

In response to growing demand for data applications, premises cable performance has evolved such that several categories of transmission performance for balanced twisted pair cables have been developed. These categories are detailed below. Although some categories are no longer common, all are provided for historical purposes. The categories are hierarchical, i.e., a higher category can be substituted for any lower category, but not vice versa.

Category	Maximum Bandwidth (MHz)	Common Application(s)	Specifications	Comments
6A	500	10 Gigabit Ethernet	ANSI/TIA/EIA-568-B.2-10	Doubles the bandwidth of CAT 6 and vastly improves alien crosstalk performance
6	250	Gigabit (1000 Mbps) Ethernet	TIA/EIA-568-B.2-1-2002	Doubles the bandwidth of CAT 5e and vastly improves signal-to-noise margins.
5e	100	Gigabit (1000 Mbps) Ethernet	TIA/EIA-568-B.2-2001 ANSI/ICEA S-90-661	Characterized by tightly twisted pairs to reduce crosstalk loss.
5	100	Gigabit (1000 Mbps) Ethernet ¹ Fast (100 Mbps) Ethernet 100 Mbps TPDDI 622 Mbps ATM	TIA/EIA-568-A (Category 5) ANSI/ICEA S-90-661	No longer recognized as an appropriate medium for commercial networking installations (replaced by CAT 5e or higher).
4	20	Ethernet (10 Mbps) 16 Mbps Token Ring (IEEE 802.5)	TIA/EIA-568-A (Category 4)	No longer used.
3	16	Ethernet (10 Mbps) (IEEE 802.3) Analog Voice Telecom Closet Wiring	TIA/EIA-568-B (Category 3) ANSI/ICEA S-90-661	Minimum allowed by the FCC for horizontal cable in commercial and residential voice and data applications. Market trend is to abandon CAT 3 in favor of installing CAT 5e or higher for both data and voice.
2	4	IBM Type 3 1.544 Mbps T1 1 Base 5 (IEEE 802.3) 4 Mbps Token Ring (IEEE 802.5)	IBM Type 3 ANSI/ICEA S-80-576	No longer used
1	<1	Baseband Comm. Alarm Systems RS-232 RS-422	ANSI/ICEA S-80-576	Horizontal cable good only for alarm systems, doorbells, etc.

¹Only if additional channel requirements of TIA/EIA TSB 95 are met.