#### EM 1110-1-4008 5 May 99

#### Appendix A References

A-1. U.S. Army Corps of Engineers (CEGS, EM, TM, etc.)

TM 5-805-4 Noise and Vibration Control

TM 5-809-10 Seismic Design for Buildings

TM 5-810-5 Plumbing

TM 5-811-7 Electrical Design, Cathodic Protection

TM 5-813-9 Water Supply: Pumping Stations

MIL-HDBK-1004/10 (Air Force) Electrical Engineering, Cathodic Protection

ER 1110-1-4 Metric Measurements in USACE Publication Media

ER 1110-1-12 Quality Management

ER 1110-345-700 Design Analysis, Drawings and Specifications

EM 385-1-1 Safety and Health Requirements Manual

EM 1110-2-503 Design of Small Water Systems

TI 809-01 Load Assumptions for Buildings

TI 814-01 Water Supply

TI 814-03 Water Distribution TI 814-10 Wastewater Collection

CEGS 02150 Piping: Off-Gas

CEGS 05093 Welding Pressure Piping

CEGS 09900 Painting, General

CEGS 11145 Aviation Fueling Systems

CEGS 13080 Seismic Protection for Mechanical, Electrical Equipment

CEGS 13110 Cathodic Protection system (Sacrificial Anode)

CEGS 13111 Cathodic Protection system (Steel Water Tanks)

CEGS 13112 Cathodic Protection system (Impressed Current)

CEGS 15080 Thermal Insulation for Mechanical Systems

CEGS 15200 Liquid Process Piping

# A-2. Industrial and Commercial References (NFPA, ASTM, ANSI, ASME, etc.)

a. American Association of State Highway and Transportation Officials

AASHTO H20 Highway Design Standards

b. American National Standards Institute

ANSI A13.1 Scheme for the Identification of Piping Systems EM 1110-1-4008 5 May 99

ANSI A58.1 Minimum Design Loads for Buildings and Other Structures

ANSI B36.10M/B36.10 Welded and Seamless Wrought Steel Pipe

c. American Petroleum Institute

API Spec 5L Line Pipe

API Spec 15LR Low Pressure Fiberglass Line Pipe

API 605 Large Diameter Carbon Steel Flanges

d. American Society of Civil Engineers

ASCE 7 Minimum Design Loads for Buildings and Other Structures

e. American Society of Mechanical Engineers

ASME Boiler and Pressure Vessel Code Sections IV, V, VIII

ASME B1.1 Unified Screw Threads

ASME B1.20.1 Pipe Threads, General Purpose

ASME B16.1 Cast Iron Pipe Flanges and Flanged Fittings

ASME B16.5 Pipe Flanges and Flanged Fittings

ASME B16.9 Factory-Made Wrought Steel Buttwelding Fittings

ASME B16.11 Forged Fittings, Socket-Welding and Threaded

ASME B16.20 Metallic Gaskets for Pipe Flanges ASME B16.21 Nonmetallic Gaskets for Pipe Flanges

ASME B16.24 Cast Copper Alloy Pipe Flanges and Flanged Fittings

ASME B16.25 Buttwelding Ends

ASME B16.28 Wrought steel Buttwelding Short Radius Elbows and Returns

ASME B16.31 Non-Ferrous Pipe Flanges

ASME B16.42 Ductile Iron Pipe Flanges and Flanged Fittings

ASME B16.47 Large Diameter Steel Flanges

ASME B31.1 Power Piping

ASME B31.3 Chemical Plant and Petroleum Refinery Piping

f. American Society for Testing and Materials

ASTM A 47M/A 47 Malleable Iron Castings

ASTM A 53 Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless

ASTM A 105M/A 105 Carbon Steel Forgings

ASTM A 106 Seamless Carbon Steel Pipe

ASTM A 126 Gray Iron Castings for Valves, Flanges, and Pipe Fittings

ASTM A 135 Electric-Resistance-Welded Steel Pipe ASTM A 182M/A 182 Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts

ASTM A 193M/A 193 Alloy-Steel and Stainless Steel Bolting Materials

ASTM A 194M/A 194 Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service.

