

FIRE PROTECTION CRITERIA

By Michael Yatsushiro

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TECHNICAL INSTRUCTIONS

TI 800-01	Design Criteria	Jul 98
TI 800-03	Technical Requirements for Design-Build	Jul 98
TI 801-01	Barracks Upgrade Program	Aug 98
TI 801-02	Army Family Housing	Aug 98
TI 810-90	Elevator Systems	Aug 98
TI 809-02	Structural Design Criteria for Buildings	
TI 809-04	Seismic Design for Buildings	

TECHNICAL MANUALS

TM 5-810-5	Plumbing	Jan 90
TM 5-810-6	Nonindustrial Gas Piping Systems	Oct 92
TM 5-805-6	Joint Sealing for Buildings	Sep 94
TM 5-813-1	Water Supply Sources and General Considerations	Dec 91
TM 5-813-4	Water Supply, Water Storage	Sep 85
TM 5-813-5	Water Supply, Water Distribution	Nov 86
TM 5-840-2	Storage Depots	Aug 85
TM 5-815-2	Energy Monitoring and Control Systems	Jan 91

ARMY ENGINEERING TECHNICAL LETTERS

ETL 1110-3-481	Containment and Disposal of Aqueous Film-Forming Foam Solution	Mar 97
ETL 1110-3-484	Aircraft Hangar Fire Protection Systems	Sep 97
ETL 1110-3-485	Fire Protection for Helicopter Hangars	Oct 97
ETL 1110-3-432	Exit Signs	Nov 91
ETL 1110-3-483	Clothes Dryer Exhaust Venting	Mar 98
ETL 1110-3-459	Hazardous Waste Storage Criteria	Nov 93

AIR FORCE ENGINEERING TECHNICAL LETTERS

ETL 91-01	Fire Protection Engineering Criteria for Testing Halon Fire Suppression Systems	Jan 91
ETL 93-4	Fire Protection of Engineering Criteria-Automatic Sprinkler Systems in Military Family Housing	Aug 93
ETL 93-5	Fire Protection Engineering Criteria-Electronic Equipment Installations	Dec 93
ETL 94-6	Fire Protection Engineering Criteria-Removal of Halogenated Agent Fire Suppression Systems	Dec 94
ETL 98-7	Fire Protection Engineering Criteria-New Aircraft Facilities	undated
ETL 98-8	Fire Protection Engineering Criteria-Existing Aircraft Facilities	undated
ETL 99-4	Fire Protection Engineering Criteria and Technical Guidance-Emergency Lighting and Marking of Exits	Nov 99

TECHNICAL INSTRUCTION

TI 809-04	Seismic Design for Buildings
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ARMY REGULATIONS

AR 415-15	Army Military Construction Program Development and Execution	Sep 98
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ENGINEERING REGULATIONS

ER 1110-345-100	Engineering and Design Design Policy for Military Construction	Feb 94
ER 415-1-11	Construction Biddability, Constructibility and Operability	Jun 84
ER 1110-1-8155	Engineering and Design Specifications	Dec 98
ER 1110-345-700	Engineering and Design Design Analysis, Drawings and Specifications	May 97

MILITARY HANDBOOKS

MIL HDBK 1008C	Fire Protection for Facilities Engineering, Construction, and Design	Jun 97
MIL HDBK 1022	Petroleum Fuel Facilities	Jun 97
MIL HDBK 1032/2	Covered Storage	Jun 82
MIL HDBK 1005/13	Hazardous Waste Storage Facilities	Aug 82
MIL HDBK 1191	Medical Military Construction Program Facilities Design and Construction Criteria	May 96

ENGINEER MANUAL

EI 14M001	Elevator Systems	Apr 96
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NATIONAL FIRE PROTECTION ASSOCIATION **This is only partial list of important criteria to be used.**

NFPA 1	Fire Prevention Code	2000
NFPA 10	Portable Fire Extinguishers	1998
NFPA 11	Low expansion Foam	1998

