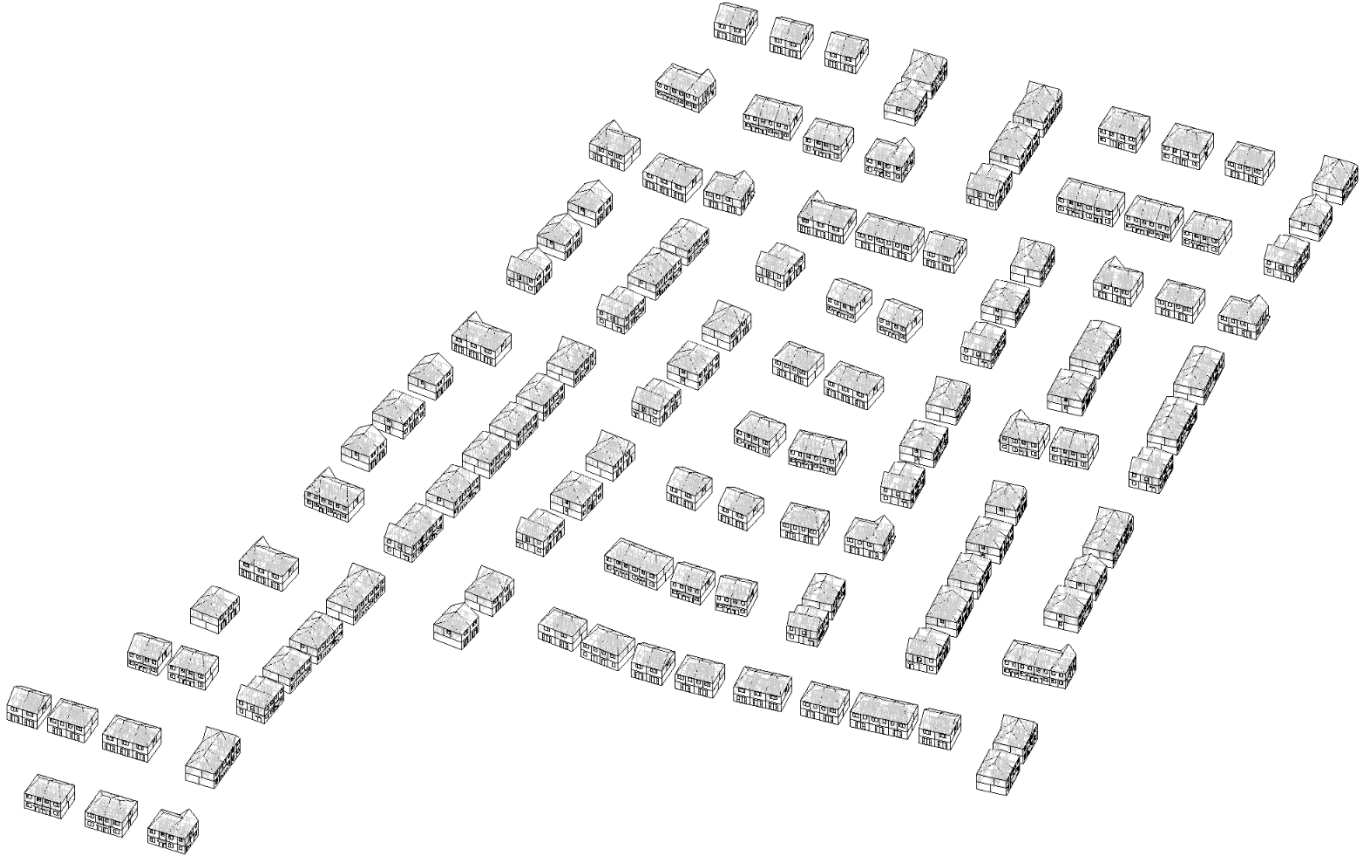


# Part O – Overheating, Summary Report

MELLANDS FIELD, MOUNT ROAD, GORTON, MANCHESTER, M18 7SU

OUR REF: 240212c

DATE: 23/09/2024



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## 1.0 INTRODUCTION

Hurstwood has been appointed to provide a TM59 Summary Report for the proposed 267 houses at Mellands Field, Mount Road, Gorton, Manchester, M18 7SU.



Figure 1. Site Layout, Kellen Homes Drawing KH007-A-100

The purpose of this report is to clearly confirm that:

1. Thermal modelling has been carried out using software in accordance with CIBSE AM11 Building Energy and Environmental Modelling.

The modelling demonstrates that the building design and services strategy can deliver thermal comfort levels in occupied spaces in accordance with the criteria set out in CIBSE Guide A Environmental Design; or other appropriate industry standard (where this sets a higher or more appropriate requirement/level for the building type) to a **warmer than average climate** as per guidance in *CIBSE TM48: Use of climate change data in building simulation*.

2. The software used to carry out the simulation at the detailed design stage provides full dynamic thermal analysis.
3. The results of the dynamic thermal analysis show which areas of the building pass the TM59 criteria and which areas need further consideration.

## 2.0 DECLARATION OF COMPLIANCE WITH CIBSE AM11

CIBSE Applications Manual AM11: 1998, Building Energy and Environmental Modelling has been written to help in the selection and application of BEEM software in practice.

The manual covers:

- a) *Applicability*: BEEM software is normally a complex package of various calculation procedures; it should only be used when it is appropriate to do so.
- b) *Selection*: a large number of BEEM software tools exist; choosing the right tool for the job is the first important task in modelling.
- c) *Quality*: there is always the possibility of errors within software, mistakes in implementation and/ or the misapplication of software. Consideration should be given to validation of software and procedures for their use.
- d) *User skills*: the effect of user errors and assumptions on the results obtained can far outweigh the accuracy of BEEM software. Appropriate training, together with the establishment and use of quality assurance procedures, is an important part of developing a modelling capability.
- e) *Input data*: access to guidance and sources of information for deriving appropriate input data is pertinent to good modelling.

The guidance given in AM11: 1998 has been followed in the production of this report.

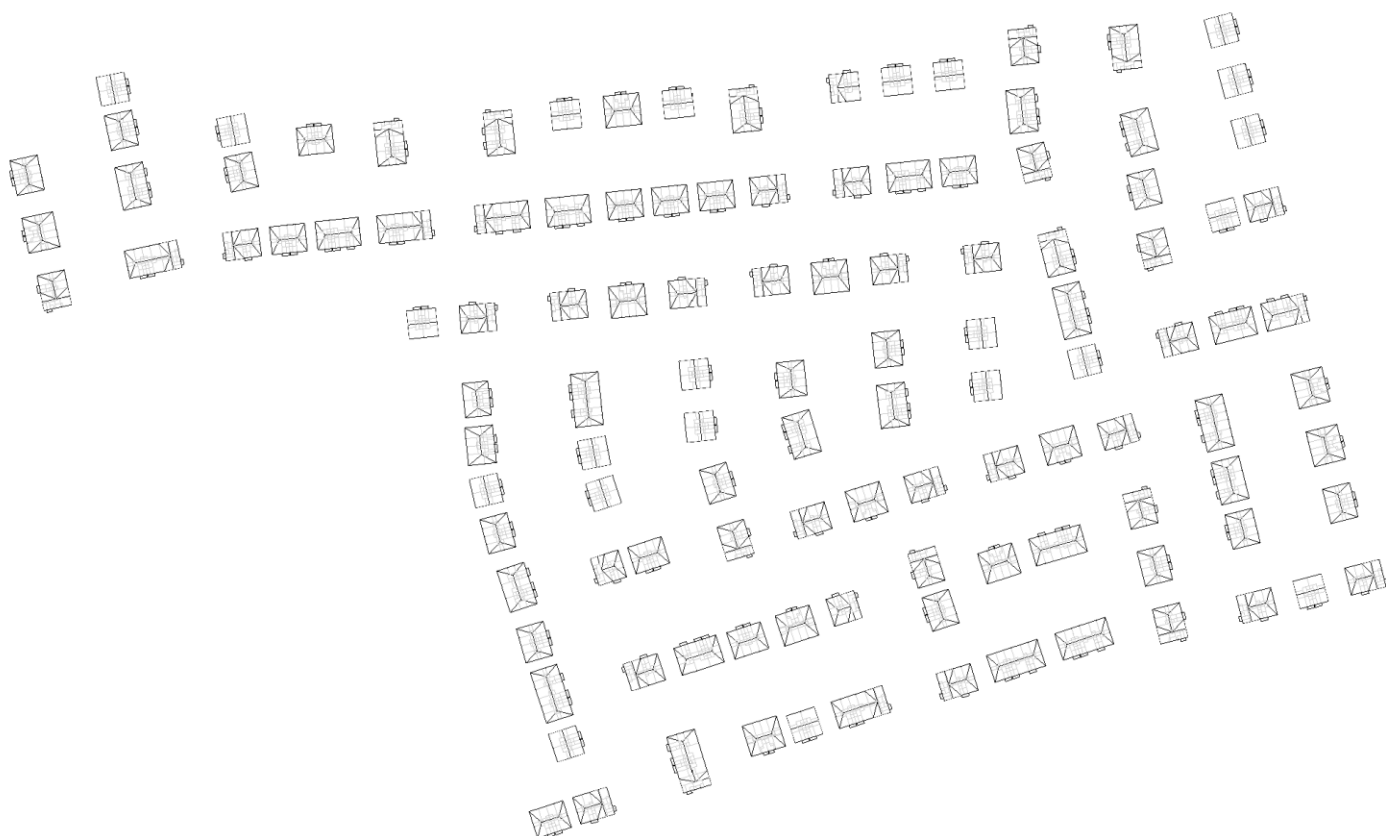


Figure 2. Top view of the proposed site from IES Thermal Model

### 3.0 SOFTWARE USED FOR DYNAMIC THERMAL SIMULATION

The simulation tool used for this investigation is IES Virtual Environment, Version 2023.4.0.0.

The calculation methodology adopted was full Dynamic Thermal Simulation over a period of 365 days with a 20 day pre-conditioning period.

The ApacheSim calculation engine was used and a full SunCast solar shading analysis was performed to ensure the local shading devices and overhangs were accurately reflected in the simulation.

ApacheSim is comprised of the following tools:

- Apache
- ApacheEngine
- Vista & VistaPro
- ApacheView
- ApachePro
- ApacheLocate
- Constructions Database



Calculations are based on first-principles models of heat transfer process and are driven by real weather data.

#### Data Entry Options

- Extensive database of global weather
- Data detailing layer-by-layer thermo-physical properties of building elements
- Comprehensive data on glazing systems including angle-dependent transmissivity and absorptivity
- Sensible and latent gains from lights, equipment and occupants
- Natural ventilation, mechanical ventilation and infiltration
- Plant operation profiles
- Plant efficiency and fuel characteristics
- Powerful facilities for assigning and editing time-varying room data such as plant, casual gains and air exchanges
- Database of constructions
- Time-series profiles
- Tabular Edit feature for Building Template Manager & NCM (for UK Part L)
- Tabular Edit interface for entering properties of thermal templates, room thermal properties, HVAC systems and constructions. Gives ability to quickly enter data, review inputs and includes option to export and import \*.csv files (e.g. Excel)
- Faster project setup using Master Template and Design Options features. The Master Templates feature delivers bulk data copying & rapid automatic seeding of data in to a project while the Design Option feature provides a means to make specific and targeted changes to specified data in a project

#### Analysis options

- User-controlled time steps down to 1 minute
- Idealised or detailed HVAC plant modeling
- Options for natural and mechanical ventilation; specify flows in advance or calculate using MacroFlo and ApacheHVAC
- Choice of models for internal and external convection

#### RadianceIES – Day Lighting and Electric Lighting Simulation

RADIANCE is a computer software package developed by the Lighting Systems Research Group at Lawrence Berkley Laboratory in California, USA. It was developed as a research tool to accurately calculate and predict the visible radiation within a space.

Radiance is internationally recognised as one of the leading lighting simulation tools available. Using a 3-dimensional geometrical model of the physical environment Radiance produces a map of spectral radiance values in a photo-realistic image.

