

Proposed House Development at Discovery Bay, Lantau Island Phase 18 in Area 2a, R.P. of Lot No. 385 & Extensions thereto in D.D. 352
Final Energy Efficiency Report



RTTV Summary Sheet

Notes:
ER = External Reflectance
SC = Shading Coefficient
VLT = Viable Light Transmittance
Window and skylight data should represent the major proportion of its use in the development.

PNAP APP-156 Appendix A

Address: Area 2a, Discovery Bay, R.P. of Lot No. 385 & Extensions thereto in D.D. 352 Lantau Island BD Ref. No. BD 2/9215/14

Building Type: Residential

RTTV calculated by: 1. Registered Professional Engineers
 2. Architect
 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	NE				SW				SE				NW			
Wall Orientation Factor	0.924				1.092				1.051				0.965			
Total External Wall Area (Residential Units)	64.9 m ²				53.6 m ²				92.1 m ²				55.9 m ²			
Window to Wall Ratio	*0.75				*0.33				*0.24				*0.16			
Total Window Factor	48.5 m ²				17.4 m ²				21.8 m ²				8.9 m ²			
Heat Conduction	0.94 W/m ²				2.93 W/m ²				3.18 W/m ²				3.23 W/m ²			
Window	0.78 W/m ²				0.40 W/m ²				0.28 W/m ²				0.17 W/m ²			
Window	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	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= 55 %	ER= 18 %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= 55 %	ER= 18 %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= 55 %	ER= 18 %
		<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= 55 %	ER= 18 %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= 55 %	ER= 18 %	<input type="checkbox"/> Clear	Area= m ²	SC=	VLT= 55 %	ER= 18 %
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	<input type="checkbox"/> Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Overhang <input type="checkbox"/> Yes <input type="checkbox"/> No			
Solar Radiation through Glazing	12.24 W/m ²				6.22 W/m ²				4.51 W/m ²				2.81 W/m ²			
Average Absorptivity	0.5				0.5				0.5				0.5			
RTTV _{Wall} at each facade	13.95 W/m ²				9.56 W/m ²				7.97 W/m ²				6.21 W/m ²			
Overall RTTV _{Wall}	9.38 W/m ²															

Table 3

RTTV _{Roof}											
Roof Orientation Factor	2.16										
Total Roof Area (Residential Units)	79.2 m ²										
Total Skylight Area	/ m ²										
Heat Conduction	2.28 W/m ²										
Skylight	/ W/m ²										
Skylight	Glass Type	<input type="checkbox"/> Reflective	Area= m ²	SC=	VLT= %	ER= %	<input type="checkbox"/> Reflective	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= %
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 ²										
Average Absorptivity (roof)	0.68										
Overall RTTV _{Roof}	2.28 W/m ²										

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

- The personal data provided by means of this form will be used by the Buildings Department for the following purposes:
 - activities relating to the processing of your submission in this form;
 - activities relating to the above proposed works, and administration of the Buildings Ordinance and other legislations; and
 - 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

- Please ensure that all relevant parts of the form are duly completed. Please enclose all supporting documents.
- If incomplete or erroneous information is provided in the form, the Buildings Department may not be able to process the submission.
- 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:

General Enquiry and Receipt Counter, G/F, Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, You Ma Tei, Kowloon.

For other submissions to the New Buildings Division:

Receipt & Despatch Counter, Buildings Department, 7/F, 14 Taikoo Wan Road, Taikoo Shing, Hong Kong.

D. Contact Details

Buildings Department
Address: Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, You Ma Tei, Kowloon
Tel No.: 2628 1616 (handled by *1823*)
Fax No.: 2537 4992
Email: enquiry@bd.gov.hk