



**MATERIAL SPECIFICATION FOR
EXTRA LOW-VOLTAGE CABLE**

TABLE OF CONTENTS

| | |
|----------------|--|
| 2410.01 | SCOPE |
| 2410.02 | REFERENCES |
| 2410.03 | DEFINITIONS - Not Used |
| 2410.04 | DESIGN AND SUBMISSION REQUIREMENTS - Not Used |
| 2410.05 | MATERIALS |
| 2410.06 | EQUIPMENT - Not Used |
| 2410.07 | PRODUCTION |
| 2410.08 | QUALITY ASSURANCE - Not Used |

2410.01 SCOPE

This specification covers the requirements for extra low-voltage cables suitable for underground or aerial installation.

2410.02 REFERENCES

This specification refers to the following standards, specifications, or publications:

International Municipal Signal Association

- 19-5 1997 Polyethylene Insulated, Polyethylene Belted, Copper Shielded, Polyvinyl Chloride Jacketed Signal Cable
- 50-2 1997 Polyethylene Insulated, Polyethylene Jacketed, Loop Detector Lead-in Cable

2410.05 MATERIALS

2410.05.01 Conductors

Conductors of all cables shall be according to IMSA 19-5 and shall be #14 AWG stranded tinned copper. The number of conductors shall be as specified in the Contract Documents.

2410.05.02 Communication Cables

2410.05.02.01 General

Communication cable shall be polyethylene insulated, polyethylene belted, and polyvinyl chloride jacketed.

2410.05.02.02 Insulation

Insulation and inner belt insulation shall be according to IMSA 19-5.

2410.05.02.03 Shielding

Shielding shall be according to IMSA 19-5.

2410.05.02.04 Jacket

Overall jacket shall be according IMSA 19-5.

2410.05.02.05 Fillers

Fillers shall be according to IMSA 19-5.

2410.05.03 Lead-In Cables

2410.05.03.01 General

Lead-in cables shall be polyethylene insulated and polyethylene jacketed.

2410.05.03.02 Insulation

Insulation shall be according to IMSA 50-2.

2410.05.03.03 Shielding

Shielding shall be according IMSA 50-2.

2410.05.03.04 Jacket

Overall jacket shall be according to IMSA 50-2.

2410.05.03.05 Drain Wire

Drain wire shall be according to IMSA 50-2.

2410.07 PRODUCTION

2410.07.01 Communication Cables

Communication cables shall be according to IMSA 19-5.

2410.07.01.01 Marking

Cable shall be permanently marked according to IMSA 19-5, at intervals not exceeding one metre, showing the following:

- a) Size of conductor.
- b) Voltage rating.
- c) Year of manufacture.
- d) IMSA specification number.

2410.07.02 Lead-In Cables

Lead-in cables shall be according to IMSA 50-2.

2410.07.02.01 Marking

Cable shall be permanently marked according to IMSA 50-2, at intervals not exceeding one metre, showing the following:

- a) Size of conductor.
- b) Voltage rating.
- c) Year of manufacture.
- d) IMSA specification number.