

Verifying Fire Engineered Solutions A Scottish Perspective

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Introduction

- Scottish Approach to Verification
- Scottish Regulatory Framework
- Fire Safety Design Hierarchy
- Local Authority / IRCC Survey
- Survey Outcomes

Scottish Approach to Verification

- National Building Regulations
- 32 Local Authorities
- Single Fire and Rescue Service
- No Mandatory registration of Fire Engineers

Fire Safety Design Hierarchy



Regulation

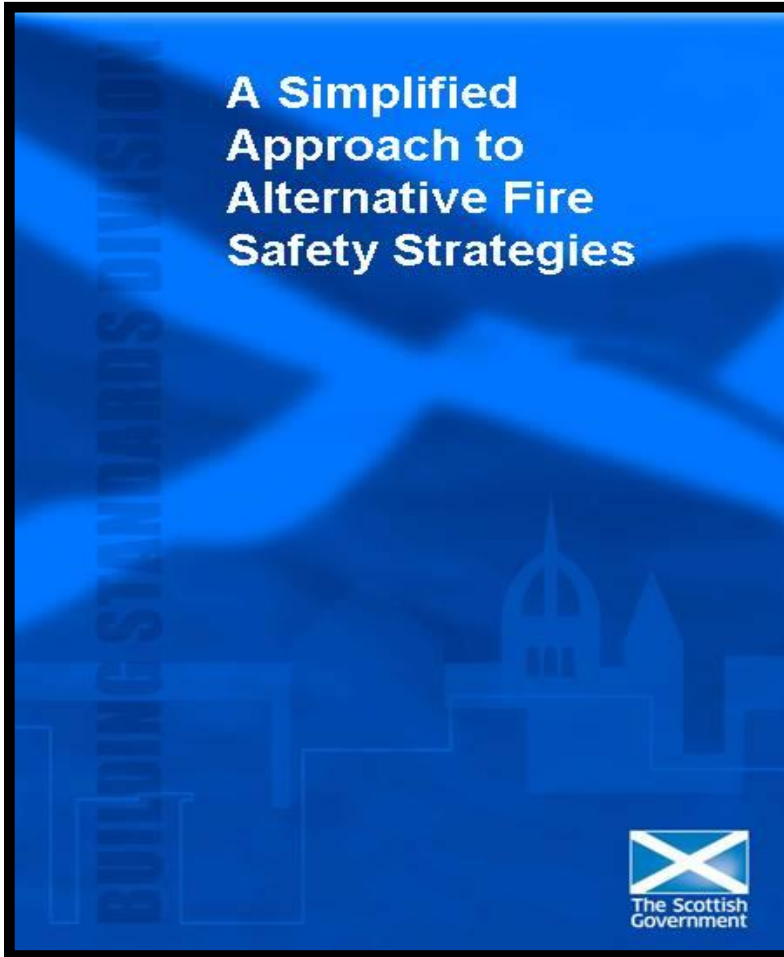


Approved Guidance



Alternative Guidance





Consider number and type of occupants at risk

Can you change location of fuel

Can you slow fire spread

Can you reduce evacuation time

Can a place of temporary safety be provided within the building

Consultations Relaxations / Views

- Consultation
- Relaxations are rare
- 'Views' are a formal method for BSD to explain the intention behind a functional standard and any supporting guidance
- Not intended to resolve disputes
- Improve consistency of interpretation throughout Scotland

