3) The 10-percent limit does not apply to curtains, draperies, fabric hangings and similar combustible decorative materials used as window coverings.

4) Interior trim is required to be of minimum Class C materials. 5) Combustible trim, excluding handrails and guardrails, cannot exceed 10 percent of the specific wall

or ceiling area in which it is located. If plastics are used as interior finish or decorations, they will need to be separately identified and

7) Decorative ceiling elements include umbrellas, awnings, canopies, roofs of interior structures, interior projections, lattice ceilings, and other horizontal installations that might obstruct or delay actuation

4.8 Means of Egress

4.8.1 General

The occupant load of every room or space that is assembly occupancy will be posted in a conspicuous place near the main exit or exit access doors.

Table 10 shows the occupant load factors used to calculate the occupant load in the primary areas.

of sprinklers will need to be separately identified and evaluated.

Table 10 - Occupant toad factors

Building Areas, Uses	Floor Area Per Occupant (st)	
Restaurants, lounges, game room	15 net	
Meeting rooms	15 net	
Bowling center	5 occupants per lane (including 15 feet of ru 7 net for other areas	
Exercise rooms	50 gross	
Residential - Dwelling Units	200 gross	
Parking garage	200 gross	
MEP and Storage rooms	300 gross	

4.8.2 Exit Signs

Exit and exit access doors will be clearly marked by exit signs readily visible from any direction of egress travel. Access to exits will be marked by additional exit signs if the egress paths to exits and exit access doors are not immediately visible. Exit signs in corridors will be placed so that there is a visible exit sign within 100 feet.

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Exit signs will not be required in areas that require only one exit.

Main exterior exit doors that are obvious and clearly identifiable will not be provided with exit signs.

Tactile exit signs stating EXIT will be provided adjacent to each door to an exit stairway and the exit discharge. Exit signs will be internally or externally illuminated at all times. Upon primary power loss, the exit signs will maintain continuous illumination for at least 90 minutes.

4.8.3 Means of Egress Illumination

The means of egress, including the exit discharge, will be illuminated at all times when the space served by the means of egress system is occupied. No illumination will be required for the means of egress within the dwelling units (Group R-2).

The means of egress illumination level is at least 1 foot-candle at the floor level in the path of egress, including along the path of travel for the exit discharge from each exit to the public way.

Emergency power will provide power for the means of egress illumination system for at least 90 minutes for the exit access corridors, aisles and passageways, where two or more means of egress are required, and for all exit

stairways and the portion of the exterior exit discharge immediately adjacent to exit discharge doorways.

Emergency lighting facilities will provide initial illumination that is at least an average of 1 foot-candle and a minimum at any point of 0.1 foot-candle measured along the path of egress at floor level. Illumination levels can decline to 0.6 foot-candle average and a minimum at any point of 0.06 foot-candle at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 will not be

4.8.4 Minimum Capacity of the Egress System

Teble 11 - Egress width per occupant

The stairways and corridors will have a minimum width of 44 inches.

Minimum exit capacities will be per Table 11.

Egress Element	Clear Width per Occupant	
Stairs	0.2 inches per occupant	
Ramps	0.15 inches per occupants	
Doors and other level egress components	0.15 inches per occupant	

Sommet Blanc, Park City, Utah 21020.00_Sommet Blanc_FLS Basis of Design CD_verD.docx Stairways and corridors serving 49 or less occupants may have a minimum width of 36 inches.

Corridors providing access to mechanical/electrical equipment only may have a minimum width of 24 inches.

4.8.5 Number of Required Exits

The minimum number of required exits or access to exits will be per Table 12.

Occupancy	Occupant Load	Required Means of Egress
Group A, F	Fewer than 50	1
	50 or more	2
Group S	Fewer than 30	1
	30 or more	2
Group R-2	Fewer than 21	1
	21 or more	2

A minimum of three exits or exit access doorways will be provided from any space, where the occupant load exceeds 500.

A minimum of four exits or exit access doorways will be provided from any space, where the occupant load exceeds 1000.

