

NFPA Codes en Standards

In het bijgaand overzicht wil Fireforum een beeld geven van wat er onder de hoed van NFPA Codes and Standards te vinden is.

Het nut van een NFPA standard voor toepassing in Europa hangt veel af van de omstandigheden waarin een techniek zich heeft ontwikkeld. Soms geldt de NFPA standard als DE internationale erkende referentie, in ander gevallen zijn de NFPA standards totaal onbruikbaar.

De NFPA standards zijn genummerd en het nummer geeft een aanwijzing over het domein waarin die normen van toepassing zijn, maar de lijst is historisch gegroeid en is niet helemaal logisch opgebouwd. In deze lijst zijn de meeste "onbruikbare" documenten weggelaten.

Blussystemen:

NFPA 10: Portable Fire Extinguishers: NIET bruikbaar, de classificatie van de blussers verschilt totaal van de EN3 .

NFPA 11: Low-, Medium-, and High-Expansion Foam: bruikbaar

NFPA 11A: Medium- and High-Expansion Foam Systems: bruikbaar

NFPA 12: Carbon Dioxide Extinguishing Systems: verschillend van de EN, maar bruikbaar voor speciale toepassingen

NFPA 13: Installation of Sprinkler Systems: voorziet meer toepassingen dan de EN12845

NFPA 13D: Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes: bruikbaar, heeft geen EN equivalent

NFPA 13E: Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems : bruikbaar, heeft geen EN equivalent

NFPA 13R: Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height : bruikbaar, heeft geen EN equivalent

NFPA 14: Installation of Standpipe and Hose Systems: NIET bruikbaar, het concept dat haspels kunnen gebruikt worden door de aanwezigen in een gebouw is hier niet voorzien.

NFPA 15: Water Spray Fixed Systems for Fire Protection: bruikbaar , heeft geen EN equivalent

NFPA 16: Installation of Foam-Water Sprinkler and Foam-Water Spray Systems: bruikbaar, heeft geen EN equivalent.

NFPA 17 en 17A: Chemical Extinguishing Systems : speciale techniek, weinig bruikbaar.

NFPA 20: Installation of Stationary Pumps for Fire Protection: bruikbaar, maar zeer sterk gericht op de Amerikaanse praktijk van pompen.

NFPA 22: Water Tanks for Private Fire Protection: niet echt bruikbaar, sterk gericht op de US praktijk.

NFPA 24: Installation of Private Fire Service Mains and Their Appurtenances: niet echt bruikbaar, sterk gericht op de US praktijk, wordt soms opgelegd door de verzekeraar.

NFPA 25: Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems: bruikbaar als referentie

NFPA 720: Recommended Practice for the Installation of Household Carbon Monoxide (CO) Warning Equipment

NFPA 750: Water Mist Fire Protection Systems

NFPA 2001: Clean Agent Fire Extinguishing Systems

Brandbare en ontvlambare producten:

De volgende NFPA codes kunnen als referentie materiaal gebruikt worden voor niet gereguleerde toepassingen:

NFPA 30: Flammable and Combustible Liquids Code

NFPA 30A: Motor Fuel Dispensing Facilities and Repair Garages (strengere regelgeving)

NFPA 30B: Manufacture and Storage of Aerosol Products

NFPA 31: Installation of Oil-Burning Equipment

NFPA 32: Drycleaning Plants

NFPA 33: Spray Application Using Flammable or Combustible Materials

NFPA 34: Dipping and Coating Processes Using Flammable or Combustible Liquids

NFPA 35: Manufacture of Organic Coatings

NFPA 36: Solvent Extraction Plants

NFPA 37: Installation and Use of Stationary Combustion Engines and Gas Turbines

NFPA 326: Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair

NFPA 329: Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases

NFPA 385: Tank Vehicles for Flammable and Combustible Liquids

Installaties met verhoogd brandrisico:

De volgende NFPA codes kunnen als referentie materiaal gebruikt worden voor niet gereguleerde toepassingen:

NFPA 40: Storage and Handling of Cellulose Nitrate Film

NFPA 42: Storage of Pyroxylin Plastic

NFPA 45: Fire Protection for Laboratories Using Chemicals

NFPA 50: Bulk Oxygen Systems at Consumer Sites

NFPA 50A: Gaseous Hydrogen Systems at Consumer Sites

NFPA 50B: Liquefied Hydrogen Systems at Consumer Sites

NFPA 51: Design and Installation of Oxygen–Fuel Gas Systems for Welding, Cutting, and Allied Processes

NFPA 51A: Acetylene Cylinder Charging Plants

NFPA 51B: Fire Prevention During Welding, Cutting, and Other Hot Work

NFPA 52: Compressed Natural Gas (CNG) Vehicular Fuel Systems Code

NFPA 53: Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres

NFPA 55: Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks

NFPA 57: Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code

NFPA 59A: Production, Storage, and Handling of Liquefied Natural Gas (LNG)

NFPA 318: Protection of Semiconductor Fabrication Facilities

NFPA 430: Storage of Liquid and Solid Oxidizers

NFPA 432: Storage of Organic Peroxide Formulations

NFPA 434: Storage of Pesticides

NFPA 560: Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation

Ontploffingsrisico

Bruikbaar referentiemateriaal zijn:

NFPA 61: Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

NFPA 68: Guide for Venting of Deflagrations

NFPA 69: Standard on Explosion Prevention Systems

NFPA 484: Combustible Metals, Metal Powders, and Metal Dusts

NFPA 490: Storage of Ammonium Nitrate

NFPA 495: Explosive Materials Code

NFPA 498: Safe Havens and Interchange Lots for Vehicles Transporting Explosives
NFPA 654: Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
NFPA 655: Prevention of Sulfur Fires and Explosions
NFPA 664: Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities
NFPA 1122: Model Rocketry
NFPA 1123: Fireworks Display
NFPA 1124: Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles
NFPA 1125: Manufacture of Model Rocket and High Power Rocket Motors
NFPA 1126: Use of Pyrotechnics before a Proximate Audience
NFPA 1127: High Power Rocketry

Elektrische installaties :

Als referentie bruikbare normen:

NFPA 75: Protection of Information Technology Equipment
NFPA 76: Recommended Practice for the Fire Protection of Telecommunications Facilities
NFPA 77: Recommended Practice on Static Electricity
NFPA 497: Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
NFPA 499: Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
NFPA 780: Installation of Lightning Protection Systems

Technische uitrusting:

Referentiemateriaal:

NFPA 82: Incinerators and Waste and Linen Handling Systems and Equipment
NFPA 86: Ovens and Furnaces
NFPA 90A: Installation of Air-Conditioning and Ventilating Systems
NFPA 90B: Installation of Warm Air Heating and Air-Conditioning Systems
NFPA 91: Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids
NFPA 92A: Recommended Practice for Smoke-Control Systems : weinig bruikbaar, verschilt van de Europese praktijk
NFPA 92B: Guide for Smoke Management Systems in Malls, Atria, and Large Areas : verschilt van de EN12101-5
NFPA 96: Ventilation Control and Fire Protection of Commercial Cooking Operations
NFPA 110: Emergency and Standby Power Systems
NFPA 115: Laser Fire Protection
NFPA 204: Smoke and Heat Venting: niet bruikbaar : Europese know-how staat verder
NFPA 214: Standard on Water-Cooling Towers

Specifieke risico's

Deze normen zijn deels bruikbaar als referentiemateriaal

NFPA 99: Health Care Facilities
NFPA 99B: Hypobaric Facilities
NFPA 101: Life Safety Code
NFPA 101B: Means of Egress for Buildings and Structures
NFPA 102: Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures
NFPA 120 -123 : bestemd voor de mijnbouw
NFPA 130: Fixed Guideway Transit and Passenger Rail Systems
NFPA 140: Motion Picture and Television Production Studio Soundstages and Approved Production Facilities
NFPA 150: Fire Safety in Racetrack Stables
NFPA 160: Flame Effects Before an Audience
NFPA 230: Fire Protection of Storage

