

## RTTV Summary Sheet

Address: Proposed Composite Building at 42 Tung Street, Central, Hong Kong		BD Ref. No. BD 2/2015/17
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineers <input checked="" type="checkbox"/> 2. Architect <input type="checkbox"/> 3. Others, please specify :	
No. of Storeys (Residential Units)		

**Table 1**

Deemed to Satisfy RTTV <sub>wall</sub>								
Façade Orientation Facing	NW	SE	SW	-	-	-	-	-
Average Absorptivity	0.48	0.80	0.47	-	-	-	-	-
Average Window to Wall Ratio	0.58	0.07	0.49	-	-	-	-	-
Shading Coefficient of Glazing	0.33	0.33	0.33	-	-	-	-	-
Average Shading Coefficient of Façade	0.33	0.33	0.33	-	-	-	-	-
Visible Light Transmittance	53 %	53 %	53 %	- %	- %	- %	- %	- %
External Reflectance	15 %	15 %	15 %	- %	- %	- %	- %	- %

**Table 2**

RTTV <sub>wall</sub>																					
Façade Orientation Facing		NW				SE				SW				-							
Wall Orientation Factor		0.965				1.051				1.092				-							
Total External Wall Area (Residential Units)		453.43 m <sup>2</sup>		Window to Wall Ratio = 0.58		166.70 m <sup>2</sup>		Window to Wall Ratio = 0.07		334.85 m <sup>2</sup>		Window to Wall Ratio = 0.49		-		Window to Wall Ratio = -					
Total Window Area		262.21 m <sup>2</sup>				11.70 m <sup>2</sup>				165.57 m <sup>2</sup>				-							
Heat Conduction	Opaque Wall	1.60 W/m <sup>2</sup>				8.06 W/m <sup>2</sup>				3.63 W/m <sup>2</sup>				-							
	Window	0.60 W/m <sup>2</sup>				0.08 W/m <sup>2</sup>				0.58 W/m <sup>2</sup>				-							
Window (for detailed glazing properties, please see below table #)	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 type="checkbox"/> Reflective	Area= m <sup>2</sup>	SC=	VLT= %	ER= %
		<input checked="" type="checkbox"/> Tinted	262.21 m <sup>2</sup>	0.33	53 %	15 %	<input checked="" type="checkbox"/> Tinted	11.70 m <sup>2</sup>	0.33	53 %	15 %	<input checked="" type="checkbox"/> Tinted	165.57 m <sup>2</sup>	0.33	53 %	15 %	<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"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= %	ER= %
	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		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No						
	Externalt Shading		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	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	Overhang	<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	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	Sidefin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sidefin	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Solar Radiation Through Glazing		7.69 W/m <sup>2</sup>				1.02 W/m <sup>2</sup>				7.44 W/m <sup>2</sup>				-							
Average Absorptivity		0.48 W/m <sup>2</sup>				0.80 W/m <sup>2</sup>				0.47 W/m <sup>2</sup>				-							
RTTV <sub>wall</sub> at each façade		9.89 W/m <sup>2</sup>				9.15 W/m <sup>2</sup>				11.65 W/m <sup>2</sup>				-							
Overall RTTV <sub>wall</sub>		10.38 W/m <sup>2</sup>																			

**Table 3**

RTTV <sub>roof</sub>											
Roof Orientation Factor		2.16									
Total Roof Wall Area (Residential Units)		3.18 m <sup>2</sup>									
Total Skylight Area		- m <sup>2</sup>									
Heat Conduction	Roof	1.98 W/m <sup>2</sup>									
	Skylight	- 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= %	<input type="checkbox"/> Clear	Area = m <sup>2</sup>	SC =	VLT= %	ER= %
		Double Glazing		<input type="checkbox"/> Yes <input type="checkbox"/> No		Externalt Shading		<input type="checkbox"/> Yes <input type="checkbox"/> No			
	Solar Radiation Through Glazing		- W/m <sup>2</sup>								
Average Absorptivity (roof)		0.50									
Overall RTTV <sub>roof</sub>		1.98 W/m <sup>2</sup>									

ER = External Reflectance; SC = Shading Coefficient & VLT = Visible Light Transmittance

Notes :

- Please tick in the bos as appropriate
- Windows and skylight data should represent the major proportion of its use in the development.

# Detailed Glazing Properties

Glazing	SC	VLT	ER
GL-101	0.33	53%	15%
GL-201	0.33	53%	15%
GL-501	0.33	53%	15%