



**Verenigde
Sprinkler Industrie**

onderdeel van Federatie Veilig Nederland

FM Workshop Fire Safety

SPECIFYING SPRINKLER PROTECTION TO FM STANDARDS

9 & 10 June 2026

Welcome to the FM workshop

Fire Safety in Utrecht

FM Workshop Agenda – 2 days

Day 1

- 9.00 Opening, introduction FM,
Protected by longitudinal flue space design
- 9.45 DS overview and interaction DS's
Building construction and Occupancy specific hazards
- 10.25 **Break**
- 10.45 Non-storage and low piled storage
- 11.15 Commodity classification
- 12.00 **Lunch**
- 13.00 Storage hazards
Workshop storage hazards
- 14.15 **Break**
- 14.30 OTC Open Top Containers
Automated storage and retrieval systems
Special hazards
Water supply
- 17:00 Closing day 1 + optional network

Day 2

- 9.00 Opening Day 2 + parking lot Day 1
NL-certificering & FM
Approval guide
Ceiling sprinkler installation - PART 1
- 10.30 **Break**
- 10.45 Ceiling sprinkler installation - PART 2
Exposure sprinklers
- 12.00 **Lunch**
- 13.00 In-rack sprinklers
Workshop IRAS
- 14.00 General considerations
- 14.30 **Break**
- 14.45 Water supplies
Plan review heavy version(Specifications, Hydraulic calcs, drawings,...)
Most common pitfalls
Field acceptance
Parking lot questions & closing
- 17:00 End of Workshop



FM and NL sprinkler inspection & certification system

Rini de Rooij, Group Manager Field Engineering

9 & 10 June 2026

overview

- NL sprinkler inspection & certification system > by John
- FM and NL sprinkler inspection & certification system
- When FM involved at a site?
- When to make what recommendation?
- What are cost-effective risk reduction solutions?

FM Workshop Agenda – 2 days

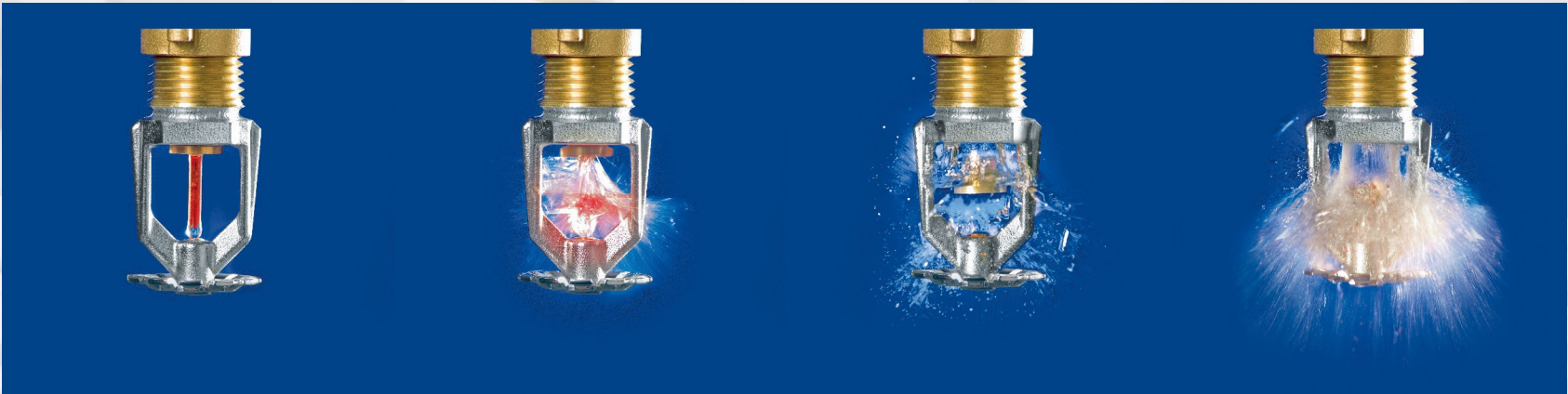
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Inspection and Certification



