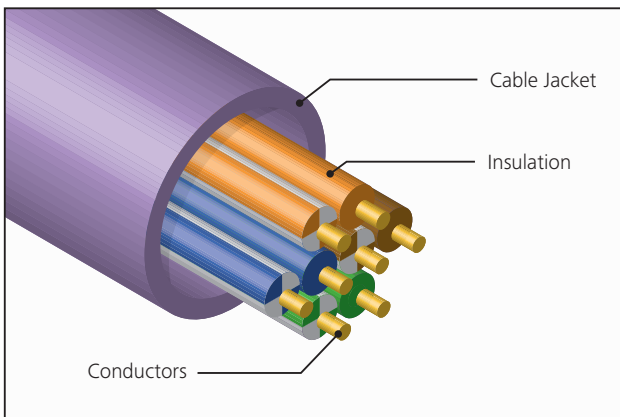


Copper Cable Cable Construction

Copper cable constructions can be translated through abbreviations. These abbreviations are relative to the level and position of screening found within the cable.

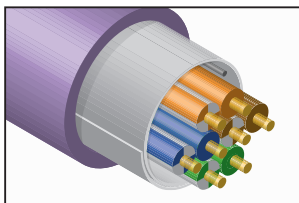


Basic cable construction.

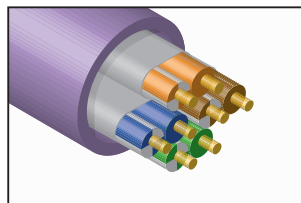
Basic Construction

The basic construction of a copper cable is always made up of;

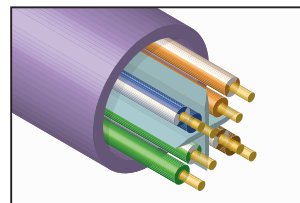
- Four pairs of twisted copper conductors
- Polyethylene insulation material that coats each copper conductor
- Cable jacket
- A cross member should be included with CAT6 or CAT6A UTP (Unshielded) Cable.



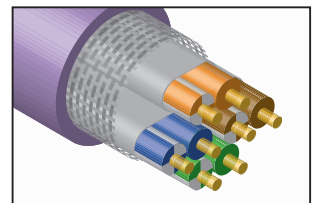
Example of screening around all four pairs.



Example of screening around each twisted pair.



Example of a cross member.



Example of braiding.

Construction Abbreviations

Referencing cable construction through abbreviations is relatively simple;

The first letter before the “/” represents the screening that surrounds all four twisted copper pairs.

The second letter found after the “/” represents the screening that surrounds each individual twisted copper pairs.

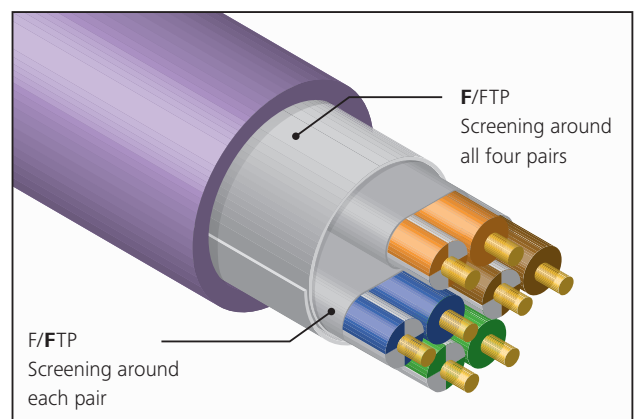
The “TP” simply means Twisted Pair



Is there screening around all four pairs?

Is there screening around each twisted pair?

Twisted Pair

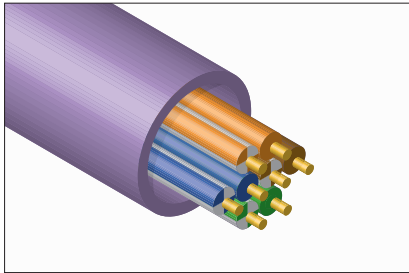


Construction abbreviations explained.

Industry Overview

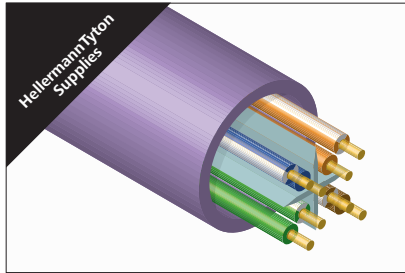
Let's take a look of some of the more typical constructions found within the Structured Cabling Industry;

U / U TP



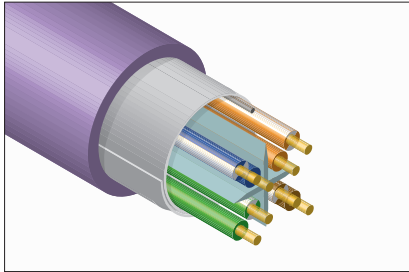
U/UTP (CAT5e)
Overall Shield
None
Pair Shield
None

U / U TP



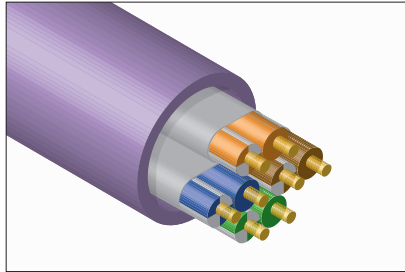
U/UTP (CAT6)
Overall Shield
None
Pair Shield
None

F / U TP



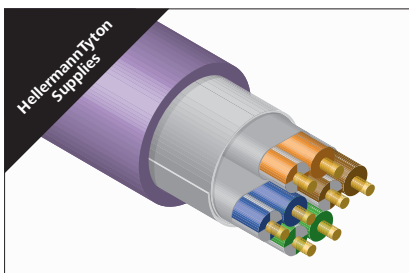
F/UTP
Overall Shield
Foil
Pair Shield
None

U / F TP



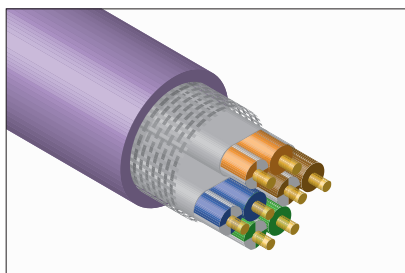
U/FTP
Overall Shield
None
Pair Shield
Foil

F / F TP



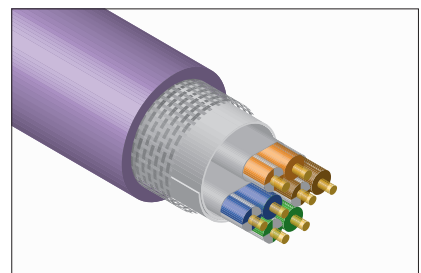
F/FTP
Overall Shield
Foil
Pair Shield
Foil

S / F TP



S/FTP
Overall Shield
Braid
Pair Shield
Foil

SF / F TP



SF/FTP
Overall Shield
Braid & Foil
Pair Shield
Foil