

# 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.

Address: RESIDENTIAL DEVELOPMENT AT LOT NO. 4056 IN D.D. 120, SHAP PAT HEUNG ROAD, YUEN LONG, NEW TERRITORIES		BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineers <input type="checkbox"/> 2. Architect <input checked="" type="checkbox"/> 3. Others, please specify:	
No. of Storeys (Residential Units)	21	

Table 1

Deemed to Satisfy RTTV <sub>Wall</sub>							
Facade Orientation Facing	East	North	West	South			
Average Absorptivity	0.88	0.88	0.82	0.85			
Average Window to Wall Ratio	0.18	0.44	0.20	0.44			
Shading Coefficient of Glazing	0.59	0.65	0.41	0.43			
Average Shading Coefficient of Facade	0.56	0.64	0.37	0.36			
Visible Light Transmittance	50 %	50 %	50 %	50 %	%	%	%
External Reflectance	8.2 %	6 %	14.9 %	14.2 %	%	%	%

Table 2

RTTV <sub>Wall</sub>																
Facade Orientation Facing		East			North			West			South					
Wall Orientation Factor		1.072			0.79			1.131			0.975					
Total External Wall Area (Residential Units)		1356.11 m <sup>2</sup>	Window to Wall Ratio = 1:5.47		2679.90 m <sup>2</sup>	Window to Wall Ratio = 1:2.26		1406.48 m <sup>2</sup>	Window to Wall Ratio = 1:4.90		2649.15 m <sup>2</sup>	Window to Wall Ratio = 1:2.26				
Total Window Factor		247.72 m <sup>2</sup>			1183.68 m <sup>2</sup>			287.21 m <sup>2</sup>			1172.39 m <sup>2</sup>					
Heat Conduction	Opaque Wall	8.40 W/m <sup>2</sup>			4.48 W/m <sup>2</sup>			8.10 W/m <sup>2</sup>			5.34 W/m <sup>2</sup>					
	Window	0.56 W/m <sup>2</sup>			1.14 W/m <sup>2</sup>			0.38 W/m <sup>2</sup>			0.77 W/m <sup>2</sup>					
Window	Glass Type	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	ER= %
		<input checked="" type="checkbox"/> Tinted	Area= 201 m <sup>2</sup>	SC= 0.65	VLT= 50 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 1184 m <sup>2</sup>	SC= 0.65	VLT= 50 %	ER= 6 %	<input checked="" type="checkbox"/> Tinted	Area= 73 m <sup>2</sup>	SC= 0.65	VLT= 50 %	ER= 6 %
		<input checked="" type="checkbox"/> IGU	Area= 46 m <sup>2</sup>	SC= 0.33	VLT= 50 %	ER= 18 %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	ER= %	<input checked="" type="checkbox"/> IGU	Area= 214 m <sup>2</sup>	SC= 0.33	VLT= 50 %	ER= 18 %
	Double Glazing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
External Shading	Overhang	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
	Sidefin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Solar Radiation through Glazing		4.60 W/m <sup>2</sup>			9.33 W/m <sup>2</sup>			3.54 W/m <sup>2</sup>			6.41 W/m <sup>2</sup>					
Average Absorptivity		0.88			0.88			0.82			0.85					
RTTV <sub>Wall</sub> at each facade		13.57 W/m <sup>2</sup>			14.95 W/m <sup>2</sup>			12.02 W/m <sup>2</sup>			12.52 W/m <sup>2</sup>					
Overall RTTV <sub>Wall</sub>		13.41 W/m <sup>2</sup>														

Table 3

RTTV <sub>Roof</sub>						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		229.80 m <sup>2</sup>				
Total Skylight Area		0 m <sup>2</sup>				
Heat Conduction	Roof	2.93 W/m <sup>2</sup>				
	Skylight	0 W/m <sup>2</sup>				
Skylight	Glass Type	<input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No				
External Shading	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Solar Radiation through Glazing		0 W/m <sup>2</sup>				
Average Absorptivity (roof)		0.7				
Overall RTTV <sub>Roof</sub>		2.93 W/m <sup>2</sup>				