A minimum of two exits or exit access doorways will be provided from any space, where the common path of travel exceeds the code limits (see Table 13).

4.8.6 Exit and Exit Access Doors

Fire doors are required to be automatic- or self-closing and swing in the direction of egress travel where serving a space with an occupant load of 50 or more persons.

Panic hardware will be provided on all doors provided with latch or lock that are part of the means of egress from the assembly areas having an occupant load of 50 or more. Egress doors will always be readily openable from the egress side without the use of a key or special

Doors from the dwelling units with an occupant load of 10 or less may have night latches, dead bolts or security chains if these devices are readily openable from the inside without the use of a key or tool.

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Horizontal sliding doors may be used from spaces that have an accupant load of less than 10 people, or within single dwelling units in Group R-2 occupancies.

The doors will provide a minimum clear width of 32 inches (measured per Figure 5), with the exception of doors opening into storage closets less than 10 square feet in area. The maximum width of a swinging door leaf will be 48 inches.

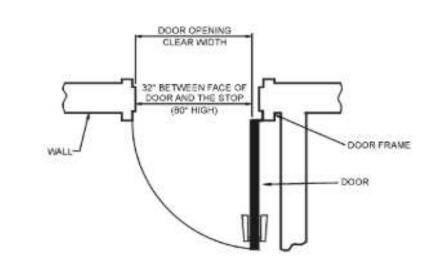
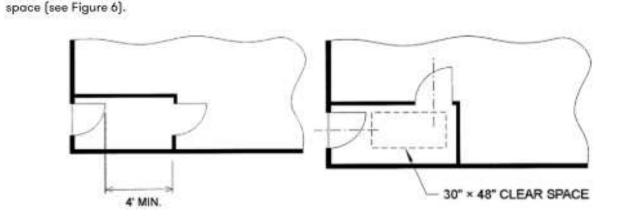


Figure 5 - Door exit width measurement The space between two doors in a series will be at least 48 inches plus the width of the door swinging into the



Figures - Clear space between doors in a series Door landings will be provided at the same elevation on either side of a door for a distance equal to the door width. Accessibility requirements may result in larger landings in some areas.

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TRAVEL DISTANCE = 29' + 29' = 58'0"

INDICATES POTENTIAL

FURNITURE LOCATION

When fully open, doors will not project more than 7 inches into the landing or the required width of an egress element. Doors in any position will not reduce the landing or the required width of an egress element to less than one-half of its required width (see Figure 7).

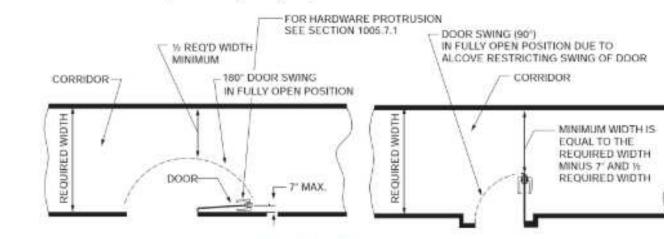


Figure 7 - Door encroachment

The fire door opening force will not be more than 15 lbs to release latch, 30 lbs to set door leaf in motion, and 15 lbs to fully open the door. The force for pushing or pulling open interior swinging egress doors, other than fire doors, cannot exceed 5 lbs.

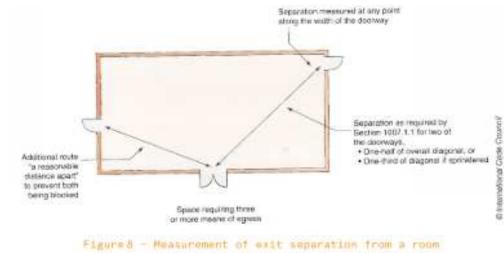
Rooms and/or spaces that are not normally occupied will not open directly into exit enclosures.

4.8.7 Exit Separation

For areas requiring two exits, the exit doors or exit access doorways will not be closer than one-third of the length of the maximum overall diagonal dimension of the area served as per UBC 1007.1.1(2). The separation distance to exit or exit access doorways may be measured to any point along the width of the doorway (see

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As per UBC 1007.1.1(1), where a 1-hour fire-resistance rated corridor is provided, the exit separation is permitted to be measured along the path of travel within the corridor (see Figure 9).

