



RTTV Summary Sheet

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.

**PNAP
APP-156**

Appendix A

Address: 178 Hing Fong Road, Kwai Chung, N.T.		BD Ref. No. 2/9038/15
Building Type:	Residential	
RTTV calculated by	<input checked="" type="checkbox"/> 1. Registered Professional Engineers <input checked="" type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify:	
No. of Storeys (Residential Units)	17	

Table 1

Deemed to Satisfy RTTV _{Wall}									
Facade Orientation Facing	SW	SE	NE	NW					
Average Absorptivity	0.58	0.58	0.58	0.58					
Average Window to Wall Ratio	0.414	0.354	0.16	0.354					
Shading Coefficient of Glazing	0.72	0.72	0.72	0.72					
Average Shading Coefficient of Facade	0.63	0.64	0.67	0.66					
Visible Light Transmittance	56	56	56 %	56 %	%	%	%	%	%
External Reflectance	7/6 %	7/6 %	7/6 %	7/6 %	%	%	%	%	%

Table 2

RTTV _{Wall}																					
Facade Orientation Facing		SW				SE				NE				NW							
Wall Orientation Factor		1.092				1.051				0.924				0.965							
Total External Wall Area (Residential Units)		1247.87 m ²		Window to Wall Ratio = 0.414		988.21 m ²		Window to Wall Ratio = 0.354		1257.41 m ²		Window to Wall Ratio = 0.16		987.7 m ²		Window to Wall Ratio = 0.354					
Total Window Factor		498.68 m ²				391.17 m ²				188.11 m ²				342.55 m ²							
Heat Conduction	Opaque Wall	5.09 W/m ²				4.93 W/m ²				6.1 W/m ²				4.89 W/m ²							
	Window	1.42 W/m ²				1.36 W/m ²				0.45 W/m ²				1.1 W/m ²							
Window	Glass Type	<input checked="" type="checkbox"/> Tinted	Area= 4.3 m ²	SC= 0.72	VLT= 56 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 54.4 m ²	SC= 0.72	VLT= 56 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 82.6 m ²	SC= 0.72	VLT= 56 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 123.3 m ²	SC= 0.72	VLT= 56 %	ER= 6 %
		<input checked="" type="checkbox"/> Tinted	Area= 494.4 m ²	SC= 0.63	VLT= 44 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 336.8 m ²	SC= 0.63	VLT= 44 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 105.4 m ²	SC= 0.63	VLT= 44 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 342.6 m ²	SC= 0.63	VLT= 44 %	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= %	<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								
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							
	Sidewall	<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		10.89 W/m ²				8.61 W/m ²				3.49 W/m ²				7.83 W/m ²							
Average Absorptivity		0.58				0.58				0.58				0.58							
RTTV _{Wall} at each facade		17.39 W/m ²				14.89 W/m ²				10.04 W/m ²				13.82 W/m ²							
Overall RTTV _{Wall}		13.99 W/m ²																			

Table 3

RTTV _{Roof}											
Roof Orientation Factor		2.16									
Total Roof Area (Residential Units)		147 m ²									
Total Skylight Area		0 m ²									
Heat Conduction	Roof	3.65 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"/> 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 checked="" type="checkbox"/> No										
External Shading	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Solar Radiation through Glazing		0 W/m ²									
Average Absorptivity (roof)		0.58									
Overall RTTV _{Roof}		3.65 W/m ²									