UNDERSTANDING THE 6th SCHEDULE IN DEPTH
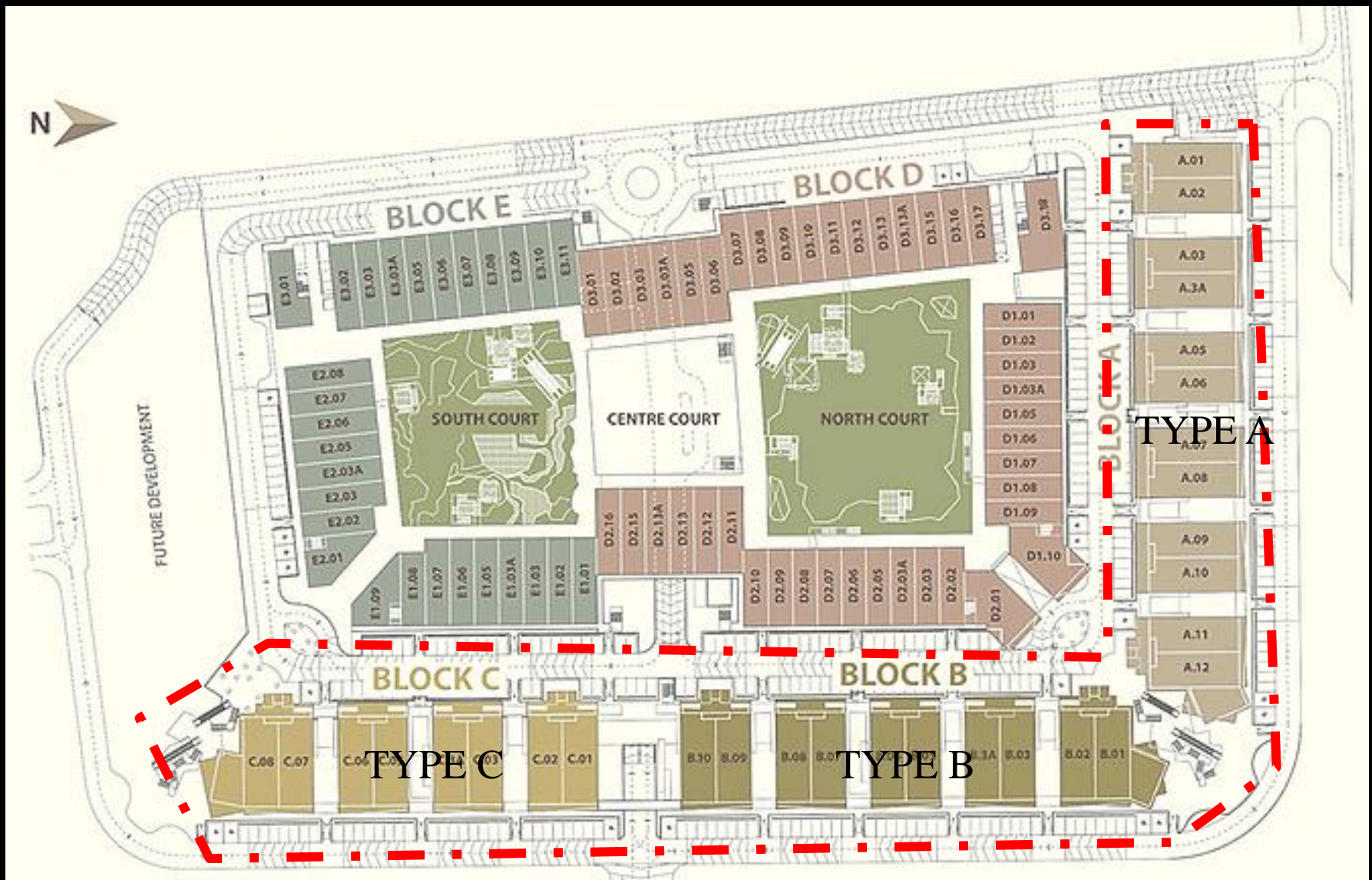
SAMPLE PROJECT COMMERCIAL SEMI-D

By Ar Ridha & Ar Adrianta
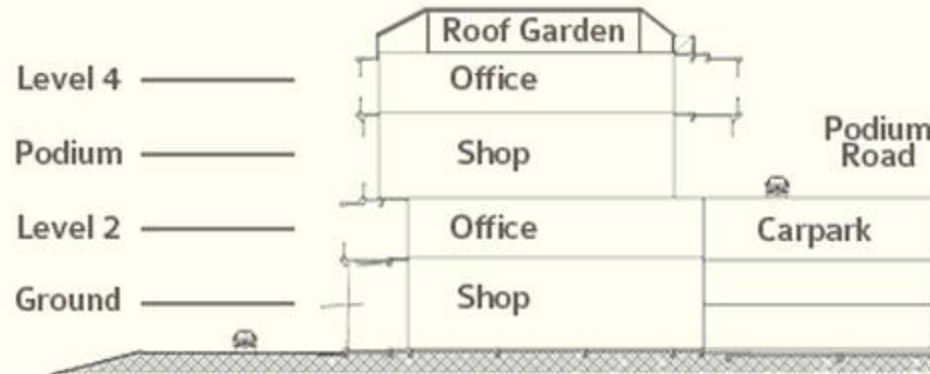
TAMARIND SQUARE CYBER
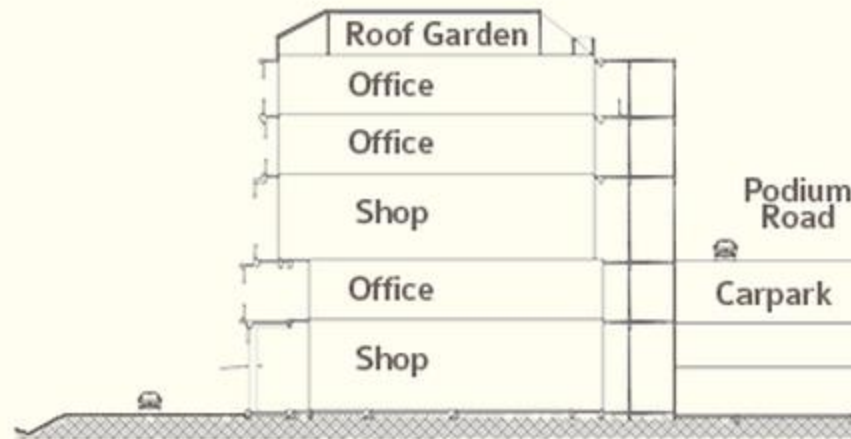
SITE PLAN

