Appendix A
(PNAP APP-156)

RTTV Summary Sheet

Address: Proposed Composite Development No. 06-22 Chung Ching Street, Sai Ying Pun, Hong Kong		BD Ref. No. BD 2/2028/16
Building Type:	Residential	
RTTV calculated by	☐ 1. Registered Professional Engineers	
	☐ 2. Architect	
	☒ 3. Others, please specify : E&M Consultant	
No. of Storeys (Residential Units)	24	

Table 1

Deemed to Satisfy $RTTV_{Wall}$								
Facade Orientation Facing	East	North	West	South				
Average Absorptivity								
Average Window to Wall Ratio								
Shading Coefficient of Glazing								
Average Shading Coefficient of Facade								
Visible Light Transmittance	%	%	%	%	%	%	%	%
External Reflectance	%	%	%	%	%	%	%	%

Table 2

$RTTV_{Wall}$																				
Facade Orientation Facing		East				North				West				South						
Wall Orientation Factor		1.072				0.79				1.131				0.975						
Total External Wall Area (Residential Units)		2321.43 m^2		Window to Wall Ratio		1168.35 m^2		Window to Wall Ratio		1819.94 m^2		Window to Wall Ratio		803.07 m^2		Window to Wall Ratio				
Total Window Area		1587.56 m^2		= 0.68		521.91 m^2		= 0.45		184.89 m^2		= 0.10		527.23 m^2		= 0.66				
Heat Conduction	Opaque Wall	3.01	W/m^2			3.89	W/m^2			8.78	W/m^2			2.98	W/m^2					
	Window	0.80	W/m^2			0.38	W/m^2			0.13	W/m^2			0.70	W/m^2					
Window	Glass Type	☐ Reflective	Area= m^2	SC=	VLT= % ER= %	☐ Reflective	Area= m^2	SC=	VLT= % ER= %	☐ Reflective	Area= m^2	SC=	VLT= % ER= %	☐ Reflective	Area= m^2	SC=	VLT= % ER= %			
		☐ Tinted	Area= m^2	SC=	VLT= % ER= %	☐ Tinted	Area= m^2	SC=	VLT= % ER= %	☐ Tinted	Area= m^2	SC=	VLT= % ER= %	☐ Tinted	Area= m^2	SC=	VLT= % ER= %			
		☒ Clear	Area= 1587.56 m^2	SC= 0.33	VLT= 61 % ER= 15 %	☒ Clear	Area= 521.91 m^2	SC= 0.33	VLT= 61 % ER= 15 %	☒ Clear	Area= 184.89 m^2	SC= 0.33	VLT= 61 % ER= 15 %	☒ Clear	Area= 527.23 m^2	SC= 0.33	VLT= 61 % ER= 15 %			
	Double Glazing	☐ Yes ☒ No				☐ Yes ☒ No				☐ Yes ☒ No				☐ Yes ☒ No						
	External Shading	Overhang ☒ Yes ☐ No				Overhang ☒ Yes ☐ No				Overhang ☒ Yes ☐ No				Overhang ☒ Yes ☐ No						
		Sidefin ☐ Yes ☒ No				Sidefin ☐ Yes ☒ No				Sidefin ☐ Yes ☒ No				Sidefin ☐ Yes ☒ No						
Solar Radiation through Gazing		9.26	W/m^2			4.81	W/m^2			1.57	W/m^2			8.36	W/m^2					
Average Absorptivity		0.82				0.82				0.82				0.82						
$RTTV_{Wall}$ at each facade		13.07	W/m^2			9.08	W/m^2			10.48	W/m^2			12.04	W/m^2					
Overall $RTTV_{Wall}$		11.40 W/m^2																		

Table 3

$RTTV_{Roof}$							
Roof Orientation Factor		2.16					
Total Roof Area (Residential Units)		287	m^2				
Total Skylight Area		0	m^2				
Heat Conduction	Roof	2.89	W/m^2				
	Skylight	0	W/m^2				
Skylight	Glass Type	☐ Reflective	Area= m^2	SC=	VLT= %	ER= %	
		☐ Tinted	Area= m^2	SC=	VLT= %	ER= %	
		☐ Clear	Area= m^2	SC=	VLT= %	ER= %	
	Double Glazing	☐ Yes ☐ No					
	External Shading	☐ Yes ☐ No					
Solar Radiation through Glazing		0	W/m^2				
Average Absorptivity (roof)		0.7					
Overall $RTTV_{Roof}$		2.89	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.