



MINIMUM REQUIREMENTS FOR THE DESIGN OF UNIVERSITY OF BOTSWANA STUDENT RESIDENCES

APPENDIX 5

PREPARED BY THE DEPARTMENT OF INSTITUTIONAL PLANNING

23RD NOVEMBER 2022

1. New residence designs must accommodate a maximum of two students per room.
2. Single rooms must be no smaller than 8 sq. m. – apartment style single rooms
3. Double rooms must be no smaller than 14 sq. m.
4. These room dimensions are applicable to the design of all new buildings
5. Halls of residence type of residence buildings must comply with the following minimum standard and norms for ablution facilities:
 - i. Wash basins – 1 basin per 4 student residents
 - ii. Shower cubicles – 1 shower cubicle per 7 student residents
 - iii. Toilet/lavatory – 1 lavatory per 5 student residents
 - iv. Shower and lavatory cubicles must be designed in such a way that individual privacy is provided (i.e., no communal showers or toilets)
 - v. Telephones and/or alarm bells (depending on affordability to the university) must be placed in accessible and strategic locations, so that students with disabilities are not disadvantaged
6. Provision of a percentage of the development must be Family Units for graduate students who may need such units
7. Warden flat provided per 150 students
8. A special Single Bed Room provided for a Student Assistant per 150 Students
9. The following minimum Social Spaces should be provided:
 - a) large common/meeting rooms - minimum of 1,5m of communal space per student
 - b) resident for the first 100 students and 1m per student resident for numbers more than 100.
10. Communal space shall comprise a combination of some or all the following:
 - a) communal lounges, games rooms, gymnasias, television rooms,
 - b) meeting/seminar rooms, dedicated group study spaces, computer centre(s), or other appropriate spaces
 - c) smaller TV/meeting rooms – at least 9 sq. m.
11. In terms of the provision of meals, residences are designed to be either self-catering or non-self-catering.

- a) In the case of non-self-catering residences, the meals will be catered for by Dining Halls or other shops/vendors on and around the campus
- b) In the case of self-catering residences, the following minimum food preparation standards must be provided in a separate kitchen(s):
 - i. suitable food storage, preparation and kitchen space shall be provided
 - ii. stove – 1 four plate stove (with oven) per 8 students
 - iii. cold storage – a minimum of a 320 litre capacity fridge / freezer combination is a minimum requirement per 8 students
 - iv. sink – 1 per 15 students
 - v. lockable cupboards – 1 per student
 - vi. microwave oven – 1 per 15 students
 - vii. countertop space – sufficient for 25% of the capacity of the student residents for simultaneous usage;

12. All student rooms must have access to the internet for study purposes.

13. All communal spaces designed for study purposes in residences must have internet access

14. Students with Disability

- a) Where self-catering facilities are provided for students with disabilities, universal design must include consideration of space to allow for independent movement of the student in the food preparation area and bathrooms.
- b) The positioning of all announcement features such as intercoms, telephones, counter loops and induction loop systems for those with hearing impairments, door handles, gates and warning signals must be considered to ensure universal design and barrier-free access to all pathways, entrances and doorways.
- c) Accessibility for DSS Students(DSS to offer more information and examples of the type of rooms needed for DSS students as well as ablutions to keep to international standards.)

15. Access control to be provided at room level or entrance to the respective residence block

16. Each residence block Entrance Area to be fitted with camera

17. Each residence block to have a Staff Office

B. HEALTH AND SAFETY

Provisions for all student residences and surroundings must comply with all the national health policies/regulations and statutory requirements regulating the environment, health and safety.

1. Fire safety, prevention and detection mechanisms and systems must be in place
2. Electricity and gas installations must meet statutory requirements
3. Security staff, mechanisms and procedures must meet statutory requirements
4. Each student room as well as the building itself must be secure
5. Shower doors or curtains must be fitted to shower cubicles to ensure privacy
6. A certificate of compliance with occupational health and safety regulations
7. An evacuation diagram must be displayed on notice boards

C. FURNISHINGS AND FITTINGS

1. The design must meet minimum furnishings and fittings requirements for each room type or area
2. Furniture and fittings selected must be vandal proof
3. Fittings must be maintained in a sound and working order, and must be replaced as soon as possible when broken beyond repair

D. GENERAL REQUIREMENTS

1. UB prefers a mixed development with more double rooms (say 60 to 70% more than single rooms and family units).
2. BHC to include UB in the benchmarking process to ensure more modern accommodation and or facilities

ANNEXURE A: MINIMUM NORMS AND STANDARDS ROOM SPECIFICATION DATA

1. Single student room

2. Double student room
3. Principal Common Room
4. Minor Common Room
5. Student Study Area
6. Passages
7. Utility Area
8. Foyer
9. Guest Toilet
10. Kitchenettes
11. Ablutions
12. Laundry (if applicable)
13. Cleaner's Store(s)
14. Box/storage room(s)
15. Linen Room
16. Water heating system
17. Hub/IT room
18. Grounds
19. Warden/Residence Manager's Flat
20. Warden/Residence Manager's Office