COMMERCIAL DEVELOPMENT

SEMI D SHOPLOT

EXPOSE FAÇADE BETWEEN SEMI D

FORMAT SUBMISSION TO BOMBA

GA 3.3D-BB04 BOMBA CHECKLIST - SIXTH SCHEDULE

Checklist No.:   2

Project Name: _____   Project No.: _____

Client Name: _____   Building Type: **Office + Retail**

Project Architect: _____   Job Captain: _____

SIXTH SCHEDULE: BY LAW 142- 146

Assumption: **Single Building, Compartmented Floor, Purpose Group IV**

- Semi-Detached Offices Types A1, A2, B1, B2
a) Enclosing rectangle
21.6m (W) x 20.3m (H)= 438.48sqm
Part II- Enclosing rectangle 21m high
Distance provided- 6.1m
Therefore, percentage of unprotected opening : **40%**
Allowable unprotected opening: **175.39sqm**

b) Openings Provided
Opening A = 15nos x 1.75m x 3m = 78.75sqm
Opening B = 7nos x 1.75m x 2.6m = 31.85sqm
Opening C = 8nos x 1.75m x 3.6m = 50.4sqm
Total Openings Provided = **161sqm**

161sqm < 210sqm. Therefore satisfies Part III 1(a) of Sixth Schedule
161sqm / 438.48sqm = 36.72%. Therefore satisfies Part II of Sixth Schedule

- Semi-Detached Offices Types C1, C2, D
a) Enclosing rectangle
21.6m (W) x 24.0m (H)= 529.20sqm
Part II- Enclosing rectangle 24m high
Distance provided- 6.1m
Therefore, percentage of unprotected opening : **40%**
Allowable unprotected opening: **211.68sqm**

b) Openings Provided
Opening A = 13nos x 1.75m x 3m = 68.25sqm
Opening B = 7nos x 1.75m x 2.6m = 31.85sqm
Opening C = 12nos x 1.75m x 3.6m = 75.6sqm
Total Openings Provided = **175.7sqm**

175.7sqm < 210sqm. Therefore satisfies Part III 1(a) of Sixth Schedule
175.7sqm / 529.2sqm = 33.2%. Therefore satisfies Part II of Sixth Schedule

Note: _____

Prepared By: _____   Check By: _____
Date: _____   Date: _____

Check Status:
☐ Release   ☐ Revise for re-check
■ Others

QUESTION

CALCULATE COMPLIANCE TO SCHEDULE 6 PART ii & iii FOR THE FOLLOWING SCENARIO ASSUMING BOTH FAÇADE HAVE SAME OPENING SIZE.

Semi-Detached Offices Types A1, A2, B1, B2	Semi-Detached Offices Types C1, C2
WIDTH : 21.6 Meter HEIGHT: 21.3 Meter DISTANCE BETWEEN BUILDING: 6.1 Meter Opening provided: Opening A = 15nos x 1.75m x 3m = 78.75sqm Opening B = 7nos x 1.75m x 2.6m = 31.85sqm Opening C = 8nos x 1.75m x 3.6m = 50.4sqm	WIDTH : 21.6 Meter HEIGHT: 24 Meter DISTANCE BETWEEN BUILDING: 6.1 Meter Opening provided: Opening A = 13nos x 1.75m x 3m = 68.25sqm Opening B = 7nos x 1.75m x 2.6m = 31.85sqm Opening C = 12nos x 1.75m x 3.6m = 75.6sqm

MODULE 4:
SIMPLE EXERCISE FOR REFRESH

By Ar Ridha & Ar Adrianta

EXERCISE 1

DETERMINING SAFE DISTANCE FOR SMALL BUILDING

2.2 meter

2 meter

5.8 meter

2 meter

7 meter

28 meter
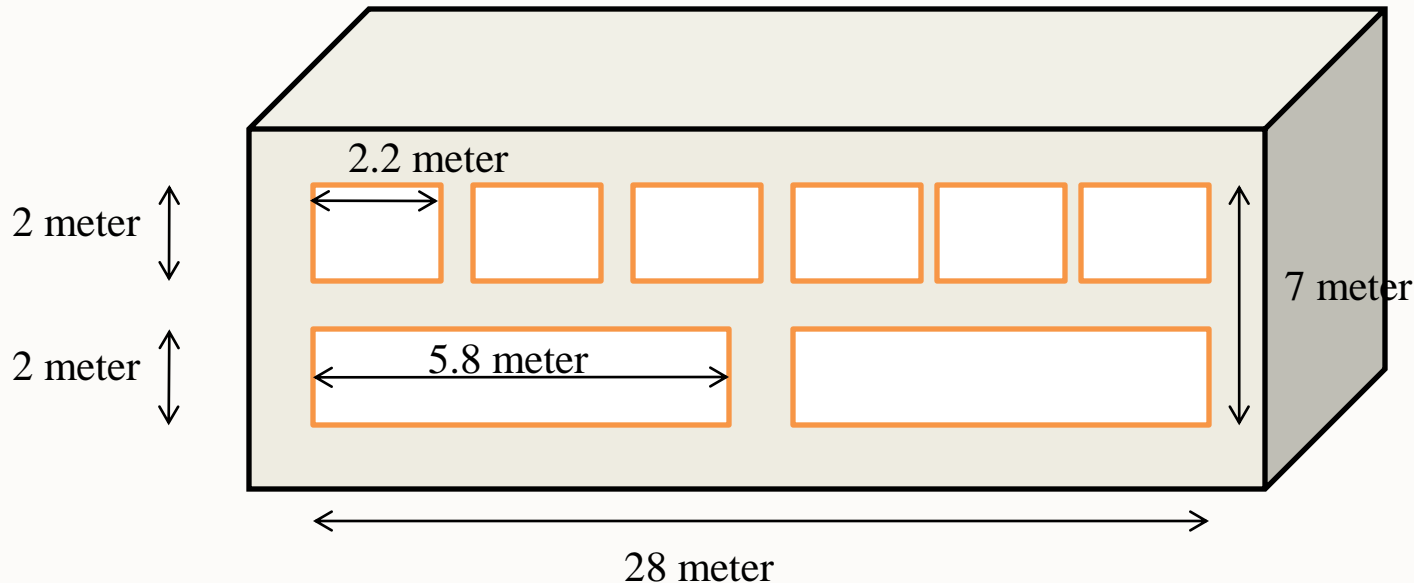
In reference to the above office diagram, calculate the followings with the given set back 6m:
1. Percentage of un protected areas (3 marks)
2. Distance from relevant boundary (6 marks)
3. Aggregate notional area (6 marks)
Answer to be supported by calculation working.

