

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
COVERED WALKWAY GUIDELINES
JULY 2021

The purpose of the Covered Walkway Guidelines is to establish minimum requirements and procedures for use of covered walkways in areas where construction or maintenance work is performed in accordance with a permit issued by the Administration. Covered walkways, sometimes referred to as sidewalk sheds, may be required to maintain a safe alternative pedestrian pathway through work zones.

A covered walkway shall not be erected unless the Administration has approved the erection of the covered walkway under an issued permit or the applicant determines that immediate erection of a covered walkway is necessary for public safety. If a covered walkway is erected to address an immediate public safety need without prior approval from the Administration, the applicant shall apply for approval from the Administration within 24 hours after the covered walkway is erected.

1. **Protection Required:** A covered walkway will be required for the protection of pedestrians based on the following criteria from the 2018 International Building Code (IBC) Section 3306:

If the height of the construction is more than 8 ft, and

- a. The horizontal distance from the edge of the walkway to the construction is less than 5 ft, or
- b. The horizontal distance from the edge of the walkway to the construction is 5 ft or more, but less than or equal to $1/4^{\text{th}}$ the height of the construction.

If the height of the construction is less than 8 ft, no covered walkway will be needed.

2. **Working Drawings:** Working drawings for the covered walkway shall be signed and sealed by a professional engineer registered in the State of Maryland. Working drawings shall be submitted as specified in the Maryland Department of Transportation State Highway Administration (MDOT SHA) Standard Specifications for Construction and Materials Terms and Conditions §4.01.
3. **Accessibility Requirements:** All covered walkways constructed under this section must provide an accessible pedestrian route according to the MDOT SHA Accessibility Policy and Guidelines for Pedestrian Facilities along State Highways and the Americans with Disabilities Act Accessibility Guidelines (ADAAG).
4. **Structural Members:** The structural members of the covered walkway shall be adequately braced and connected to prevent displacement or distortion of the framework. The design live load shall be at least 150 psf for the entire structure. The effect of wind, snow, rain, and other loads on the covered walkway, and any item placed or attached on or to the walkway, shall be considered in the design according to ASCE 7-10, Minimum Design Loads for Buildings and Other Structures.

5. **Roof:** Roofs of covered walkways shall be watertight and covered with a fire-resistant surface. For the standard design, the roof shall be designed to carry a live load of at least 150 psf. Supplies and other materials shall not be stored on the roof.
6. **Floor:** Sidewalks or the roadway surface may be used as the floor of the covered walkway if the surface meets the accessibility requirements referenced above and provides adequate drainage. Structural floors may be used to cross an opening or an obstruction or to comply with the accessibility requirements. The structural floor shall be designed for a live load of 300 psf, provide adequate drainage, and shall comply with the accessibility requirements referenced above.
7. **Height:** Covered walkways shall have a clear and unobstructed ceiling height of at least 8 ft as measured from the floor to the lowest point of the ceiling, including light fixtures and bracing.
8. **Width:** Covered walkways shall have a clear unobstructed width of at least 5 ft for pedestrian travel.
9. **Lighting:** The interior of the covered walkway shall be illuminated at all times by either daylight or electric light. The level of illumination shall be uniformly distributed along the entire length of the walkway.

Photometric calculations shall be submitted for review and approval to the Office of Traffic and Safety Traffic Engineering Design Division (OOTS TEDD) to ensure adequate illumination is provided according to the MDOT SHA Lighting Design Guidelines. Calculation points shall be provided on a 5 ft x 5 ft grid within the covered walkway to ensure horizontal illumination meets the values provided in Table IV-C.1 of the MDOT SHA Lighting Design Guidelines. Additional calculation points shall be added in two lines in opposite directions along the covered walkway to ensure the vertical illumination meets the values provided in Table IV-C.1 of the MDOT SHA Lighting Design Guidelines.

The adjacent roadway travel lanes shall also be analyzed for veiling luminance (disability glare). The analysis shall model the covered walkway to include the roof and any walls which would fully block any existing lighting. All lamps shall be enclosed in water resistant and vandal resistant fixtures, and all lamps, wiring, and accessory components shall comply with the latest edition of the National Electrical Code and any applicable County Electrical Code.

Photosensors may be used to control electric lighting according to the amount of daylight available. All photosensors shall be equipped for fail safe operation ensuring that if the sensor or control fails, the lamps will provide the lighting levels required by this section. Electrical power service and energy costs shall be the responsibility of the permit holder. Lighting shall be maintained at all times and inspected nightly. Burned out or inoperative lights shall be replaced or repaired within 24 hours of the inspection. If not repaired within 72 hours of notification, MDOT SHA may repair at the permit holder's expense.

10. Construction Facing Side: The side of the covered walkway facing the construction area shall be completely enclosed with fencing or plywood.

11. Roadway Facing Side: If the covered walkway is on the sidewalk, the side of the covered walkway facing the roadway shall be set back from the face of curb by a minimum of 1 ft-6 in. The covered walkway shall be constructed to maintain an unobstructed line of sight for drivers in the roadway.

If the covered walkway is in the roadway, the side of the covered walkway facing the travel lanes of the roadway must be shielded by crashworthy temporary traffic barriers.

12. Building Entry: If the adjacent building or site is actively in use while the covered walkway is in place, the covered walkway shall be designed to maintain entry to and exit from the building or site.

13. Transit Access: The covered walkway shall be designed to maintain access from the sidewalk to any adjacent transit entrance or bus stop.

14. Fixtures and Signs: The covered walkway shall be designed to accommodate any existing fixture, such as fire hydrants, light poles, traffic signal devices, parking meters, manholes, loading areas, and bus stops. The covered walkway shall not cover or obstruct traffic operation signage and signals or street signs. See the Maryland Manual on Uniform Traffic Control Devices (MdMUTCD). The covered walkway shall not block access to stormwater runoff inlets.

15. Bike Lanes: When placement of a covered walkway impacts bicycle accessibility, accommodations shall be provided to maintain bicycle access during construction per the requirements of the MDOT SHA Bicycle Policy and Design Guidelines and with approval from the Assistant District Engineer – Traffic prior to implementation. Consider the following options for maintaining bicycle access, in descending order of priority:

- a. Providing a bike lane on the same roadway that the blocked lane is on. Where limited space exists to accommodate bicyclists, consider reducing existing lane widths or repurposing existing lanes to provide a temporary bike lane.
- b. Merging bicyclists and adjacent traffic into a shared lane of traffic; and
- c. Providing a bike lane detour route.

16. Tree Protection: Trees shall not be removed, pruned, or trimmed for the construction of the covered walkway, except in conformance with a Roadside Tree Permit issued by Maryland Department of Natural Resources Forest Service.

17. Removal: The covered walkway shall be removed upon completion of the construction work or the end of any potential hazard to pedestrians.