EXAMINATION REQUIREMENTS

FOR

FIRE SUPPRESSION SYSTEM

CERTIFICATION

AS PRESCRIBED BY

THE STATE FIRE PREVENTION COMMISSION

ON NOVEMBER 11, 2009

IN ACCORDANCE WITH

THE STATE FIRE PREVENTION REGULATIONS

REGULATION 703, CHAPTERS 5 AND 7
## EXAMINATION REQUIREMENTS

FOR

FIRE SUPPRESSION SYSTEM

CERTIFICATION

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- **June 12, 2003**
- **November 11, 2009**

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Office of the State Fire Marshal  
1537 Chestnut Grove Road  
Dover, DE 19904-1544  
Phone (302) 739-4394 Fax (302) 739-3696
### Classification of Fire Suppression System

**Licenses Certificates**

*As per the State Fire Prevention Regulations*

**Regulation 703, Chapters 5 and 7**

<table>
<thead>
<tr>
<th>Class</th>
<th>Type of work that may be performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>All types of fire suppression systems under Classes II, III, IV, and VIb.</td>
</tr>
<tr>
<td>II</td>
<td>Sprinkler and Standpipe Systems.</td>
</tr>
<tr>
<td>IIIa</td>
<td>Engineered CO2 fire suppression systems.</td>
</tr>
<tr>
<td>IIIb</td>
<td>Engineered clean agent fire suppression systems.</td>
</tr>
<tr>
<td>IIIc</td>
<td>Engineered foam fire suppression systems.</td>
</tr>
<tr>
<td>IIId</td>
<td>Engineered dry chemical fire suppression systems.</td>
</tr>
<tr>
<td>IIIe</td>
<td>Engineered water mist fire suppression systems.</td>
</tr>
<tr>
<td>IV</td>
<td>Residential fire suppression systems (NFPA 13D systems)</td>
</tr>
<tr>
<td>Va</td>
<td>Pre-engineered CO2 fire suppression systems only.</td>
</tr>
<tr>
<td>Vb</td>
<td>Pre-engineered clean agent fire suppression systems only.</td>
</tr>
<tr>
<td>Vc</td>
<td>Pre-engineered foam fire suppression systems only.</td>
</tr>
<tr>
<td>Vd</td>
<td>Pre-engineered dry chemical fire suppression systems only.</td>
</tr>
<tr>
<td>Ve</td>
<td>Pre-engineered wet chemical fire suppression systems only.</td>
</tr>
<tr>
<td>Vf</td>
<td>Pre-engineered water mist suppression systems.</td>
</tr>
<tr>
<td>VIa</td>
<td>Inspection and Testing of all water-based systems.</td>
</tr>
<tr>
<td>VIb</td>
<td>Inspection, Testing and Maintenance of all non water-based fire suppression systems and Maintenance of water-based fire suppression systems.</td>
</tr>
<tr>
<td>VIIIa</td>
<td>Inspection and Testing of water-based In-House Licensed Systems, ONLY.</td>
</tr>
<tr>
<td>VIIIb</td>
<td>Inspection, Testing and Maintenance of all In-house Licensed non water-based fire suppression systems and Maintenance of water-based In-house fire suppression systems.</td>
</tr>
</tbody>
</table>
## Examination Requirements for Fire Suppression System Certification

*As per the State Fire Prevention Regulations Regulation 703, Chapters 5 and 7*

<table>
<thead>
<tr>
<th>Certificate Class</th>
<th>Examination Requirements</th>
</tr>
</thead>
</table>
| I                 | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IV Certification Exam”  
|                   | Successfully complete “Class II Certification Exam”  
|                   | Successfully complete “Class III Combined Certification Exam”  |
| II                | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class II Certification Exam”  |
| IIIa              | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IIIa Certification Exam”  |
| IIIb              | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IIIb Certification Exam”  |
| IIIc              | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IIIc Certification Exam”  |
| IIId              | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IIId Certification Exam”  |
| IIIe              | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IIIe Certification Exam”  |
| IV                | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IV Certification Exam”  |
| Va-Vf             | Successfully complete “SFPR Exam”  
|                   | Provide proper Manufacturer’s Certification  |
| VIa               | Successfully complete “SFPR Exam”  
|                   | Successfully complete “NICET Level II Inspection and Testing of Water-Based Certification Exam”  
|                   | Provide proof of 16 hours of continuing education  |
| VIb               | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class II Certification Exam”  
|                   | Successfully complete “Class III Combined Certification Exam”  
|                   | Successfully complete “Class IV Certification Exam”  |
| VIIIa             | Successfully complete “SFPR Exam”  
|                   | Successfully complete “NICET Level II Inspection and Testing of Water-Based Certification Exam”  |
| VIIIb             | Successfully complete “SFPR Exam”  
|                   | Successfully complete “Class IV Certification Exam”  
|                   | Successfully complete “Class II Certification Exam”  
|                   | Successfully complete “Class III Combined Certification Exam”  |
**CLASS I**

**FIRE SUPPRESSION SYSTEM CERTIFICATE EXAMINATIONS**

**Section 1 – Scope of work which may be performed**

A Class I Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, install and maintain Fire Suppression Systems under Class II, III, IV and VIb Certificates.

**Section 2 – Examination Requirements**

1. **State Fire Prevention Regulations Examination (SFPR Exam)**

The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. **Fire Suppression System Class II Certification Examination (FSS Class II Exam)**

(Note 1)

The Fire Suppression System Class II Certificate Exam is an exam consisting of questions from the following 38 NICET work elements. Successful completion of this exam requires passing all 38 work elements.