Inspection Fire Safety

- ❑ Inspection sometimes mandatory:
 - **Bbl**: Certain occupancy functions and installations
Equivalent solution and standards; NEN 6060, NEN 6079 etc
 - **PGS 15/ PGS 37-2**
 - Fireworks Storage

Inspection based on 'derived objectives' > typical Dutch

Integrated Building Fire Safety Model

Optimal Fire Safety

Collaboration model developed by 'het CCV'

- ☐ For: consultant, fire brigade, Building and Housing Supervision Authority, insurer, designer, construction company, installer, and the user/owner
- ☐ Future-proof fire safety

For the user:

- ☐ Choose the fire safety solution that best fits my situation
- ☐ Clearly communicate to other parties what I want and what considerations apply
- ☐ Avoid problems and failure costs
- ☐ Demonstrate that fire safety in my building is properly managed
- ☐ Negotiate with the insurer about the premium level in relation to my investment in fire protection
- ☐ Properly document my choices and decisions so they can easily be retrieved in the future

<https://hetccv.nl/keurmerken/brandbeveiliging/model-integrale-brandveiligheid-bouwwerken/>

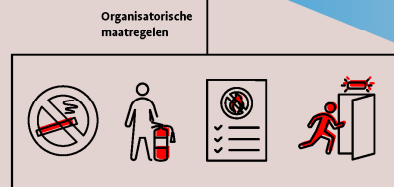
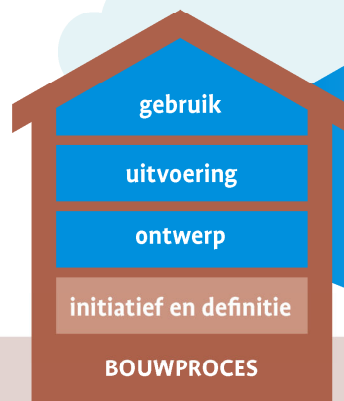


Integrale brandveiligheid bouwwerken

IBB-Cyclus

De IBB-cyclus is een stappenplan voor gebouwgebruikers en -eigenaren om de brandveiligheid van een nieuw of bestaand gebouw op orde te krijgen en te houden.

De cyclus zorgt voor samenhang tussen de bouwkundige, installatietechnische en organisatorische brandbeveiligingsmaatregelen. Zo sluiten deze aan op de eisen van de overheid en verzekeraars.



6 Evaluatie van jouw situatie

Evalueer je situatie regelmatig. Als je het gebouw niet meer volgens het plan gebruikt of de regelgeving verandert, dan is een nieuwe analyse nodig.

Schakel adviseur in

5 Gebruik

Let op de brandveiligheid bij het gebruik. Zorg voor goed beheer en onderhoud van de installaties.

Vind goede onderhoudsbedrijven

4 Inspectie

Schakel een inspecteur in om de genomen maatregelen en installaties te controleren.

Vind inspectie-instellingen

1 Analyse

Schakel (externe) expertise in om de brandveiligheidsrisico's van het gebouwgebruik in kaart te brengen.

Schakel adviseur in

Verschillende factoren
brandveiligheidsrisico's



Risicobeheer



Bouwregelgeving



Erfgoed



Milieu

2 Plan (IPB)

Zorg voor een Integraal Plan Brandbeveiliging. Een goed plan helpt bij overleg met bevoegd gezag en voorkomt reparatiekosten.

