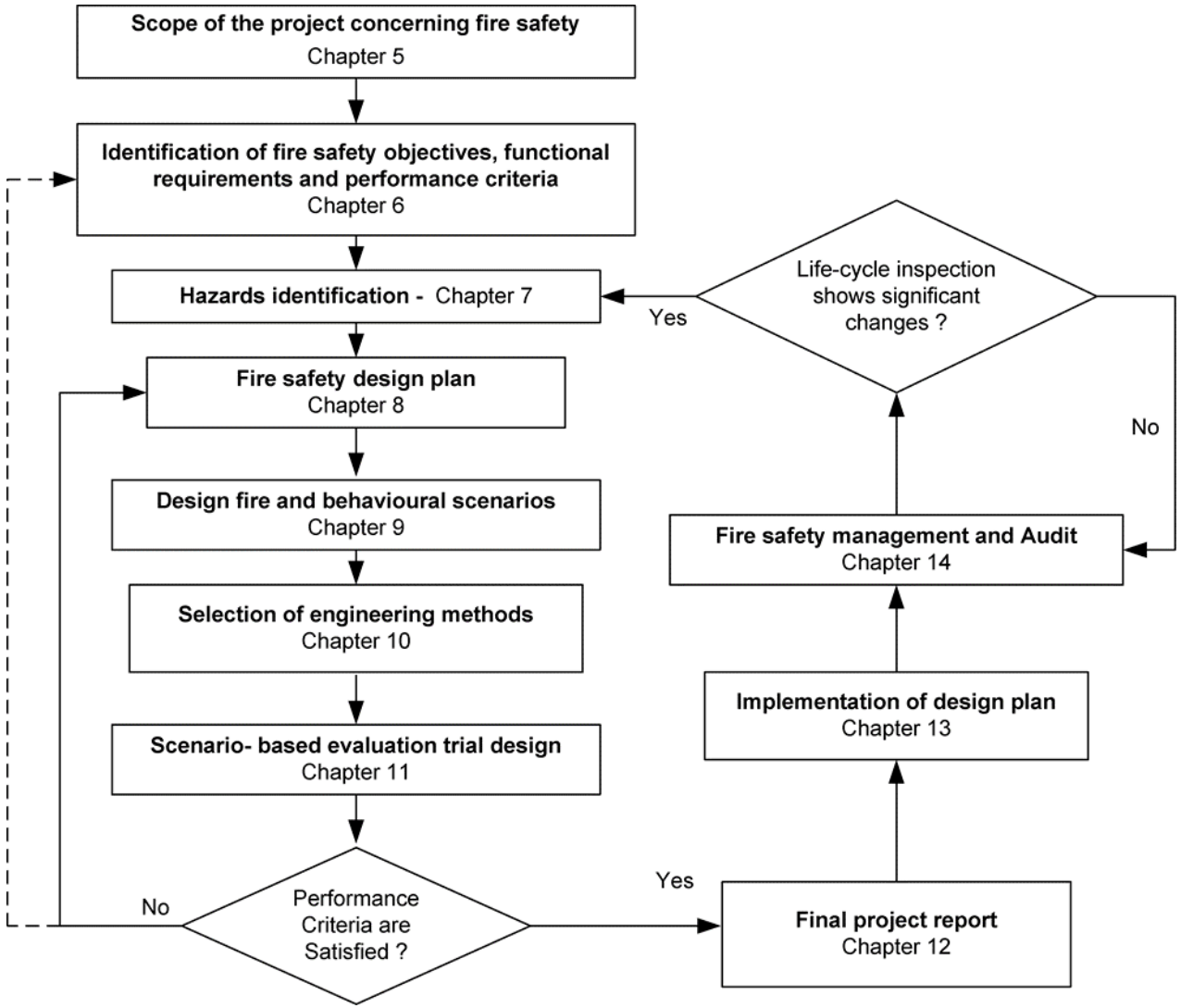
Deytec, Inc. USA -
A company based on quality

ISO Fire Safety Engineering Standards

- Quality assurance essential for “engineered solutions”
- Methods used must be verified and validated
- Methods should be used in appropriate manner
- ISO standards provide necessary quality assurance

Fire Safety Engineering Process



Current Core FSE Standards

Chapter in ISO 23932	List of standards available	Comments
Scope of the project concerning fire safety – Chapter 5		Provided by architect to fire safety engineer.
Identification of fire safety objectives, functional requirements and performance criteria – Chapter 6	ISO 29761	The standard covers the life safety objective.
Hazard Identification - Chapter 7 and Design scenarios – Chapter 9	ISO 16733-1, ISO 16732-1, ISO 29761	ISO 16733-1 covers design scenarios generically, ISO 16732-1 includes risk methods for scenario selection, and ISO 29761 covers the life safety objective.
Scenario based evaluation of trial design – Chapter 11		Covers calculations for fire plumes, smoke layers, ceiling jet flows, and vent flows, respectively.
▪ **Movement of fire effluents**	ISO 16734, ISO 16735, ISO 16736, ISO 16737	
▪ **Structural response and fire beyond enclosure of origin**	ISO/TS 24679-1	
▪ **Detection, activation, and suppression**	ISO/TR 13387-7	Standard currently withdrawn, replacement under development..
General to ISO 23932	ISO 16732-1, ISO 16730-1	ISO 16732-1 is used for a fire risk assessment approach. ISO 16730-1 is for verifying & validating methods used per Chapter 11.

Current Core Fire Safety Engineering Standards

ISO 23932:2008, Fire safety engineering – General principles

ISO 16733-1:2015, Fire safety engineering -- Selection of design fire scenarios and design fires.

ISO 16732-1:2012, Fire safety engineering -- Fire risk assessment -- Part 1: General.

ISO 24678-1, Fire safety engineering -- Requirements governing algebraic equations — Part 1: General requirements.

ISO 24678-2, Fire safety engineering -- Requirements governing algebraic equations -- Fire plumes.

ISO 24678-3, Fire safety engineering -- Requirements governing algebraic equations -- Ceiling jet flows.

ISO 24678-4, Fire safety engineering -- Requirements governing algebraic equations -- Smoke layers.

ISO 24678-5, Fire Safety Engineering — Requirements governing algebraic equations — Part 5: Vent flows.

ISO 24678-6, Fire safety engineering – Requirements governing algebraic equations – Part 6: Flashover related phenomena.

ISO/TS 24679:2011, Fire safety engineering -- Performance of structures in fire.

ISO/TR 13387-7:1999, Fire safety engineering -- Part 7: Detection, activation and suppression (withdrawn, replacement to be published)

ISO 16730-1:2015, Fire safety engineering — Procedures and requirements for verification and validation of calculation methods.

ISO 29761:2015, Fire Safety Engineering -- Selection of design occupant behavioral scenarios (for life safety applications).

ISO/TS 13447, Fire safety engineering -- Guidance for use of fire zone models.

Why Use **ISO** Standards

- Internationally recognized
- Quality assurance
- Verification and validation
- Conformity assessment

- See store at www.deytecinc.com for reference materials
- Report describing standards in more detail available
- See ISO website for description of standards

- 2-day workshop available from Deytec, Inc., USA
- Consultation available on implementing ISO standards

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