

RTTV Summary Sheet

Address: Villa 1, 9 Lung Kwai Road, Beacon Hill, Kowloon		BD Ref. No.
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)	3	

Table 1

Deemed to Satisfy RTTV _{wall}									
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 _{wall}																	
Facade Orientation Facing		North				South				West				East			
Wall Orientation Factor		0.79				0.975				1.131				1.072			
Total External Wall Area (Residential Units)		115.52 m ²		Window to Wall Ratio = 0.52		85.73 m ²		Window to Wall Ratio = 0.70		186.79 m ²		Window to Wall Ratio = 0.17		170.08 m ²		Window to Wall Ratio = 0.14	
Total Window Area		59.57 m ²				60.31 m ²				32.06 m ²				24.61 m ²			
Heat Conduction	Opaque Wall	2.01 W/m ²				1.29 W/m ²				5.77 W/m ²				5.71 W/m ²			
	Window	0.46 W/m ²				0.77 W/m ²				0.22 W/m ²				0.17 W/m ²			
Window	Glass Type	<input checked="" type="checkbox"/> Reflective	Area= 59.57 m ²	SC= 0.46	VLT= 54% ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 60.31 m ²	SC= 0.46	VLT= 54% ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 32.06 m ²	SC= 0.46	VLT= 54% ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 24.61 m ²	SC= 0.46	VLT= 54% ER= 15%
		<input type="checkbox"/> Tinted	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC= %	VLT= % ER= %
		<input type="checkbox"/> Clear	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Clear	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Clear	Area= m ²	SC= %	VLT= % ER= %	<input type="checkbox"/> Clear	Area= m ²	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	
External Shading	Overhang	<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			
	Sidfin	<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		7.82 W/m ²				13.17 W/m ²				3.73 W/m ²				2.98 W/m ²			
Average Absorptivity		0.5 / 0.8				0.5 / 0.8				0.5				0.5 / 0.8			
RTTV _{wall} at each facade		10.30 W/m ²				15.23 W/m ²				9.71 W/m ²				8.87 W/m ²			
Overall RTTV _{wall}						10.42 W/m ²											

Table 3

RTTV _{Roof}						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		164.51 m ²				
Total Skylight Area		0 m ²				
Heat Conduction	Roof	2.73 W/m ²				
	Skylight	0 W/m ²				
Skylight	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	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 ²				
Average Absorptivity (roof)		0.7				
Overall RTTV _{Roof}		2.73 W/m ²				

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

Notes :

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

RTTV Summary Sheet

Address: Villa 2 to Villa 6, 9 Lung Kee Road, Beacon Hill, Kowloon		BD Ref. No.
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)	3	

Table 1

Deemed to Satisfy RTTV _{wall}									
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 _{wall}																
Facade Orientation Facing		North			South			West			East					
Wall Orientation Factor		0.79			0.975			1.131			1.072					
Total External Wall Area (Residential Units)		87.15 m ²			77.20 m ²			168.22 m ²			143.28 m ²					
Total Window Area		47.70 m ²			51.53 m ²			12.43 m ²			28.61 m ²					
Window to Wall Ratio		= 0.55			= 0.67			= 0.07			= 0.20					
Heat Conduction	Opaque Wall	1.80 W/m ²			1.61 W/m ²			6.53 W/m ²			5.34 W/m ²					
	Window	0.47 W/m ²			0.73 W/m ²			0.09 W/m ²			0.24 W/m ²					
Window	Glass Type	<input checked="" type="checkbox"/> Reflective	Area= 47.7m ²	SC= 0.46	MLT= 54%	ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 51.53m ²	SC= 0.40	MLT= 54%	ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 12.43m ²	SC= 0.46	MLT= 54%	ER= 15%
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	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				
External Shading	Overhang	<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					
	Sideline	<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		8.30 W/m ²			12.50 W/m ²			1.60 W/m ²			4.11 W/m ²					
Average Absorptivity		0.5 / 0.8			0.5 / 0.8			0.5			0.5 / 0.8					
RTTV _{wall} at each facade		10.59 W/m ²			14.84 W/m ²			8.23 W/m ²			9.69 W/m ²					
Overall RTTV _{wall}		10.17 W/m ²			10.17 W/m ²			10.17 W/m ²			10.17 W/m ²					

Table 3

RTTV _{roof}						
Roof Orientation Factor	2.16					
Total Roof Area (Residential Units)	109.24 m ²					
Total Skylight Area	0 m ²					
Heat Conduction	Roof	2.73 W/m ²				
	Skylight	0 W/m ²				
Skylight	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	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 ²				
Average Absorptivity (roof)		0.7				
Overall RTTV _{roof}		2.73 W/m ²				

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

Notes:

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

RTTV Summary Sheet

Address: <u>House 1 to House 17, 9 Lung Kwi Road, Beacon Hill, Kowloon</u>		BD Ref. No.
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)	2	

