

# ISO/IEC 11801-2:2017-11 (E)

## Information technology - Generic cabling for customer premises - Part 2: Office premises

---

### CONTENTS

- FOREWORD.....4
- INTRODUCTION.....6
- 1 Scope.....8
- 2 Normative references .....8
- 3 Terms, definitions and abbreviated terms .....8
  - 3.1 Terms and definitions.....8
  - 3.2 Abbreviated terms.....9
- 4 Conformance .....9
- 5 Structure of the generic cabling system .....10
  - 5.1 General.....10
  - 5.2 Functional elements.....10
  - 5.3 General structure and hierarchy.....11
    - 5.3.1 General .....11
    - 5.3.2 Campus and building backbone cabling subsystem.....11
    - 5.3.3 Horizontal cabling subsystem .....11
    - 5.3.4 Design objectives .....11
  - 5.4 Interconnection of subsystems .....12
    - 5.4.1 General .....12
    - 5.4.2 Centralized cabling architecture.....12
  - 5.5 Accommodation of functional elements .....12
  - 5.6 Dimensioning and configuring .....13
    - 5.6.1 Distributors.....13
    - 5.6.2 Connecting hardware.....15
    - 5.6.3 Work area cords and equipment cords.....15
    - 5.6.4 Patch cords and jumpers .....15
    - 5.6.5 Telecommunications outlet .....15
    - 5.6.6 Consolidation point.....16
    - 5.6.7 Telecommunications rooms and equipment rooms.....17
    - 5.6.8 External services cabling.....17
- 6 Channel performance requirements .....17
  - 6.1 General.....17
  - 6.2 Environmental performance .....18
  - 6.3 Transmission performance .....18
    - 6.3.1 General .....18
    - 6.3.2 Balanced cabling .....19
    - 6.3.3 Optical fibre cabling.....19
- 7 Link performance requirements .....19
  - 7.1 General.....19
  - 7.2 Balanced cabling .....19
  - 7.3 Optical fibre cabling.....19

8	Reference implementations .....	20
8.1	General.....	20
8.2	Balanced cabling .....	20
8.2.1	General .....	20
8.2.2	Horizontal cabling .....	20
8.2.3	Campus and building backbone cabling system .....	23
8.3	Optical fibre cabling .....	23
8.3.1	General .....	23
8.3.2	Component selection .....	23
8.3.3	Dimensions.....	23
9	Cable requirements .....	25
9.1	General.....	25
9.2	Balanced cables .....	26
9.3	Optical fibre cables .....	26
10	Connecting hardware requirements .....	26
10.1	General requirements .....	26
10.2	Connecting hardware for balanced cabling.....	26
10.2.1	General requirements .....	26
10.2.2	Electrical, mechanical and environmental performance.....	26
10.3	Connecting hardware for optical fibre cabling.....	27
10.3.1	General requirements .....	27
10.3.2	Optical, mechanical and environmental performance .....	27
11	Cord requirements .....	27
11.1	Jumpers.....	27
11.2	Balanced cords .....	27
11.2.1	General .....	27
11.2.2	Additional requirements for work area cords .....	27
11.3	Optical fibre cords.....	27
	Bibliography.....	28

Figure 1 – Relationships between the generic cabling documents produced by ISO/IEC JTC 1/SC 25 .....	6
Figure 2 – Structure of generic cabling .....	11
Figure 3 – Hierarchical structure of generic cabling.....	12
Figure 4 – Structures for centralized generic cabling.....	12
Figure 5 – Accommodation of functional elements .....	13
Figure 6 – Example of a generic cabling system with combined BD and FD .....	14
Figure 7 – Inter-relationship of functional elements in an installation with redundancy .....	15
Figure 8 –Channel, permanent link and CP link.....	18
Figure 9 – Example of a system showing the location of cabling interfaces and extent of associated channels .....	18
Figure 10 – Horizontal cabling models .....	21
Figure 11 – Combined backbone/horizontal channels.....	25
Table 1 – Maximum channel lengths .....	14
Table 2 – Length assumptions used in the mathematical modelling of balanced horizontal cabling.....	22
Table 3 – Horizontal link length equations.....	22