

# Fire phenomena and defects observed

- Poor fire safety management (many fire examples)
- Flash fire under ceiling (Paris Bazaar, Ringling circus, Dublin Disco)
- Trench fire (Kings Cross underground)
- Flashover fire with floor surface involvement (Gothenburg disco)
- Poor means of escape design (Summerland and many other fires)
- Locked escape doors / escape doors opening wrong way (many fires)
- Fire protection facilities not used (Maysfield shutter and hose reel)



# Fire phenomena and defects observed

- Panic (Iroquois theatre, Paris Bazaar, Ringling circus, Summerland leisure centre etc)
- Poor structural continuity (Ronan Point)
- Fire risk of plastic foam not appreciated (Maysfield, Woolworth)
- Lack of cavity barriers (Fairfield nursing home)
- Flexible plastic (PU) foam fire (Maysfield and Woolworth)
- Inadequate building separation (Great fire of London, Blandford, Cripplegate)
- Body piling in panic (many fires)



# Fire phenomena and defects observed

- Inadequate architect knowledge of fire (Summerland)
- Narrow exits (Ringling)
- Building-to-building fire spread coupled with inadequate fire fighting capacity (1666 fire, Blandford town, Tooley St, Cripplegate, Peshtigo)
- Unexpected fire fuel source (Loscoe, Bradford, Taunton sleeper, Kings Cross, Gothenburg)
- Poor fire rescue procedures (Maysfield)
- Poor workmanship (Ronan Point gas fitting)
- Wrong sprinkler bulb used (Cologne Ford depot)



# Fire phenomena and defects observed

- Inadequate fire compartmentation (Tooley Street, Donnington, Fairfield home, Brazilian high-rise)
- Inaccessible means of escape (Piper Alpha)
- Inadequate fire wardens (Taunton sleeper car, Fairfield)
- Incomplete fire precautions (early theatres)
- External fire spread (Andraus, Joelma and Star Princess)
- Unauthorised change to equipment (Flixborough, Ford Cologne)
- Inadequate fire fighting water (Brightside)



# Fire phenomena and defects observed

- Bush fire (Peshtigo)
- Unclear building approving responsibility (several fires incl Coldharbour)
- Overcrowding (Stardust, Gothenburg)

