



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

May 2018
Log No. _____

1. State Building Code to be Amended:

- | | |
|---|---|
| <input checked="" type="checkbox"/> International Building Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> Wildland Urban Interface Code |
| <input type="checkbox"/> Uniform Plumbing Code | |

For the Washington State Energy Code, please see specialized [energy code forms](#)

Section(s):

IBC Chapter 10 (various sections) and Section 3114

Title: IBC Fixed Guideway Transit and Passenger Rail Systems Stations - Means of Egress

2. Proponent Name (Specific local government, organization or individual):

Proponent: Kym Williams, Sound Transit
Title: Acting Director, Regulatory Permitting
Date: May 14/2021

3. Designated Contact Person:

Name: Mark Murray
Title: Senior Fire Protection Engineer
Address: 401 S. Jackson Street, Seattle, WA 98104

Office Phone: (206-553-3899)
Cell: (206-245-0320)
E-Mail address: mark.murray@soundtransit.org

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

IBC **Section(s)** 1004.5, 1005.1, 1006.2.1, 1010.3.4, 1017.2, 3114.2 (Note this proposal also includes adoption and amendment of NFPA 130 2020 edition (hereafter referred as NFPA 130) in section 3114).

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

A. Topic: Elevators, escalators and moving walks.

1003.7 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress from any other part of the building.

Exceptions:

1. Elevators used as an accessible means of egress in accordance with Section 1009.4.
2. Escalators used as a means of egress for fixed transit and passenger rail system accordance with Section 3114.

B. Topic: Occupant load

1004.5 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.5. For areas without fixed seating, the occupant load shall be not less than that number determined by dividing the floor area under consideration by the occupant load factor assigned to the function of the space as set forth in Table 1004.5. Where an intended function is not listed in Table 1004.5, the building official shall establish a function based on a listed function that most nearly resembles the intended function.

Exception: Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load.

1004.5.1 Increased occupant load. The occupant load permitted in any building, or portion thereof, is permitted to be increased from that number established for the occupancies in Table 1004.5, provided that all other requirements of the code are met based on such modified number and the occupant load does not exceed one occupant per 7 square feet (0.65 m²) of occupiable floor space. Where required by the building official, an approved aisle, seating or fixed equipment diagram substantiating any increase in occupant load shall be submitted.

**Table 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR'
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	

Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	See Section 1004.6
Assembly without fixed seats	
Concentrated (chairs only-not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway and for additional areas	7 net
Business areas	150 gross
Concentrated business use areas	See Section 1004.8
Courtrooms-other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
<u>Fixed guideway transit and passenger rail systems</u>	
<u>Platform</u>	<u>See Section 3114</u>
<u>Concourse/lobby</u>	<u>100 gross</u>
Group H-5 fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mall buildings-covered and open	See Section 402.8.2
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross
For SI: 1 foot = 304.8 mm, 1 square foot= 0.0929 m ²	

a. Floor area in square feet per occupant.

C. Topic: Exit width

1005.1 General. All portions of the means of egress system shall be sized in accordance with this section.

Exceptions:

1. Aisles and aisle accessways in rooms or spaces used for assembly purposes complying with Section 1029.
2. The capacity in inches, of means of egress components for fixed guideway transit and passenger rail stations, shall meet the requirements of Section 3114.

D. Topic: Common path of travel

1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

1. The number of exits from foyers, lobbies, vestibules or similar spaces need not be based on cumulative occupant loads for areas discharging through such spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.
2. Care suites in Group I-2 occupancies complying with Section 407.4.
3. Unoccupied mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.
4. The common path of travel for fixed transit and passenger rail system stations shall be in accordance with Section 3114.

E. Topic: Number of exits

1006.2.1.1 Three or more exits or exit access doorways. Three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000.

Exception: The number of required exits for fixed transit and passenger rail systems may be reduced by one at open stations.