Radiance can be categorised as a “ray-tracing” algorithm, which tracks rays of light backwards from the “eye” to the “focus” of the scene. This contrasts with the “radiosity” technique where the exchange of energy between surface matches is matched.

### SunCast – Solar Shading Analysis

SunCast is used to perform shading and solar insolation studies. It can be used to investigate:

- External obstruction and self-shading of a building.
- Solar mapping through windows and openings.
- The effects of changing orientation of building.

SunCast generates shadows and internal solar insolation from any sun position defined by date, time, orientation, site latitude and longitude. This shadow information can be stored for subsequent analysis by:

- Viewing shadows from any eye position.
- Animating the solar analyses by generating a sequence of images and creating an \*.avi movie.
- Making opaque surfaces "transparent" to permit the user to better view the solar insolation on internal surfaces e.g. “removing” roofs or surfaces to identify internal solar insolation paths.
- Displaying solar surface shading/insolation statistics.
- Output data for thermal simulation.

SunCast can be used in a variety of studies including passive solar design and is essential at the planning stage to visualize the effect of the building on surrounding buildings. SunCast has also been used to study problems such as grass growth in sports stadia and ‘right of light’ issues.

### MacroFlo – Multi Zone Air Movement

MacroFlo uses a multi-zone thermo-fluid solver to simulate bulk air flow driven by wind pressure and buoyancy forces. It allows analysis of problems involving infiltration, natural ventilation and mechanical ventilation. Typical applications include:

- Evaluation of natural ventilation solutions (including Advanced Natural Ventilation and Mixed-mode systems).
- Evaluation of ventilation control strategies.
- An understanding of the performance of double-skin façades.
- Analysis of room temperature statistics in naturally ventilated buildings (simulation of overheating risk).
- Predictions of air velocities through openings.
- Analysis of HVAC systems where the building is used as a return air pathway.

## 4.0 RELEVANT THERMAL COMFORT CRITERIA

Approved Document O – Overheating has been produced to support Part O of Schedule 1 to the Building Regulations 2010. The approved document came into effect on June 15<sup>th</sup> 2022 for use in England.

Building Regulation O1 Requirement:

| Requirement                                                                                                                                                                                              |                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <i>Requirement</i>                                                                                                                                                                                       | <i>Limits on application</i> |
| <b>O1 Overheating mitigation</b>                                                                                                                                                                         |                              |
| (1) Reasonable provision must be made in respect of a dwelling, institution or any other building containing one or more rooms for residential purposes, other than a room in a hotel ("residences") to— |                              |
| (a) limit unwanted solar gains in summer;                                                                                                                                                                |                              |
| (b) provide an adequate means to remove heat from the indoor environment.                                                                                                                                |                              |
| (2) In meeting the obligations in paragraph (1)—                                                                                                                                                         |                              |
| (a) account must be taken of the safety of any occupant, and their reasonable enjoyment of the residence; and                                                                                            |                              |
| (b) mechanical cooling may only be used where insufficient heat is capable of being removed from the indoor environment without it.                                                                      |                              |

Figure 2. Extract from The Building Regulations England

To demonstrate compliance with Regulation O1 using the dynamic thermal modelling method, the following guidance should be followed:

- CIBSE's TM59 methodology for predicting overheating risk.
- The limits on the use of CIBSE's TM59 methodology set out in paragraphs 2.5 and 2.6 of ADO.
- The acceptable strategies for reducing overheating risk in paragraphs 2.7 to 2.11 of ADO.

The CIBSE criteria for homes predominantly naturally ventilated dwellings outlined in Section 4.2 of CIBSE TM59 (2017) has been applied to all habitable rooms: Both of the following criteria must be met in all relevant rooms for the dwelling to pass:

- For living rooms, kitchens and bedrooms: the number of hours during which  $\Delta T$  is greater than or equal to one degree (K) during the period May to September inclusive shall not be more than 3 per cent of occupied hours. (CIBSE TM52 Criterion 1: Hours of exceedance).
- For bedrooms only: to guarantee comfort during the sleeping hours the operative temperature in the bedroom from 10 pm to 7 am shall not exceed 26 °C for more than 1% of annual hours. (Note: 1% of the annual hours between 22:00 and 07:00 for bedrooms is 32 hours, so 33 or more hours above 26 °C will be recorded as a fail).

## 5.0 RELEVANT SIMULATION DATA

### Weather Data

To demonstrate adaptability to a current climate scenario the Manchester\_DSY1\_2020\_High Emissions\_50% percentile scenario has been applied as per guidance in Section 3.2 of *CIBSE TM59 - Design methodology for the assessment of overheating risk in homes*. This represents a predicted warmer than average summer based in historic measured data for the region.

### General Performance Criteria

| Building Element                        | Value | Unit                |
|-----------------------------------------|-------|---------------------|
| External Wall – Timber Frame            | 0.19  | W/m <sup>2</sup> .K |
| Ground Floor – Jetfloor                 | 0.12  | W/m <sup>2</sup> .K |
| External Roof – Plane                   | 0.10  | W/m <sup>2</sup> .K |
| Glazing (Windows & Patio Doors)         | 1.30  | W/m <sup>2</sup> .K |
| Glazing (Windows & Patio Doors) g-value | 63    | %                   |
| Front Door                              | 1.30  | W/m <sup>2</sup> .K |
| Rear and Half Glazed Doors              | 1.30  | W/m <sup>2</sup> .K |

### Thermal Mass Analysis

| Building Element   | Thermal Mass, Cm | Value                  | Thermal Mass Classification |
|--------------------|------------------|------------------------|-----------------------------|
| External Wall      | 60.0             | kJ/(m <sup>2</sup> .K) | Very Lightweight            |
| Internal Partition | 24.9             | kJ/(m <sup>2</sup> .K) | Very Lightweight            |
| External Roof      | 65.7             | kJ/(m <sup>2</sup> .K) | Very Lightweight            |
| External Floor     | 133.1            | kJ/(m <sup>2</sup> .K) | Very Lightweight            |
| Intermediate Floor | 79.0             | kJ/(m <sup>2</sup> .K) | Very Lightweight            |

### General Infiltration

This ventilation profile is considered to run continuously. The assumed ventilation rate is 0.15 air changes per hour.

The condition of the supply air is External.

### Natural Ventilation

Natural ventilation is the primary means of ventilation in in all dwellings. All occupied perimeter rooms have manually openable windows.

The Noise Impact Assessment produced by E3P, January 2024 has identified all acoustically affected elevations (highlighted red in Figure 3) on the site.

In line with Section 3.2 of ADO, windows and patio doors on acoustically affected elevations are considered to be closed during sleeping hours (11pm to 7am).

Easily accessible ground floor windows and patio doors have inadequate security features to allow them to be securely left open when the rooms are not in use. All ground floor windows and patio doors are modelled as closed when kitchen/living areas are unoccupied (10pm to 9am).

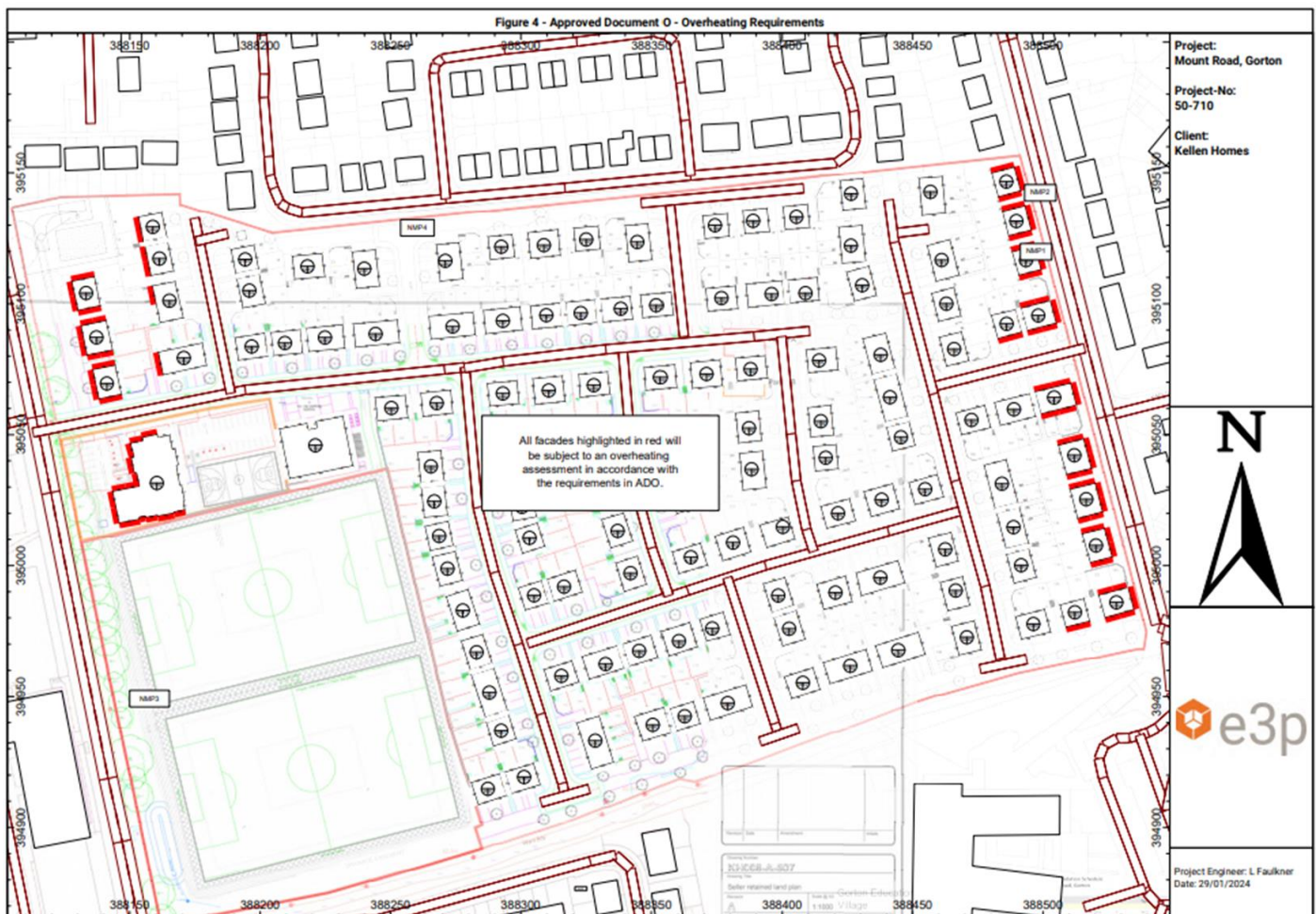


Figure 3. Site Layout Showing Acoustically Affected Elevations, image taken from E3P Report

Side-hung opening windows are currently modelled with a 90% openable area and a maximum opening angle of 90°.

Patio doors are modelled as side-hung with a 90% openable area and a maximum opening angle of 90°.

Top-hung opening windows are currently modelled with a 90% openable area and a maximum opening angle of 60°.

In line with Section 2.6 of Approved Document Part O (2021), the variation profile for the operation of the windows and patio doors is  $gt(t_a, 24, 4)$ , this means the opening windows are set to open/close on a gradient trend around an internal temperature of 24°C subject to a proportional bandwidth of 4°C. In other words, they start to open at an internal temperature of 22°C, are fully open when the internal temperature exceeds 26°C, start to close when the internal temperature falls below 26°C, and are fully closed when the internal temperature falls below 22°C.

In line with Section 3.3 of TM59, internal doors have been included and are modelled as always open during the day (7am to 11pm), and always closed during the night.

Ground and First Floor Stair Zones are connected by a permanent opening (internal hole) to simulate the free passage of air up/down the stairs.

### External Glazing

Kellen Homes Elevation Drawings in file *Mount Road House Types Planning Pack.dwg* have been used to model the opening windows.