I. SINGLE STUDENT ROOM

A. Room Use: Bedroom

B. Area: 8m²

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture and equipment

- i. Fitted/installed by contractor: CBD joinery, Curtain rail (double track), Towel rail, Mirror
- ii. Furniture & Fittings: Bed, Mattress, Study table, Desk chair, Book shelf, Curtains, Study lamp (low energy), Pin board (mounted), Wastepaper bin, Bedside table

E. Services

i. Mechanical: Wall mounted heater; Firefighting: Hose reel, extinguisher in passage

ii. Electrical: Lighting 100 lux, 15 Amp socket (x2)

iii. Communication: Network: fibre-optic and/or wireless

F. Notes

i. Bookshelf for Self – catering:

Bookshelf must have a separate section for storage of 2 small pots and 1 pan.

ii. Cupboards: Built-in cupboards with sufficient hanging space and shelf space.

iii. A separate built-in cupboard for groceries is to be provided if self-catering facilities are available.

iv. Windows: Bedroom windows on ground floor and other vulnerable windows must be fitted with burglar bars.

II. DOUBLE STUDENT ROOM

A. Room Use: Bedroom

B. Area: 14m²

C. Privacy partition wall

D Finishes:

i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles/carpet

iii. Ceiling: Plastered concrete or ceiling board

E. Fittings, furniture & equipment

i. Fitted/installed by contractor: CBD joinery curtain rail (double track), Towel rail (x2), Mirror (x2)

ii. Furniture & Fittings: Bed (x2), Mattress (x2), Study table (x2), Desk Chair (x2), Book shelf (x2), Curtains, Study lamp (low energy) (x2), Pin board (mounted) (x2), Wastepaper bin (x2), Bedside table (x2)

E. Services

i. Mechanical: Wall mounted heater; firefighting: Hose reel, extinguisher in passage

ii. Electrical: Lighting 100 lux, 15 Amp socket (x2)

iii. Communication: Network: fibre-optic and/or wireless

F. Notes

i. Bookshelf for Self – catering:

Bookshelf must have a separate section for storage of 2 small pots and 1 pan.

ii. Cupboards: Built-in cupboards with sufficient hanging space and shelf space.

iii. A separate built-in cupboard for groceries is to be provided if self-catering facilities are available.

iv. Windows: Bedroom windows on ground floor and other vulnerable windows must be fitted with burglar bars.

III. COMMON ROOMS

A. Room Use: Recreation/meeting

B. Area: per standards

C. Finishes:

i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

i. Fitted/installed by contractor: TV shelf/bracket, Curtain track (double), AV equipment cupboard (theft proofed)

ii. Furniture & Fittings: Tub/easy chairs (1/2 bed capacity), Plastic stacking chairs (1/4 bed capacity), Curtains, Rubbish bin (large), DVD player, TV (theft--proof bracket)

E. Services

- i. Mechanical: Wall mounted heater (x2), Firefighting: Hose reel & extinguisher in passage, Smoke detector
- ii. Electrical: Lighting: 200 lux (x2), 15 Amp socket (x4)
- iii. Communication: Network: fibre-optic (x2) and/or wireless

F. Notes

- i. Windows: Windows on ground floor & other vulnerable windows must be fitted with burglar bars.

IV STUDENT STUDY AREA

A. Room Use: Student study area

B. Area: 0,1m² per bed capacity

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

V. PASSAGES

A. Use: Passage

B. Area: As per design

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles/carpet
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Statutory fire equipment & signage (exit & fire)
- ii. Furniture & Fittings: Noticeboards (where applicable)

E. Services

- i. Mechanical: Firefighting: Hosereel & extinguisher in passage, Smoke detector
- ii. Electrical: Lighting: 100 lux, 15 Amp socket (x2)
- iii. Communication: Intercom system linked to front entrance

F. Notes

- i. Passage lights on time--delay motion sensor switch

VI. UTILITY AREA

A. Room Use: General Utility Area

B. Area: As per design

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: CBD joinery
- ii. Furniture & Fittings: Waste bins (x3), Fridge (1 per floor) , Vacuum cleaner, Broom , Dustpan & hand brush
- ii. Furniture & Fittings: Study tables, Desk chairs

E. Services

- i. Mechanical: Wall mounted heater, firefighting: Hose reel & extinguisher in passage, Smoke detector
- ii. Electrical: Lighting: 500 lux, 15 Amp socket
- iii. Communication • Network: fibre-optic (x2) and/or wireless

VII. FOYER

A. Room Use: Entrance

B. Area: As per design

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor , Recessed floor mats, Statutory fire equipment & signage (exit & fire)
- ii. Furniture & Fittings: Noticeboards (where applicable), Rubbish bin, Table

E. Services

- i. Mechanical/Security: Firefighting: Hose reel & extinguisher in passage, Smoke detector , CCTV, preferably Biometric access , Door alarm, Fire alarm control box
- ii. Electrical: Lighting: 200 lux, 15 Amp socket
- iii. Communication: Intercom system linked to each passage

F. Notes

- i. Biometric access control system, magnetic locks and door alarm to be integrated in door design/installation.
- ii. Access control to be easily accessible to wheelchair users.

