

RTTV Summary Sheet

Address: PROPOSED DETACHED BUILDING AT NO. 18 MOSQUE STREET, MID-LEVELS, HONG KONG IL 58 S.A ss.1 S.B & S.E. IL 58 S.A ss.1 S.A & S.D & IL 58 S.A ss.1 RP & S.C		BD Ref. No. 2/2022/12
Building Type:	Residential	
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)	24	

Table 1

Deemed to Satisfy RTTV _{wall}							
Facade Orientation Facing	North East	South East	South West	North West			
Average Absorptivity	0.505	0.577	0.464	0.457			
Average Window to Wall Ratio	0.48	0.40	0.46	0.52			
Shading Coefficient of Glazing	0.66/0.34	0.66/0.34	0.66/0.34	0.66/0.34			
Average Shading Coefficient of Facade	0.47	0.52	0.55	0.50			
Visible Light Transmittance	50/51%	50/51%	50/51%	50/51%	%	%	%
External Reflectance	6/14 %	6/14 %	6/14 %	6/14 %	%	%	%

Table 2

RTTV _{wall}																	
Facade Orientation Facing		North East				South East				South West				North West			
Wall Orientation Factor		0.924				1.051				1.092				0.965			
Total External Wall Area (Residential Units)		845.41 m ²		Window to Wall Ratio		483.92 m ²		Window to Wall Ratio		885.98 m ²		Window to Wall Ratio		1290.55 m ²		Window to Wall Ratio	
Total Window Area		406.50 m ²		1 = 0.48		192.32 m ²		1 = 0.40		404.92 m ²		1 = 0.46		666.38 m ²		1 = 0.33	
Heat Conduction	Opaque Wall	2.50 W/m ²				4.07 W/m ²				3.08 W/m ²				2.21 W/m ²			
	Window	0.90 W/m ²				0.99 W/m ²				1.29 W/m ²				1.11 W/m ²			
Window	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	
		<input checked="" type="checkbox"/> Tinted	Area= 170.39m ²	SC= 0.66	VLT= 50 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 109.43m ²	SC= 0.66	VLT= 50 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 266.31m ²	SC= 0.66	VLT= 50 %	ER= 6 %	
	<input type="checkbox"/> Clear	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 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			
External Shading	Overhang	<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			
	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 Gazing		8.79 W/m ²				9.10 W/m ²				11.47 W/m ²				10.41 W/m ²			
Average Absorptivity		0.505				0.577				0.464				0.457			
RTTV _{wall} at each facade		12.19 W/m ²				14.16 W/m ²				15.83 W/m ²				13.72 W/m ²			
Overall RTTV _{wall}		13.95 W/m ²															

Table 3

RTTV _{roof}						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		70.75 m ²				
Total Skylight Area		N/A m ²				
Heat Conduction	Roof	2.83 W/m ²				
	Skylight	N/A 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 checked="" type="checkbox"/> No				
External Shading		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Solar Radiation through Glazing		N/A W/m ²				
Average Absorptivity (roof)		0.7				
Overall RTTV _{roof}		2.83 W/m ²				

ER = External Reflectance; SC = Shading Coefficient & VLT = Visible Light Transmittance

Notes:

- Please tick in the box as appropriate
- Window and skylight data should represent the major proportion of its use in the development.