Figure 4. House Type: Acacia, Elevations



Figure 5. House Type: ADU835, Elevations



Figure 6. House Type: ADU1009, Elevations



Figure 7. House Type: Cedar, Elevations



Figure 8. House Type: Emerson, Elevations



Figure 9. House Type: Hickory, Elevations

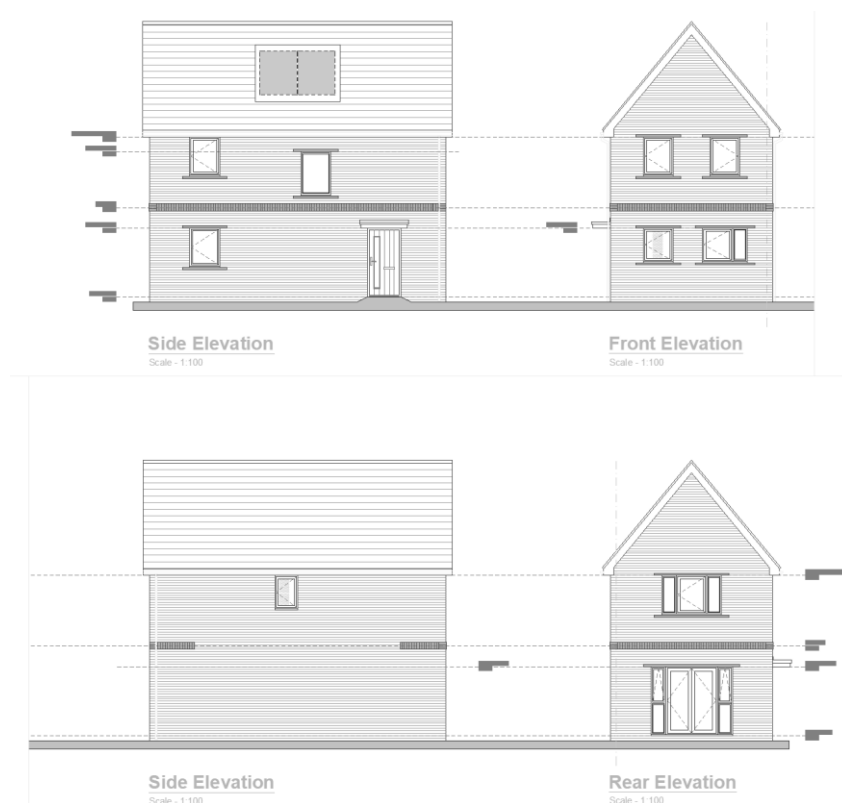


Figure 10. House Type: Olive, Elevations

### Mechanical ventilation

Each dwelling benefits from independent Decentralised Mechanical Extract Ventilation (dMEV) with background ventilation from window trickle vents.

Ventilation rates have been modelled in line with minimum extract ventilation rates for continuous extract systems as set out in Table 1.2 of ADF Vol.1 (2021).

**Table 1.2 Minimum extract ventilation rates for continuous extract systems<sup>(1)</sup>**

| Room                   | High rate (l/s) | Continuous rate                                                                                                                                     |
|------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Kitchen                | 13              | The sum of all extract ventilation in the dwelling on its continuous rate should be at least the whole dwelling ventilation rate given in Table 1.3 |
| Utility room           | 8               |                                                                                                                                                     |
| Bathroom               | 8               |                                                                                                                                                     |
| Sanitary accommodation | 6               |                                                                                                                                                     |

**NOTE:**

1. If the continuous rate of ventilation provided in a room is equal to or higher than the minimum high rate specified in the table, no extra ventilation is needed.

Figure 11. Table 1.2 of ADF Vol.1 (2021).

All bedrooms on acoustically affected elevations (see Figure 3) have local mechanical extract capable of a minimum flow rate of 20 l/s. Bedrooms with extract fans are:

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| 001_Ced_01_BED 2 | 014_Ced_01_BED 3 | 099_Hic_01_BED 2 | 123_Aca_01_BED 1 |
| 002_Ced_01_BED 2 | 015_Hic_01_BED 1 | 100_Hic_01_BED 2 | 123_Aca_01_BED 2 |
| 003_Eme_01_BED 1 | 016_Hic_01_BED 1 | 101_Hic_01_BED 2 | 123_Aca_01_BED 3 |
| 003_Eme_01_BED 4 | 092_Hic_01_BED 2 | 102_Oli_01_BED 1 | 124_Ced_01_BED 2 |

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| 004_Eme_01_BED 1 | 093_Hic_01_BED 2 | 102_Oli_01_BED 2 | 125_Ced_01_BED 2 |
| 004_Eme_01_BED 4 | 094_Ced_01_BED 1 | 103_Hic_01_BED 1 | 126_Eme_01_BED 1 |
| 005_Ced_01_BED 2 | 094_Ced_01_BED 2 | 103_Hic_01_BED 2 | 126_Eme_01_BED 4 |
| 006_Aca_01_BED 2 | 094_Ced_01_BED 3 | 104_Hic_01_BED 1 | 127_Eme_01_BED 1 |
| 010_Hic_01_BED 1 | 095_Aca_01_BED 1 | 104_Hic_01_BED 2 | 127_Eme_01_BED 4 |
| 011_Hic_01_BED 1 | 095_Aca_01_BED 2 | 120_Hic_01_BED 2 | 128_Eme_01_BED 1 |
| 012_Hic_01_BED 1 | 095_Aca_01_BED 3 | 121_Hic_01_BED 2 | 128_Eme_01_BED 4 |
| 013_Ced_01_BED 1 | 096_Hic_01_BED 2 | 122_Ced_01_BED 1 | 129_Eme_01_BED 1 |
| 013_Ced_01_BED 3 | 097_Hic_01_BED 2 | 122_Ced_01_BED 2 | 129_Eme_01_BED 4 |
| 014_Ced_01_BED 1 | 098_Hic_01_BED 2 | 122_Ced_01_BED 3 |                  |

### Internal Shading Devices

In line with Section 2.8 of Approved Document Part O (2021), internal curtains and blinds have not been taken into consideration when assessing the overheating risk of this development.

### Internal Gains

Figure 1 of CIBSE TM59 provides guidance on the typical peak equipment gains which can be expected in modern dwellings.

| Room Type             | Watts |
|-----------------------|-------|
| Bedroom               | 80    |
| Kitchen/Living/Dining | 450   |
| Living                | 150   |
| Kitchen/Dining        | 300   |

The internal lighting gain is set globally as 2.0W/m<sup>2</sup> between 6pm and 11pm in line with Section 5.2 of TM59 (2017).

All internal gains are controlled by specific modulating profiles which are used to represent the equipment heat gain into the space as it varies throughout the day. These profiles are taken directly from Figure 1 of CIBSE TM59.

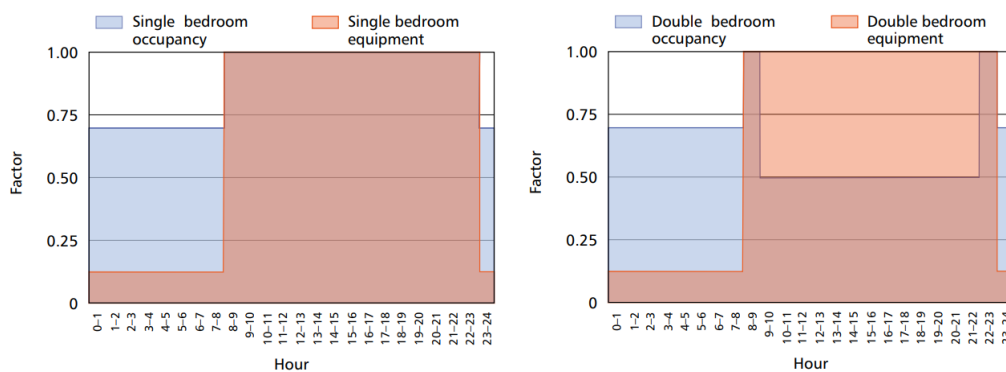


**Figure 12. Heat gain profile Single Bedroom, and Heat gain profile for Double Bedroom**

The occupancy gain is based on the CIBSE figures of 75W Sensible and 55W Latent per person. The number of occupants in each space and the variation profile for each is specified in Table 5.2 of CIBSE TM59 and summarised below:

| Number of people | Description                        | Peak load (W) |        | Period      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|------------------|------------------------------------|---------------|--------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|                  |                                    | Sensible      | Latent | Hour ending |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|                  |                                    |               |        | 00-01       | 01-02 | 02-03 | 03-04 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |   |
| 1                | Single bedroom occupancy           | 75            | 55     | 1.00        | 2.00  | 3.00  | 4.00  | 5.00  | 6.00  | 7.00  | 8.00  | 9.00  | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 |   |
| 2                | Double bedroom occupancy           | 150           | 110    | 0.7         | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 1     | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 1     | 0.7   |   |
| 2                | Studio occupancy                   | 150           | 110    | 0.7         | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0.7   |   |
| 1                | 1-bedroom living/kitchen occupancy | 75            | 55     | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0     |   |
| 1                | 1-bedroom living occupancy         | 75            | 55     | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0     | 0     |   |
| 1                | 1-bedroom kitchen occupancy        | 75            | 55     | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0     | 0     |   |
| 2                | 2-bedroom living/kitchen occupancy | 150           | 110    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0 |
| 2                | 2-bedroom living occupancy         | 150           | 110    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0     | 0     |   |
| 2                | 2-bedroom kitchen occupancy        | 150           | 110    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0     | 0     |   |
| 3                | 3-bedroom living/kitchen occupancy | 225           | 165    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0     | 0 |
| 3                | 3-bedroom living occupancy         | 225           | 165    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0     | 0     |   |
| 3                | 3-bedroom kitchen occupancy        | 225           | 165    | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0     | 0     |   |
|                  | Single bedroom equipment           | 80            |        | 0.13        | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0.13  |   |
|                  | Double bedroom equipment           | 80            |        | 0.13        | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0.13  |   |
|                  | Studio equipment                   | 450           |        | 0.19        | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 1     | 1     | 0.44  | 0.44  | 0.24  | 0.24  |   |
|                  | Living/litchen equipment           | 450           |        | 0.19        | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  | 1     | 1     | 0.44  | 0.44  | 0.24  | 0.24  |   |
|                  | Living equipment                   | 150           |        | 0.23        | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 1     | 1     | 1     | 1     | 0.4   | 0.4   |   |
|                  | Kitchen equipment                  | 300           |        | 0.17        | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 1     | 1     | 0.17  | 0.17  | 0.17  | 0.17  |   |
|                  | Lighting profile                   | 2 (W/m2)      |        | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     | 1     | 0     |   |

Figure 13. Heat gain profiles

The internal lighting gain is set globally as 2.0W/m<sup>2</sup> between 6pm and 11pm in line with Section 5.2 of TM59 (2017).

