

HONOLULU FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

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RICK BLANGIARDI  
MAYOR



LIONEL CAMARA JR.  
ACTING FIRE CHIEF

SHELDON K. HAO  
ACTING DEPUTY FIRE CHIEF

April 20, 2021

The Honorable Carol Fukunaga, Chair  
and Members  
Committee on Public Information and Technology  
Honolulu City Council  
530 South King Street, Room 202  
Honolulu, Hawaii 96813

Dear Chair Fukunaga and Councilmembers:

SUBJECT: Questions Relating to Departmental Communication D-237 -  
*Honolulu Fire Department on the Six-Month Report Pursuant to  
Ordinance 19-4 - Relating to Fire Safety*

In response to your letter dated April 15, 2021, the Honolulu Fire Department (HFD) provides the following responses:

1. *Life Safety Evaluations (LSE) Submitted by Licensed Design Professionals: The report states that of the 102 LSEs submitted, 6 LSE passed.*
  - a. *Please identify the process that the HFD used to score the 102 LSEs, and how the department determined that 6 out of 102 Life Safety Evaluations had 'passed.'*

The HFD does not score the LSE. A 'passing' score or acceptable level of fire safety is automatically generated on the LSE based on data provided and inputted by the licensed design professional. A sample of the LSE form is attached.

Six out of 102 LSEs passed by totaling the completed, signed, and submitted LSEs with an acceptable level of fire safety on Table 8 - Conclusions.

- b. *What does the term 'passed' signify?*

The term 'passed' signifies that an acceptable level of fire safety has been achieved. This is reflected in the checked box on Table 8 - Conclusions, All of the checks in Table 7 are in the "Yes" column. The level of fire safety is acceptable.

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- c. *What is the distinction between 'passed' and 'lowest values' in HFD's report?*

'Passed' signifies that an acceptable level of fire safety has been achieved. This is automatically generated on the LSE based on the values inputted and submitted by the licensed design professional.

'Lowest Values' signifies the lowest score for each parameter on Table 4 - Fire Safety Parameter Values, and are manually inputted and submitted by the licensed design professional.

- d. *What is the range of 'passing' scores?*

The range of passing scores is based on data inputted and submitted by the licensed design professional. This data is automatically calculated in the LSE to determine a 'passing' score.

A passing score is achieved when all the boxes in Table 7 - Fire Safety Compartment Safety Equivalency Evaluation are automatically checked in the "Yes" column.

- e. *What does HFD mean when the report states that 22 LSEs had 'low values for Vertical Openings? What is a 'passing' score for Vertical Openings?*

This means that 22 completed, signed, and submitted LSEs had 2 or more floors with vertical openings.

Passing scores for vertical openings are automatically calculated in the LSE form based on data provided by the licensed design professional.

- f. *What does HFD mean when the report states that 82 LSEs had low values for Vertical Openings and Fire Alarm Systems? What is a 'passing' score for Vertical Openings and Fire Alarm Systems?*

This means that 82 completed, signed, and submitted LSEs had 2 or more floors with vertical openings and did not have a fire alarm system, the fire alarm system was not operational or compliant, or could be manually initiated to notify occupants without voice communication.

Passing scores for vertical openings and fire alarm systems are automatically calculated in the LSE form based on data provided by the licensed design professional.

- g. *What does HFD mean when the report states that 14 LSEs had the lowest values for Corridor Doors, Vertical Openings and Smoke Alarms? What is a 'passing' score for Corridor Doors, Vertical Openings and Smoke Alarms?*

This means that 14 completed, signed, and submitted LSEs did not have required corridor doors or the doors contained unprotected openings, did not have any smoke alarms in the dwelling units, and had 4 or more floors with vertical openings.

Passing scores for corridor doors, vertical openings, and smoke alarms are automatically calculated in the LSE form based on data provided by the licensed design professional.

