Table 17.1: Guidelines for Risk Assessment	
OCCUPANCY	**REQUIRMENTS**
5. **FIRE MODELS**	**5.c. ASCOS (Analysis of Smoke Control Systems) MODELS** i. ASCOS is a program for steady air flow analysis of smoke control systems. This program can analyze any smoke control system that produces pressure differences with the intent of limiting smoke movement in building fire situations. ii. The program is also capable of modeling the stack effect created in taller buildings during extreme temperature conditions. iii. The program input consists of the outside and building temperatures, a description of the building flow network and the flows produced by the ventilation or smoke control system. iv. The output consists of the steady state pressures and flows throughout the building.
6. EVENT TREE	i. Event trees, as the name suggests, represent fires as a sequence of events. An event may correspond to a change in the size or character of the fire, a change in the status or performance of various active systems or passive features, or a change in the status or behaviour of occupants or first responders. ii. An event tree is a visual representation of all the events that can occur in a system. As the number of events increases, the picture fans out like the branches of a tree. iii. The goal of an event tree is to determine the probability of an event based on the outcomes of each event in the chronological sequence of events leading up to it. iv. The event tree displays the sequences of events involving success and/or failure of the system components. By analysing all possible outcomes, one can determine the percentage of outcomes that lead to the desired result make a model as complete as possible, the tree must represent all possible events as accurately as possible. v. The initiating event, which is generally a fire, is what starts the sequence of events detailed in the event tree. All subsequent events stem from the initiating event. vi. As a simplistic example, an event tree can be constructed to analyse the possible outcomes of a fire. The system has two strategic components designed to handle this event: manual intervention by staff and an automatic suppression system. If the fire is too large to be controlled by staff, it will be mostly contained by the suppression system. If the suppression system fails as well, the loss is unacceptable. vii. Event trees show all possible event options and chance events with a branching structure. They proceed chronologically, left to right, showing events as they occur in time. All outcomes along with the values and probabilities associated with them can be shown directly on the tree. viii. There is very little ambiguity as to the possible outcomes and events the tree represents. Any node gives all possible outcomes resulting from the node and the events that follow.
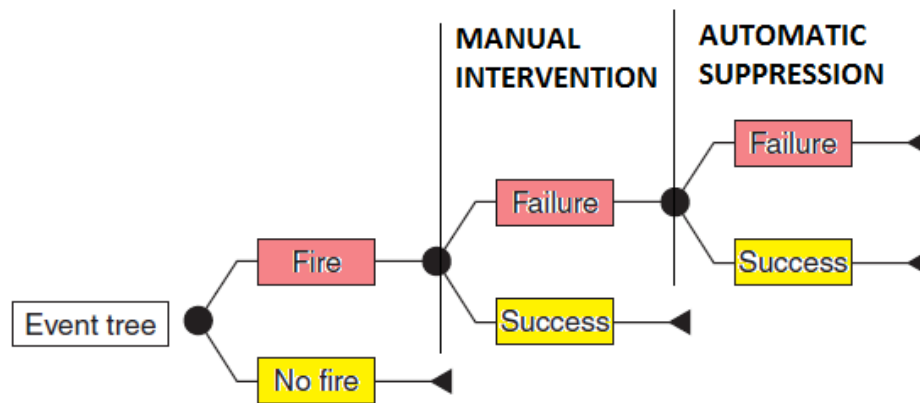
A SIMPLE EVENT TREE FOR ILLUSTRATION

UAE FIRE & LIFE
SAFETY CODE OF PRACTICE