

## ISO Fire Safety Engineering Standards

In this video I will answer the question, Why use ISO fire safety engineering standards? Quality assurance is essential for the use of “engineered solutions” or performance-based design. It is essential to ensure the methods used are verified and validated. They should be used in an appropriate manner. The ISO fire safety engineering standards, which cover safety design and management, provide the necessary quality assurance. – Slide 2

This slide shows the fire safety engineering design process for developing a fire safety plan. The figure is taken from ISO 23932 which contain the main requirements for fire safety engineering. Initially, the scope of the project should be defined. Is fire safety being designed for the whole building or facility, or just part of it?

Then the safety objectives, functional requirements, and performance criteria are developed. This is followed by the most important step which is to define the fire loads in the building or facility. A set of design fire scenarios and design fires are then developed based on the fire loads.

Based on these fire loads, one develops a preliminary fire protection plan aimed to meet the performance criteria. Computer simulations are conducted to determine if the performance criteria will be met. If they are not met, one needs to modify the fire safety plan until the performance criteria are met.

Shown on the right side of the figure is the most important part of fire safety engineering, i.e. to establish a fire safety management and audit program. It is important to continually monitor changes in the fire loads to determine if the fire safety plan needs to be modified. – Slide 3

This slide lists the ISO standards available for fire safety engineering. The column on the left side lists the Chapters in ISO 23932 which contain the main requirements. The middle column lists the ISO standards available for implementing the main requirements in those chapters of ISO 23932. I won't go through the list in detail here. I will tell you later how to obtain a copy of these slides. – Slide 4

This slide lists the complete set of ISO standards that has been named the ISO Global Fire Safety Engineering and Analysis System. It is included here for your reference– Slide 5

So once again, why use ISO standards? They are internationally recognized and have a quality brand associated with them. Indeed, they provide the necessary quality assurance for fire safety designs. Verification and validation, and conformity assessment are key elements to ensure quality. - Slide 6

Please see the store at [www.deytecinc.com](http://www.deytecinc.com) for reference materials. Included there is a report that more fully describes the set of standards in the ISO Global Analysis and Information System. Also, see the ISO website for a description and preview of the standards. – Slide 7

Deytec, Inc. USA provides a 2-day workshop on these ISO fire engineering standards. Consultation is also available on implementing the ISO fire standards in a national framework. Please view the other video I have prepared on implementation of the standards. – Slide 8

Sign up for the informative newsletter on fire safety engineering at the website, and you will receive a free copy of the script and slides of this video. – Slide 9

Please contact us if you have any questions about the content of this video, or fire safety engineering in general. And, don't forget to view the other video. Thank you for listening. – Slide 10