VIII GUEST TOILET

A. Use: Passage

B. Area: 2 ASM

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor • Statutory fire equipment & signage (exit & fire)

- ii. Furniture & Fittings • Noticeboards (where applicable)

E. Services

- i. Mechanical: Firefighting: Hose reel & extinguisher in passage, Smoke detector
- ii. Electrical: Lighting: 100 lux, 15 Amp socket (x2)
- iii. Communication: Intercom system linked to front entrance

F. Notes

- i. Passage lights on time-delay motion sensor switch

IX. KITCHENETTES IN NON--SELF--CATERING STUDENT HOUSING

Note: These specifications are for kitchenettes in residences where catering is provided to the student residents and must not be used for self-catering residences.

A. Use: Kitchen

B. Area: 8.2 ASM

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Single bowl sink with drain, Counter top with 2 door cupboard beneath, Towel rail, Fire extinguisher
- ii. Furniture & Fittings: Fridge 325l, Microwave 26l, Flip top bin large, Urn 20l

E. Services

- i. Mechanical • Firefighting: Hose reel & extinguisher in passage, Smoke detector
- ii. Electrical: Lighting: 200 lux, 15 Amp socket (x2)

F. Notes

- i. Lights on time-delay motion sensor switch
- ii. Hatch to large common room

X. Ablutions

A. Use: Ablution facilities

B. Area: Size driven by ratios below

C. Finishes:

- i. Walls: Tiles to ceiling
- ii. Floors: Non-slip tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Shower rail 2/shower , Wash basin 1 per 4 students, Shower cubicle 1 for 7 students, Robe hook per cubicle 1 per cubicle, Mirror 300x400 1 per wash basin , Soap dish 1 per cubicle
- ii. Furniture & Fittings: Shower curtains x 2 per cubicle

E. Services

- i. Mechanical: Mechanical extract
- ii. Electrical: Lighting: Lighting: 200 lux, 15 Amp socket (x2)

F. Notes

- i. Lights on time-delay motion sensor switch
- ii. Floor with Fall from door to showers
- iii. Ablution per passage
- iv. Paraplegic toilet/shower in ablution at entry wing
- v. Shower cubicle to have dry/wet zone

XI. LAUNDRY (if applicable)

A. Room Use: Laundry 1 per 40 students

B. Finishes:

- i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

C. Fittings, furniture & equipment

i. Fitted/installed by contractor: Double trough, Fixed ironing board, Shelving 300x1500

ii. Furniture & Fittings: Industrial tumble dryer 1 per 25 students, Industrial washing machine 1 per 25 students, Clothes horse

D. Services

i. Mechanical: Mechanical extract

ii. Electrical • Lighting: Lighting: 200 lux, 15 Amp socket
(x2 double)

E. Notes

i. Lights on time-delay motion sensor switch

ii. Floor tiles laid to fall with floor drain

iii. Dryer Direct Expel through outer wall

iv. Preferably one laundry per floor

v. Window on external wall preferable

vi. Sufficient power points for washing machines, tumble dryers & student iron

XII.CLEANER'S STORE

A. Room Use: Cleaner's store

B. Area: 2 ASM

C. Finishes:

i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Shelves 300x1000 (x3)

E. Services

- i. Electrical: Lighting: 160 lux, 15 Amp socket

F. Notes

- i. One cleaner's cupboard per cleaner
- ii. No service ducts to pass through room

XIII. BOX ROOM

A. Room Use: Storage

B. Area: ASM 0.15 m²/student

C. Finishes:

- i. Walls: Plaster, painted
- ii. Floors: Durable lino/tiles
- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Slatted shelving (3 rows), Security gate
- ii. Furniture & Fittings: Noticeboards (where applicable)

E. Services

- i. Mechanical: Firefighting: Hose reel & extinguisher in passage
- ii. Electrical: Lighting: Lighting: 200 lux, 15 Amp socket

F. Notes

- i. Small common room doubles as a box room during vacations
- ii. Solid door
- iii. 1 suitcase per student
- iv. Ventilation louvre
- v. Air bricks

