City of Tempe 31 East Fifth Street Tempe, AZ 85281 602-350-8341 www.tempe.gov



Community Development Department Building Safety Division

#### **BUILDING CODE DIRECTIVE #48**

**SUBJECT:** PEDESTRIAN PROTECTION DURING DEMOLITION AND / OR CONSTRUCTION

No demolition or construction shall be performed on any building or structure adjacent to a public way in general use by the public for pedestrian travel unless the pedestrians are protected as specified in the adopted City of Tempe Building code. This requirement includes alleys as well as streets with or without sidewalks.

Each application for demolition or new construction shall be reviewed to determine if pedestrian protection is required for the project. When protection is required, the following procedures will apply and shall be completed prior to issuance of the Demolition or Building Permit.

Covered walkways shall be designed to support **all imposed loads**. In no case shall the design live load be less than 150 psf for the entire structure.

- 1. The applicant shall prepare and submit complete plans of the protection structures as follows:
  - a. A site plan showing the location of the protection structures, the street curb, alley, the property line and the building(s) by accurate dimensions.
  - b. The height of the building to be demolished or constructed.
  - c. Engineering calculations (wind and gravity loads) on the protection structure(s).
  - d. Construction details of the protection structure and the walkway.
- 2. The applicant shall obtain an encroachment permit from the Department of Public Works if the protection system extends into the public right-of-way (ROW).
- 3. The plans must be reviewed and approved by the Community Development Department/Building Safety Division and a permit issued prior to construction of the protection.
- 4. The protection system must be constructed in compliance with the approved drawings, inspected and approved prior to commencing demolition or construction work. The protection must be in place as the construction of the building progresses per attached Table 1 (page 2).

**Building Code Directive #48** 

Subject: Pedestrian Protection During Demolition and/or Construction

EXCEPTION 1: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories in height are permitted to be designed for a live load of 75 psf or the loads imposed on them, whichever is greater. For designs in lieu of 75 psf loads, the roof and supporting structure of a covered walkway are permitted to be constructed per the adopted City of Tempe Building code, or the drawings in this handout.

EXCEPTION 2: A construction safety/debris containment netting system may be permitted if approved by the Building Official.

# TYPE OF PROTECTION REQUIRED FOR PEDESTRIAN TRAFFIC

### 1. Walkway required.

A walkway not less than four (4) feet in width shall be maintained in front of the building site during demolition and construction. The walkway may not encroach into the street or roadway unless an encroachment permit is first obtained from the Department of Public Works. An accessible route with a clear width less than 60 in shall provide passing spaces at intervals of 200 ft maximum. These passing spaces shall be a 60 in by 60 in minimum space. The walkway shall comply with the adopted City of Tempe Accessibility code.

#### 2. Pedestrian Protection.

Requirements for protection of pedestrian traffic shall be determined from the following table:

TABLE 1: TYPE OF PROTECTION REQUIRED FOR PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE FROM CONSTRUCTION	PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Railing
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than one-fourth the height of construction	Barrier and covered walkway
	5 feet or more, but between one-fourth and one- half the height of construction	Barrier
	5 feet or more, but exceeding one-half the height of construction	None

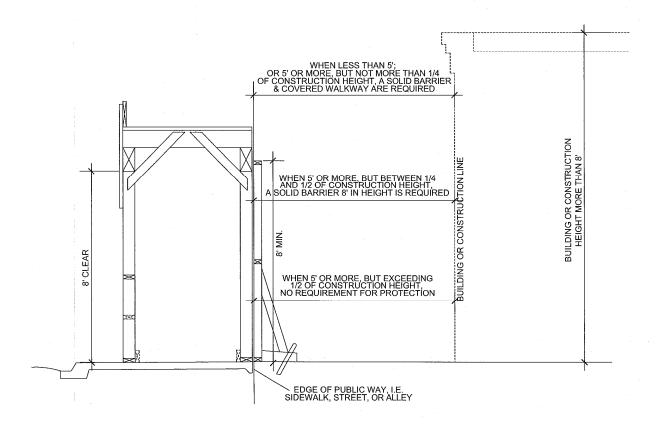
**Subject: Pedestrian Protection During Demolition** and/or Construction

### 3. Detail and Data Requirements.

- a. Construction railings: Shall be at least 42 in. in height, have a mid-rail when adjacent to an excavation and shall be sufficient to direct pedestrians around construction.
- b. Barriers: Shall be designed to resist loads required per the adopted City of Tempe Building code.
- c. Covered walkways: Shall be designed to support **all imposed loads**. In no case shall the design live load be less than 150 psf for the entire structure.

