SECTION 1036 -- METAL FLARED-END SECTIONS

1036.01 -- Description

Metal flared-end sections shall be either metallic-coated steel or aluminum.

1036.02 -- Material Characteristics

1. The base metal for all coated sheets shall conform to the requirements of AASHTO M 218.

2. Aluminum and steel materials shall not be mixed in any installation.

3. a. Steel flared-end sections shall conform to the requirements of AASHTO M 36/M 36M.

b. Bolts, nuts, washers, and all other hardware items used with coupling bands shall be galvanized in accordance with AASHTO M 232 (ASTM A 153) or mechanically galvanized in accordance with AASHTO M 298 (ASTM B 695) Class 50.

4. Aluminum alloy flared-end sections shall conform to the requirements of AASHTO M 196/M 196M.

5. a. In the repair of damaged coating on flared-end sections which are fabricated by methods which cause the damage, both the interior and exterior surfaces of the damaged area shall be thoroughly cleaned and all traces of welding flux and weld spatter shall be removed. The cleaned area shall then be painted with zinc-rich paint at the fabricating plant in accordance with Section 1061.

b. The mass of metallic coating may be determined by the use of magnetic thickness gauges in accordance with ASTM E 376. In cases of dispute, additional samples shall be tested in accordance with AASHTO T 65 or AASHTO T 213, as applicable.

6. Unless otherwise specified on the plans, the minimum gauge or sheet thickness for steel or aluminum alloy flared-end sections shall be as shown in Table 1036.01.

Table 1036.01

Steel Aluminum Flared-End Thickness	
Nominal Diameter Millimeters	**Sheet Thickness Millimeters**
205 thru 610	1.45
760 thru 915	1.83
1065 thru 1375	2.57
1525 thru 1825	3.28
Over 1825	4.20

7. Metal flared-end sections shall be of the design shown in the plans.

8. Coupling or connecting bands with projections (often referred to as dimple bands) are not acceptable.

1036.03 -- Acceptance Requirements

Metal flared-end sections will be accepted based on requirements of this Section and sampling and testing requirements in accordance with the NDR *Materials Sampling Guide*.