Table 1

Deemed to Satisfy RTTV _{Wall}									
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 _{Wall}																					
Facade Orientation Facing		North				South				West				East							
Wall Orientation Factor		0.79				0.975				1.131				1.072							
Total External Wall Area (Residential Units)		50.94 m ²		Window to Wall Ratio = 0.49		62.94 m ²		Window to Wall Ratio = 0.54		134.69 m ²		Window to Wall Ratio = 0		120.66 m ²		Window to Wall Ratio = 0.12					
Total Window Area		24.84 m ²				34.19 m ²				0 m ²				14.57 m ²							
Heat Conduction	Opaque Wall	2.23 W/m ²				2.34 W/m ²				7.22 W/m ²				6.02 W/m ²							
	Window	0.43 W/m ²				0.60 W/m ²				0 W/m ²				0.15 W/m ²							
Window	Glass Type	<input checked="" type="checkbox"/> Reflective	Area= 24.8 m ²	SC= 0.46	VLT= 54%	ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 34.19 m ²	SC= 0.46	VLT= 54%	ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 0 m ²	SC= 0.46	VLT= 54%	ER= 15%	<input checked="" type="checkbox"/> Reflective	Area= 14.57 m ²	SC= 0.46	VLT= 54%	ER= 15%
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Clear	Area= m ²	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						
External Shading	Overhang	<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							
	Sidfin	<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		7.40 W/m ²				10.17 W/m ²				0 W/m ²				2.49 W/m ²							
Average Absorptivity		0.5 / 0.8				0.5 / 0.8				0.5				0.5							
RTTV _{Wall} at each facade		10.06 W/m ²				13.10 W/m ²				7.22 W/m ²				8.65 W/m ²							
Overall RTTV _{Wall}		9.08 W/m ²																			

Table 3

RTTV _{Roof}						
Roof Orientation Factor		2.16				
Total Roof Area (Residential Units)		92.57 m ²				
Total Skylight Area		1.07 m ²				
Heat Conduction	Roof	2.73 W/m ²				
	Skylight	0.05 W/m ²				
Skylight	Glass Type	<input checked="" type="checkbox"/> Reflective	Area= 1.07 m ²	SC= 0.51	VLT= 40%	ER= 5%
		<input type="checkbox"/> Tinted	Area= m ²	SC=	VLT= %	ER= %
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= %	ER= %
Double Glazing		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
External Shading		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Solar Radiation through Glazing		0.52 W/m ²				
Average Absorptivity (roof)		0.7				
Overall RTTV _{Roof}		3.30 W/m ²				

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

Notes :

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

RTTV Summary Sheet

Address: Tower 1 & Tower 2, 9 Lung Kee Road, Beacon Hill, Kowloon BD Ref. No. _____

Building Type: Residential

RTTV calculated by: 1. Registered Professional Engineers
 2. Architect
 3. Others, please specify: _____

No. of Storeys (Residential Units): 7

Table 1

Doomed to Satisfy RTTV _{max}	
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 _{max}		North	South	West	East	North-West	South-East	North-East	South-West
Facade Orientation		North	South	West	East	North-West	South-East	North-East	South-West
Wall Orientation Factor		0.77	0.735	1.131	1.072	0.724	1.05	0.724	1.072
Total External Wall		279.07 m ²	455.27 m ²	304.24 m ²	231.43 m ²	279.07 m ²	455.27 m ²	304.24 m ²	231.43 m ²
Total Window Area		141.57 m ²	475.27 m ²	477.74 m ²	16.07 m ²	141.57 m ²	475.27 m ²	477.74 m ²	16.07 m ²
Window to Wall Ratio		0.54	0.65	0.66	0.07	0.54	0.65	0.66	0.07
Heat Conduction		2.29 W/m ²	1.57 W/m ²	0.20 W/m ²	6.44 W/m ²	2.68 W/m ²	1.67 W/m ²	5.04 W/m ²	6.86 W/m ²
Window		0.48 W/m ²	0.7 W/m ²	0.46 W/m ²	0.46 W/m ²	0.56 W/m ²	0.76 W/m ²	0.66 W/m ²	0.07 W/m ²
Glass Type		Reflexive Area= 161.57 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 455.27 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 477.74 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 16.07 m ² SC= 0.46 VLT= 54% ER= 15%	Reflexive Area= 141.57 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 455.27 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 304.24 m ² SC= 0.46 VLT= 54% ER= 15%	Medium Area= 231.43 m ² SC= 0.46 VLT= 54% ER= 15%
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 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Overhang <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sidelight <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Solar Radiation through		8.20 W/m ²	12.08 W/m ²	3.41 W/m ²	1.43 W/m ²	7.57 W/m ²	13.02 W/m ²	2.93 W/m ²	1.43 W/m ²
Average Absorptivity		0.5	0.5 / 0.8	0.5	0.5	0.5	0.5 / 0.8	0.5	0.5
RTTV _{max} at each facade		10.97 W/m ²	16.86 W/m ²	4.77 W/m ²	7.95 W/m ²	12.43 W/m ²	15.47 W/m ²	3.98 W/m ²	7.10 W/m ²
Overall RTTV _{max}					12.10 W/m ²				

Table 3

RTTV _{max}	
Roof Orientation Factor	
Total Roof Area (Residential Units)	2.76 m ²
Total Skylight Area	404.78 m ²
Heat Conduction	2.73 W/m ²
Skylight	
Glass Type	
Reflective	Area= m ² SC= VLT= % ER= %
Tinted	Area= m ² SC= VLT= % ER= %
Clear	Area= m ² 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	0 W/m ²
Average Absorptivity (roof)	0.7
Overall RTTV _{max}	2.73 W/m ²

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

- Notes
- Please tick in the box as appropriate
 - Window and skylight data should represent the major proportion of its use in the development.