ANSWER QUESTION 2(1) (3 marks)

Area of façade : 7 X 28 = 196

Window area = 6unit X 2m X 2.2m + 2 unit X 2m X 5.8m = 49.6

Percentage of un protected area = 49.6/ 196 = 25.3%

ANSWER QUESTION 2(2) (6 marks)

Building height = 7m
Width of building = 28m
Percentage of un protected area =25.3%

Read table at schedule 6 for enclosing rectangle 9m (7m meter nearest to 9m)
Read width of building 28m nearest to 30m
Read percentage of un protected 25.3% nearest to 30%

Distance in meters of relevant boundary is 3.5m which is smaller than setback of 6 meter provided

Distance from relevant boundary 3.5 meter.
Given set back 6 meter.

Aggregate notional area provided is 6
Read at table of factors between 6.0 to 8.5 is 2.

Therefore aggregate notional area provided is:
=Unprotected area X factor
= 49.6 X 2
= 99.2 which satisfy schedule 6 Part III 1(a) 210 sqm for building purpose group iv.

UNDERSTANDING THE 6th SCHEDULE IN DEPTH

MODULE 5: HIGH RISE CALCULATION

By Ar Ridha & Ar Adrianta

EXERCISE 2
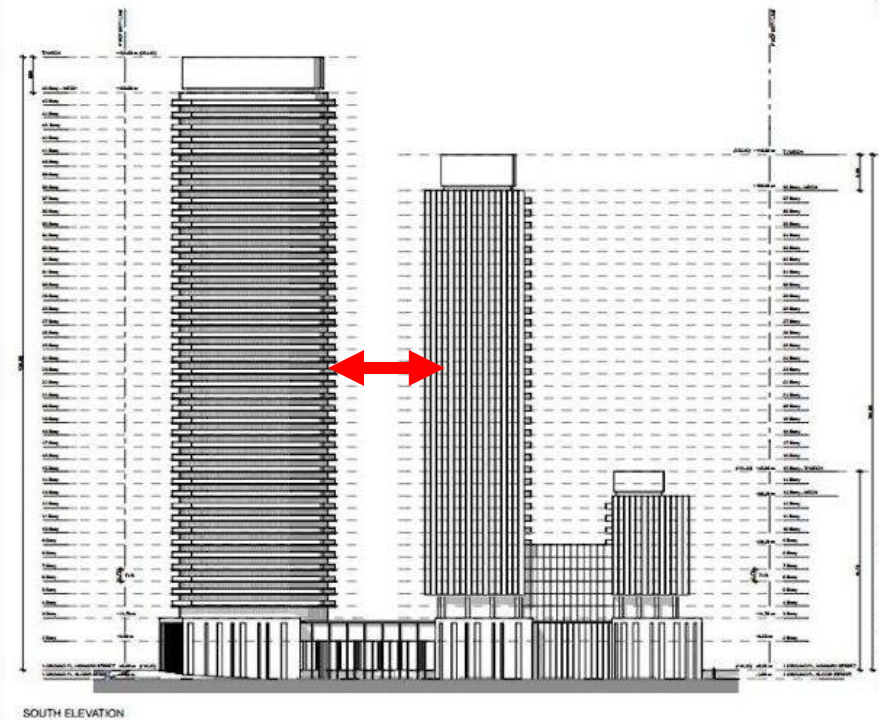
DETERMINING SAFE DISTANCE FOR HIGHRISE BUILDING

APRIL 3, 2013- HIGH-RISE 40 STOREY APARTMENT BUILDING IN GROZNY, RUSSIA

Fires involving multi-storey buildings are
– a risk to life
– a risk of property loss
– a disruption to commercial business or
– to domestic life if dwellings are involved.

HOW TO CALCULATE DISTANCE BETWEEN HIGHRISE BUILDING?

SOUTH ELEVATION

You are given the attached schematic floor plan for an office development proposal on a very tight urban site comprising identical twin 30 storey office towers to check for compliance with the UBBL Part 7 requirements with respect to separation between the two buildings.
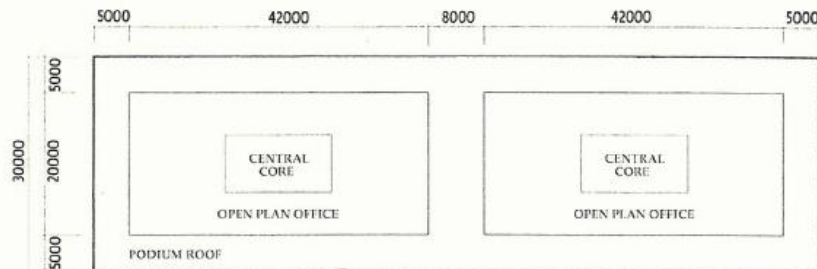
You are to assume the following:

- Both towers are 30 storeys and designed with centre cores and all round curtain walling on the perimeter
- Floor to floor height is 4.8 metres throughout
- There is a vertical fire barrier comprising of a dropped beam of 900 mm at the edge of each floor slab
- The structural columns are set back 1.5 metres from the edge of the building

a. Using the Sixth Schedule in the UBBL, check if the design as proposed can comply with the Sixth Schedule Part II by reference to Enclosing Rectangle, showing your calculation using sketches and reference to the Tables to Part II.

(8 marks)

b. Assuming that the separation distance between the two office blocks cannot be amended, calculate the percentage opening that can be allowed in order for the design to comply with the Sixth Schedule.

(12 marks)

c. Using Part III of the Sixth Schedule, and by reference to aggregate notional area, check your answer to (b) above for compliance.

(5 marks)

SKETCHING -SOALAN 4

You are given the attached schematic floor plan for an office development proposal on a very tight urban site comprising identical twin 30 storey office towers to check for compliance with the UBBL Part 7 requirements with respect to separation between the two buildings.
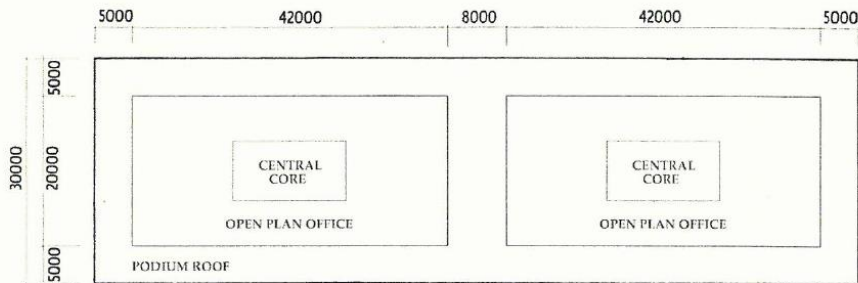

You are to assume the following:

- Both towers are 30 storeys and designed with centre cores and all round curtain walling on the perimeter
- Floor to floor height is 4.8 metres throughout
- There is a vertical fire barrier comprising of a dropped beam of 900 mm at the edge of each floor slab
- The structural columns are set back 1.5 metres from the edge of the building

