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Guidance on Practice for Structured Horizontal Cabling System

GP 59-62

BP GROUP
ENGINEERING TECHNICAL PRACTICES

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 59-62. This Guidance on Practice (GP) is ordered to indicate the considerations that shall be involved during the design phase of a structured horizontal cabling system.

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1. Scope

This GP document provides guidance practice for a high performance generic structured horizontal cable plan system for voice and data. It is the intent of a new cabling plant to support from two to three generations of communications equipment.

*Details on installation techniques are included in the associated document
GIS 59-621*

2. Normative references

The following normative documents contain requirements that, through reference in this text, constitute requirements of this technical practice. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

American Society for Testing & Materials (ASTM)

ASTM E2174-04 Standard Practice for On-Site Inspection of Installed Fire Stops

BP Engineering Technical Practices (ETP)

GIS 12-158 Guidance on Industry Standard for Optical Fibre Cable (ANSI)
GP 12-15 Guidance on Practice for Wire and Cable
GP 59-63 Guidance on Practice for Fiber Cable Plant Design

Telecommunications Industry Association (TIA) / Electronics Industry Alliance (EIA)

TIA/EIA-568-B.1 Commercial Building Telecommunications Cabling Standard – Part 1
TIA/EIA-568-B.2 Commercial Building Telecommunications Cabling Standard – Part 2
TIA/EIA-569-B Commercial Building Standard for Telecommunications Pathways and Spaces
TIA/EIA-606-A Administrative Standard for Commercial Telecommunications Infrastructure
TIA/EIA-607 Grounding and Bonding Requirements
EIA-310-D Cabinets, Racks, Panels, and Associated Equipment
TIA J-STD-607-A Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications

3. General design

A typical structured horizontal cabling system consists of main cross-connect (MC), intermediate cross-connect (IC), telecommunications closet (TC), and work areas (WA). The MC may also be the main entrance point to the facility (e.g. the main telecom service provider demarcation point).

A Work Area (WA) is where the user or end device (printer, fax) resides. The WA generally has the cable outlets on the wall and both voice and data will generally use the same cabling. From the WA, the cable runs through the building space (typically within walls and then the space in a false ceiling in most buildings) to the Telecommunications Closet (TC). The TC is the room where the data and/or voice

