

### RTTV Summary Sheet

Address: PROPOSED COMMERCIAL/RESIDENTIAL ON I.L.4549, I.L.4550, I.L.4551 R.P., I.L. 4552 R.P., I.L. 4553, I.L. 4554 AND I.L. 4555 AT NO. 160 QUEEN'S ROAD WEST HONG KONG		BD Ref. No. 2/2034/18
Building Type:	Residential	
RTTV calculated by	<input checked="" type="checkbox"/> 1. Registered Professional Engineers <input type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify :	
No. of Storeys (Residential Units)	24	

**Table 1**

Deemed to Satisfy RTTV <sub>wall</sub>								
Facade Orientation Facing	North East	South East	South West	North West				
Average Absorptivity	0.399	0.863	0.346	0.866				
Average Window to Wall Ratio	0.59	0.05	0.56	0.05				
Shading Coefficient of Glazing	0.46	0.46	0.46	0.46				
Average Shading Coefficient of Facade	0.46	0.46	0.46	0.46				
Visible Light Transmittance	53 %	53 %	53 %	53 %	%	%	%	%
External Reflectance	16 %	16 %	16 %	16 %	%	%	%	%

**Table 2**

RTTV <sub>wall</sub>																	
Facade Orientation Facing		North East				South East				South West			North West				
Wall Orientation Factor		0.924				1.051				1.092			0.865				
Total External Wall Area (Residential Units)		2098.24 m <sup>2</sup>		Window to Wall Ratio		458.54 m <sup>2</sup>		Window to Wall Ratio		703.52 m <sup>2</sup>		Window to Wall Ratio		458.54 m <sup>2</sup>	Window to Wall Ratio		
Total Window Area		1239.68 m <sup>2</sup>		1 = 0.59		21.35 m <sup>2</sup>		1 = 0.05		391.78 m <sup>2</sup>		1 = 0.56		23.64 m <sup>2</sup>	= 0.05		
Heat Conduction	Opaque Wall	2.52 W/m <sup>2</sup>				10.13 W/m <sup>2</sup>				1.64 W/m <sup>2</sup>			9.25 W/m <sup>2</sup>				
	Window	0.61 W/m <sup>2</sup>				0.06 W/m <sup>2</sup>				0.68 W/m <sup>2</sup>			0.06 W/m <sup>2</sup>				
Window	Glass Type	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %
		<input checked="" type="checkbox"/> Tinted	Area= 1239.68 m <sup>2</sup>	SC= 0.46	VLT= 53 %	<input checked="" type="checkbox"/> Tinted	Area= 21.35 m <sup>2</sup>	SC= 0.46	VLT= 53 %	<input checked="" type="checkbox"/> Tinted	Area= 391.78 m <sup>2</sup>	SC= 0.46	VLT= 53 %	<input checked="" type="checkbox"/> Tinted	Area= 23.64 m <sup>2</sup>	SC= 0.46	VLT= 53 %
		<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %
		Double Glazing		<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						
External Shading	Overhang	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
	Sidefin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sidefin <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Sidefin <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
Solar Radiation through Gazing		8.81 W/m <sup>2</sup>		0.94 W/m <sup>2</sup>		11.68 W/m <sup>2</sup>			0.96 W/m <sup>2</sup>								
Average Absorptivity		0.399		0.863		0.346			0.865								
RTTV <sub>wall</sub> at each facade		11.94 W/m <sup>2</sup>		11.13 W/m <sup>2</sup>		14.01 W/m <sup>2</sup>			10.26 W/m <sup>2</sup>								
Overall RTTV <sub>wall</sub>				12.02 W/m <sup>2</sup>		< 12.5											

**Table 3**

RTTV <sub>roof</sub>						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		110.95 m <sup>2</sup>				
Total Skylight Area		N/A m <sup>2</sup>				
Heat Conduction	Roof	2.86 W/m <sup>2</sup>				
	Skylight	N/A 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 checked="" type="checkbox"/> No				
External Shading		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Solar Radiation through Glazing		N/A W/m <sup>2</sup>				
Average Absorptivity (roof)		0.7				
Overall RTTV <sub>roof</sub>		2.86		W/m <sup>2</sup> < 3.5		

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.