F. Topic: Security Grilles

1010.3.4 Security grilles. In Groups B, F, M and S, horizontal sliding or vertical security grilles are permitted at the main exit and shall be openable from the inside without the use of a key or special knowledge or effort during periods that the space is occupied. The grilles shall remain secured in the full-open position during the period of occupancy by the general public. Where two or more means of egress are required, not more than one-half of the exits or exit access doorways shall be equipped with horizontal sliding or vertical security grilles.

1010.3.4.1 Fixed transit and passenger rail systems. In fixed transit and passenger rail system stations horizontal and vertical security grilles are permitted at station entrances as a component in the means of egress when the station is under constant supervision by on-site security personnel and an exit door with panic hardware that swings in the direction of egress, with a minimum clear width of 32 inches, provided within 10 feet of the gate. The security grilles shall remain secured in the full-open position during the period of occupancy by the general public.

G. Topic: Travel distance

TABLE 1017.2
EXIT ACCESS TRAVEL DISTANCE^a

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM(feet)
A, E, F-1, M, R, S-1	200 ^e	250 ^b
I-1	Not Permitted	250 ^b
B	200	300 ^c
F-Z, S-Z, U	300	400 ^c
H-1	Not Permitted	7 ^{5d}
H-Z	Not Permitted	100 ^d
H-3	Not Permitted	150 ^d
H-4	Not Permitted	175 ^d
H-5	Not Permitted	200 ^c

1-Z, 1-3	Not Permitted	200°
1-4	150	200°

For SI: 1 foot = 304.8 mm.

- a. See the following sections for modifications to exit access travel distance requirements:
 - Section 402.8: For the distance limitation in malls.
 - Section 407.4: For the distance limitation in Group 1-2.
 - Sections 408.6.1 and 408.8.1: For the distance limitations in Group 1-3.
 - Section 411.2: For the distance limitation in special amusement buildings.
 - Section 412.6: For the distance limitations in aircraft manufacturing facilities.
 - Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.
 - Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.
 - Section 1006.3.4: For buildings with one exit.
 - Section 1017.2.2: For increased distance limitation in Groups F-1 and S- 1.
 - Section 1030.7: For increased limitation in assembly seating.
 - Section 3103.4: For temporary structures.
 - Section 3104.9: For pedestrian walkways.
 - Section 3114: For fixed guideway and passenger rail stations
- b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3. 1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1 .2.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3. 1.1.
- d. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5. 1.

H. Topic: Adoption of NFPA 130

3114.2 Fixed guideway and passenger rail systems. Construction of fixed guideway transit and passenger rail systems shall be in accordance with NFPA 130-2020, standard for fixed transit and passenger rail systems, as modified below.

~~3114.2 Means of egress. The means of egress for fixed guideway transit and passenger rail systems shall be in accordance with NFPA 130-17.~~

I. Topic: Construction Type

5.2.2.1 Building construction for stations shall be in accordance with Table 5.2.2.1 based upon station configuration.

5.2.2.2 Construction types shall conform to the requirements in ~~NFPA 220~~ IBC Chapter 6, unless otherwise exempted in this section.

Table 5.2.2.1 Minimum Construction Requirements for New Station Structures

Station Configuration	Construction Type†
Stations Erected entirely above grade and in a separate building:	
Open stations	Type IB(000)
Enclosed stations	Type IIA(111)
Stations erected entirely or partially below grade:	
Open above grade portions of below grade structures*	Type IIA(111)
Below grade portions of structures	Type IB H(222)
Below grade structures with occupant loads exceeding 1000	Type IA(322)

*Roofs not supporting an occupancy above are not required to have a fire resistance rating.

†Construction types are in accordance with ~~NFPA 220~~ the IBC.

J. Topic: Occupancy Separation

5.2.4.3: Ancillary Spaces. Fire resistance ratings of separations between ancillary occupancies shall be established as required for accessory occupancies and incidental uses by ~~NFPA 101~~ the IBC and in accordance with ASTM E119 and ANSI/ UL 263.