ASTM A 216M/A 216 Steel Castings, Carbon, for High Temperature Service

ASTM A 217M/A 217 Steel Castings, Martensitic Stainless Steel and Alloys, for High Temperature Service

ASTM A 307 Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

ASTM A 312M/A 312 Seamless and Welded Austenitic Stainless Steel Pipes

ASTM A 333M/A 333 Seamless and Welded Steel pipe for Low-Temperature Service

ASTM A 351M/A 351 Castings, Austenitic, Austenitic-Ferric

ASTM A 403M/A 403 Wrought Austenitic Stainless Steel Piping Fittings

ASTM A 494 Castings, Nickel and Nickel Alloy.

ASTM A 587 Electric-Resistance-Welded Low-Carbon Steel Pipe

ASTM A 691 Carbon and Alloy Steel Pipe, EFW for High-Pressure Service at High Temperatures

ASTM A 727M/a 727 Carbon Steel Forgings for Piping Components ASTM A 731M/A 731 Seamless, Welded Ferritic, and Martensitic Stainless Steel Pipe

ASTM A 813M/A 813 Single- or Double-Welded Austenitic Stainless Steel Pipe

ASTM A 814M/A 814 Cold-Worked Welded Austenitic Stainless Steel Pipe

ASTM A 815M/A 815 Wrought Ferritic, Ferritic/Austenitic, and Martensitic Stainless Steel Piping Fittings

ASTM A 858M/A 858 Heat-Treated Carbon Steel Fittings

ASTM B 42 Seamless Copper Pipe, Standard Sizes

ASTM B 61 Steam or Valve Bronze Castings

ASTM B 62 Composition Bronze or Ounce Metal Castings

ASTM B 160 Nickel Rod and Bar

ASTM B 161 Nickel Seamless Pipe and Tube

ASTM B 165 Nickel-Copper Alloy (N04400) Seamless Pipe and Tube

ASTM B 241M/B 241 Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube

ASTM B 247M/B 247 Aluminum and Aluminum-Alloy Die Forgings, Hand Forgings, and Rolled Ring Forgings

ASTM B 345M/B 345 Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube for Gas and Oil Transmission and Distribution Piping Systems EM 1110-1-4008 5 May 99

ASTM B 361 Factory-Made Wrought Aluminum and Aluminum-Alloy Welding Fittings

ASTM B 366 Factory-Made Wrought Nickel and Nickel Alloy Fittings

ASTM B 517 Welded Nickel-Chromium-Iron Alloy (N06600), N06025, N06045 Pipe

ASTM B 564 Nickel Alloy Forgings

ASTM B 584 Copper Alloy Sand Castings for General Applications

ASTM B 608 Welded Copper-Alloy Pipe

ASTM B 619 Welded Nickel and Nickel-Cobalt Alloy Pipe

ASTM B 622 Seamless Nickel and Nickel-Cobalt Alloy Pipe and Tube

ASTM B 725 Welded Nickel (N02200/N02201) and Nickel-Copper Alloy (N04400)Pipe

ASTM B 775 General Requirements for Nickel and Nickel Alloy Welded Pipe

ASTM B 829 General Requirements for Nickel and Nickel Alloys Seamless Pipe and Tube

ASTM D 380 Test Methods for Rubber Hose

ASTM D 471 Test Method for Rubber Property-Effect of Liquids

ASTM D 729 Vinylidene Chloride Molding Compounds ASTM D 1457 Polytetrafluoroethylene (PTFE) Molding and Extrusion Materials

ASTM D 1600 Terminology for Abbreviated Terms relating to Plastics

ASTM D 2000 Standard Classification for Rubber Products in Automotive Applications

ASTM D 2282 Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (SDR-PR)

ASTM D 2310 Standard Classification for Machine-Made "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe

ASTM D 2464 Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

ASTM D 2466 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40

ASTM D 2467 Socket-Type Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

ASTM D 2657 Heat-Joining Polyolefin Pipe and Fittings

ASTM D 2661 Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste and Vent Pipe