<table>
<thead>
<tr>
<th>Work Elements Description</th>
<th>NICET Numbers</th>
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<tbody>
<tr>
<td>11001 – PLANS, SPECIFICATIONS AND CONTRACTS</td>
<td>13017 – BUILDING CODES</td>
</tr>
<tr>
<td>11002 – LAYOUT SIMPLE DESIGNS</td>
<td>13023 – SPECIAL SPRINKLERS</td>
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<tr>
<td>11003 – NFPA STANDARDS</td>
<td>13024 – WATER FLOW TEST</td>
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<tr>
<td>11004 – BASICS OF SPRINKLER SYSTEMS</td>
<td>13025 – FUNDAMENTALS OF HYDRAULICS</td>
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<td>11005 – BASIC MATERIALS AND COMPONENTS</td>
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<tr>
<td>13001 – CONSTRUCTION PLANS</td>
<td>14002 – SELECTION OF FIRE PUMPS</td>
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<tr>
<td>13002 – FIRE PROTECTION PLANS AND SYMBOLS</td>
<td>14004 – PUMP FLOW TEST</td>
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<tr>
<td>13005 – BASICS OF SYSTEM LAYOUT</td>
<td>14005 – HIGH PILED STORAGE</td>
</tr>
<tr>
<td>13006 – CLASSIFICATION OF OCCURRENCIES</td>
<td>14006 – RACK STORAGE</td>
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<tr>
<td>13007 – WATER SUPPLY REQUIREMENTS</td>
<td>14007 – SPRINKLER SYSTEM MAINTENANCE</td>
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<tr>
<td>13008 – SYSTEM CONNECTIONS</td>
<td>14009 – STANDPIPE SYSTEMS</td>
</tr>
<tr>
<td>13009 – SYSTEM PIPING CONFIGURATIONS, SCHEDULES AND SIZES</td>
<td>14101 – FIRE PUMPS AND SYSTEMS</td>
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<tr>
<td>13010 – REQUIREMENTS OF SPACING</td>
<td>14101 – STORAGE TANKS</td>
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<tr>
<td>13011 – SPRINKLER LOCATION AND POSITION</td>
<td>14101 – SURVEYS FOR FIRE PROTECTION</td>
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<tr>
<td>13012 – PIPE JOINING TECHNIQUES AND FITTINGS</td>
<td>15005 – SHOP AND ERECTION DRAWINGS</td>
</tr>
<tr>
<td>13013 – PIPE HANGERS AND HANGING</td>
<td>15007 – SYSTEM ACCEPTANCE TESTS</td>
</tr>
<tr>
<td>13014 – WET AND DRY SYSTEMS</td>
<td>15106 – HYDRAULIC DESIGN AREA</td>
</tr>
<tr>
<td>13015 – HYDRAULIC CALCULATIONS OF SYSTEMS</td>
<td>15106 – UNDERGROUND PIPING</td>
</tr>
</tbody>
</table>

3. **Combination of all Fire Suppression System Class IIIa thru IIIe Certification Exams**

(FSS Class IIIa thru IIIe Exams)

(Note 2)

To meet the Exam Requirements for FSS Class I, the applicant must successfully complete all 43 required NICET work elements for FSS Class IIIa thru IIIe. The 43 work elements required are as follows:

<table>
<thead>
<tr>
<th>Work Elements Description</th>
<th>NICET Numbers</th>
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</thead>
<tbody>
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<td>51001 – SIMPLE PLANS AND SPECIFICATIONS</td>
<td>54014 – INERGEN (IG- 541)</td>
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<tr>
<td>51002 – NFPA STANDARDS</td>
<td>54015 – FM-200 (HFC-227ea)</td>
</tr>
<tr>
<td>51003 – SPRINKLER SUPPRESSION SYSTEMS</td>
<td>54016 – FE-13 (HFC-23)</td>
</tr>
<tr>
<td>51005 – STANDARD SYMBOLS</td>
<td>54017 – ROOM INTERGRITY/FAN TESTING</td>
</tr>
<tr>
<td>52004 – LAYOUT SIMPLE DESIGNS</td>
<td>54018 – ENGINEERING DRAWINGS AND SUBMITTALS</td>
</tr>
<tr>
<td>53002 – HAZARD ANALYSIS</td>
<td>55001 – CONSTRUCTION PLANS</td>
</tr>
<tr>
<td>53003 – DETECTION METHODS</td>
<td>55003 – SYSTEM PIPING REQUIREMENTS</td>
</tr>
<tr>
<td>53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT</td>
<td>55004 – NOZZLE AND TANK LOCATION</td>
</tr>
<tr>
<td>53005 – EXTINGUISHING AGENTS I</td>
<td>55011 – FINAL ACCEPTANCE TEST FOR AHJ</td>
</tr>
<tr>
<td>53006 – SMOKE-SENSING DETECTORS</td>
<td>55012 – FIRE RISK ASSESSMENT</td>
</tr>
<tr>
<td>53007 – ELECTRICAL INSTALLATION STANDARDS</td>
<td>56001 – HEAT-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53008 – SPECIAL HAZARDS SYSTEMS INSPECTION</td>
<td>56002 – SMOKE-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53010 – HEAT-SENSING DETECTORS</td>
<td>56003 – FLAME-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53011 – FOAM WATER I</td>
<td>56004 – FIRE DETECTING SYSTEMS</td>
</tr>
<tr>
<td>53012 – CARBON DIOXIDE I</td>
<td>56005 – FOAM WATER II</td>
</tr>
<tr>
<td>53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS</td>
<td>56006 – HALON 1301 II</td>
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<tr>
<td>53017 – FIRE RISK ASSESSMENT</td>
<td>56007 – CARBON DIOXIDE II</td>
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<tr>
<td>54005 – FLAME DETECTORS</td>
<td>56008 – DRY CHEMICAL II</td>
</tr>
<tr>
<td>54006 – FIRE GAS DETECTORS</td>
<td>56014 – INERGEN (IG-541)</td>
</tr>
<tr>
<td>54007 – HALON 1301 I</td>
<td>56015 – FE-13 (HFC-23)</td>
</tr>
<tr>
<td>54008 – DRY CHEMICAL I</td>
<td>56016 – FM-200 (HFC-227ea)</td>
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<td>54011 – VISUAL INSPECTION OF CYLINDERS</td>
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Section 3 – Reference Material