- h. What does HFD mean when the report states that 24 LSEs had the lowest values for Corridor Doors, Vertical Openings and Fire Alarm Systems? What is the 'passing' score for Corridor Doors, Vertical Openings and Fire Alarm Systems?*

This means that 24 completed, signed, and submitted LSEs did not have the required corridor doors or the doors contained unprotected openings, had 4 or more floors with vertical openings, and did not have a fire alarm system or the fire alarm system was not operational or compliant.

Passing scores for corridor doors, vertical openings, and fire alarm systems are automatically calculated in the LSE form based on data provided by the licensed design professional.

- i. What does HFD mean when the report states the 3 LSEs had a low value for Fire Alarm Systems? What is a 'passing' score for Fire Alarm Systems?*

This means that 3 completed, signed, and submitted LSEs did not have a fire alarm system, the fire alarm system was not operational or compliant, or could be manually initiated to notify occupants without voice communication.

Passing scores for fire alarm systems are automatically calculated in the LSE form based on data provided by the licensed design professional.

- j. What does HFD mean when the report states that 31 LSEs had low values for Hazardous Conditions and Fire Alarm Systems? What is a 'passing' score for Hazardous Conditions and Fire Alarm Systems?*

This means that 31 completed, signed, and submitted LSEs had 2 or more hazardous areas inside or outside a fire compartment and did not have a fire alarm system, the fire alarm system was not operational or compliant, or could be manually initiated to notify occupants without voice communication.

Passing scores for hazardous conditions and fire alarm systems are automatically calculated in the LSE form based on data provided by licensed design professionals.

- k. *What does HFD mean when the report states that 42 had the lowest values for Vertical Openings and Smoke Alarms? What is a 'passing' score for Vertical Openings and Smoke Alarms?*

This means that 42 completed, signed, and submitted LSEs had 4 or more floors with vertical openings and did not have smoke alarms in the dwelling units.

Passing scores for vertical openings and smoke alarms are automatically calculated in the LSE form based on data provided by the licensed design professional.

- l. *What does HFD mean when the report states that 19 LSEs had the lowest values for Corridor Doors, Fire Alarm Systems and Smoke Alarms? What is a passing score for Corridor Doors, Fire Alarm Systems and Smoke Alarms?*

This means that 19 completed, signed, and submitted LSEs did not have required corridor doors or the doors contained unprotected openings, did not have a fire alarm system or the fire alarm system was not operational or compliant, and did not have any smoke alarms in the dwelling units.

Passing scores for corridor doors, fire alarm systems, and smoke alarms are automatically calculated in the LSE form based on data provided by the licensed design professional.

- m. *What does HFD mean when the report states that 50 LSEs had the lowest values for Fire Alarm Systems and Smoke Alarms? What is a 'passing' score for Fire Alarm Systems and Smoke Alarms?*

This means that 50 completed, signed, and submitted LSEs did not have a fire alarm system or the fire alarm system was not operational or compliant and did not have any smoke alarms in the dwelling units.

Passing scores for fire alarm systems and smoke alarms are automatically calculated in the LSE form based on data provided by the licensed design professional.

- n. *What does HFD mean when the report states that 22 LSEs had the lowest values for Separation Walls, Corridor Doors, Vertical Openings and Fire Alarm Systems? What is a 'passing' score for Separation Walls, Corridor Doors, Vertical Openings and Fire Alarm Systems?*

This means that 22 completed, signed, and submitted LSEs did not have corridor and dwelling unit separation walls or these walls were incomplete, did not have required corridor doors or the doors contained unprotected

The Honorable Carol Fukunaga, Chair  
and Members  
April 20, 2021  
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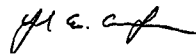
*information listed above: Currently, there are no suggested amendments or changes to Ordinance 19-4 or to the LSE."*

There were no suggested amendments or changes to Ordinance 19-4 or to the LSE at the time of the Six-Month Report Pursuant to Ordinance 19-4 - Relating to Fire Safety dated April 8, 2021.

All existing high-rise residential buildings were currently compliant with Ordinance 19-4 and related Ordinances (Ordinance 20-48 and 21-3) deadlines and requirements.