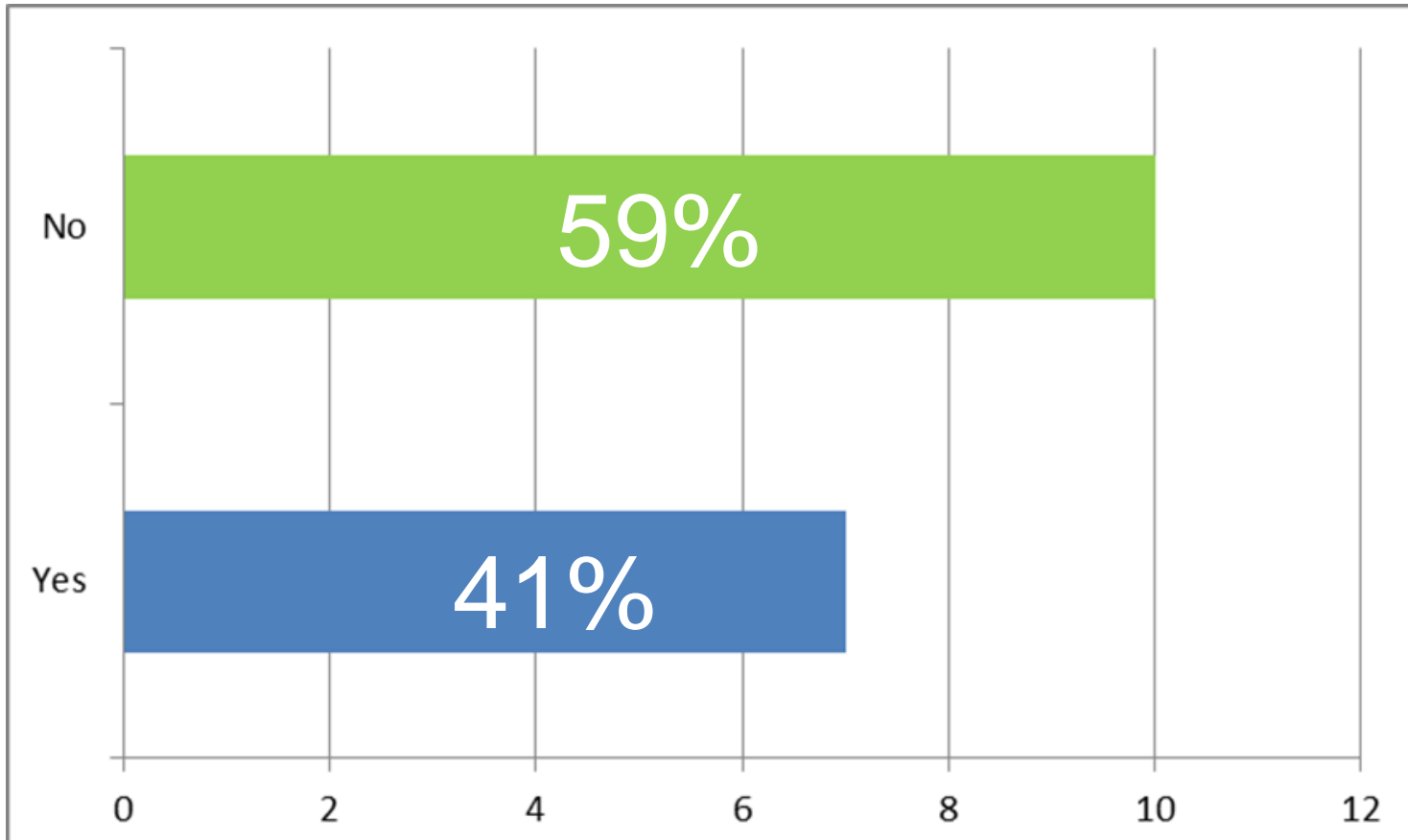
Local Authority / IRCC Survey

BSD carried out a survey to evaluate how local authorities are verifying fire engineered solutions. The main thrust of the questions was to examine the following:

- Established protocols
- Training regime
- Third party review
- Use of CFD Modelling

BSD have also issued a survey to IRCC members.

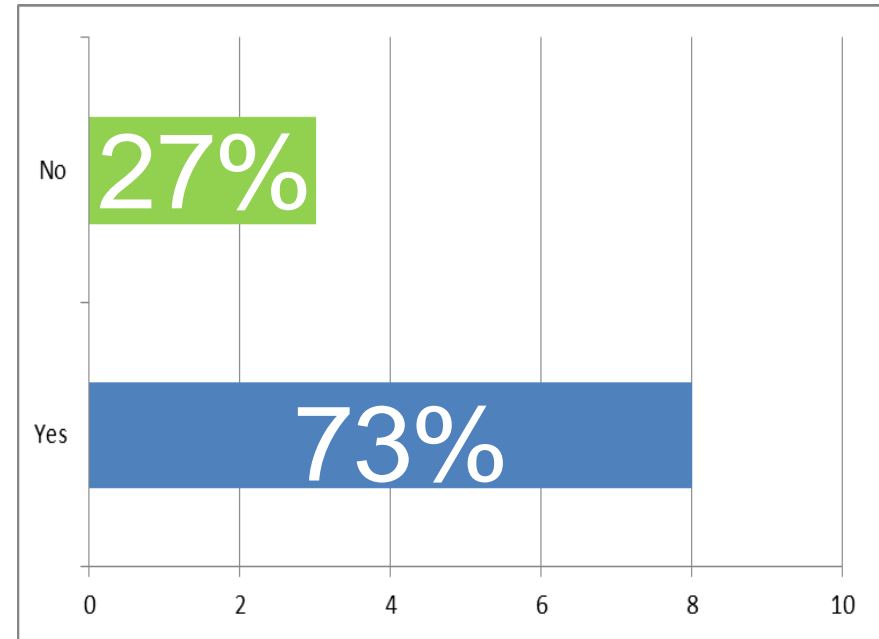
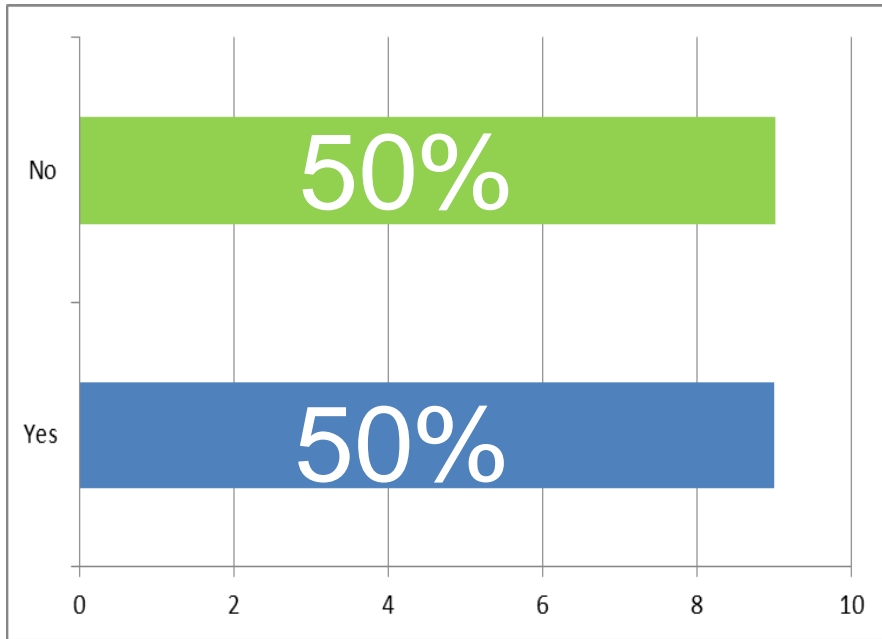
Are There Protocols In Place?