ASTM D 2855 Making Solvent-Cemented Joints with Poly(Vinyl Chloride) (PVC) Pipe and Fittings

ASTM D 2996 Filament-Wound "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pipe

ASTM D 2997 Centrifugally Cast "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pipe ASTM D 3139 Joints for Plastic Pressure Pipes using Flexible Elastomeric Seals

ASTM D 3222 Unmodified Poly (Vinylidene Fluoride) (PVDF) Molding, Extrusion and Coating Materials

ASTM D 3307 PFA-Fluorocarbon Molding and Extrusion Materials

ASTM D 3311 Drain, Waste, and Vent (DWV) Plastic Fittings Patterns

ASTM D 3517 "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pressure Pipe

ASTM D 3754 "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Sewer and Industrial Pressure Pipe

ASTM D 4000 Classification System for Specifying Plastic Materials

ASTM D 4024 Machine Made "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Flanges

ASTM D 4101 Propylene Plastic Injection and Extrusion Materials

ASTM D 4161 "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pipe Joints Using Flexible Elastomeric Seals

ASTM E 814 Fire Tests of Through-Penetration Fire Stops

ASTM F 423 Polytetrafluoroethylene (PTFE) Plastic-Lined Ferrous Metal Pipe, Fittings, and Flanges

ASTM F 437 Threaded Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 ASTM F 438 Socket-Type Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40

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ASTM F 491 Poly (Vinylidene Fluoride) (PVDF) Plastic-Lined Ferrous Metal Pipe and Fittings

ASTM F 492 Propylene and Polypropylene (PP) Plastic Lined Ferrous Metal Pipe and Fittings

ASTM F 599 Poly (Vinylidene Chloride) (PVDC) Plastic-Lined Ferrous Metal Pipe and Fittings

ASTM F 628 Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste and Vent Pipe with a Cellular Core

ASTM F 781 Perfluoro (Alkoxyalkane) Copolymer (PFA) Plastic-Lined Ferrous Metal Pipe and Fittings

ASTM F 1173 Epoxy Resin Fiberglass Pipe and Fittings for Marine Applications

ASTM F 1290 Electrofusion Joining Polyolefin Pipe and Fittings

g. American Water Works Association

AWWA C105 Polyethylene Encasement for Ductile-Iron Pipe Systems

AWWA C110 Ductile-Iron and Gray-Iron Fittings

AWWA C150 Thickness Design of Ductile-Iron Pipe

AWWA C900 Polyvinyl Chloride (PVC) Pressure Pipe EM 1110-1-4008 Change 1 16 Sep 02

AWWA C950 Fiberglass Pressure Pipe

AWWA D103 Factory-Coated Bolted Steel Tanks for Water Storage

AWWA D110 Wire-Wound, Circular Prestressed Concrete Water Tanks

h. Fluid Controls Institute

FCI 70-2 Control Valve Seat Leakage

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ISA-S75.01 Flow Equations for Sizing Control Valves

j. Manufacturers Standardiz ation Society of the Valve and Fittings Industry (MSS)

MSS SP-43 Wrought Stainless Steel Buttwelding Fittings

MSS SP-44 Steel Pipeline Flanges

MSS SP-51 Class 150LW Corrosion Resistant Cast Flanges and Flanged Fittings

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MSS SP-69 Pipe Hangers and Supports - Selection and Application

MSS SP-73 Brazing Joints for Wrought and Cast Copper Alloy Solder Joint Pressure Fittings

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MSS SP-104 Wrought Copper Solder Joint Pressure Fittings

MSS SP-106 Cast Copper Alloy Flanges and Flanged Fittings MSS SP-114 Corrosion Resistant Pipe Fittings Threaded and Socket Welding

MSS SP-119 Balled End Socket Welding Fittings, Stainless Steel and Copper-Nickel

k. National Association of Corrosion Engineers

NACE RP-0286 Electrical Isolation of Cathodically Protected Pipelines

1. National Fire Protection Association

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