

***OTTV (RRF) Calculation Report
For
Proposed House Development
in Demarcation District No. 105 Ngau Tam Mei, Yuen Long, N.T.***

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OTTV(RRF) Calculation Report

INTRODUCTION

The building is Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

The General Building Plan has been submitted to Buildings Department under submission letter dated 2 Feb 2021.

This document is the Overall Thermal Transfer Value calculation for energy consumption of the building envelope demonstrated by computation in accordance with the Code of Practice for Overall Thermal Transfer Value in Buildings

Support calculation, building information, glazing information and general building plan are submitted in the attached document.

CONCLUSION

The following result are obtained from the submitted calculation in Form OTTV 4

for Podium = 16.41 W/m² < 56 W/m² as required by BD requirement

Therefore, the recreation facilities of residential has been designed and constructed to have a suitable Overall Thermal Transfer Value (OTTV)(RRF) in accordance with section 39 of the Building Ordinance.

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Gross Wall Calculations

Storey heights : 4.75 m
Ground floor : 4.75 m

East Elevation

Recreation Facilities	G/F	4.13	x	4.75	=	19.6 m ²	19.6 m ²
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South Elevation

Recreation Facilities	G/F	3.275	x	4.75	=	15.6 m ²	15.6 m ²
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West Elevation

Recreation Facilities	G/F	3.61	x	4.75	=	17.1 m ²	17.1 m ²
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North Elevation

Recreation Facilities	G/F	4.85	x	4.75	=	23.0 m ²	23.0 m ²
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Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Window Schedule

Orientation of Facade	Floor	Glass Thickness m	Type	Size and no./floor m	Total area per floor m ²
East	G/F	0.01	Tinted	2.8 x 3.6	10.1

South

West	G/F	0.01	Tinted	3.65 x 3.6	13.1
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North

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Accountable Roof Area

Podium Roof

Gross Area = m²

Roof Panel 8.35 = 8.4 m²

Roof

non-accountable = Nil m²

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

"U" value of composite beams & columns

W1 for beam & column	resistance	Weight (kg/m ²)
external surface film	0.044	
5 mm white mosaic tiles	0.003	12.50
10 mm cement / sand render	0.014	18.60
600 mm concrete beam & cloumn	0.278	1440.00
10mm gypsum plaster	0.026	11.20
internal surface film	0.299	
Totals	0.664	1482.30

$$U = 1.505 \text{ W/m}^{20}\text{C}$$

"U" value of composite concrete walls

W2 for wall panel	resistance	Weight (kg/m ²)
external surface film	0.044	
5 mm white mosaic tiles	0.003	12.50
10 mm cement / sand render	0.014	18.60
150 mm concrete panel	0.069	240.00
10 mm gypsum plaster	0.026	11.20
internal surface film	0.299	
Totals	0.456	282.30

$$U = 2.193 \text{ W/m}^{20}\text{C}$$

"U" value of core walls

W3 for wall panel	resistance	Weight (kg/m ²)
external surface film	0.044	
5 mm white mosaic tiles	0.003	12.50
10 mm cement / sand render	0.014	18.60
250 mm concrete wall	0.116	720.00
10 mm gypsum plaster	0.026	11.20
internal surface film	0.299	
Totals	0.502	762.30

$$U = 1.991 \text{ W/m}^{20}\text{C}$$

"U" value of composite roof

R1 for beams (panels)	resistance	Weight (kg/m ²)
external surface film	0.055	
25 mm tiles	0.023	52.50
20 mm asphalt	0.017	47.00
50 mm cement / sand screed	0.069	93.00
50 mm polystyrene insulation	1.471	1.25
600 mm r. concrete	0.278	1440.00
10 mm gypsum plaster	0.026	11.20
internal surface film	0.801	
Totals	2.740	1644.95

$$U = 0.365 \text{ W/m}^{20}\text{C}$$

d1(R1)

Building (Energy Efficiency) Regulation
Form OTTV 1
Calculation of 'U' Value of Composite Wall/Roof
and Detail of Other Values