K. Topic: Interior Finish

5.2.5.4: Materials used as interior finish in open stations shall comply with the requirements of ~~NFPA 101, Chapter 12~~ IBC, Chapter 8.

5.3.1* General.

5.3.1.1 The provisions for means of egress for a station shall comply with IBC Chapter 10 ~~Chapters 7 and 12 of NFPA 101,~~ except as herein modified.

5.3.2 Occupant Load.

5.3.2.1 The occupant load for a station shall be based on the train load of trains simultaneously entering the station on all tracks in normal traffic direction plus the simultaneous entraining load awaiting trains.

1. The train load shall consider only one train at any one track, inside a station.
2. The basis for calculating train and entraining loads shall be the peak period ridership figures as projected for design of a new system or as updated for an operating system

5.3.2.2* For station(s) servicing areas such as civic centers, sports complexes, and convention centers, the peak ridership figures shall consider events that establish occupant loads not included in normal passenger loads.

5.3.2.2.1 Where station occupancy is anticipated to be greater than design capacity during a major event the operating agency shall initiate measures to restrict access to the station, when required by the fire code official, to ensure existing means of egress are adequate as an alternate to account for peak ridership associated with major events.

5.3.2.3 At multilevel, multiline, or multiplatform stations, occupant loads shall be determined as follows:

- (1) The maximum occupant load for each platform shall be considered separately for the purpose of sizing the means of egress from that platform.
- (2)* Simultaneous loads shall be considered for all egress routes passing through each level of that station.

5.3.2.4 Where an area within a station is intended for use by other than passengers or employees, the following parameters shall apply:

- (1) The occupant load for that area shall be determined in accordance with the provisions of the IBC ~~NFPA 101~~ as appropriate for the use.
- (2) The additional occupant load shall be included in determining the required egress from that area.
- (3) The additional occupant load shall be permitted to be omitted from the station occupant load where the area has independent means of egress of sufficient number and capacity.

5.3.3.4 Travel Distance.

For open stations ~~t~~The maximum travel distance on the platform to a point at which a means of egress route leaves the platform shall not exceed 100 m (325 ft). For enclosed stations the travel distance to an exit shall not exceed 76 m (250 ft.)

5.3.5 Stairs and Escalators.

5.3.5.1 Stairs and escalators permitted by 5.2.4.1 to be unenclosed shall be permitted to be counted as contributing to the egress capacity in stations as detailed in 5.2.2 and 5.3.3.

5.3.5.2 Stairs in the means of egress shall be a minimum of 1120 mm (44 in.) wide.

5.3.5.3* Capacity and travel speed for stairs and escalators shall be computed as follows:

(1) Capacity — 0.0555 p/mm-min (1.41 p/in.-min)

(2)* Travel speed — 14.6 m/min (48 ft/min) (indicates vertical component of travel speed)

5.3.5.4 Escalators shall not account for more than one-half of the egress capacity at any one level except as permitted by 5.3.5.5.

~~5.3.5.5 Escalators shall be permitted to account for more than one-half of the required means of egress capacity at any one level where the following criteria are met:~~

~~(1) The escalators are capable of being remotely brought to a stop in accordance with the requirements of 5.3.5.7(3)(b), 5.3.5.7(4), and 5.3.5.7(5).~~

~~(2) A portion of the means of egress capacity from each station level is stairs.~~

~~(3) For enclosed stations, at least one enclosed exit stair or exit passageway provides continuous access from the platforms to the public way.~~

5.3.5.6* In calculating the egress capacity of escalators, the following criteria shall be met:

(1) One escalator at each level shall be considered as being out of service.

(2) The escalator chosen shall be the one having the most adverse effect upon egress capacity.

5.3.5.7 Where escalators are permitted as a means of egress in stations, the following criteria shall be met:

(1)* The escalators shall be constructed of noncombustible materials.

(2)* Escalators running in the direction of egress shall be permitted to remain operating.

