



THE INSTITUTION OF FIRE ENGINEERS

FOUNDED 1918 • INCORPORATED 1924

The International Organisation  
for Fire Professionals



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# Fire Engineering In High Rise Buildings

IFE Nederland High Rise2012



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# Expanding horizons

## Share knowledge Find new resources

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# This workshop is supported by:



**Hanzehogeschool  
Groningen**  
University of Applied Sciences

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# Programme:

Introduction by Jose Torero  
Building Performance by HG Tay  
Fire Fighting in High Rise by Bill Stewart  
Working groups  
Wrap-up and discussion



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# 3 hours CPD





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Result:  
A guidance paper with  
resources, best practices



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# High Rise buildings

- Constraints for fire fighter operations  
(beyond reach of rescue vehicles, long  
attack routes, cross traffic with occupants)
- Extended evacuation time
- Stack- and wind effects
- Mixed occupancies



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# High Rise in the Netherlands

Considered “safe” (few incidents reported)

20 m building = 69 m building

71 m building = special design





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# High Rise in the Netherlands

- No consensus on design objectives for buildings over 70 m
- Limited risk-awareness
- Fire safety level arbitrary, depending on “powers” of parties involved



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# High Rise international

Outside reach of rescue ladder = high rise

More than 10% are High Rise fires



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# High Rise questions:

What is considered High Rise, and which performance should be expected from High Rise buildings



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# High Rise questions:

What does the fire service need to fight fires  
in high-rise buildings



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# High Rise questions:

What is the contribution of fire engineers and fire scientists to the design and performance of High Rise buildings



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# Jose Torero

Professor University of Edinburgh  
Director BRE research  
Chairman IAFSS



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# HG Tay

## IFE International President Professional Fire Engineer Malaysia

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# Bill Stewart

## Toronto Fire Chief IFE Board Member

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# Workshop

## Wrap-up 12. 15 hrs.



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# Wrap-up

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# Acknowledgements

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