



THE J D RUSSELL COMPANY

The J.D. Russell Co

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PN 164929

SUBJECT: Physical Testing on material submitted by the above company to ASTM D 994 test specification.

RECEIVED: Several 4 x 4" x 1/2" pieces identified as Reflex Rubber Expansion Joint received 5/20/22
Second submittal received four (4) 2" x 4" x 1/2" pieces on 7/6/22

DECISION RULE: Rule #1

TESTING LOCATION: Akron unless indicated below

SAMPLE PREP, ASTM D 3183
Performed at Barberton location

DISTORTION, PARA. 8.2.1^

2" x 4" specimen measured for thickness and then clamped between 2 plates with 3 1/2" cantilever and then conditioned 2 hrs. @ 125°F. After conditioning, specimen removed from clamp assembly and measured for deflection

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Deflection, in.	0.03	1 max.	Pass

BRITTLENESS, PARA. 8.2.2^

2" x 4" specimen placed in distilled water for 2 hrs. @ 5°C. After 2 hrs. @ 5°C specimens clamped between 2 plates with 3 1/2" cantilever and then a modified 0.95 lb. cast iron ball with 1 7/8" diameter dropped onto specimens from 1 ft. above specimen

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
	No cracks or breaks	No cracks or breaks	Pass

WATER ABSORPTION, PARA. 8.2.3^

2" x 4" specimen immersed 24 hrs. @ 73°F in distilled water 1" below the surface. Specimen then removed from water and blotted dry with a wet cloth and immediately weighed.

2nd Submittal	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Absorption, %	+2.6	4 max.	Pass

*ARDL is ISO 17025 accredited by A2LA for the test methods listed on the certificates referenced on page one. Unless specified, the current specification version is used.

NOTE: Non-ISO 17025 accredited test methods are designated with the ^ symbol to differentiate from ISO 17025 accredited methods in the body of the test report.*

COMPRESSION, PARA. 8.2.4

Test Method: ASTM D 545

4" x 4" specimens compressed 50% at 0.05 in/min. and load immediately taken.

Median of five specimens reported.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Compression, psi	450	100 - 928	Pass

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Decision Rules

Rule 1. This is the way test results have traditionally been reported by ARDL. If ARDL runs a test for you that has pass/fail requirements, ARDL will report the values observed and then state "Pass" or "Fail", based on those values only. By default, ARDL will apply this rule to all Category I tests and those tests which are not on ARDL's Scope of Accreditation.

Rule 2. This rule takes into account the calculated measurement uncertainty of test results generated. Every test and piece of test equipment has an inherent amount of measurement uncertainty associated with it. Rule 2 establishes "Guard Bands" where the measurement uncertainty value is added to the Minimum Passing requirement and is subtracted from the Maximum Passing requirement. The Pass/Fail requirements thus become tighter and customers may be more "Certain" of their Pass/Fail result.

Rule 3. This rule also takes into account measurement uncertainty but does not set up guard bands. Rule 3 may be used when values are reported, but there is no Pass/Fail requirement called out in the test specification. Rule 3 simply states that the measurement uncertainty is reported to the customer, along with the testing result generated, and the customer decides if the results are suitable for their purposes.

Report Revision Log

<u>Date</u>	<u>Report Revision</u>	<u>Description</u>
7-8-22	New	

Prepared By: 
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Approved By: 
Melissa Martin
Physical Testing Manager

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