



住戶康樂設施總熱傳送值的摘要匯表  
**OTTV of Resident's  
 Recreational Facilities  
 Summary Sheet**

電郵地址  
E-mail Address

作認收電郵之用 (電子呈交適用)  
For acknowledgement email (e-submission)

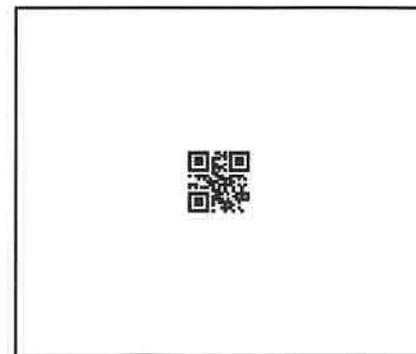
PNAP  
**APP-156**  
 附錄 **B**  
 Appendix

地址: TOWER 1, PROPOSED RESIDENTIAL DEVELOPMENT AT INLAND LOT NO. 9076,		屋宇署樓號 BD Ref. No. 2/3003/20	
建築物類型/用途: Building Type / Use:	住戶康樂設施 Resident's Recreational Facilities		
總熱傳送值計算者 OTTV calculated by	<input checked="" type="checkbox"/> 1. 註冊專業工程師 1. Registered Professional Engineers <input type="checkbox"/> 2. 建築師 2. Architect <input type="checkbox"/> 3. 其他·請註明: 3. Others, please specify:		
分類 Classification	<input checked="" type="checkbox"/> 平台 Padium / <input type="checkbox"/> 樓塔 Tower		
層數 (住戶康樂設施) No. of Storeys (RRF)	1		
總樓面面積 Gross Floor Area	平方米 m <sup>2</sup>		
實用樓面面積 Usable Floor Area	平方米 m <sup>2</sup>		
外牆總面積 (包括窗戶) Total External Wall Area (Including windows)	238.95	平方米 m <sup>2</sup>	窗戶與牆壁的比例 Window to Wall Ratio
窗戶總面積 Total Window Area	115.5	平方米 m <sup>2</sup>	= 770:1593
天窗總面積 Total Skylight Area	平方米 m <sup>2</sup>		
**加權平均U值 **Weighted Average U-value	不透光牆 Opaque Wall	2.18	瓦特/平方米 W/m <sup>2</sup>
	窗戶 Window	0.65	瓦特/平方米 W/m <sup>2</sup>
	不透光屋頂 Opaque Roof	0.39	瓦特/平方米 W/m <sup>2</sup>
	天窗 Skylight		瓦特/平方米 W/m <sup>2</sup>
窗戶 Window	玻璃類型 Glass Type	<input type="checkbox"/> 反射性 Reflective <input checked="" type="checkbox"/> 有色 Tinted <input type="checkbox"/> 透明 Clear	面積 Area= 平方米 m <sup>2</sup> SC= 0.42 VLT= 55 %ER= 12
	雙層玻璃 Double Glazing	<input checked="" type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No	
	外遮光物 External Shading	外懸伸建物 Overhang <input type="checkbox"/> 有 Yes <input checked="" type="checkbox"/> 無 No 側簷伸建物 Sidefin <input type="checkbox"/> 有 Yes <input checked="" type="checkbox"/> 無 No	
	玻璃類型 Glass Type	<input type="checkbox"/> 反射性 Reflective <input type="checkbox"/> 有色 Tinted <input type="checkbox"/> 透明 Clear	面積 Area= 平方米 m <sup>2</sup> SC= VLT= %ER=
天窗 Skylight	玻璃類型 Glass Type	<input type="checkbox"/> 反射性 Reflective <input type="checkbox"/> 有色 Tinted <input type="checkbox"/> 透明 Clear	面積 Area= 平方米 m <sup>2</sup> SC= VLT= %ER=
	雙層玻璃 Double Glazing	<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No	
	外遮光物 External Shading	<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No	
	外遮光物 External Shading	<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No	
**加權平均吸熱率值 **Weighted Average Absorptivity	牆壁 Wall	0.25	
	屋頂 Roof	0.25	
**加權平均密度值 **Weighted Average Density	牆壁 Wall	467.7	公斤/平方米 kg/m <sup>2</sup>
	屋頂 Roof	618.18	公斤/平方米 kg/m <sup>2</sup>
住戶康樂設施 總熱傳送值 OTTV <sub>RRF</sub>	牆壁 Wall	30.75	瓦特/平方米 W/m <sup>2</sup>
	屋頂 Roof	3.48	瓦特/平方米 W/m <sup>2</sup>
	總平均數 Overall Average	26.24	瓦特/平方米 W/m <sup>2</sup>

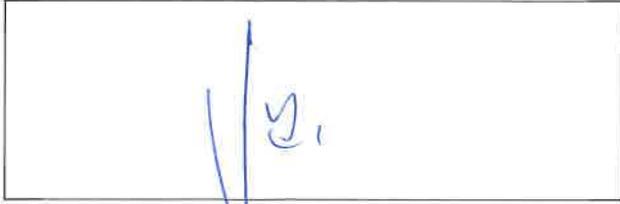
註:  
 ER = 外部反射率  
 SC = 遮光係數  
 VLT = 可見光透光率  
 \*\*按面積加權計算  
 應以發展項目中使用比例最高的窗戶和天窗的資料為準。

請在適當的方格內填上「√」號。  
 Please tick in box as appropriate.

Notes:  
 ER = External Reflectance  
 SC = Shading Coefficient  
 VLT = Visible Light Transmittance  
 \*\* Weighted by area  
 Window and skylight data should represent the major proportion of its use in the development.



簽署\*  
Signature\*

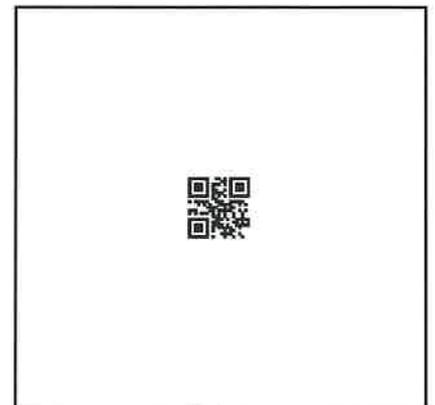


任何失實核證或聲明可引致法律行動。##  
Any false certification or declaration  
may be subject to legal action.##

日期 Date

1	6	0	8	2	0	2	4
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日 dd 月 mm 年 yyyy



## 注意事項

\*\* 任何人如作出虛假聲明或就重要事項作出失實陳述即屬觸犯刑事罪行，可能會被檢控。

## 甲. 填寫表格

1. 請填妥表格載列所有有關的部分。請附上所有證明文件。
2. 所提供的資料如有不全或錯誤，屋宇署將不能處理呈交的文件。
3. 如對本表格有任何疑問，請與屋宇署聯絡。

## 乙. 呈交方法

1. 郵寄/親身呈交 - 本表格連同有關文件應郵寄或親身呈交至屋宇署：

呈交有關勸諭信 / 命令 / 通知 / 指示的表格：

九龍油麻地海庭道11號西九龍政府合署北座屋宇署總部地下一般查詢及收件處

呈交至拓展部有關其他事宜的表格：

香港太古城太古灣道14號7樓屋宇署收發處。

## 丙. 聯絡資料

屋宇署

地址：九龍油麻地海庭道11號西九龍政府合署北座屋宇署總部

電話：2626 1616 (由“1823”接聽)

傳真：2537 4992

電郵：enquiry@bd.gov.hk

## Matters to Note

\*\* Any person making a false declaration or misrepresenting a material fact shall be guilty of a criminal offence and subject to prosecution.

