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Performance Standard
For Coaxial Premise Data Communications Cables

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Foreword

This standard has been developed by the High Performance Wire and Cable Section of NEMA in close coordination between manufacturers, users, third party certifying agencies and others having specialized experience. The High Performance Wire and Cable Section of NEMA periodically reviews this standard for any revisions necessary to keep it up to date. Proposed revisions or comments should be submitted to:

Vice President, Technical Services
National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, Virginia 22209

At the time of the reaffirmation of this standard in 2003, the members of the NEMA High Performance Wire and Cable Section were:

AFC Cable Systems—New Bedford, MA and Freehold
AmerCable—El Dorado, AR
American Insulated Wire Corporation—Pawtucket, RI
Belden CDT, Inc.—Richmond, IN 47374 and St. Louis, MO
Berk-Tek a Nexans Company—Elm City, NC
Cable USA, Inc.—Naples, FL
Coleman Cable Inc.—Waukegan, IL
Draka Comteq USA Inc.—Franklin, MA
Fisk Alloy Conductors, Inc.—Hawthorne, NJ
General Cable—Upper Saddle River, NJ 07458-1609 and Rocklin, CA
Harbour Industries, Inc.—Shelburne, VT
Judd Wire, Inc.—Turners Falls, MA
Kaneka High-Tech Materials, Inc.—Pasadena, TX
Leoni Wire, Inc.—Chicopee, MA
Leviton Manufacturing Co., Inc.—Gardena, CA
The Okonite Company—Ramsey, NJ
Phelps Dodge High Performance Conductors—Inman, SC
Quirk Wire Company, Inc.—West Brookfield, MA
Radix Wire Company—Euclid, OH
Rea Magnet Wire Company, Inc.—Fort Wayne, IN
Rockbestos-Surprenant Cable Corporation—East Granby, CT
Southwire Company—Carrollton, GA
Specialty Cable Corporation—Wallingford, CT
Tyco Electronics/Raychem Wire & Cable—Menlo Park, CA

Section approval of this standard does not necessarily imply that all section members voted for its approval or participated in its development.

Section 1
GENERAL

1.1 SCOPE

This standard defines minimum electrical performance characteristics, material, and mechanical specifications of premise wiring cables for data applications. Definitions and applicable test methods are included.

The products covered in this Standard shall conform to the requirements of Part 68 of the FCC rules and regulations as well as the applicable article(s) of the National Electrical Code and/or other national and local codes and safety standards.

The performance requirements contained in this document are for cables as manufactured. The installed cable interconnect system may have different characteristics. The performance of the installed cable is outside the scope of this document.

This standard covers 50 Ω coaxial cables for data communication systems.

1.2 REFERENCED STANDARDS

Copies of referenced documents may be obtained from the appropriate sources as follows.

American Society for Testing and Materials (ASTM)
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

ASTM B 3-01	*Soft or Annealed Copper Wire*
ASTM B 8-04	*Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft*
ASTM B 33-00	*Tinned Soft or Annealed Copper Wire for Electrical Purposes*
ASTM B 286-02	*Copper Conductors for Use in Hookup Wire for Electronic Equipment*
ASTM D 1248-04	*Polyethylene Plastics Molding & Extrusion Materials*
ASTM D 2116-02	*FEP-Fluorocarbon Molding & Extrusion Materials*
ASTM D 4566-98	*Standard Test Methods for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire & Cable*

Federal Communications Commission (FCC)
1919 M Street, N.W.
Washington, D.C. 20554

Code of Federal Regulations, Title 47, Telecommunications, Chapter 1-FCC, Part 68

Institute of Electrical & Electronic Engineers (IEEE)
445 Hoes Lane, IEEE Service Center
P.O. Box 1331
Piscataway, NJ 08855-1331

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