



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: Proposed Composite Development at Nos. 78 to Maidstone Road and Lok Sheun Road BD Ref. No. 2/403/15

Building Type: Residential

RTTV calculated by:
 1. Registered Professional Engineers
 2. Architect
 3. Others, please specify: Caroon, Hong Kong

No. of Storeys (Residential Units): 23

Table 1

Doomed to Satisfy RTTV _{Wall}							
Facade Orientation Facing	N	S	E	W			
Average Absorptivity	0.7	0.7	0.7	0.7			
Average Window to Wall Ratio	0.28	0.36	0.37	0.06			
Shading Coefficient of Glazing	1	1	1	1			
Average Shading Coefficient of Facade	1	1	1	1			
Visible Light Transmittance	1 %	1 %	1 %	1 %	%	%	%
External Reflectance	12 %	12 %	12 %	12 %	%	%	%

Table 2

RTTV _{Wall}																					
Facade Orientation Facing		N				S				E				W							
Wall Orientation Factor		0.79				0.975				1.072				1.131							
Total External Wall Area (Residential Units)		677.82 m ²				625.06 m ²				1423.23 m ²				1378.80 m ²							
Window to Wall Ratio		1:3.57				1:2.78				1:2.70				1:16.67							
Total Window Factor		268.88 m ²				341.34 m ²				531.06 m ²				86.84 m ²							
Heat Conduction	Opaque Wall	4.26 W/m ²				4.29 W/m ²				1.09 W/m ²				9.54 W/m ²							
	Window	0.73 W/m ²				1.14 W/m ²				1.30 W/m ²				0.21 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 checked="" type="checkbox"/> Tinted	268.88 m ²	0.63	52%	12%	<input checked="" type="checkbox"/> Tinted	341.34 m ²	0.63	52%	12%	<input checked="" type="checkbox"/> Tinted	531.06 m ²	0.63	52%	12%	<input checked="" type="checkbox"/> Tinted	86.84 m ²	0.63	52%	12%
		<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		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" 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		<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		<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		5.90 W/m ²				9.25 W/m ²				10.52 W/m ²				2.02 W/m ²							
Average Absorptivity		0.70				0.70				0.70				0.70							
RTTV _{Wall} at each facade		10.88 W/m ²				15.18 W/m ²				16.91 W/m ²				21.77 W/m ²							
Overall RTTV _{Wall}		13.84				13.84				13.84				13.84							

Table 3

RTTV _{Roof}						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		101.61 m ²				
Total Skylight Area		0 m ²				
Heat Conduction	Roof	2.81 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)		0.7				
Overall RTTV _{Roof}		2.81 W/m ²				