SFPR  Delaware State Fire Prevention Regulations
NFPA 11 -  Standard for Foam Extinguishing Systems
NFPA 12 -  Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A -  Standard on Halon 1301 Extinguishing Systems
NFPA 13 -  Standard for the Installation of Sprinkler Systems
NFPA 13D -  Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes
NFPA 13R -  Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height
NFPA 14 -  Standard for Standpipe, Private Hydrant and Hose Systems
NFPA 16 -  Standard for Foam-Water Sprinkler Systems and Foam Water Spray Systems
NFPA 17 -  Standard for Dry Chemical Extinguishing Systems
NFPA 17A -  Standard on Wet Chemical Extinguishing Systems
NFPA 20 -  Standard for the Installation of Stationary Fire Pumps for Fire Protection
NFPA 22 -  Standard for Water Tanks for Private Fire Protection
NFPA 24 -  Standard for Installation of Private Fire Service Mains and Their Appurtenances
NFPA 25 -  Inspection, Testing and Maintenance of Water Based Fire Protection Systems
NFPA 70 -  National Electric Code
NFPA 72 -  National Alarm Code
NFPA 75 -  Electronic Computer/Data Processing Equipment
NFPA 170 -  Fire Safety Symbols
NFPA 409 -  Standard on Aircraft Hangars
NFPA 750 -  Water Mist Fire Protection Systems
NFPA 2001 -  Standard on Clean Agent Fire Extinguishing Systems

See the NICET Sprinkler Systems and Special Hazards Program Detail Manuals for additional suggested references.

**Note 1** – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Automatic Sprinkler System Layout, will be considered an equivalent to the FSS Class II Exam.

**Note 2** – NICET Certification to Level III in Fire Protection Engineering Technology subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
Section 1 – Scope of work which may be performed

A Class II Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, maintain, and install sprinkler and standpipe systems beginning at the point where the water supply is used exclusively for the fire suppression system.

Section 2 – Examination Requirements

1. State Fire Prevention Regulations Examination (SFPR Exam)

The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class II Certification Examination (FSS Class II Exam)

(Note 1)

The Fire Suppression System Class II Certificate Exam is an exam consisting of questions from the following 37 NICET work elements. Successful completion of this exam requires passing all 37 work elements.

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<td>13016 – UNDERGROUND PIPING</td>
</tr>
<tr>
<td>11002 – LAYOUT SIMPLE DESIGNS</td>
<td>13017 – BUILDING CODES</td>
</tr>
<tr>
<td>11003 – NFPA STANDARDS</td>
<td>13023 – SPECIAL SPRINKLERS</td>
</tr>
<tr>
<td>11004 – BASICS OF SPRINKLER SYSTEMS</td>
<td>13024 – WATER FLOW TEST</td>
</tr>
<tr>
<td>11005 – BASIC MATERIALS AND COMPONENTS</td>
<td>13025 – FUNDAMENTALS OF HYDRAULICS</td>
</tr>
<tr>
<td>13001 – CONSTRUCTION PLANS</td>
<td>14002 – SELECTION OF FIRE PUMPS</td>
</tr>
<tr>
<td>13002 – FIRE PROTECTION PLANS AND SYMBOLS</td>
<td>14004 – PUMP FLOW TEST</td>
</tr>
<tr>
<td>13005 – BASICS OF SYSTEM LAYOUT</td>
<td>14005 – HIGH PILED STORAGE</td>
</tr>
<tr>
<td>13006 – CLASSIFICATION OF OCCUPANCIES</td>
<td>14006 – RACK STORAGE</td>
</tr>
<tr>
<td>13007 – WATER SUPPLY REQUIREMENTS</td>
<td>14007 – SPRINKLER SYSTEM MAINTENANCE</td>
</tr>
<tr>
<td>13008 – SYSTEM CONNECTIONS</td>
<td>14009 – STANDPIPE SYSTEMS</td>
</tr>
<tr>
<td>13009 – SYSTEM PIPING CONFIGURATIONS, SCHEDULES AND SIZES</td>
<td>14010 – FIRE PUMPS AND SYSTEMS</td>
</tr>
<tr>
<td>13010 – REQUIREMENTS OF SPACING</td>
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</tr>
<tr>
<td>13011 – SPRINKLER LOCATION AND POSITION</td>
<td>14012 – ALARMS AND SYSTEM SUPERVISION</td>
</tr>
<tr>
<td>13012 – PIPE JOINING TECHNIQUES AND FITTINGS</td>
<td>14013 – FUNDAMENTALS OF FIRE EXTINGUISHMENT</td>
</tr>
<tr>
<td>13013 – PIPE HANGERS AND HANGING</td>
<td>14016 – SURVEYS FOR FIRE PROTECTION</td>
</tr>
<tr>
<td>13014 – WET AN DRY SYSTEMS</td>
<td>15005 – SHOP AND ERECTION DRAWINGS</td>
</tr>
<tr>
<td>13015 – HYDRAULIC CALCULATIONS OF SYSTEMS</td>
<td>15007 – SYSTEM ACCEPTANCE TESTS</td>
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<tr>
<td></td>
<td>15016 – HYDRAULIC DESIGN AREA</td>
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</table>

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<th>Standards</th>
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<tbody>
<tr>
<td>SFPR</td>
</tr>
<tr>
<td>Delaware State Fire Prevention Regulations</td>
</tr>
<tr>
<td>NFPA 13 - Standard for the Installation of Sprinkler Systems</td>
</tr>
<tr>
<td>NFPA 14 - Standard for Standpipe, Private Hydrant and Hose Systems</td>
</tr>
<tr>
<td>NFPA 20 - Standard for the Installation of Stationary Fire Pumps for Fire Protection</td>
</tr>
<tr>
<td>NFPA 22 - Standard for Water Tanks for Private Fire Protection</td>
</tr>
<tr>
<td>NFPA 24 - Standard for Installation of Private Fire Service Mains and Their Appurtenances</td>
</tr>
<tr>
<td>NFPA 25 - Inspection, Testing and Maintenance of Water Based Fire Protection Systems</td>
</tr>
<tr>
<td>NFPA 72 - National Alarm Code</td>
</tr>
<tr>
<td>NFPA 170 - Fire Safety Symbols</td>
</tr>
</tbody>
</table>

See the NICET Sprinkler Systems Program Detail Manual for additional suggested references.

