

Item No. 435S
P.C. Concrete Steps

435S.1 Description

This item shall govern construction of Portland Cement (p.c.) concrete steps (with or without reinforcing steel as required) on approved subgrade and in conformity with the lines, grades, sections and details indicated on the Drawings or as established by the Engineer or designated representative.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text, the inch-pound units are given preference followed by SI units shown within parentheses.

435S.2 Submittals

The submittal requirements of this specification item include:

- A. Class A p. c. concrete mix design,
- B. Construction details (i.e., reinforcing steel, curing membrane, etc.),

435S.3 Materials

- A. Concrete

The p.c. concrete shall be Class A Concrete, Section 403S.7 (Table 4) of Standard Specification Item No. 403S, "Concrete for Structures".

- B. Reinforcing Steel

Reinforcing steel shall conform to Standard Specification Item No. 406S, "Reinforcing Steel".

- C. Expansion Joint Materials

Expansion joint materials shall conform to Standard Specification Item No. 408S, "Expansion Joint Materials".

- D. Membrane Curing Compound

Membrane curing compound shall conform to Standard Specification Item No. 409S, "Membrane Curing".

435S.4 Construction Methods

All excavation, including removal of existing steps or sidewalks and backfill, shall conform to Standard Specification Item No. 401S, "Structural Excavation and Backfill".

All forms and forming, placement of reinforcement when required, placement of concrete, form removal, finishing and curing shall conform to Standard Specification Item No. 410S, "Concrete Structures".

The height of the steps will be determined by the existing grade or as directed by the Engineer or designated representative. The tread width is normally 10 inches (250 mm) and the riser is normally 7 1/2 inches (190 mm), but these dimensions may be varied to

fit existing conditions as directed by the Engineer or designated representative. Step width will match the existing sidewalk, but not less than 3 feet (0.9 meter).

Reinforcement for the steps, when required, shall be as indicated on the Drawings.

Expansion joints shall be placed along the lower and upper tread and along each side when abutting p.c. concrete.

The steps shall be constructed monolithically. The p.c. concrete shall be placed in the forms and properly consolidated until it covers the area. The top surface shall be floated and troweled to a smooth surface, then finished with a camel hairbrush or wood float to a gritty texture and neat appearance. The outer edges and joints shall be rounded with approved tools with a 1/4-inch (6.3 mm) radius.

At the proper time after finishing, the surface shall be protected by a membrane compound curing agent conforming to Standard Specification Item No. 409S, "Membrane Curing" or by wetting cotton or burlap mats. Either method shall be subject to approval by the Engineer or designated representative.

435S.5 Measurement

Accepted work as prescribed by this item will be measured by the cumulative width in feet (meters: 1 meter equals 3.281 feet) of individual steps (treads) including the bottom step.

435S.6 Payment

The work performed as prescribed by this item will be paid for at the unit bid price per lineal foot for "P.C. Concrete Steps". The unit bid price shall include full compensation for all excavation, forms, concrete, reinforcement, curing, backfill, sloping; all labor, tools, materials, equipment; and incidentals necessary to complete the work.

Payment will be made under:

Pay Item No. 435S: P.C. Concrete Steps Per Lineal Foot.

End

<i>SPECIFIC</i> CROSS REFERENCE MATERIALS
Specification Item No. 435S, "P.C. Concrete Steps"

City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 201S	Subgrade Preparation
Item No. 210S	Flexible Base
Item No. 401S	Structural Excavation and Backfill
Item No. 403S	Concrete for Structures
Section 403S.7; Item No. 403S	Table 4: Classes of Concrete
Item No. 405S	Concrete Admixtures
Item No. 406S	Reinforcing Steel
Item No. 408S	Expansion Joint Materials
Item No. 409S	Membrane Curing
Item No. 410S	Concrete Structures

<i>RELATED CROSS REFERENCE MATERIALS</i>
Specification Item No. 435S, "P.C. Concrete Steps"

City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 360	Concrete Pavement
Item No. 430S	P.C. Concrete Curb and Gutter
Item No. 431S	Machine Laid PCC Curb and Gutter
Item No. 432S	P.C. Concrete Sidewalks
Item No. 433S	P.C. Concrete Driveways
Item No. 434S	P.C. Concrete Medians and Islands
Item No. 436S	P.C. Concrete Valley Gutters
Item No. 470S	Curb Cuts for Sidewalk Ramps and Driveways