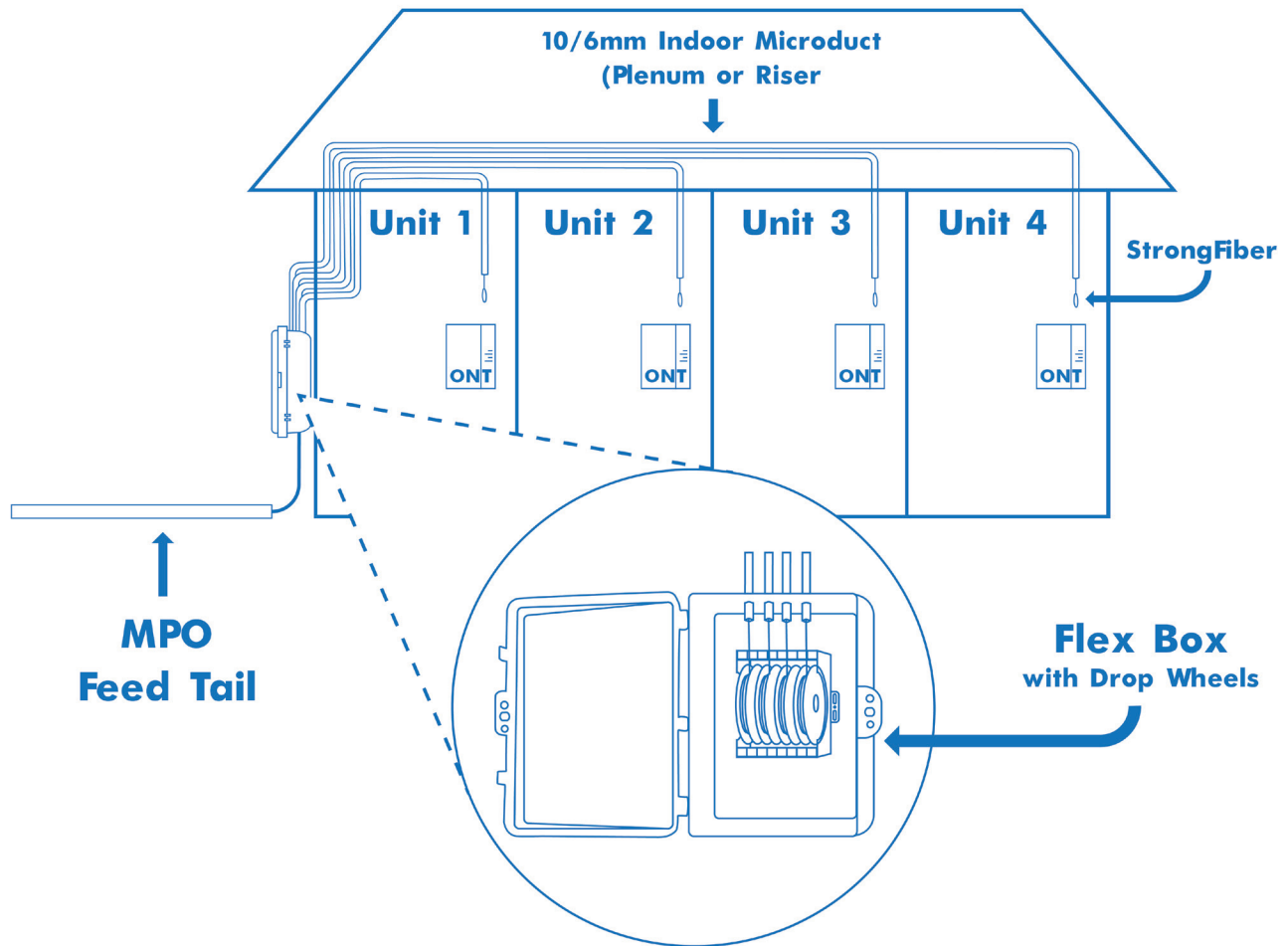
- Multiple units in a single structure
- Units may be multi-floor, and each are individual living units
- No common communications room
- Services are typically terminated outdoors on one end of the building structure

Challenges:

- All services normally terminate on one end of the building
- Fiber for entire structure must be installed from the termination point to each living unit, typically through the attics
- Slack storage of drop is a common problem
- Routes to units must be able to be restored easily if damaged - without disruption to the homeowner

Solution:

- FieldShield pre-connectorized, pushable MPO fiber passes through FieldShield Microduct to feed a YOURx Flex Box with 900um pre-terminated StrongFiber drop wheels (up to 16 per box)
- FieldShield microduct is routed from the box to each living unit in the building cluster. Microducts can have fire rating if required by code.
- Only as much StrongFiber as needed is pulled from the drop wheel to the living unit and plugged into customer equipment. Remaining slack is stored on the drop wheel inside the Flex Box. The technician then has to only snap on an inner and outer housing to complete the connection.



FTTH - DISTRIBUTED SPLIT CASCADED



CLEARFIELD

Deployment Scenario:

- Single, freestanding buildings
- Demarc location varies
- Distance from distribution point varies
- Variable landscapes
- First distribution point is fed from feed fiber via MPO
- Each downstream distribution point is fed via MPO assemblies until fiber is exhausted

Challenges:

- Each home is constructed differently, even within the same neighborhood
- Fiber entry points greatly vary requiring multiple drop options
- Driveways, sidewalks, planting beds, drainage and irrigation systems must be navigated
- Soil conditions of all types may be encountered

Solution:

- A FieldShield MPO cable assembly is fed inside a 14/10 FieldShield Microduct to the first YOURx-Terminal in line and is normally spliced into the OSP feeder cable in an existing splice location.
- The YOURx-Terminal, equipped with a splitter, picks up a single fiber from the 12 fiber MPO assembly and splits the signal to feed each home it services, allowing the remaining 11 fibers to pass through (Cascade) to the next terminal in line using a FieldShield MPO cable assembly. This cascade effect occurs until all homes are served or there are no remaining fibers in the MPO.

