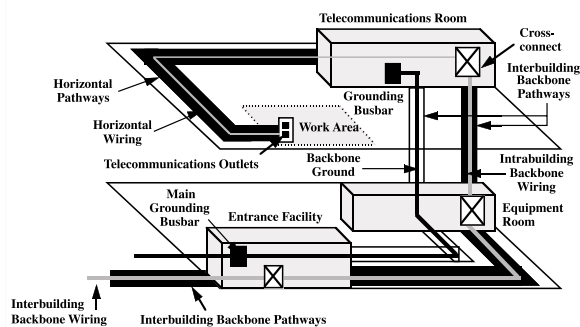


**OBJECTIVE OF ANSI/TIA/EIA-606-A**

ANSI/TIA/EIA-606-A is a revision of the ANSI/TIA/EIA-606 originally published August 1993.

The primary objective of the administration standard is to provide a uniform administration scheme that is independent of applications. Applications are expected to change several times during the lifetime of the premises. The Revised Version was created considering the need for a user-friendly applicable method.

This Standard provides guidelines and choices of classes of administration for maintaining telecommunications infrastructure. Four classes of administration are specified. These classes are based on the complexity of the infrastructure being administered and are allowing a modular and scalable implementation.



Scope of ANSI/TIA/EIA-606-A

**CLASSES**

Four classes of administration are specified to accommodate diverse telecommunications infrastructure. The most relevant factors in determining the class of administration required are the size and complexity of the infrastructure.

**Class 1**

Class 1 addresses the administration needs of a premise that is served by a single ER. This ER is the only telecommunications space (TS) administered whereas there are no TRs and no backbone cabling or outside plant cabling systems to administer. Simple cable pathways will generally be intuitively understood and need not be administered. In order to administer cable pathways or firestopping locations, class 2 or higher administration system should be used.

The following infrastructure identifiers shall be required in class 1 administration, when the corresponding elements are present:

- TS identifier
- horizontal link identifier
- TMGB identifier
- TGB identifier

**Class 2**

Class 2 administration provides for the telecommunications infrastructure administration needs of a single building or of a tenant that is served by a single or multiple telecommunications spaces (e.g., an ER with one or more TRs) within a single building. Class 2 administration includes all elements of class 1 administration, plus identifiers for backbone cabling, multiple-element grounding and bonding systems, and firestopping.

The following infrastructure identifiers shall be required in class 2 administration, when the corresponding elements are present:

- Identifiers required in class 1 administration
- Building backbone cable identifier
- Building backbone pair or optical fiber identifier
- Firestopping location identifier

Cable pathways administration is optional.

**Class 3**

Class 3 administration addresses the needs of a campus, including its buildings and outside plant elements. Class 3 administration includes all elements of class 2 administration, plus identifiers for buildings and campus cabling. Administration of building pathways and spaces, and outside plant elements is recommended.

The following infrastructure identifiers shall be required in class 3 administration:

- identifiers required in class 2 administration
- building identifier
- campus backbone cable identifier
- campus backbone pair or optical fiber identifier

The following infrastructure identifiers are optional:

- identifiers optional in class 2 administration
- outside plant pathway element identifier
- campus pathway or element identifier

Additional identifiers may be added if needed.

**Class 4**

Class 4 administration addresses the needs of a multi-site system. Class 4 administration includes all elements of class 3 administration, plus an identifier for each site, and optional identifiers for inter-campus elements, such as wide area network connections. For mission critical systems, large buildings, or multi-tenant buildings, administration of pathways and spaces and outside plant elements is strongly recommended.

The following infrastructure identifiers shall be required in class 4 administration:

- identifiers required in class 3 administration
- campus or site identifier

The following infrastructure identifiers are optional:

- identifiers optional in class 3 administration
- inter-campus element identifier

Additional identifiers may be added if needed.

### COLOR CODING OF TERMINATION FIELDS

Color coding of termination fields can simplify telecommunication cabling system administration. Color coding is based on the two level hierarchical star configuration of backbone cabling. The first level includes cabling from the main cross-connect to a TR in the same building or to an intermediate cross-connect in a remote building, such as in a campus environment.

The second level includes cabling between two TRs in a building containing the main cross-connect or between an intermediate cross-connect and a TR in a remote building.

General rules:

Termination labels identifying two ends of the same cable must be the same color. Cross-connections are generally made between termination fields of two different colors.

### LABELING, LINKAGE AND REPORTS PROCEDURES

Each component of the telecommunications infrastructure is assigned a unique “label” linking the component to its corresponding record. Records contain information about or are related to a specific component. All records contain required information, required linkages, optional information and other linkages. Linkages are considered to be the “logical” connection between identifiers and records as well as linking one record to another.

Reports are the means by which information about a telecommunications infrastructure is communicated. A report may consist of an individual record, a group of records, or selected portions of one or more records.

The label used should be selected to ensure that the identifiers are easily readable and should be resistant to the environmental conditions. All labels shall be printed or generated by a mechanical device.

### COLOR SPECIFICATIONS

Colors are specified using Pantone numbers. These colors or their equivalent are to be used.

Color	Pantone number	Element identified
<b>Orange</b>	Pantone 150C	Demarcation point (central office termination)
<b>Green</b>	Pantone 353C	Termination of network connections on the customer side of the demarcation point
<b>Purple</b> (in USA) <b>White/Silver</b> (in Canada)	Pantone 264C	Termination of cables originating from common equipment (PBXs, computers, LANs and multiplexers)
<b>White</b> (in USA) <b>Purple</b> (in Canada)	Pantone 264C	First-level backbone telecommunications media termination in the building containing the main cross-connect (main cross-connect to TR or main cross-connect to local intermediate cross-connect)
<b>Gray</b>	Pantone 422C	Second-level backbone telecommunications media termination in the building containing the main cross-connect (local intermediate cross-connect to TR) Purple (in USA) or white (in Canada) may be used to identify second-level backbone terminations in buildings not containing the main cross-connect
<b>Blue</b>	Pantone 291C	Termination of station telecommunications media; required only at the TR and equipment room end of the cable, not at the telecommunications outlet
<b>Brown</b>	Pantone 465C	Interbuilding backbone cable terminations (main cross-connect to remote intermediate cross-connect)
<b>Yellow</b>	Pantone 101C	Termination of auxiliary circuits, alarms, maintenance, security and other miscellaneous circuits
<b>Red</b>	Pantone 184C	Termination of key telephone systems