## A. Completion of Form

1. Please ensure that all relevant parts of the form are duly completed. Please enclose all supporting documents.
2. If incomplete or erroneous information is provided in the form, the Buildings Department may not be able to process the submission.
3. Enquiries regarding this form should be addressed to the Buildings Department.

## B. Submission Methods

1. **By Post / In Person - This form together with the relevant documents shall be posted to or submitted in person to the Buildings Department:**

**For submissions relating to advisory letter/order/notice/direction:**

General Enquiry and Receipt Counter, G/F, Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon

**For other submissions to the New Buildings Division:**

Receipt & Despatch Counter, Buildings Department, 7/F, 14 Taikoo Wan Road, Taikoo Shing, Hong Kong

## C. Contact Details

Buildings Department

Address: Buildings Department Headquarters, North Tower, West Kowloon

Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon

Tel No.: 2626 1616 (handled by "1823")

Fax No.: 2537 4992

Email: enquiry@bd.gov.hk

**Tower 1, Proposed Residential  
Development at Inland Lot No. 9076,  
135 Tai Hang Road, Hong Kong**

**OTTV Report for Commercial  
Podium**

**Building Services Engineer:  
*AECOM Asia Company Limited***

**AECOM**

**13/F Tower 2, Grand Central Plaza,  
138 Shatin Rural Committee Road,  
Shatin, Hong Kong.**

**Tel: +852 3922 9162**

**Fax: +852 3922 9797**

**PROJECT : Tower 1, Proposed Residential Development at Inland Lot No. 9076,  
135 Tai Hang Road , Hong Kong**

**OTTV CALCULATION**

**Breakdown of Wall, Glass & Roof Area**

Ref. : BD 2/3003/20  
Building Address: Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Glass, Wall, & Roof Area (sq. meter)					
Facing Orientation/Direction	NE	SE	SW	NW	Roof
Total Facade Area (m <sup>2</sup> )	60.55	34.60	45.05	98.75	-
Concrete Wall Area (m <sup>2</sup> )	43.80	34.60	45.05	0.00	-
Roof Area	-	-	-	-	47.38
Glazing Area (m <sup>2</sup> )	16.75	0.00	0.00	98.75	-

## Construction Details

### W1 Concrete Wall: -

5mm white mosaic tiles on mosaic tile cladding  
(External Finish Material)  
+ 10mm cement/sand plaster/render + 125mm normal weight aggregate concrete  
(1st Intermediate Material) (2nd Intermediate Component)  
+ 10mm white gloss paint on cement/sand plaster/render  
(Internal Finish Material)

### R1 Roof Panel: -

10mm white mosaic tiles on concrete flat roof tiles or slabs + 75mm lightweight aggregate concrete  
(External Finish Material) (1st Intermediate Component)  
+ 50mm polystyrene foam insulation + 25mm plaster/render cement/sand  
(2nd Intermediate Component) (3rd Intermediate Component)  
+ 150mm white gloss paint on normal weight aggregate concrete  
(Internal Finish Material)

### Notes:

1. Shading Coefficient (SC) of fenestration are listed as follows:

<u>Shading Coefficient (SC)</u>	<u>Window Type</u>
0.42	F1 (G/F)

2. External Shading Multiplier (ESM) is assumed to be 1 for all directions.
3. Façade Orientation markup refers to Appendix 1

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A

1

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data of Opaque:

\*Wall/Roof

Facade Orientation Facing:

NE

Solar Factor (SF) is

138

*Wall/Roof Code No.		*W1/R1		
Location of Wall/Roof		Concrete wall		
External Surface Film	$R_s$	0.044		
External Finish Material		Mosaic tile cladding		
Conductivity	$W/m^{\circ}C$	1.5		
Density	$kg/m^3$	2500		
Thickness	m	0.005		
Material/Paint		Dark grey paint		
Absorptivity	$(\alpha)$	0.91		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity	$W/m^{\circ}C$	2.16		
Density	$kg/m^3$	2400		
Thickness	m	0.185		
Air Space Resistance	$R_a$			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Internal Finish Material		Plaster/render - gypsum		
Conductivity	$W/m^{\circ}C$	0.38		
Density	$kg/m^3$	1120		
Thickness	m	0.01		
Material/Paint		White gloss paint		
Absorptivity	$(\alpha)$	0.25		
Internal Surface Film	$R_i$	0.299		
U' Value of Composite		2.18		
*Wall/Roof				
Area of *Wall/Roof	$m^2$	43.80		
Density of Composite	$kg/m^2$	467.70		
*Wall/Roof				
Equivalent Temperature Difference	$(TD_{Ea})$	2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A

2

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data of Opaque:

\*Wall/Roof

Facade Orientation Facing:

SE

Solar Factor (SF) is

197

*Wall/Roof Code No.		*W1/R1		
Location of Wall/Roof		Concrete wall		
External Surface Film	$R_o$	0.044		
External Finish Material		Mosaic tile cladding		
Conductivity	$W/m^{\circ}C$	1.5		
Density	$kg/m^3$	2500		
Thickness	m	0.005		
Material/Paint		Dark grey paint		
Absorptivity	$(\alpha)$	0.91		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity	$W/m^{\circ}C$	2.16		
Density	$kg/m^3$	2400		
Thickness	m	0.185		
Air Space Resistance	$R_a$			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Internal Finish Material		Plaster/render - gypsum		
Conductivity	$W/m^{\circ}C$	0.38		
Density	$kg/m^3$	1120		
Thickness	m	0.01		
Material/Paint		White gloss paint		
Absorptivity	$(\alpha)$	0.25		
Internal Surface Film	$R_i$	0.299		
U' Value of Composite		2.18		
*Wall/Roof				
Area of *Wall/Roof	$m^2$	34.60		
Density of Composite	$kg/m^2$	467.70		
*Wall/Roof				
Equivalent Temperature Difference	$(TD_{eq})$	2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A 3 Ref. : BD 2/3003/20  
 Building Address: Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong  
 Physical data of Opaque: \*Wall/Roof  
 Facade Orientation Facing: SW Solar Factor (SF) is 202

*Wall/Roof Code No.		*W1/R1		
Location of Wall/Roof		Concrete wall		
External Surface Film $R_o$		0.044		
External Finish Material		Mosaic tile cladding		
Conductivity $W/m^{\circ}C$		1.5		
Density $kg/m^3$		2500		
Thickness $m$		0.005		
Material/Paint		Dark grey paint		
Absorptivity $(\alpha)$		0.91		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity $W/m^{\circ}C$		2.16		
Density $kg/m^3$		2400		
Thickness $m$		0.185		
Air Space Resistance $R_a$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Internal Finish Material		Plaster/render - gypsum		
Conductivity $W/m^{\circ}C$		0.38		
Density $kg/m^3$		1120		
Thickness $m$		0.01		
Material/Paint		White gloss paint		
Absorptivity $(\alpha)$		0.25		
Internal Surface Film $R_i$		0.299		
'U' Value of Composite *Wall/Roof		2.18		
Area of *Wall/Roof $m^2$		45.05		
Density of Composite *Wall/Roof $kg/m^2$		467.70		
Equivalent Temperature Difference $(TD_{Eq})$		2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A 4 Ref. : BD 2/3003/20  
 Building Address: Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong  
 Physical data of Opaque: \*Wall/Reef  
 Facade Orientation Facing: NW Solar Factor (SF) is 138

