

TERMINATING CABLE

Contents

1. Introduction	1
1.1 Scope	1
1.2 Organization	1
2. General Information	1
2.1 Definition and Purpose	1
2.2 Analysis Criteria	1
2.3 Safety Considerations	2
3. General Requirements	2
3.1 Analysis Procedures	2
3.2 Packaging and Marking	2
3.2.1 Reels.	2
3.2.2 End Sealing.	2
3.2.3 Information Accompanying the Reel.	2
3.3 Quality Assurance - Program Requirements	3
4. Design Requirements	3
4.1 Conductors	3
4.1.1 Material.	3
4.1.2 Factory Joints.	3
4.1.3 Tin Plating.	3
4.2 Conductor Insulation	3
4.3 Binders.	4
4.4 Core Wrap.	4
4.5 Aluminum Shield.	4
4.6 Polyvinyl Chloride Jacket.	5
4.7 Construction Requirements	5
4.7.1 Twist Lengths.	5
4.7.2 Defective Pairs.	5
4.7.3 Insulation Color Coding.	5
4.7.4 Size and Location of Ink Marks.	6
4.7.5 Permanency of Ink Marks.	7
4.7.6 Munsell Color Limits.	7
4.7.7 Core.	7
4.7.8 Binders.	8
4.7.9 Core Wrap.	8
4.7.10 Sheath.	8
4.7.11 Cable Sizes.	9
4.7.12 Identification of Manufacturer and Year.	9
4.7.13 Length Marking.	9
4.8 Mechanical Requirements	10
4.8.1 Extensibility of Corrugated Aluminum Shield.	10

4.8.2	Fire Resistance Requirements.	10
4.9	Electrical Requirements	10
4.9.1	Continuity and Shorts.	10
4.9.2	DC Resistance.	10
4.9.3	DC Resistance Unbalance.	10
4.9.4	Attenuation.	10
4.9.5	Mutual Capacitance.	10
4.9.6	Capacitance Unbalance.	10
4.9.7	Crosstalk Requirements.	11
4.9.8	Insulation Resistance.	11
4.9.9	Dielectric Strength.	11
5.	Performance Verification and Test Procedures	11
5.1	Material Tests Procedures	11
5.1.1	Conductor Elongation.	11
5.1.2	Insulation.	11
5.1.3	Binder Shrinkback.	12
5.1.4	Jacket Flammability Test.	12
5.2	Mechanical Test Procedures	12
5.2.1	Corrugated Aluminum Extensibility Test.	12
5.2.2	Jacket to Aluminum Peel Strength Test.	12
5.3	Crosstalk Test Procedures	13
FIGURE 1.	Core Layups	14
FIGURE 2.	Minimum Extensibility For Aluminum	15
FIGURE 3.	Jacket-to-Aluminum Peel Strength Test	16
APPENDIX A	— Solderability Test	A-1
APPENDIX B	— Shrink-Back Test	B-1
APPENDIX C	— Capacitance Unbalance Test	C-1

PRELIMINARY