Twin tower
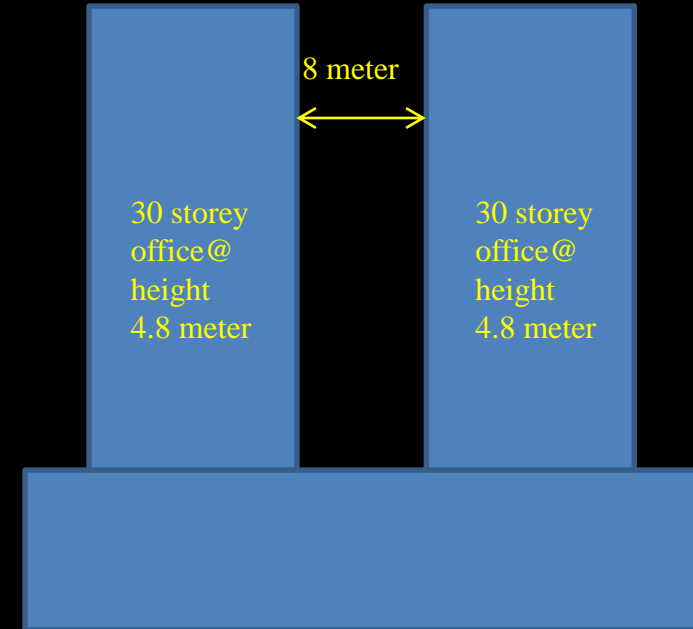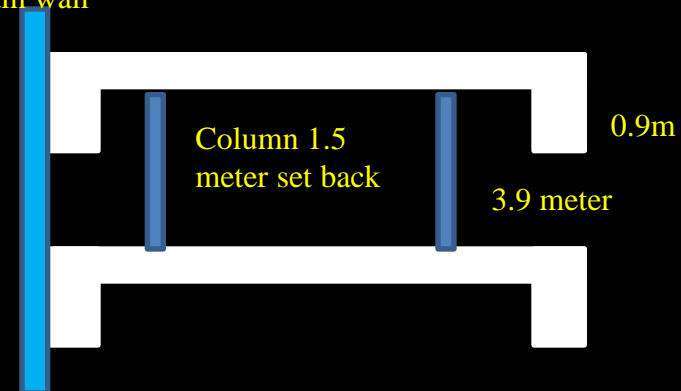
8 meter

30 storey office@ height 4.8 meter

30 storey office@ height 4.8 meter

Design with curtain wall

Column 1.5 meter set back

0.9m

3.9 meter

JAWAPAN A

a. Using the Sixth Schedule in the UBBL, check if the design as proposed can comply with the Sixth Schedule Part II by reference to Enclosing Rectangle, showing your calculation using sketches and reference to the Tables to Part II.

(8 marks)

Design compliance to Schedule 6:

Total building Height : 4.8 X 30 = 144 m
Refer schedule 5 Dimension of building, limit and volume for

TABLES TO PART II

TABLE I—BUILDINGS OR COMPARTMENTS OF PURPOSE GROUPS

I (Small Residential), II (Institutional), III (Other Residential),
IV (Office) and VII (Assembly)

The distance of relevant boundary is 15 meters.

Looking at the plans, the distance between building is : 8 meter < 15 meters from the table base on percentage of un protected opening of 81.25%

Therefore the percentage of un protected area propose **does not comply to** UBBL schedule 6 for the said façade.

27	4.0	7.5	10.0	11.5	13.0	14.0	16.0	17.0	18.0
30	4.0	8.0	10.0	12.0	13.5	15.0	17.0	18.0	19.0
40	5.0	9.0	11.5	13.0	15.5	17.5	19.0	20.5	22.0
50	5.5	9.5	12.5	15.0	17.0	19.0	21.0	22.5	24.0
60	5.5	10.5	13.5	16.0	18.5	20.5	22.5	24.5	26.5
80	6.0	11.0	14.5	17.5	20.5	22.5	25.0	27.5	29.5
100	6.0	11.0	15.5	19.0	21.5	24.5	27.0	30.0	32.0
120	6.0	11.5	15.5	19.5	22.5	26.0	28.5	32.0	34.0
No limit	6.0	11.5	15.5	20.0	23.5	27.0	29.5	33.0	35.0

**GELOJOH BRO !!!!!
BELASAH GUNA TABLE 1 TINGGI ENCLOSING RECTANGLE 27 METER UNTUK BANGUNAN WITHOUT COMPARTMENT TINGGI 144M.
LOGIC KE?**

JAWAPAN B

SINGLE FLOOR COMPARTMENTATION

10 STEPS TO CALCULATE SCHEDULE 6

STEP 1: Establish Plane of reference

STEP 2 : Determination the area of exposure of fire - Establish Enclosing Rectangle Size

STEP 3: Determining Unprotected Area - Calculate Area of Unprotected Openings and smallest enclosing wall of opening

STEP 4: Determining Unprotected Area- Calculate Percentage of Unprotected Openings

STEP 5 : For Compliance with Schedule 6 Part II –Establish parameters of the enclosing rectangle : Height, width, percentage of unprotected openings.

STEP 6 : Determination of Relevant boundary Distance- Go to Table for related purpose group with enclosing rectangle required high and width.

STEP 7 : For Compliance with Part II – check relevant boundary permitted according to design

STEP 8 : For Compliance with Part II – check your design for any adjustments

STEP 9 : Determine factor in Part III- Distance of Relevant boundary will determine factor to be use

STEP 10 : Calculation compliance to aggregate notional area

a. Using the Sixth Schedule in the UBBL, check if the design as proposed can comply with the Sixth Schedule Part II by reference to Enclosing Rectangle, showing your calculation using sketches and reference to the Tables to Part II.

(8 marks)

My checking on the design are as follows:

1. Defining the reference plane on plan

| 5000 | 42000 | 8000 | 42000 | 5000 |

CENTRAL CORE

OPEN PLAN OFFICE

CENTRAL CORE

OPEN PLAN OFFICE

PODIUM ROOF

Reference plane building 1

Reference plane building 2
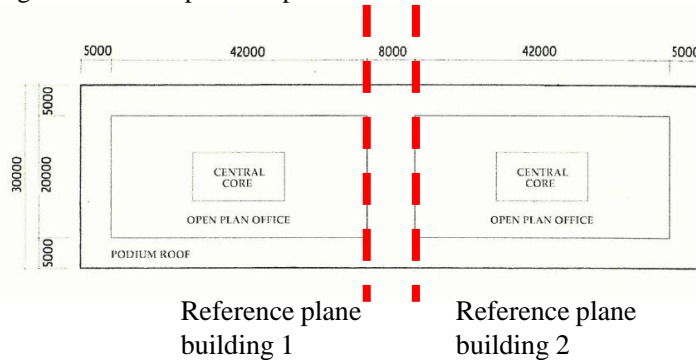
2. Defining the enclosing rectangle on elevation

Since the building is a highrise building with a height of 144m, refer by law 137- building above 30 meter must be compartmentalize.

