

Forecasting Collapse During Fire Operations



Pre-Incident Planning

- Survey high-risk buildings and critical infrastructure
- Review building plans and construction details
- Identify load paths and potential vulnerabilities
- Compile data on fireproofing and escape routes



On-Scene Assessment

- Identify building materials (timber, concrete, steel)
- Evaluate current fire spread and intensity
- Check for unusual noises (creaking, cracking)
- Observe smoke patterns and color changes



Observing Fire Behaviour

- Monitor flame locations and fire progression
- Track ventilation openings and oxygen levels
- Watch for sagging, warping, or deforming structures
- Detect sudden shifts in smoke and heat patterns



Monitoring Structural Integrity

- Use thermal imaging to detect hot spots
- Look for visible cracks, spalling, or bulging walls
- Monitor movement in beams, columns and floors

For safe and effective firefighting operations:

- Coordinate closely with Fire, Rescue, Police, and SES
- Call 000 immediately for comprehensive emergency response