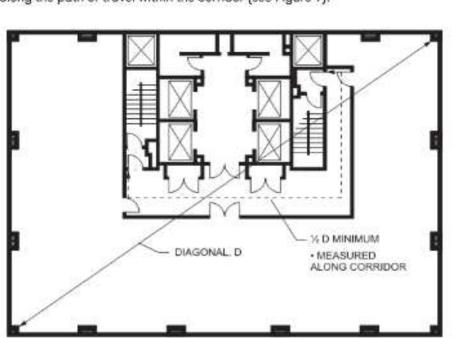


Figure 9 - Measurement of exit separation within a corridor (figure from IBC commentary) Additional high-rise requirements for the buildings is that exit stairs shall be separated by 30-ft or 1/4 of the building diagonal, see Section 3.1.1.

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For areas requiring three or more exits, at least two will be placed no closer than one-third the length of the maximum overall diagonal dimension of the area served. The additional exits will be placed such that if one exit becomes blocked, the other exit(s) will be available.

Exit access doorways will be separated by a horizontal distance equal to one-half the maximum horizontal dimension of large boiler and refrigeration machinery rooms.

4.8.8 Intervening Spaces

Egress from a room or a space to an exit or to a corridor will not pass through another room or intervening room, except where the room is accessory to the area served and provides a discernible egress path.

Egress will not pass through storage rooms, kitchens, closets or spaces used for similar purposes. An exit access will not pass through a room that can be locked to prevent egress.

4.8.9 Corridors

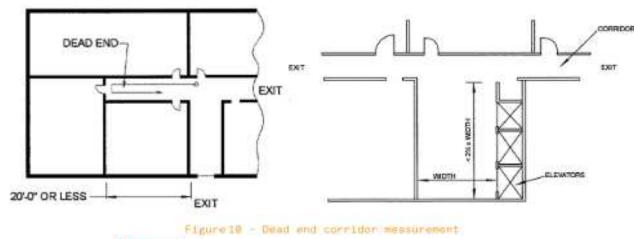
Per the code definition, a corridor is "an enclosed exit access component that defines and provides a path of egress travel". Corridors serving Group R occupancies are required to have a 0.5-hour fire-resistance rating.

4.8.10 Travel Distance / Common Path of Egress / Dead End Corridors

Occupancy	Maximum Travel Distance	Maximum Common Path of Egress Travel [®] (see Figure 11)	Maximum Dead-End Corridor Distance ^{3, 1} (see Figure 10)
Group A,	250 feet	75 feet	20 feet
Group B	300 feet	100 feet	50 feet
Group F-1	250 feet ⁶	100 feet	50 feet
Group F-2	400 feet	100 feet	50 feet
Group R-2	250 feet	125 feet	50 feet
Group S-1	250 feet	100 feet	50 feet
Group S-2	400 feet	100 feet	50 feet

- Travel distances to the nearest exit 2 The portion of the exit access, which the occupants are required to traverse before two separate and distinct paths of egress travel to two exits are available
- 3 Where more than one exit or exit access is required 4 A dead-end corridor is not limited in length where the length of the dead-end corridor is less than 2.5 times the least
- 5. All portions of refrigeration machinery room will be within 150 feet of an exit or exit access doorway

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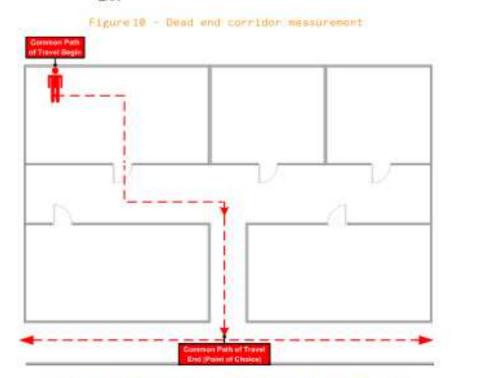


Figure 11 - Measurement of common path of egress travel. Exit access travel distance is required to be measured from the most remote point within a story along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an exit (see Figure 12).

