屋宇署 BUILDINGS DEPARTMENT

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: Redevelopment of Tai Po Town Lot No.233, Nos.2, 4 and 6, Wai Yi Street, Tai Po, N.T.	BD Ref. No. BD2/9046/18
Building Type:	Residential
RTTV calculated by	☐ 1. Registered Professional Engineers
	☑ 2. Architect
	☐ 3. Others, please specify:
No. of Storeys (Residential Units)	10

Table 1

Deemed to Satisfy $RTTV_{Wall}$								
Facade Orientation Facing								
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		E					N					W					S				
Wall Orientation Factor		1.072					0.79					1.131					0.975				
Total External Wall Area (Residential Units)		357.24 m²	Window to Wall Ratio = 0.01				381.62 m²	Window to Wall Ratio = 0.76				359.76 m²	Window to Wall Ratio = 0				376.61 m²	Window to Wall Ratio = 0.04			
Total Window area		4.03 m²					289.72 m²					0 m²					14.08 m²				
Heat Conduction	Opaque Wall	9.30 W/m²					0.64 W/m²					3.83 W/m²					3.18 W/m²				
	Window	0.03 W/m²					1.50 W/m²					0 W/m²					0.09 W/m²				
Window	Glass Type	☐ Reflective	Area= m²	SC=	VLT= % ER= %		☐ Reflective	Area= m²	SC=	VLT= % ER= %		☐ Reflective	Area= m²	SC=	VLT= % ER= %		☐ Reflective	Area= m²	SC=	VLT= % ER= %	
		☐ Tinted	Area= m²	SC=	VLT= % ER= %		☐ Tinted	Area= m²	SC=	VLT= % ER= %		☐ Tinted	Area= m²	SC=	VLT= % ER= %		☐ Tinted	Area= m²	SC=	VLT= % ER= %	
		☑ Clear	Area= 4.03 m²	SC= 0.69	VLT= 80 % ER= 11 %		☑ Clear	Area= 289.72 m²	SC= 0.69	VLT= 80 % ER= 11 %		☐ Clear	Area= m²	SC=	VLT= % ER= %		☑ Clear	Area= 14.08 m²	SC= 0.69	VLT= 80 % ER= 11 %	
	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 Glazing		0.35 W/m²					17.28 W/m²					0 W/m²					1.05 W/m²				
Average Absorptivity		0.78					0.61					0.78					0.9				
$RTTV_{Wall}$ at each facade		9.67 W/m²					20.09 W/m²					9.97 W/m²					10.69 W/m²				
Overall $RTTV_{Wall}$		12.70 W/m²																			

Table 3

$RTTV_{Roof}$						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		86.41 m²				
Total Skylight Area		0 m²				
Heat Conduction	Roof	3.48 W/m²				
	Skylight	0 W/m²				
Skylight	Glass Type	☐ Reflective	Area= m²	SC=	VLT= %	ER= %
		☐ Tinted	Area= m²	SC=	VLT= %	ER= %
		☐ Clear	Area= m²	SC=	VLT= %	ER= %
	Double Glazing	☐ Yes ☐ No				
	External Shading	☐ Yes ☐ No				
Solar Radiation through Glazing		0 W/m²				
Average Absorptivity (roof)		0.9				
Overall $RTTV_{Roof}$		3.48 W/m²				