

**NZFS Engineering Unit – Zone Model FEB Check Sheet (ZONE01)**

**Job Number:**

**Job Name:**

**Date:**

<b>Overall Model Issues</b>		
<ul style="list-style-type: none"> <li>• Has the space been modelled appropriately?</li> <li>• Are compartment sizes within validated limits for the program?</li> <li>• Are compartment aspect ratios appropriate?</li> <li>• Is the complexity of the space appropriate for a zone model?</li> <li>• Are thermal properties of compartment boundaries appropriately modeled?</li> <li>• Are vents detailed appropriately?</li> </ul>		
<b>Parameter</b>	<b>Input</b>	<b>Comments</b>
<b>Program and Version</b>		
<b>Largest Compartment Size</b>		
<b>Worst Case Compartment Aspect Ratio</b>		
<b>Compartment Complexity</b>		
<b>Compartment Material Properties</b>		
<b>Vents Between Compartments</b>		

<b>Ambient Conditions</b>		
<ul style="list-style-type: none"> <li>• Is the building located where high or low temperatures may impact on the results?</li> </ul>		
<b>Parameter</b>	<b>Data Input or Assumptions</b>	<b>Justification/Comment</b>
<b>Temperature</b>		
<b>Humidity</b>		

<b>Design Fire Parameters</b>		
<ul style="list-style-type: none"> <li>• How many worst credible design fires? Is justification that they are the worst credible provided?</li> <li>• What are the HRR and growth rate? Why are these considered appropriate to the anticipated fuel load?</li> <li>• Appropriate combustion parameters and fuel used? Have references been given? (e.g. Soot, CO<sub>2</sub>, HCN and Energy Yield)</li> <li>• Is visibility to an illuminated or reflective sign?</li> </ul>		
<b>Parameter</b>	<b>Data Input or Assumptions</b>	<b>Justification/Comment</b>
<b>Fire Growth Rate</b>		
<b>Fire Locations</b>		
<b>Combustion Properties</b>		
<b>Visibility Parameter</b>		

<b>Fire Safety Systems</b>		
<ul style="list-style-type: none"> <li>• Is the physical layout of detectors appropriate for the space</li> <li>• Has appropriate detector input data been used and references been given?</li> <li>• Is the descent rate of smoke curtains appropriate?</li> <li>• Is the fire alarm poling time included?</li> </ul>		
<b>Parameter</b>	<b>Data Input or Assumptions</b>	<b>Justification/Comment</b>
<b>Detector Distance To Fire</b>		
<b>Detector Inputs (RTI, sensitivity)</b>		
<b>Fire Alarm System Poling Time</b>		
<b>Smoke Extraction System Parameters</b>		
<b>Make-up air velocity and distribution</b>		
<b>Smoke Barrier Operation</b>		

**Outputs**

The following outputs are recommended to be included in the consent documentation

<b>Parameter</b>	<b>Include</b>	<b>Justification/Comment</b>
<b>Significant outputs to be included in the output file</b>		
<b>Output file in consent docs</b>		