Sheet No. A 1

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

BD Ref 2/9179/15

Physical data of Opaque Wall

Facade Orientation facing East Elevation

Solar Factor 168

*Wall/Roof Code No.	W1	W2	W3	W4
Location of *Wall/Roof	Concrete Walls G/F			
External Finish Material	white mosaic tiles			
Conductivity W/m ⁰ C	1.5			
Density kg/m ³	2500			
Thickness m	0.005			
Absortivity (α)	0.9			
Intermediate component	cement reder			
Conductivity W/m ⁰ C	0.72			
Density kg/m ³	1860			
Thickness m	0.01			
Intermediate component	r. concrete			
Conductivity W/m ⁰ C	2.16			
Density kg/m ³	2400			
Thickness m	0.15			
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Internal Finish Material	white semi gloss paint on gypsum plaster			
Conductivity W/m ⁰ C	0.38			
Density kg/m ³	1120			
Thickness m	0.02			
Absortivity (α)	0.3			
U' value of composite *Wall/Roof	2.19			
Area of *Wall/Roof m ²	9.54			
Density of composite *Wall/Roof kg/m ²	282			
Equivalent temperature Different (TD _{EQ})	4.30			

Building (Energy Efficiency) Regulation
Form OTTV 2
Windows/Rooflight Schedule

Sheet No. B 1

BD Ref

2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data on *window/rooflight

Facade Orientation facing

East Elevation

Solar Factor (SF) is 168

*Windows/Rooflight Code No.	F ₁	F ₂	F ₃	F ₄
Location of *Window/Rooflight	G/F unshaded			
Glazing type	Clear			
Thickness m	0.01			
Shading Coefficient (SC)	0.43			
Type of shading device	-			
External Shading Multiplier (ESM)	1			
Area of glazing m ²	10.08			

Building (Energy Efficiency) Regulation
Form OTTV 3
Calculation of OTTV of Individual Facade in Building Envelope

Sheet No. C 1

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Facade Orientation facing : East Elevation

Opaque *Wall/Roofs

Code No.	Description	*A _w /A _f	U	α	TD _{EQ}	Sum
W1	Concrete Walls G/F	9.54	2.19	0.9	4.3	80.95
W2						
W3						
W4						
Subtotals		9.54	(A)		Heat Gain	80.95 (C)

Fenestration

Code No.	Description	*A _f _w /A _f	SC	ESM	SF	Sum
F1	G/F unshaded	10.08	0.43	1.00	168	728.18
F2						
F3						
F4						
Subtotals		10.08	(B)		Heat Gain	728.18 (D)

Gross Heat Gain (C+D) = 809.13
 Gross Area (A+B) = 19.62
 OTTV = (C+D)/(A+B) = 41.25 W/m²

*Delete as appropriate

Building (Energy Efficiency) Regulation
Form OTTV 1
Calculation of 'U' Value of Composite Wall/Roof
and Detail of Other Values

Sheet No. A 2

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data of Opaque Wall

Facade Orientation facing South Elevation

Solar Factor 191

*Wall/Roof Code No.	W1	W2	W3	W4
Location of *Wall/Roof	Concrete Walls G/F-1/F			
External Finish Material	white mosaic tiles			
Conductivity W/m ⁰ C	1.5			
Density kg/m ³	2500			
Thickness m	0.005			
Absortivity (α)	0.9			
Intermediate component	cement reder			
Conductivity W/m ⁰ C	0.72			
Density kg/m ³	1860			
Thickness m	0.01			
Intermediate component	r. concrete			
Conductivity W/m ⁰ C	2.16			
Density kg/m ³	2400			
Thickness m	0.15			
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Internal Finish Material	white semi gloss paint on gypsum plaster			
Conductivity W/m ⁰ C	0.38			
Density kg/m ³	1120			
Thickness m	0.02			
Absortivity (α)	0.3			
U' value of composite *Wall/Roof	2.19			
Area of *Wall/Roof m ²	15.56			
Density of composite *Wall/Roof kg/m ²	282			
Equivalent temperature Different (TD _{EQ})	4.23			

Building (Energy Efficiency) Regulation
Form OTTV 2
Windows/Rooflight Schedule

Sheet No. B 2

BD Ref

2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data on *window/rooflight

Facade Orientation facing

South Elevation

Solar Factor (SF) is

191

*Windows/Rooflight Code No.	F ₁	F ₂	F ₃	F ₄
Location of *Window/Rooflight				
Glazing type				
Thickness m				
Shading Coefficient (SC)				
Type of shading device				
External Shading Multiplier (ESM)				
Area of glazing m ²				