Should you have questions, please contact Assistant Chief Jason Samala of our Support Services division at 723-7105 or [jsamala@honolulu.gov](mailto:jsamala@honolulu.gov).

Sincerely,




Digitally signed by  
Camara Jr., Lionel E  
Date: 2021.04.20  
07:36:19 -10'00'

LIONEL CAMARA JR.  
Acting Fire Chief

Attachment

APPROVED:

  
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Michael D. Formby  
Managing Director

## LIFE SAFETY EVALUATION

| Worksheet Cover Sheet  |           |
|--|-----------|
| EVALUATION WORK SHEETS FOR   |           |
| THE FIRE AND LIFE SAFETY INDEX FOR   |           |
| EXISTING RESIDENTIAL HIGH-RISE BUILDINGS   |           |
| FACILITY:  | BUILDING: |
| FIRE COMPARTMENTS(S) EVALUATED   |           |
| EVALUATOR:   | DATE:     |
| PURPOSE:   |           |
|  |           |
|  |           |
| Complete this work sheet for each fire compartment (floor) Where conditions are the same in several fire compartments, one work sheet can be used for those fire compartments. |           |

HAVE A MAJORITY OF THE UNIT OWNERS VOTED TO OPT OUT OF REQUIRED SPRINKLER PROTECTION? ☐ << Answer by placing a "Yes" or "No" in the box on the left  
**THE SPRINKLER OPT-OUT VERSION OF THE LIFE SAFETY EVALUATION DOES NOT PROVIDE AN EQUIVALENT LEVEL OF LIFE SAFETY TO BUILDING OCCUPANTS AND FIRE FIGHTERS.**

Existing highrise residential building means any building that has floors used for human occupancy located more than 75 feet above the highest grade and contains dwelling units.

**Table 1. Occupant and Firefighter Risk Parameters**

Risk Parameters

RISK PARAMETER VALUES

|                                   | MOBILITY STATUS                             | NORMAL OR LIMITED MOBILITY                | REQUIRE* ASSISTANCE |   |        |
|-----------------------------------|---|---|---------------------|---|--------|
| 1. RESIDENT EVACUATION CAPABILITY |   |   |                     | *If the building fire emergency plan contains provisions which identify those building occupants that require assistance and establish procedures for the safe evacuation of these occupants, the risk values for "Normal or Limited Mobility" can be used. |        |
|                                   | OCCUPANT RISK FACTOR (O1)                   | 1.50                                      | 2.50                |   |        |
|                                   | FIREFIGHTER RISK FACTOR (FF1)               | 1.60                                      | 3.00                |   |        |
| ENTER (O1)                        | <input style="width: 40px;" type="text"/>   |   |                     |   |        |
| ENTER (FF1)                       | <input style="width: 40px;" type="text"/>   |   |                     |   |        |
| 2. OCCUPANT LOAD                  |   |   |                     |   |        |
|                                   | RESIDENTS                                   | 1 TO 25                                   | 26 TO 50            | 51 TO 100   | > 100  |
|                                   | OCCUPANT RISK FACTOR (O2)                   | 1.00                                      | 1.10                | 1.20  | 1.30   |
|                                   | FIREFIGHTER RISK FACTOR (FF2)               | 1.00                                      | 1.10                | 1.20  | 1.30   |
| ENTER (O2)                        | The occupant load is                        | <input style="width: 40px;" type="text"/> | persons             |   |        |
| ENTER (FF2)                       | <input style="width: 40px;" type="text"/>   |   |                     |   |        |
| 3. FIRE COMPARTMENT LOCATION (L)  |   |   |                     |   |        |
|                                   | FLOOR                                       | 9TH FLOOR OR LOWER                        | 10TH TO 19TH        | 20TH TO 29TH  | > 30TH |
|                                   | OCCUPANT RISK FACTOR (O3)                   | 1.10                                      | 1.20                | 1.30  | 1.40   |
|                                   | FIREFIGHTER RISK FACTOR (FF3)               | 1.10                                      | 1.50                | 1.80  | 2.00   |
| ENTER (O3)                        | Highest floor with residential dwellings is | <input style="width: 40px;" type="text"/> | floor.              |   |        |
| ENTER (FF3)                       | <input style="width: 40px;" type="text"/>   |   |                     |   |        |