(3) Escalators running reverse to the direction of egress shall be capable of being stopped locally and remotely as follows:

(a) Locally by a manual stopping device at the escalator

(b) Remotely by one of the following:

i. A manual stopping device at a remote location

ii. As part of a pre-planned evacuation response

(4)* Where provision is made for remote stopping of escalators counted as means of egress, one of the following shall apply:

(a) The stop shall be delayed until it is preceded by a minimum 15-second audible signal or warning message sounded at the escalator

(b) Where escalators are equipped with the necessary controls to decelerate in a controlled manner under the full rated load, the stop shall be delayed for at least 5 seconds before beginning deceleration, and the deceleration, rate shall be no greater than 0.052 m/sec² (0.17 ft/sec²).

(5) Where an audible signal or warning message is used, the following shall apply:

(a) The signal or message shall have a sound intensity that is at least 15 dBA above the average ambient sound level for the entire length of the escalator.

(b) The signal shall be distinct from the fire alarm signal.

(c) The warning message shall meet audibility and intelligibility requirements.

5.3.7* Doors, Gates, Security Grilles and Exit Hatches.

5.3.7.1 The egress capacity for doors and gates in a means of egress serving public areas shall be computed as follows:

(1) 60 people per minute (p/min) for single leaf doors and gates

(2)* 0.0819 p/mm-min (2.08 p/in.-min) for bi-parting multileaf doors and gates measured for the clear width dimension.

5.3.7.2 Gates in a means of egress shall be designed in accordance with the requirements for doors serving as a means of egress.

5.3.7.2.1 Security grilles are allowed when designed and operated in accordance with the IBC.

5.3.7.3 Where used, exit hatches shall comply with the requirements of 6.3.3.15 through 6.3.3.17.

5.3.9* Horizontal Exits. Horizontal exits ~~shall comply compliant with NFPA 101 IBC Section 1026. shall be permitted for up to 100 percent of the number of exits and require egress capacity provided that not more than 50 percent of the number and required capacity is into a single building.~~

5.3.11 Means of Egress Lighting.

5.3.11.1 Illumination of the means of egress in stations, including escalators that are considered a means of egress, shall be in accordance with ~~Section 7.8 of NFPA 101~~ IBC Section 1008.

5.3.11.2 Means of egress, including escalators considered as means of egress, shall be provided with a system of emergency lighting in accordance with IBC Section 1008 ~~Section 7.9 of NFPA 101.~~

5.3.11.3 In addition to the requirements of 5.3.11.1 and 5.3.11.2:

(1) Lighting for stairs and escalators shall be designed to emphasize illumination on the top and bottom steps and landings.

(2) Where newel- and comb-lighting is provided for escalator steps, such lighting shall be on emergency power circuits.

L. Topic: Adoption of NFPA 130 in the referenced standard section

Chapter 35 REFERENCED STANDARDS

130-20: Fixed Guideway Transit and Passenger Rail Systems

5. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

This amendment draws from NFPA 130 amendments by the City of Bellevue and the City of Seattle for means of egress for light rail stations. Clarity is needed for more consistent application of the IBC and NFPA 130 in the future as light rail service expands and extends into new jurisdictions. Confusion on how the codes correlate can result in schedule delay and additional work for the agency and the AHJ.

Escalator Explanation:

While it has been very uncommon to date, stations may use escalators as a means of egress. Escalators are necessary for circulation and there isn't always space to a supplemental exit stair. While the IBC does not allow escalators as a means of egress, NFPA 130 provides reasonable allowance if certain provisions are met. The amendment allows escalators to be used for a means of egress in accordance with NFPA 130. The amendment also limits use to 50% of the means of egress capacity which would apply to the number of exits and the total width of the means of egress system.

