Appendix A
(PNAP APP-156)

RTTV Summary Sheet

Address:	34 Mount Kellett Road	BD Ref. No.	BD3/2134/10
Building Type:	Residential		
RTTV calculated by	☐ 1. Registered Professional Engineers		
	☐ 2. Architect		
	☑ 3. Others, please specify : Inhabit Group		
No. of Storeys (Residential Units)	2		

Table 1

Deemed to Satisfy $RTTV_{Wall}$								
Facade Orientation Facing	E	NE	N	NW	W	SW	S	SE
Average Absorptivity	0.24	0.80	0.24	0.23	0.29	0.80	0.34	0.80
Average Window to Wall Ratio	0.43	0	0.43	0	0.07	0	0.23	0
Shading Coefficient of Glazing	0.46	0	0.45	0	0.45	0	0.45	0
Average Shading Coefficient of Facade	0.46	0.99	0.71	0.99	0.41	0.42	0.94	0.48
Visible Light Transmittance	70 %	N/A %	70 %	N/A %	71 %	N/A %	71 %	N/A %
External Reflectance	13 %	N/A %	13 %	N/A %	12 %	N/A %	13 %	N/A %

Table 2

$RTTV_{Wall}$																				
Facade Orientation Facing		EAST				North				West				South						
Wall Orientation Factor		1.072				0.79				1.131				0.975						
Total External Wall Area (Residential Units)		280.55 m²	Window to Wall Ratio = 0.43			93.92 m²	Window to Wall Ratio = 0.43			253.24 m²	Window to Wall Ratio = 0.07			100.74 m²	Window to Wall Ratio = 0.23					
Total Window Area		120.636 m²				40.47 m²				21.79 m²				23.17 m²						
Heat Conduction	Opaque Wall	1.03 W/m²				1.03 W/m²				1.34 W/m²				0.83 W/m²						
	Window	0.52 W/m²				5.06 W/m²				0.08 W/m²				0.40 W/m²						
Window	Glass Type	☐ Reflective	Area= m²	SC=	VLT= % ER= %	☐ Reflective	Area= m²	SC=	VLT= % ER= %	☐ Reflective	Area= m²	SC=	VLT= % ER= %	☐ Reflective	Area= m²	SC=	VLT= % ER= %			
		☐ Tinted	Area= m²	SC=	VLT= % ER= %	☐ Tinted	Area= m²	SC=	VLT= % ER= %	☐ Tinted	Area= m²	SC=	VLT= % ER= %	☐ Tinted	Area= m²	SC=	VLT= % ER= %			
		☑ Clear	Area= 120.63m²	SC= 0.46	VLT=70 % ER= 13 %	☑ Clear	Area= 40.47m²	SC= 0.45	VLT=70 % ER= 13 %	☑ Clear	Area= 21.79 m²	SC= 0.45	VLT=71 % ER= 12%	☑ Clear	Area= 23.17m²	SC= 0.45	VLT=71 % ER= 13 %			
	Double Glazing	☑ Yes ☐ No				☑ Yes ☐ No				☑ Yes ☐ No				☑ Yes ☐ No						
	External Shading	Overhang ☑ Yes ☐ No				Overhang ☑ Yes ☐ No				Overhang ☑ Yes ☐ No				Overhang ☐ Yes ☐ No						
		Sidefin ☑ Yes ☐ No				Sidefin ☑ Yes ☐ No				Sidefin ☑ Yes ☐ No				Sidefin ☑ Yes ☐ No						
Solar Radiation through Gazing		8.64 W/m²				0.29 W/m²				1.37 W/m²				5.85 W/m²						
Average Absorptivity		0.80				0.24				0.29				0.34						
$RTTV_{Wall}$ at each facade		10.18 W/m²				6.38 W/m²				2.78 W/m²				7.08 W/m²						
Overall $RTTV_{Wall}$		6.45 W/m²																		

Table 3

$RTTV_{Roof}$							
Roof Orientation Factor		2.16					
Total Roof Area (Residential Units)		391.04 sqm m²					
Total Skylight Area		30.19 sqm m²					
Heat Conduction	Roof	1.2 W/m²					
	Skylight	1.5 W/m²					
Skylight	Glass Type	☐ Reflective	Area= m²	SC=	VLT= %	ER= %	
		☐ Tinted	Area= m²	SC=	VLT= %	ER= %	
		☑ Clear	Area= 30.19 m²	SC= 0.45	VLT= 70 %	ER= 13 %	
	Double Glazing	☑ Yes ☐ No					
	External Shading	☐ Yes ☑ No					
Solar Radiation through Glazing		2.31 W/m²					
Average Absorptivity (roof)		0.32					
Overall $RTTV_{Roof}$		3.60 W/m²					

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

Notes : (please refer to enclosed report for detail and breakdown)

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

(9/2014)