**Table 2. Risk Factor Calculations**

|                                |     |      |   |     |      |   |     |      |   |      |      |
|--------------------------------|-----|------|---|-----|------|---|-----|------|---|------|------|
| OCCUPANT RISK FACTOR (ORF)     | O1  | 0.00 | X | O2  | 0.00 | X | O3  | 0.00 | = | ORF  | 0.00 |
| FIREFIGHTER RISK FACTOR (FFRF) | FF1 | 0.00 | X | FF2 | 0.00 | X | FF3 | 0.00 | = | FFRF | 0.00 |

**Table 3A and 3B Building Status**

| Table 3A. New Buildings |   |      |      |   |     |
|-------------------------|---|------|------|---|-----|
| 1.00                    | x | ORF  | 0.00 | = | ORF |
|                         |   |      |      |   |     |
|                         |   | FFRF | 0.00 | = | ORF |
|                         |   |      |      |   |     |

| Table 3B. (Existing Buildings) |   |      |      |   |      |
|--------------------------------|---|------|------|---|------|
| 0.60                           | x | ORF  | 0.00 | = | ORF  |
|                                |   |      |      |   |      |
|                                |   | FFRF | 0.00 | = | FFRF |
|                                |   |      |      |   |      |

This facility is an existing building

OCCUPANT RISK FACTOR (ORF)

FIREFIGHTER RISK FACTOR (FFRF)



