HOUSTON PUBLIC WORKS

BUILDING CODE ENFORCEMENT
PEDESTRIAN PROTECTION GUIDELINE
(Permit Must Be Obtained Prior To Erecting Structure)

PURPOSE

This guide outlines the permit and the plan review process associated with erecting scaffolding and other structures to serve as pedestrian protection during construction, repairs, and demolition projects.

A permit to erect pedestrian protection is required even if the actual scope of work may not require a permit. **Example:** Painting an exterior of a building does not require a building permit; however, erecting scaffolding over the pedestrian sidewalk or walkway to accommodate the painting project does. Compliance with the Houston Adopted IBC (2012) requirements are verified by: **(1)** reviewing the required engineer designed plans, **(2)** issuing a building permit to erect the structure, and **(3)** conducting field inspections during construction to confirm compliance with the approved plans. Reference Section 3303.2, 3306, and Ch. 16 of the Houston Adopted IBC (2012).

PROCEDURE

Plans limited to a maximum of 30-minutes plan review may be reviewed through the Commercial One-Stop Plan Review Section on a walk-through basis. Where appropriate information is provided for the scope of work proposed plan approval and a building permit can be issued. For additional information, contact Commercial One-Stop Section at (832) 394-8820 or commercial.planreview@houstontx.gov

BULDING PERMIT APPLICATION

The building permit application must clearly indicate the time period for all barricades, e.g., from mm/dd/yyyy to mm/dd/yyyy. The dates specified on the permit application shall clearly match the dates indicated on any required Street/Sidewalk Closure Permit issued by the Mobility Permitting Section. For additional information contact: (832) 395-3020.

GENERAL CONTENTS

The submittal package for Pedestrian Protection Permits shall include plans drawn to a standard architectural and/or engineers scale, and include but not be limited to the following items:

1. Where a sidewalk closure is necessary a photocopy of the Street/Sidewalk Closure Permit from the Traffic Management Division shall be securely attached to the front of each plan set.
2. A site plan based on an accurate survey of the property. The site plan shall clearly identify, and differentiate existing items from the scope of demolition, and proposed construction, including repairs. Site plan shall include but not be limited to the following information:
    - **a)** Site utility connections for electrical, plumbing and storm, when applicable,
    - **b)** All plumbing and electrical conduit lines with capping details, when applicable,
    - **c)** All buildings and/or structures on the site shall be identified with their COH assigned address, and labeled “existing or proposed”,
    - **d)** All property lines shall be identified on the site plan and clearly marked as such,
    - **e)** Details associated with existing or proposed aerial easements clearly show no encroachment,
    - **f)** Location of all setback lines shall be clearly labeled,
    - **g)** All private and public streets identified with their recorded name and width,
    - **h)** When applicable, plans shall differentiate between existing, replaced, and proposed sidewalks and driveways,
3. Complete structural plans should be designed, sealed, signed, and dated by a licensed Texas P.E. for the minimum ultimate design wind speed of 130mph as a Risk Category 1 (temporary structure). The engineer shall include the minimum design criteria specified by the applicable provisions of Chapter 16 and Table 1607.1 or the specific provisions identified in Section 3306 of the Houston Adopted IBC (2012).

4. When concrete foundations are included in the scope of work, details shall be provided and include spacing, size and grade of all reinforcing steel. The lengths of all reinforcing steel laps, with the minimum required concrete coverage over the reinforcing steel should be clearly indicated in the foundation details by the P.E. and comply with the minimum code provisions for foundations. Reference: Section 107.1 and Chapter 18 of the Houston Adopted IBC (2012).

5. A written soil investigation report must accompany all submittal packages that include foundation plans having drilled piers. In lieu of submitting a soil report, the foundation engineer may document on the sealed foundation plans the soil classification, expansion index, potential expansion, and the bearing capacity of the soil at the depth of drilled piers and/or beams. Reference: Table 1804.2, 1805.4.2, and Ch.18 of the Houston Building Code.