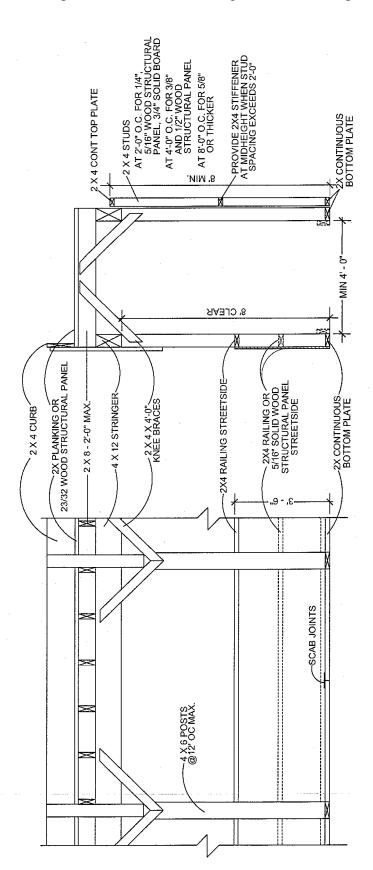
EXCEPTION 1: Roofs and supporting structures of covered walkways for new, light-framed construction not exceeding two stories in height are permitted to be designed for a live load of 75 psf or the loads imposed on them, which ever is greater. For designs in lieu of 75 psf loads, the roof and supporting structure of a covered walkway are permitted to be constructed per the adopted City of Tempe Building code, or the drawings in this handout.

EXCEPTION 2: A construction safety/debris containment netting system may be allowed when approved by the Building Official.



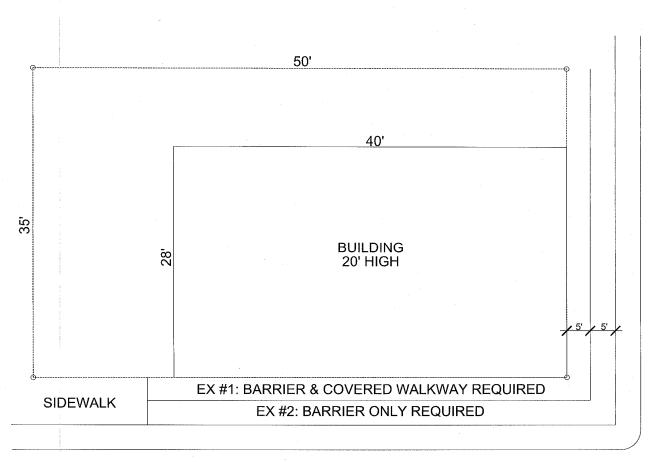
and/or Construction

Example of distances when design is in lieu of 75 psf loads



Example of construction when design is in lieu of 75 psf loads

**Subject: Pedestrian Protection During Demolition** and/or Construction



Example of a typical site plan

Given: Building height 20 ft; Barricade 5 ft from building. Per Table 1:

EX #1 If less than 5', Barrier and Covered Walkway are required.

EX #2 If 5' or more, and greater than 1/4 of the height of construction, Barrier only is required.

## MAINTENANCE OF PEDESTRIAN PROTECTION

- 1. The required pedestrian traffic protection system shall be maintained in place and kept in good working order for the entire length of the demolition or construction period.
- 2. Adequate signs shall be provided to direct pedestrian traffic.
- 3. Walkways, barriers and covered walkways which occupy public property shall be adequately lighted between sunset and sunrise with minimum 0.5 ft candle. Electrical shall be provided from a private power source.