Note 1 – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Automatic Sprinkler System Layout, will be considered an equivalent to the FSS Class II Exam.
CLASS IIIa
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Engineered CO2 Fire Suppression Systems]

Section 1 – Scope of work which may be performed
A Class IIIa Fire Suppression System Certificate will allow the certificate holder to prepare technical documents, install, inspect, test and maintain engineered carbon dioxide fire suppression systems.

Section 2 – Examination Requirements

1. State Fire Prevention Regulations Examination (SFPR Exam)
The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class IIIa Certification Examination (FSS Class IIIa Exam)
The Fire Suppression System Class IIIa Certificate Exam is an exam consisting of questions from the following 27 NICET work elements. Successful completion of this exam requires passing all 27 work elements.

   51001 – SIMPLE PLANS AND SPECIFICATIONS
   51002 – NFPA STANDARDS
   51003 – SPRINKLER SUPPRESSION SYSTEMS
   51005 – STANDARD SYMBOLS
   52004 – LAYOUT SIMPLE DESIGNS
   53002 – HAZARD ANALYSIS
   53003 – DETECTION METHODS
   53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
   53005 – EXTINGUISHING AGENTS I
   53006 – SMOKE-SENSING DETECTORS
   53007 – ELECTRICAL INSTALLATION STANDARDS
   53008 – SPECIAL HAZARDS SYSTEMS INSPECTION
   53010 – HEAT-SENSING DETECTORS
   53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS
   53012 – CARBON DIOXIDE I
   54005 – FLAME DETECTORS
   54006 – FIRE GAS DETECTORS
   54018 – ENGINEERING DRAWINGS AND SUBMITTALS
   55001 – CONSTRUCTION PLANS
   55003 – SYSTEM PIPING REQUIREMENTS
   55004 – NOZZLE AND TANK LOCATION
   55011 – FINAL ACCEPTANCE TEST FOR AHJ
   56001 – HEAT- SENSING PROTECTION SYSTEMS
   56002 – SMOKE-SENSING PROTECTION SYSTEMS
   56003 – FLAME- SENSING PROTECTION SYSTEMS
   56004 – FIRE DETECTING SYSTEMS
   56007 – CARBON DIOXIDE II

Section 3 – Reference Materials

SFPR Delaware State Fire Prevention Regulations
NFPA 11 - Standard for Foam Extinguishing Systems
NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A - Standard on Halon 1301 Extinguishing Systems
NFPA 13 - Standard for the Installation of Sprinkler Systems
NFPA 17 - Standard for Dry Chemical Extinguishing Systems
NFPA 17A - Standard on Wet Chemical Extinguishing Systems
NFPA 70 - National Electric Code
NFPA 72 - National Alarm Code
NFPA 75 - Electronic Computer/Data Processing Equipment
NFPA 170 - Fire Safety Symbols
NFPA 409 - Standard on Aircraft Hangars
NFPA 750 - Water Mist Fire Protection Systems
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems

See the NICET Special Hazards systems Program Detail Manual for additional suggested references

Note 2 – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
CLASS IIIb
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Engineered Clean Agent Suppression Systems]

Section 1 – Scope of work which may be performed
A Class IIIb Fire Suppression System Certificate will allow the certificate holder to prepare technical documents, install, inspect, test and maintain engineered Clean Agent fire suppression systems.

Section 2 _ Examination Requirements
1. State Fire Prevention Regulations Examination (SFPR Exam)
The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class IIIb Certification Examination (FSS Class IIIb Exam)
(Note 2)
The Fire Suppression System Class IIIb Certificate Exam is an exam consisting of questions from the following 35 NICET work elements. Successful completion of this exam passing all 35 work elements.

51001 – SIMPLE PLANS AND SPECIFICATIONS 54014 – INERGEN (IG– 541)
51002 – NFPA STANDARDS 54015 – FM-200 (HFC-227ea)
51003 – SPRINKLER SUPPRESSION SYSTEMS 54016 – FE-13 (HFC-23)
51005 – STANDARD SYMBOLS 54017 – ROOM INTEGRITY/FAN TESTING
52004 – LAYOUT SIMPLE DESIGNS 54018 – ENGINEERING DRAWINGS AND SUBMITTALS
53002 – HAZARD ANALYSIS 55001 – CONSTRUCTION PLANS
53003 – DETECTION METHODS 55003 – SYSTEM PIPING REQUIREMENTS
53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT 55004 – NOZZLE AND TANK LOCATION
53005 – EXTINGUISHING AGENTS I 55011 – FINAL ACCEPTANCE TEST FOR AN AHJ
53006 – SMOKE-SENSING DETECTORS 56001 – HEAT-SENSING PROTECTION SYSTEMS
53007 – ELECTRICAL INSTALLATION STANDARDS 56002 – SMOKE-SENSING PROTECTION SYSTEMS
53008 – SPECIAL HAZARDS SYSTEMS INSPECTION 56003 – FLAME-SENSING PROTECTION SYSTEMS
53010 – HEAT-SENSING DETECTORS 56004 – FIRE DETECTING SYSTEMS
53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS 56006 – HALON 1301 II
54005 – FLAME DETECTORS 56014 – INERGEN (IG-541)
54006 – FIRE GAS DETECTORS 56015 – FE-13 (HFC-23)
54007 – HALON 1301 I 56016 – FM-200 (HFC-227ea)
54011 – VISUAL INSPECTION OF CYLINDERS

Section 3 – Reference Materials
SFPR Delaware State Fire Prevention Regulations
NFPA 11 - Standard for Foam Extinguishing Systems
NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A - Standard on Halon 1301 Extinguishing Systems
NFPA 13 - Standard for the Installation of Sprinkler Systems
NFPA 17 - Standard for Dry Chemical Extinguishing Systems
NFPA 17A - Standard on Wet Chemical Extinguishing Systems
NFPA 70 - National Electric Code
NFPA 72 - National Alarm Code
NFPA 75 - Electronic Computer/Data Processing Equipment
NFPA 170 - Fire Safety Symbols
NFPA 409 - Standard on Aircraft Hangars
NFPA 750 - Water Mist Fire Protection Systems
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems

See the NICET Special Hazards Systems Program Detail Manual for additional suggested

Note 2 – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
CLASS IIIc
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Engineered Foam Fire Suppression Systems]

Section 1 – Scope of work which may be performed

A Class IIIc Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, install, inspect, test and maintain engineered foam fire suppression systems.