*Wall/Roof Code No.		*W2/R2		
Location of Wall/Roof		Concrete wall		
External Surface Film	$R_o$	0.044		
External Finish Material		Metals - aluminium alloy typical		
Conductivity	$W/m^{\circ}C$	160		
Density	$kg/m^3$	2800		
Thickness	m	0.005		
Material/Paint		Silver paint		
Absorptivity	( $\alpha$ )	0.25		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity	$W/m^{\circ}C$	2.16		
Density	$kg/m^3$	2400		
Thickness	m	0.185		
Air Space Resistance	$R_a$			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Intermediate Component				
Conductivity	$W/m^{\circ}C$			
Density	$kg/m^3$			
Thickness	m			
Internal Finish Material		Plaster/render - gypsum		
Conductivity	$W/m^{\circ}C$	0.38		
Density	$kg/m^3$	1120		
Thickness	m	0.01		
Material/Paint		White gloss paint		
Absorptivity	( $\alpha$ )	0.25		
Internal Surface Film	$R_i$	0.299		
U' Value of Composite		2.20		
*Wall/Reef				
Area of *Wall/Reef	$m^2$	0.00		
Density of Composite	$kg/m^2$	469.20		
*Wall/Reef				
Equivalent Temperature Difference	( $TD_{eq}$ )	2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A

5

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data of Opaque:

\*Wall/Roof

Facade Orientation Facing:

Roof

Solar Factor (SF) is

264

*Wall/Roof Code No.		*W1/R1		
Location of Wall/Roof		Roof		
External Surface Film $R_o$		0.055		
External Finish Material		Mosaic tile cladding		
Conductivity $W/m^{\circ}C$		1.5		
Density $kg/m^3$		2500		
Thickness $m$		0.009		
Material/Paint		Dark grey paint		
Absorptivity $(\alpha)$		0.91		
Intermediate Component		Screeding - cement sand		
Conductivity $W/m^{\circ}C$		0.72		
Density $kg/m^3$		1860		
Thickness $m$		0.083		
Intermediate Component		Insulating materials - polyurethane foam		
Conductivity $W/m^{\circ}C$		0.026		
Density $kg/m^3$		30		
Thickness $m$		0.05		
Intermediate Component		waterproofing membrane		
Conductivity $W/m^{\circ}C$		1.15		
Density $kg/m^3$		2400		
Thickness $m$		0.003		
Intermediate Component		Screeding - cement sand		
Conductivity $W/m^{\circ}C$		0.72		
Density $kg/m^3$		1860		
Thickness $m$		0.03		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity $W/m^{\circ}C$		2.16		
Density $kg/m^3$		2400		
Thickness $m$		0.15		
Internal Finish Material		Plaster/render - gypsum		
Conductivity $W/m^{\circ}C$		0.38		
Density $kg/m^3$		1120		
Thickness $m$		0.015		
Material/Paint		White gloss paint		
Absorptivity $(\alpha)$		0.25		
Internal Surface Film $R_i$		0.299		
U' Value of Composite *Wall/Roof		0.39		
Area of *Wall/Roof $m^2$		47.38		
Density of Composite *Wall/Roof $kg/m^2$		618.18		
Equivalent Temperature Difference $(TD_{eq})$		9.75		

Building (Energy Efficiency) Regulation  
Form OTTV2  
Window / Rooflight Schedule

Sheet No. B 1 Ref. : BD 2/3003/20  
 Building Address: Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data on \*window/rooflight  
 Facade Orientation Facing: NE Solar Factor (SF) is 138

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.008			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	16.75			

Facade Orientation Facing: SE Solar Factor (SF) is 197

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.008			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	0.00			

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV2

Window / Rooflight Schedule

Sheet No. B 2 Ref. : BD 2/3003/20  
 Building Address: Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data on \*window/rooflight  
 Facade Orientation Facing: SW Solar Factor (SF) is 202

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.008			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	0.00			

Physical data on \*window/rooflight  
 Facade Orientation Facing: NW Solar Factor (SF) is 138

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.008			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	98.75			

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

1

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

NE (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/A <sub>r</sub>	U	a	T <sub>Deq</sub>	SUM
W1	Concrete wall	43.80	2.18	0.91	2.67	232.2
Subtotals		43.80	(A)		Heat Gain	232.2 (C)

Fenestration

Code No.	Description	*A <sub>fw</sub> /A <sub>fr</sub>	SC	ESM	SF	SUM
F1	Tinted Glass	16.75	0.42	1	138	970.8
Subtotals		16.75	(B)		Heat Gain	970.8 (D)

Gross Heat Gain (C + D)

1203.04 (E)

Gross Area (A + B)

60.55 (F)

OTTV = (E / F) =

19.87 W / sq. meter

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

2

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

SE (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/A <sub>f</sub>	U	a	TDeg	SUM
W1	Concrete wall	34.60	2.18	0.91	2.67	183.4
Subtotals		34.6 (A)			Heat Gain	183.4 (C)

Fenestration

Code No.	Description	*Af <sub>w</sub> /A <sub>f</sub>	SC	ESM	SF	SUM
F1	Tinted Glass	0.00	0.42	1	197	0.0
Subtotals		0.00 (B)			Heat Gain	0.0 (D)

Gross Heat Gain (C + D)

183.43 (E)

Gross Area (A + B)

34.60 (F)

OTTV = (E / F) =

5.30 W / sq. meter

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

3

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

SW (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/A <sub>r</sub>	U	a	TDeq	SUM
W1	Concrete wall	45.05	2.18	0.91	2.67	238.8
Subtotals		45.05 (A)			Heat Gain	238.8 (C)

Fenestration

Code No.	Description	*A <sub>f</sub> w/A <sub>f</sub>	SC	ESM	SF	SUM
F1	Tinted Glass	0.00	0.42	1	202	0.0
Subtotals		0.00 (B)			Heat Gain	0.0 (D)

Gross Heat Gain (C + D)

238.84 (E)

Gross Area (A + B)

45.05 (F)

OTTV = (E / F) =

5.30 W / sq. meter

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

4

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

NW (Including Curved Face)

Opaque \*Walls/Reofs

Code No.	Description	*Aw/A <sub>f</sub>	U	a	TDeq	SUM
W1	Concrete wall	0.00	2.20	0.25	2.67	0.0
Subtotals		0	(A)		Heat Gain	0.0

Fenestration

Code No.	Description	*A <sub>f</sub> w/A <sub>f</sub>	SC	ESM	SF	SUM
F1	Tinted Glass	98.75	0.42	1	138	5723.6
Subtotals		98.75	(B)		Heat Gain	5723.6

Gross Heat Gain (C + D)

5723.55 (E)

Gross Area (A + B)

98.75 (F)

OTTV = (E / F) =

57.96 W / sq. meter

\*Delete as appropriate



Building (Energy Efficiency) Regulation  
Form OTTV 4

Summary of OTTV of Building Envelope

Sheet No. D

1

Ref. : BD 2/3003/20

Building Address:

Tower 1, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Total Envelope Heat Gain

~~\*~~(Tower/Podium)

