



**City of Warren**  
**Code Enforcement**  
318 West 3<sup>rd</sup> Avenue  
Warren, PA 16365  
814-723-6300, ext. 116

## SPECIFICATIONS

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### CEMENT CONCRETE SIDEWALKS

**Description:** This work is the construction of cement concrete sidewalks on an aggregate bed.

**Material:**

- Cement Concrete – Class AA. Entrained air design value shall be 6.5% with air content based on field test to be not less than 5% (6.25 min. bag mix, 3,000 psi/7 days – 3,750 psi compressive/28 days).
- Aggregate Subbase – Crushed stone meeting PennDOT No. 2A gradation, Type C material.
- Premolded Expansion Joint Filler – ½” asphalt impregnated felt or fiber approved type (4” wide/typical).
- Concrete Curing Compound – Liquid Membrane-Forming Curing Compound, Clear. AASHTO-M148, Type 1-D, Clear.
- Curing and Protective Cover – Burlap AASHTO-M12 Class 1.

**Construction - as shown on the Standard Detail and as follows:**

- a) **Permits & Notifications.** You must obtain a permit from the City of Warren and notify the Pennsylvania One Call System prior to initiation of construction.
- b) **Preparation of Foundation.** Excavate, as required, and form the foundation at a depth 8 or 10 inches below and parallel with the finished surface of the sidewalk. When necessary, remove additional unsuitable material. Thoroughly compact the foundation, finish to a firm, even surface; moisten if required.
- c) **Placing Aggregate for Bed.** Spread aggregate subbase material on the prepared foundation to form a thoroughly compacted bed 4 inches deep.
- d) **Forms.** Use acceptable wood or metal forms extending the full depth of concrete.
- e) **Concrete.** Placement as specified. Place concrete 4 inches deep. Strike off and finish using a light broom finish.
  - ✓ Form outside edges and joints with a ¼” radius edging tool.
  - ✓ Form transverse control (dummy) joints at 5-foot intervals, approximately 1/8” wide and at least 1” deep. **NO SAW CUTS ALLOWED.** Must use hand joints.
  - ✓ Where required, construct cement concrete sidewalk curb ramps in accordance with ADA requirements. Finish concrete sidewalk curb ramps with a coarse broomed texture finish transverse to the slope of the curb ramp. Transverse control (dummy) joints are not required for curb ramps.
- f) **Reinforcement.** Woven wire mesh must be used as a sidewalk reinforcement. This would allow future cracking without “pop outs”. Mesh must be pulled up into the middle of the pour as shown below.
- g) **Expansion Joints.** Place ½” premolded, expansion joint material for the full depth of the sidewalk at all joints of contact with existing concrete sidewalk, at maximum 20’ intervals, opposite expansion joints in adjacent curb, between the sidewalk and curb, and between the sidewalk and all surface obstructions.
- h) **Removal of Forms.** Do not remove side forms until at least 12 hours after placing concrete. After removal of forms, fill minor honeycombed areas with concrete repair epoxy or mortar. Remove and replace defective areas with major honeycomb areas.
- i) **Backfilling and Restoration.** After the concrete has cured for at least 72 hours, backfill spaces adjacent to the sidewalk, using acceptable topsoil material. Rake, seed, and mulch as required. Repair or replace existing pavement, curb, and sidewalk damaged due to construction. Satisfactorily dispose of unsuitable and surplus materials.

**4” CONCRETE; 6” @ DRIVEWAYS**  
*Do not drive on new 6” sidewalks installed through driveways for a period of seven (7) days from concrete placement.*