Section 2 – Examination Requirements

1. State Fire Prevention Regulations Examination (SFPR Exam)
   The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class IIIc Certificate Examination (FSS IIIc Exam)
   (Note 2)
   The Fire Suppression System Class IIIc Certificate Exam is an exam consisting of questions from the following 25 NICET work elements. Successful completion of this exam requires passing all 25 work elements.

   51001 – SIMPLE PLANS AND SPECIFICATIONS
   51002 – NFPA STANDARDS
   51003 – SPRINKLER SUPPRESSION SYSTEMS
   51005 – STANDARD SYMBOLS
   52004 – LAYOUT SIMPLE DESIGNS
   53002 – HAZARD ANALYSIS
   53003 – DETECTION METHODS
   53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
   53005 – EXTINGUISHING AGENTS I
   53006 – SMOKE-SENSING DETECTORS
   53007 – ELECTRICAL INSTALLATION STANDARDS
   53008 – SPECIAL HAZARDS SYSTEMS INSPECTION
   53010 – HEAT-SENSING DETECTORS
   53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS
   54005 – FLAME DETECTORS
   54006 – FIRE GAS DETECTORS
   55001 – CONSTRUCTION PLANS
   55003 – SYSTEM PIPING REQUIREMENTS
   55004 – NOZZLE AND TANK LOCATION
   56001 – HEAT-SENSING PROTECTION SYSTEMS
   56002 – SMOKE-SENSING PROTECTION SYSTEMS
   56003 – FLAME-SENSING PROTECTION SYSTEMS
   56004 – FIRE DETECTING SYSTEMS
   56005 – FOAM WATER II
   56006 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS
   57001 – HEAT-SENSING PROTECTION SYSTEMS
   57002 – SMOKE-SENSING PROTECTION SYSTEMS
   57003 – FLAME-SENSING PROTECTION SYSTEMS
   57004 – FIRE DETECTING SYSTEMS
   57005 – FOAM WATER II

Section 3 – Reference Materials

SFPR Delaware State Fire Prevention Regulations
NFPA 11 - Standard for Foam Extinguishing Systems
NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A - Standard on Halon 1301 Extinguishing Systems
NFPA 13 - Standard for the Installation of Sprinkler Systems
NFPA 16 - Standard for Foam-Water Sprinkler Systems and Foam Water Spray Systems
NFPA 17 - Standard for Dry Chemical Extinguishing Systems
NFPA 17A - Standard on Wet Chemical Extinguishing Systems
NFPA 70 - National Electric Code
NFPA 72 - National Alarm Code
NFPA 75 - Electronic Computer/Data Processing Equipment
NFPA 170 - Fire Safety Symbols
NFPA 409 - Standard on Aircraft Hangars
NFPA 750 - Water Mist Fire Protection Systems
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems

See the NICET Special Hazards Systems Program Detail Manual for additional suggested references.

Note 2 – NICET Certification to Level III in Fire Protection Engineering Technology, sub field of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
**CLASS III Id**

**FIRE SUPPRESSION SYSTEM CERTIFICATE**  
[Engineered Dry Chemical]

**Section 1 – Scope of work which may be performed**

A Class III Id Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, install, inspect, test and maintain engineered dry chemical fire suppression systems.

**Section 2 – Examination Requirements**

1. **State Fire Prevention Regulations Examination (SFPR Exam)**

   The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. **Fire Suppression System Class III Id Certification Examination (FSS Class III Id Exam)**  

   (Note 2)

   The Fire Suppression System Class III Id Certificate Exam is an exam consisting of questions from the following 25 NICET work elements. Successful completion of this exam requires passing all 25 work elements.

<table>
<thead>
<tr>
<th>Work Element</th>
<th>NICET Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>51001 – SIMPLE PLANS AND SPECIFICATIONS</td>
<td>53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS</td>
</tr>
<tr>
<td>51002 – NFPA STANDARDS</td>
<td>54005 – FLAME DETECTORS</td>
</tr>
<tr>
<td>51003 – SPRINKLER SUPPRESSION SYSTEMS</td>
<td>54006 – FIRE GAS DETECTORS</td>
</tr>
<tr>
<td>51005 – STANDARD SYMBOLS</td>
<td>54008 – DRY CHEMICAL I</td>
</tr>
<tr>
<td>52004 – LAYOUT SIMPLE DESIGNS</td>
<td>55001 – CONSTRUCTION PLANS</td>
</tr>
<tr>
<td>53002 – HAZARD ANALYSIS</td>
<td>55003 – SYSTEM PIPING REQUIREMENTS</td>
</tr>
<tr>
<td>53003 – DETECTION METHODS</td>
<td>55004 – NOZZLE AND TANK LOCATION</td>
</tr>
<tr>
<td>53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT</td>
<td>56001 – HEAT-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53005 – EXTINGUISHING AGENTS I</td>
<td>56002 – SMOKE-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53006 – SMOKE-SENSING DETECTORS</td>
<td>56003 – FLAME-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53007 – ELECTRICAL INSTALLATION STANDARDS</td>
<td>56004 – FIRE DETECTING SYSTEMS</td>
</tr>
<tr>
<td>53008 – SPECIAL HAZARDS SYSTEMS INSPECTION</td>
<td>56008 – DRY CHEMICAL II</td>
</tr>
<tr>
<td>53010 – HEAT-SENSING DETECTORS</td>
<td></td>
</tr>
</tbody>
</table>

