

**Table of Contents****[Telcordia TR-NWT-000251 - Documentation Information](#)****1 Introduction**

1.1 Scope . . . . .	1-1
1.2 Organization . . . . .	1-1
1.3 Reason for Reissue . . . . .	1-2

**2 General Information**

2.1 General Description of Functions and Features . . . . .	2-1
2.2 Terminology . . . . .	2-1
2.3 Requirement Labeling Conventions . . . . .	2-1
2.3.1 Numbering of Requirement and Related Objects . . . . .	2-2
2.3.2 Requirement, Recommended Practices, and Ooptional Features Identification . . . . .	2-2
2.4 Reporting of Design Analysis and Test Data . . . . .	2-2
2.5 Safety and Reliability Considerations . . . . .	2-2

**3 General Requirements**

3.1 Documentation . . . . .	3-1
3.1.1 Practices . . . . .	3-1
3.1.2 Installation Instructions . . . . .	3-1
3.1.3 Audio-Visual Information Package . . . . .	3-1
3.2 Marking, Packaging, and Shipping . . . . .	3-2
3.2.1 Marking . . . . .	3-2
3.2.2 Packaging and Shipping . . . . .	3-2
3.3 Quality and Reliability Requirements . . . . .	3-2
3.3.1 Quality Assurance Program . . . . .	3-3
3.3.2 Product Samples . . . . .	3-3

**4 Functional Design and Performance Requirements**

4.1 Design and Fabrication Requirements . . . . .	4-1
4.1.1 Manufacturing Standards . . . . .	4-1
4.1.2 Non-Metallic - Chemical Resistance . . . . .	4-1
4.1.3 Tools . . . . .	4-1
4.1.4 Cable Pullout . . . . .	4-2
4.1.5 Torsion Resistance . . . . .	4-2
4.1.6 Bending Resistance . . . . .	4-2
4.2 Electrical Requirements . . . . .	4-2
4.2.1 Shield Continuity . . . . .	4-2
4.2.2 Electrical Resistance - Temperature Cycling with Humidity . . . . .	4-2
4.3 Environmental Requirements . . . . .	4-3
4.3.1 Corrosion Resistance . . . . .	4-3
4.3.2 Fungus . . . . .	4-3
4.3.3 Shock resistance . . . . .	4-3
4.3.3.1 Impact Resistance . . . . .	4-3
4.3.3.2 Drop Test . . . . .	4-3
4.3.4 Low Temperature Handling . . . . .	4-3

- 4.3.5 Accelerated Aging/Insulation Resistance . . . . . 4-4
- 4.3.6 Freeze/Thaw Cycling in Wet Sand . . . . . 4-4
- 4.3.7 Water Head Test . . . . . 4-4
- 4.3.8 Sealant (Encapsulant) . . . . . 4-4
  - 4.3.8.1 Sealant Compatibility . . . . . 4-4
  - 4.3.8.2 Sealant Material . . . . . 4-4
  - 4.3.8.3 Sealant Consistency . . . . . 4-5
  - 4.3.8.4 Sealant Odor . . . . . 4-5
  - 4.3.8.5 Sealant Corrosion of Copper . . . . . 4-5
- 4.3.9 Stress Cracking of Polyethylene . . . . . 4-5

**5 Performance Verification/Test Procedures**

- 5.1 Design and Fabrication Testing . . . . . 5-1
  - 5.1.1 Manufacturing Standards Inspection . . . . . 5-1
  - 5.1.2 Non-Metallic - Chemical Resistance Test . . . . . 5-1
  - 5.1.3 Tools . . . . . 5-1
  - 5.1.4 Cable Pull-Out Test . . . . . 5-1
  - 5.1.5 Torsion Resistance Test . . . . . 5-2
  - 5.1.6 Bend Resistance Test . . . . . 5-2
- 5.2 Electrical Tests . . . . . 5-2
  - 5.2.1 Shield Continuity Test . . . . . 5-2
  - 5.2.2 Temperature Cycling with Humidity Test . . . . . 5-2
- 5.3 Environmental Tests . . . . . 5-3
  - 5.3.1 Corrosion Resistance Test . . . . . 5-3
  - 5.3.2 Fungus Growth . . . . . 5-3
  - 5.3.3 Shock Resistance . . . . . 5-3
    - 5.3.3.1 Impact Resistance . . . . . 5-3
    - 5.3.3.2 Drop Test . . . . . 5-3
  - 5.3.4 Low Temperature Handling . . . . . 5-3
  - 5.3.5 Accelerated Aging/Insulation Resistance . . . . . 5-4
    - 5.3.5.1 Water Immersion . . . . . 5-4
    - 5.3.5.2 Thermal Shock . . . . . 5-4
  - 5.3.6 Freeze/Thaw Cycling in Wet Sand . . . . . 5-4
  - 5.3.7 Water Head Test . . . . . 5-5
  - 5.3.8 Sealant (Encapsulant) . . . . . 5-5
    - 5.3.8.1 Sealant Compatibility . . . . . 5-5
    - 5.3.8.2 Sealant Material . . . . . 5-5
    - 5.3.8.3 Sealant Consistency . . . . . 5-6
    - 5.3.8.4 Odor . . . . . 5-6
    - 5.3.8.5 Corrosion of Copper . . . . . 5-6
  - 5.3.9 Stress Cracking of Polyethylene . . . . . 5-7

**Appendix A: References**

- A.1 Telcordia Documents . . . . . A-1
- A.2 Other References . . . . . A-1

**Appendix B: Glossary of Terms and Acronyms**

**Requirement-Object Index**

