Complete this form and submit with the corresponding application form when computational fluid dynamics (CFD) or zone modelling is being undertaken as the verification method for any assessment criteria

# Premises

|  |  |
| --- | --- |
| Premises name (if applicable) | Premises name (if applicable) |
| Primary street address | Primary street address |
| Premises suburb | Premises suburb name |

Model/program details

|  |  |
| --- | --- |
| Type of modelling | Select |
| Name of program | Enter program name |
| Version | Enter version |
| Provide any other relevant details | |

# General/domain parameters

## CFD modelling only

|  |  |
| --- | --- |
| Number of meshes | Enter details |
| Type of mesh (e.g. cartesian) | Enter details |
| Mesh size | Enter details |
| Material properties | Enter details |
| Boundary conditions | Enter details |
| Major geometrical or other simplifications or assumptions | Enter details |
| Steady-state or transient? | Select |
| Simulation time | Enter details |

## Zone modelling only

|  |  |
| --- | --- |
| Total floor area volume | Enter details |
| Floor area and volume of each compartment | Enter details |
| Openings between compartments | Enter details |
| Material properties | Enter details |
| Boundary conditions | Enter details |
| Major geometrical or other simplifications or assumptions | Enter details |
| Simulation time | Enter details |

# Fire parameters

|  |  |
| --- | --- |
| Radiative fraction | Enter details |
| Reaction/combustion properties (material, heat of combustion) | Enter details |
| Soot yield (value and means of including in model) | Enter details |
| Visibility factor (or parameters used to obtain visibility output) | Enter details |
| Heat release rate per unit area (HRRPUA) | Enter details |
| Means of achieving fire growth rate (ramp, multiple fire objects) | Enter details |
| Fire locations (including height above floor) | Enter details |

# Scenario parameters

|  |  |
| --- | --- |
| Ambient temperature | Enter details |
| Wind | Enter details |
| Others | Enter details |

# Fire safety system/device parameters

|  |  |
| --- | --- |
| Mechanical smoke exhaust | Enter details |
| Mechanical supply air | Enter details |
| Jet fans | Enter details |
| Natural vents | Enter details |
| Natural make-up air | Enter details |
| Assumed building leakage | Enter details |
| Sprinklers (spacing, location, RTI, distance to fire, rating etc.) | Enter details |
| Detectors (spacing, location, RTI, distance to fire, rating, activation obscuration etc.) | Enter details |
| Other systems/devices | Enter details |

# Outputs

|  |  |
| --- | --- |
| Actual heat release rate curve produced should be compared to specified design fire | Enter details |
| Sufficient outputs should be provided to justify any results used in the ASR | Enter details |
| Others | Enter details |