



RTTV Summary Sheet

App's covering letter to be supplemented.

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**

AP

Address: _____ BD Ref. No. _____

Building Type: Residential

RTTV calculated by:

1. Registered Professional Engineers

2. Architect

3. Others, please specify: _____

No. of Storeys (Residential Units): 23

Table 1

Deemed to Satisfy RTTV_{Wall}

Facade Orientation Facing	E	N	W	S	Total				
Average Absorptivity	0.6	0.6	0.6	0.6					
Average Window to Wall Ratio	0.26	0.23	0.06	0.20					
Shading Coefficient of Glazing	Refer to attachment 1	Refer to attachment 2	Refer to attachment 3	Refer to attachment 4					
Average Shading Coefficient of Facade	0.583	0.625	0.705	0.625	0.617				
Visible Light Transmittance	Refer to attachment 1	Refer to attachment 2	Refer to attachment 3	Refer to attachment 4	52.374 %	%	%	%	%
External Reflectance					7.404 %	%	%	%	%

Table 2

RTTV_{Wall}

Facade Orientation Facing	E	N	W	S
Wall Orientation Factor	1.072	0.79	1.131	0.975
Total External Wall Area (Residential Units)	902.8 m ²	569.4 m ²	943.68 m ²	1415.11 m ²
Total Window Factor	231.35 m ²	133.62 m ²	55.03 m ²	277.27 m ²
Heat Conduction				
Opaque Wall	5.72 W/m ²	4.34 W/m ²	7.64 W/m ²	5.62 W/m ²
Window	0.79 W/m ²	0.55 W/m ²	0.05 W/m ²	0.59 W/m ²
Window				
Glass Type	<input type="checkbox"/> Reflective <input type="checkbox"/> Tinted <input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Reflective <input type="checkbox"/> Tinted <input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Reflective <input type="checkbox"/> Tinted <input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Reflective <input type="checkbox"/> Tinted <input checked="" type="checkbox"/> Clear
Area=	Refer to attachment 1	Refer to attachment 2	Refer to attachment 3	Refer to attachment 4
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 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 type="checkbox"/> Yes <input type="checkbox"/> No
Sidefin	<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 type="checkbox"/> Yes <input type="checkbox"/> No
Solar Radiation through Glazing	6.13 W/m ²	4.60 W/m ²	1.88 W/m ²	3.86 W/m ²
Average Absorptivity	0.6	0.6	0.6	0.6
RTTV _{Wall} at each facade	12.65 W/m ²	9.48 W/m ²	9.57 W/m ²	10.08 W/m ²
Overall RTTV _{Wall}	10.47 W/m ² < 14 W/m ²			

Table 3

RTTV_{Roof}

Roof Orientation Factor	2.16			
Total Roof Area (Residential Units)	137.38 m ²			
Total Skylight Area	/ m ²			
Heat Conduction	2.91 W/m ²			
Roof	/ W/m ²			
Skylight	/ 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	/ W/m ²			
Average Absorptivity (roof)	0.7			
Overall RTTV _{Roof}	2.91 W/m ² < 4 W/m ²			