6. In lieu of using the loads specified in Table 1607.1, the P.E. may utilize the design criteria specified in Sections 3306.2 through 3306.7 for walkways, barriers and covered walkways. The design loads outlined in these sections should be clearly documented by the P.E. in engineer designed and sealed plans. The plans shall address all of the design criteria, construction requirements and specific materials identified in the following Building Code sections:

SECTION 3303 – DEMOLITION

3303.1 Construction documents. *Construction documents and a schedule for demolition shall be submitted where required by the building official. Where such information is required, no work shall be done until such construction documents or schedule, or both, are approved.*

3303.2 Pedestrian protection. *The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by this chapter.*

3303.3 Means of egress. *A horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.*

3303.4 Vacant lot. *Where a structure has been demolished or removed, the vacant lot shall be filled and maintained to the existing grade or in accordance with the ordinances of the jurisdiction having authority.*

3303.5 Water accumulation. *Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.*

3303.6 Utility connections. *Service utility connections shall be discontinued and capped in accordance with the approved rules and the requirements of the applicable governing authority.*

3303.7 Fire safety during demolition. *Fire safety during demolition shall comply with the applicable requirements of this code and the applicable provisions of Chapter 56 of the International Fire Code.*

SECTION 3306 – PROTECTION OF PEDESTRIANS

3306.1 Protection required. *Pedestrians shall be protected during construction, remodeling and demolition activities as required by this chapter and Table 3306.1. Signs shall be provided to direct pedestrian traffic.*

TABLE 3306.1
PROTECTION OF PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE FROM CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	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

3306.2 Walkways. *A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4-feet (1219 mm) in width.*

Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapter 11 and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m^2).

3306.3 Directional barricades. *Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.*

3306.4 Construction railings. *Construction railings shall be not less than 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas.*

3306.5 Barriers. *Barriers shall be not less than 8-feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors which are normally kept closed.*

3306.6 Barrier design. *Barriers shall be designed to resist loads required in Chapter 16 unless constructed as follows:*

1. *Barriers shall be provided with 2-inch by 4-inch (51 mm by 102 mm) top and bottom plates.*
2. *The barrier material shall be boards not less than 3/4-inch (19.1 mm) thick or wood structural panels not less than 1/4-inch (6.4 mm) thick.*
3. *Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.*
4. *Wood structural use panels ¼-inch (6.4 mm) or 5/16-inch (23.8 mm) in thickness shall have studs spaced not more than 2-feet (610 mm) on center (o.c.).*
5. *Wood structural use panels 3/8-inch (9.5 mm) or 1/2-inch (12.7 mm) in thickness shall have studs spaced not more than 4-feet (1219 mm) on center provided a 2-inch by 4-inch (51 mm by 102 mm) stiffener is placed horizontally at mid-height where the stud spacing is greater than 2-feet (610 mm) on center.*
6. *Wood structural use panels 5/8-inch (15.9 mm) or thicker shall not span over 8-feet (2438 mm).*

3306.7 Covered walkways. *Covered walkways shall have a clear height of not less than 8-feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. In no case shall the design live load be less than 150 psf (7.2 kN/m²) for the entire structure.*

Exception: *Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (3.6kN/m²) or the loads imposed on them, whichever is greater. In lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:*

1. *Footings shall be continuous 2-inch by 6-inch (51 mm by 152 mm) members.*
2. *Posts not less than 4-inches by 6-inches (102 mm by 152 mm) shall be provided on both sides of the roof and spaced not more than 12-feet (3658 mm) on center.*
3. *Stringers not less than 4-inches by 12-inches (102 mm by 305 mm) shall be placed on edge upon the posts.*
4. *Joists resting on the stringers shall be not less than 2-inches by 8-inches (51 mm by 203 mm) and shall be spaced not more than 2-feet (610 mm) on center.*
5. *The deck shall be planks not less than 2-inches (51 mm) thick or wood structural panels with an exterior exposure durability classification not less than 23/32-inch (18.3 mm) thick nailed to the joists.*
6. *Each post shall be knee braced to joists and stringers by members not less than 2-inch by 4-inch (51 mm by 102 mm); 4-feet (1219 mm) in length.*
7. *A curb which is not less than 2-inch by 4-inch (51 mm by 102 mm) shall be set on edge along the outside edge of the deck.*

3306.8 Repair, maintenance and removal. *Pedestrian protection required by this chapter shall be maintained in place and kept in good order for the entire length of time pedestrians are subject to being endangered. The owner or the owner's agent, upon the completion of the construction activity, shall immediately remove walkways, debris and other obstructions and leave such public property in as good a condition as it was before such work was commenced.*

3306.9 Adjacent to excavations. *Every excavation on a site located 5-feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6-feet (1829 mm) in height. Where located more than 5-feet (1524 mm) from the street lot line, a barrier shall be erected where required by the building official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 16*

PERMIT FEES

Barricade Fees:	First 100 lineal feet	$ 67.13	**Administration Fee:**	$30.51
	Each additional 100 lineal feet	$ 18.31	**Minimum Permit Fee:**	$82.78