

RTTV Summary Sheet

Address : No. 18 and 20 Caine Road, Hong Kong		Date : 31 August 2019
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)	27	

Table 1

Deemed to Satisfy RTTV wall							
Façade Orientation Facing	North East	North West	South West	South East	South	East	
Average Absorptive	0.7	0.5	0.66	0.59	0.79	0.5	
Average Window to Wall Ratio	0.67	0.24	0.24	0.57	0.68	0	
Shading Coefficient of Glazing	0.43	0.43	0.43	0.43	0.43	N.A.	
Average Shading Coefficient of Façade	0.43	0.43	0.43	0.43	0.43	N.A.	
Visible Light Transmittance	53%	53%	53%	53%	53%	%	%
External Reflectance	17%	17%	17%	17%	17%	%	%

Table 2

RTTV Wall																										
Façade Orientation Facing	North East			North West			South West			South East			South	East												
Wall Orientation Factor	0.924			0.965			1.092			1.051			0.975	1.072												
Total External Wall Area (Residential Units)	2166.29m ²	Window to Wall Ratio		1083.16m ²	Window to Wall Ratio		1117.94m ²	Window to Wall Ratio		3481.06m ²	Window to Wall Ratio		599.77m ²	Window to Wall Ratio	363.52m ²	Window to Wall Ratio										
Total Window Area	1453.52m ²	1=0.67		263.75m ²	1=0.24		270.93m ²	1=0.24		1995.61m ²	1=0.57		407.34m ²	1=0.68	0m ²	1=0										
Heat Conduction	Opaque Wall	1.45W/m ²			4.09W/m ²			4.92W/m ²			2.08W/m ²			1.23W/m ²			6.1W/m ²									
	Window	0.68W/m ²			0.26W/m ²			0.29W/m ²			0.66W/m ²			0.72W/m ²			0.00W/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 checked="" type="checkbox"/> Tinted	1453.52m ²	0.43	ER=17%	<input checked="" type="checkbox"/> Tinted	263.75m ²	0.43	ER=17%	<input checked="" type="checkbox"/> Tinted	270.93m ²	0.43	ER=17%	<input checked="" type="checkbox"/> Tinted	1995.61m ²	0.43	ER=17%	<input checked="" type="checkbox"/> Tinted	407.34m ²	0.43	ER=17%	<input type="checkbox"/> Tinted	m ²	ER=%		
		<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=%	<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 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			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
External Shading	<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			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Solar Radiation through Glazing	10.24W/m ²			3.97W/m ²			4.75W/m ²			10.07W/m ²			10.71W/m ²			0W/m ²										
Average Absorptivity	0.7W/m ²			0.5W/m ²			0.66W/m ²			0.59W/m ²			0.79W/m ²			0.5W/m ²										
RTTV _{wall} at each façade	12.37W/m ²			8.82W/m ²			9.96W/m ²			12.81W/m ²			12.67W/m ²			6.1W/m ²										
Overall RTTV _{wall}	11.50W/m ²																									

Table 3

RTTV Roof											
Roof Orientation Factor	2.16										
Total Roof Area (Residential Units)	313.09m ²										
Total Skylight Area	0m ²										
Heat Conduction	Roof	2.8W/m ²									
	Skylight	0W/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	0W/m ²										
Average Absorptivity (roof)	0.7										
Overall RTTV _{Roof}	2.8W/m ²										

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

Note :

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