Is there a structured training programme in place?

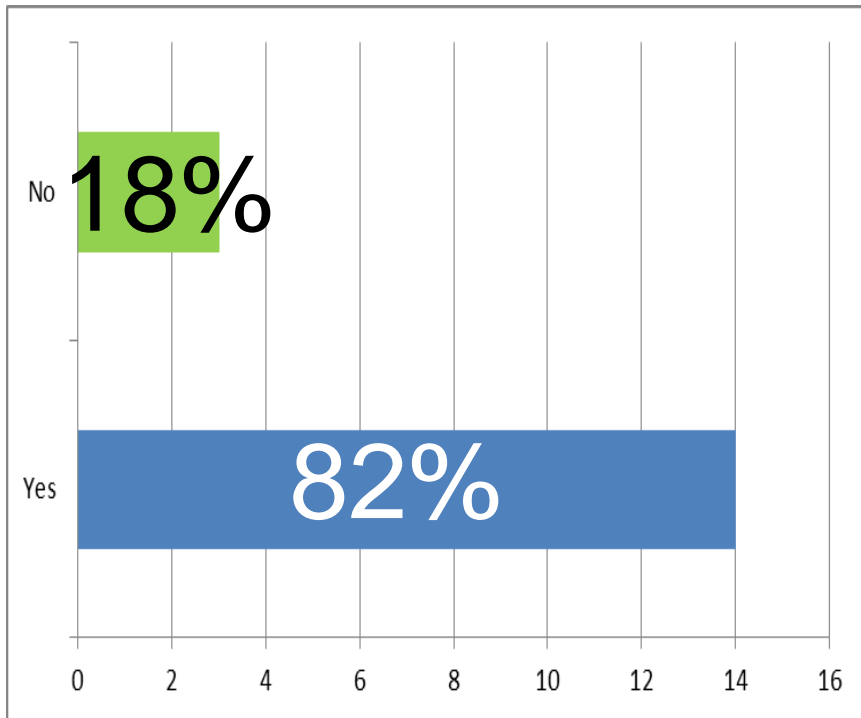
Local Authorities

IRCC

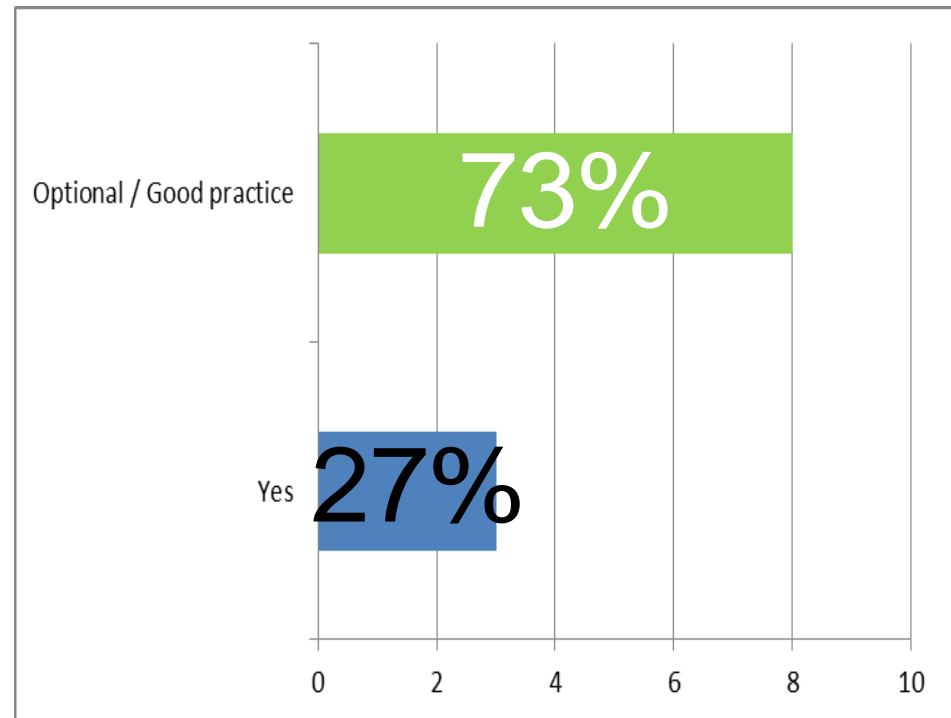


Third Party Review

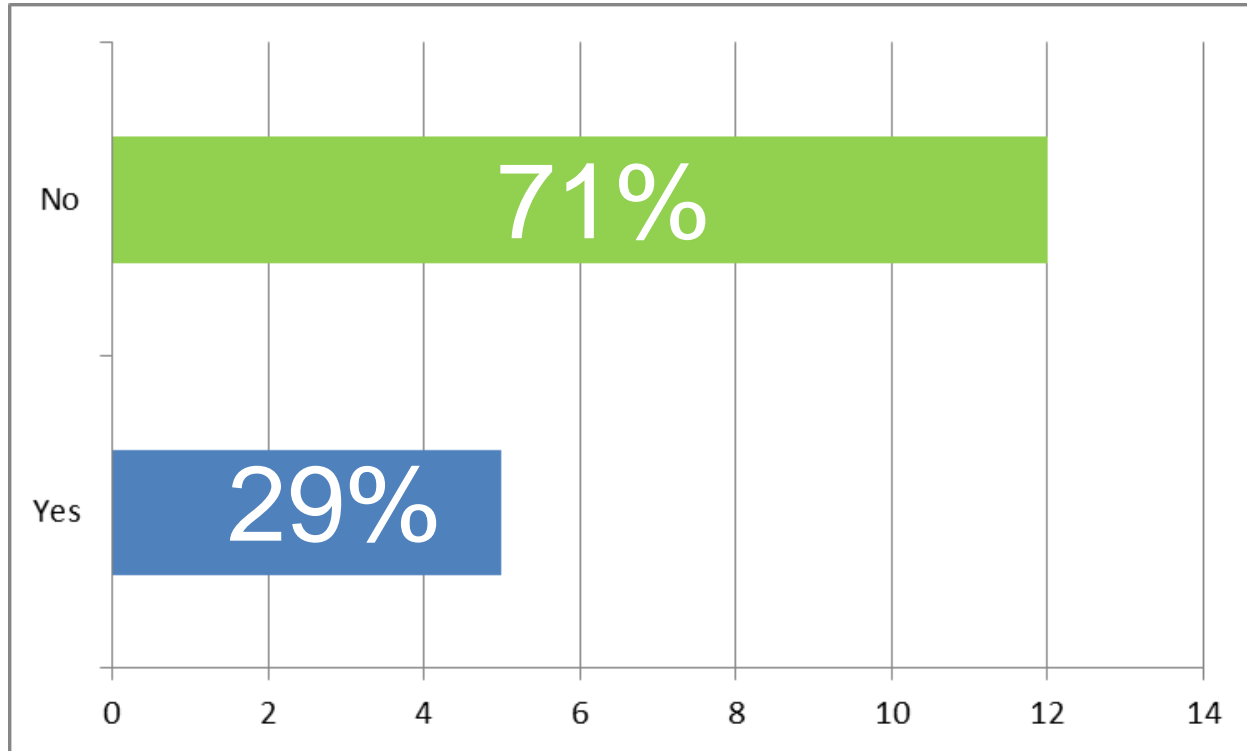
Local Authorities



IRCC



Protocols for CFD Modelling



Survey Outcome - 1

- Great reliance is placed on the Fire & Rescue Service to review CFD modelling
- Consideration could be given to developing a national protocol for verification of fire engineered solutions
- Consideration could be given to developing guidance on the level of expertise, knowledge and training required to assess fire engineered solutions

Survey Outcome - 2

- Consideration could be given to developing a national protocol for the utilisation of third party reviews
- Consideration could be given to developing a national methodology for reviewing fire engineered solutions that incorporate CFD modelling

Thank You



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