

Fire Engineering Brief information sheet

The International Fire Engineering Guidelines , Code of Practice and performance requirements of the BCA have a methodology that can be used to identify and mitigate the relevant risks to an acceptable benchmark. The brief is the first part of the process that includes the following:

- ▶ Prepare a Fire Engineering Brief (FEB)
- ▶ Obtain Relevant Stakeholder acceptance of the FEB
- ▶ Carry out analysis
- ▶ Collate and evaluate results
- ▶ Draw conclusions
- ▶ Prepare a Fire Engineering Report (FER).

The brief is a key document that is to be approved by relevant stakeholder and contains the following:

Chapter	Information provided
<i>Executive summary</i>	A summary of the key points - a must read for stakeholders.
<i>Introduction</i>	Provides the purpose, objectives and fire engineering process.
<i>Brief context</i>	Sets the context of the brief with the basis, scope and approval process.
<i>Project scope</i>	Informs of the contractual context, program and relevant stakeholders.
<i>Principal building characteristics</i>	This provides an overview of the building use, geometry and other principal characteristics that enables the engineer to identify and quantify any non compliance issues with the DtS provisions.
<i>Occupant characteristics</i>	Describes the occupants principal characteristics which is important in determining how they will react to fire hazards. This will be needed to identify key occupant groups and how they will respond to fire hazard of relevant fire scenarios.
<i>Design requirements</i>	Lists the relevant design requirements listing BCA objectives, functional statements and performance requirements. These set the parameters to which the fire engineering analysis will address.
<i>Building solutions</i>	Describes the fire safety subsystems provided in reference to the building code of Australia, alternative solutions, dispensations and other life safety preventative and protective measures. This is where the alternative solution is detailed.
<i>Method of analysis</i>	Describes the various methods that will be used to analyse the alternative solutions and how they will be assessed and accepted.
<i>Hazard assessment</i>	To enable possible fire scenarios to be identified fire hazards need to be listed in terms of ignition sources, potential fuel sources, and dangerous goods. . This section also provides statistics and a literature search relevant to the alternative solutions which is used in developing the design fires.
<i>Design fires</i>	This part puts it all together. Relevant fire scenarios are selected from a list of possible fire scenarios. Relevant fire scenarios are detailed so stakeholders can agree to how the analysis in the fire engineering report is to be undertaken.
<i>Bibliography</i>	Provides a list of relevant documents and their details
<i>Glossary of terms</i>	Provides the meaning of technical words and terms or abbreviations used in the brief.
<i>Appendix</i>	Appendix A provides a list of drawings that annotates the alternative solution. Appendix B provides some calculations used to define benchmarks. Supporting information is found in the later appendices.