## LIFE SAFETY EVALUATION

Table 4 Fire Safety Parameter Values

| Parameters   | Parameter Values                              | NONCOMBUSTIBLE TYPES I AND II                           | TYPE I A (ONE HOUR)  | TYPE I A or I B (TWO HOURS)   |
|--|---|---|--|---|
| 1. CONSTRUCTION TYPE   | TYPE I B, TYPE II, V                          | TYPE I A (ONE HOUR)                                     | TYPE I A or I B (TWO HOURS)  |   |
| LOCATION OF FIRE COMPARTMENT (Floor above level of exit discharge) |   |   |  |   |
| 17TH OR LESS   | NP  | NP  | 2  |   |
| 18TH TO 19TH   | NP  | NP  | 1  |   |
| 18TH TO 20TH   | NP  | NP  | 3  |   |
| 21ST TO 20TH   | NP  | NP  | -1   |   |
| 20TH AND ABOVE   | NP  | NP  | -2   |   |
| ENTER 1.   |   |   |  |   |
| 2. INTERIOR FINISH and Exit(s)                                     | (Corridors) UNDETERMINED OR LESS THAN CLASS C | CLASS C   | CLASS B  | CLASS A*  |
| ENTER 2.   | -10   | -5  | -2   | 3   |
| 3. CORRIDOR & DWELLING UNIT SEPARATION WALLS                       | NONE OR INCOMPLETE                            | ≤ 1/2 HR  | > 1/2 ≤ 1 HR   | ≥ 1 HR  |
| ENTER 3.   | -10   | -5  | 0  | 4   |
| 4. DOORS TO CORRIDOR*  | NO DOOR OR DOOR CONTAINS UNPROTECTED OPENINGS | < 20 MIN. FFR NO CLOSER                                 | < 4 MIN 1 3/4 INCH SOLID WOOD CORE WITH CLOSER                               | MINIMUM 20 MIN. FFR WITH CLOSER   |
| ENTER 4.   | -10   | -5  | 2  | 5   |
| 5. EXIT ACCESS   |   |   |  |   |
| 5A. INTERIOR CORRIDOR  | MAXIMUM CORRIDOR DEAD END                     | NO DEAD END > 20  | NO DEAD END > 30   |   |
| ENTER 5.   | -10   | 1   | 2  |   |
| 5B. EXTERIOR EGRESS BALCONIES (EXTERIOR EXIT ACCESS)               | MAXIMUM CORRIDOR DEAD END                     | NO DEAD END > 30  | NO DEAD END > 30   |   |
| ENTER 6.   | -10   | 1   | 2  |   |
| 6. VERTICAL OPENINGS   | OPEN 4 OR MORE FLOORS                         | OPEN 2 OR 3 FLOORS                                      | ENCLOSURE WITH INDICATED FIRE RESISTANCE                                     |   |
| ENTER 6.   | -14   | -10   | 0  | 2   |
| 7. HAZARDOUS AREAS   | DOUBLE DEFICIENCY IN FIRE COMPARTMENT         | OUTSIDE FIRE COMPARTMENT                                | SINGLE DEFICIENCY IN FIRE COMPARTMENT  | OUTSIDE FIRE COMPARTMENT  |
| ENTER 7.   | -11   | -5  | -5   | 0   |
| 8. SMOKE MANAGEMENT  | NONE  | SMOKEPROOF ENCLOSURE                                    | EXTERIOR STAIRS OR STAIR SHAFT WITH EXTERIOR EXIT ACCESS FOR ALL EXIT STAIRS | SMOKEPROOF ENCLOSURE (VIA NATURAL VENTILATION OR MECHANICAL PRESSURIZATION) |
| ENTER 8.   | -5  | -2  | 3  | 4   |
| 9. EGRESS ROUTES   | < 2 ROUTES                                    | MULTIPLE ROUTES   | NOT DEFICIENT W/ COMPLIANT STAIRWELL ENTRY                                   |   |
| ENTER 9.   | -9  | 0   | 3  |   |
| 10. FIRE ALARM SYSTEM  | NONE, NONOPERATIONAL, OR NONCOMPLIANT         | MANUAL INITIATION WITHOUT FIRE DEPARTMENT NOTIFICATION  | OCCUPANT NOTIFICATION WITHOUT VOICE COMMUNICATION                            | OCCUPANT NOTIFICATION WITH VOICE COMMUNICATION                              |
| ENTER 10.  | -10   | 1   | 4  |   |
| 11. SMOKE DETECTION  | NONE  | CORRIDORS*  |  | TOTAL SMOKE DETECTION THROUGHOUT FIRE COMPARTMENT                           |
| ENTER 11.  | 0 (0)**                                       | 3   |  | 5   |
| 12. AUTOMATIC SPRINKLERS   | NONE  | CORRIDOR & COMMON AREAS                                 | ENTIRE BUILDING WITH NFPA 13R ON RESIDENTIAL FLOORS                          | ENTIRE BUILDING*  |
| ENTER 12.  | -5 (0)** (4)***                               | 0   | 5  | 10 (5)*   |
| 13. SMOKE ALARMS   | NONE  | ONE IN HALL NEAR BEDROOM                                | ONLY IN BEDROOM(S)   | IN ALL BEDROOMS AND HALLWAYS NEAR BEDROOMS NO TANDEN OPERATION              |
| ENTER 13.  | -10   | -3  | -1   | 2   |
| 14. STANDPIPE SYSTEM   | NONE  | CLASS I STANDPIPE PRESENT BUT NOT IN ALL REQUIRED EXITS | CLASS I MANUAL STANDPIPE IN ALL EXIT ENCLOSURES                              | AUTOMATIC WET STANDPIPE SYSTEM WITH HOSE VALVES IN ALL EXIT ENCLOSURES      |
| ENTER 14.  | -10   | 0   | 5  | 7   |
| 15. ELEVATORS  | NO RECALL OR NO FIREFIGHTER SERVICE           | WITH RECALL AND FIREFIGHTER SERVICE                     |  |   |
| ENTER 15.  | -5  | 0   | 4  |   |
| 16. EMERGENCY LIGHTING AND EXIT SIGNS                              | NO EMERGENCY LIGHTING                         | EXITS ONLY  | EXIT ACCESS AND EXITS  |   |
| ENTER 16.  | -2  | 0   | 2  |   |

\* Interior finish of Class B or less that is provided with a listed, approved fire retardant coating, providing a Class A rating, is acceptable.

