



- LEGEND:**
- ▶▶▶ DENOTES PATHS OF EXIT TRAVEL
  - EXIT DENOTES DOOR AS AN EMERGENCY EXIT
  - ◆ DENOTES STARTING POINT FOR TRAVEL DISTANCE
  - ☺ DENOTES FIRE EXTINGUISHER LOCATIONS
  - (1) HOUR RATED WALL
  - - - (2) HOUR RATED WALL
  - (3) HOUR RATED WALL

**1**  
**A-001** LIFE SAFETY PLAN  
SCALE: 1:100

**CODE ANALYSIS:**

1. **REFERENCES:**  
2006 INTERNATIONAL BUILDING CODE (2006 IBC)  
2006 LIFE SAFETY CODE (2006 NFPA 101)
2. **IBC OCCUPANCY CLASSIFICATION:**  
GROUP R-2 (NEW HOTELS AND DORMITORIES NFPA 101 6.1.8 AND CHAPTER 28)
3. **TYPE OF CONSTRUCTION (IBC):** TYPE II-B (UNPROTECTED/NONSPRINKLERED)
4. **IBC TABLE 503: ALLOWABLE HEIGHT AND BUILDING AREAS:**  
**GROUP R-2**  
ALLOWABLE AREA: 1486 SM  
ALLOWABLE HEIGHT: 4 STORIES (16 M)  
**GROUP R-2**  
PROPOSED AREA: 569 SM  
PROPOSED HEIGHT: 1 STORY (<16 M)
5. **IBC TABLE 601 & 602: FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS FOR TYPE II-B**

BUILDING ELEMENT	RATING (HOUR)	REFERENCE
STRUCTURAL FRAME (COLUMNS, GIRDERS & TRUSSES)	0	TABLE 601
BEARING WALLS EXTERIOR	0	TABLE 601
BEARING WALLS INTERIOR	0	TABLE 601
NONBEARING WALLS & PARTITIONS INTERIOR	0	TABLE 601
FLOOR CONSTRUCTION	0	TABLE 601
ROOF CONSTRUCTION	0	TABLE 601
EXTERIOR WALL	0	TABLE 602
6. **IBC TABLE 803.5 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS FOR R-2 OCCUPANCY/NONSPRINKLERED**

GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAY	CORRIDORS	ROOMS AND ENCLOSED SPACES
R-2	B	B	C
7. **NFPA 101 TABLE 7.3.1.2 - OCCUPANT LOAD**  
HOTELS AND DORMITORIES = 18.6 SM/PERSON    CALCULATED = 30 OCCUPANTS  
ACTUAL = 45 OCCUPANTS
8. **NFPA 101 TABLE 7.3.3.1 - EGRESS CAPACITY**  
HOTELS AND DORMITORIES = 5 MM PER OCCUPANT  
MINIMUM REQUIRED: 225 MM (45 OCCUPANTS x 5 MM PER OCCUPANT)  
PROPOSED EGRESS CAPACITY: 3600 MM: (4) 900 MM DOORS
9. **NFPA 101 PARAGRAPH 28.2.6 - EXIT ACCESS TRAVEL DISTANCE**  
MAXIMUM ALLOWED WITHIN ROOM OR SUITE TO CORRIDOR: 23 METERS  
MAXIMUM ALLOWED CORRIDOR DOOR OF ANY ROOM OR SUITE TO NEAREST EXIT: 30 METERS  
PROPOSED WITHIN ROOM OR SUITE TO CORRIDOR: 17 METERS  
PROPOSED CORRIDOR DOOR OF ANY ROOM OR SUITE TO NEAREST EXIT: 11 METERS
10. **NFPA 101 PARAGRAPH 28.3.6.1.2 - CORRIDOR FIRE-RESISTANCE RATING (HOUR)**  
REQUIRED: WALLS NOT LESS THAN ONE HOUR FIRE RESISTANCE RATING  
PROPOSED: 1 HOUR RATED WALLS
11. **NFPA 101 PARAGRAPH 28.3.6.2 & TABLE 8.3.4.2 - DOORS INTO EXIT ACCESS CORRIDORS**  
REQUIRED MINIMUM: 20 MINUTE FIRE PROTECTION RATING  
PROPOSED: 20 MINUTE DOORS
12. **NFPA 101 PARAGRAPH 28.2.3.3 - CORRIDOR WIDTH**  
REQUIRED: SUFFICIENT FOR OCCUPANT LOAD, BUT NOT LESS THAN 1120 MM  
CALCULATED WIDTH REQUIRED PER OCCUPANT LOAD: 225 (45 OCCUPANTS x 5 MM)  
PROVIDED: 1700 MM
13. **NFPA 101 PARAGRAPH 28.2.5.3 - COMMON PATH OF TRAVEL**  
MAXIMUM ALLOWED: 10.7 METERS  
PROVIDED: 0 METERS
14. **NFPA 101 PARAGRAPH 28.2.5.5 - DEAD END CORRIDORS**  
PERMITTED: 10.7 METERS  
PROPOSED: NO DEAD END CORRIDORS
15. **NFPA 101 PARAGRAPH 28.2.4.1 AND 7.4.1.1 - MINIMUM NUMBER OF EXITS**  
REQUIRED: 2 MINIMUM  
PROPOSED: 3 EXITS
16. **NFPA 101 PARAGRAPH 28.2.1.2 & 24.2 - SECONDARY MEANS OF ESCAPE**  
ONE OF THE FOLLOWING REQUIRED:  
1) DOOR, SIMILAR TO PRIMARY, BUT REMOTE FROM PRIMARY  
2) OPERABLE WINDOW, 0.53 SM, NOT LESS THAN 510 MM WIDE, 610 MM HIGH, NOT MORE THAN 1120 MM AFF, WITHIN 6100 MM OF GRADE  
PROVIDED: OPERABLE WINDOWS, 0.93 SM EACH, MULTIPLE PER ROOM
17. **NFPA 101 PARAGRAPH 24.2.2.4 - TWO PRIMARY MEANS OF ESCAPE**  
AREA WITH DWELLING UNIT EXCEEDS 185 SM PER STORY  
ALLOWED AREA PER STORY WITHIN DWELLING UNIT: 185 SM  
PROVIDED AREA WITHIN DWELLING UNIT: (253) SM ROOM 106  
REQUIRED PRIMARY EXITS: 2  
PROVIDED PRIMARY EXITS: 2
18. **NFPA 101 PARAGRAPH 28.3.7.1 - SUBDIVISION OF BUILDING SPACES - NONSPRINKLERED**  
REQUIRED: EACH GUEST ROOM OR DORMITORY ROOM SHALL BE SEPARATED FROM OTHER GUEST OR DORMITORY ROOMS BY FIRE BARRIERS HAVING FIRE RESISTANCE RATING OF NOT LESS THAN 1 HOUR  
PROVIDED: 1 HOUR SEPARATION
19. **HAZARDOUS AREA PROTECTION TABLE 28.3.2.2.2**  
STORAGE ROOMS: 1 HOUR SEPARATION REQUIRED
20. **NFPA 101 A.3.3.5.3 DORMITORY: ROOMS WITHIN DORMITORIES INTENDED FOR THE USE OF INDIVIDUALS FOR COMBINED LIVING AND SLEEPING PURPOSES ARE GUEST ROOMS OR GUEST SUITES. EXAMPLES OF DORMITORIES ARE COLLEGE DORMITORIES, FRATERNITY AND SORORITY HOUSES AND MILITARY BARRACKS.**
21. **NFPA 101 28.3.5.2 EXTINGUISHMENT REQUIREMENTS: AUTOMATIC SPRINKLER PROTECTION REQUIRED UNLESS SLEEPING ROOMS HAVE DOORS DIRECTLY TO OUTSIDE. DUE TO AUSTERE DESIGN CRITERIA, THE GOVERNMENT HAS A FIRE PROTECTION WAIVER FOR THIS REQUIREMENT.**

LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM), UNLESS OTHERWISE NOTED



APPROVED:

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A/E DESIGNER OF RECORD

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STANDARD DESIGN  
VARIOUS PROJECTS  
VARIOUS LOCATIONS, AFGHANISTAN  
SUPPORT STAFF BARRACKS  
LIFE SAFETY PLAN

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