Building (Energy Efficiency) Regulation
Form OTTV 3
Calculation of OTTV of Individual Facade in Building Envelope

Sheet No. C 2

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Facade Orientation facing : South Elevation

Opaque *Wall/Roofs

Code No.	Description	*A _w /A _f	U	α	TD _{EQ}	Sum
W1	Concrete Walls G/F-1/F	15.56	2.19	0.9	4.23	129.88
W2						
W3						
W4						
Subtotals		15.56	(A)		Heat Gain	129.88 (C)

Fenestration

Code No.	Description	*A _f _w /A _f	SC	ESM	SF	Sum
F1						
F2						
F3						
F4						
Subtotals		0.0	(B)		Heat Gain	0.0 (D)

Gross Heat Gain (C+D) = 129.88
 Gross Area (A+B) = 15.56
 OTTV = (C+D)/(A+B) = 8.35 W/m²

*Delete as appropriate

Building (Energy Efficiency) Regulation
Form OTTV 1
Calculation of 'U' Value of Composite Wall/Roof
and Detail of Other Values

Sheet No. A 3

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data of Opaque Wall

Facade Orientation facing West Elevation

Solar Factor 175

*Wall/Roof Code No.	W1	W2	W3	W4
Location of *Wall/Roof	Concrete Walls G/F			
External Finish Material	white mosaic tiles			
Conductivity W/m ⁰ C	1.5			
Density kg/m ³	2500			
Thickness m	0.005			
Absortivity (α)	0.9			
Intermediate component	cement reder			
Conductivity W/m ⁰ C	0.72			
Density kg/m ³	1860			
Thickness m	0.01			
Intermediate component	r. concrete			
Conductivity W/m ⁰ C	2.16			
Density kg/m ³	2400			
Thickness m	0.15			
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Internal Finish Material	White semi gloss paint on gypsum plaster			
Conductivity W/m ⁰ C	0.38			
Density kg/m ³	1120			
Thickness m	0.02			
Absortivity (α)	0.3			
U' value of composite *Wall/Roof	2.19			
Area of *Wall/Roof m ²	4.01			
Density of composite *Wall/Roof kg/m ²	282			
Equivalent temperature Different (TD _{EQ})	3.54			

Building (Energy Efficiency) Regulation
Form OTTV 2
Windows/Rooflight Schedule

Sheet No. B 3

BD Ref

2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data on *window/rooflight

Facade Orientation facing

West Elevation

Solar Factor (SF) is 175

*Windows/Rooflight Code No.	F ₁	F ₂	F ₃	F ₄
Location of *Window/Rooflight				
Glazing type				
Thickness m				
Shading Coefficient (SC)				
Type of shading device				
External Shading Multiplier (ESM)				
Area of glazing m ²				

Building (Energy Efficiency) Regulation
Form OTTV 3
Calculation of OTTV of Individual Facade in Building Envelope

Sheet No. C 3

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Facade Orientation facing : West Elevation

Opaque *Wall/Roofs

Code No.	Description	*A _w /A _f	U	α	TD _{EQ}	Sum
W1	Concrete Walls G/F-1/F	4.01	2.19	0.9	3.54	28.00
W2						
W3						
W4						
Subtotals		4.01	(A)		Heat Gain	28.00 (C)

Fenestration

Code No.	Description	*A _f _w /A _f	SC	ESM	SF	Sum
F1						
F2						
F3						
F4						
Subtotals		0.00	(B)		Heat Gain	0.00 (D)

Gross Heat Gain (C+D) = 28.00
 Gross Area (A+B) = 4.01
 OTTV = (C+D)/(A+B) = 6.99 W/m²

*Delete as appropriate

Building (Energy Efficiency) Regulation
Form OTTV 1
Calculation of 'U' Value of Composite Wall/Roof
and Detail of Other Values