Height perfloor 4.8 meter

Vertical fire barrier — 0.9 meter

Unprotected area — 3.9 meter

Twin tower

8 meter

30 storey office@ height 4.8 meter

30 storey office@ height 4.8 meter

Design with curtain wall

Column 1.5 meter set back

0.9m
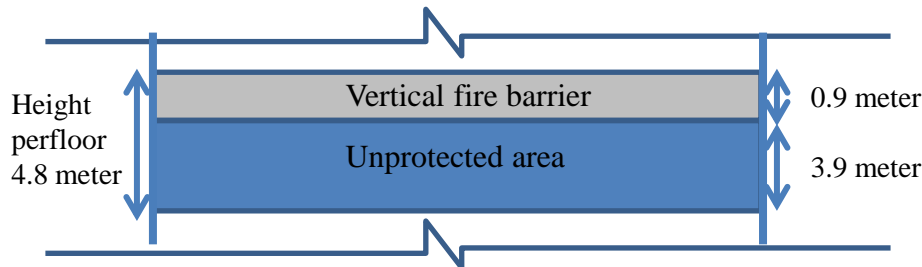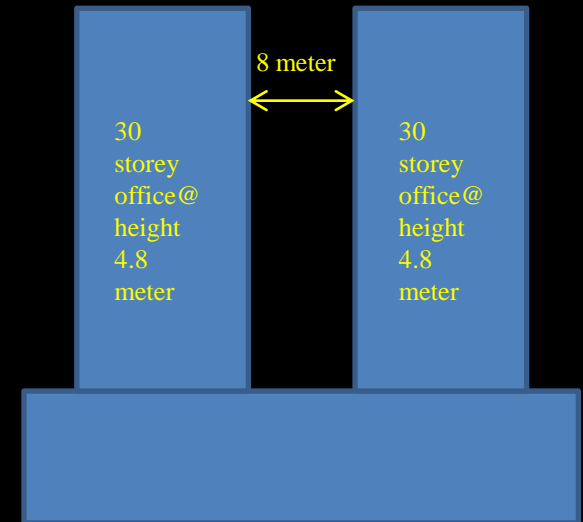
3.9 meter

3. Calculation of unprotected area & Smallest enclosing rectangle
Smallest area enclosing rectangle : 20m X 4.8 = 96 sqm
Total Area unprotected area : 20m X (4.8-0.9)1 = 78 sqm

4. **Calculation for un protected percentage:**
Percentage unprotected area : 78/96 = 81.25%

5. **Determining compliance to schedule 6.**
Refer schedule 6 at table for Office for height
- Purpose group Office- refer table 1
- Since per floor height 4.8 meter, refer table height 6 meter
- Refer Percentage unprotected area: 81.25% refer to 90%
- Refer Width: 20m enclosing rectangle refer to 21 meters
- The distance of relevant boundary is 6.5 meters.

Therefore , If the building is to be identical with same amount of opening ,
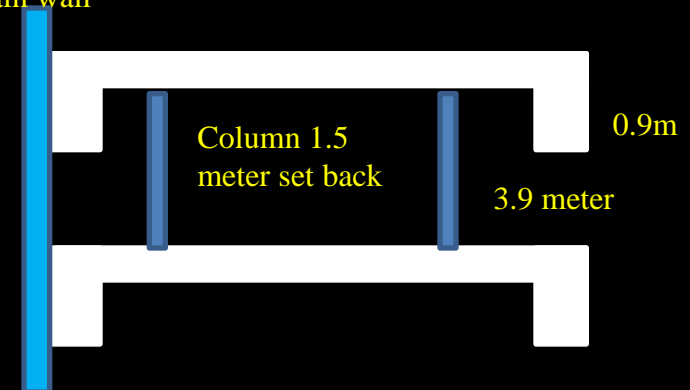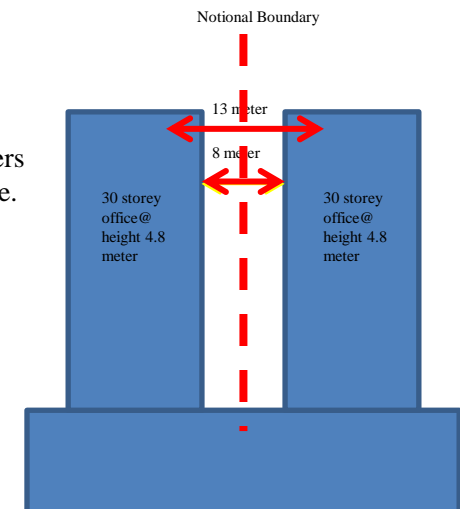the notional boundary shall be in the centre and shall require 6.5meter X 2 = 13meter length.

Conclusion

Looking at the plans and elevation, the distance between building is :8 meter which is smaller than 13.5 meters
Therefore the percentage of un protected area propose **do not comply to** UBBL schedule 6 for the said façade.

TABLES TO PART II
TABLE I—BUILDINGS OR COMPARTMENTS OF PURPOSE GROUPS
I (Small Residential), II (Institutional), III (Other Residential),
IV (Office) and VII (Assembly)

Width of enclosing rectangle in metres	Distance in metres from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 6 m high								
3	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.5	3.0
6	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.0
9	1.0	2.0	2.5	3.0	3.5	4.0	4.5	4.5	5.0
12	1.5	2.5	3.0	3.5	4.0	4.5	5.0	5.0	5.5
15	1.5	2.5	3.0	4.0	4.5	5.0	5.5	5.5	6.0
18	1.5	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5
21	1.5	2.5	3.5	4.0	5.0	5.5	6.0	6.5	7.0
24	1.5	2.5	3.5	4.5	5.0	5.5	6.0	7.0	7.0
27	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	7.5
30	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	8.0
40	1.5	2.5	3.5	4.5	5.5	6.5	7.0	8.0	8.5
50	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.0	9.0
60	1.5	2.5	3.5	5.0	5.5	6.5	7.5	8.5	9.5
80	1.5	2.5	3.5	5.0	6.0	7.0	7.5	8.5	9.5
100	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0
No limit	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0

