

Section 1 – Bridge Superstructure PC/PS Concrete Deck Panel Detail No. 2

XS Sheet Numbers

xs01-180-2

Description of Component

Precast prestressed concrete deck panel, details number 2

Standard Drawing Features

Plan-Type 2 (Skewed Panel)

1. Designer is responsible for **design and design calculations** of the deck panels and fill in the information in the table on sheet of PC/PS Concrete Deck Panel – Details No. 1. Design guidance includes AASHTO LRFD Bridge Design Specifications, MTD 8-6, Standard Specs, etc.
2. Panel length “L” is limited to 9 feet-6 inches maximum
3. Panel width “W” is limited to 8 feet maximum and 4 feet minimum
4. Skew of the deck panel is 20 degree maximum. Special design is required for skew more than 20 degree.
5. Designer shall determine the number of strands required and decides the appropriate strand spacing “S”. The spacing “S” should take into account the 2 ½ inches (minimum) to 4 inches (maximum) distance from edge of panel to centerline of strands.
6. Strand length less than 3 feet-6 inches shall be replaced by #4 rebars in same length.

Section B-B

1. Minimum panel depth “D” shall be 3 ½ inches.
2. Top face of panel (interface between precast and cast-in-place deck concrete) shall be texture roughened per Standard Specification.

Section C-C

1. This section shows the details of reinforcement at skewed corner.

Detail 1

1. Center of strands shall be at the same level as Center of gravity (CG) of panels.
2. The skewed edge of the panel shall have vertical face perpendicular to the bottom soffit.

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Detail 2

1. Dimensions of keys and reinforcement details.

Section At Deck Panel Joint

1. Due to fact that pre-camber (upward deflection) of prestressed girders changes with time, thickness of camber shall be adjusted accordingly.
2. Deck reinforcement should not sit directly on deck panels. There shall be a 1 inch minimum clearance between deck reinforcement and top of deck panels.

Design/General Notes

Many notes related to construction of PC/PS deck panels are in Section 51-4.02D(7) and Section 51-4.03G “Deck Panels” of Standard Specifications. Designers have to read the sections of the Standard Specifications.

Additional Drawings Needed to Complete PS&E

This sheet works together with XS Sheet No. xs01-180-1.

Contract Specifications

Standard Specifications 2015

Restrictions on Use of Standard Drawings

The project designer and project engineer may modify this sheet to suit project requirements and needs.

Special Considerations

The designer and project engineer are responsible for the structure components design and design calculations shown on this sheet. Designer/Project Engineer shall stamp this sheet with a valid California Professional Engineer License Stamp.