

Address: Proposed Site J Development at Area 86, TKOTL RP, Tseung Kwan O, New Territories		BD Ref. No. 2/7192/97/6(J)
Building Type:	Residential (Tower 3) (Sheet 1 of 3)	
RTTV calculated by	<input checked="" type="checkbox"/> 1. Registered Professional Engineers <input type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify:	
No. of Storeys (Residential Units)	54	

Table 1 (N/A)

Deemed to Satisfy RTTV _{Wall}									
Facade Orientation Facing									
Average Absorptivity									
Average Window to Wall Ratio									
Shading Coefficient of Glazing									
Average Shading Coefficient of Facade									
Visible Light Transmittance		%	%	%	%	%	%	%	%
External Reflectance		%	%	%	%	%	%	%	%

Table 2

RTTV _{Wall}																	
Facade Orientation Facing		East				East				Southeast				South			
Wall Orientation Factor		1.072				1.072				1.051				0.975			
Total External Wall Area (Residential Units)		1843.6 m ²		Window to Wall Ratio = 0.478		1843.6 m ²		Window to Wall Ratio = 0.478		798 m ²		Window to Wall Ratio = 0.110		1278.1 m ²		Window to Wall Ratio = 0.781	
Total Window Factor		1686.0 m ²				1686.0 m ²				98.8 m ²				4554.0 m ²			
Heat Conduction	Opaque Wall	1.99 W/m ²				1.99 W/m ²				1.38 W/m ²				0.22 W/m ²			
	Window	0.90 W/m ²				0.90 W/m ²				0.12 W/m ²				1.34 W/m ²			
Window	Glass Type	F1 - Curtain Wall IGU Glass with Double Low-E Coating Area= 975 m ² SC= 0.33 VLT= 50 % ER= 14 %				F5 - Glass Wall (12mm + 1.52 PVB + 12mm Clear Tempered Laminated Glass) Area= 2.7 m ² SC= 0.78 VLT= 81 % ER= 8 %				F1 - Curtain Wall IGU Glass with Double Low-E Coating Area= 30.6 m ² SC= 0.33 VLT= 50 % ER= 14 %				F1 - Curtain Wall IGU Glass with Double Low-E Coating Area= 2697 m ² SC= 0.33 VLT= 50 % ER= 14 %			
		F2 - Glass for Sliding Door (10mm Crystal Grey) Area= 509 m ² SC= 0.66 VLT= 50 % ER= 6 %				F3 - Window Glass (6mm Clear YR-FG2 + 12AS + 6mm Clear) Area= 199 m ² SC= 0.35 VLT= 53 % ER= 14 %				F3 - Window Glass (6mm Clear YR-FG2 + 12AS + 6mm Clear) Area= 68.2 m ² SC= 0.35 VLT= 53 % ER= 14 %				F2 - Glass for Sliding Door (10mm Crystal Grey) Area= 1417 m ² SC= 0.66 VLT= 50 % ER= 6 %			
Double Glazing		<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No			
External Shading		Overhang		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
		Sidefin		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Solar Radiation through Glazing		9.25 W/m ²				9.25 W/m ²				1.66 W/m ²				13.79 W/m ²			
Average Absorptivity		0.500				0.500				0.590				0.590			
RTTV _{Wall} at each facade		12.14 W/m ²				12.14 W/m ²				3.17 W/m ²				15.36 W/m ²			
Overall RTTV _{Wall}		11.07															

Table 3

RTTV _{Roof}									
Roof Orientation Factor		2.16							
Total Roof Area (Residential Units)		369.9 m ²							
Total Skylight Area		/ m ²							
Heat Conduction	Roof	1.62 W/m ²							
	Skylight	/ W/m ²							
Skylight (N/A)	Glass Type	<input type="checkbox"/> Reflective	Area=	m ²	SC=	VLT=	%	ER=	%
		<input type="checkbox"/> Tinted	Area=	m ²	SC=	VLT=	%	ER=	%
		<input type="checkbox"/> Clear	Area=	m ²	SC=	VLT=	%	ER=	%
Double Glazing		<input type="checkbox"/> Yes <input type="checkbox"/> No							
External Shading		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Solar Radiation through Glazing		/ W/m ²							
Average Absorptivity (roof)		0.5							
Overall RTTV _{Roof}		1.62 W/m ²							