Notional Boundary
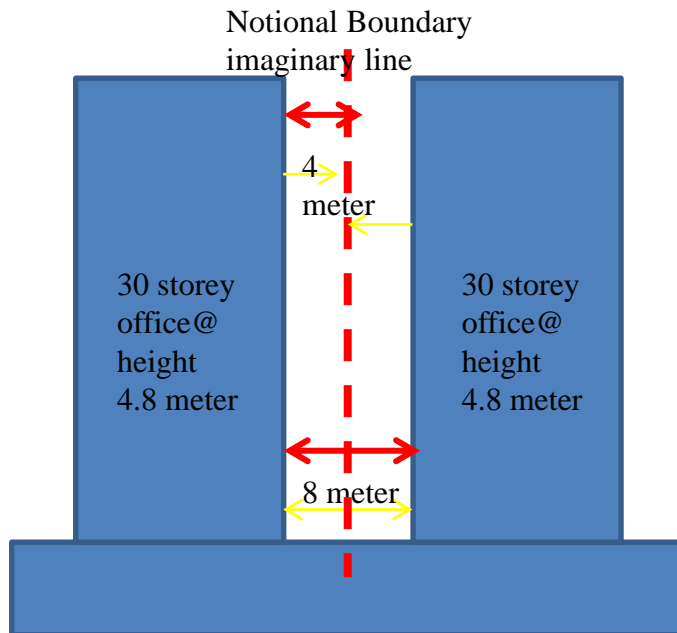

13 meter

8 meter

30 storey office@ height 4.8 meter

30 storey office@ height 4.8 meter

b. Assuming that the separation distance between the two office blocks cannot be amended, calculate the percentage opening that can be allowed in order for the design to comply with the Sixth Schedule.

(12 marks)

If the distance between 2 block cannot be amended ie 8 meter, therefore:

1. Determine the position of the Notional Boundary

Notional Boundary imaginary line

4 meter

30 storey office@ height 4.8 meter

30 storey office@ height 4.8 meter

8 meter

2. Since the building is a highrise building with a height of 144m, refer by law 137- building above 30 meter must be compartmentalize.

3. **Determining compliance to schedule 6.**
Refer schedule 6 at table for
* Purpose group Office- refer table 1
* Since per floor height 4.8 meter, refer table height 6 meter
* Refer Width: 20m enclosing rectangle refer to 21 meters
* The distance of relevant boundary given is 4 meters.

Width of enclosing rectangle in metres	Distance in metres from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 6 m high								
3	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.5	3.0
6	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.0
9	1.0	2.0	2.5	3.0	3.5	4.0	4.5	4.5	5.0
12	1.5	2.5	3.0	3.5	4.0	4.5	5.0	5.0	5.5
15	1.5	2.5	3.0	4.0	4.5	5.0	5.5	5.5	6.0
18	1.5	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5
21	1.5	2.5	3.5	4.0	5.0	5.5	6.0	6.5	7.0
24	1.5	2.5	3.5	4.5	5.0	5.5	6.0	7.0	7.0
27	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	7.5
30	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	8.0
40	1.5	2.5	3.5	4.5	5.5	6.5	7.0	8.0	8.5
50	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.0	9.0
60	1.5	2.5	3.5	5.0	5.5	6.5	7.5	8.5	9.5
80	1.5	2.5	3.5	5.0	6.0	7.0	7.5	8.5	9.5.
100	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0
No limit	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0

4. T   is
50%.

c. Using Part III of the Sixth Schedule, and by reference to aggregate notional area, check your answer to (b) above for compliance.

(5 marks)

The aggregate notional area for compliance:

1. The distance from notional boundary is 4 meters;
Refer for distance of unprotected area from vertical datum in meters is 2.7-4.3 meters = factor of 10

2. Calculation of enclosing rectangle
Area of unprotected opening for compartmentalize floor
= 4.8m height X 20 meter width X 50%
= 48sqm

3. Calculation for aggregate notional area
Aggregate notional area (area of Unprotected Opening X Factor in table factor PART III schedule 6)
= 48 sqm X factor 10
= 480 sqm

4. Compliance
- Part III Rule 1 says aggregate notional area at side building must not exceed 210sqm- I.II.III.IV, IV.
- Therefore 480 sqm > 210sqm **does not comply** to requirement for purpose group IV for aggregate notional area.

TABLE OF FACTORS

Distance of unprotected area from vertical datum in metres		Factor
Not less than	Less than	
1	1.2	80
1.2	1.8	40
1.8	2.7	20
2.7	4.3	10
4.3	6.0	4
6.0	8.5	2
8.5	12.0	1
12.0	18.5	0.5
18.5	27.5	0.25
27.5	50	0.1
50	No limit	0

4 m

How to Comply

In order to comply for the aggregate notional Area allowable below 210sqm , distance unprotected area from vertical datum has to be increase by 300mm to become 4.3m inlieu of 4m.

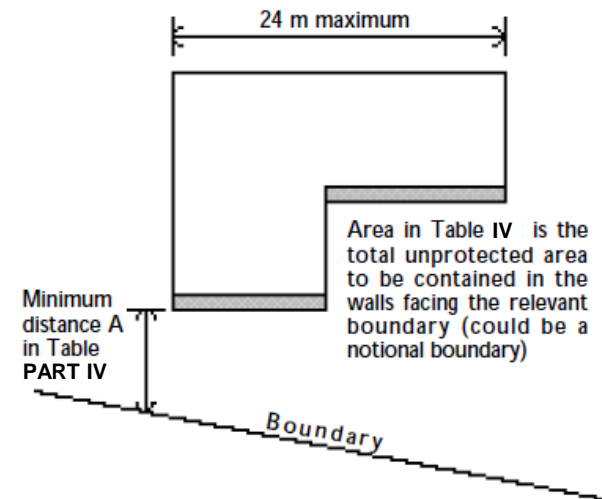This will allow the 50% opening to be maintain with 48 sqm X factor of 4 = 192sqm < 210.

EXERCISE 3

DETERMINING SAFE DISTANCE FOR SMALL RESIDENTIAL BUILDING

Table IV : for calculation of building not more than 3 storey and sides does not exceed 24 meters in length

TABLE TO PART IV

PERMITTED UNPROTECTED AREAS IN CERTAIN RESIDENTIAL BUILDINGS

Minimum distance (in metres) between side of building	Length of side (in metres) not exceeding	Total area of unprotected areas (in square metres) not exceeding
(1)	(2)	(3)
1	24	5.6
2.5	24	15
5.0	12	up to the whole area of the wall
6.0	24	up to the whole area of the wall

24 m maximum

Area in Table **IV** is the total unprotected area to be contained in the walls facing the relevant boundary (could be a notional boundary)

Minimum distance A in Table **PART IV**

Boundary

1. If distance of building is 1 meter within a 24 meter length = Unprotected area allowed is 5.6 sqm

2. If distance of building is 2.5 meter within a 24 meter length = Unprotected area allowed is 15 sqm

3. If distance above 5 meters : Unprotected area allowed is up to the whole wall

Referring to table IV schedule 6, Calculate the permitted un protected area for façade I and ii for the following low rise residential Flat A.