Occupant Load and means of egress sizing, travel distance, and common path explanation

NFPA 130 refers to NFPA 101 for additional requirement for means of egress which can cause confusion with plan examiners who will apply the IBC which is not clearly correlated to NFPA 130. NFPA does not refer to the IBC and does not indicate what provisions apply when there are real or perceived conflicts. This proposal clarifies when NFPA 130 applies and how it correlates with the IBC. It also removes the reference to NFPA 101

NFPA 130 uses a timed performance-based analysis for evacuation from the platform that includes a combination of a full train load and passengers at the station awaiting trains. The numbers are based upon projected ridership for a date well into the future (2042 for example) and account for one missed headway for the peak load train.

To paraphrase the requirements of NFPA 130, the platform occupant load for a center platform station would be calculated to include the following:

- Peak train load - for LINK - 800 passengers (crush load train per NFPA 130)
- Entraining load for the peak train assuming one missed headway
- Off peak train load (unless omitted through administrative controls)
- Entraining load for the opposite track

The platform occupant load for a side platform station would be calculated as follows:

- Peak train load - for LINK - 800 passengers (crush load train per NFPA 130)
- Entraining load for the peak train assuming one missed headway

Surge factors are applied to train loads and entraining loads to account for service disruptions and system reaction time.

The occupant load for single level/line station ranges from about 830 for a side platform at a suburban station to 2165 for a busy urban station with a center platform.

NFPA 130 does not require more than two exits but this proposal clarifies that the IBC requirement for number of exits also applies. However, an exception is proposed for the number of exits for open stations because at open stations smoke and heat will readily vent to the atmosphere. (For some stations it can be impractical to provide a third exit to both side platforms). For enclosed stations the proposal goes beyond the requirements of NFPA 130 calling for additional exits if the calculated occupant load exceeds 500 (three exits required) or 1000 (four exits required) per the IBC.

The station design will meet NFPA 130 for calculated egress time of 4 minutes to the exit platform and 6 minutes to reach of point of safety. This option gets away from having to assign an occupant load factor (e.g., 7sf/person or 15 sf/person) at the platform which has been required in some jurisdictions.

Variables in the NFPA algorithm include travel distance, exit width and doors. Results from the algorithm generally requires more exit width than what is required by the IBC when the platform is loaded at 15 sf/person. The results are often comparable to loading the platform at 7 sf/person.

By the reference from the IBC to NFPA 130 this proposal allows for more travel distance (325 feet instead of the 250 for example) for open stations. Note that the timed-egress analysis of NFPA 130 must be met.

To ensure the area of the concourse, lobbies, and other public space is accounted for those spaces will be loaded at 100 sf per person similar to airport concourses.

Related code amendments for security grills, common path of travel and exit travel distance are also included. IBC travel distance for Group A occupancies can present practical difficulties for open elevated stations using exit access stairs where the travel distance must extend (down stairs in the example) to the exterior of the building.

Plans examiners have approved stations following the means of timed-egress requirements of NFPA 130 on a case by case basis. Other jurisdictions require stations also meet the requirements of IBC Chapter 10, or a hybrid of both. It varies from jurisdiction to jurisdiction. This code proposal is to address the need and to help ensure consistency across jurisdictions and to reduce the need for code modification, alternate means and methods, and other agreements while also ensuring stations are safe. The following excerpt from NFPA 130 Annex C explains why applying an occupant load to station platforms should not be done.

C.1 Station Occupant Load.

The station platform dimensions are a function of the length of trains served and the train load. Thus the length of a platform at an outlying station might be equal to those of central business district transit stations where the train loads are significantly higher. Consequently, the platform and station occupant loads are a function of the train load and the simultaneous entraining load. This concept differs from that of NFPA 101, in which the occupant load is determined by dividing the floor area by an occupant load factor assigned to that use. Applying the NFPA 101 approach to determine the station platform occupant load is inappropriate.

Ridership calculation will account for daily peak loads. This proposal includes a new provision to address the potential for post event surges from overcrowding anticipated near stadiums, for example, that could exceed calculated daily peak loads used for determining means of egress. While stations are design to accommodate peak loads including loads associated with civic event centers, it is not always practical to account for the large surges the occur at the end of a football game, for example, when all the patrons leave at the same time as part of station design. Doing so would potentially require a much larger platform. It is more appropriate in some cases to restricted entry to the station so that the platform does not become overcrowded and backup onto the concourse. This specific peak surges is addressed in the NFPA 130 Annex (130-A5.3.2.2). The code amendment allows the fire code official to require administrative control (as an element of the annual operating permit) to restrict access to the station following a major event.