NFPA 232: Protection of Records
NFPA 241: Safeguarding Construction, Alteration, and Demolition Operations
NFPA 501: Standard on Manufactured Housing
NFPA 501A: Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities
NFPA 502: Road Tunnels, Bridges, and Other Limited Access Highways
NFPA 520: Standard on Subterranean Spaces
NFPA 801: Fire Protection for Facilities Handling Radioactive Materials
NFPA 804: Fire Protection for Advanced Light Water Reactor Electric Generating Plants
NFPA 805: Performance-Based Fire Protection for Light Water Reactor Electric Generating Plants
NFPA 820: Fire Protection in Wastewater Treatment and Collection Facilities
NFPA 850: Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations
NFPA 851: Recommended Practice for Fire Protection for Hydroelectric Generating Plants
NFPA 853: Installation of Stationary Fuel Cell Power Systems
NFPA 909: Protection of Cultural Resources
NFPA 914: Fire Protection of Historic Structures

Bouwkundige aspecten :

Bruikbaar referentiemateriaal

NFPA 80A: Recommended Practice for Protection of Buildings from Exterior Fire Exposures
NFPA 221: Fire Walls and Fire Barrier Walls : deels bruikbaar, maar omdat de bepaling van de brandweerstand volgens verschillende criteria gebeurt in Europa en de US, zijn de eisen niet zo maar over te nemen, hoewel dat soms gebeurt.

NFPA 251 tot NFPA 288 bepalen de testmethodes van bouwproducten, meubels, enz.. Hoewel er gelijkaardige termen gebruikt worden is er geen eenvoudige relatie af te leiden tussen de bepalingen van het gedrag bij brand volgens de NFPA / ASTM methodes en de Methodes van de EN-normen.

Bepaalde testmethodes zijn bedoeld voor experimenten en rekenmethodes; Hiervoor zijn er ook overeenkomstige ISO normen

Brandvertragers:

NFPA 701: Standard Methods of Fire Tests for Flame Propagation of Textiles and Films
NFPA 703: Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials
NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response
NFPA 705: Recommended Practice for a Field Flame Test for Textiles and Films

Scheepvaart

De reeks NFPA 301- 312 is van toepassing op de scheepvaart

Luchtvaart

De reeks NFPA 402 - 424 is van toepassing op luchtvaart, gebouwen en operaties

Fire safety engineering:

Er zijn een aantal richtlijnen beschikbaar voor het toepassen van Fire safety Engineering, maar er is nog geen globale visie ontwikkeld

NFPA 101A: Guide on Alternative Approaches to Life Safety

NFPA 550: Guide to the Fire Safety Concepts Tree

NFPA 555: Guide on Methods for Evaluating Potential for Room Flashover

Brandweer en hulpdiensten:

