Unshielded Twisted Pair Cabling Installation Practices

UTP CABLING INSTALLATION PRACTICES

- To avoid stretching, pulling tension should not exceed 110N (25 lb f) for 4-pair cables.
- **Installed bend radii shall not exceed:**
  - 4 times the cable diameter for horizontal UTP cables.
  - 10 times the cable diameter for multi-pair backbone UTP cables.
- **Avoid cable stress, as caused by:**
  - cable twist during pulling or installation
  - tension in suspended cable runs
  - tightly cinched cable ties or staples
  - tight bend radii
- Horizontal cables should be used with connecting hardware and patch cords (or jumpers) of the same performance category or higher.

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**Important Note:** Installed UTP cabling shall be classified by the least performing component in the link

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**Do's:**

- Use connecting hardware that is compatible with the installed cable.
- Terminate each horizontal cable on a dedicated telecommunications outlet.
- Locate the main cross-connect near the center of the building to limit cable distances.
- Maintain the twist of horizontal and backbone cable pairs up to the point of termination.
- Tie and dress horizontal cables neatly and with a minimum bend radius of 4 times the cable diameter.
- Place cabling at a sufficient distance from equipment that may generate high levels of electromagnetic interference.
Don'ts:

- Do not use connecting hardware that is of a lower category than the cable being used.
- Do not create multiple appearances of the same cable at several distribution points (called bridged taps).
- Do not locate cross-connects where cable distances will exceed the maximum.
- Do not leave any wire pairs untwisted.
- Do not over-tighten cable ties, use staples, or make sharp bends with cables.
- Do not place cable near equipment that may generate high levels of electromagnetic interference.