

UNIT 10 - TYPE A & B SIGNS

ASSIGNMENT

Read and study Division 9 of the Standard Specifications for Roads and Structures and 901.10 through 906.10 of the Roadway Standard Drawings. Answer review questions. Take and pass the written test.

KEY POINTS

Type A signs are guide signs fabricated from *multiple* aluminum sheet panels with welded studs for attachment to the supporting frame consisting of a thickness of 0.125 inches, a width greater than 12 feet (144 inches), and a height greater than five feet (60 inches).

Type B signs are guide signs fabricated from *single* aluminum sheet panels with welded studs for attachment to the supporting frame consisting of a thickness of 0.125 inches, a maximum width of 12 feet (144 inches), and a maximum height of five feet (60 inches).

Type A and Type B signs shall be mounted on two or more supports.

Type A and Type B signs can be fabricated with very high bond (VHB) acrylic foam tape capable of obtaining 140 psi tensile adhesion, for attachment to the supporting frame. When VHB tape is used, the aluminum sheet panels shall have a thickness of 0.080 inches.

All overlays for existing signs shall be fabricated from 0.063 inch aluminum sheeting, unless otherwise directed by the plans.

Supporting frames for Type A and Type B signs shall consist of two or more horizontal aluminum "Z" stringers with vertical aluminum bar stiffeners in accordance with the details and dimensions shown in the plans.

Field drilling of holes in any part of the structural assembly *will not* be permitted, except the field drilling of Z-bars for attaching new signs to existing supports will be allowed when necessary.

Footings for Type A and Type B signs shall be either reinforced or plain Class A concrete.

Breakaway supports shall be completely assembled prior to erection, and they shall be installed plumb. No shimming will be permitted.

REVIEW QUESTIONS

1) What is the maximum size of a Type B sign?

_____ feet in width by _____ feet in height

2) What is the maximum sign width for two supports?

_____ inches

3) What is the maximum square area for two supports?

_____ square feet

4) The normal thickness of a Type A and a Type B sign with welded studs is 0.125 inches.

TRUE FALSE

5) What is the normal thickness of a sign overlay?

_____ inches

6) Can Type A and Type B signs be fabricated with VHB tape?

YES NO

7) Three Z-bars are normally needed for the supporting frames.

TRUE FALSE

8) When is field drilling of holes in the structural assembly permitted?

9) What specification discusses the erection of ground mounted signs?

10) What standard drawing is used to determine the rivet spacing for overhead signs?

ANSWERS TO REVIEW QUESTIONS

- 1) 12 feet by 5 feet (*901.20, sheet 1 of 1 of the Roadway Standard Drawings*)
- 2) 216 inches (*901.70, sheet 1 of 1 of the Roadway Standard Drawings*)
- 3) 250 square feet (*901.70, sheet 1 of 1 of the Roadway Standard Drawings*)
- 4) True (*page 448 of the Standard Specifications for Roads and Structures*)
- 5) 0.063 inches (*page 449 of the Standard Specifications for Roads and Structures*)
- 6) Yes (*page 448 of the Standard Specifications for Roads and Structures*)
- 7) False (*page 452 of the Standard Specifications for Roads and Structures*)
- 8) Field drilling of Z-bars for attaching new signs to existing supports is allowed when necessary (*page 452 of the Standard Specifications for Roads and Structures*)
- 9) Section 904 (*pages 458 thru 460 of the Standard Specifications for Roads and Structures*)
- 10) 901.60, sheet 1 of 1 (*Roadway Standard Drawings*)