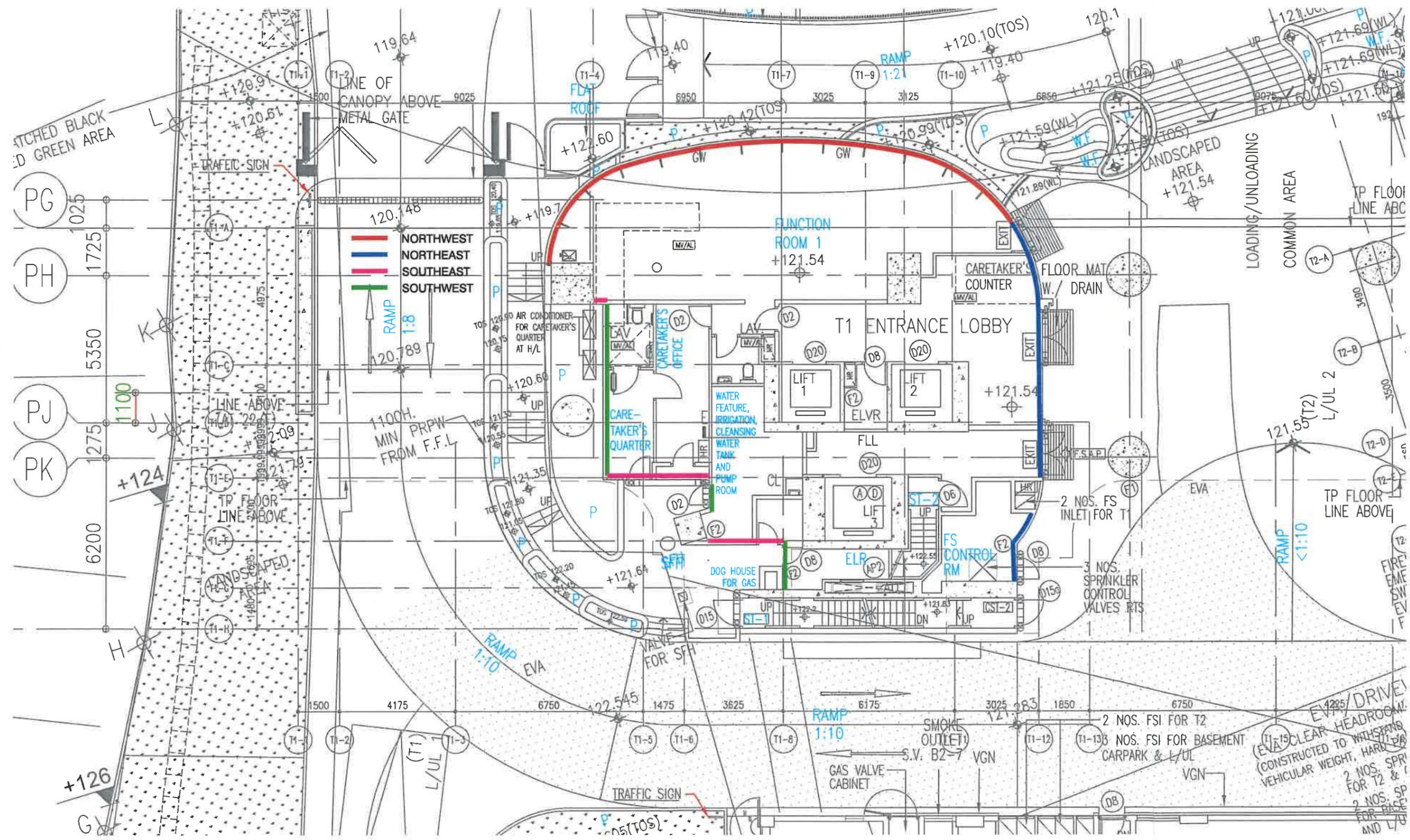
Façade Orientation	Gross Area from Form OTTV3	Gross Heat Gain from Form OTTV3
<b>Walls</b>		
NE	60.55	1203.04
SE	34.60	183.43
SW	45.05	238.84
NW	98.75	5723.55
Subtotal	238.95 (G)	7348.86 (H)
<b>Roof</b>		
a.	47.38	164.75
b.		
c.		
Subtotal	47.38 (I)	164.75 (J)

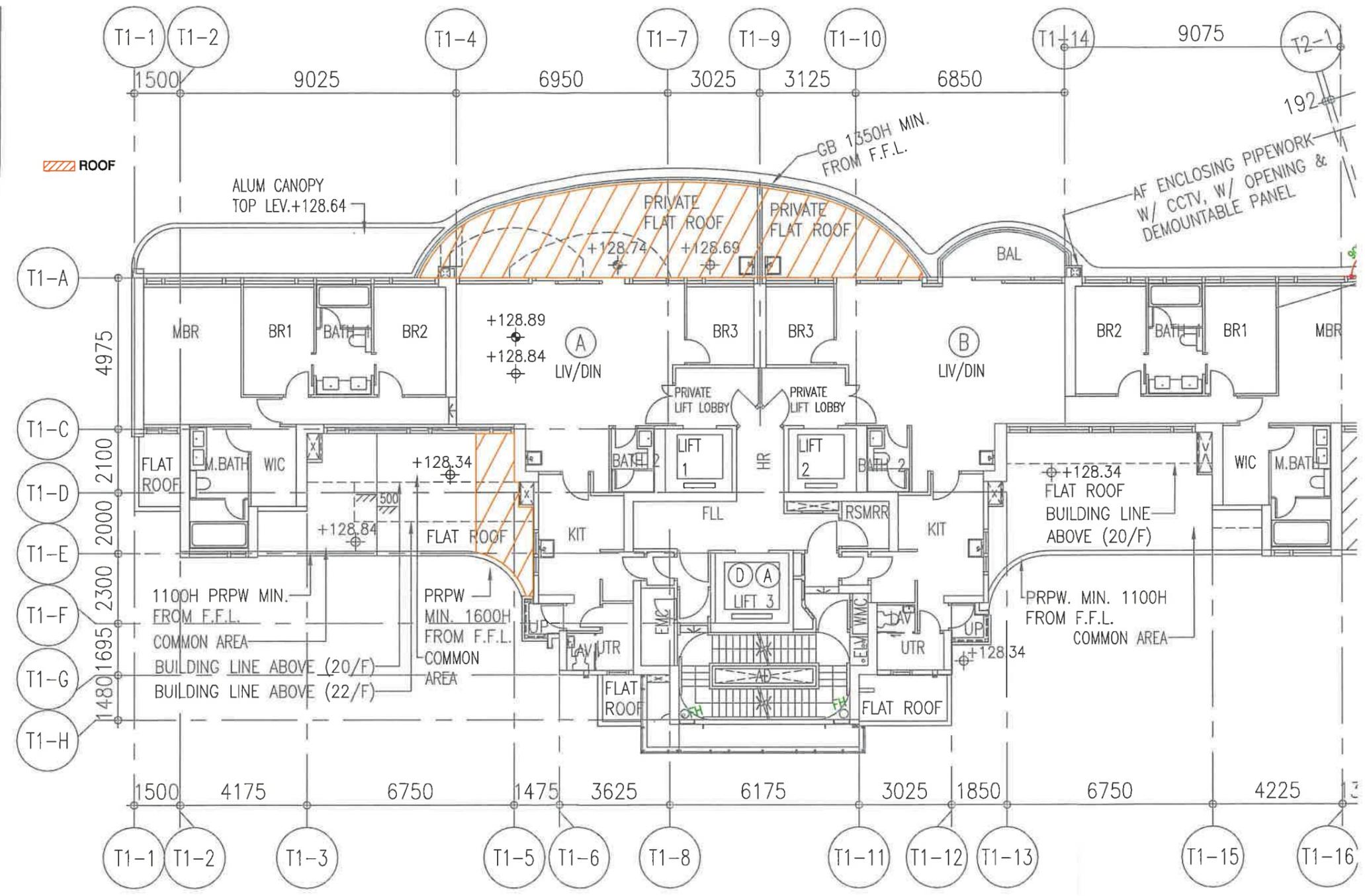
~~\*~~Tower/Podium Walls OTTV =  $H / G =$  30.75 W/sq meter