- vi. Burglar bars on window; but preferably no window

XIV. LINEN ROOM (if applicable)

A. Room Use: Linen storage

B. Area: ASM 0.15m²/student

C. Finishes:

- i. Walls: Plaster, painted

- ii. Floors: Durable lino/tiles

- iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Slatted shelving

E. Services

- i. Mechanical • Firefighting: Hose reel & extinguisher in passage, Smoke detector

- ii. Electrical • Lighting: Lighting: 200 lux, 15 Amp socket

F. Notes

- i. Adequate space for laundry collection & distribution

- ii. Adequate ventilation

- iii. Ventilation louver

- iv. Air bricks

- v. Stable door with service flap

XV. HUB/IT ROOM (if applicable)

A. Room Use: IT equipment space

B. Area: ASM 0.03m² per student

C. Finishes:

- i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

i. Fitted/installed by contractor: Equipment as per IT Department specifications

E. Services

i. Mechanical • Firefighting: Hose reel & extinguisher in passage, Smoke detector

ii. Electrical: Lighting: 250 lux, 15 Amp socket (x3)

F. Notes

i. Adequate ventilation – riser duct to roof space

ii. Reinforced louvre in door

XVI. GROUNDS

A. Use: Recreation & access

B. Area: Reasonable space for social and recreation purposes

C. Fittings, furniture & equipment

i. Fitted/installed by contractor

ii. Furniture & Fittings

D. Services

i. Mechanical: Garden tap, Fire Hydrants

ii. Electrical: Security & accent lighting, 15 Amp socket (x2)

E. Notes

i. Landscaping should include a flat lawn area sufficient for a volleyball court

ii. Parking provision – 1bay per 20 students

iii. Service vehicles access to front door should be no greater than 20m

XVII.WARDEN/RESIDENCE MANAGER’S FLAT

A. Facility Use: Accommodation for warden/resident manager and family

B. Area: 3 bedroomed flat with open plan lounge/dining/kitchen space with bathroom and guest toilet

C. Finishes:

i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

i. Fitted/installed by contractor • Determined by each institution

ii. Furniture & Fittings: standard residential fittings

E. Services

i. Mechanical: Firefighting: Hose reel & extinguisher in passage, Smoke detector

ii. Electrical: Lighting: min 100 lux per room, Sufficient 15 Amp sockets per room

iii. Communication: External line telephone, Wireless and or fibre-optic network access

F. Notes

i. Separate 200l geyser (NOT supplied from residence)

ii. Carport adjacent to flat

iii. Small enclosed garden where possible with drying yard with clothes-line

XVIII. RESIDENCE/BLOCK OFFICE

A. Room Use: Support Office

B. Area: Sufficient to interview 2/3 students simultaneously

C. Finishes:

i. Walls: Plaster, painted

ii. Floors: Durable lino/tiles

iii. Ceiling: Plastered concrete or ceiling board

D. Fittings, furniture & equipment

- i. Fitted/installed by contractor: Door bell, Double curtain rail
- ii. Furniture & Fittings: Curtains/blinds , Office desk, Floor mat, Office chair, Filing cabinet, Visitors chairs (x2), Wall safe, First Aid box, Door pin board, Wall pin board, Bookcase (3 tier)

E. Services

- i. Mechanical: Firefighting: Hose reel & extinguisher in passage, Smoke detector
- ii. Electrical • Lighting: Lighting: 200 lux, 15 Amp socket (x2)
- iii. Communication: Telephone extension, Wireless and/or fibre-optic network connection

XIX. STUDENTS WITH DISABILITY

Include the following: special provision -adapted accommodation

1. Provision for Disability Wardens Flat within disability students hostels for closer monitoring
2. Provision for Personal care takers rooms as per attached sketch draft (or better) to cater for some students with complex disabilities
3. Mini study lounge with computer section for students with limited mobility to access campus
4. Provision of rooms with enclosed toilet and showers for wheelchair users and the totally blind students
5. Disability signage and FM systems for hearing impaired refer to previous rehabilitation project (attached for further SPECS on disability accessibility)

XX. GENERAL

- i. Residence block number to be prominently located at front entrance of the block/building
- ii. Disability and Statutory safety signage to be fitted throughout the building and external areas
- iii. One fridge per floor, but not less than one fridge per 30 students (catering provided)
- iv. Front entrance and facilities to be wheelchair accessible
- v. Adequate fire alarm system to be fitted incl. for hearing and sight impaired persons
- vi. Fire safety doors to be fitted to all fire escapes

- vii. Rain water tanks should be provided in easily accessible places
- viii. Power outage lights fitted in all passages, ablutions, entrance areas and out-door areas

**ANNEXURE B: ADDITIONAL SPECIFICATIONS FOR FOR STUDENTS WITH
DISABILITY (ATTACHED)**