

Grades of Cabling

To correctly install structured cabling in a home, it is necessary to follow accepted cabling standards that take into account what is commonly expected by homeowners for telecommunications uses.

The TIA-570-B standards specify two levels of cabling for each location. A location can consist of a single outlet, or a single room. It is permissible to break apart the cabling within a room or space to provide separate outlets, in other words a grade 2 cabling can be installed in a single or multiple outlets within a space. For example, the 4-pair UTP cable can be separated from the 75-ohm coaxial cable to create separate television and telephone outlets. The table below shows the grades of cabling specified by the TIA-570-B standard. The two grades can be described as:

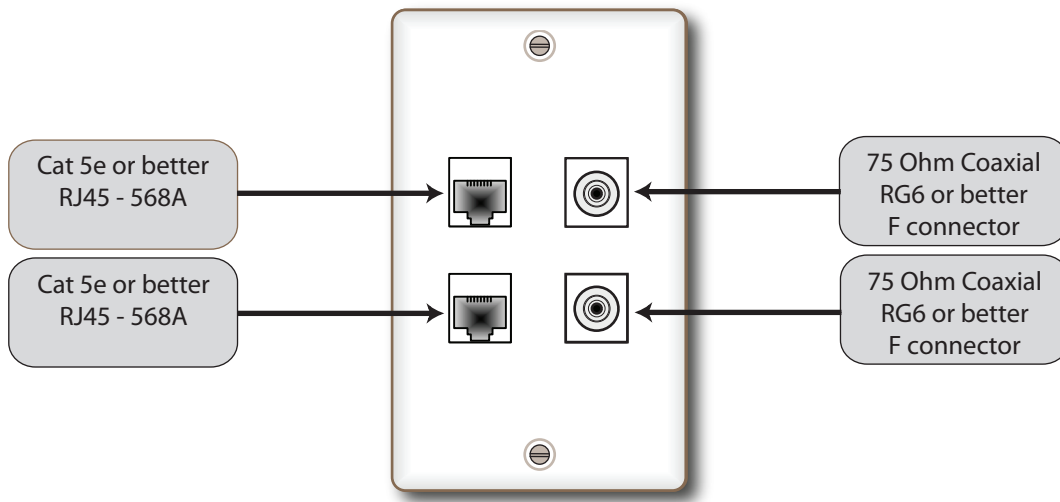
Grade 1. This grade of cable provides a generic cabling system that meets the minimum requirements for basic telecommunications services. As an example, this grade provides for telephone, satellite, community antenna television (CATV) and data services.

Grade 2. This grade of cable provides a generic cabling system that meets the minimum requirements for basic and advanced telecommunications services, such as high-speed Internet and in-home generated video. This grade provides for both current and developing telecommunications services.

Grade	4-pair UTP category 5e or greater	75-ohm coaxial cable	Fiber optic cable
1	1 cable	1 cable	1 cable (optional)
2	2 cables	2 cables	2 cables (optional)

The standard also recommends using category 6 cable when possible rather than the category 5e, for the standard presented here we use category 6 for networking and category 5e for all other purposes. In addition, the de facto industry standard for 75-ohm coaxial cable is RG6 quad shielded. It is also important to distinguish the purpose of the cable by utilizing different color cables for specific purposes. The table below shows Dpartner's recommended standards for cable colors for data, telephone, and video.

Cable	Color	Purpose
4-pair UTP Category 5e	white	telephone
4-pair UTP Category 6	blue	networking
4-pair UTP Category 5e	yellow	video (head-end to display)
4-pair UTP Category 5e	green	video (source to head-end)
4-pair UTP Category 5e	orange	bi-directional audio
75-ohm coaxial RG6 QD	black	CATV, FM
75-ohm coaxial RG6 QD	white	satellite, in-house RF video



Grade 2 Outlet

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