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

Address: Proposed Site J Development at Area 86, TKOTL RP, Tseung Kwan O, New Territories		BD Ref. No. 2/7192/97/6(J)
Building Type:	Residential (Tower 3) (Sheet 2 of 3)	
RTTV calculated by	<input checked="" type="checkbox"/> 1. Registered Professional Engineers <input type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify:	
No. of Storeys (Residential Units)	54	

Table 1 (N/A)

Deemed to Satisfy RTTV _{Wall}										
Facade Orientation Facing										
Average Absorptivity										
Average Window to Wall Ratio										
Shading Coefficient of Glazing										
Average Shading Coefficient of Facade										
Visible Light Transmittance	%	%	%	%	%	%	%	%	%	%
External Reflectance	%	%	%	%	%	%	%	%	%	%

Table 2

RTTV _{Wall}																					
Facade Orientation Facing		South				Southwest				West				Northwest							
Wall Orientation Factor		0.975				1.092				1.131				0.965							
Total External Wall Area (Residential Units)		1278.1 m ²		Window to Wall Ratio = 0.781		936.9 m ²		Window to Wall Ratio = 0		1630.9 m ²		Window to Wall Ratio = 0.340		337.1 m ²		Window to Wall Ratio = 0.863					
Total Window Factor		4554.0 m ²				0 m ²				839.0 m ²				2119 m ²							
Heat Conduction	Opaque Wall	0.22 W/m ²				1.59 W/m ²				1.06 W/m ²				0.06 W/m ²							
	Window	1.34 W/m ²				0 W/m ²				0.40 W/m ²				1.57 W/m ²							
Window	Glass Type	F5 - Glass Wall (12mm + 1.52 PVG + 12mm Clear Tempered Laminated Glass)		Area= 8.7 m ²	SC= 0.78	VLT= 81 %	ER= 8 %	<input type="checkbox"/> Reflective			F1 - Curtain Wall IGU Glass with Double Low-E Coating		Area= 583 m ²	SC= 0.33	VLT= 50 %	ER= 14 %	<input type="checkbox"/> F1 - Curtain Wall IGU Glass with Double Low-E Coating	Area= 1288 m ²	SC= 0.33	VLT= 50 %	ER= 14 %
				Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted			F3 - Window Glass (6mm Clear YR-FG2 + 12AS + 6mm Clear)		Area= 253 m ²	SC= 0.35	VLT= 53 %	ER= 14 %	<input type="checkbox"/> F2 - Glass for Sliding Door (10mm Crystal Grey)	Area= 767 m ²	SC= 0.66	VLT= 50 %	ER= 6 %
				Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear			F6 - Glass Door (6mm Tempered Glass)		Area= 2.7 m ²	SC= 0.96	VLT= 88.63 %	ER= 6.8 %	<input type="checkbox"/> F3 - Window Glass (6mm Clear YR-FG2 + 12AS + 6mm Clear)	Area= 63 m ²	SC= 0.35	VLT= 53 %	ER= 14 %
Double Glazing	<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No								
External Shading	Overhang	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
	Sidefin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Solar Radiation through Glazing		13.79 W/m ²				0 W/m ²				5.42 W/m ²				15.65 W/m ²							
Average Absorptivity		0.590				0.500				0.544				0.640							
RTTV _{Wall} at each facade		15.36 W/m ²				1.59 W/m ²				6.89 W/m ²				17.28 W/m ²							
Overall RTTV _{Wall}		11.07																			

