

**RTTV Summary Sheet**

PNAP-APP-156  
Appendix J-1

Address	T.M.T.L. 500 Tuen Mun N.T.	BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineer <input checked="" type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify :	
No. of Storeys (Residential Units)	17(1/F, 2/F to 20/F) (Excluding 4/F, 13/F & 14/F)	

Table 1

Deemed to Satisfy RTTV <sub>wall</sub>										
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 <sub>wall</sub>																				
Facade Orientation Facing	South East				South West				North West				North East							
Wall Orientation Factor	1.051				1.092				0.965				0.924							
Total External Wall Area (Residential Units)	155.47m <sup>2</sup>				2224.71m <sup>2</sup>				529.23m <sup>2</sup>				417.59m <sup>2</sup>							
Total Window Area	41.94m <sup>2</sup>				1681.11m <sup>2</sup>				88.88m <sup>2</sup>				149.89m <sup>2</sup>							
Heat Conduction	Opaque Wall				Window				Opaque Wall				Window							
	8.19W/m <sup>2</sup>				2.76W/m <sup>2</sup>				8.55W/m <sup>2</sup>				6.27W/m <sup>2</sup>							
Window	Glass Type	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%				
		<input type="checkbox"/>					<input type="checkbox"/>						<input type="checkbox"/>							
	Tinted	Area= 41.94m <sup>2</sup>	SC= 0.35	VLT=25%	ER=8%	Tinted	Area= 1681.11m <sup>2</sup>	SC= 0.36	VLT=27%	ER=7%	Tinted	Area= 74.16m <sup>2</sup>	SC= 0.36	VLT=27%	ER=7%	Tinted	Area= 149.89m <sup>2</sup>	SC= 0.35	VLT=25%	ER=8%
		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%
		<input type="checkbox"/>				<input type="checkbox"/>					<input type="checkbox"/>					<input type="checkbox"/>				
	Double Glazing	<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No
		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No
	External Glazing	Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No
		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No
Sidefin	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No			
	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
Window	Glass Type	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Reflective	Area= m <sup>2</sup>	SC=	VLT=%	ER=%				
		<input type="checkbox"/>					<input type="checkbox"/>						<input type="checkbox"/>							
	Tinted	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Tinted	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Tinted	Area= 14.72m <sup>2</sup>	SC= 0.35	VLT=25%	ER=8%	Tinted	Area= m <sup>2</sup>	SC=	VLT=%	ER=%
		<input type="checkbox"/>				<input type="checkbox"/>					<input type="checkbox"/>					<input type="checkbox"/>				
	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%	Clear	Area= m <sup>2</sup>	SC=	VLT=%	ER=%
		<input type="checkbox"/>				<input type="checkbox"/>					<input type="checkbox"/>					<input type="checkbox"/>				
	Double Glazing	<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No		<input checked="" type="checkbox"/>	Yes	No
		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No
	External Glazing	Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No
		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No
Sidefin	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No			
	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
Solar Radiation through Glazing	1.09W/m <sup>2</sup>				7.43W/m <sup>2</sup>				1.9W/m <sup>2</sup>				3.7W/m <sup>2</sup>							
Average Absorptivity	0.9				0.9				0.9				0.9							
RTTV <sub>wall</sub> at each facade	9.36W/m <sup>2</sup>				11.01W/m <sup>2</sup>				10.59W/m <sup>2</sup>				10.28W/m <sup>2</sup>							
Overall RTTV <sub>wall</sub>	10.77W/m <sup>2</sup>																			

Table 3

RTTV <sub>roof</sub>												
Roof Orientation Factor	2.16											
Total Roof Area (Residential Units)	92.49m <sup>2</sup>											
Total Skylight Area	0m <sup>2</sup>											
Heat Conduction	Roof											
	1.20W/m <sup>2</sup>											
Skylight	Skylight											
	0W/m <sup>2</sup>											
Skylight	Glass Type	Reflective	Area= m <sup>2</sup>	SC=	VLT= %	ER%= %						
		<input type="checkbox"/>										
		Tinted	Area= m <sup>2</sup>	SC=	VLT= %	ER%= %						
	<input type="checkbox"/>											
Clear	Area= m <sup>2</sup>	SC=	VLT= %	ER%= %								
	<input type="checkbox"/>											
Double Glazing	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
External Shading	Overhang	Yes	No		Overhang	Yes	No		Overhang	Yes	No	
	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
Sidefin	Yes	No		Yes	No		Yes	No		Yes	No	
	<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No		<input type="checkbox"/>	Yes	No	
Solar Radiation through Glazing	0W/m <sup>2</sup>											
Average Absorptivity (roof)	0.9											
Overall RTTV <sub>roof</sub>	1.20W/m <sup>2</sup>											

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.

