



# 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.

PNAP  
**APP-156**  
**Appendix A**

(17A) (7)

Address: Residential Re-development, No. 2 Headland Road, Repulse Bay, R.B.L. 676, Hong Kong		BD Ref. No. BD 2/2014/16
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)	4	

**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		North					Northeast					Southeast				South					
Wall Orientation Factor		0.790					0.924					1.051				0.975					
Total External Wall Area (Residential Units)		92.44 m <sup>2</sup>					253.09 m <sup>2</sup>					164.72 m <sup>2</sup>				48.23 m <sup>2</sup>					
Total Window Factor		16.10 m <sup>2</sup>					124.32 m <sup>2</sup>					22.79 m <sup>2</sup>				21.65 m <sup>2</sup>					
Heat Conduction	Opaque Wall	1.99 W/m <sup>2</sup>					1.37 W/m <sup>2</sup>					2.67 W/m <sup>2</sup>				1.65 W/m <sup>2</sup>					
	Window	0.13 W/m <sup>2</sup>					0.44 W/m <sup>2</sup>					0.14 W/m <sup>2</sup>				0.42 W/m <sup>2</sup>					
Window	Glass Type	<input type="checkbox"/> Reflective	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area=	SC=	VLT= %	ER= %
		<input type="checkbox"/> Tinted	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area=	SC=	VLT= %	ER= %	<input type="checkbox"/> Tinted	Area=	SC=	VLT= %	ER= %
		<input checked="" type="checkbox"/> Clear	Area= 16.10 m <sup>2</sup>	SC= 0.32	VLT= 50 %	ER= 14 %	<input checked="" type="checkbox"/> Clear	Area= 124.32 m <sup>2</sup>	SC= 0.32	VLT= 50 %	ER= 14 %	<input checked="" type="checkbox"/> Clear	Area= 22.79 m <sup>2</sup>	SC= 0.32	VLT= 50 %	ER= 14 %	<input checked="" type="checkbox"/> Clear	Area= 21.65 m <sup>2</sup>	SC= 0.32	VLT= 50 %	ER= 14 %
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			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			
		Sidefin		<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			
Solar Radiation through Glazing		1.84 W/m <sup>2</sup>					5.74 W/m <sup>2</sup>					1.94 W/m <sup>2</sup>				5.85 W/m <sup>2</sup>					
Average Absorptivity		0.35					0.35					0.35				0.35					
RTTV <sub>Wall</sub> at each facade		3.96 W/m <sup>2</sup>					7.54 W/m <sup>2</sup>					4.75 W/m <sup>2</sup>				7.47 W/m <sup>2</sup>					
Overall RTTV <sub>Wall</sub>		7.61 W/m <sup>2</sup>																			

**Table 3**

RTTV <sub>Roof</sub>													
Roof Orientation Factor		2.16											
Total Roof Area (Residential Units)		568.40 m <sup>2</sup>											
Total Skylight Area		0 m <sup>2</sup>											
Heat Conduction	Roof	2.82 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"/> Reflective	Area=	m <sup>2</sup>	SC=	VLT= %	ER= %
		<input type="checkbox"/> Tinted	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											
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>		2.82 W/m <sup>2</sup>											

## Matters to Note

Any person making a false declaration or misrepresenting a material fact shall be guilty of a criminal offence and subject to prosecution.

### A. Personal Data

#### Purposes of Collection

1. The personal data provided by means of this form will be used by the Buildings Department for the following purposes:
  - (a) activities relating to the processing of your submission in this form;
  - (b) activities relating to the above proposed works, and administration of the Buildings Ordinance and other legislations; and
  - (c) facilitating communication between the Buildings Department and yourself.
2. It is obligatory for you to provide the information as required in the form. If you fail to provide the required data, delay may be caused in processing of your submission or even result in rejection of the application.

#### Classes of Transferees

3. The personal data you provided by means of this form may be disclosed to other government departments, bureaux, organisations or any persons for the purposes mentioned in paragraph 1 above.

