



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 100554696

Date: November 30, 2011

REPORT NO. 100554696CRT-002

**AIR PERFORMANCE AND LEAKAGE TESTS
ON A 600mm X 600mm DAMPER**

RENDERED TO

**FAISAL JASSIM TRADING CO LLC
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UNITED ARAB EMIRATES**

INTRODUCTION

This report gives the results of air performance and leakage tests conducted on a damper. The damper was selected and supplied by the client and received at the laboratories on November 8, 2011. The sample appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. 500338996

TEST METHOD

Air Performance and Leakage testing were conducted in accordance with AMCA Standard 500-D-98 entitled, "Laboratory Methods for Testing Dampers for Rating".

Air Volume was measured employing metering stations containing appropriately sized sharp edged orifices.

DESCRIPTION OF TEST SPECIMEN

Volume Control Damper

The 600 by 600 mm parallel blade damper was constructed of sheet metal. The unit contained 4 aluminum damper blades. The metal measured 0.048 inches thick. The unit measured 6.75 inches in depth. A pressure of 5 foot pounds was applied to the damper shaft.

TEST RESULTS

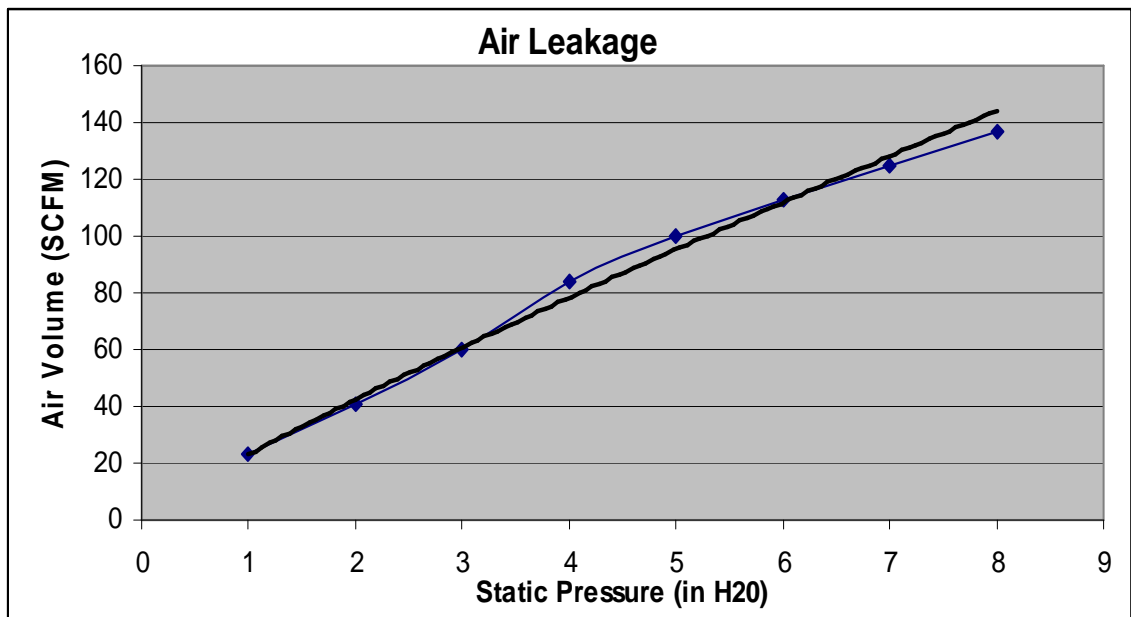
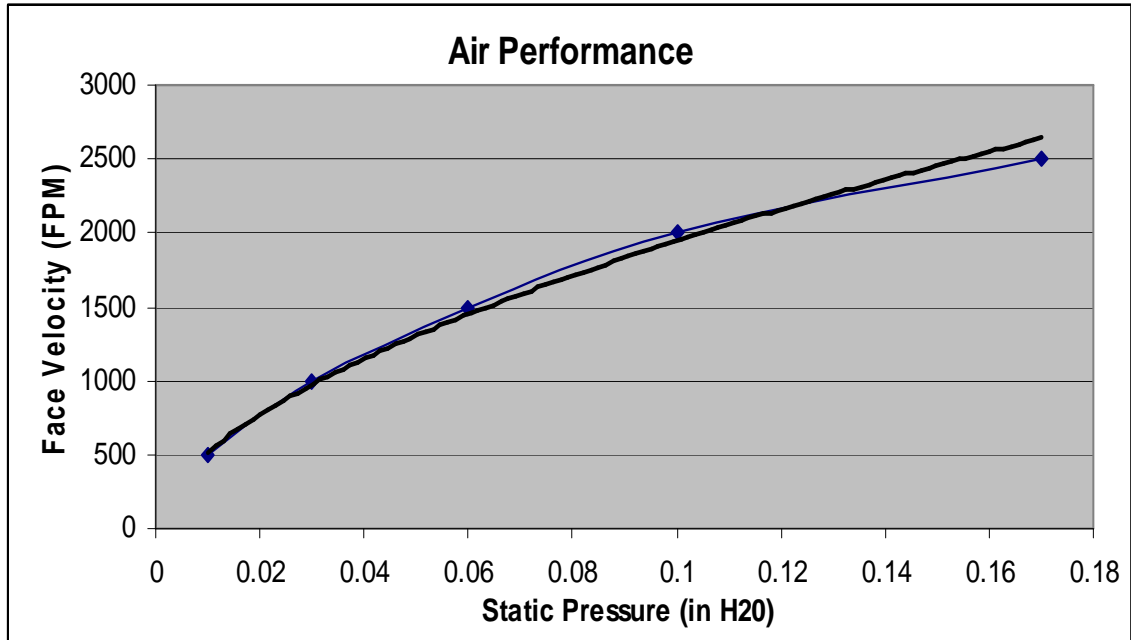
Air Performance
Volume Damper
Size 600 mm by 600 mm

Pressure Drop Across Full Open Damper		Air Velocity	
<u>in. H₂O</u>	<u>Pa</u>	<u>FPM</u>	<u>m/s</u>
0.01	2	500	2.5
0.03	7	1000	5.1
0.06	15	1500	7.6
0.10	25	2000	10.2
0.17	42	2500	12.7

Air Leakage
Volume Damper
Size 600 mm by 600 mm

Pressure Drop Across Closed Damper		Air Volume	
<u>in. H₂O</u>	<u>kPa</u>	<u>SCFM</u>	<u>Ls</u>
1	0.25	23	11
2	0.50	41	19
3	0.75	60	28
4	1.00	84	40
5	1.25	100	47
6	1.50	113	53
7	1.75	125	59
8	2.00	137	65

GRAPHICAL TEST RESULTS



PHOTOGRAPH OF TEST SAMPLE



REMARKS

Ambient Temperature: 70.7° F
Relative Humidity: 42%
Barometric Pressure: 28.88 in. Hg

CONCLUSION


The test method employed for this test has no pass-fail criteria; therefore, the evaluation of the test results is left to the discretion of the client.

Date of Tests: November 29, 2011

Report Approved by:


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Report Reviewed By:


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Engineer/Quality Supervisor
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Attachments: None