## 6.0 RESULTS FOR PREDOMINANTLY NATURALLY VENTILATED SPACES [CURRENT DSY]

| ROOM NAME                 | Occupied Areas<br>% Hrs $\Delta T > 1^\circ\text{K}$ ,<br><3% | Bedrooms<br>No. Annual Hrs<br>>26°C, 10pm to<br>7am, <33 | PASS/FAIL |
|---------------------------|---------------------------------------------------------------|----------------------------------------------------------|-----------|
|                           | (criteria a)                                                  | (criteria b)                                             |           |
| 001_Ced_00_KITCHEN/DINING | 0.4                                                           | -                                                        | PASS      |
| 001_Ced_00_LIVING         | 0.8                                                           | -                                                        | PASS      |
| 001_Ced_01_BED 1          | 0.5                                                           | 3                                                        | PASS      |
| 001_Ced_01_BED 2          | 0.9                                                           | 18                                                       | PASS      |
| 001_Ced_01_BED 3          | 0.5                                                           | 3                                                        | PASS      |
| 002_Ced_00_KITCHEN/DINING | 0.4                                                           | -                                                        | PASS      |
| 002_Ced_00_LIVING         | 0.9                                                           | -                                                        | PASS      |
| 002_Ced_01_BED 1          | 0.6                                                           | 5                                                        | PASS      |
| 002_Ced_01_BED 2          | 1.0                                                           | 18                                                       | PASS      |
| 002_Ced_01_BED 3          | 0.5                                                           | 3                                                        | PASS      |
| 003_Eme_00_KITCHEN/DINING | 0.3                                                           | -                                                        | PASS      |
| 003_Eme_00_LIVING         | 0.8                                                           | -                                                        | PASS      |
| 003_Eme_01_BED 1          | 1.0                                                           | 14                                                       | PASS      |
| 003_Eme_01_BED 2          | 0.5                                                           | 3                                                        | PASS      |
| 003_Eme_01_BED 3          | 0.5                                                           | 3                                                        | PASS      |
| 003_Eme_01_BED 4          | 0.8                                                           | 8                                                        | PASS      |
| 004_Eme_00_KITCHEN/DINING | 0.3                                                           | -                                                        | PASS      |
| 004_Eme_00_LIVING         | 0.9                                                           | -                                                        | PASS      |
| 004_Eme_01_BED 1          | 1.0                                                           | 14                                                       | PASS      |
| 004_Eme_01_BED 2          | 0.6                                                           | 5                                                        | PASS      |
| 004_Eme_01_BED 3          | 0.5                                                           | 3                                                        | PASS      |
| 004_Eme_01_BED 4          | 0.8                                                           | 8                                                        | PASS      |
| 005_Ced_00_KITCHEN/DINING | 0.4                                                           | -                                                        | PASS      |
| 005_Ced_00_LIVING         | 0.8                                                           | -                                                        | PASS      |
| 005_Ced_01_BED 1          | 0.5                                                           | 4                                                        | PASS      |
| 005_Ced_01_BED 2          | 0.9                                                           | 18                                                       | PASS      |
| 005_Ced_01_BED 3          | 0.5                                                           | 3                                                        | PASS      |
| 006_Aca_00_KITCHEN/DINING | 0.5                                                           | -                                                        | PASS      |
| 006_Aca_00_LIVING         | 0.9                                                           | -                                                        | PASS      |
| 006_Aca_01_BED 1          | 0.6                                                           | 4                                                        | PASS      |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 006_Aca_01_BED 2          | 0.9 | 21 | PASS |
| 006_Aca_01_BED 3          | 0.7 | 4  | PASS |
| 007_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 007_Ced_00_LIVING         | 0.6 | -  | PASS |
| 007_Ced_01_BED 1          | 0.5 | 5  | PASS |
| 007_Ced_01_BED 2          | 0.6 | 8  | PASS |
| 007_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 008_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 008_Ced_00_LIVING         | 0.6 | -  | PASS |
| 008_Ced_01_BED 1          | 0.5 | 4  | PASS |
| 008_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 008_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 009_Aca_00_KITCHEN/DINING | 0.4 | -  | PASS |
| 009_Aca_00_LIVING         | 0.7 | -  | PASS |
| 009_Aca_01_BED 1          | 0.5 | 2  | PASS |
| 009_Aca_01_BED 2          | 0.6 | 5  | PASS |
| 009_Aca_01_BED 3          | 0.6 | 3  | PASS |
| 010_Hic_00_LIVING/KITCHEN | 1.0 | -  | PASS |
| 010_Hic_01_BED 1          | 0.9 | 11 | PASS |
| 010_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 011_Hic_00_LIVING/KITCHEN | 0.8 | -  | PASS |
| 011_Hic_01_BED 1          | 0.9 | 11 | PASS |
| 011_Hic_01_BED 2          | 0.4 | 3  | PASS |
| 012_Hic_00_LIVING/KITCHEN | 1.0 | -  | PASS |
| 012_Hic_01_BED 1          | 0.9 | 12 | PASS |
| 012_Hic_01_BED 2          | 0.4 | 3  | PASS |
| 013_Ced_00_KITCHEN/DINING | 1.3 | -  | PASS |
| 013_Ced_00_LIVING         | 0.7 | -  | PASS |
| 013_Ced_01_BED 1          | 1.0 | 4  | PASS |
| 013_Ced_01_BED 2          | 0.7 | 5  | PASS |
| 013_Ced_01_BED 3          | 0.9 | 2  | PASS |
| 014_Ced_00_KITCHEN/DINING | 1.3 | -  | PASS |
| 014_Ced_00_LIVING         | 0.6 | -  | PASS |
| 014_Ced_01_BED 1          | 1.0 | 18 | PASS |
| 014_Ced_01_BED 2          | 0.6 | 5  | PASS |
| 014_Ced_01_BED 3          | 0.8 | 8  | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 015_Hic_00_LIVING/KITCHEN | 1.1 | -  | PASS |
| 015_Hic_01_BED 1          | 1.0 | 12 | PASS |
| 015_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 016_Hic_00_LIVING/KITCHEN | 1.1 | -  | PASS |
| 016_Hic_01_BED 1          | 1.0 | 12 | PASS |
| 016_Hic_01_BED 2          | 0.4 | 3  | PASS |
| 017_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 017_Hic_01_BED 1          | 0.5 | 3  | PASS |
| 017_Hic_01_BED 2          | 0.8 | 3  | PASS |
| 018_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 018_Hic_01_BED 1          | 0.5 | 3  | PASS |
| 018_Hic_01_BED 2          | 0.8 | 2  | PASS |
| 019_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 019_Ced_00_LIVING         | 0.8 | -  | PASS |
| 019_Ced_01_BED 1          | 0.5 | 3  | PASS |
| 019_Ced_01_BED 2          | 0.8 | 4  | PASS |
| 019_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 020_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 020_Ced_00_LIVING         | 0.9 | -  | PASS |
| 020_Ced_01_BED 1          | 0.6 | 5  | PASS |
| 020_Ced_01_BED 2          | 1.0 | 5  | PASS |
| 020_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 021_Aca_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 021_Aca_00_LIVING         | 0.6 | -  | PASS |
| 021_Aca_01_BED 1          | 0.6 | 6  | PASS |
| 021_Aca_01_BED 2          | 0.6 | 5  | PASS |
| 021_Aca_01_BED 3          | 0.8 | 2  | PASS |
| 022_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 022_Ced_00_LIVING         | 0.6 | -  | PASS |
| 022_Ced_01_BED 1          | 0.5 | 5  | PASS |
| 022_Ced_01_BED 2          | 0.6 | 7  | PASS |
| 022_Ced_01_BED 3          | 0.5 | 1  | PASS |
| 023_Ced_00_KITCHEN/DINING | 0.3 | -  | PASS |
| 023_Ced_00_LIVING         | 0.6 | -  | PASS |
| 023_Ced_01_BED 1          | 0.5 | 4  | PASS |
| 023_Ced_01_BED 2          | 0.6 | 8  | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 023_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 024_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 024_Ced_00_LIVING         | 0.6 | - | PASS |
| 024_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 024_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 024_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 025_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 025_Hic_01_BED 1          | 0.5 | 5 | PASS |
| 025_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 026_Hic_00_LIVING/KITCHEN | 0.3 | - | PASS |
| 026_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 026_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 027_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 027_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 027_Hic_01_BED 2          | 0.6 | 4 | PASS |
| 028_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 028_Ced_00_LIVING         | 0.6 | - | PASS |
| 028_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 028_Ced_01_BED 2          | 0.6 | 8 | PASS |
| 028_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 029_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 029_Ced_00_LIVING         | 0.6 | - | PASS |
| 029_Ced_01_BED 1          | 0.5 | 3 | PASS |
| 029_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 029_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 030_Aca_00_KITCHEN/DINING | 0.3 | - | PASS |
| 030_Aca_00_LIVING         | 0.7 | - | PASS |
| 030_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 030_Aca_01_BED 2          | 0.7 | 5 | PASS |
| 030_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 031_Hic_00_LIVING/KITCHEN | 0.8 | - | PASS |
| 031_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 031_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 032_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 032_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 032_Hic_01_BED 2          | 0.4 | 3 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 033_Oli_00_LIV/KIT/DIN    | 0.8 | 7 | PASS |
| 033_Oli_01_BED 1          | 0.4 | 3 | PASS |
| 033_Oli_01_BED 2          | 0.9 | 2 | PASS |
| 034_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 034_Ced_00_LIVING         | 0.5 | - | PASS |
| 034_Ced_01_BED 1          | 0.7 | 7 | PASS |
| 034_Ced_01_BED 2          | 0.6 | 4 | PASS |
| 034_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 035_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 035_Ced_00_LIVING         | 0.4 | - | PASS |
| 035_Ced_01_BED 1          | 0.6 | 8 | PASS |
| 035_Ced_01_BED 2          | 0.6 | 4 | PASS |
| 035_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 036_Oli_00_LIV/KIT/DIN    | 0.6 | 6 | PASS |
| 036_Oli_01_BED 1          | 0.7 | 3 | PASS |
| 036_Oli_01_BED 2          | 0.5 | 2 | PASS |
| 037_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 037_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 037_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 038_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 038_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 038_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 039_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 039_Hic_01_BED 1          | 0.6 | 6 | PASS |
| 039_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 040_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 040_Hic_01_BED 1          | 0.7 | 5 | PASS |
| 040_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 041_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 041_Eme_00_LIVING         | 0.4 | - | PASS |
| 041_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 041_Eme_01_BED 2          | 0.6 | 6 | PASS |
| 041_Eme_01_BED 3          | 0.6 | 5 | PASS |
| 041_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 042_Aca_00_KITCHEN/DINING | 0.5 | - | PASS |
| 042_Aca_00_LIVING         | 0.6 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 042_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 042_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 042_Aca_01_BED 3          | 0.8 | 2 | PASS |
| 043_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 043_Ced_00_LIVING         | 0.6 | - | PASS |
| 043_Ced_01_BED 1          | 0.5 | 3 | PASS |
| 043_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 043_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 044_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 044_Ced_00_LIVING         | 0.6 | - | PASS |
| 044_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 044_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 044_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 045_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 045_Hic_01_BED 1          | 0.5 | 5 | PASS |
| 045_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 046_Hic_00_LIVING/KITCHEN | 0.3 | - | PASS |
| 046_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 046_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 047_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 047_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 047_Hic_01_BED 2          | 0.6 | 4 | PASS |
| 048_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 048_Ced_00_LIVING         | 0.6 | - | PASS |
| 048_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 048_Ced_01_BED 2          | 0.6 | 8 | PASS |
| 048_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 049_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 049_Ced_00_LIVING         | 0.6 | - | PASS |
| 049_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 049_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 049_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 050_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 050_Ced_00_LIVING         | 0.6 | - | PASS |
| 050_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 050_Ced_01_BED 2          | 0.6 | 8 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 050_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 051_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 051_Ced_00_LIVING         | 0.6 | - | PASS |
| 051_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 051_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 051_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 052_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 052_Ced_00_LIVING         | 0.6 | - | PASS |
| 052_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 052_Ced_01_BED 2          | 0.6 | 8 | PASS |
| 052_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 053_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 053_Ced_00_LIVING         | 0.6 | - | PASS |
| 053_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 053_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 053_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 054_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 054_Ced_00_LIVING         | 0.6 | - | PASS |
| 054_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 054_Ced_01_BED 2          | 0.6 | 8 | PASS |
| 054_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 055_Aca_00_KITCHEN/DINING | 0.3 | - | PASS |
| 055_Aca_00_LIVING         | 0.6 | - | PASS |
| 055_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 055_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 055_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 056_Hic_00_LIVING/KITCHEN | 0.9 | - | PASS |
| 056_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 056_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 057_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 057_Hic_01_BED 1          | 0.8 | 2 | PASS |
| 057_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 058_Olj_00_LIV/KIT/DIN    | 0.8 | 6 | PASS |
| 058_Olj_01_BED 1          | 0.4 | 3 | PASS |
| 058_Olj_01_BED 2          | 0.9 | 2 | PASS |
| 059_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 059_Hic_01_BED 1          | 0.7 | 5 | PASS |
| 059_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 060_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 060_Hic_01_BED 1          | 0.6 | 6 | PASS |
| 060_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 061_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 061_Eme_00_LIVING         | 0.4 | - | PASS |
| 061_Eme_01_BED 1          | 0.5 | 4 | PASS |
| 061_Eme_01_BED 2          | 0.7 | 6 | PASS |
| 061_Eme_01_BED 3          | 0.7 | 4 | PASS |
| 061_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 062_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 062_Hic_01_BED 1          | 0.7 | 5 | PASS |
| 062_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 063_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 063_Hic_01_BED 1          | 0.6 | 6 | PASS |
| 063_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 064_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 064_Hic_01_BED 1          | 0.7 | 5 | PASS |
| 064_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 065_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 065_Hic_01_BED 1          | 0.6 | 6 | PASS |
| 065_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 066_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 066_Hic_01_BED 1          | 0.7 | 5 | PASS |
| 066_Hic_01_BED 2          | 0.5 | 2 | PASS |
| 067_Oli_00_LIV/KIT/DIN    | 0.7 | 8 | PASS |
| 067_Oli_01_BED 1          | 0.6 | 4 | PASS |
| 067_Oli_01_BED 2          | 0.7 | 3 | PASS |
| 068_Aca_00_KITCHEN/DINING | 0.6 | - | PASS |
| 068_Aca_00_LIVING         | 0.6 | - | PASS |
| 068_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 068_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 068_Aca_01_BED 3          | 0.8 | 2 | PASS |