#### Access to Personal Data

4. You have the right of access and correction with respect to the personal data as provided under the Personal Data (Privacy) Ordinance. The Buildings Department has the right to charge a reasonable fee for the processing of any data access request. Request for personal data access and correction should be addressed to the Buildings Department.

### B. Completion of Form

1. Please ensure that all relevant parts of the form are duly completed. Please enclose all supporting documents.
2. If incomplete or erroneous information is provided in the form, the Buildings Department may not be able to process the submission.
3. Enquiries regarding this form should be addressed to the Buildings Department.

### C. Submission Methods

1. **By Post / In Person** - This form together with the relevant documents shall be posted to or submitted in person to the Buildings Department:

**For submissions relating to advisory letter/order/notice/direction:**

Receipt & Despatch Counter, Building Department, 12/F Pioneer Centre, 750 Nathan Road, Kowloon.

**For other submissions to the New Buildings Division:**

Receipt & Despatch Counter, Building Department, 7/F Cityplaza Three, 14 Taikoo Wan Road, Quarry Bay, Hong Kong.

### D. Contact Details

Buildings Department  
Address: 12/F, Pioneer Centre, 750 Nathan Road, Kowloon.  
Tel No.: 2626 1616 (handled by "1823")  
Fax No.: 2537 4992  
Email: enquiry@bd.gov.hk



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 ER = External Reflectance  
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 Window and skylight data should represent the major proportion of its use in the development.

**PNAP  
 APP-156  
 Appendix A**

Address:		BD Ref. No.
Building Type:	Residential	
RTTV calculated by	<input type="checkbox"/> 1. Registered Professional Engineers	
	<input 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>								
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		Southwest				West				Northwest							
Wall Orientation Factor		1.092				1.131				0.965							
Total External Wall Area (Residential Units)		50.56 m <sup>2</sup>		Window to Wall Ratio = 0.334		276.61 m <sup>2</sup>		Window to Wall Ratio = 0.713		70.05 m <sup>2</sup>		Window to Wall Ratio = 0.03		m <sup>2</sup> =			
Total Window Factor		16.91 m <sup>2</sup>				197.23 m <sup>2</sup>				1.73 m <sup>2</sup>				m <sup>2</sup> =			
Heat Conduction	Opaque Wall	2.24 W/m <sup>2</sup>				1.05 W/m <sup>2</sup>				2.91 W/m <sup>2</sup>				W/m <sup>2</sup>			
	Window	0.35 W/m <sup>2</sup>				0.77 W/m <sup>2</sup>				0.02 W/m <sup>2</sup>				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 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"/> Tinted	Area= m <sup>2</sup>	SC=	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m <sup>2</sup>	SC=	VLT= % ER= %	<input type="checkbox"/> Tinted	Area= m <sup>2</sup>	SC=	VLT= % ER= %
		<input checked="" type="checkbox"/> Clear	Area= 16.91 m <sup>2</sup>	SC= 0.32	VLT= 50 % ER= 14 %	<input checked="" type="checkbox"/> Clear	Area= 197.23 m <sup>2</sup>	SC= 0.32	VLT= 50 % ER= 14 %	<input checked="" type="checkbox"/> Clear	Area= 1.73 m <sup>2</sup>	SC= 0.32	VLT= 50 % ER= 14 %	<input type="checkbox"/> Clear	Area= m <sup>2</sup>	SC=	VLT= 50 % 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 type="checkbox"/> Yes <input type="checkbox"/> No							
External Shading	Overhang	<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		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No							
	Sidefin	<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		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Solar Radiation through Glazing		4.88 W/m <sup>2</sup>				9.87 W/m <sup>2</sup>				0.32 W/m <sup>2</sup>				W/m <sup>2</sup>			
Average Absorptivity		0.35				0.377				0.35							
RTTV <sub>Wall</sub> at each facade		7.47 W/m <sup>2</sup>				11.69 W/m <sup>2</sup>				3.25 W/m <sup>2</sup>				W/m <sup>2</sup>			
Overall RTTV <sub>Wall</sub>		W/m <sup>2</sup>															

**Table 3**

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

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