



BOMA Seattle King County, Spokane, South Puget Sound & Tri-cities

The Building Owners and Managers Association (BOMA Seattle King County, Spokane, Tri-cities and South Puget Sound) opposes the retroactive requirement of luminous egress path markings in existing hi-rise buildings.

BOMA urges the State Building Code Council to adopt Option 2 as listed in the Fire Code Amendments being considered.

OPTION 2

WAC 51-54A-1104 Means of egress for existing buildings.

1104.1 General. Means of egress in existing buildings shall comply with Section 1030 and 1104.2 through 1104.24.

EXCEPTION: Means of egress conforming to the requirements of the building code under which they were constructed and Section 1030 shall not be required to comply with 1104.2 through 1104.22 and 1104.24.

In November of 2011, the SBCC voted to adopt an emergency rule that excluded existing hi-rise buildings (that were conforming to the requirements of the building code under which they were constructed) from retroactive installation of luminous egress markings. This action should be retained and made permanent in the 2012 code adoption process.

BOMA opposes this unnecessary requirement for the following reasons:

- 1. Hi-rise office buildings in Washington State have an outstanding safety record and are safe places to be and work. Almost all hi-rises in Washington State have one or more of the following fire life safety systems: backup generators, emergency egress lighting, pressurized stairways and sprinkler systems. There has not been a single incident in Washington State that would have required luminous stair markings for safe egress. There is no demonstrable critical safety need.**
- 2. The SBCC has a guiding policy consideration framework as stated in section 51-04-020. Requiring this amendment does not meet the guiding criteria.**

51-04-020 Policies for the consideration of proposed statewide amendments. Statewide and emergency statewide amendments to the state building code shall be based on one of the following criteria:

- (1) The amendment is needed to address a critical life/safety need.***
- (2) The amendment is needed to address a specific state policy or statute.***
- (3) The amendment is needed for consistency with state or federal regulations.***

(4) The amendment is needed to address a unique character of the state.

(5) The amendment corrects errors and omissions.

3. There is no demonstrable need to justify the significant cost. By any measure, the cost-benefit analysis for this requirement makes no sense.

The three alternatives for luminous stairwell markings are photo luminescent paint, tape and the rigid material application. The application costs for the paint or tape alternatives do not take into account the constant maintenance and repair expense as demonstrated by the experience in New York City and in local applications. The paint and tape options do not hold up to the foot traffic from daily use and fire drills and there are serious questions about the ability of the luminescent properties to function as required. The rigid material manufacturers and installers are often quoted as stating the paint and tape won't work. However, the metal tracks of their rigid material significantly increases the trip and fall hazard when installed across the leading edge of the stair.

4. BOMA has and will share upon request dozens of bids received by BOMA members that illustrate installation costs of the rigid material that range from \$0.35 to as high as \$0.50 per square foot. Retroactive installation costs are considerable, costing as much as \$350,000 to \$500,000 dollars in a 1 million square foot building. In Washington State alone, the cost is estimated to exceed \$30,000,000 (nationwide \$2 billion). Installations costs would exceed a building's typical entire annual HVAC repair & maintenance budget, be five times a building's annual electrical repair and maintenance budget and three times a building's entire life safety budget.
5. Since 2008 office building values have dropped dramatically while rents have decreased and vacancies have increased as the job market has declined. Landlords are forced to grant rent relief and concessions to keep existing tenants in business and in their buildings. Many owners are facing very difficult refinancing deadlines and given the budget pressures in this market are challenged to come up with the capital to meet loan obligations. Owners must balance limited capital across a broad range of building needs.
6. BOMA supports the SBCC's principled and historical preference of not requiring retrofits for existing buildings that were built to the code in place at time of construction.
7. This measure is not being broadly adopted in other states. More and more states are exempting existing buildings in their code adoption process. Even New York City, the primary location and an early adopter of luminous egress markings for existing buildings has elements that are voluntary in the code.
8. There are numerous safety measures in place for hi-rise buildings, including, but not limited to, regular confidence testing.

For more information contact:

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Luminous Egress Path Markings

BOMA International Position

BOMA International opposes mandates for luminous egress path markings in existing buildings.

Background

Luminous egress path markings, also known as exit stair path markings, are markings on stairs, walls, floors, and doors that help illuminate the egress path in exit enclosures. Following 9/11, luminous egress path markings were recommended by the World Trade Center Building Code Task Force in 2002, and first became a requirement for high-rise buildings in New York City. Since then, new requirements were added to the 2009 editions of the International Building Code (IBC), the 2009 International Fire Code (IFC), and NFPA 101 – The Life Safety Code. The IBC requires luminous egress path markings in exit enclosures and exit passageways of high-rise buildings that house Group A – Assembly, B – Business, E – Educational, I – Institutional, M – Mercantile, and R-1 – Residential occupancies. They are not required for buildings that are not high-rise buildings or in other occupancies even if the building is a high-rise. A high-rise building is defined as a building having an occupied floor located more than 75 feet above the lowest level of fire department vehicle access.

These building codes are designed for new construction, but when undergoing the local code adoption process, some jurisdictions are proposing that the luminous markings be mandated on existing buildings as well. BOMA recommends that jurisdictions maintain a principled preference for not adopting retrofits for existing buildings that were built to the code in place at time of construction without strong and overwhelming evidence that there have been a demonstrated need or actual incidents and significant risks to justify the costs.

BOMA International opposes luminous marking mandates for several reasons. First, there is no demonstrable need for this regulation; high-rise office buildings are among the safest places to be. There were no fire deaths in high-rise office buildings across the U.S. between 2005 and 2009 (the most recent year available), and only \$4.7 million in damages. Conversely, it is estimated that the cost to retrofit existing high-rises with the rigid luminous material exceeds \$0.35 per square foot – nationwide the estimated cost is two billion dollars. In addition, almost all high-rises have backup generators, emergency egress lighting, pressurized stairways, sprinkler systems, and regularly tested fire systems. Furthermore, the paint and soft tape options do not hold up to the foot traffic, yet the vastly more expensive rigid material in metal tracks significantly increases the trip and fall hazard where installed retroactively after construction across the leading edge of the stair. Installation in new construction allows for recessed flush installation.

Some jurisdictions that have considered these mandates have found them to be unnecessary and extreme. The City of Philadelphia recently adopted the 2009 International Fire Code with a provision requiring all high-rise buildings, new as well as existing, to mark the stair towers with photo luminescent paint or tape. After careful review, the Philadelphia Fire Department felt comfortable with BOMA's position to amend the requirement to exempt those buildings in which: (1) a sprinkler system is installed throughout the building; and (2) the building's exit stairway lighting is connected to an emergency generator or other secondary power supply.



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