NFPA 13	Installation of Sprinkler Systems	1999
NFPA 13D	Sprinkler Systems in 1 and 2 Family Dwellings and Manufactured Homes	1999
NFPA 13R	Sprinkler Systems in Residential Occupancies up to and Including 4 Stories in Height	1999
NFPA 14	Standpipe, Private Hydrant, and Hose Systems	2000
NFPA 17A	Wet Chemical Extinguishing Systems	1998
NFPA 20	Installation of Stationary Pumps	1999
NFPA 24	Private Fire Service Mains	1995
NFPA 30	Flammable and Combustible Liquids Code	1996
NFPA 31	Installation of Oil-Burning Equipment	1997
NFPA 33	Spray Application Using Flammable or Combustible Materials	1995
NFPA 37	Stationary Combustion Engines and Gas Turbines	1998
NFPA 54	National Fuel Gas Code	1999
NFPA 70	National Electrical Code	1999
NFPA 72	National Fire Alarm Code	1999
NFPA 75	Protection of Electronic Computer/Data Processing Equipment	1999
NFPA 80	Fire Doors and Fire Windows	1999
NFPA 88A	Parking Structures	1998
NFPA 90A	Installation of Air-Conditioning and Ventilating Systems	1999
NFPA 90B	Installation of Warm Air Heating and Air-Conditioning Systems	1999
NFPA 91	Exhaust Systems for Air Conveying of Gases	1999

NFPA 96	Ventilation Control and Fire Protection of Commercial Cooking Operations	1998
NFPA 99	Health Care Facilities	1999
NFPA 101	Life Safety Code	2000
NFPA 110	Emergency and Standby Power Systems	1999
NFPA 170	Fire Safety Symbols (Note all fire protection drawings to use symbols in NFPA 170)	1999
NFPA 204	Smoke and Heat Venting	1998
NFPA 211	Chimneys, Fire places, Vents and Solid Fuel Burning Appliances	2000
NFPA 220	Types of Building Construction	1995
NFPA 230	Fire Protection of Storage	1999
NFPA 291	Fire Flow Testing and Marking of Hydrants	1995
NFPA 409	Aircraft Hangars	1995

CORPS OF ENGINEERS GUIDE SPECIFICATIONS (CEGS)

Division 7

CEGS 7840 Firestopping

Division 13 - Special Construction

CEGS 13850 Fire Detection and Alarm System,
Direct Current Loop

CEGS 13851 Fire Detection and Alarm System,
Addressable

CEGS 13852 Fire Alarm Reporting System, Radio Type

CEGS 13853 Central Fire Alarm System, Digital Alarm
Communicator Type

CEGS 13920 Fire Pumps

CEGS 13930	Wet Pipe Sprinkler System, Fire Protection
CEGS 13935	Dry Pipe Sprinkler System, Fire Protection
CEGS 13945	Preaction and Deluge Sprinkler Systems, Fire Protection
CEGS 13955	Aqueous Film-Forming Foam (AFFF) Fire Protection System
CEGS 13965	Wet Chemical Fire Extinguishing System
CEGS 13202	Fuel Storage Systems

Division 14 - Conveying Systems

CEGS 14210	Elevators, Electric
CEGS 14240	Elevators, Hydraulic

MISCELLANEOUS

DOD 4145.19-R-1	Storage and Materials Handling	Sep 79
	Design Criteria for Construction in the U.S. Army Kwajalein Atoll/Kwajalein Missile Range (USAKA/KMR)	Oct 97
	ADA Accessibility Guidelines for Buildings and Facilities	Jul 91
	Uniform Federal Accessibility Standards	Apr 88
	National Standard Plumbing Code	
	ASHRAE Standards	
	Uniform Building Code	1997
	CEPOD-ED-T Design Criteria Guide and Sample DA	
	SFPE (Society of Fire Protection Engineers) Handbook of Fire Protection Engineering	
	UL Fire Protection Equipment Directory	

UL Building Materials Directory

UL Fire Resistance Materials Directory

SMACNA Fire Smoke and Radiation Damper Guide for
HVAC Systems

MSS

AWWA

ASME A17.1, Elevator code

ACGIH Industrial Ventilation