~~\*~~Tower/Podium Roof OTTV =  $J / I =$  3.48 W/sq meter

~~\*~~Tower/Podium OTTV =  $J+H / G+I =$  26.24 W/sq meter

\*Delete as appropriate





ROOF

ALUM CANOPY  
TOP LEV. +128.64

GB 1350H MIN.  
FROM F.F.L.

AF ENCLOSING PIPEWORK  
W/ CCTV, W/ OPENING &  
DEMOUNTABLE PANEL

T1-A

T1-C

T1-D

T1-E

T1-F

T1-G

T1-H

T1-1

T1-2

T1-4

T1-7

T1-9

T1-10

T1-14

T2-1

T1-1

T1-2

T1-3

T1-5

T1-6

T1-8

T1-11

T1-12

T1-13

T1-15

T1-16

4975

2100

2000

2300

1695

1480

1500

9025

6950

3025

3125

6850

9075

192

1500

4175

6750

1475

3625

6175

3025

1850

6750

4225

13

+128.89  
+128.84

A

LIV/DIN

B

LIV/DIN

+128.34

+128.84

+128.34

+128.34

+128.34

1100H PRPW MIN.  
FROM F.F.L.  
COMMON AREA

BUILDING LINE ABOVE (20/F)

BUILDING LINE ABOVE (22/F)

PRPW  
MIN. 1600H  
FROM F.F.L.  
COMMON AREA

PRPW. MIN. 1100H  
FROM F.F.L.  
COMMON AREA



住戶康樂設施總熱傳送值的摘要匯表  
**OTTV of Resident's  
 Recreational Facilities  
 Summary Sheet**

電郵地址  
E-mail Address

作認收電郵之用 (電子呈交適用)  
For acknowledgement email (e-submission)

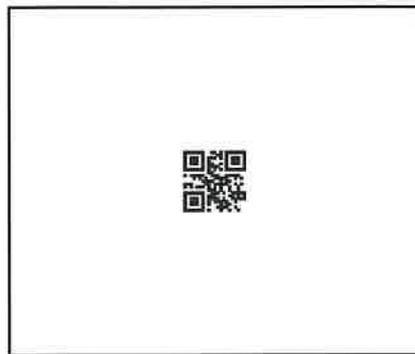
PNAP  
**APP-156**  
 附錄 **B**  
 Appendix

地址: TOWER 2, PROPOSED RESIDENTIAL DEVELOPMENT AT INLAND LOT NO. 9076,		屋宇署編號 BD Ref. No. 2/3003/20		
建築物類型/用途: Building Type / Use:	住戶康樂設施 Resident's Recreational Facilities			
總熱傳送值計算者 OTTV calculated by	<input checked="" type="checkbox"/> 1. 註冊專業工程師 1. Registered Professional Engineers <input type="checkbox"/> 2. 建築師 2. Architect <input type="checkbox"/> 3. 其他·請註明: 3. Others, please specify:			
分類 Classification	<input checked="" type="checkbox"/> 平台 Podium / <input type="checkbox"/> 樓塔 Tower			
層數 (住戶康樂設施) No. of Storeys (RRF)	1			
總樓面面積 Gross Floor Area	平方米 m <sup>2</sup>			
實用樓面面積 Usable Floor Area	平方米 m <sup>2</sup>			
外牆總面積 (包括窗戶) Total External Wall Area (including windows)	275.7 平方米 m <sup>2</sup>	窗戶與牆壁的比例 Window to Wall Ratio		
窗戶總面積 Total Window Area	175.65 平方米 m <sup>2</sup>	1171:1838		
天窗總面積 Total Skylight Area	平方米 m <sup>2</sup>			
**加權平均U值 **Weighted Average U-value	不透光牆 Opaque Wall	2.18	瓦特/平方米 W/m <sup>2</sup>	
	窗戶 Window	0.65	瓦特/平方米 W/m <sup>2</sup>	
	不透光屋頂 Opaque Roof	0.39	瓦特/平方米 W/m <sup>2</sup>	
	天窗 Skylight		瓦特/平方米 W/m <sup>2</sup>	
窗戶 Window	玻璃類型 Glass Type	<input type="checkbox"/> 反射性 Reflective 面積 Area= 平方米 m <sup>2</sup> SC= VLT= %ER= % <input checked="" type="checkbox"/> 有色 Tinted 面積 Area= 175.65平方米m <sup>2</sup> SC= 0.42 VLT= 55 %ER= 12 % <input type="checkbox"/> 透明 Clear 面積 Area= 平方米 m <sup>2</sup> SC= VLT= %ER= %		
	雙層玻璃 Double Glazing	<input checked="" type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No		
	外遮光物 External Shading	外懸伸遮物 Overhang <input type="checkbox"/> 有 Yes <input checked="" type="checkbox"/> 無 No		
		側簷伸遮物 Sidefin <input type="checkbox"/> 有 Yes <input checked="" type="checkbox"/> 無 No		
天窗 Skylight	玻璃類型 Glass Type	<input type="checkbox"/> 反射性 Reflective 面積 Area= 平方米 m <sup>2</sup> SC= VLT= %ER= % <input type="checkbox"/> 有色 Tinted 面積 Area= 平方米m <sup>2</sup> SC= VLT= %ER= % <input type="checkbox"/> 透明 Clear 面積 Area= 平方米m <sup>2</sup> SC= VLT= %ER= %		
	雙層玻璃 Double Glazing	<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No		
	外遮光物 External Shading	<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No		
		<input type="checkbox"/> 有 Yes <input type="checkbox"/> 無 No		
**加權平均吸熱率值 **Weighted Average Absorptivity	牆壁 Wall	0.25		
	屋頂 Roof	0.25		
**加權平均密度值 **Weighted Average Density	牆壁 Wall	467.7	公斤/平方米 kg/m <sup>2</sup>	
	屋頂 Roof	618.18	公斤/平方米 kg/m <sup>2</sup>	
住戶康樂設施 總熱傳送值 OTTV <sub>RRF</sub>	牆壁 Wall	44.64	瓦特/平方米 W/m <sup>2</sup>	
	屋頂 Roof	3.48	瓦特/平方米 W/m <sup>2</sup>	
	總平均數 Overall Average	35.82	瓦特/平方米 W/m <sup>2</sup>	

註:  
 ER = 外部反射率  
 SC = 遮光係數  
 VLT = 可見光透光率  
 \*\*按面積加權計算  
 應以發展項目中使用比例最高的窗戶和天窗的資料為準。

請在適當的方格內填上「√」號。  
 Please tick in box as appropriate.

