



119 North Hersey Avenue
P.O. Box 567
Beloit, Kansas 67420
Phone: 785-738-3551
Fax: 785-738-2517
E-mail: info@beloitks.org

CODES & ORDINANCES

SIDEWALK CONSTRUCTION

Materials

Cement: Shall be a 6-sack mix (minimum 564 lbs. per cubic yard). Type I, II, III, or IP may be used.

Course Aggregates: Shall be three-fourths by five-sixteenths rock.

Fine Aggregates: Shall be commercial sand mix class C33 or better.

Mix: Shall meet a compressive strength of 3000-4000 psi (6-sack, 27% mix)

Additives: Shall have an air-entraining agent and yield 6% plus or minus 2% of air entrainment at the job site. Water reducers and set retarders may be used in hot weather. Accelerators (calcium chloride) not greater than 2% may be used in cold weather. The use of additives shall follow manufacturer's recommendations.

Water/Cement Ratio: Shall be a maximum of .49 lbs. of water per pound of cement including free water on aggregate. Water may be added at the job site only to the extent that it was withheld at the plant.

Construction

Excavation: Prior to excavation, consult with the city building inspector at the construction site to work out details for the job. The following standards will apply:

All vegetation shall be removed from the ground surface.

Soft and yielding base shall be compacted or removed and replaced with acceptable compactable material.

Where unacceptable base is encountered, a 5" course aggregate or crushed rock base may be required.

Sand may not be used under sidewalks to create a base. Up to 1" of sand may be used to fill holes or to create a level bed.

The standard location for sidewalk construction is such that the residence side of the sidewalk is 6" to the street side of the right-of-way/property line.

Tree roots that interfere or are likely to interfere with the sidewalk's quality shall be cut and removed.

Forms/Thickness: All edges shall be formed. Forms shall provide for the following:

A minimum thickness of 4".

Sidewalks across driveways shall have a minimum thickness of 5".

Forms shall be maintained in a straight line during the placement and setting process and align with sidewalks on either end.

The standard width of sidewalks shall be 6'-0". Where existing sidewalks are less than 6'-0", the new sidewalks will conform to width of the existing sidewalk(s).

Placement: Sidewalk shall be constructed in a single course of concrete meeting the above specifications. Reinforcing is not required, but is permitted. The concrete shall be placed and struck off while in a fresh condition prior to any set. The ground and the forms shall be damp at the time of placement.

Finish: All outside edges and joints shall be edged with a ¼" to ½" radius edging tool. The finished surface shall have a light broomed or burlap dragged texture.



Joints: Contraction joints shall be made at equal spacings of between 4 and 5 feet. Contraction joints shall be 1" in depth and may be made with a trowel and edging tool or may be sawed. If sawed, the cut shall be made as soon as possible after placement without damaging the fresh concrete. Pre-molded expansion joint material shall be placed against existing concrete prior to new concrete placement. Construction (cold) joints may be made as needed for construction, but should not be closer than 30 feet.

Curing: The fresh surface shall be cured for a period of 4 days. Acceptable curing methods include maintaining a wet surface and being covered with Visquine or a similar sheeting product. White pigment compound is acceptable, but the landowner/contractor shall remove a sufficient amount of the compound following the 4-day cure period to eliminate the slick surface caused by the compound.

Cold Weather Construction: Fresh concrete shall not be placed on frozen ground. The temperature of the mix shall be 50oF or higher. The air temperature shall be 30oF or higher and rising. The temperature of new construction shall be maintained above 35oF for the 4-day curing period.