Figure 12 - Exit access travel distance measurement along an unobstructed path 4.8.11 Stairs Projections into the required stairway width will not exceed 4.5 inches on each side located below the handrail height. Projections are not limited above the required headroom height.

Open risers are not permitted, with the exception of stairs that are not part of the accessible means of egress. These stairs may have openings between the treads that does not permit the passage of a sphere with a diameter of 4 inches.

At least one stairway is required to serve the highest roof level. If the roof or penthouses contains elevator equipment that must be accessed for maintenance, that roof level is also required to be accessed by a

4.8.12 Ramps

Ramps will have a running slope not steeper than one unit vertical in 12 units horizontal (8-percent slope). Ramps will have minimum 60-inch long landings at the bottom and top of each ramp.

Where the ramp is not a part of an accessible route, the length of the landing is not required to be more than 48 inches in the direction of travel.

The rise of a ramp will not be over 30 inches between landings.

4.8.13 Handrails Stairways will have handrails on each side.

Ramps with a rise greater than 6 inches will have handrails on both sides.

Handrails will be provided 34 to 38 inches above landings and nose of tread on each side.

flight of stairs or ramp run. Where handrails are not continuous between flights, the handrails are required to extend harizontally not less than 12 inches beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser. At ramps where handrails are not continuous between runs, the handrails will extend horizontally above the landing 12 inches minimum beyond the top and bottom of ramp runs. Stairways will have intermediate handrails located in such a manner that all portions of the stairway width

required for egress capacity are within 30 inches of a handrail, which is permitted to project into the required stairway width up to 4.5 inches.

Handrails will return to a wall, guard or the walking surface or will be continuous to the handrail of an adjacent

Guards will be located along open-sided walking surfaces, including mezzanines, stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side.

Guards will also be provided where appliances, equipment, fans, roof hatch openings or other components that require service are located within 10 feet of a roof edge located more than 30 inches above the floor, roof or grade below. The guard will extend not less than 30 inches beyond each end of such roof component requiring protection.

Required guards will be not less than 42 inches high, measured vertically above the adjacent walking surfaces or the line connecting the leading edges of the treads.

Guards will not have openings which allow passage of a sphere 4 inches in diameter from the walking surface to the required guard height. (Guard protecting appliances, equipment, fans, roof hatch openings may be constructed so as to prevent the passage of a sphere 21 inches in diameter.)

4.8.15 Interior Exit Stairways

Enclosed exit stairs will be separated by 2-hour fire-resistive construction from the interior of the building with openings protected by assemblies having a 90-minute fire protection rating. Openings in enclosed exit stair shaft walls will be limited to those necessary for exit access to the enclosure from normally occupied spaces including egress corridors. Interior exit stairways are required to discharge:

more than half of the interior exit stairways and number of building occupants (see Section 3.4).

Directly to the outside,

elevators.

 Through a continuous 2-hour fire-resistance rated exit passageway, or Through the level of exit discharge of the building as long as the way to the exterior is unobstructed and readily visible/identifiable from the termination of the exit enclosure. This option is limited to not

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SEPARATION AS REQUIRED FOR EXIT -ENCLOSURE (TO BE CONTINUOUS)

Figure 13 - Example exit stairway discharge configuration Penetrations into an exit enclosure will be limited to sprinkler piping, standpipes, and electrical raceway serving the exit enclosure and terminating at a steel box not exceeding 16 square inches.

4.8.16 Accessible Means of Egress

Accessible spaces are required to be provided with not less than one accessible means of egress. Where more required to be served by not less than two accessible means of egress.

egress. However, stairways that connect levels in the same story are not permitted as part an accessible means of egress. The proposed accessible means of egress for the development consists of interior exit stairways and elevators.

A two-way communication system will be provided at the elevator landings above grade levels (with the exception of service elevators) as noted below (see Figure 14):

Two-way communication systems will provide communication between the elevator landings and a

- central control point location approved by the fire department.
- The two-way communication system will include both audible and visible signals.

