

Presented at the RICS Congress 2018,  
May 6-10 2018 in Istanbul, Turkey

“With the exception of language, it would not be an exaggeration to characterise global fire safety standards as the most urgent outstanding issue in the pursuit of the public interest in global safety and performance comparability.”

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Chair – CTBUH Fire & Facades Group

Chair – International Fire Safety Standards Coalition

# Grenfell Tower update



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Independent Expert Advisory Panel  
IRG – Industry Response Group  
Public Inquiry  
Dame Judith Hackitt Building Regulations  
and Life Safety Review  
Criminal investigation  
7 large scale BS8414 tests  
Guidance issued to building owners by  
MHCLG continuing  
Building Safety Programme  
Building Solutions Programme



# Grenfell Tower update



Cladding system tests	Result
<p style="text-align: center;"><b>Test 1</b></p> <p style="text-align: center;">cladding system formed using ACM panels with an unmodified polyethylene core (PE) and a rigid polyisocyanurate foam (PIR) insulation</p>	Failed
<p style="text-align: center;"><b>Test 2</b></p> <p style="text-align: center;">cladding system formed using ACM panels with unmodified polyethylene core (PE) (Cat 3 in screening tests) and stone wool insulation</p>	Failed
<p style="text-align: center;"><b>Test 3</b></p> <p style="text-align: center;">cladding system formed using ACM panels with a fire-retardant polyethylene core (FR) and a PIR foam insulation</p>	Failed
<p style="text-align: center;"><b>Test 7</b></p> <p style="text-align: center;">cladding system formed using ACM panels with fire-retardant polyethylene filler (Cat 2 in screening tests) with phenolic foam insulation</p>	Failed
<p style="text-align: center;"><b>Test 4</b></p> <p style="text-align: center;">cladding system formed using ACM panels with a fire-retardant (FR) core and stone wool insulation</p>	Passed
<p style="text-align: center;"><b>Test 5</b></p> <p style="text-align: center;">cladding system formed using ACM panels with a limited combustibility filler (A2) with PIR foam insulation</p>	Passed
<p style="text-align: center;"><b>Test 6</b></p> <p style="text-align: center;">cladding system formed using ACM panels with a limited combustibility filler (Cat 1 in screening tests) and mineral (or stone) wool insulation</p>	Passed

# Electrical issues

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21st October 2017

## Residents evacuated in Walpole Road and Hamilton Road, Bournemouth on Friday after power surge sparks five fires

[http://www.bournemouthcho.co.uk/news/15610931.Hundreds\\_of\\_people\\_still\\_without\\_electricity\\_after\\_power\\_surge\\_causes\\_house\\_fires/](http://www.bournemouthcho.co.uk/news/15610931.Hundreds_of_people_still_without_electricity_after_power_surge_causes_house_fires/)

# Sprinklers

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In Wales, sprinklers are now mandatory for ALL residential new buildings – but not in England, Scotland or Northern Ireland.

Recommended in AD B above 30m but NOT mandatory

From investors to the public, they offer significant benefits to different stakeholders:

