

ALDOT-231-73
TESTING TECHNIQUES FOR PNEUMATICALLY APPLIED CONCRETE

1. Responsibilities

- 1.1. The Alabama Department of Transportation will provide the cylinder molds upright and concentric during casting.
 - 1.1.1. The 6 in (150 mm) x 12 in (300 mm) cylinder molds shall be fabricated from ½" (13 mm) mesh hardware cloth in accordance with the design shown in Appendix A.
 - 1.1.2. The device or restraining frame for holding the mold-cylinder shall be constructed in accordance with the design criteria depicted in Appendix B.
- 1.2. The contractor will place the concrete in the molds. Project personnel will cut and screed the cylinders at the appropriate time.

2. Frequency Of Testing

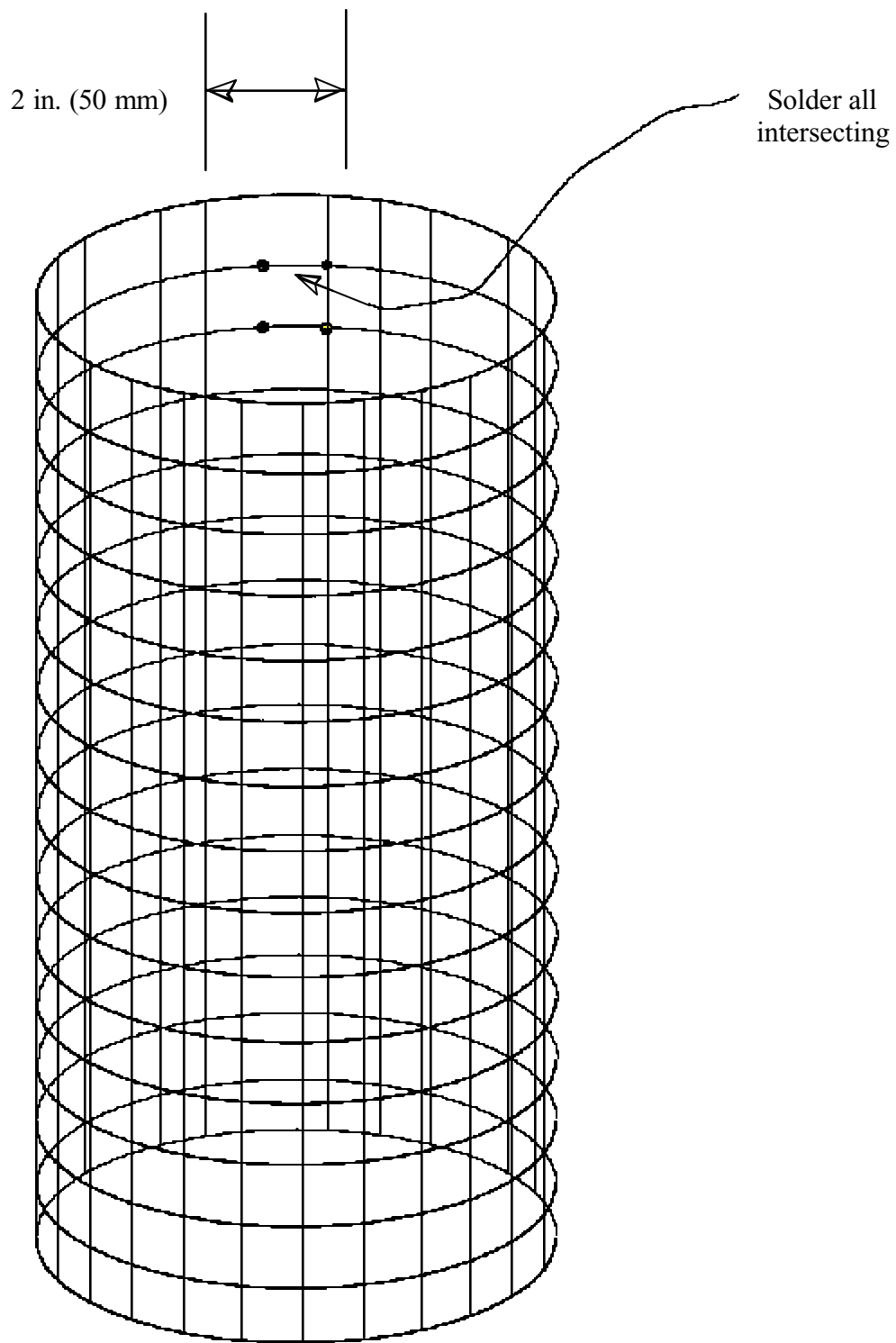
- 2.1. Three 28 day cylinders will be made every other day and at other times deemed necessary by the project engineer.