Sheet No. A 4

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data of Opaque Wall

Facade Orientation facing North Elevation

Solar Factor 104

*Wall/Roof Code No.	W1	W2	W3	W4
Location of *Wall/Roof	Concrete Walls G/F			
External Finish Material	White Mosaic Tiles			
Conductivity W/m ⁰ C	1.5			
Density kg/m ³	2500			
Thickness m	0.005			
Absortivity (α)	0.9			
Intermediate component	cement reder			
Conductivity W/m ⁰ C	0.72			
Density kg/m ³	1860			
Thickness m	0.01			
Intermediate component	R. Concrete			
Conductivity W/m ⁰ C	2.16			
Density kg/m ³	2400			
Thickness m	0.15			
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Intermediate component				
Conductivity W/m ⁰ C				
Density kg/m ³				
Thickness m				
Internal Finish Material	White semi gloss paint on gypsum plaster			
Conductivity W/m ⁰ C	0.38			
Density kg/m ³	1120			
Thickness m	0.02			
Absortivity (α)	0.3			
U' value of composite *Wall/Roof	2.19			
Area of *Wall/Roof m ²	23.04			
Density of composite *Wall/Roof kg/m ²	282			
Equivalent temperature Different (TD _{EQ})	3.86			

Building (Energy Efficiency) Regulation
Form OTTV 2
Windows/Rooflight Schedule

Sheet No. B 4

BD Ref

2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data on *window/rooflight

Facade Orientation facing

North Elevation

Solar Factor (SF) is 104

*Windows/Rooflight Code No.	F ₁	F ₂	F ₃	F ₄
Location of *Window/Rooflight				
Glazing type				
Thickness m				
Shading Coefficient (SC)				
Type of shading device				
External Shading Multiplier (ESM)				
Area of glazing m ²				

Building (Energy Efficiency) Regulation
Form OTTV 3
Calculation of OTTV of Individual Facade in Building Envelope

Sheet No. C 4

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Facade Orientation facing : North Elevation

Opaque *Wall/Roofs

Code No.	Description	*A _w /A _f	U	α	TD _{EQ}	Sum
W1	Concrete Walls G/F	23.04	2.19	0.9	3.86	175.52
W2						
W3						
W4						
Subtotals		23.04	(A)		Heat Gain	175.52 (C)

Fenestration

Code No.	Description	*A _f _w /A _f	SC	ESM	SF	Sum
F1						
F2						
F3						
F4						
Subtotals		0.00	(B)		Heat Gain	0.00 (D)

Gross Heat Gain (C+D) = 175.52
 Gross Area (A+B) = 23.04
 OTTV = (C+D)/(A+B) = 7.62 W/m²

*Delete as appropriate

Building (Energy Efficiency) Regulation
Form OTTV 1
Calculation of 'U' Value of Composite Wall/Roof
and Detail of Other Values

Sheet No. A 5

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data of Opaque Roof

Facade Orientation facing ROOF (Podium)

Solar Factor 264

*Wall/Roof Code No.	R1	R2	R3	R4
Location of *Wall/Roof	Roof Panels			
External Finish Material	tiles			
Conductivity W/m ⁰ C	1.1			
Density kg/m ³	2100			
Thickness m	0.025			
Absortivity (α)	0.65			
Intermediate component	asphalt			
Conductivity W/m ⁰ C	1.15			
Density kg/m ³	2350			
Thickness m	0.02			
Intermediate component	cement render screed			
Conductivity W/m ⁰ C	0.72			
Density kg/m ³	1860			
Thickness m	0.05			
Intermediate component	expanded polystyrene			
Conductivity W/m ⁰ C	0.034			
Density kg/m ³	25			
Thickness m	0.05			
Intermediate component	r. concrete			
Conductivity W/m ⁰ C	2.16			
Density kg/m ³	2400			
Thickness m	0.15			
Internal Finish Material	gypsum plaster			
Conductivity W/m ⁰ C	0.38			
Density kg/m ³	1120			
Thickness m	0.01			
Absortivity (α)	0.3			
U' value of composite *Wall/Roof	0.36			
Area of *Wall/Roof m ²	8			
Density of composite *Wall/Roof kg/m ²	1645			
Equivalent temperature Different (TD _{EQr})	7.90			

Building (Energy Efficiency) Regulation
Form OTTV 2
Windows/Rooflight Schedule

Sheet No. B 5

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Physical data on *window/rooflight