**Section 3 – Reference Materials**

- SFPR: Delaware State Fire Prevention Regulations
- NFPA 11 - Standard for Foam Extinguishing Systems
- NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
- NFPA 12A - Standard on Halon 1301 Extinguishing Systems
- NFPA 13 - Standard for the Installation of Sprinkler Systems
- NFPA 17 - Standard for Dry Chemical Extinguishing Systems
- NFPA 17A - Standard on Wet Chemical Extinguishing Systems
- NFPA 70 - National Electric Code
- NFPA 72 - National Alarm Code
- NFPA 75 - Electronic Computer/Data Processing Equipment
- NFPA 170 - Fire Safety Symbols
- NFPA 409 - Standard on Aircraft Hangars
- NFPA 750 - Water Mist Fire Protection Systems
- NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems

See the NICET Special Hazards Systems Program Detail Manual for additional suggested

**Note 2** – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
**CLASS IIIe**

FIRE SUPPRESSION SYSTEM CERTIFICATE
[Engineered Water Mist]

### Section 1 – Scope of work which may be performed

A Class IIIe Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, install, inspect, test and maintain engineered water mist fire suppression systems

### Section 2 – Examination Requirements

1. **State Fire Prevention Regulations Examination (SFPR Exam)**

The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. **Fire Suppression System Class IIIe Certification Examination (FSS Class IIIe Exam)**

   (Note 2)

The Fire Suppression System Class IIIe Certificate Exam is an exam consisting of questions from the following 27 NICET work elements. Successful completion of this exam requires passing all 27 work elements.

<table>
<thead>
<tr>
<th>NICET Work Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>51001 – SIMPLE PLANS AND SPECIFICATIONS</td>
<td>53017 – FIRE RISK ASSESSMENT</td>
</tr>
<tr>
<td>51002 – NFPA STANDARDS</td>
<td>54005 – FLAME DETECTORS</td>
</tr>
<tr>
<td>51003 – SPRINKLER SUPPRESSION SYSTEMS</td>
<td>54006 – FIRE GAS DETECTORS</td>
</tr>
<tr>
<td>51005 – STANDARD SYMBOLS</td>
<td>54018 – ENGINEERING DRAWINGS AND SUBMITTALS</td>
</tr>
<tr>
<td>52004 – LAYOUT SIMPLE DESIGNS</td>
<td>55001 – CONSTRUCTION PLANS</td>
</tr>
<tr>
<td>53002 – HAZARD ANALYSIS</td>
<td>55003 – SYSTEM PIPING REQUIREMENTS</td>
</tr>
<tr>
<td>53003 – DETECTION METHODS</td>
<td>55004 – NOZZLE AND TANK LOCATION</td>
</tr>
<tr>
<td>53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT</td>
<td>55011 – FINAL ACCEPTANCE TEST FOR AN AHJ</td>
</tr>
<tr>
<td>53005 – EXTINGUISHING AGENTS I</td>
<td>55012 – FIRE RISK ASSESSMENT</td>
</tr>
<tr>
<td>53006 – SMOKE-SENSING DETECTORS</td>
<td>56001 – HEAT-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53007 – ELECTRICAL INSTALLATION STANDARDS</td>
<td>56002 – SMOKE-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53008 – SPECIAL HAZARDS SYSTEMS INSPECTION</td>
<td>56003 – FLAME-SENSING PROTECTION SYSTEMS</td>
</tr>
<tr>
<td>53010 – HEAT-SENSING DETECTORS</td>
<td>56004 – FIRE DETECTING SYSTEMS</td>
</tr>
<tr>
<td>53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS</td>
<td></td>
</tr>
</tbody>
</table>

### Section 3 – Reference Materials

- SFPR: Delaware State Fire Prevention Regulations
- NFPA 11: Standard for Foam Extinguishing Systems
- NFPA 12: Standard on Carbon Dioxide Extinguishing Systems
- NFPA 12A: Standard on Halon 1301 Extinguishing Systems
- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 17: Standard for Dry Chemical Extinguishing Systems
- NFPA 17A: Standard on Wet Chemical Extinguishing Systems
- NFPA 70: National Electric Code
- NFPA 72: National Alarm Code
- NFPA 75: Electronic Computer/Data Processing Equipment
- NFPA 170: Fire Safety Symbols
- NFPA 409: Standard on Aircraft Hangars
- NFPA 750: Water Mist Fire Protection Systems
- NFPA 2001: Standard on Clean Agent Fire Extinguishing Systems

See the NICET Special Hazards systems Program Detail Manual for additional suggested references

**Note 2** – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.
CLASS IV
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Dwelling Sprinklers]

Section 1 – Scope of work which may be performed

A Class IV Fire Suppression System Certificate will allow the certificate holder to design, prepare technical documents, maintain, and install sprinkler systems in one- and two-family dwellings and/or manufactured homes (NFPA 13D systems).

Section 2 – Examination Requirements (SFPR Exam)

1. State Fire Prevention Regulations Examination (SFPR Exam)

The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class IV Certification Examination (FSS Class IV Exam)

This Exam is based on NFPA 13D.

Section 3 – Reference Material

SFPR State Fire Prevention Regulations
NFPA 13D - Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes

CLASS V
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Pre-engineered Fire Protection System]

Section 1 – Scope of work which may be performed

A Class V Fire Suppression System Certificate will allow the certificate holder to prepare technical documents, install, inspect, test and maintain pre-engineered fire protection systems.

Section 2 – Examination Requirements

1. State Fire Prevention Regulations Examination (SFPR Exam)

The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class V Certification Examination (FSS Class V Exam)

A manufacturer’s certification in specific systems is to be considered equivalent to a Class V Certificate in the specific category.
CLASS VIa
FIRE SUPPRESSION SYSTEM CERTIFICATE
[Testing and Inspection of Water-Based Fire Suppression]

Section 1 – Scope of work which may be performed
A Class VIa Fire Suppression System Certificate will allow the certificate holder to inspect and test water-based fire protection systems as specified in the National Fire Protection Association’s National Fire Codes, for all fire suppression systems covered under Certificate Classifications II and IV.

Section 2 – Examination Requirements
1. State Fire Prevention Regulations Examination (SFPR Exam)
The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class VIa Certification Examination
A minimum certification to a NICET Level II in Inspection and Testing of Water Based Fire Suppression Systems.