\*\* For locations where there are no interior corridors, only exterior egress balconies, use 4 points, regardless of wall type.

\*\* For buildings with exterior egress balconies enter 5 regardless of door type.

\*\* The licensed design professional should determine the representative sampling amount in order to provide the value for this parameter.

\*\* For locations where there are no interior corridors, only exterior egress balconies, use 3 points, even if there is no smoke detection.

\*\* Use this value if the entire zone is protected with quick-response automatic sprinklers.

\*\* For locations where there are no interior corridors, only exterior egress balconies, use 5 points, even if there is no sprinkler protection.

\*\* For locations which have opted out of sprinkler protection, use 0 points.

\*\*\* Item 1 is 2 points use -8 points here

\* Credit for a combined system is only permitted if the Parameter 13 Automatic Sprinklers value is 10 or 10.

NP: Not permitted, this evaluation method cannot be used.

LIFE SAFETY EVALUATION

Table 5 Individual Safety Evaluations

| FIRE SAFETY<br>PARAMETER                        | COMPARTMENTATION FIRE<br>SAFETY<br>(S1) | EXTINGUISHMENT<br>FIRE SAFETY<br>(S2) | EGRESS FIRE<br>SAFETY<br>(S3)   | GENERAL<br>OCCUPANT SAFETY<br>(S4) | GENERAL FIRE<br>FIGHTER SAFETY<br>(S5) |
|---|---|---------------------------------------|---------------------------------|------------------------------------|--|
| 1. CONSTRUCTION                                 | 0                                       | 0                                     |                                 | 0                                  | 0                                      |
| 2. INTERIOR FINISH<br>(Corridors and Exits)     | 0                                       |                                       | 0                               | 0                                  | 0                                      |
| 3. CORRIDOR & DWELLING<br>UNIT SEPARATION WALLS | 0                                       |                                       |                                 | 0                                  | 0                                      |
| 4. DOORS TO CORRIDOR *                          | 0                                       |                                       | 0                               | 0                                  | 0                                      |
| 5. EXIT ACCESS*                                 |   |                                       | 0                               | 0                                  | 0                                      |
| 6. VERTICAL OPENINGS                            | 0                                       |                                       | 0                               | 0                                  | 0                                      |
| 7. HAZARDOUS AREAS                              | 0                                       | 0                                     |                                 | 0                                  | 0                                      |
| 8. SMOKE MANAGEMENT                             |   |                                       | 0                               | 0                                  | 0                                      |
| 9. EGRESS ROUTES                                |   |                                       | 0                               | 0                                  | 0                                      |
| 10. FIRE ALARM SYSTEM                           |   | 0                                     |                                 | 0                                  | use 1/2 of item 10<br>0                |
| 11. SMOKE DETECTION                             |   | 0                                     | 0                               | 0                                  | 0                                      |
| 12. AUTOMATIC SPRINKLERS                        |   | 0                                     | 0                               | 0                                  | 0                                      |
| 13. SMOKE ALARMS                                |   |                                       | 0                               | 0                                  |  |
| 14. STANDPIPE SYSTEM                            |   | 0                                     |                                 |                                    | 0                                      |
| 15. ELEVATORS                                   |   |                                       |                                 |                                    | 0                                      |
| 16. EMERGENCY LIGHTING<br>AND EXIT SIGNS        |   |                                       | 0                               | 0                                  | 0                                      |
| SUBTOTALS                                       | -                                       | -                                     | -                               | -                                  | -                                      |
| ADDITIONAL FACTORS                              |   |                                       | OCCUPANT RISK<br>FACTOR<br>0.00 | OCCUPANT RISK FACTOR<br>0.00       | FIREFIGHTER RISK<br>FACTOR<br>0.00     |
| TOTAL VALUE                                     | S1 =<br>-                               | S2 =<br>-                             | S3 =<br>#DIV/0!                 | S4 =<br>#DIV/0!                    | S5 =<br>#DIV/0!                        |