Facade Orientation facing ROOF (Podium) Solar Factor (SF) is 264

*Windows/Rooflight Code No.	RL ₁	RL ₂	RL ₃	RL ₄
Location of *Window/Rooflight				
Glazing type				
Thickness m				
Shading Coefficient (SC)				
Type of shading device				
External Shading Multiplier (ESM)				
Area of glazing m ²				

Building (Energy Efficiency) Regulation
Form OTTV 3
Calculation of OTTV of Individual Facade in Building Envelope

Sheet No. C 5

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Facade Orientation facing : Roof (Podium)

Opaque *Wall/Roofs

Code No.	Description	*A _w /A _r	U	α	TD _{EQ}	Sum
W1	Roof Panels	8.35	0.36	0.65	7.9	15.65
W2						
W3						
W4						
Subtotals		8.35	(A)		Heat Gain	15.65 (C)

Fenestration

Code No.	Description	*A _f /A _r	SC	ESM	SF	Sum
RL1					264	
RL2						
RL3						
RL4						
Subtotals		0.00	(B)		Heat Gain	0.00 (D)

Gross Heat Gain (C+D) =

15.65

Gross Area (A+B) =

8.35

OTTV = (C+D)/(A+B) =

1.87 W/m²

*Delete as appropriate

Building (Energy Efficiency) Regulation
 Form OTTV 4
 Summary of OTTV of Building Envelope

Sheet No.D 1

BD Ref 2/9179/15

Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)

Total Envelope Heat Gain (*Tower / Podium)

Facade	Gross Area From	Gross Heat Gain From
Orientation	Form OTTV 3	Form OTTV 3
East Elevation	19.62	809.13
South Elevation	15.56	129.88
West Elevation	4.01	28.00
North Elevation	23.04	175.52
Subtotal	62.22 (E)	1142.52 (G)
Roof	8.35	15.65
Subtotal	8.35 (F)	15.65 (H)

Total External Wall Area (including windows) =

75.36 m²

Total Window Area =

10.08 m²

Podium Wall OTTV = G/E =

18.36 W/m²

Podium Roofs OTTV = TP/F =

1.87 W/m²

Podium OTTV = (G+H)/(E+F) =

16.41 W/m²

<56 W/m² (OK)

