

Contents

Telcordia GR-2880-Documentation Information

Generic Requirements Notice Of Disclaimer	iii
List of Tables	viii
Preface	ix
Telcordia Interactive GR Process	ix
FA-TA-TR to GR	ix
Transition Phase	ix
Comments and Issues List Report Mechanism	x
GR-2880-CORE Current Maturity Level, Status, and Plans	x
Formatting Comments	xi
Where and When to Submit Comments	xi
1 Introduction	
1.1 Purpose and Scope	1-1
1.2 Organization	1-1
1.3 Requirements Terminology	1-1
1.4 Requirement Labeling Conventions	1-2
1.4.1 Numbering of Requirement and Related Objects	1-2
1.4.2 Requirement, Conditional Requirement, and Objective Identification	1-3
2 General Information	
2.1 Description of Product	2-1
2.2 Ordering Options	2-1
2.3 Quality Assurance Programs	2-2
2.4 Comprehensive Tests	2-2
3 General Requirements	
3.1 Safety Considerations	3-1
3.2 Test and Analysis Criteria	3-1
3.3 Packaging Requirements	3-2
3.4 End Sealing	3-2
3.5 Marking	3-2
3.5.1 Package, Coil, and Reel Marking	3-2
3.5.2 Jacket Marking	3-2
3.5.3 Length Marking	3-2
3.5.4 Jacket Marking Durability	3-3
3.6 Compatibility with Hardware	3-3
4 Mechanical Design and Test Requirements	
4.1 Center Conductor	4-1
4.1.1 Copper-Clad Steel Wire	4-1

- 4.1.2 Tensile Strength of Composite Conductor 4-2
- 4.1.3 Elongation of Composite Conductor 4-2
- 4.1.4 Adhesion of Copper 4-2
- 4.1.5 Copper Ductility 4-2
- 4.1.6 Joints 4-3
- 4.2 Dielectric 4-3
 - 4.2.1 Material 4-3
 - 4.2.2 Shrinkback 4-3
 - 4.2.3 Adhesion 4-3
 - 4.2.4 Patching 4-4
 - 4.2.5 Insulation Imperfections 4-4
- 4.3 Overall Shield 4-4
 - 4.3.1 Average Core Diameter and Ovalness 4-4
 - 4.3.2 Braid Wire 4-5
 - 4.3.2.1 Material 4-5
 - 4.3.2.2 Braid Coverage 4-6
- 4.4 Cable Jacket 4-6
 - 4.4.1 General 4-6
 - 4.4.2 Material 4-6
 - 4.4.3 Jacket Tensile Strength and Elongation 4-7
 - 4.4.4 Aging Test 4-7
 - 4.4.5 Jacket Color 4-8
 - 4.4.6 Jacket Thickness 4-8
 - 4.4.7 Jacket Eccentricity 4-8
 - 4.4.8 Other Coverings 4-8
 - 4.4.9 Diameter Over Jacket 4-8

5 Completed Cable Physical Tests

- 5.1 Cold Bend 5-1
- 5.2 Cable Impact Test 5-1
- 5.3 Jacket Longitudinal Shrinkage 5-1
- 5.4 Flame Spread and Smoke Emission 5-1
- 5.5 National Electrical Code Listing 5-2
- 5.6 Abrasion Resistance 5-2

6 Completed Cable Electrical Requirements

- 6.1 Continuity and Shorts 6-1
- 6.2 Conductor Resistance 6-1
- 6.3 Impedance 6-1
- 6.4 Structural Return Loss (SRL) 6-2
- 6.5 Shielding Effectiveness 6-2
- 6.6 Attenuation 6-2
- 6.7 Dielectric Strength Between Conductors 6-4
- 6.8 Insulation Resistance 6-4

Appendix A: References

A.1 Telcordia Documents	A-1
A.2 Industry Standards	A-1
Note	A-3
To Contact Telcordia Customer Service or to Order Documents	A-3
To Order Documents From Within Telcordia (Employees Only)	A-3

Requirement-Object Index

List of Tables

Table 4-1	Center Conductor Diameter and Material Properties	4-1
Table 4-2	Average Core Diameter Over Tape	4-4
Table 4-3	Core Ovalness, Maximum	4-5
Table 4-4	Aging Temperatures	4-7
Table 4-5	Diameter Over Jacket	4-9
Table 6-1	DC Loop Resistance at 20°C (68°F), Maximum	6-1
Table 6-2	Attenuation at 20°C (68°F), Maximum dB/100ft. (dB/100m)	6-2