# LIFE SAFETY EVALUATION

**Table 6 Minimum Required Fire Safety Indices**

|                  | COMPARTMENT<br>FIRE SAFETY Sa | EXTINGUISHMENT<br>FIRE SAFETY Sb | EGRESS FIRE<br>SAFETY Sc | GENERAL<br>OCCUPANT FIRE<br>Sa | FIRE FIGHTER<br>SAFETY<br>Se |
|------------------|-------------------------------|----------------------------------|--------------------------|--------------------------------|------------------------------|
|                  | EXIST.                        | EXIST.                           | EXIST.                   | EXIST.                         | EXIST.                       |
| STANDARD INDICES | 8                             | 8                                | 8                        | 8                              | 8                            |
| OPT-OUT INDICES  | 6                             | 6                                | 8                        | 6                              | 6                            |

HAVE A MAJORITY OF THE UNIT OWNERS VOTED TO OPT OUT OF REQUIRED SPRINKLER PROTECTION

0

This answer is from cell G17 in Table 1

IF THE ANSWER IS YES, THEN PROCEED WITH THE OPT OUT VERSION

THE SPRINKLER OPT-OUT VERSION OF THE LIFE SAFETY EVALUATION DOES NOT PROVIDE AN EQUIVALENT LEVEL OF LIFE SAFETY TO BUILDING OCCUPANTS AND FIRE FIGHTERS.

Sa =

8

Sb =

8

Sc =

8

Sd =

8

Se =

8

LIFE SAFETY EVALUATION

| Table 7. Fire Compartment Safety Equivalency Evaluation |                                    |                                 |         |   |      |   | YES       | NO      |
|---|------------------------------------|---------------------------------|---------|---|------|---|-----------|---------|
| CALCULATED FIRE SAFETY INDEX                            | MINIMUM REQUIRED FIRE SAFETY INDEX |                                 |         |   |      |   | Is C >=0? |         |
| COMPARTMENTATION FIRE SAFETY (S1)                       | less                               | COMPARTMENT FIRE SAFETY (Sa)    | S1      |   | Sa   | C |           |         |
|   |                                    |                                 | 0.0     | - | 8.0  | = | -8.0      | X       |
| EXTINGUISHMENT FIRE SAFETY (S2)                         | less                               | EXTINGUISHMENT FIRE SAFETY (Sb) | S2      |   | Sb   | E | Is E >=0? |         |
|   |                                    |                                 | 0.0     | - | 8.0  | = | -8.0      | X       |
| EGRESS FIRE SAFETY (S3)                                 | less                               | EGRESS FIRE SAFETY (Sc)         | S3      |   | Sc   | P | Is P >=0? |         |
|   |                                    |                                 | #DIV/0! | - | 8.00 | = | #DIV/0!   | #DIV/0! |
| GENERAL OCCUPANT SAFETY (S4)                            | less                               | GENERAL OCCUPANT SAFETY (Sd)    | S4      |   | Sd   | G | Is G >=0? |         |
|   |                                    |                                 | #DIV/0! | - | 8.0  | = | #DIV/0!   | #DIV/0! |
| FIRE FIGHTER SAFETY (S5)                                | less                               | FIRE FIGHTER SAFETY (Se)        | S5      |   | Se   | F | Is F >=0? |         |
|   |                                    |                                 | #DIV/0! | - | 8.0  | = | #DIV/0!   | #DIV/0! |

## LIFE SAFETY EVALUATION

### TABLE 8 CONCLUSIONS

- ☐ All of the checks in Table 7 are in the "Yes" column. The level of fire safety is acceptable.
- ☐ One or more of the checks in Table 7 are in the "No" column. The level of fire safety is not acceptable.
- ☐ Compliance will be met with an automatic fire sprinkler system throughout the building.