OTTV of Resident's Recreational Facilities Summary Sheet

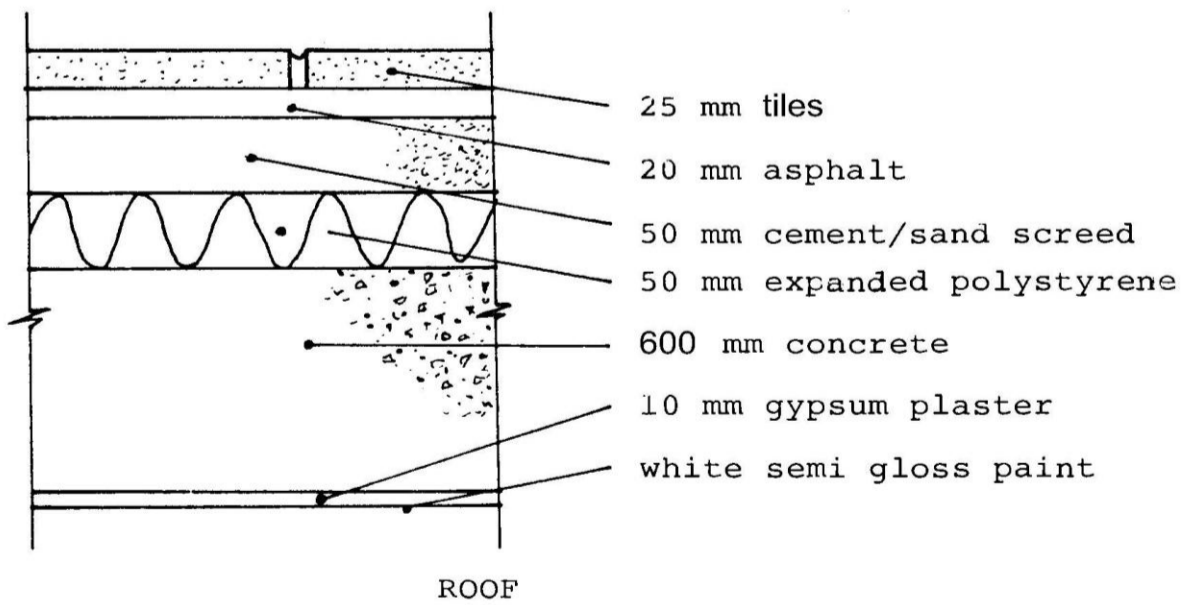
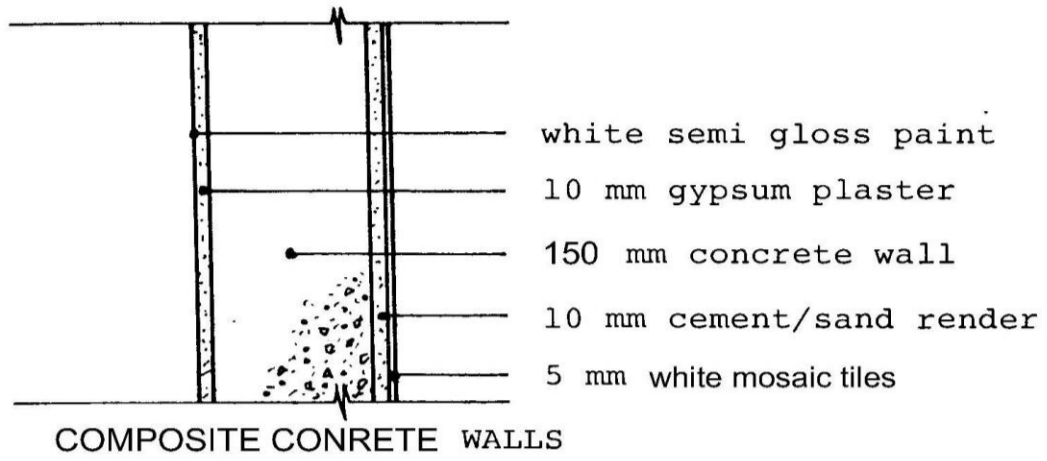
Building Address: Lot 2115, D.D. 105, Ngau Tam Mei, Yuen Long (RRF)				BD Ref. No. 2/9179/15											
Building Type / Use:		Resident's Recreational Facilities													
OTTV Calculated by:		<input checked="" type="checkbox"/> 1. Registered Professional Engineers		Thomas Anderson & Partners Consulting Engineers Ltd.											
		<input type="checkbox"/> 2. Architect													
		<input type="checkbox"/> 3. Others, please specify:-													
Classification:				<input checked="" type="checkbox"/> Podium / <input type="checkbox"/> Tower											
No. of Storeys (RRF)				1											
Gross Floor Area				29.90 m ²											
Usable Floor Area				24.71 m ²											
Total External Wall Area (including Windows)		75.36 m ²		Window to Wall Ratio =		0.308									
Total Window Area		23.22 m ²													
Total Skylight Area		m ²													
** Weighted Average U-value		Opaque Wall		2.19 W/m ²											
		Window		5.61 W/m ²											
		Opaque Roof		0.36 W/m ²											
		Skylight		W/m ²											
Window		Glass Type		<input type="checkbox"/> Reflective		Area = m2		SC =		VLT = %		ER = %			
				<input checked="" type="checkbox"/> Tinted		Area = 23.22 m2		SC = 0.43		VLT = 53 %		ER = 17 %			
				<input type="checkbox"/> Clear		Area = m2		SC =		VLT = %		ER = %			
		Double Glazing				<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No							
		External Shading				Overhang		<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No					
						Sidefin		<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No					
Skylight		Glass Type		<input type="checkbox"/> Reflective		Area = m2		SC =		VLT = %		ER = %			
				<input type="checkbox"/> Tinted		Area = m2		SC =		VLT = %		ER = %			
				<input type="checkbox"/> Clear		Area = m2		SC =		VLT = %		ER = %			
		Double Glazing				<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No							
		External Shading				Overhang		<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No					
						Sidefin		<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No					
** Weighted Average Absorptivity		Wall		0.795											
		Roof		0.795											
** Weighted Average Density		Wall		282.3 kg/m ²											
		Roof		1644.95 kg/m ²											
OTTV _{RRF}		Wall		18.36 W/m ²											
		Roof		1.87 W/m ²											
		Overall Average		16.41 W/m ²											