A.5.3.2.2 Consideration of control of the access to platforms might be necessary so that the station occupant load does not exceed the station egress capacity.

Measures to restrict access during major events is the current practice for Sound Transit. Stations where this practice is in place include UW, Stadium and SODO stations and it will be implemented at future stations as needed.

Certain aspects of the IBC apply to the means of egress for stations such as, doors, gates, stairways, ramps, handrails, guards and accessible means of egress for example. Those code provisions complement the provisions of NFPA 130. The IBC amendments are intended to help clarify how those IBC provisions apply. The entirety of IBC chapter 10 applies unless a specific exception is included herein.

Security grilles explanation (IBC 1010.3.4.1 and NFPA 130):

Security grilles are often provided at station main entrances that lead to plaza level that is located below an elevated platform or a mezzanine level that is located above platforms for enclosed stations. In some cases these main entrances also serve as a means of egress to complement exterior or interior stairs. Security grilles are not currently allowed for Group A occupancies. Exceptions have also been made for ferry terminals.

All stations are staffed with a security presence responsible to walk the station and confirm it is unoccupied following arrival/departure of the last trains at the end of revenue service for the day. The security grilles be closed only during non-revenue hours when the only occupants would be employees responsible for testing, maintenance and custodial services. When the station open all security grilles would be raised before revenue service by security. The language is intended to apply only to passenger stations with no other function besides transportation (food service function for example).

The opening secured by the grille will be sized to accommodate circulation and station egress requirements. To ensure a means of egress is provided for employees during non-revenue hours, a single door is required within 10 feet of the grille to ensure egress is available at all time. The 32 inch clear width language aligns with IBC 1010 and relates to a 36 inch wide door open to 90 degrees. Stations are generally open 20 or 21 hours per day from 4:00 am to midnight or 1:00 am depending upon the day of the week.

It is uncommon to close a single station for maintenance during revenue service but if a closed station was needed for evacuation of a train the security gates could be open either 1) remotely by command from the Link Control Center (LCC), or 2) the station could be provided with personnel to open the gates as a temporary administrative control.

Plans examiners have approved the provision of security grill at station entrances on a case by case basis considering how the station are operated. This code proposal is to address the need and to help ensure consistency across jurisdictions.

Construction Type Explanation (NFPA 130)

NFPA 130 being in the NFPA family of standards refers to NFPA 220 for construction type rather than the IBC. Since the IBC is adopted in the State of Washington and application of its provision well known to building officials and plans examiners, it makes sense to refer to the IBC rather than NFPA 220 for construction type. The construction types proposed are based upon published correlation tables that compare the IBC to NFPA 220. A footnote in IBC Tables 504.3 and 504.4 referring to Section 3114 may be appropriate to clarify the NFPA 130 may have more restrictive requirements than the IBC for construction type. While not proposed this could further correlate the IBC with NFPA 130.

Explanation for other Amendments

Amendments for means of egress lighting, and interior finish are included for code correlation only.

Adoption of NFPA 130-20

Section 3114 intends to adopt the latest (2020) version of NFPA 130. The prior amendment to adopt the means of egress section is being deleted because it is no longer need with the code correlation amendments provided herein.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment clarifies the intent or application of the code.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain: This amendment is to clarify code conflicts between the IBC and NFPA 130.

If there is an economic impact, use the tool below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$[Click here to enter text.](#)/square foot (For residential projects, also provide \$[Click here to enter text.](#)/dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

This proposal is intended to reduce time for plans examination by clarifying application of the code and eliminating the need to formal code modification or other local agreements.

Please send your completed proposal to: sbcc@des.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.