8m

3m

i

3m

Apartment B
5 storey

Flat A
3 storey

ii

5m

8m

ANSWER QUESTION 6 (5 marks)

Refer to table to part IV schedule 6 for permitted unprotected area in certain residential buildings

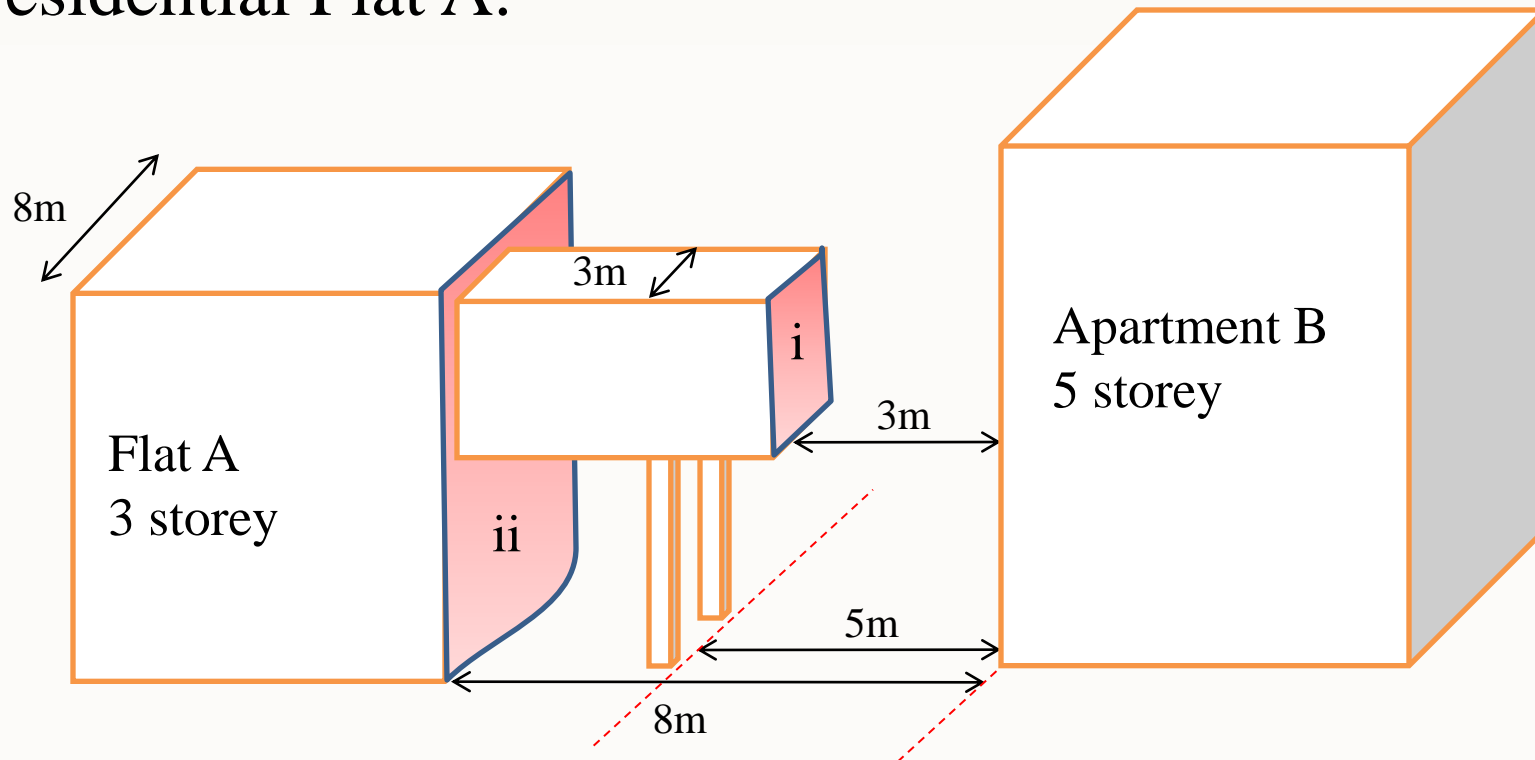| Minimum distance (in meters) between side of building	Length of side (in meters) not exceeding	Total area of unprotected area (in sqm) not exceeding
1	24	5.6
2.5	24	15
5	12	Up to the whole area of wall
6	24	Up to the whole area of wall

- **Façade i**

3m> 2.5 meters distance= permitted un protected area 15 sqm of wall

- **Façade ii**

8 meters > than 6 meter = permitted un protected area whole wall

CONCLUSION

DEC 2013- HIGH-RISE APARTMENT GUANGZHOU

Cause: Misuse as a warehouse in lieu of its original intention. Construction of the building started in 1995, but was suspended in 1998, and has reportedly been used as a warehouse for storing leather, shoes and wooden boards ever since.

2014 - HIGH-RISE BUILDING UNDER CONSTRUCTION IN SAN FRANCISCO

Cause: Fire suppression system was not yet install in the building

DEC 2015- DUBAI 63 STOREY 244 ROOM HOTEL

Caused: Fireworks

6 WAYS HOW FIRE SPREAD IN HIGH RISE BUILDING

1. **WINDOW-TO-WINDOW FIRE SPREAD-** "autoexposure," flames lap out a window and flow upward, with heat cracking or melting the window directly above. Fire then spreads into the floor above through the broken window.

2. **CURTAIN WALL VOID** - usually is a small space between the outer edge of the floor slab and the inside of the curtain wall through which flames and smoke spread to the floors above.

3. **UTILITY CLOSETS** -wire, cable, piping, and conduit rise up through holes in each floor level. These holes are known in the fire service as "poke-through holes" and allow vertical fire, heat, and smoke spread.

4. **FLOOR COLLAPSE** - At a high-rise fire that burns uncontrolled for a long time, the suspended ceiling is destroyed and flames heat the underside of the floor above, the hottest part of the fire below buckles and heaves upward. Concrete cracks and flames can spread up through the cracks.

5. **OPEN STAIRWAY** - The design of Open Internal Staircase within office on multiple floors will allow Fire, heat, and smoke to quickly spread up through an open stairway.