NFPA 600: Standard on Industrial Fire Brigades
NFPA 601: Security Services in Fire Loss Prevention
NFPA 610: Guide for Emergency and Safety Operations at Motorsports Venues
NFPA 901: Standard Classifications for Incident Reporting and Fire Protection Data
NFPA 906: Guide for Fire Incident Field Notes
NFPA 921: Guide for Fire and Explosion Investigations
NFPA 1000: Fire Service Professional Qualifications Accreditation and Certification Systems
NFPA 1001: Fire Fighter Professional Qualifications
NFPA 1002: Standard on Fire Apparatus Driver/Operator Professional Qualifications
NFPA 1003: Airport Fire Fighter Professional Qualifications
NFPA 1006: Rescue Technician Professional Qualifications
NFPA 1021: Fire Officer Professional Qualifications
NFPA 1031: Professional Qualifications for Fire Inspector and Plan Examiner
NFPA 1033: Professional Qualifications for Fire Investigator
NFPA 1035: Professional Qualifications for Public Fire and Life Safety Educator
NFPA 1041: Fire Service Instructor Professional Qualifications
NFPA 1051: Wildland Fire Fighter Professional Qualifications
NFPA 1061: Professional Qualifications for Public Safety Telecommunicator
NFPA 1071: Emergency Vehicle Technician Professional Qualifications
NFPA 1081: Industrial Fire Brigade Member Professional Qualifications
NFPA 1201: Developing Fire Protection Services for the Public
NFPA 1221: Installation, Maintenance, and Use of Emergency Services Communications Systems
NFPA 1250: Recommended Practice in Emergency Service Organization Risk Management
NFPA 1401: Recommended Practice for Fire Service Training Reports and Records
NFPA 1402: Guide to Building Fire Service Training Centers
NFPA 1403: Standard on Live Fire Training Evolutions
NFPA 1404: Fire Service Respiratory Protection Training
NFPA 1405: Guide for Land-Based Fire Fighters Who Respond to Marine Vessel Fires
NFPA 1410: Training for Initial Emergency Scene Operations
NFPA 1451: Fire Service Vehicle Operations Training Program
NFPA 1452: Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys
NFPA 1500: Fire Department Occupational Safety and Health Program
NFPA 1521: Fire Department Safety Officer
NFPA 1561: Emergency Services Incident Management System
NFPA 1581: Fire Department Infection Control Program
NFPA 1582: Comprehensive Occupational Medical Program for Fire Departments
NFPA 1583: Health-Related Fitness Programs for Fire Fighters
NFPA 1584: Recommended Practice on the Rehabilitation of Members Operating at Incident Scene Operations and Training Exercises
NFPA 1600: Disaster/Emergency Management and Business Continuity Programs
NFPA 1620: Recommended Practice for Pre-Incident Planning
NFPA 1670: Operations and Training for Technical Rescue Incidents
NFPA 1710: Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments
NFPA 1720: Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments
NFPA 1851: Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles
NFPA 1852: Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA)
NFPA 1901: Automotive Fire Apparatus
NFPA 1906: Wildland Fire Apparatus
NFPA 1911: Service Tests of Fire Pump Systems on Fire Apparatus
NFPA 1912: Fire Apparatus Refurbishing
NFPA 1914: Testing Fire Department Aerial Devices
NFPA 1915: Fire Apparatus Preventive Maintenance Program

NFPA 1925: Marine Fire-Fighting Vessels
NFPA 1931: Design of and Design Verification Tests for Fire Department Ground Ladders
NFPA 1932: Use, Maintenance, and Service Testing of Fire Department Ground Ladders
NFPA 1936: Powered Rescue Tool Systems
NFPA 1951: Protective Ensemble for USAR Operations
NFPA 1961: Fire Hose
NFPA 1962: Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose
NFPA 1963: Fire Hose Connections
NFPA 1964: Spray Nozzles
NFPA 1965: Fire Hose Appliances
NFPA 1971: Protective Ensemble for Structural Fire Fighting
NFPA 1975: Station/Work Uniforms for Fire and Emergency Services
NFPA 1976: Protective Ensemble for Proximity Fire Fighting
NFPA 1977: Protective Clothing and Equipment for Wildland Fire Fighting
NFPA 1981: Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services
NFPA 1982: Personal Alert Safety Systems (PASS) 1998 Edition
NFPA 1983: Fire Service Life Safety Rope and System Components
NFPA 1989: Breathing Air Quality for Fire and Emergency Services Respiratory Protection
NFPA 1991: Vapor-Protective Ensembles for Hazardous Materials Emergencies
NFPA 1992: Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies
NFPA 1994: Protective Ensembles for Chemical/Biological Terrorism Incidents
NFPA 1999: Protective Clothing for Emergency Medical Operations
NFPA 2112: Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire
NFPA 2113: Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire

Brandbestrijding in bosrijke gebieden :

NFPA 1141: Fire Protection in Planned Building Groups
NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting
NFPA 1143: Wildland Fire Management