

# MICRODUCT INSTALLATION OVERVIEW for MDU/MBU

TL9000



For detailed Installation Information, please refer to Technical Bulletin: "MicroDuct for Communications Systems in Multi-Dwelling Units (MDU) and Multi-Business Units (MBU)" [Document DCEB\_06004 ISS H latest document at time of this publication 3.2016]

Plenum Rated and Riser Rated MicroDucts (MD) for behind the wall use. Store inside until use.

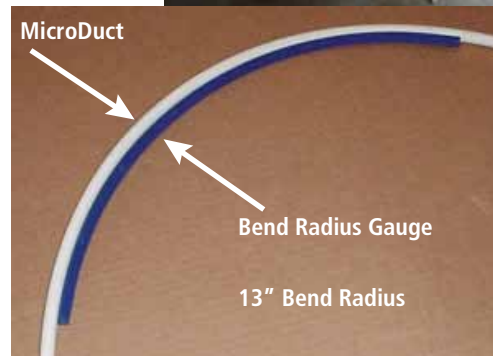
MicroDuct should payout over the top of the reel.

Choose routing with the fewest bends, avoiding exposure to possible mechanical damage (hot water pipes, steam pipes, etc) and interference from drywall installation.

When placing MicroDuct (MD):

- Number of bends should not exceed eight 90° turns, or sixteen 45° turns
- Bends of 45° or less are easier to pull through and should be used when possible
- Recommended run length should not exceed two hundred feet
- Each bend should maintain a minimum thirteen-inch radius
- Long sweeping bends are encouraged.

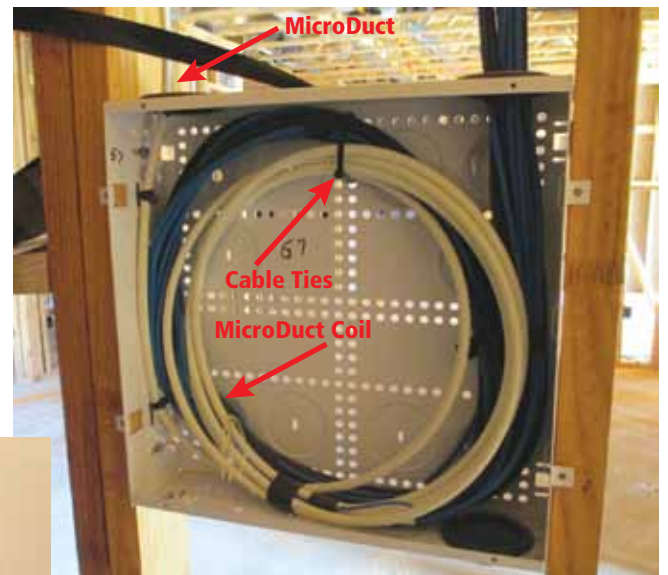
MicroDuct Bend Radius Gauge ensures that the bends in the MD have not exceeded the minimum bend radius. A larger bend radius is acceptable and even recommended. Each shipment of MicroDuct should contain a Bend Radius Gauge and will be taped to the outside of the reel.



When MD reached serving unit terminal, insert MD and pull 10' of MD into terminal housing. Coil MD and secure with cable ties. Do NOT remove the MD from the cable in the terminal housing. Secure MD with connector or a cable strap clamp. Avoid sharp bends.

If MD kinks, pull additional MD into terminal housing and remove kink or remove kinked section from MD.

Permanently label interior of each serving unit terminal so MicroDucts can be identified correctly on both ends.



## Surface Mount Equipment



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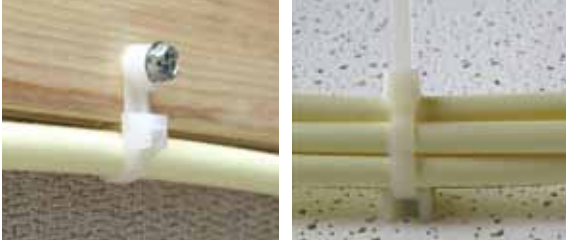
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For straight runs, either horizontal or vertical, secure MD every 16" - 24". Plastic cable strap clamps recommended.

On runs with multiple MDs, use two-hole cable straps or cable ties. MDs should be properly secured along entire length of route.



MicroDuct ready to place into Fiber Distribution Terminal



Do not over tighten cable ties or crush MD.

Label MDs at main terminal, preferable at three places, outward facing for easy ID.

For placement of MicroDucts in concrete:

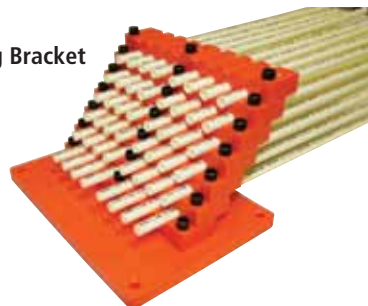
- Place MD just prior to pouring concrete
- Number of bends should not exceed eight 90° or sixteen 45° bends (45° bends are preferred) within in a 200-foot run
- Each bend should maintain a minimum twelve-inch radius
- Long sweeping bends are highly recommended
- Sleeves are recommended as a protection around the MicroDuct where it enters and exits the concrete  
Sleeves can be metal or PVC pipe, bent at a maximum 90-degree turn and have a minimum thirteen-inch radius.
- Seal both ends of MD
- Always test MD pathway before concrete is poured or walls are sealed to ensure no blockages in pathway.

For placement of Riser MicroDucts in multi-story buildings:

- Meet with owner or agent prior to beginning work
- Use Split Cable Grips at every fourth floor with an intermediate support every two floors (approx every 24 feet)
- MD can be fastened directly to walls with equally spaced cable ties attached to anchors or clamps every 24 inches
- Intermediate Split Cable grips aren't required if MD is fastened to walls or backboards
- Split Cable Grip placement details outlined in Technical Bulletin.

MicroDuct Organizing Bracket is designed to be used where 8 or more MDs are terminated.  
Details instructions for Installation of MD Organizing Bracket in Technical Bulletin DCEB-07003

MicroDuct Organizing Bracket



Outside Fiber Distribution Terminal