6. **CENTRAL AIR-CONDITIONING RETURN AIR DUCTS-** Fire, heat and smoke travel up through a return air shaft of the central air-conditioning system
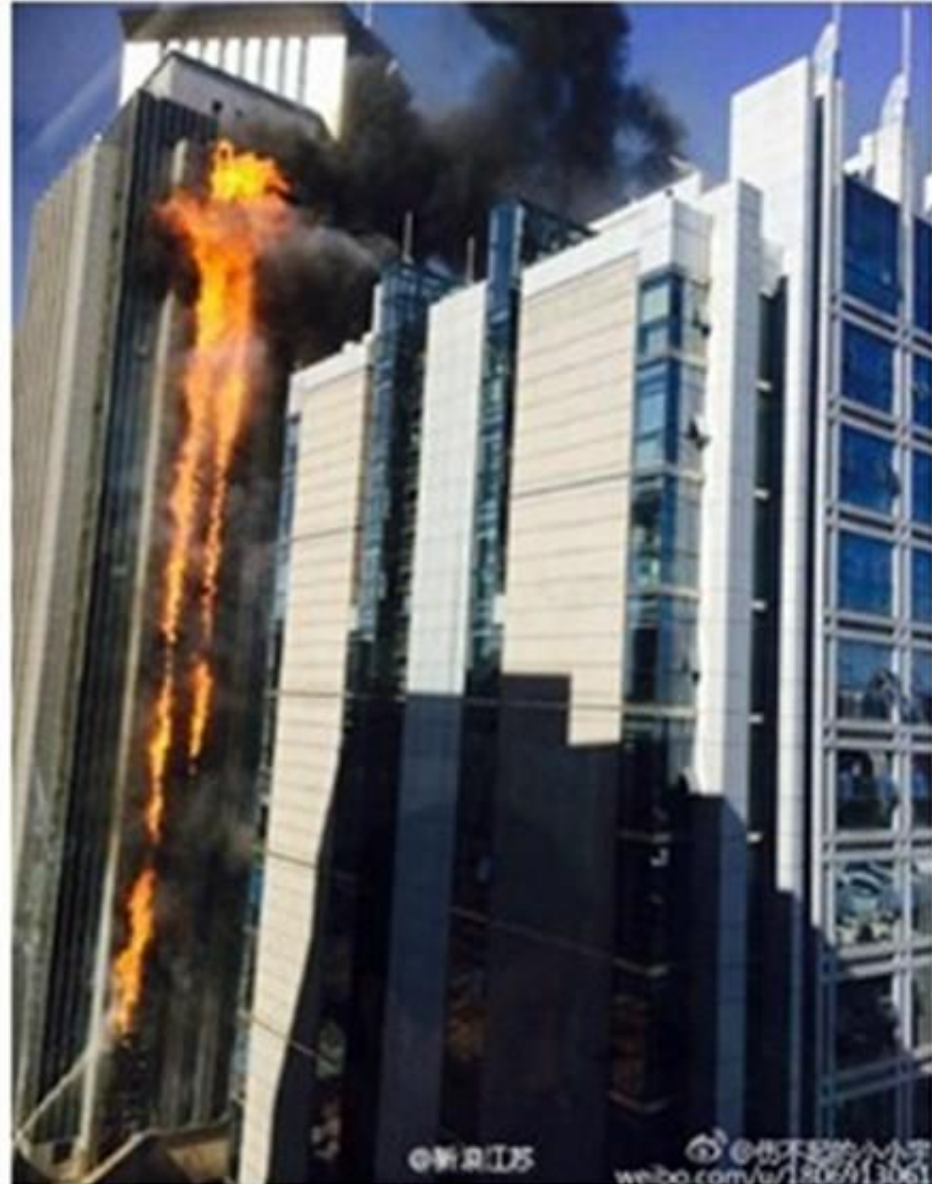
MAY 2016- NANJING HOTEL

Cause: The fire is believed to have started from the central air-conditioning system on the sixth-floor and expanded along the exterior wall to the top of the building, provincial media reported.

PART II

Tables to Part II

Table I—Buildings or Compartments of Purpose Groups
I (Small Residential), II (Institutional), III (Other Residential), IV (Office) and VII (Assembly)

Width of enclosing rectangle in metres	Distance in metres from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
Enclosing rectangle 3 m high									
3	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0
6	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.5	3.0
9	1.0	1.0	1.5	2.0	2.5	2.5	3.0	3.0	3.5
12	1.0	1.5	2.0	2.0	2.5	3.0	3.0	3.5	3.5
15	1.0	1.5	2.0	2.5	2.5	3.0	3.5	3.5	4.0
18	1.0	1.5	2.0	2.5	2.5	3.0	3.5	4.0	4.0
21	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.5
24	1.0	1.5	2.0	2.5	3.0	3.5	3.5	4.0	4.5
27	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	4.5
30	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	4.5
40	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	5.0
No limit	1.0	1.5	2.0	2.5	3.0	3.5	4.0		5.0

Table 2—Buildings or Compartments of Purpose Groups
V (Shop), VI (Factory) and VIII (Storage and General)

Width of enclosing rectangle in metres	Distance in metres from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
Enclosing rectangle 3 m high									
3	1.0	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0
6	1.5	2.0	2.5	3.0	3.5	3.5	4.0	4.0	4.0
9	1.5	2.5	3.0	3.5	4.0	4.0	4.5	5.0	5.0
12	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	5.5
15	2.0	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.0
18	2.0	2.5	3.5	4.0	5.0	5.0	6.0	6.5	6.5
21	2.0	3.0	3.5	4.5	5.0	5.5	6.0	6.5	7.0
24	2.0	3.0	3.5	4.5	5.0	5.5	6.0	7.0	7.5
27	2.0	3.0	4.0	4.5	5.5	6.0	6.5	7.0	7.5
30	2.0	3.0	4.0	4.5	5.5	6.0	6.5	7.5	8.0
40	2.0	3.0	4.0	5.0	5.5	6.5	7.0	8.0	8.5
50	2.0	3.0	4.0	5.0	6.0	6.5	7.5	8.0	9.0
60	2.0	3.0	4.0	5.0	6.0	7.0	7.5	8.5	9.5
80	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	9.5
No limit	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0

Part III

RULES FOR CALCULATION BY REFERENCE TO AGGREGATE NOTIONAL AREA

Table of Factors

Distance of unprotected area from vertical datum in metres		Factor
Not less than	Less than	
1	1.2	80
1.2	1.8	40
1.8	2.7	20
2.7	4.3	10
4.3	6.0	4
6.0	8.5	2
8.5	12.0	1
12.0	18.5	0.5
18.5	27.5	0.25
27.5	50	0.1
50	No limit	0

Part IV

RULES FOR CALCULATION IN RESPECT OF CERTAIN BUILDINGS OF PURPOSE GROUP I OR III

Table to Part IV

PERMITTED UNPROTECTED AREAS IN CERTAIN RESIDENTIAL BUILDINGS

Minimum distance (in metres) between side of building	Length of side (in metres) not exceeding	Total area of unprotected areas (in square metres) not exceeding
(1)	(2)	(3)
1	24	5.6
2.5	24	15
5.0	12	up to the whole area of the wall
6.0	24	up to the whole area of the wall

LEARN TO CALCULATE SCHEDULE 6 TO AVOID THIS TO OCCUR

THANK YOU