**RTTV Summary Sheet**

Address	TOWER 2, TUEN MUN TOWN LOT NO. 516, TSING HA LANE, AREA 20, TUEN MUN, NEW TERRITORIES	BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input checked="" type="checkbox"/> 1. Registered Professional Engineer <input type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify :	
No. of Storeys (Residential Units)	4 (G/F, 1/F, 2/F and R/F)	

**Table 1**

Deemed to Satisfy RTTV <sub>wall</sub>										
Facade Orientation Facing										
Average Absorptivity	1.70	##	##	1.70	##	2	##	1.70	1.70	
Average Window to Wall Ratio										
Shading Coefficient of Glazing										
Average Shading Coefficient of Façade										
Visible Light Transmittance										
External Reflectance										

**Table 2**

RTTV <sub>wall</sub>																			
Façade Orientation Facing		South East					South West					North West				North East			
Wall Orientation Factor		1.76					1.7					0.965				0.924			
Total External Wall Area (Residential Units)		376.66 m <sup>2</sup>					2154.20 m <sup>2</sup>					68.60 m <sup>2</sup>				1093.49 m <sup>2</sup>			
Total Window Area		121.69 m <sup>2</sup>					1570.72 m <sup>2</sup>					9.81 m <sup>2</sup>				406.85 m <sup>2</sup>			
Heat Conduction		7.58W/m <sup>2</sup>					2.95W/m <sup>2</sup>					8.78W/m <sup>2</sup>				5.97W/m <sup>2</sup>			
Window		0.21W/m <sup>2</sup>					0.65W/m <sup>2</sup>					0.15W/m <sup>2</sup>				0.39W/m <sup>2</sup>			
Window	Glass Type	Reflective	Area=	SC=	VLT=%	ER=%	Reflective	Area=	SC=	VLT=%	ER=%	Reflective	Area=	SC=	VLT=%	ER=%			
		<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>	
		<input checked="" type="checkbox"/>	121.69	0.35	ER=8%	VLT=25%	<input type="checkbox"/>	1570.72	0.36	ER=7%	VLT=27%	<input checked="" type="checkbox"/>	9.81	0.36	ER=7%	VLT=27%	<input type="checkbox"/>	406.85	
		<input type="checkbox"/>	m <sup>2</sup>				m <sup>2</sup>					m <sup>2</sup>					m <sup>2</sup>		
	Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes	
	External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes	
	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	
	Glass Type	Reflective	Area=	SC=	VLT=%	ER=%	Reflective	Area=	SC=	VLT=%	ER=%	Reflective	Area=	SC=	VLT=%	ER=%	Reflective	Area=	
		<input checked="" type="checkbox"/>	14.48	0.35	ER=8%	VLT=25%	<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>	
		<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>	
<input type="checkbox"/>		m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>				<input type="checkbox"/>	m <sup>2</sup>		
Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Double Glazing	<input checked="" type="checkbox"/>	Yes		
External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes	<input checked="" type="checkbox"/>	No	External Glazing	Overhang	Yes		
Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes	<input checked="" type="checkbox"/>	No	Sidefin	Yes		
Solar Radiation through Glazing		0.64W/m <sup>2</sup>					6.11W/m <sup>2</sup>					2.06W/m <sup>2</sup>				5.03W/m <sup>2</sup>			
Average Absorptivity		0.9					0.9					0.9				0.9			
RTTV <sub>wall</sub> at each façade		8.44W/m <sup>2</sup>					9.70W/m <sup>2</sup>					10.99W/m <sup>2</sup>				11.39W/m <sup>2</sup>			
Overall RTTV <sub>wall</sub>																			

**Table 3**

RTTV <sub>roof</sub>										
Roof Orientation Factor										
Total Roof Area(Residential Units)		2.16								
Total Skylight Area		92.49m <sup>2</sup>								
Roof		0m <sup>2</sup>								
Skylight		1.20W/m <sup>2</sup>								
Skylight	Glass Type	Reflective	Area =	m <sup>2</sup>	SC =	VLT =	%	ER% =	%	
		<input type="checkbox"/>	Tinted	Area =	m <sup>2</sup>	SC =	VLT =	%	ER% =	%
		<input type="checkbox"/>	Clear	Area =	m <sup>2</sup>	SC =	VLT =	%	ER% =	%
	Double Glazing	Yes	No							
	External Shading	Yes	No							
Solar Radiation through Glazing		0W/m <sup>2</sup>								
Average Absorptivity (roof)		0.9								
Overall RTTV <sub>roof</sub>		1.20W/m <sup>2</sup>								

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.