Notes:  
 ER = External Reflectance  
 SC = Shading Coefficient  
 VLT = Visible Light Transmittance  
 \*\* Weighted by area  
 Window and skylight data should represent the major proportion of its use in the development.



簽署\*  
Signature\*

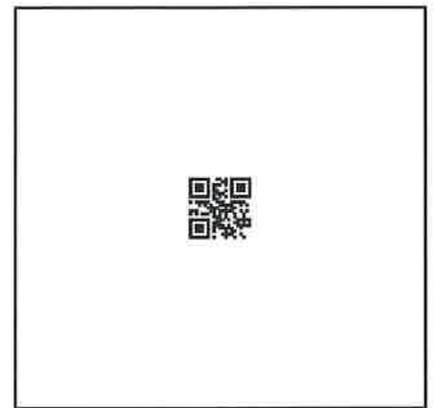


任何失實核證或聲明可引致法律行動。##  
Any false certification or declaration  
may be subject to legal action.##

日期 Date

1	6	0	8	2	0	2	4
---	---	---	---	---	---	---	---

日 dd 月 mm 年 yyyy



## 注意事項

\*\* 任何人如作出虛假聲明或就重要事項作出失實陳述即屬觸犯刑事罪行，可能會被檢控。

## 甲. 填寫表格

1. 請填妥表格載列所有有關的部分，請附上所有證明文件。
2. 所提供的資料如有不全或錯誤，屋宇署將不能處理呈交的文件。
3. 如對本表格有任何疑問，請與屋宇署聯絡。

## 乙. 呈交方法

1. 郵寄/親身呈交 - 本表格連同有關文件應郵寄或親身呈交至屋宇署：

呈交有關勸諭信 / 命令 / 通知 / 指示的表格：

九龍油麻地海庭道11號西九龍政府合署北座屋宇署總部地下一般查詢及收件處

呈交至拓展部有關其他事宜的表格：

香港太古城太古灣道14號7樓屋宇署收發處。

## 丙. 聯絡資料

屋宇署

地址：九龍油麻地海庭道11號西九龍政府合署北座屋宇署總部

電話：2626 1616 (由“1823”接聽)

傳真：2537 4992

電郵：enquiry@bd.gov.hk

## Matters to Note

\*\* Any person making a false declaration or misrepresenting a material fact shall be guilty of a criminal offence and subject to prosecution.

## A. Completion of Form

1. Please ensure that all relevant parts of the form are duly completed. Please enclose all supporting documents.
2. If incomplete or erroneous information is provided in the form, the Buildings Department may not be able to process the submission.
3. Enquiries regarding this form should be addressed to the Buildings Department.

## B. Submission Methods

1. **By Post / In Person - This form together with the relevant documents shall be posted to or submitted in person to the Buildings Department:**

**For submissions relating to advisory letter/order/notice/direction:**

General Enquiry and Receipt Counter, G/F, Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon

**For other submissions to the New Buildings Division:**

Receipt & Despatch Counter, Buildings Department, 7/F, 14 Taikoo Wan Road, Taikoo Shing, Hong Kong

## C. Contact Details

Buildings Department

Address: Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon

Tel No.: 2626 1616 (handled by "1823")

Fax No.: 2537 4992

Email: enquiry@bd.gov.hk

**Tower 2, Proposed Residential  
Development at Inland Lot No. 9076,  
135 Tai Hang Road, Hong Kong**

**OTTV Report for Commercial  
Podium**

**Building Services Engineer:  
*AECOM Asia Company Limited***

**AECOM**

**13/F Tower 2, Grand Central Plaza,  
138 Shatin Rural Committee Road,  
Shatin, Hong Kong.**

**Tel: +852 3922 9162  
Fax: +852 3922 9797**

**PROJECT : Tower 2, Proposed Residential Development at Inland Lot No. 9076,  
135 Tai Hang Road , Hong Kong**

**OTTV CALCULATION**

**Introduction**

**Breakdown of Wall, Glass & Roof Area**

Ref. : BD 2/3003/20  
Building Address: Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Glass, Wall, & Roof Area (sq. meter)					
Facing Orientation/Direction	NE	SE	SW	NW	Roof
Total Facade Area (m <sup>2</sup> )	56.80	43.25	59.40	116.25	-
Concrete Wall Area (m <sup>2</sup> )	56.80	43.25	0.00	0.00	-
Roof Area	-	-	-	-	75.22
Glazing Area (m <sup>2</sup> )	0.00	0.00	59.40	116.25	-



Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A

1

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data of Opaque:

\*Wall/Roof

Facade Orientation Facing:

NE

Solar Factor (SF) is

138

*Wall/Roof Code No.		*W1/R1		
Location of Wall/Roof		Concrete wall		
External Surface Film $R_o$		0.044		
External Finish Material		Mosaic tile cladding		
Conductivity	W/m°C	1.5		
Density	kg/m <sup>3</sup>	2500		
Thickness	m	0.005		
Material/Paint		Dark grey paint		
Absorptivity $(\alpha)$		0.91		
Intermediate Component		Concrete - normal weight aggregate		
Conductivity	W/m°C	2.16		
Density	kg/m <sup>3</sup>	2400		
Thickness	m	0.185		
Air Space Resistance $R_a$				
Intermediate Component				
Conductivity	W/m°C			
Density	kg/m <sup>3</sup>			
Thickness	m			
Intermediate Component				
Conductivity	W/m°C			
Density	kg/m <sup>3</sup>			
Thickness	m			
Internal Finish Material		Plaster/render - gypsum		
Conductivity	W/m°C	0.38		
Density	kg/m <sup>3</sup>	1120		
Thickness	m	0.01		
Material/Paint		White gloss paint		
Absorptivity $(\alpha)$		0.25		
Internal Surface Film $R_i$		0.299		
U' Value of Composite *Wall/Roof		2.18		
Area of *Wall/Roof	m <sup>2</sup>	56.80		
Density of Composite *Wall/Roof	kg/m <sup>2</sup>	467.70		
Equivalent Temperature Difference $(TD_{Eq})$		2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A 2 Ref. : BD 2/3003/20  
 Building Address: Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong  
 Physical data of Opaque: \*Wall/Roof  
 Facade Orientation Facing: SE Solar Factor (SF) is 197

<b>*Wall/Roof Code No.</b>	<b>*W1/R1</b>			
Location of Wall/Roof	Concrete wall			
External Surface Film $R_o$	0.044			
External Finish Material	Mosaic tile cladding			
Conductivity $W/m^{\circ}C$	1.5			
Density $kg/m^3$	2500			
Thickness $m$	0.005			
Material/Paint	Dark grey paint			
Absorptivity $(\alpha)$	0.91			
Intermediate Component	Concrete - normal weight aggregate			
Conductivity $W/m^{\circ}C$	2.16			
Density $kg/m^3$	2400			
Thickness $m$	0.185			
Air Space Resistance $R_a$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Internal Finish Material	Plaster/render - gypsum			
Conductivity $W/m^{\circ}C$	0.38			
Density $kg/m^3$	1120			
Thickness $m$	0.01			
Material/Paint	White gloss paint			
Absorptivity $(\alpha)$	0.25			
Internal Surface Film $R_i$	0.299			
U' Value of Composite *Wall/Roof	2.18			
Area of *Wall/Roof $m^2$	43.25			
Density of Composite *Wall/Roof $kg/m^2$	467.70			
Equivalent Temperature Difference $(TD_{Ea})$	2.67			