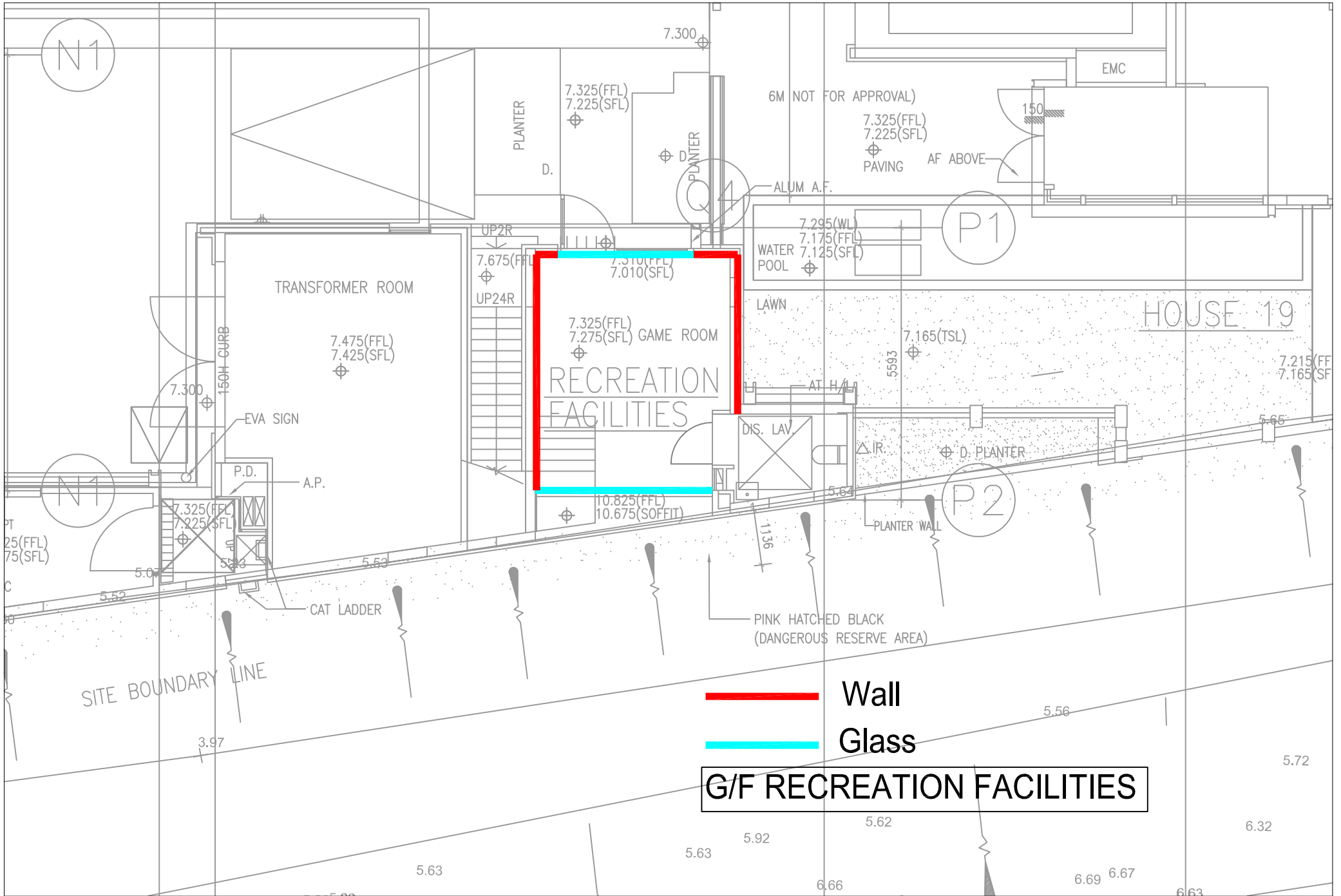
ER = External Reflectance; SC = Shading Coefficient & VLT = Visible Light Transmittance