Enclosed areas of refuge, enlarged floor level stair landings or stair vestibules are not required.

via the two-way communication system and written identification of the location will be posted adjacent to the two-way communication system.

Directions for the use of the two-way communication system, instructions for summoning assistance

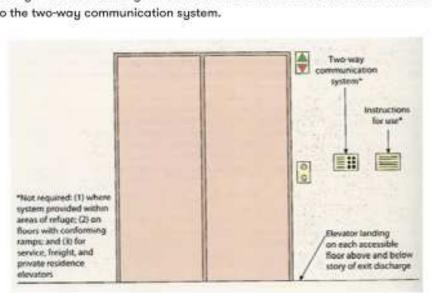


Figure 14 - Two-way communication system at elevator landing

4.9 Fire Suppression Systems

4.9.1 Automatic Fire Sprinkler Systems Hydraulically calculated automatic fire sprinkler systems will protect the entire project. The automatic fire

sprinkler systems will be designed to comply with NFPA 13. No storage areas of ordinary combustibles are intended to have storage in excess of 12 feet in height. If storage in excess of 12 feet is later added, or storage of hazardous materials is introduced, it will be protected in accordance with NFPA 13 and the UFC.

apartments and Ordinary Hazard Group 1 in parking garage and the remainder of the development in accordance with NFPA 13 requirements. As discussed in Section 3.1 and 3.3.1, Buildings A/B and C will be protected by independent automatic fire

The fire sprinkler system will be zoned per level and will be designed for Light Hazard in the residential

sprinkler systems, and each floor will be provided with control valves equipped with supervisory initiating devices and water-flow initiating devices.

Class I standpipe system will be installed, designed per the requirements of NFPA 14. The standpipes may be the automatic wet type, designed to provide a minimum pressure of 100 psi at the outlet of the hydraulically most remote 2-1/2-inch hose connections. 2-1/2-inch Class I connections will be provided at the following

- . In the main floor landings of all stairways. The hose connections will be located in such a manner so as
- At the entrance from the exit passageway to other areas of a building. . Supplemental locations to ensure that the most remote portion of each floor is within 150 ft of a

Standpipe risers will be protected by 2-hour construction unless they are within a stair enclosure. Standpipe laterals that are not located within an interior exit stairway are not required to be enclosed within fire rated

4.9.3 Fire Pump

One fire pump is required for the entire building.

The controllers will be within sight of the motor.

An electric motor driven fire pump will be provided for each building, installed per the requirements of NFPA 20. The electric motor will be connected to an emergency power source.

protected corridor connected to an exit enclosure accessible from the exterior. The fire pump controllers will be readily accessible and located adjacent to the fire pump room exterior door.

underground fire mains will be installed to comply with NFPA 24.

In addition to the above, the building will require a secondary, on-site water supply as required for high-rise

The fire department connection (FDC) must be located adjacent to the usable stairways, where the standpipe hose connections are located. The FDC should be on the street that the building fronts to, and be visible from the approved fire apparatus access road. The FDC cannot be further than 100 feet of a fire hydrant, measured on an approved route. A 3-foot clear space will be maintained around the FDC.

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The fire department connections will have at least 2-way inlets. To be discussed and confirmed by Park City Fire Department.

The selection, installation, distribution, inspection, maintenance, and testing of portable fire extinguishers will be in accordance with the UFC.

Where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C, other portable fire extinguishers will not be required except the following condition: On each floor of the structures under construction, in accordance with 3315.1 of the UFC.

For the Group A assembly spaces, portable fire extinguishers having a minimum rating of 2-A:10-B:C are recommended. The parking garage is an ordinary hazard space where Class B flammables are present, and 2A:20B extinguishers are recommended. The maximum travel distance to a portable fire extinguisher will not exceed 75 feet measured along normal paths of travel (50 feet in the parking garage). Portable fire extinguishers will be located in conspicuous locations where they are readily accessible and immediately

Commercial kitchens will have Class K extinguishers with a maximum travel distance shall not exceed 30 ft from the hazard to the extinguishers.