| 069_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 069_Ced_00_LIVING         | 0.6 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 069_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 069_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 069_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 070_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 070_Hic_01_BED 1          | 0.5 | 5 | PASS |
| 070_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 071_Hic_00_LIVING/KITCHEN | 0.3 | - | PASS |
| 071_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 071_Hic_01_BED 2          | 0.5 | 5 | PASS |
| 072_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 072_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 072_Hic_01_BED 2          | 0.6 | 4 | PASS |
| 073_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 073_Ced_00_LIVING         | 0.6 | - | PASS |
| 073_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 073_Ced_01_BED 2          | 0.6 | 8 | PASS |
| 073_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 074_Ced_00_KITCHEN/DINING | 0.3 | - | PASS |
| 074_Ced_00_LIVING         | 0.6 | - | PASS |
| 074_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 074_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 074_Ced_01_BED 3          | 0.5 | 1 | PASS |
| 075_Aca_00_KITCHEN/DINING | 1.0 | - | PASS |
| 075_Aca_00_LIVING         | 0.6 | - | PASS |
| 075_Aca_01_BED 1          | 0.8 | 3 | PASS |
| 075_Aca_01_BED 2          | 0.5 | 5 | PASS |
| 075_Aca_01_BED 3          | 0.6 | 4 | PASS |
| 076_Ced_00_KITCHEN/DINING | 1.1 | - | PASS |
| 076_Ced_00_LIVING         | 0.6 | - | PASS |
| 076_Ced_01_BED 1          | 0.9 | 3 | PASS |
| 076_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 076_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 077_Hic_00_LIVING/KITCHEN | 1.0 | - | PASS |
| 077_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 077_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 078_Hic_00_LIVING/KITCHEN | 0.8 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 078_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 078_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 079_Hic_00_LIVING/KITCHEN | 0.8 | - | PASS |
| 079_Hic_01_BED 1          | 0.8 | 3 | PASS |
| 079_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 080_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 080_Ced_00_LIVING         | 0.7 | - | PASS |
| 080_Ced_01_BED 1          | 1.0 | 4 | PASS |
| 080_Ced_01_BED 2          | 0.7 | 6 | PASS |
| 080_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 081_Aca_00_KITCHEN/DINING | 1.1 | - | PASS |
| 081_Aca_00_LIVING         | 0.6 | - | PASS |
| 081_Aca_01_BED 1          | 0.8 | 3 | PASS |
| 081_Aca_01_BED 2          | 0.5 | 4 | PASS |
| 081_Aca_01_BED 3          | 0.7 | 4 | PASS |
| 082_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 082_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 082_Hic_01_BED 2          | 0.9 | 2 | PASS |
| 083_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 083_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 083_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 084_Oli_01_BED 1          | 0.9 | 2 | PASS |
| 084_Oli_01_BED 2          | 0.6 | 2 | PASS |
| 085_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 085_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 085_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 086_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 086_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 086_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 087_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 087_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 087_Hic_01_BED 2          | 0.9 | 2 | PASS |
| 088_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 088_Ced_00_LIVING         | 1.1 | - | PASS |
| 088_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 088_Ced_01_BED 2          | 0.9 | 5 | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 088_Ced_01_BED 3          | 0.6 | 3  | PASS |
| 089_Ced_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 089_Ced_00_LIVING         | 1.1 | -  | PASS |
| 089_Ced_01_BED 1          | 0.6 | 6  | PASS |
| 089_Ced_01_BED 2          | 1.0 | 6  | PASS |
| 089_Ced_01_BED 3          | 0.6 | 3  | PASS |
| 090_Ced_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 090_Ced_00_LIVING         | 1.1 | -  | PASS |
| 090_Ced_01_BED 1          | 0.5 | 6  | PASS |
| 090_Ced_01_BED 2          | 0.9 | 6  | PASS |
| 090_Ced_01_BED 3          | 0.6 | 3  | PASS |
| 091_Aca_00_KITCHEN/DINING | 0.6 | -  | PASS |
| 091_Aca_00_LIVING         | 1.1 | -  | PASS |
| 091_Aca_01_BED 1          | 0.6 | 4  | PASS |
| 091_Aca_01_BED 2          | 0.9 | 4  | PASS |
| 091_Aca_01_BED 3          | 0.7 | 4  | PASS |
| 092_Hic_00_LIVING/KITCHEN | 0.5 | -  | PASS |
| 092_Hic_01_BED 1          | 0.5 | 5  | PASS |
| 092_Hic_01_BED 2          | 0.5 | 11 | PASS |
| 093_Hic_00_LIVING/KITCHEN | 0.4 | -  | PASS |
| 093_Hic_01_BED 1          | 0.5 | 2  | PASS |
| 093_Hic_01_BED 2          | 0.5 | 11 | PASS |
| 094_Ced_00_KITCHEN/DINING | 0.4 | -  | PASS |
| 094_Ced_00_LIVING         | 0.7 | -  | PASS |
| 094_Ced_01_BED 1          | 0.5 | 12 | PASS |
| 094_Ced_01_BED 2          | 0.6 | 18 | PASS |
| 094_Ced_01_BED 3          | 0.5 | 11 | PASS |
| 095_Aca_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 095_Aca_00_LIVING         | 0.8 | -  | PASS |
| 095_Aca_01_BED 1          | 0.5 | 16 | PASS |
| 095_Aca_01_BED 2          | 0.5 | 21 | PASS |
| 095_Aca_01_BED 3          | 0.5 | 7  | PASS |
| 096_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 096_Hic_01_BED 1          | 0.9 | 3  | PASS |
| 096_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 097_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 097_Hic_01_BED 1          | 0.9 | 3  | PASS |
| 097_Hic_01_BED 2          | 0.4 | 11 | PASS |
| 098_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 098_Hic_01_BED 1          | 0.9 | 2  | PASS |
| 098_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 099_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 099_Hic_01_BED 1          | 0.9 | 3  | PASS |
| 099_Hic_01_BED 2          | 0.4 | 11 | PASS |
| 100_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 100_Hic_01_BED 1          | 0.9 | 2  | PASS |
| 100_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 101_Hic_00_LIVING/KITCHEN | 1.4 | -  | PASS |
| 101_Hic_01_BED 1          | 0.9 | 3  | PASS |
| 101_Hic_01_BED 2          | 0.5 | 11 | PASS |
| 102_Olj_00_LIV/KIT/DIN    | 0.7 | 14 | PASS |
| 102_Olj_01_BED 1          | 0.5 | 15 | PASS |
| 102_Olj_01_BED 2          | 0.6 | 11 | PASS |
| 103_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 103_Hic_01_BED 1          | 0.6 | 11 | PASS |
| 103_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 104_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 104_Hic_01_BED 1          | 0.6 | 11 | PASS |
| 104_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 105_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 105_Hic_01_BED 1          | 0.7 | 6  | PASS |
| 105_Hic_01_BED 2          | 0.5 | 2  | PASS |
| 106_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 106_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 106_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 107_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 107_Hic_01_BED 1          | 0.6 | 6  | PASS |
| 107_Hic_01_BED 2          | 0.5 | 4  | PASS |
| 108_Ced_00_KITCHEN/DINING | 0.8 | -  | PASS |
| 108_Ced_00_LIVING         | 0.7 | -  | PASS |
| 108_Ced_01_BED 1          | 0.7 | 6  | PASS |
| 108_Ced_01_BED 2          | 0.6 | 5  | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 108_Ced_01_BED 3          | 0.6 | 4 | PASS |
| 109_Aca_00_KITCHEN/DINING | 0.9 | - | PASS |
| 109_Aca_00_LIVING         | 0.7 | - | PASS |
| 109_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 109_Aca_01_BED 2          | 0.7 | 7 | PASS |
| 109_Aca_01_BED 3          | 0.9 | 3 | PASS |
| 110_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 110_Ced_00_LIVING         | 1.1 | - | PASS |
| 110_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 110_Ced_01_BED 2          | 0.9 | 5 | PASS |
| 110_Ced_01_BED 3          | 0.6 | 3 | PASS |
| 111_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 111_Ced_00_LIVING         | 0.9 | - | PASS |
| 111_Ced_01_BED 1          | 0.6 | 3 | PASS |
| 111_Ced_01_BED 2          | 0.9 | 3 | PASS |
| 111_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 112_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 112_Ced_00_LIVING         | 1.2 | - | PASS |
| 112_Ced_01_BED 1          | 0.7 | 6 | PASS |
| 112_Ced_01_BED 2          | 1.0 | 6 | PASS |
| 112_Ced_01_BED 3          | 0.6 | 3 | PASS |
| 113_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 113_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 113_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 114_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 114_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 114_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 115_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 115_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 115_Hic_01_BED 2          | 0.9 | 2 | PASS |
| 116_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 116_Ced_00_LIVING         | 1.1 | - | PASS |
| 116_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 116_Ced_01_BED 2          | 0.9 | 5 | PASS |
| 116_Ced_01_BED 3          | 0.6 | 3 | PASS |
| 117_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 117_Ced_00_LIVING         | 1.1 | -  | PASS |
| 117_Ced_01_BED 1          | 0.6 | 6  | PASS |
| 117_Ced_01_BED 2          | 1.0 | 6  | PASS |
| 117_Ced_01_BED 3          | 0.6 | 3  | PASS |
| 118_Aca_00_KITCHEN/DINING | 0.7 | -  | PASS |
| 118_Aca_00_LIVING         | 0.7 | -  | PASS |
| 118_Aca_01_BED 1          | 0.6 | 7  | PASS |
| 118_Aca_01_BED 2          | 0.6 | 5  | PASS |
| 118_Aca_01_BED 3          | 0.8 | 3  | PASS |
| 119_Ced_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 119_Ced_00_LIVING         | 0.7 | -  | PASS |
| 119_Ced_01_BED 1          | 0.5 | 6  | PASS |
| 119_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 119_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 120_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 120_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 120_Hic_01_BED 2          | 0.5 | 12 | PASS |
| 121_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 121_Hic_01_BED 1          | 0.5 | 2  | PASS |
| 121_Hic_01_BED 2          | 0.6 | 12 | PASS |
| 122_Ced_00_KITCHEN/DINING | 0.4 | -  | PASS |
| 122_Ced_00_LIVING         | 0.7 | -  | PASS |
| 122_Ced_01_BED 1          | 0.5 | 6  | PASS |
| 122_Ced_01_BED 2          | 0.6 | 18 | PASS |
| 122_Ced_01_BED 3          | 0.5 | 11 | PASS |
| 123_Aca_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 123_Aca_00_LIVING         | 0.8 | -  | PASS |
| 123_Aca_01_BED 1          | 0.5 | 16 | PASS |
| 123_Aca_01_BED 2          | 0.6 | 21 | PASS |
| 123_Aca_01_BED 3          | 0.6 | 7  | PASS |
| 124_Ced_00_KITCHEN/DINING | 1.5 | -  | PASS |
| 124_Ced_00_LIVING         | 1.1 | -  | PASS |
| 124_Ced_01_BED 1          | 0.8 | 3  | PASS |
| 124_Ced_01_BED 2          | 0.5 | 18 | PASS |
| 124_Ced_01_BED 3          | 0.7 | 2  | PASS |
| 125_Ced_00_KITCHEN/DINING | 1.3 | -  | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 125_Ced_00_LIVING         | 0.7 | -  | PASS |
| 125_Ced_01_BED 1          | 0.6 | 3  | PASS |
| 125_Ced_01_BED 2          | 0.5 | 17 | PASS |
| 125_Ced_01_BED 3          | 0.7 | 2  | PASS |
| 126_Eme_00_KITCHEN/DINING | 1.1 | -  | PASS |
| 126_Eme_00_LIVING         | 0.7 | -  | PASS |
| 126_Eme_01_BED 1          | 0.5 | 14 | PASS |
| 126_Eme_01_BED 2          | 0.9 | 2  | PASS |
| 126_Eme_01_BED 3          | 0.9 | 2  | PASS |
| 126_Eme_01_BED 4          | 0.5 | 8  | PASS |
| 127_Eme_00_KITCHEN/DINING | 1.2 | -  | PASS |
| 127_Eme_00_LIVING         | 0.7 | -  | PASS |
| 127_Eme_01_BED 1          | 0.5 | 13 | PASS |
| 127_Eme_01_BED 2          | 0.9 | 3  | PASS |
| 127_Eme_01_BED 3          | 0.9 | 2  | PASS |
| 127_Eme_01_BED 4          | 0.5 | 7  | PASS |
| 128_Eme_00_KITCHEN/DINING | 1.1 | -  | PASS |
| 128_Eme_00_LIVING         | 0.7 | -  | PASS |
| 128_Eme_01_BED 1          | 0.5 | 14 | PASS |
| 128_Eme_01_BED 2          | 0.9 | 2  | PASS |
| 128_Eme_01_BED 3          | 0.9 | 2  | PASS |
| 128_Eme_01_BED 4          | 0.5 | 8  | PASS |
| 129_Eme_00_KITCHEN/DINING | 1.2 | -  | PASS |
| 129_Eme_00_LIVING         | 0.7 | -  | PASS |
| 129_Eme_01_BED 1          | 0.5 | 12 | PASS |
| 129_Eme_01_BED 2          | 0.9 | 3  | PASS |
| 129_Eme_01_BED 3          | 0.9 | 2  | PASS |
| 129_Eme_01_BED 4          | 0.5 | 7  | PASS |
| 130_Aca_00_KITCHEN/DINING | 1.3 | -  | PASS |
| 130_Aca_00_LIVING         | 0.7 | -  | PASS |
| 130_Aca_01_BED 1          | 0.9 | 4  | PASS |
| 130_Aca_01_BED 2          | 0.6 | 3  | PASS |
| 130_Aca_01_BED 3          | 0.7 | 3  | PASS |
| 131_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 131_Ced_00_LIVING         | 0.8 | -  | PASS |
| 131_Ced_01_BED 1          | 1.0 | 4  | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 131_Ced_01_BED 2          | 0.7 | 6 | PASS |
| 131_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 132_Ced_00_KITCHEN/DINING | 1.2 | - | PASS |
| 132_Ced_00_LIVING         | 0.7 | - | PASS |
| 132_Ced_01_BED 1          | 0.8 | 3 | PASS |
| 132_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 132_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 133_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 133_Ced_00_LIVING         | 0.7 | - | PASS |
| 133_Ced_01_BED 1          | 1.0 | 4 | PASS |
| 133_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 133_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 134_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 134_Ced_00_LIVING         | 0.7 | - | PASS |
| 134_Ced_01_BED 1          | 0.9 | 4 | PASS |
| 134_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 134_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 135_Aca_00_KITCHEN/DINING | 1.0 | - | PASS |
| 135_Aca_00_LIVING         | 0.7 | - | PASS |
| 135_Aca_01_BED 1          | 0.8 | 3 | PASS |
| 135_Aca_01_BED 2          | 0.5 | 5 | PASS |
| 135_Aca_01_BED 3          | 0.6 | 4 | PASS |
| 136_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 136_Ced_00_LIVING         | 0.7 | - | PASS |
| 136_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 136_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 136_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 137_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 137_Ced_00_LIVING         | 0.7 | - | PASS |
| 137_Ced_01_BED 1          | 0.5 | 3 | PASS |
| 137_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 137_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 138_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 138_Ced_00_LIVING         | 0.7 | - | PASS |
| 138_Ced_01_BED 1          | 0.6 | 6 | PASS |
| 138_Ced_01_BED 2          | 0.6 | 6 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 138_Ced_01_BED 3          | 0.6 | 4 | PASS |
| 139_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 139_Ced_00_LIVING         | 0.6 | - | PASS |
| 139_Ced_01_BED 1          | 0.6 | 5 | PASS |
| 139_Ced_01_BED 2          | 0.6 | 3 | PASS |
| 139_Ced_01_BED 3          | 0.6 | 4 | PASS |
| 140_Ced_00_KITCHEN/DINING | 0.6 | - | PASS |
| 140_Ced_00_LIVING         | 0.7 | - | PASS |
| 140_Ced_01_BED 1          | 0.6 | 6 | PASS |
| 140_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 140_Ced_01_BED 3          | 0.6 | 4 | PASS |
| 141_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 141_Eme_00_LIVING         | 0.6 | - | PASS |
| 141_Eme_01_BED 1          | 0.6 | 4 | PASS |
| 141_Eme_01_BED 2          | 0.6 | 5 | PASS |
| 141_Eme_01_BED 3          | 0.6 | 4 | PASS |
| 141_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 142_Eme_00_KITCHEN/DINING | 0.5 | - | PASS |
| 142_Eme_00_LIVING         | 0.6 | - | PASS |
| 142_Eme_01_BED 1          | 0.6 | 6 | PASS |
| 142_Eme_01_BED 2          | 0.6 | 5 | PASS |
| 142_Eme_01_BED 3          | 0.6 | 4 | PASS |
| 142_Eme_01_BED 4          | 0.5 | 3 | PASS |
| 143_Aca_00_KITCHEN/DINING | 0.5 | - | PASS |
| 143_Aca_00_LIVING         | 1.1 | - | PASS |
| 143_Aca_01_BED 1          | 0.5 | 3 | PASS |
| 143_Aca_01_BED 2          | 0.9 | 8 | PASS |
| 143_Aca_01_BED 3          | 0.7 | 4 | PASS |
| 144_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 144_Ced_00_LIVING         | 1.2 | - | PASS |
| 144_Ced_01_BED 1          | 0.6 | 6 | PASS |
| 144_Ced_01_BED 2          | 1.0 | 6 | PASS |
| 144_Ced_01_BED 3          | 0.6 | 3 | PASS |
| 145_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 145_Ced_00_LIVING         | 1.0 | - | PASS |
| 145_Ced_01_BED 1          | 0.5 | 4 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 145_Ced_01_BED 2          | 0.9 | 5 | PASS |
| 145_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 146_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 146_Ced_00_LIVING         | 1.1 | - | PASS |
| 146_Ced_01_BED 1          | 0.6 | 4 | PASS |
| 146_Ced_01_BED 2          | 0.9 | 5 | PASS |
| 146_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 147_Aca_00_KITCHEN/DINING | 0.7 | - | PASS |
| 147_Aca_00_LIVING         | 0.7 | - | PASS |
| 147_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 147_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 147_Aca_01_BED 3          | 0.8 | 3 | PASS |
| 148_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 148_Ced_00_LIVING         | 0.7 | - | PASS |
| 148_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 148_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 148_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 149_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 149_Ced_00_LIVING         | 0.7 | - | PASS |
| 149_Ced_01_BED 1          | 0.5 | 6 | PASS |
| 149_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 149_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 150_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 150_Ced_00_LIVING         | 0.7 | - | PASS |
| 150_Ced_01_BED 1          | 0.5 | 3 | PASS |
| 150_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 150_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 151_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 151_Ced_00_LIVING         | 0.7 | - | PASS |
| 151_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 151_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 151_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 152_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 152_Ced_00_LIVING         | 0.7 | - | PASS |