CLASS VIb
FIRE SUPPRESSION SYSTEM CERTIFICATE

Section 1 – Scope of work which may be performed
A Class VIb Fire Suppression System Certificate will allow the certificate holder to inspect, test and maintain service of fire suppression systems that are not water based, for all fire suppression systems covered under Certificate Classification III and performing maintenance service of water based fire protection systems, for all fire suppression systems covered under Certificate Classifications II and IV.

Section 2 – Examination Requirements
1. State Fire Prevention Regulations Examination (SFPR Exam)
The State Fire Prevention Regulations Exam is based on the current edition of the State Fire Prevention Regulations. The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class VIb Certification Examination (FSS Class II Exam)
(Note 1, Note 2 & Note 4)
The Fire Suppression System Class VIb Certificate Exam is an exam consisting of questions from the following 37 NICET work elements. Successful completion of this exam requires successful passing of all 37 work elements.

11001 – PLANS, SPECIFICATIONS AND CONTRACTS
11002 – LAYOUT SIMPLE DESIGNS
11003 – NFPA STANDARDS
11004 – BASICS OF SPRINKLER SYSTEMS
11005 – BASIC MATERIALS AND COMPONENTS
13001 – CONSTRUCTION PLANS
13002 – FIRE PROTECTION PLANS AND SYMBOLS
13005 – BASICS OF SYSTEM LAYOUT
13006 – CLASSIFICATION OF OCCUPANCIES
13007 – WATER SUPPLY REQUIREMENTS
13008 – SYSTEM CONNECTIONS
13009 – SYSTEM PIPING CONFIGURATIONS, SCHEDULES AND SIZES
13010 – REQUIREMENTS OF SPACING
13011 – SPRINKLER LOCATION AND POSITION
13012 – PIPE JOINING TECHNIQUES AND FITTINGS
13013 – PIPE HANGARS AND HANGING
13014 – WET AND DRY SYSTEMS
13015 – HYDRAULIC CALCULATIONS OF SYSTEMS
13016 – UNDERGROUND PIPING
13017 – BUILDING CODES
13023 – SPECIAL SPRINKLERS
13024 – WATER FLOW TEST
13025 – FUNDAMENTALS OF HYDRAULICS
14002 – SELECTION OF FIRE PUMPS
14004 – PUMP FLOW TEST
14005 – HIGH PILED STORAGE
14006 – RACK STORAGE
14007 – SPRINKLER SYSTEM MAINTENANCE
14009 – STANDPIPE SYSTEMS
14010 – FIRE PUMPS AND SYSTEMS
14011 – STORAGE TANKS
14012 – ALARMS AND SYSTEM SUPERVISION
14013 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
14016 – SURVEYS FOR FIRE PROTECTION
14017 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
14018 – SURVEYS FOR FIRE PROTECTION
15005 – SHOP AND ERECTION DRAWINGS
15007 – SYSTEM ACCEPTANCE TESTS
15016 – HYDRAULIC DESIGN AREA
3. Combination of all Fire Suppression System Class IIIa thru IIIe Certification Exams
(FSS Class IIIa thru IIIe Exams)
(Note 2)

To meet the Exam Requirements for FSS Class I, the applicant must successfully complete all 43 required NICET work elements for FSS Class IIIa thru IIIe. The 43 work elements required are as follows:

51001 – SIMPLE PLANS AND SPECIFICATIONS
51002 – NFPA STANDARDS
51003 – SPRINKLER SUPPRESSION SYSTEMS
51005 – STANDARD SYMBOLS
52004 – LAYOUT SIMPLE DESIGNS
53002 – HAZARD ANALYSIS
53003 – DETECTION METHODS
53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
53005 – EXTINGUISHING AGENTS I
53006 – SMOKE-SENSING DETECTORS
53007 – ELECTRICAL INSTALLATION STANDARDS
53008 – SPECIAL HAZARDS SYSTEMS INSPECTION
53010 – HEAT-SENSING DETECTORS
53011 – FOAM WATER I
53012 – CARBON DIOXIDE I
53016 – INTERCONNECTION WITH EXTINGUISHING SYSTEMS
53017 – FIRE RISK ASSESSMENT
54005 – FLAME DETECTORS
54006 – FIRE GAS DETECTORS
54011 – VISUAL INSPECTION OF CYLINDERS
54014 – INERGEN (IG–541)
54015 – FM-200 (HFC-227ea)
54016 – FE-13 (HFC-23)
54017 – ROOM INTERGRITY/FAN TESTING
54018 – ENGINEERING DRAWINGS AND SUBMITTALS
55001 – CONSTRUCTION PLANS
55003 – SYSTEM PIPING REQUIREMENTS
55004 – NOZZLE AND TANK LOCATION
55011 – FINAL ACCEPTANCE TEST FOR AHJ
55012 – FIRE RISK ASSESSMENT
56001 – HEAT-SENSING PROTECTION SYSTEMS
56002 – SMOKE-SENSING PROTECTION SYSTEMS
56003 – FLAME-SENSING PROTECTION SYSTEMS
56004 – FIRE DETECTING SYSTEMS
56005 – FOAM WATER II
56006 – HALON 1301 II
56007 – CARBON DIOXIDE II
56008 – DRY CHEMICAL II
56014 – INERGEN (IG-541)
56015 – FE-13 (HFC-23)
56016 – FM-200 (HFC-227ea)

Section 3 – Reference Material

SFPR Delaware State Fire Prevention Regulations
NFPA 11 - Standard for Foam Extinguishing Systems
NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A - Standard on Halon 1301 Extinguishing Systems
NFPA 13 - Standard for the Installation of Sprinkler Systems
NFPA 13D - Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes
NFPA 13R - Sprinkler Systems in Residential Occupancies Up To and Including FourStories in Height
NFPA 14 - Standard for Standpipe, Private Hydrant and Hose Systems
NFPA 16 - Standard for Foam-Water Sprinkler Systems and Foam Water Spray Systems
NFPA 17 - Standard for Dry Chemical Extinguishing Systems
NFPA 17A - Standard on Wet Chemical Extinguishing Systems
NFPA 20 - Standard for the Installation of Stationary Fire Pumps for Fire Protection
NFPA 22 - Standard for Water Tanks for Private Fire Protection
NFPA 24 - Standard for Installation of Private Fire Service Mains and Their Appurtenances
NFPA 25 - Inspection, Testing and Maintenance of Water Based Fire Protection Systems
NFPA 70 - National Electric Code
NFPA 72 - National Alarm Code
NFPA 75 - Electronic Computer/Data Processing Equipment
NFPA 170 - Fire Safety Symbols
NFPA 409 - Standard on Aircraft Hangars
NFPA 750 - Water Mist Fire Protection Systems
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems

See the NICET Sprinkler Systems and Special Hazards Program Detail Manuals for additional suggested references.