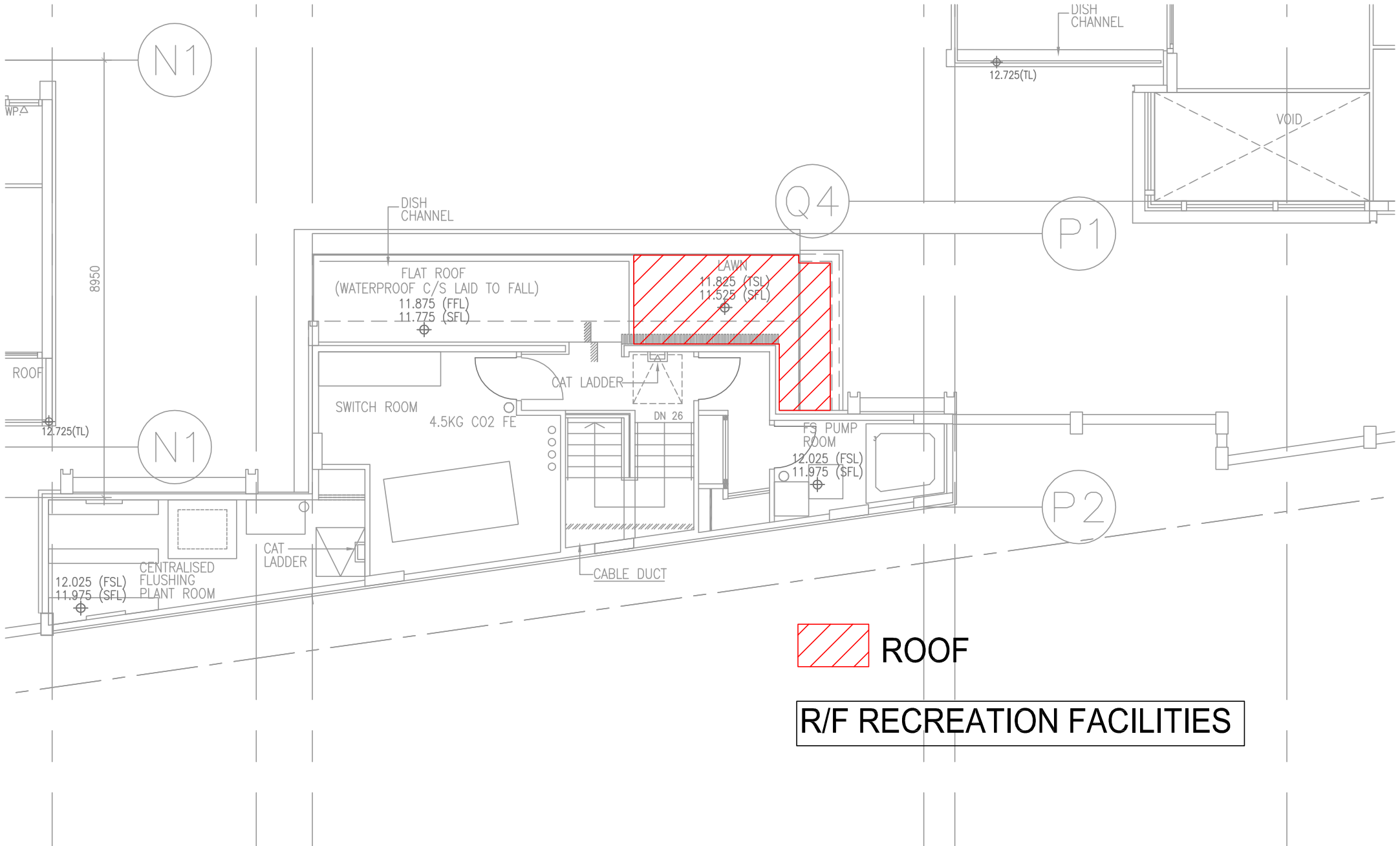
** Weighted by area

- 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.

**Construction of Walls
and Roof**







 ROOF

R/F RECREATION FACILITIES



PERFORMANCE DATA

Project: Proposed Residential Development at Lot No 2115 in D.D.105, Ngau Tam Mei, Yuen Long, New Territories

Date: 21-Jun-18

Prepared by: Phoebe Hu

NO	COMPOSITION	Type	Visible Light (%)			Shading Coefficient	U-Value (W/m ² K)
			Transmittance	Reflectance			
				Outdoor	Indoor		
1	10mm SBTS61B #2 HS + 12A (BLK) + 12mm Clear glass	IGU	53%	17%	10%	0.43	1.74

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