| 152_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 152_Ced_01_BED 2          | 0.6 | 7 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 152_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 153_Aca_00_KITCHEN/DINING | 0.5 | - | PASS |
| 153_Aca_00_LIVING         | 0.8 | - | PASS |
| 153_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 153_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 153_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 154_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 154_Ced_00_LIVING         | 0.7 | - | PASS |
| 154_Ced_01_BED 1          | 0.5 | 3 | PASS |
| 154_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 154_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 155_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 155_Ced_00_LIVING         | 0.7 | - | PASS |
| 155_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 155_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 155_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 156_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 156_Hic_01_BED 1          | 0.5 | 2 | PASS |
| 156_Hic_01_BED 2          | 0.5 | 4 | PASS |
| 157_Olj_01_BED 1          | 0.5 | 2 | PASS |
| 157_Olj_01_BED 2          | 0.6 | 3 | PASS |
| 158_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 158_Hic_01_BED 1          | 0.6 | 7 | PASS |
| 158_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 159_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 159_Eme_00_LIVING         | 0.6 | - | PASS |
| 159_Eme_01_BED 1          | 0.6 | 4 | PASS |
| 159_Eme_01_BED 2          | 0.6 | 5 | PASS |
| 159_Eme_01_BED 3          | 0.6 | 4 | PASS |
| 159_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 160_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 160_Eme_00_LIVING         | 0.6 | - | PASS |
| 160_Eme_01_BED 1          | 0.6 | 6 | PASS |
| 160_Eme_01_BED 2          | 0.6 | 5 | PASS |
| 160_Eme_01_BED 3          | 0.6 | 4 | PASS |
| 160_Eme_01_BED 4          | 0.5 | 3 | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 161_Ced_00_KITCHEN/DINING | 0.6 | -  | PASS |
| 161_Ced_00_LIVING         | 0.7 | -  | PASS |
| 161_Ced_01_BED 1          | 0.6 | 5  | PASS |
| 161_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 161_Ced_01_BED 3          | 0.6 | 4  | PASS |
| 162_Ced_00_KITCHEN/DINING | 0.6 | -  | PASS |
| 162_Ced_00_LIVING         | 0.7 | -  | PASS |
| 162_Ced_01_BED 1          | 0.6 | 6  | PASS |
| 162_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 162_Ced_01_BED 3          | 0.6 | 4  | PASS |
| 163_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 163_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 163_Hic_01_BED 2          | 0.5 | 2  | PASS |
| 164_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 164_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 164_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 165_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 165_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 165_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 166_Ced_00_KITCHEN/DINING | 0.6 | -  | PASS |
| 166_Ced_00_LIVING         | 0.7 | -  | PASS |
| 166_Ced_01_BED 1          | 0.6 | 6  | PASS |
| 166_Ced_01_BED 2          | 0.7 | 6  | PASS |
| 166_Ced_01_BED 3          | 0.6 | 4  | PASS |
| 167_Aca_00_KITCHEN/DINING | 0.8 | -  | PASS |
| 167_Aca_00_LIVING         | 0.7 | -  | PASS |
| 167_Aca_01_BED 1          | 0.6 | 5  | PASS |
| 167_Aca_01_BED 2          | 0.7 | 7  | PASS |
| 167_Aca_01_BED 3          | 1.0 | 3  | PASS |
| 168_Hic_00_LIVING/KITCHEN | 0.6 | 13 | PASS |
| 168_Hic_01_BED 1          | 0.5 | 4  | PASS |
| 168_Hic_01_BED 2          | 0.8 | 3  | PASS |
| 169_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |
| 169_Hic_01_BED 1          | 0.5 | 4  | PASS |
| 169_Hic_01_BED 2          | 0.8 | 3  | PASS |
| 170_Hic_00_LIVING/KITCHEN | 0.6 | -  | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 170_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 170_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 171_Oli_01_BED 1          | 0.9 | 2 | PASS |
| 171_Oli_01_BED 2          | 0.6 | 2 | PASS |
| 172_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 172_Eme_00_LIVING         | 0.7 | - | PASS |
| 172_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 172_Eme_01_BED 2          | 0.6 | 5 | PASS |
| 172_Eme_01_BED 3          | 0.6 | 3 | PASS |
| 172_Eme_01_BED 4          | 0.5 | 5 | PASS |
| 173_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 173_Eme_00_LIVING         | 0.7 | - | PASS |
| 173_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 173_Eme_01_BED 2          | 0.5 | 2 | PASS |
| 173_Eme_01_BED 3          | 0.5 | 2 | PASS |
| 173_Eme_01_BED 4          | 0.6 | 4 | PASS |
| 174_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 174_Hic_01_BED 1          | 0.5 | 5 | PASS |
| 174_Hic_01_BED 2          | 0.5 | 4 | PASS |
| 175_Oli_00_LIV/KIT/DIN    | 1.1 | - | PASS |
| 175_Oli_01_BED 1          | 0.4 | 3 | PASS |
| 175_Oli_01_BED 2          | 0.9 | 2 | PASS |
| 176_Hic_00_LIVING/KITCHEN | 1.1 | - | PASS |
| 176_Hic_01_BED 1          | 1.0 | 3 | PASS |
| 176_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 177_Hic_00_LIVING/KITCHEN | 0.9 | - | PASS |
| 177_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 177_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 178_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 178_Ced_00_LIVING         | 0.7 | - | PASS |
| 178_Ced_01_BED 1          | 0.9 | 4 | PASS |
| 178_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 178_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 179_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 179_Ced_00_LIVING         | 0.7 | - | PASS |
| 179_Ced_01_BED 1          | 0.9 | 3 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 179_Ced_01_BED 2          | 0.6 | 3 | PASS |
| 179_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 180_Ced_00_KITCHEN/DINING | 1.2 | - | PASS |
| 180_Ced_00_LIVING         | 0.7 | - | PASS |
| 180_Ced_01_BED 1          | 1.0 | 4 | PASS |
| 180_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 180_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 181_Hic_00_LIVING/KITCHEN | 1.0 | - | PASS |
| 181_Hic_01_BED 1          | 0.9 | 3 | PASS |
| 181_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 182_Hic_00_LIVING/KITCHEN | 1.1 | - | PASS |
| 182_Hic_01_BED 1          | 0.9 | 4 | PASS |
| 182_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 183_Aca_00_KITCHEN/DINING | 0.5 | - | PASS |
| 183_Aca_00_LIVING         | 0.7 | - | PASS |
| 183_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 183_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 183_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 184_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 184_Ced_00_LIVING         | 0.7 | - | PASS |
| 184_Ced_01_BED 1          | 0.5 | 6 | PASS |
| 184_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 184_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 185_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 185_Eme_00_LIVING         | 0.7 | - | PASS |
| 185_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 185_Eme_01_BED 2          | 0.5 | 2 | PASS |
| 185_Eme_01_BED 3          | 0.6 | 2 | PASS |
| 185_Eme_01_BED 4          | 0.6 | 4 | PASS |
| 186_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 186_Eme_00_LIVING         | 0.7 | - | PASS |
| 186_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 186_Eme_01_BED 2          | 0.7 | 5 | PASS |
| 186_Eme_01_BED 3          | 0.6 | 3 | PASS |
| 186_Eme_01_BED 4          | 0.5 | 5 | PASS |
| 187_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 187_Ced_00_LIVING         | 0.7 | - | PASS |
| 187_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 187_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 187_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 188_Aca_00_KITCHEN/DINING | 0.7 | - | PASS |
| 188_Aca_00_LIVING         | 0.7 | - | PASS |
| 188_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 188_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 188_Aca_01_BED 3          | 0.8 | 3 | PASS |
| 189_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 189_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 189_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 190_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 190_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 190_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 191_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 191_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 191_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 192_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 192_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 192_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 193_Aca_00_KITCHEN/DINING | 0.9 | - | PASS |
| 193_Aca_00_LIVING         | 0.7 | - | PASS |
| 193_Aca_01_BED 1          | 0.6 | 5 | PASS |
| 193_Aca_01_BED 2          | 0.7 | 8 | PASS |
| 193_Aca_01_BED 3          | 0.9 | 3 | PASS |
| 194_Ced_00_KITCHEN/DINING | 0.8 | - | PASS |
| 194_Ced_00_LIVING         | 0.7 | - | PASS |
| 194_Ced_01_BED 1          | 0.7 | 7 | PASS |
| 194_Ced_01_BED 2          | 0.7 | 4 | PASS |
| 194_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 195_Aca_00_KITCHEN/DINING | 0.7 | - | PASS |
| 195_Aca_00_LIVING         | 0.6 | - | PASS |
| 195_Aca_01_BED 1          | 0.6 | 4 | PASS |
| 195_Aca_01_BED 2          | 0.5 | 2 | PASS |
| 195_Aca_01_BED 3          | 0.7 | 3 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 196_Ced_00_KITCHEN/DINING | 0.8 | - | PASS |
| 196_Ced_00_LIVING         | 0.7 | - | PASS |
| 196_Ced_01_BED 1          | 0.7 | 8 | PASS |
| 196_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 196_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 197_Eme_00_KITCHEN/DINING | 0.5 | - | PASS |
| 197_Eme_00_LIVING         | 0.5 | - | PASS |
| 197_Eme_01_BED 1          | 0.6 | 4 | PASS |
| 197_Eme_01_BED 2          | 0.7 | 7 | PASS |
| 197_Eme_01_BED 3          | 0.7 | 4 | PASS |
| 197_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 198_Eme_00_KITCHEN/DINING | 0.6 | - | PASS |
| 198_Eme_00_LIVING         | 0.6 | - | PASS |
| 198_Eme_01_BED 1          | 0.7 | 5 | PASS |
| 198_Eme_01_BED 2          | 0.6 | 6 | PASS |
| 198_Eme_01_BED 3          | 0.6 | 5 | PASS |
| 198_Eme_01_BED 4          | 0.6 | 2 | PASS |
| 199_Ced_00_KITCHEN/DINING | 0.8 | - | PASS |
| 199_Ced_00_LIVING         | 0.7 | - | PASS |
| 199_Ced_01_BED 1          | 0.7 | 7 | PASS |
| 199_Ced_01_BED 2          | 0.7 | 4 | PASS |
| 199_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 200_Aca_00_KITCHEN/DINING | 0.9 | - | PASS |
| 200_Aca_00_LIVING         | 0.7 | - | PASS |
| 200_Aca_01_BED 1          | 0.6 | 5 | PASS |
| 200_Aca_01_BED 2          | 0.7 | 8 | PASS |
| 200_Aca_01_BED 3          | 0.9 | 3 | PASS |
| 201_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 201_Ced_00_LIVING         | 0.9 | - | PASS |
| 201_Ced_01_BED 1          | 0.5 | 4 | PASS |
| 201_Ced_01_BED 2          | 1.0 | 4 | PASS |
| 201_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 202_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 202_Ced_00_LIVING         | 0.9 | - | PASS |
| 202_Ced_01_BED 1          | 0.6 | 6 | PASS |
| 202_Ced_01_BED 2          | 0.9 | 4 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 202_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 203_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 203_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 203_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 204_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 204_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 204_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 205_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 205_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 205_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 206_Aca_00_KITCHEN/DINING | 0.7 | - | PASS |
| 206_Aca_00_LIVING         | 0.7 | - | PASS |
| 206_Aca_01_BED 1          | 0.6 | 6 | PASS |
| 206_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 206_Aca_01_BED 3          | 0.8 | 3 | PASS |
| 207_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 207_Ced_00_LIVING         | 0.7 | - | PASS |
| 207_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 207_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 207_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 208_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 208_Eme_00_LIVING         | 0.7 | - | PASS |
| 208_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 208_Eme_01_BED 2          | 0.7 | 5 | PASS |
| 208_Eme_01_BED 3          | 0.6 | 3 | PASS |
| 208_Eme_01_BED 4          | 0.5 | 5 | PASS |
| 209_Eme_00_KITCHEN/DINING | 0.4 | - | PASS |
| 209_Eme_00_LIVING         | 0.7 | - | PASS |
| 209_Eme_01_BED 1          | 0.6 | 5 | PASS |
| 209_Eme_01_BED 2          | 0.5 | 2 | PASS |
| 209_Eme_01_BED 3          | 0.5 | 2 | PASS |
| 209_Eme_01_BED 4          | 0.6 | 4 | PASS |
| 210_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 210_Ced_00_LIVING         | 0.7 | - | PASS |
| 210_Ced_01_BED 1          | 0.5 | 6 | PASS |
| 210_Ced_01_BED 2          | 0.6 | 7 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 210_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 211_Aca_00_KITCHEN/DINING | 0.4 | - | PASS |
| 211_Aca_00_LIVING         | 0.7 | - | PASS |
| 211_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 211_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 211_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 212_Hic_00_LIVING/KITCHEN | 1.0 | - | PASS |
| 212_Hic_01_BED 1          | 0.9 | 3 | PASS |
| 212_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 213_Hic_00_LIVING/KITCHEN | 1.0 | - | PASS |
| 213_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 213_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 214_Hic_00_LIVING/KITCHEN | 0.9 | - | PASS |
| 214_Hic_01_BED 1          | 0.9 | 3 | PASS |
| 214_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 215_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 215_Ced_00_LIVING         | 0.7 | - | PASS |
| 215_Ced_01_BED 1          | 1.0 | 4 | PASS |
| 215_Ced_01_BED 2          | 0.7 | 6 | PASS |
| 215_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 216_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 216_Ced_00_LIVING         | 0.7 | - | PASS |
| 216_Ced_01_BED 1          | 1.0 | 3 | PASS |
| 216_Ced_01_BED 2          | 0.7 | 5 | PASS |
| 216_Ced_01_BED 3          | 0.9 | 2 | PASS |
| 217_Aca_00_KITCHEN/DINING | 0.9 | - | PASS |
| 217_Aca_00_LIVING         | 0.7 | - | PASS |
| 217_Aca_01_BED 1          | 0.6 | 5 | PASS |
| 217_Aca_01_BED 2          | 0.7 | 8 | PASS |
| 217_Aca_01_BED 3          | 0.9 | 3 | PASS |
| 218_Ced_00_KITCHEN/DINING | 0.8 | - | PASS |
| 218_Ced_00_LIVING         | 0.7 | - | PASS |
| 218_Ced_01_BED 1          | 0.7 | 7 | PASS |
| 218_Ced_01_BED 2          | 0.7 | 4 | PASS |
| 218_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 219_Eme_00_KITCHEN/DINING | 0.6 | - | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 219_Eme_00_LIVING         | 0.6 | - | PASS |
| 219_Eme_01_BED 1          | 0.7 | 5 | PASS |
| 219_Eme_01_BED 2          | 0.6 | 6 | PASS |
| 219_Eme_01_BED 3          | 0.6 | 5 | PASS |
| 219_Eme_01_BED 4          | 0.6 | 2 | PASS |
| 220_Eme_00_KITCHEN/DINING | 0.5 | - | PASS |
| 220_Eme_00_LIVING         | 0.5 | - | PASS |
| 220_Eme_01_BED 1          | 0.6 | 4 | PASS |
| 220_Eme_01_BED 2          | 0.7 | 7 | PASS |
| 220_Eme_01_BED 3          | 0.7 | 4 | PASS |
| 220_Eme_01_BED 4          | 0.5 | 2 | PASS |
| 221_Ced_00_KITCHEN/DINING | 0.8 | - | PASS |
| 221_Ced_00_LIVING         | 0.7 | - | PASS |
| 221_Ced_01_BED 1          | 0.7 | 8 | PASS |
| 221_Ced_01_BED 2          | 0.6 | 4 | PASS |
| 221_Ced_01_BED 3          | 0.6 | 5 | PASS |
| 222_Aca_00_KITCHEN/DINING | 0.7 | - | PASS |
| 222_Aca_00_LIVING         | 0.6 | - | PASS |
| 222_Aca_01_BED 1          | 0.6 | 4 | PASS |
| 222_Aca_01_BED 2          | 0.5 | 3 | PASS |
| 222_Aca_01_BED 3          | 0.7 | 3 | PASS |
| 223_Hic_00_LIVING/KITCHEN | 1.1 | - | PASS |
| 223_Hic_01_BED 1          | 1.0 | 3 | PASS |
| 223_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 224_Hic_00_LIVING/KITCHEN | 1.2 | - | PASS |
| 224_Hic_01_BED 1          | 1.0 | 5 | PASS |
| 224_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 225_Hic_00_LIVING/KITCHEN | 1.0 | - | PASS |
| 225_Hic_01_BED 1          | 0.9 | 3 | PASS |
| 225_Hic_01_BED 2          | 0.4 | 3 | PASS |
| 226_Hic_00_LIVING/KITCHEN | 1.1 | - | PASS |
| 226_Hic_01_BED 1          | 0.9 | 2 | PASS |
| 226_Hic_01_BED 2          | 0.5 | 3 | PASS |
| 227_Ced_00_KITCHEN/DINING | 1.2 | - | PASS |
| 227_Ced_00_LIVING         | 0.7 | - | PASS |
| 227_Ced_01_BED 1          | 0.9 | 3 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 227_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 227_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 228_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 228_Ced_00_LIVING         | 0.8 | - | PASS |
| 228_Ced_01_BED 1          | 1.0 | 4 | PASS |
| 228_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 228_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 229_Ced_00_KITCHEN/DINING | 1.3 | - | PASS |
| 229_Ced_00_LIVING         | 0.7 | - | PASS |
| 229_Ced_01_BED 1          | 0.8 | 4 | PASS |
| 229_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 229_Ced_01_BED 3          | 0.8 | 2 | PASS |
| 230_Aca_00_KITCHEN/DINING | 1.0 | - | PASS |
| 230_Aca_00_LIVING         | 0.8 | - | PASS |
| 230_Aca_01_BED 1          | 0.8 | 3 | PASS |
| 230_Aca_01_BED 2          | 0.5 | 5 | PASS |
| 230_Aca_01_BED 3          | 0.7 | 4 | PASS |
| 231_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 231_Ced_00_LIVING         | 0.7 | - | PASS |
| 231_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 231_Ced_01_BED 2          | 0.6 | 5 | PASS |
| 231_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 232_Ced_00_KITCHEN/DINING | 0.4 | - | PASS |
| 232_Ced_00_LIVING         | 0.7 | - | PASS |
| 232_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 232_Ced_01_BED 2          | 0.6 | 6 | PASS |
| 232_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 233_Hic_00_LIVING/KITCHEN | 0.4 | - | PASS |
| 233_Hic_01_BED 1          | 0.6 | 6 | PASS |
| 233_Hic_01_BED 2          | 0.5 | 4 | PASS |
| 234_Oli_00_LIV/KIT/DIN    | 0.6 | - | PASS |
| 234_Oli_01_BED 1          | 0.5 | 4 | PASS |
| 234_Oli_01_BED 2          | 0.7 | 1 | PASS |
| 235_Hic_00_LIVING/KITCHEN | 0.7 | - | PASS |
| 235_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 235_Hic_01_BED 2          | 0.9 | 2 | PASS |