## Professional advisors

enhance performance  
and reputation

1

## Investors

comparability of  
sound investments on a  
like for like basis

2

## Multinationals

better understanding  
of property portfolio

3

## Developers

ability to attract  
new clients from all  
markets/regions

4

## Governments

political, market transparency  
and investment  
potential

5

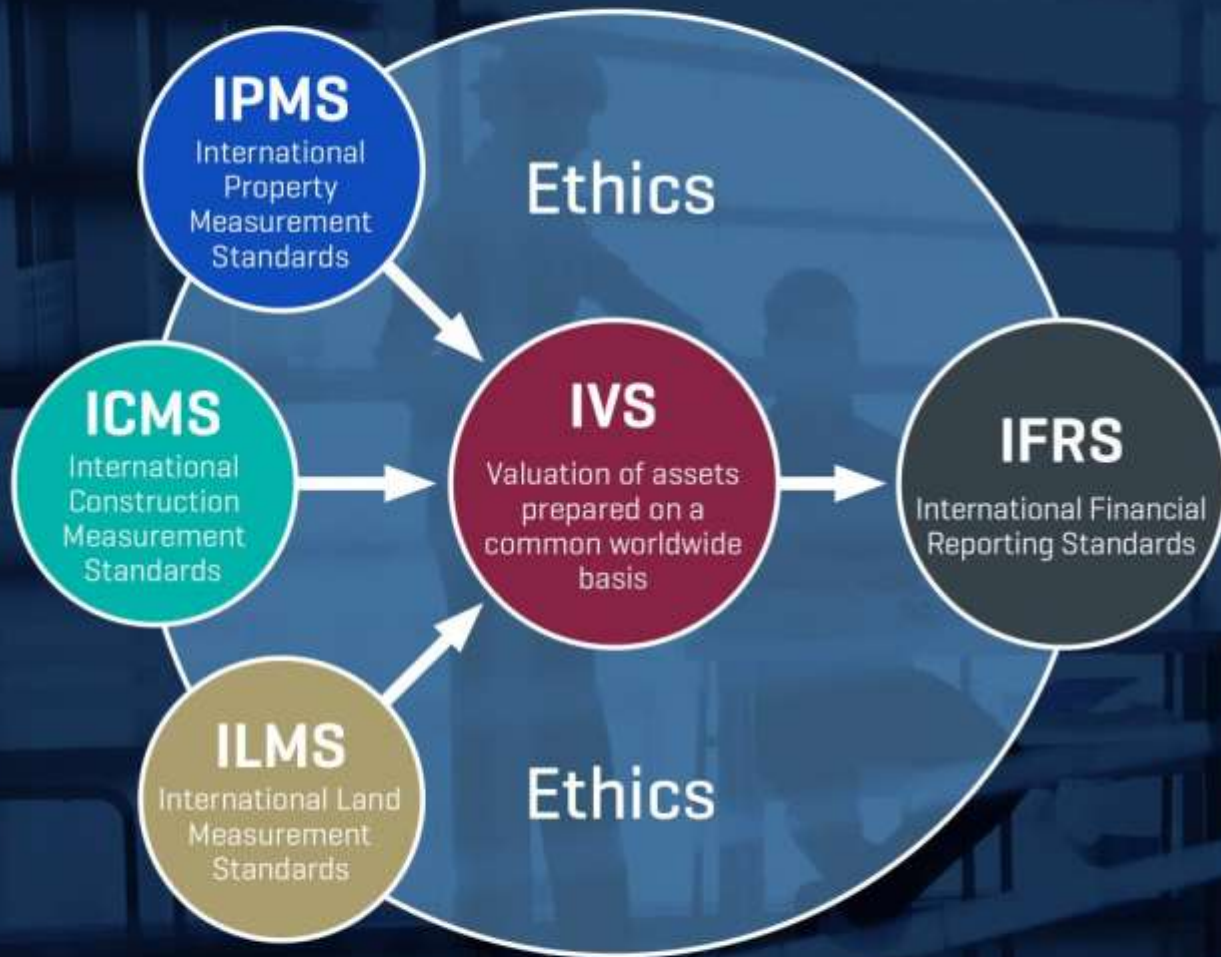
## Public

confidence in  
governments  
and buildings

6



# International standards – working together



## Valuation

- Based on open market value
- Use best comparables available
- Public sentiment is against dangerous buildings
- Global investors very aware of this as a global issue
- Local investors very aware
- Banks very aware of inconsistencies
- So **no investment and inability to raise finance**

# IFSS - International Fire Safety Standards



# Why is there a need for IFSS?

Property of all types is built and managed differently around the world, which leads to:

- difficulty in providing consistent and transparent information from one market to the next
- inconsistency further undermining existing international standards such as IFRS and IVS
- a degree of uncertainty in property markets
- uncertainty for international financial investors
- uncertainty by the public leading to political instability

# Fire Safety in Buildings

Fire safety in buildings has two arenas:

- Design and construction – providing the fire safety infrastructure
- Building in use – using and maintaining the fire safety infrastructure

### Fire safety design needs to address:

- Holistically the whole building, not just cladding, on a fire engineered approach
- Fire prevention and arson resistance
- Fire detection and alarm
- Means of escape/evacuation
- Structural fire resilience
- Fire growth control incl fire suppression
- Fire fighting facilities
- Fire engineers input
- Supervision of construction

- Fire risk assessment
- Building management
  - Regular inspection, reporting & testing
  - Maintenance
- Training
- Existing buildings – incremental improvements

# What are International Fire Safety Standards (IFSS)?



IFSS will offer a global solution to:

- address current inconsistencies in the way property is designed, built and managed for fire safety
- Ensure different types of property including offices, residential, retail and industrial are safe for users
- Ensure confidence in property investment

IFSS will be implemented by all coalition organisations, through their members.



## Consistency

- Consistent standards enable governments & clients to accurately quantify risks and other sustainability measures.
- Enable governments to reassure the public and investors

## Transparency

- Improved confidence in national market for foreign direct investment at all stages of the property lifecycle.

## Comparability

- Removes need for multiple differing standards within countries (such as the UK), and allows for better foreign direct investment assessment.

## Future proof

- Utilising international best practice early as the world moves to this set of standards, as it has done with IFRS and other international standards.

## Why not ISO ?

- Takes too long and costs too much
- ISO set up for products not professional behaviour
- IP owned by ISO and cost (of downloading) is a barrier
- Any one country can veto a standard
- IFSS Coalition members develop the standards and ensure it's adoption

- **These issues need a team approach**
- **Fire engineers are key to the solutions**
- **Opportunity to build a global fire engineering profession is huge**
- **Professional bodies must collaborate**



Professional standards are

Good for business  
Good for govts  
Good for the public

[rics.org/standards](https://rics.org/standards)

RIBA 

SFPE  
Engineering A Fire Safe World

 RICS®

ICC  
INTERNATIONAL  
CODE COUNCIL

  
C.A.S.L.E.

  
cabe  
chartered association  
of building engineers

CELEBRATING 100 YEARS  
1918  2018

CEBC

 THE WORLD BANK  
IBRD • IDA

SGSA  
Sports Grounds Safety Authority

AEEBC

  
Singapore Institute  
of Building Limited

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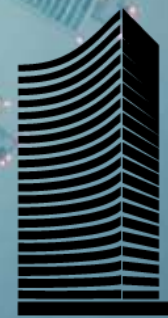
  
United Nations

Get involved –  
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 CIAT

NHBC

  
LABC

  
Council  
on  
Tall Buildings  
and  
Urban Habitat



[rics.org/standards](https://rics.org/standards)