3. Consistency

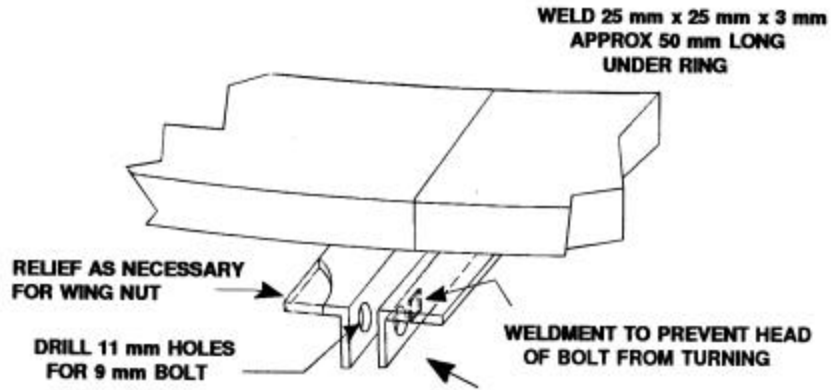
- 3.1. Air pressure will remain the same in cylinder production as in the actual work.
- 3.2. Test cylinders will be cast by the same technique throughout the entire job unless changes are ordered in writing by the engineer.

4. Handling

- 4.1. Cylinders shall be carefully cut and screeded using a trowel after initial set, normally about two hours.
- 4.2. After cutting and screeding, the cylinders shall be cured under polyethylene sheeting until time for stripping.
- 4.3. After 24 ± hours, the cylinders will be placed on a sand cushion and the wire mesh stripped, taking precautions not to damage the cylinders. Cylinders will be shipped to the Division or Central Laboratory for moist curing.

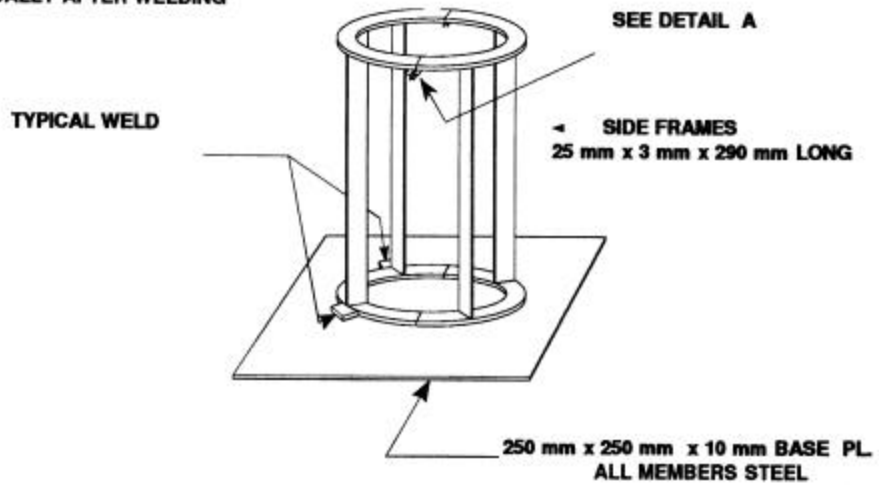


6 in. (150 mm) ID X 12 in. (300 mm) Height
1/2 in. (13 mm) Hardware Cloth Cylinder
Edges Overlapped 2 in. (50 mm) & Securely Soldered



DETAIL A - CLAMPING EARS

TOP AND BOTTOM RINGS
160 mm ID, 185 mm OD, 5 mm TH
SPLIT DIAMETRICALLY AFTER WELDING



PNEUMATICALLY APPLIED CONCRETE
CYLINDER RESTRAINING FRAME

Appendix B