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A

3

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data of Opaque:

\*Wall/Roof

Facade Orientation Facing:

SW

Solar Factor (SF) is

202

*Wall/Roof Code No.	*W1/R1			
Location of Wall/Roof	Concrete wall			
External Surface Film $R_o$	0.044			
External Finish Material	Mosaic tile cladding			
Conductivity $W/m^{\circ}C$	1.5			
Density $kg/m^3$	2500			
Thickness $m$	0.005			
Material/Paint	Dark grey paint			
Absorptivity $(\alpha)$	0.91			
Intermediate Component	Concrete - normal weight aggregate			
Conductivity $W/m^{\circ}C$	2.16			
Density $kg/m^3$	2400			
Thickness $m$	0.185			
Air Space Resistance $R_a$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Intermediate Component				
Conductivity $W/m^{\circ}C$				
Density $kg/m^3$				
Thickness $m$				
Internal Finish Material	Plaster/render - gypsum			
Conductivity $W/m^{\circ}C$	0.38			
Density $kg/m^3$	1120			
Thickness $m$	0.01			
Material/Paint	White gloss paint			
Absorptivity $(\alpha)$	0.25			
Internal Surface Film $R_i$	0.299			
U' Value of Composite *Wall/Roof	2.18			
Area of *Wall/Roof $m^2$	0.00			
Density of Composite *Wall/Roof $kg/m^2$	467.70			
Equivalent Temperature Difference $(TD_{eq})$	2.67			

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A 4 Ref. : BD 2/3003/20  
 Building Address: Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong  
 Physical data of Opaque: \*Wall/Roof  
 Facade Orientation Facing: NW Solar Factor (SF) is 138

*Wall/Roof Code No.	*W2/R2		
Location of Wall/Roof	Concrete wall		
External Surface Film $R_o$	0.044		
External Finish Material	Metals - aluminium alloy typical		
Conductivity $W/m^{\circ}C$	160		
Density $kg/m^3$	2800		
Thickness $m$	0.005		
Material/Paint	Silver paint		
Absorptivity $(\alpha)$	0.25		
Intermediate Component	Concrete - normal weight aggregate		
Conductivity $W/m^{\circ}C$	2.16		
Density $kg/m^3$	2400		
Thickness $m$	0.185		
Air Space Resistance $R_a$			
Intermediate Component			
Conductivity $W/m^{\circ}C$			
Density $kg/m^3$			
Thickness $m$			
Intermediate Component			
Conductivity $W/m^{\circ}C$			
Density $kg/m^3$			
Thickness $m$			
Internal Finish Material	Plaster/render - gypsum		
Conductivity $W/m^{\circ}C$	0.38		
Density $kg/m^3$	1120		
Thickness $m$	0.01		
Material/Paint	White gloss paint		
Absorptivity $(\alpha)$	0.25		
Internal Surface Film $R_i$	0.299		
U' Value of Composite *Wall/Roof	2.20		
Area of *Wall/Roof- $m^2$	0.00		
Density of Composite *Wall/Roof $kg/m^2$	469.20		
Equivalent Temperature Difference $(TD_{eq})$	2.67		

Building (Energy Efficiency) Regulation  
Form OTTV 1

Calculation of 'U' Value of Composite Wall/Roof  
and Details of Other Values

Sheet No. A 5 Ref. : BD 2/3003/20  
 Building Address: Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong  
 Physical data of Opaque: **\*Wall/Roof**  
 Facade Orientation Facing: Roof Solar Factor (SF) is 264

*Wall/Roof Code No.	*W1/R1		
Location of Wall/Roof	Roof		
External Surface Film $R_o$	0.055		
External Finish Material	Mosaic tile cladding		
Conductivity $W/m^{\circ}C$	1.5		
Density $kg/m^3$	2500		
Thickness $m$	0.009		
Material/Paint	Dark grey paint		
Absorptivity $(\alpha)$	0.91		
Intermediate Component	Screeding - cement sand		
Conductivity $W/m^{\circ}C$	0.72		
Density $kg/m^3$	1860		
Thickness $m$	0.083		
Intermediate Component	Insulating materials - polyurethane foam		
Conductivity $W/m^{\circ}C$	0.026		
Density $kg/m^3$	30		
Thickness $m$	0.05		
Intermediate Component	Waterproofing membrane		
Conductivity $W/m^{\circ}C$	1.15		
Density $kg/m^3$	2400		
Thickness $m$	0.003		
Intermediate Component	Screeding - cement sand		
Conductivity $W/m^{\circ}C$	0.72		
Density $kg/m^3$	1860		
Thickness $m$	0.03		
Intermediate Component	Concrete - normal weight aggregate		
Conductivity $W/m^{\circ}C$	2.16		
Density $kg/m^3$	2400		
Thickness $m$	0.15		
Internal Finish Material	Plaster/render - gypsum		
Conductivity $W/m^{\circ}C$	0.38		
Density $kg/m^3$	1120		
Thickness $m$	0.015		
Material/Paint	White gloss paint		
Absorptivity $(\alpha)$	0.25		
Internal Surface Film $R_i$	0.299		
U' Value of Composite <b>*Wall/Roof</b>	0.39		
Area of <b>*Wall/Roof</b>	$m^2$	75.22	
Density of Composite <b>*Wall/Roof</b>	$kg/m^2$	618.18	
Equivalent Temperature Difference $(TD_{Eq})$		9.75	

Building (Energy Efficiency) Regulation  
Form OTTV2  
Window / Rooflight Schedule

Sheet No. B

1

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data on \*window/rooflight

Facade Orientation Facing:

NE

Solar Factor (SF) is

138

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.037			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	0.00			

Facade Orientation Facing:

SE

Solar Factor (SF) is

197

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.037			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	0.00			

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV2  
Window / Rooflight Schedule

Sheet No. B

2

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Physical data on \*window/rooflight

Facade Orientation Facing:

SW

Solar Factor (SF) is

202

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.037			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	59.40			

Physical data on \*window/rooflight

Facade Orientation Facing:

NW

Solar Factor (SF) is

138

*Wall/Roof Code No.	*F1/RL1	*F2/RL2	*F3/RL3	*F4/RL4
Location of *Window/Rooflight	Podium			
Glazing Type	Tinted Glass			
Thickness m	0.037			
Shading Coefficient (SC)	0.42			
Type of Shading Device	N/A			
External Shading Multiplier (ESM)	1			
Area of Glazing m <sup>2</sup>	116.25			

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

1

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

NE (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/A <sub>f</sub>	U	a	TDeg	SUM
W1	Concrete wall	56.80	2.18	0.91	2.67	301.1
Subtotals		56.80	(A)		Heat Gain	301.1 (C)

Fenestration

Code No.	Description	*A <sub>f</sub> w/A <sub>f</sub>	SC	ESM	SF	SUM
F1	Tinted Glass	0.00	0.42	1	138	0.0
Subtotals		0.00	(B)		Heat Gain	0.0 (D)

Gross Heat Gain (C + D)

301.13 (E)

Gross Area (A + B)

56.80 (F)

OTTV = (E / F) =

5.30 W / sq. meter

\*Delete as appropriate





Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

4

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

NW (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/Af	U	a	TDeq	SUM
W1	Concrete wall	0.00	2.20	0.25	2.67	0.0
Subtotals		0	(A)		Heat Gain	0.0 (C)

