

RTTV Summary Sheet

Address: Proposed Residential Development at 1 Shau Kei Wan Road, Hong Kong – S.M.L 2s. B		BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineers	
	<input type="checkbox"/> 2. Architect	
	<input type="checkbox"/> 3. Others, please specify :	
No. of Storeys (Residential Units)		

Table 1

Deemed to Satisfy RTTV _{Wall}									
Facade Orientation Facing	NE	SE	SW	NW					
Average Absorptivity	0.64	0.64	0.64	0.64					
Average Window to Wall Ratio	0.42	0.29	0.50	0.17					
Shading Coefficient of Glazing	0.53	0.50	0.54	0.44					
Average Shading Coefficient of Facade									
Visible Light Transmittance	51 %	51 %	51 %	52 %	%	%	%	%	%
External Reflectance	13 %	15 %	12 %	17 %	%	%	%	%	%

Table 2

RTTV _{Wall}																					
Facade Orientation Facing		NE				SE				SW				NW							
Wall Orientation Factor		0.924				1.051				1.092				0.965							
Total External Wall Area (Residential Units)		143.55 m ²		Window to Wall Ratio		57.83 m ²		Window to Wall Ratio		148.2 m ²		Window to Wall Ratio		65.34 m ²		Window to Wall Ratio					
Total Window Area		60.62 m ²		= 0.42		16.69 m ²		= 0.29		74.82 m ²		= 0.50		11.12 m ²		= 0.17					
Heat Conduction	Opaque Wall	4.60 w/m ²				6.44 w/m ²				4.65 w/m ²				6.89 w/m ²							
	Window	0.88 w/m ²				0.58 w/m ²				1.31 w/m ²				0.23 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 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"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input checked="" type="checkbox"/> Clear	Area= 60.62 m ²	SC= 0.53	VLT= 51 %	ER= 13 %	<input checked="" type="checkbox"/> Clear	Area= 16.69 m ²	SC= 0.50	VLT= 51 %	ER= 15 %	<input checked="" type="checkbox"/> Clear	Area= 74.82 m ²	SC= 0.54	VLT= 51 %	ER= 12 %	<input checked="" type="checkbox"/> Clear	Area= 11.12 m ²	SC= 0.44	VLT= 52 %	ER= 17 %
	Double Glazing	<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							
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		7.86 W/m ²				5.91 W/m ²				10.65 W/m ²				3.04 W/m ²							
Average Absorptivity		0.64				0.64				0.64				0.64							
RTTV _{Wall} at each facade		13.33 w/m ²				12.93 w/m ²				16.61 w/m ²				10.16 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)		457.18 m ²				
Total Skylight Area		0 m ²				
Heat Conduction	Roof	2.89 W/m ²				
	Skylight	0 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		0 W/m ²				
Average Absorptivity (roof)		0.75				
Overall RTTV _{Roof}		2.89 W/m ²				

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

Notes :

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