2/9117/15 (Pt. III)

Appendix A 75

(PNAP APP-156)

RTTV Summary Sheet

Address: Proposed Residential Development at Lot No.1181 in DD215, Hong Kong, Tui Min Hoi, Sai Kung	BD Ref. No.
Building Type:	Residential
RTTV calculated by	☑ 1. Registered Professional Engineers
	☐ 2. Architect
	☐ 3. Others, please specify :
No. of Storeys (Residential Units)	Tower-5 storeys/ House- 3 Storeys

Table 1

Deemed to Satisfy $RTTV_{Wall}$								
Facade Orientation Facing	NE	SE	SW	NW				
Average Absorptivity	0.55	0.5	0.54	0.5				
Average Window to Wall Ratio	0.71	0.14	0.54	0.1				
Shading Coefficient of Glazing	0.38	0.38	0.38	0.38				
Average Shading Coefficient of Facade	0.38	0.38	0.38	0.38				
Visible Light Transmittance	50 %	50 %	50 %	50 %	%	%	%	%
External Reflectance	9 %	9 %	9 %	9 %	%	%	%	%

Table 2

$RTTV_{Wall}$																					
Facade Orientation Facing		NE				SE				SW				NW							
Wall Orientation Factor		0.924				1.051				1.092				0.965							
Total External Wall Area (Residential Units)		357.56 m^2	Window to Wall Ratio			263.4 m^2	Window to Wall Ratio			347.2 m^2	Window to Wall Ratio			290.0 m^2	Window to Wall Ratio						
Total Window Area		868.16 m^2	= 0.71			42.05 m^2	= 0.14			408.9 m^2	= 0.54			30.4 m^2	= 0.1						
Heat Conduction	Opaque Wall	3.35 W/m^2				8.39 W/m^2				7.00 W/m^2				7.04 W/m^2							
	Window	0.67 W/m^2				1.051 W/m^2				0.6 W/m^2				0.09 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= 868 m^2	SC= 0.38	VLT=50 % ER= 9 %	☑ Clear	Area= 42.0 m^2	SC= 0.38	VLT=50 % ER= 9 %	☑ Clear	Area= 409 m^2	SC= 0.38	VLT=50 % ER= 9 %	☑ Clear	Area= 30.4 m^2	SC= 0.38	VLT=50 % ER= 9 %				
	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		13.17 W/m^2				10.83 W/m^2				17.42 W/m^2				8.59 W/m^2							
Average Absorptivity		0.55				0.5				0.54				0.5							
$RTTV_{Wall}$ at each facade		6.19 W/m^2				1.27 W/m^2				5.05 W/m^2				1.06 W/m^2							
Overall $RTTV_{Wall}$		13.57 W/m^2																			

Table 3

$RTTV_{Roof}$						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		995 m^2				
Total Skylight Area		N/A m^2				
Heat Conduction	Roof	3.19 W/m^2				
	Skylight	N/A W/m^2				
Skylight	Glass Type N/A	☐ 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		N/A W/m^2				
Average Absorptivity (roof)		0.8				
Overall $RTTV_{Roof}$		3.19 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.

(9/2014)