



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.

rec'd
25/11/2020

PNAP
APP-156
 Appendix **A**

Address: **Proposed Composite Development At N.K.I.L. 6534, Junction of Fuk Wing Street, Camp Street & Fuk Wa Street, Sham Shui Po, Kowloons** BD Ref. No.

Building Type: Residential

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

No. of Storeys (Residential Units): **28(3/F to 35/F, exclude 4/F, 13/F, 14/F, 24/F & 34/F)**

Table 1

Deemed to Satisfy RTTV _{Wall}							
Facade Orientation Facing	NNE to NNW	NNW to NNE					
Average Absorptivity	0.6	0.8					
Average Window to Wall Ratio	0.34	0.46					
Shading Coefficient of Glazing	IGU_Curtain Wall(Vision Fix Panel) = 0.45, IGU_Curtain Wall(Vision Openable Panel) = 0.46 IGU_Curtain Wall(Spandrel) = 0.59, IGU_Sliding Door/IGU_French Door = 0.47, Crystal Grey = 0.69						
Average Shading Coefficient of Facade	0.43	0.39					
Visible Light Transmittance	IGU_Curtain Wall(Vision Fix Panel) = 50%, IGU_Curtain Wall(Vision Openable Panel) = 51% IGU_Curtain Wall(Spandrel) = 46%, IGU_Sliding Door/IGU_French Door = 52%, Crystal Grey = 56%						
External Reflectance	IGU_Curtain Wall(Vision Fix Panel) = 17%, IGU_Curtain Wall(Vision Openable Panel) = 18% IGU_Curtain Wall(Spandrel) = 11%, IGU_Sliding Door/IGU_French Door = 18%, Crystal Grey = 5%						

Table 2

RTTV _{Wall}																
Facade Orientation Facing																
Wall Orientation Factor																
Total External Wall Area (Residential Units)		m ²	Window to Wall Ratio =		m ²	Window to Wall Ratio =		m ²	Window to Wall Ratio =		m ²	Window to Wall Ratio =				
Total Window Factor		m ²			m ²			m ²			m ²					
Heat Conduction	Opaque Wall	W/m ²				W/m ²				W/m ²						
	Window	W/m ²				W/m ²				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= %	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		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No								
External Shading	Overhang	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No								
	Sidfin	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No								
Solar Radiation through Glazing		W/m ²				W/m ²				W/m ²						
Average Absorptivity																
RTTV _{Wall} at each facade		W/m ²				W/m ²				W/m ²						
Overall RTTV _{Wall}		W/m ²														

Table 3

RTTV _{Roof}							
Roof Orientation Factor		2.16					
Total Roof Area (Residential Units)		470.1 m ²					
Total Skylight Area		0.93 m ²					
Heat Conduction	Roof	2.68 W/m ²					
	Skylight	0.01 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 checked="" type="checkbox"/> Clear	Area= 0.93 m ²	SC= 0.01	VLT= 83 %	ER= 7 %	
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		0.14 W/m ²					
Average Absorptivity (roof)		R1 = 0.6 / R2 = 0.9					
Overall RTTV _{Roof}		2.83 W/m ²					