

10/23/20

State of Louisiana  
Department of Transportation and Development (DOTD)  
Materials and Testing Section Approved Materials Procedure  
for

**GASKET MATERIALS FOR CULVERT PIPE**

**MATERIAL SPECIFICATION REFERENCE:**

DOTD Standard Specifications, Subsections 1016.01(Concrete Pipe Joint Systems and Gaskets), 1006.06(Joint Systems for Thermoplastic Pipe), 1007.08(Metal Pipe Joint Systems), and 1018.03(Joint Systems for Pipe and Precast Concrete Drainage Units).

**APPROVED MATERIAL EVALUATION SUBMITTAL:**

The manufacturer shall submit a completed Approved Materials Evaluation Submittal to the DOTD Materials and Testing Section Coordinator listed below.

**PRELIMINARY REQUIREMENTS:**

The complete submittal must include:

- Complete Approved Materials Evaluation Form
- Letter requesting evaluation of the material
- Product Data Sheets
- Safety Data Sheet (SDS)
- Manufacturer's specifications
- Certificate of Analysis
- Sample

NOTE: Evaluation will not begin until all required items listed above are received by the Materials Laboratory.

Certifications and/or Test Reports

Submit a Certificate of Analysis (CA) reporting actual test results of the material properties for each material submitted.

Sample (to be furnished at no cost to the Department)

For extruded type plastic gaskets one (1) box of material will be required. For rubber gaskets four (4) feet of material, with one (1) splice in the middle, will be required, along with at least two (2) sets of prepared rubber specimens as required by the ASTM test methods specified in Section 9.1 of AASHTO M315. Additional material will be required for hydrostatic testing if initial laboratory tests meet specifications.

**TEST REQUIREMENTS:**

Laboratory Testing

The approved materials sample shall be tested in accordance with the applicable procedures shown in DOTD Standard Specifications, Subsection 1016.01 (Concrete Pipe Joint Systems and Gaskets), 1006.06 (Joint Systems for Thermoplastic Pipe), 1007.08 (Metal Pipe Joint Systems), and 1018.03 (Joint Systems for Pipe and Precast Concrete Drainage Units).

After satisfactorily completing laboratory testing, hydrostatic tests will be required in accordance with AASHTO Designation: M315 and DOTD Standard Specifications, Subsection 1016.01- concrete pipe and concrete box culverts, 1006.06- plastic pipe, 1007.08 metal pipe. These tests will be performed by the manufacturer or its representative at no cost to the Department and witnessed by the Construction Fabrication Unit. A table from the manufacturer indicating the recommended size of gasket for a particular size pipe along with any recommended primer or lubricant shall be furnished. If a primer or lubricant is recommended or used in the hydrostatic tests, it will be listed in the Approved Materials List (AML) if the gasket is approved and its use shall be required with the gasket.

Requirements on the test pipe will be supplied by the Construction Fabrication Unit after laboratory testing is completed. Gasket manufacturer will be required to purchase these test pipes.

Field Evaluation (if Required)

A field evaluation by the Construction Fabrication Unit may be required on materials in which hydrostatic testing is not feasible. Estimated testing time of 6 months.

Evaluation Time (4 weeks)

Laboratory testing - 2 weeks

Evaluation of results – 2 weeks

**GENERAL:**

Upon completion of the evaluation, the submitter will be notified in writing concerning the results of the evaluation and whether the material will or will not be added to the AML. The DOTD Materials and Testing Section Coordinator shall be notified in writing of any change from the original material submittal. The Department reserves the right to re-evaluate any material or individual material at any time. A CA of the material shall be submitted annually to the DOTD Materials and Testing Section Coordinator to remain on the AML.

**PROJECT ACCEPTANCE REQUIREMENTS:**

The inclusion of any material on the AML is not blanket approval for its use. All materials, regardless of prior approval, shall be sampled in accordance with the Materials Sampling Manual.

**DISQUALIFICATION AND REMOVAL:**

Any material may be removed from the AML for non-conformance with specifications, performance requirements, failure to supply annual CAs to the DOTD Materials and Testing Section Coordinator or failure to notify the Department of any change in material formulation.

**REQUALIFICATION:**

Any material which has been disqualified and/or removed from the AML will be considered for re-evaluation only after submission of a formal request along with acceptable evidence that the problems causing the disqualification and/or removal have been resolved.

**DOTD MATERIALS AND TESTING SECTION COORDINATOR**

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Approved



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