

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
POLYMER COATED STEEL PIPE

C&T:RDT/Rev.

1 of 2

C&T:APPR:
FHWA:APPR:

a. Description. This specification revises the requirements for polymer-precoated and dual wall corrugated steel pipe in the Standard Specifications for Construction as follows.

Polymer-precoated corrugated and spiral ribbed steel pipe may be used with wall thicknesses according to Table 909-6 revised herein.

Delete the first paragraph of subsection 909.05.A of the Standard Specifications for Construction and replace with the following paragraph.

Corrugated Steel Pipe. Circular and pipe arch corrugated steel pipe shall conform to AASHTO M 36 when metallic coated pipe is specified, or AASHTO M 245 using an ethylene acrylic acid film selected from the Qualified Products List when polymer-precoated pipe is specified, with the following exceptions and additions.

Delete the second paragraph of subsection 909.05.A of the Standard Specifications for Construction and replace with the following paragraph.

Type IA (circular) and Type IIA (arch) dual wall polymer-precoated galvanized corrugated steel pipe may be used with wall thicknesses according to Table 909-6 revised herein.

Delete the second paragraph of subsection 909.05.A.1 of the Standard Specifications for Construction and replace with the following paragraph.

For polymer-precoated corrugated steel pipe, ethylene acrylic acid film selected from the Qualified Products list meeting AASHTO M 246 Grade 250/250 polymer on zinc coated steel sheet shall be used. Only lock seam pipe are allowed. Riveted pipe is not permitted.

Delete Table 909-6 and replace with the following Table 909-6.

Table 909-6 References for Spiral Ribbed and Corrugated Metal Pipes

Minimum wall thickness (in inches) to meet structural and durability requirements

Pipe Material Type	Driveway Culverts and Downspouts	Culverts	Sewers
	Minimum Design Life		
	25 years	50 years	70 years
Galvanized Spiral Ribbed Metal Pipe	Table 909-8	0.109	0.168
Aluminized Type 2 Spiral Ribbed Metal Pipe	Table 909-8	Table 909-11	0.138
Polymer-Precoated Spiral Ribbed Metal Pipe	Table 909-8	Table 909-8	Table 909-8
Galvanized Corrugated Metal Pipe	Table 909-7	Table 909-9	0.168 (a)
Aluminized Type 2 Corrugated Metal Pipe	Table 909-7	Table 909-10	0.138(a)
Polymer-Precoated Galvanized Corrugated Metal Pipe	Table 909-7	Table 909-7	Table 909-7(a)
Aluminum Pipe	Table 909-12	Table 909-13	Table 909-14
Aluminum Spiral Ribbed Pipe	Table 909-15	Table 909-16	Table 909-17
Dual Wall Polymer-Precoated Galvanized Corrugated Steel Pipe	Table 909-20		

Numbers represent the minimum durability thickness requirements for the specific pipe material.

(a) Permitted for 12 to 18 inch diameter 2-2/3 x 1/2 inch helically corrugated pipe only.

**Table 909-20 Dual Wall Polymer-Precoated Galvanized Corrugated Steel Pipe
Wall Thickness Requirements in inches
Based on Diameter and Size of Corrugation**

Diameter of Pipe, in.	Corrugation Size, in.		Corrugation Size, in.	
	2 2/3 x 1/2		3 x 1	
	Shell	Liner	Shell	Liner
36-48	0.064	0.052	0.064	0.052
54	0.079	0.052	0.064	0.052
60	0.109	0.052	0.064	0.052
66-72	0.138	0.052	0.064	0.052
78-84	0.168	0.052	0.064	0.052
90-102	-	-	0.079	0.052
108-120	-	-	0.109	0.052
126-136	-	-	0.138	0.052
144	-	-	0.168	0.052