Fenestration

Code No.	Description	*Aw/Af	SC	ESM	SF	SUM
F1	Tinted Glass	116.25	0.42	1	138	6737.9
Subtotals		116.25	(B)		Heat Gain	6737.9 (D)

Gross Heat Gain (C + D)

6737.85 (E)

Gross Area (A + B)

116.25 (F)

OTTV = (E / F)=

57.96 W / sq. meter

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 3

Calculation of OTTV of Individual Façade in Building Envelope

Sheet No. C

5

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Façade Orientation Facing

Roof (Including Curved Face)

Opaque \*Walls/Roofs

Code No.	Description	*Aw/Ar	U	a	TDeq	SUM
R1	Roof	75.22	0.39	0.91	9.75	261.56
Subtotals		75.22 (A)			Heat Gain	261.6 (C)

Fenestration

Code No.	Description	*Afw/Afr	SC	ESM	SF	SUM
Subtotals		0 (B)			Heat Gain	0.00 (D)

Gross Heat Gain (C + D) 261.6 (E)  
 Gross Area (A + B) 75.22 (F)  
 OTTV = (E / F) = 3.48 W / sq. meter

\*Delete as appropriate

Building (Energy Efficiency) Regulation  
Form OTTV 4

Summary of OTTV of Building Envelope

Sheet No. D

1

Ref. : BD 2/3003/20

Building Address:

Tower 2, Proposed Residential Development At Inland Lot No. 9076, 135 Tai Hang Road, Hong Kong

Total Envelope Heat Gain

\*(Tower/Podium)

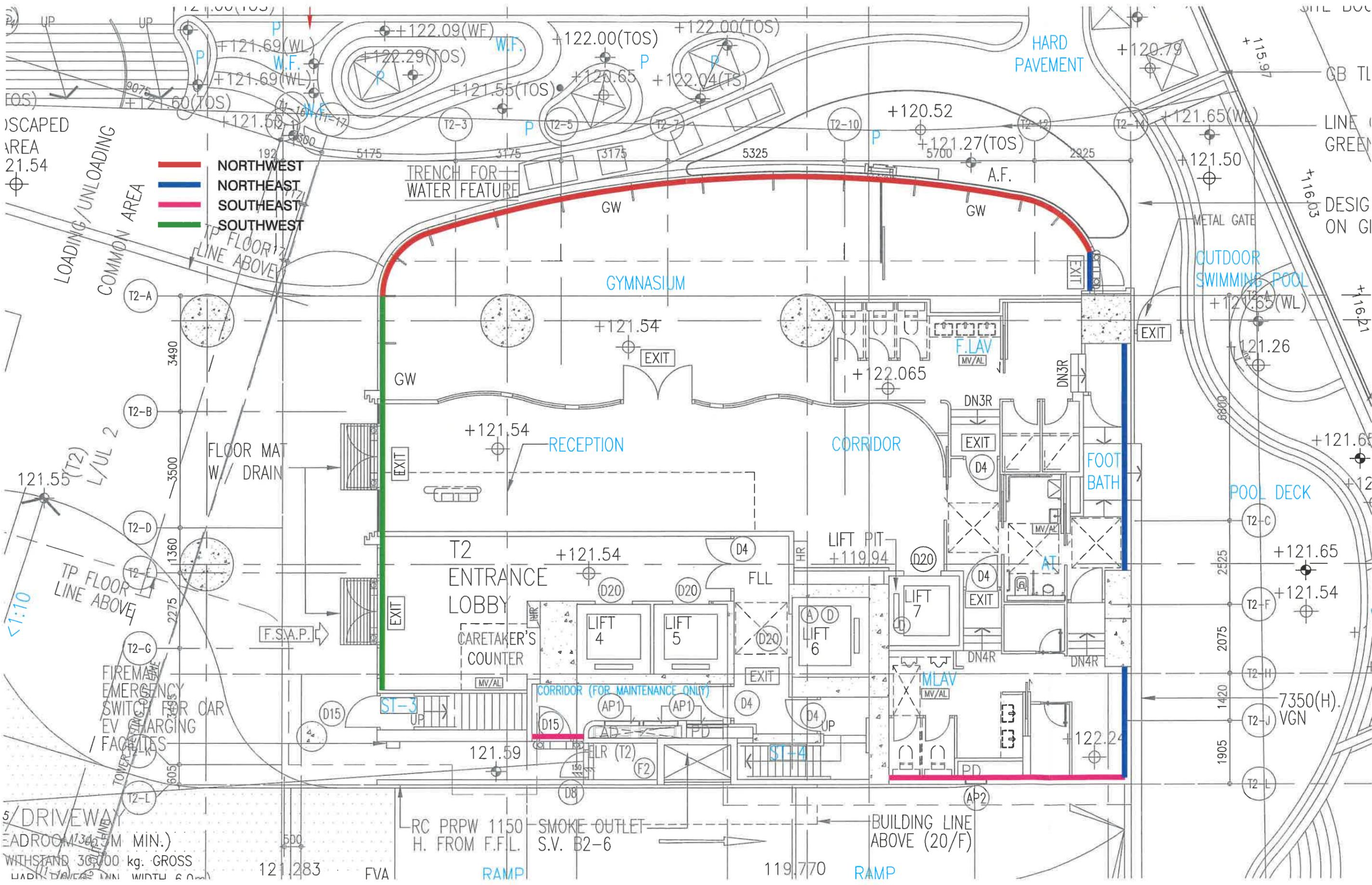
Façade Orientation	Gross Area from Form OTTV3	Gross Heat Gain from Form OTTV3
<b>Walls</b>		
NE	56.80	301.13
SE	43.25	229.29
SW	59.40	5039.50
NW	116.25	6737.85
Subtotal	275.70 (G)	12307.77 (H)
<b>Roof</b>		
a.	75.22	261.56
b.		
c.		
Subtotal	75.22 (I)	261.56 (J)

\*~~Tower~~/Podium Walls OTTV = H / G = 44.64 W/sq meter

\*~~Tower~~/Podium Roof OTTV = J / I = 3.48 W/sq meter

\*~~Tower~~/Podium OTTV = J+H / G+I = 35.82 W/sq meter

\*Delete as appropriate



- NORTHWEST
- NORTHEAST
- SOUTHEAST
- SOUTHWEST

UNSCAPED AREA  
21.54

LOADING/UNLOADING  
COMMON AREA

TP FLOOR LINE ABOVE

TRENCH FOR WATER FEATURE

GYMNASIUM

RECEPTION

CORRIDOR

T2 ENTRANCE LOBBY

CARETAKER'S COUNTER

CORRIDOR (FOR MAINTENANCE ONLY)

FOOT BATH

POOL DECK

OUTDOOR SWIMMING POOL

TP FLOOR LINE ABOVE

FIREMAN EMERGENCY SWITCH FOR CAR EV CHARGING FACILITIES

DRIVEWAY  
HEADROOM (3.0M MIN.)  
WITHSTAND 30,000 kg. GROSS  
LOADING DEVICE MIN. WIDTH 6.0M

RC PRPW 1150 H. FROM F.F.L.

SMOKE OUTLET S.V. B2-6

BUILDING LINE ABOVE (20/F)

RAMP

RAMP

7350(H) VGN

DESIGN ON GI

METAL GATE

DESIGN ON GI