Table 3

RTTV _{Roof}										
Roof Orientation Factor										
Total Roof Area (Residential Units)	m ²									
Total Skylight Area	m ²									
Heat Conduction	Roof	W/m ²								
	Skylight	W/m ²								
Skylight	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %				
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %				
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %				
Double Glazing	<input type="checkbox"/> Yes <input type="checkbox"/> No									
External Shading	<input type="checkbox"/> Yes <input type="checkbox"/> No									
Solar Radiation through Glazing	W/m ²									
Average Absorptivity (roof)										
Overall RTTV _{Roof}	W/m ²									

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

Address: **Proposed Site J Development at Area 86, TKOTL RP, Tseung Kwan O, New Territories** BD Ref. No. **2/7192/97/6(J)**

Building Type: Residential **(Tower 3) (Sheet 3 of 3)**

RTTV calculated by 1. Registered Professional Engineers
 2. Architect
 3. Others, please specify:

No. of Storeys (Residential Units) **54**

Table 1 (N/A)

Deemed to Satisfy RTTV _{Wall}									
Facade Orientation Facing									
Average Absorptivity									
Average Window to Wall Ratio									
Shading Coefficient of Glazing									
Average Shading Coefficient of Facade									
Visible Light Transmittance	%	%	%	%	%	%	%	%	%
External Reflectance	%	%	%	%	%	%	%	%	%

Table 2

RTTV _{Wall}																	
Facade Orientation Facing	North				Northeast												
Wall Orientation Factor	0.790				0.924												
Total External Wall Area (Residential Units)	1809.3 m ²		Window to Wall Ratio = 0.490		914.1 m ²		Window to Wall Ratio = 0.305		m ²		Window to Wall Ratio =		m ²				
Total Window Factor	1736.5 m ²				401.3 m ²				m ²				m ²				
Heat Conduction	Opaque Wall	0.67 W/m ²		0.85 W/m ²		W/m ²		W/m ²		W/m ²		W/m ²					
	Window	0.67 W/m ²		0.29 W/m ²		W/m ²		W/m ²		W/m ²		W/m ²					
Window	Glass Type	F1 - Curtain Wall IGU Glass with Double Low-E Coating	Area= 1052 m ²	SC= 0.33	VLT= 50 % ER= 14 %	F1 - Curtain Wall IGU Glass with Double Low-E Coating	Area= 264 m ²	SC= 0.33	VLT= 50 % ER= 14 %	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= % ER= %	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= % ER= %
		F2 - Glass for Sliding Door (10mm Crystal Grey)	Area= 516 m ²	SC= 0.66	VLT= 50 % ER= 6 %	F3 - Window Glass (5mm Clear YR-F1Q2 + 12AS + 6mm Clear)	Area= 137 m ²	SC= 0.35	VLT= 53 % ER= 14 %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= % ER= %
		F3 - Window Glass (5mm Clear YR-F1Q2 + 12AS + 6mm Clear)	Area= 168 m ²	SC= 0.35	VLT= 53 % ER= 14 %		Area= m ²	SC=	VLT= % ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= % ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= % ER= %
	Double Glazing	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No			
External Shading	Overhang	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No					
	Sidefin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input type="checkbox"/> No					
Solar Radiation through Glazing	6.95 W/m ²		3.96 W/m ²		W/m ²		W/m ²		W/m ²		W/m ²						
Average Absorptivity	0.618		0.500														
RTTV _{Wall} at each facade	8.29 W/m ²		5.11 W/m ²		W/m ²		W/m ²		W/m ²		W/m ²						
Overall RTTV _{Wall}	11.07 W/m ²																

Table 3

RTTV _{Roof}											
Roof Orientation Factor											
Total Roof Area (Residential Units)	m ²										
Total Skylight Area	m ²										
Heat Conduction	Roof	W/m ²									
	Skylight	W/m ²									
Skylight	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %					
	Double Glazing	<input type="checkbox"/> Yes <input type="checkbox"/> No									
External Shading	<input type="checkbox"/> Yes <input type="checkbox"/> No										
Solar Radiation through Glazing	W/m ²										
Average Absorptivity (roof)											
Overall RTTV _{Roof}	W/m ²										