

Appendix A
(PNAP APP-156)

RTTV Summary Sheet

Address: PROPOSED REDEVELOPMENT OF CLEAR WATER BAY ROAD SAI KUNG LOT NO. 1681 DD. NO.243		BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineers	
	<input type="checkbox"/> 2. Architect	
	<input checked="" type="checkbox"/> 3. Others, please specify : Engineer	
No. of Storeys (Residential Units)	3	

Table 1

Deemed to Satisfy RTTV _{wall}							
Facade Orientation Facing	North East	North West	South West	South East			
Average Absorptivity	0.58	0.58	0.58	0.58			
Average Window to Wall Ratio	0.49	0.04	0.27	0.18			
Shading Coefficient of Glazing	0.57-0.74	0.68-0.73	0.57-0.73	0.68-0.73			
Average Shading Coefficient of Facade	0.57-0.74	0.68-0.73	0.57-0.73	0.68-0.73			
Visible Light Transmittance	40-81 %	72-75 %	40-75 %	72-75 %	%	%	%
External Reflectance	6-14 %	9-14 %	6-14 %	9-14 %	%	%	%

Table 2

RTTV _{wall}																	
Facade Orientation Facing		North East				North West				South West				South East			
Wall Orientation Factor		0.924				0.965				1.092				1.051			
Total External Wall Area (Residential Units)		210.23 m ²		Window to Wall Ratio = 0.49		142.91 m ²		Window to Wall Ratio = 0.04		239.1 m ²		Window to Wall Ratio = 0.27		117.31 m ²		Window to Wall Ratio = 0.18	
Total Window Area		199.88 m ²				6.65 m ²				86.86 m ²				26.49 m ²			
Heat Conduction	Opaque Wall	3.20 W/m ²				5.82 W/m ²				5.29 W/m ²				5.48 W/m ²			
	Window	0.75 W/m ²				0.06 W/m ²				0.55 W/m ²				0.29 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"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input checked="" type="checkbox"/> Tinted	Area= 44.58 m ²	SC= 0.45	VLT= 50 %	ER= 20 %	
		<input checked="" type="checkbox"/> Clear	Area= 199.88 m ²	SC= 0.57-0.74	VLT= 40-81 %	ER= 6-14 %	<input checked="" type="checkbox"/> Clear	Area= 6.65 m ²	SC= 0.68-0.73	VLT= 72-75 %	ER= 9-14 %	<input checked="" type="checkbox"/> Clear	Area= 42.28 m ²	SC= 0.57-0.73	VLT= 40-75 %	ER= 6-14 %	
	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		13.69 W/m ²				1.24 W/m ²				6.68 W/m ²				5.73 W/m ²			
Average Absorptivity		0.58				0.58				0.58				0.58			
RTTV _{wall} at each facade		17.64 W/m ²				7.12 W/m ²				12.52 W/m ²				11.5 W/m ²			
Overall RTTV _{wall}		13.63 W/m ²															

Table 3

RTTV _{Roof}							
Roof Orientation Factor		2.16					
Total Roof Area (Residential Units)		475.35 m ²					
Total Skylight Area		19.4 m ²					
Heat Conduction	Roof	2.46 W/m ²					
	Skylight	0.02 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 checked="" type="checkbox"/> Clear	Area= 19.4 m ²	SC= 0.18	VLT= 5 %	ER= 21 %	
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		0.63 W/m ²					
Average Absorptivity (roof)		0.64					
Overall RTTV _{Roof}		3.11 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.