4.10 Fire Detection and Occupant Notification Systems

4.10.1 Fire Alarm System The fire alarm system incorporating emergency voice alarm/communications (EVACS) will be designed to comply with NFPA 72.

available for use. Portable fire extinguishers will not obstructed or obscured from view.

- Water flow alarm Fire alarm
- Supervisory Valve tamper supervisory

initiating devices of the project will be provided.

The EVACS will allow for zone by zone communication and all call. Each floor will be a separate fire alarm zone. The length of any zone will not exceed 300 feet in any direction, but the zones may coincide with the automatic alert tone followed by recorded voice instructions. The voice message will be a direction for evacuation, and not any kind of message that could be construed as a reason to wait for instructions.

The voice alarm notification will be audible throughout the evacuation zone. The voice communications systems will be capable of the reproduction of prerecorded, synthesized, or live messages with voice intelligibility through speakers located in elevators, exit stairways and throughout a selected floor or floors.

fire sprinkler zones. The fire alarm annunciation will be fully coordinated with the floor levels, stairs and

Each floor will constitute a separate occupant notification zone. The occupant notification system of the floors

The operation of an automatic fire detector or a fire sprinkler waterflow device will automatically sound an

A manual override for emergency voice communication will be provided for all paging zones.

At a minimum, paging zones will be provided as follows:

or as required by the local fire chief.

4.10.2 Emergency Voice Alarm-Signaling System

 Elevator groups (manual paging only) Interior exit stairways (manual paging only)

Each floor

The emergency voice alarm-signaling system will be a dual-channel system, capable of sending two separate messages to different zones.

The audibility will exceed the ambient sound level in the room or space by 15 decibels minimum, or exceed any maximum sound level with a duration of 60 seconds by 5 decibels, whichever is louder. Sound levels will be maximum 110 decibels at the minimum hearing distance from the audible appliance.

The fire alarm panel will contain controls for manually activating the voice alarm system on a selective and

general basis. When activated, the voice alarm system will automatically override all other sound systems that would

interfere with the required sound pressure levels.

A fire alarm speaker will not be provided in the fire command center.

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> 1319 SE MLK Blvd, Suite 210 Portland, Oregon 97219

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Bothell, WA 98011

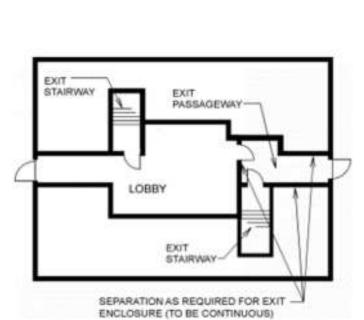
Building Envelope Consultant 2101 N 34th St Seattle, WA 98103

> principal architect <u>TK, KM</u> job no. 20052 date 05/17/2024

05/17/2024

IFC SET 2 OF 3

CODE SUMMARY - FIRE



than one means of egress are required from any accessible space, each accessible portion of the space is Ramps, open exit access stairways, or interior or exterior exit stairways may be part of the accessible means of

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not to obstruct egress when the hose lines are connected and charged.

construction.

standpipe hose connection (measured along the path of travel).

A dedicated, 2-hour fire-resistance-rated fire pump room is required, with direct exterior access or via a

4.9.4 Water Supply The water supply will be provided by the municipal water supply system with two isolated connections. The

buildings, see Section 3.1.8.

System trouble

The main fire alarm control panel will be located in the fire command center, where the annunciation of all

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The following five distinctly different signals will be transmitted to the approved supervising station:

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The voice alarm system will be zoned to be coordinated with fire alarm and sprinkler zones.

Accessibility Consultant
Studio Pacifica 2144 Westlake Ave N, Suite F Seattle, WA 98109 immediately above and below the fire floor will also activate simultaneously with the fire alarm on the fire floor, 1001 Fourth Ave., Suite 3100 Seattle, WA 98154 project manager__TM, JB, SL, MD_

drawn by SK, SS, JR, CP, EA, JF, BD checked by JB

no. date

LIFE SAFETY REPORT