Schakel adviseur in

3 Realiseren

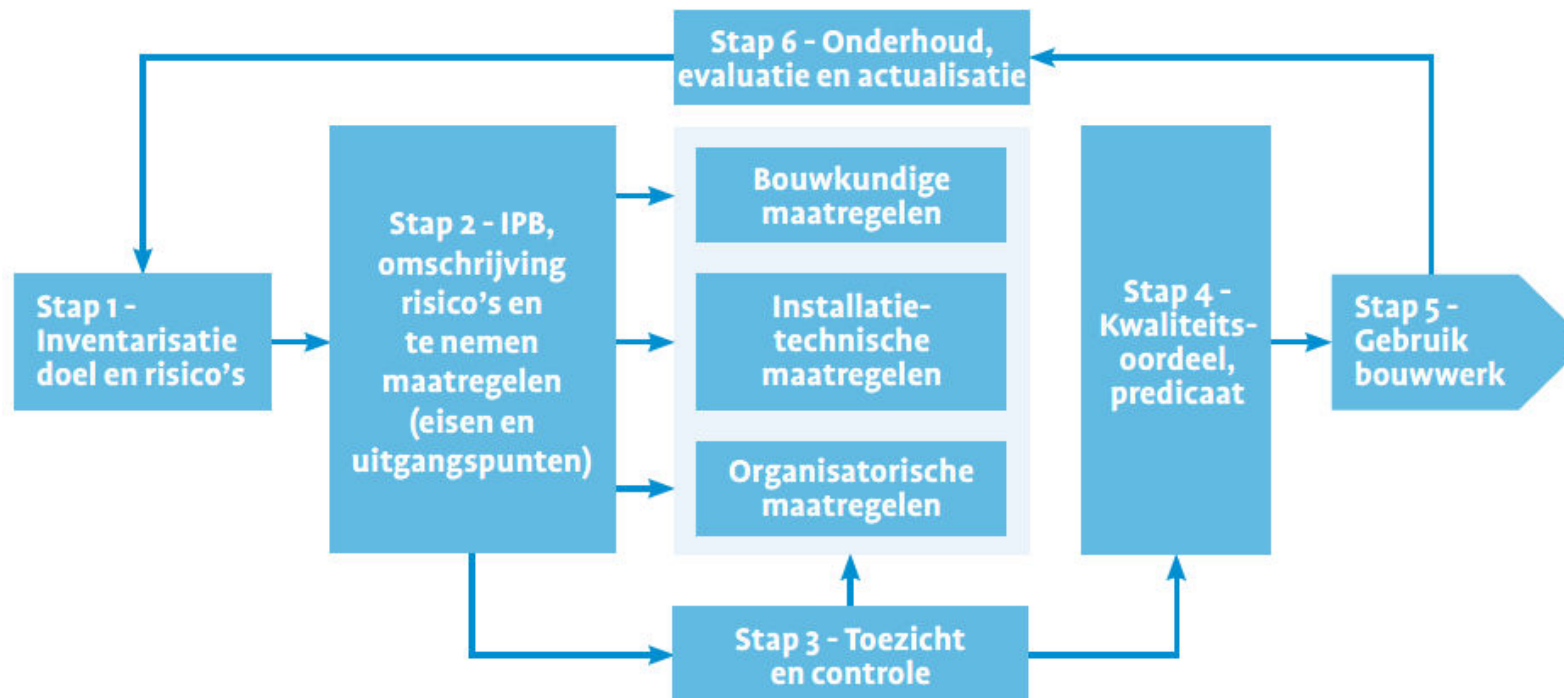
Laat de installatie aanleggen volgens het Integraal Plan Brandbeveiliging (IPB).

Vind goede installatiebedrijven

Bouwkundige en
installatietechnische
maatregelen



Integrated Building Fire Safety Model



Documents ‘Uitgangspuntendocument Fire Safety’ ‘design Basis Document’

Certified ‘Uitgangspuntendocument opsteller’

Certificatieschema UPD-PvE Brandbeveiliging (versie 2.0)

- [Certificatieschema UPD-PvE Brandbeveiliging \(versie 2.0\)](#)
- [Bijlage A: Label inhoud UPD-PvE Brandbeveiliging](#)



Inspection Fire Safety

- ❑ Inspection based on 'derived objectives' ' ISO 17020
- ❑ CCV Inspection schemes:
 - Fire Safety Basic (*Basisontwerp*)
 - Fire Safety Detail (*Detailontwerp*)
 - Fire Safety systems
 - CCV-Inspectieschema Brandbeveiliging PGS
- ❑ Verification of fire safety: coherence of measures and essential components of installations