|                           |     |   |      |
|---------------------------|-----|---|------|
| 236_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 236_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 236_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 237_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 237_Hic_01_BED 1          | 0.5 | 4 | PASS |
| 237_Hic_01_BED 2          | 0.8 | 2 | PASS |
| 238_Hic_00_LIVING/KITCHEN | 0.6 | - | PASS |
| 238_Hic_01_BED 1          | 0.5 | 3 | PASS |
| 238_Hic_01_BED 2          | 0.8 | 3 | PASS |
| 239_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 239_Ced_00_LIVING         | 1.0 | - | PASS |
| 239_Ced_01_BED 1          | 0.6 | 6 | PASS |
| 239_Ced_01_BED 2          | 1.0 | 5 | PASS |
| 239_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 240_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 240_Ced_00_LIVING         | 0.9 | - | PASS |
| 240_Ced_01_BED 1          | 0.6 | 3 | PASS |
| 240_Ced_01_BED 2          | 0.9 | 2 | PASS |
| 240_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 241_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 241_Ced_00_LIVING         | 0.9 | - | PASS |
| 241_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 241_Ced_01_BED 2          | 1.0 | 4 | PASS |
| 241_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 242_Aca_00_KITCHEN/DINING | 0.4 | - | PASS |
| 242_Aca_00_LIVING         | 0.7 | - | PASS |
| 242_Aca_01_BED 1          | 0.5 | 2 | PASS |
| 242_Aca_01_BED 2          | 0.6 | 5 | PASS |
| 242_Aca_01_BED 3          | 0.6 | 3 | PASS |
| 243_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 243_Ced_00_LIVING         | 0.7 | - | PASS |
| 243_Ced_01_BED 1          | 0.5 | 5 | PASS |
| 243_Ced_01_BED 2          | 0.6 | 7 | PASS |
| 243_Ced_01_BED 3          | 0.5 | 3 | PASS |
| 244_Ced_00_KITCHEN/DINING | 0.5 | - | PASS |
| 244_Ced_00_LIVING         | 0.7 | - | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 244_Ced_01_BED 1          | 0.5 | 5  | PASS |
| 244_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 244_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 245_Ced_00_KITCHEN/DINING | 0.5 | -  | PASS |
| 245_Ced_00_LIVING         | 0.7 | -  | PASS |
| 245_Ced_01_BED 1          | 0.5 | 6  | PASS |
| 245_Ced_01_BED 2          | 0.6 | 7  | PASS |
| 245_Ced_01_BED 3          | 0.5 | 3  | PASS |
| 246_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 246_Hic_01_BED 1          | 1.0 | 5  | PASS |
| 246_Hic_01_BED 2          | 0.5 | 3  | PASS |
| 247_Hic_00_LIVING/KITCHEN | 1.3 | -  | PASS |
| 247_Hic_01_BED 1          | 0.9 | 4  | PASS |
| 247_Hic_01_BED 2          | 0.4 | 3  | PASS |
| 248_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 248_Ced_00_LIVING         | 0.8 | 30 | PASS |
| 248_Ced_01_BED 1          | 1.0 | 5  | PASS |
| 248_Ced_01_BED 2          | 0.6 | 5  | PASS |
| 248_Ced_01_BED 3          | 0.8 | 2  | PASS |
| 249_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 249_Ced_00_LIVING         | 0.7 | 23 | PASS |
| 249_Ced_01_BED 1          | 0.9 | 3  | PASS |
| 249_Ced_01_BED 2          | 0.6 | 4  | PASS |
| 249_Ced_01_BED 3          | 0.8 | 2  | PASS |
| 250_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 250_Ced_00_LIVING         | 0.7 | -  | PASS |
| 250_Ced_01_BED 1          | 0.9 | 5  | PASS |
| 250_Ced_01_BED 2          | 0.6 | 5  | PASS |
| 250_Ced_01_BED 3          | 0.8 | 2  | PASS |
| 251_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 251_Ced_00_LIVING         | 0.8 | -  | PASS |
| 251_Ced_01_BED 1          | 1.0 | 5  | PASS |
| 251_Ced_01_BED 2          | 0.6 | 6  | PASS |
| 251_Ced_01_BED 3          | 0.9 | 2  | PASS |
| 252_Ced_00_KITCHEN/DINING | 1.4 | -  | PASS |
| 252_Ced_00_LIVING         | 0.7 | -  | PASS |

