(PNAP APP-156)

RTTV Summary Sheet

Address :	Proposed Redevelopment at No. 3 Marble Road, North Point	BD Ref. No. BD 2/3008/15/(1)
Building Type :	Residential Tower	
RTTV calculated by	☑ 1. Registered Professional Engineers (Building Services/Mechanical)	
	☐ 2. Architect	
	☐ 3. Others, please specify :	
No. of Storeys (Residential Units)	22	

Table 1

Deemed to Satisfy $RTTV_{wall}$								
Faacde Orientation Facing								
Average Absorptivity								
Average Window to Wall Ratio								
Shading Coefficient of Glazing								
Average Shading Corfficient of Facade								
Visible Light Transmittance	%	%	%	%	%	%	%	%
External Reflectance	%	%	%	%	%	%	%	%

Table 2

$RTTV_{wall}$																
Façade Orientation Facing		East-Northeast				North-Northwest				West-Southwest				South-Southeast			
Wall Orientation Factor		1.072				0.79				1.131				0.975			
Total External Wall Area (Residential Units)		960.66m²		Window to Wall Ratio =0.36		1636.6m²		Window to Wall Ratio =0.25		885.06m²		Window to Wall Ratio =0.38		2578.52m²		Window to Wall Ratio =0.55	
Total Window Area		349.73m²				414.58m²				332m²				1405.60m²			
Heat Conduction	Opaque Wall	6.87W/m²				5.70W/m²				5.13W/m²				4.08W/m²			
	Window	0.73W/m²				0.39W/m²				0.84W/m²				0.95W/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= 69.19m²	SC= 0.57	VLT=50% ER=8%	☑ Tinted	Area= 196.77m²	SC= 0.57	VLT=50% ER=8%	☑ Tinted	Area= 69.19m²	SC= 0.57	VLT=50% ER=8%	☑ Tinted	Area= 504.80m²	SC= 0.57	VLT=50% ER=8%
		☑ Tinted	Area= 14.20m²	SC= 0.58	VLT=51% ER=10%	☑ Tinted	Area= 3.66m²	SC= 0.58	VLT=51% ER=10%	☑ Tinted	Area= 14.20m²	SC= 0.58	VLT=51% ER=10%	☑ Tinted	Area= 35.40m²	SC= 0.58	VLT=51% ER=10%
		☑ Tinted	Area= 266.35m²	SC= 0.59	VLT=52% ER=9%	☑ Tinted	Area= 214.15m²	SC= 0.59	VLT=52% ER=9%	☑ Tinted	Area= 248.62m²	SC= 0.59	VLT=52% ER=9%	☑ Tinted	Area= 865.40m²	SC= 0.59	VLT=52% 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 Glazing		7.42W/m²				5.35W/m²				8.89W/m²				9.73W/m²			
Average Absorptivity		0.9				0.9				0.9				0.9			
$RTTV_{wall}$ at each façade		15.02W/m²				11.19W/m²				15.69W/m²				14.77W/m²			
Overall $RTTV_{wall}$		13.94W/m²															

Table 3

$RTTV_{Roof}$						
Roof Orientation Facing		2.16				
Total Roof Area (Residential Units)		168.4m²				
Total Skylight Area		0m²				
Heat Conduction	Roof	3.62W/m²				
	Skylight	0W/m²				
Skylight	Glass Type	☐ Reflective	Area= m²	SC=	VLT= %	ER= %
	Double Glazing	☐ Tinted	Area= m²	SC=	VLT= %	ER= %
	External Shading	☐ Clear	Area= m²	SC=	VLT= %	ER= %
	Double Glazing	☐ Yes ☐ No				
	External Shading	☐ Yes ☐ No				
Solar Radiation through Glazing		0W/m²				
Average Absorptivity (roof)		0.9				
Overall $RTTV_{Roof}$		3.62W/m²				

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)