Publications Series on Hazardous Substances PGS:

refers to the Dutch series 'Publicatiereeks Gevaarlijke Stoffen



PGS 15

> Storage of Packaged Hazardous Substances

PGS 37-2

> Lithium-Containing Energy Carriers: Storage



<https://hetccv.nl/keurmerken/brandbeveiliging/opslag-gevaarlijke-stoffen/documenten/>

Certification Supply and Maintenance

Certified 'sprinkler contractors'

- ❑ Concerns the quality of the supply and maintenance of installations such as sprinkler systems
 - requirements for working methods and supplier qualifications
 - based on ISO 9001
 - installers determine the quality!
 - working in accordance with the current standards, interpretations, and decisions
- ❑ Companies are certified according CCV certification schemes under the supervision of a Certification Body
 - CCV certification scheme for the supply of fire suppression installations
 - CCV certification scheme for the maintenance of fire suppression installations
- ❑ Certification is not mandatory; however, inspections are then less in-depth

Benefits of certification

- ❑ Quality of supply and maintenance guaranteed
 - Verification of working methods through audits
 - and verification of supplies and services through sample inspections
- ❑ **Assurance for clients:** delivery right the first time
- ❑ Assurance of proper operation



FM and NL sprinkler inspection & certification system

FM – Property Insurance Perspective

Objective:

Protect property value and ensure business continuity

- Property damage & Business interruption
- Covers fire, natural, and B&M hazards and risks
- Outcome: Risk assessment report with recommendations
- Technical basis: FM Global Data Sheets only
- Insurance policy is leading for coverage
- Consultant engineers provide recommendations. Decision to implement is with the insured client
- Guiding principle: Loss prevention and cost-effective risk reduction



NL Sprinkler Inspection & Certification System

Objective:

Demonstrate legal compliance and safety

- Human, animal, and environmental safety
- Certification required under BBL, PGS 15, fireworks storage, or as equivalent solution
- Outcome: Certificate for Design, installation, maintenance, and use
- Technical basis: Dutch, European, and international standards
- Required to meet legal and regulatory obligations
- Guiding principle: Compliance with local standards



When FM involved at a site?



Visit frequency and FM project involvement depend on:

Location profile:

- Occupancy type
- Total Insured Value / Total Exposed Value
- Servicing agreement with corporate risk management or broker

Insured client relationship:

- Owner: building & equipment
- Owner(s): stored products (in non-insured building)
- Logistics operator, not owning products (and building)

Project notification timing:

- moment notification of new or ongoing projects



When to make what recommendation?



1. Existing & new locations

Evaluations per current FM Datasheets to reduce loss **likelihood** and mitigate the **magnitude** of events **with cost-effective physical improvements**

- *Human Element: hot work, process safety & change management, smoking control, inspection & testing e.g. sprinklers (2-81) and electrical*
- *Passive construction measures and active protection upgrades*

2. Projects (new sites / site modifications)

Always recommended FM Datasheet-compliant design to reduce loss magnitude

- *Passive: non-combustible or fire-rated construction, drainage, containment, ...*
- *Active: sprinklers/active protection systems, interlocks & shutoff valves, ...*

*Or in other words: not just because it is not per Data Sheet
but the impact to the client is taken into the consideration to
make a recommendation*



What are cost-effective risk reduction solutions?



Principle:

Cost versus benefit:

Investment to achieve Risk reduction (in monetary terms €)
compared to
the reduction in Loss Expectancy (Loss Before-Loss After in €)

Loss Expectancy:

- Property Damage (PD):

Direct physical loss of or damage to insured property caused by a covered peril. E.g. for fire event: Fire, Water, Smoke damage

- Business Interruption (BI):

Loss of income and additional expense resulting from interruption of operations caused by insured physical damage to property



What are cost-effective risk reduction solutions?



Determined by the investment needed to achieve risk reduction for the client

Taking into consideration:

- Occupancy
- Values
- Downstream or Upstream disruptions
- Market impact and reputation



Office:

- PD: 15m€
- BI: yearly: 1m€ (weekly 0,02 m€)



Pharma manufacturing in clean room:

- PD: 400m€
- BI: yearly: 400m€ (weekly 7,7 m€)

FM

>Taster