|                            |     |   |      |
|----------------------------|-----|---|------|
| 252_Ced_01_BED 1           | 0.9 | 4 | PASS |
| 252_Ced_01_BED 2           | 0.6 | 5 | PASS |
| 252_Ced_01_BED 3           | 0.8 | 2 | PASS |
| 253_Hic_00_LIVING/KITCHEN  | 1.3 | - | PASS |
| 253_Hic_01_BED 1           | 1.0 | 5 | PASS |
| 253_Hic_01_BED 2           | 0.5 | 3 | PASS |
| 254_Hic_00_LIVING/KITCHEN  | 1.3 | - | PASS |
| 254_Hic_01_BED 1           | 0.9 | 5 | PASS |
| 254_Hic_01_BED 2           | 0.4 | 3 | PASS |
| 255_Hic_00_LIVING/KITCHEN  | 1.2 | - | PASS |
| 255_Hic_01_BED 1           | 0.9 | 5 | PASS |
| 255_Hic_01_BED 2           | 0.4 | 3 | PASS |
| 256_Ced_00_KITCHEN/DINING  | 1.5 | - | PASS |
| 256_Ced_00_LIVING          | 0.8 | - | PASS |
| 256_Ced_01_BED 1           | 1.0 | 4 | PASS |
| 256_Ced_01_BED 2           | 0.6 | 6 | PASS |
| 256_Ced_01_BED 3           | 0.9 | 2 | PASS |
| 257_Ced_00_KITCHEN/DINING  | 1.4 | - | PASS |
| 257_Ced_00_LIVING          | 0.7 | - | PASS |
| 257_Ced_01_BED 1           | 1.0 | 4 | PASS |
| 257_Ced_01_BED 2           | 0.6 | 5 | PASS |
| 257_Ced_01_BED 3           | 0.8 | 2 | PASS |
| 258_Hic_00_LIVING/KITCHEN  | 1.2 | - | PASS |
| 258_Hic_01_BED 1           | 1.0 | 5 | PASS |
| 258_Hic_01_BED 2           | 0.5 | 3 | PASS |
| 259_Hic_00_LIVING/KITCHEN  | 1.2 | - | PASS |
| 259_Hic_01_BED 1           | 0.9 | 4 | PASS |
| 259_Hic_01_BED 2           | 0.4 | 3 | PASS |
| 260_Adu1009_00_LIV/KIT/DIN | 0.9 | - | PASS |
| 260_Adu1009_01_BED 1       | 1.0 | 4 | PASS |
| 260_Adu1009_01_BED 2       | 0.7 | 5 | PASS |
| 260_Adu1009_01_BED 3       | 0.9 | 2 | PASS |
| 261_Adu1009_00_LIV/KIT/DIN | 0.8 | - | PASS |
| 261_Adu1009_01_BED 1       | 1.0 | 4 | PASS |
| 261_Adu1009_01_BED 2       | 0.7 | 4 | PASS |
| 261_Adu1009_01_BED 3       | 0.9 | 2 | PASS |

|                           |     |    |      |
|---------------------------|-----|----|------|
| 262_Adu835_00_KITCHEN     | 0.8 | 10 | PASS |
| 262_Adu835_00_LIVING      | 1.3 | -  | PASS |
| 262_Adu835_01_BED 1       | 0.9 | 5  | PASS |
| 262_Adu835_01_BED 2       | 0.7 | 6  | PASS |
| 263_Adu835_00_KITCHEN     | 0.6 | 10 | PASS |
| 263_Adu835_00_LIVING      | 1.3 | -  | PASS |
| 263_Adu835_01_BED 1       | 0.9 | 5  | PASS |
| 263_Adu835_01_BED 2       | 0.7 | 6  | PASS |
| 264_Aca_00_KITCHEN/DINING | 0.7 | -  | PASS |
| 264_Aca_00_LIVING         | 0.6 | -  | PASS |
| 264_Aca_01_BED 1          | 0.6 | 4  | PASS |
| 264_Aca_01_BED 2          | 0.5 | 3  | PASS |
| 264_Aca_01_BED 3          | 0.7 | 3  | PASS |
| 265_Ced_00_KITCHEN/DINING | 0.8 | -  | PASS |
| 265_Ced_00_LIVING         | 0.7 | -  | PASS |
| 265_Ced_01_BED 1          | 0.7 | 8  | PASS |
| 265_Ced_01_BED 2          | 0.6 | 4  | PASS |
| 265_Ced_01_BED 3          | 0.6 | 5  | PASS |
| 266_Hic_00_LIVING/KITCHEN | 0.8 | -  | PASS |
| 266_Hic_01_BED 1          | 0.6 | 5  | PASS |
| 266_Hic_01_BED 2          | 0.5 | 2  | PASS |
| 267_Hic_00_LIVING/KITCHEN | 0.7 | -  | PASS |
| 267_Hic_01_BED 1          | 0.7 | 7  | PASS |
| 267_Hic_01_BED 2          | 0.5 | 2  | PASS |

## 7.0 CONCLUSION

All zones meet the relevant Part O thermal comfort criteria.

-END-