Note 1 – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Automatic Sprinkler System Layout, will be considered an equivalent to the FSS Class II Exam.

Note 2 – NICET Certification to Level III in Fire Protection Engineering Technology subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.

Note 4 – Class IV Certification will be required for those that will be inspecting, testing or maintaining fire suppression systems in one and two family dwellings.
CLASS VIIIa
FIRE SUPPRESSION SYSTEM CERTIFICATE
(RESERVED FOR IN-HOUSE LICENSEE’S)

Section 1 – Scope of work which may be performed
A Class VIIIa Fire Suppression System Certificate will allow the certificate holder to inspect and test wholly owned or proprietary water-based fire suppression systems. This class of certificate is for In-House Licensees.

Section 2 – Examination Requirements
1. State Fire Prevention Regulations Examination (SFPR Exam)
The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class VIIIa Certification Examination
A minimum certification to a NICET Level II in Inspection and Testing of Water Based Fire Suppression Systems.

CLASS VIIIb
FIRE SUPPRESSION SYSTEM CERTIFICATE
(RESERVED FOR IN-HOUSE LICENSEE’S)

Section 1 – Scope of work which may be performed
A Class VIIIb Fire Suppression System Certificate will allow the certificate holder to inspect, test, and maintain wholly owned or proprietary fire suppression systems that are not water-based and the maintain water-based fire suppression systems. This class of certificate is for In-House Licensees.

Section 2 – Examination Requirements
1. State Fire Prevention Regulations Examination (SFPR Exam)
The purpose of this exam is to test for knowledge of the Delaware State Fire Prevention Regulations.

2. Fire Suppression System Class VIIIb Certification Examination (FSS Class VIIIb Exam)
(Note 1 & 4)
The Fire Suppression System Class II Certification Exam is an exam consisting of questions from the following 37 NICET work elements. Successful completion of this exam requires passing all 37 work elements.

3. Combination of all Fire Suppression System Class IIIa thru IIIe Certification Exams
(FSS Class IIIa thru IIIe Exams)
(Notes 2 and 3)
To meet the Exam Requirements for FSS Class I, the applicant must successfully complete all 431 required NICET work elements for FSS Class IIIa thru IIIe. The 43 work elements required are as follows:

51001 – SIMPLE PLANS AND SPECIFICATIONS
51002 – NFPA STANDARDS
51003 – SPRINKLER SUPPRESSION SYSTEMS
51005 – STANDARD SYMBOLS
52004 – LAYOUT SIMPLE DESIGNS
53002 – HAZARD ANALYSIS
53003 – DETECTION METHODS
53004 – FUNDAMENTALS OF FIRE EXTINGUISHMENT
53005 – EXTINGUISHING AGENTS I
53006 – SMOKE-SENSING DETECTORS
53007 – ELECTRICAL INSTALLATION STANDARDS
53008 – SPECIAL HAZARDS SYSTEMS INSPECTION
53010 – HEAT-SENSING DETECTORS
53011 – FOAM WATER I
Section 3 – Reference Material

SFPR Delaware State Fire Prevention Regulations  
NFPA 11 - Standard for Foam Extinguishing Systems  
NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems  
NFPA 12A - Standard on Halon 1301 Extinguishing Systems  
NFPA 13 - Standard for the Installation of Sprinkler Systems  
NFPA 13D - Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes  
NFPA 13R - Sprinkler Systems in Residential Occupancies Up To And Including Four Stories In Height  
NFPA 14 - Standard for Standpipe, Private Hydrant and Hose Systems  
NFPA 16 - Standard for Foam-Water Sprinkler Systems and Foam Water Spray Systems  
NFPA 17 - Standard for Dry Chemical Extinguishing Systems  
NFPA 17A - Standard on Wet Chemical Extinguishing Systems  
NFPA 20 - Standard for the Installation of Stationary Fire Pumps for Fire Protection  
NFPA 22 - Standard for Water Tanks for Private Fire Protection  
NFPA 24 - Standard for Installation of Private Fire Service Mains and Their Appurtenances  
NFPA 25 - Inspection, Testing and Maintenance of Water Based Fire Protection Systems  
NFPA 70 - National Electric Code  
NFPA 72 - National Alarm Code  
NFPA 75 - Electronic Computer/Data Processing Equipment  
NFPA 170 - Fire Safety Symbols  
NFPA 409 - Standard on Aircraft Hangars  
NFPA 750 - Water Mist Fire Protection Systems  
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems  

See the NICET Sprinkler Systems and Special Hazards Program Detail Manuals for additional suggested references.

Note 1 – NICET Certification to Level III in Fire Protection Engineering Technology, Subfield of Automatic Sprinkler System Layout, will be considered an equivalent to the FSS Class II Exam.

Note 2 – NICET Certification to Level III in Fire Protection Engineering Technology, subfield of Special Hazards System Layout, will be considered an equivalent to the FSS Class III Exams.

Note 3 – Class III Certification will not be required for those In-House Licensee’s that are not inspecting, testing or maintaining special hazards systems.

Note 4 – Class IV Certification will be required for those In-House Licensee’s that will be inspecting, testing or maintaining fire suppression systems in one and two family dwellings.
SELECTED GENERAL REFERENCES


In all cases, we suggest that the most current edition of the publication be used.