

Fatalities & Injuries caused by Fire

Circumstances Leading to Heavy Casualties

Conclusions

Leader of IFITF
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Fatalities

Identity	Wang Tao	Wang Kin	Wang Sun	Wang Tai	Wang Cheong	Wang Shing	Total
Resident	2	-	2	72	72	1	149
Worker	-	-	-	4	3	-	7
Domestic Helper	-	-	-	4	6	-	10
Visitor	-	-	-	1	-	-	1
FS Member	-	-	-	1	-	-	1
Total	2	-	2	82	81	1	168

Fatalities

Location	Wang Cheong	Wang Tai
Within unit	57	41
Staircase	5	28
Common corridor	19	10
Roof	-	2
Openground outside building	-	1
Total	81 (48%)	82 (48%)

* Wang Cheong House

- Fire first spread at east re-entrant which connected to both staircases
- Openings allowed smoke and heat penetrated into the staircases
- 1st report of fire (1451 hours) to rapid fire spread happened at re-entrant (1458 hours), indicated that occupants had only 7 minutes to evacuate to G/F

* Wang Tai House

- First re-entrant alighted was connected to common corridors
- Allowed occupants to attempt evacuation through the staircases

Sustaining Extremely Severe Damage or Severe Damage

Location sustaining Extremely Severe Damage or Severe Damage	Wang Cheong (81 fatalities)	Wang Tai (82 fatalities)	Wang Sun (2 fatalities)
Unit	63%	58%	58%
Common corridor	87%	94%	100%
Staircase	55%	55%	81%

- Wang Cheong House and Wang Tai House were alighted at early stage
→ little time for evacuation
- Wang Sun House first fire spread observed at 1525 hours while rapid fire spread occurred at 1601 hours
- FSD's effort to slow the fire progression bought critical time for evacuation
- Occupants' awareness of the fire

Injuries

79 Injuries at Various Locations

Place of Rescue	Wang Cheong	Wang Tai	Wang Tao	Wang Shing	Wang Yan	Others	Total
Within unit	26	10	6	2	1	-	45
Staircase	3	-	1	-	-	-	4
Common corridor	1	-	2	-	-	-	3
Rooftop	2	2	-	-	-	-	4
Outside building	1	2	-	-	-	-	3
Kwong Fuk Estate	-	-	-	-	-	3	3
FS Members	-	-	-	-	-	13	13
Arrived at hospital by private means	-	-	-	-	-	4	4
Total	33	14	9	2	1	20	79

Circumstances Leading to Heavy Casualties

Para. 11.5

- **Rapid Fire Spread**
- **Compromised Tenability of MoE**
- **Blocked Exits**
- **Shutdown of Fire Alarms**
- **Polystyrene Window Covers**

Circumstances Leading to Heavy Casualties

Para. 10.2

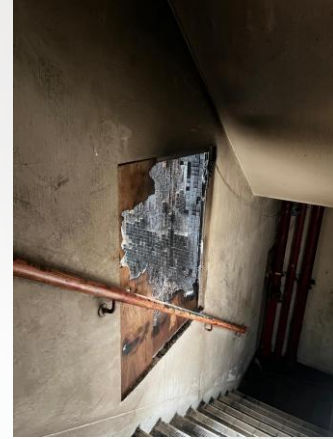
Rapid Fire Spread



Circumstances Leading to Heavy Casualties

Para. 10.6

Compromised Tenability of MoE



Wang Cheong House



Wang Tai House



Wang Sun House

Circumstances Leading to Heavy Casualties

Para. 10.6

Compromised Tenability of MoE



Wang Cheong House
S/C Windows Remained Intact



Wang Cheong House
S/C Windows Broken by
FS personnel

Circumstances Leading to Heavy Casualties

Para. 10.3

Blocked Exits



Circumstances Leading to Heavy Casualties

Para. 10.4-10.5

- **Shutdown of Fire Alarms**
- **Presence of Polystyrene Window Covers**

Circumstances Leading to Heavy Casualties

*Not to Scale

Required Safe Egress Time (RSET)



Fire Development - Available Safe Egress Time (ASET)



Circumstances Leading to Heavy Casualties

*Not to Scale

Rapid Fire Growth and Spread

Required Safe Egress Time (RSET)



Fire Development - Available Safe Egress Time (ASET)



Circumstances Leading to Heavy Casualties

*Not to Scale

Compromised Tenability of MoE

Required Safe Egress Time (RSET)



Fire Development - Available Safe Egress Time (ASET)



Circumstances Leading to Heavy Casualties

*Not to Scale

Blocked Exits

Required Safe Egress Time (RSET)



Evacuation starts

Reaches place of safety

Fire Development - Available Safe Egress Time (ASET)



Ignition

Tenability limit reached

Circumstances Leading to Heavy Casualties

*Not to Scale

Shutdown of Fire Alarm

Required Safe Egress Time (RSET)

Detection
Time

Pre-movement
Time

Movement
Time



Evacuation
starts

Reaches
place of
safety

Fire Development - Available Safe Egress Time (ASET)

Incipient

Growth

Fully developed



Ignition

Tenability limit reached

Circumstances Leading to Heavy Casualties

*Not to Scale

Presence of Polystyrene Window Covers

Required Safe Egress Time (RSET)



Evacuation starts

Reaches place of safety

Fire Development - Available Safe Egress Time (ASET)



Ignition

Tenability limit reached



Thank you

Smoke Stop Doors

