REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 103051478 Date: May 26, 2017

REPORT NO. 103051478CRT-001

AIR PERFORMANCE AND AIR LEAKAGE TESTS ON A 24 INCH BY 24 INCH OPPOSED BLADE DAMPER

RENDERED TO

ATLANTIC FABRICATION & COATINGS, LLC
72 PUTNAM STREET
PATERSON, NJ 07524

INTRODUCTION

This report gives the results of air performance and leakage tests conducted on a 24 inch square damper. The sample was selected and supplied by the client and received at the laboratories on May 2, 2017. The sample appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. Qu-00779569

TEST METHOD

Air Performance and Leakage testing were conducted in accordance with AMCA Standard 500-D-2012 entitled, “Laboratory Methods of Testing Dampers for Rating”.

Air Volume was measured employing metering stations containing appropriately sized orifice plates.

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. Measurement uncertainty budgets have been determined for applicable test methods and are available upon request.

DESCRIPTION OF TEST SPECIMEN

Opposed Blade Damper

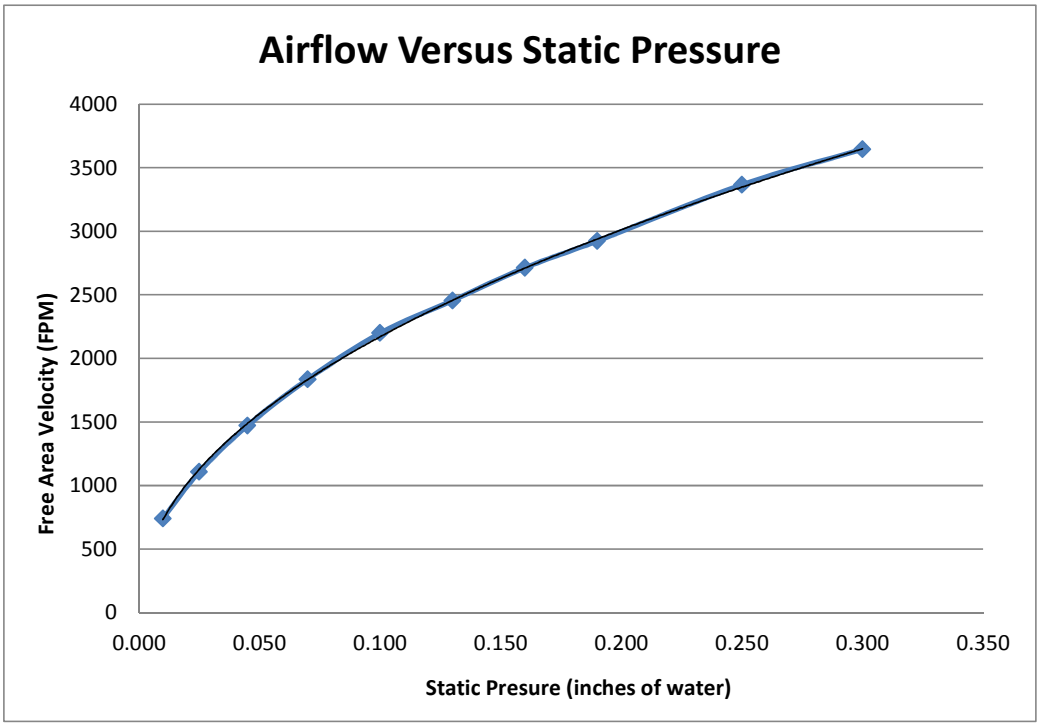
The 24 inch by 24 inch by 5 ½ inch deep damper was constructed of aluminum and contained 4 blades. The spacing between blades ranged from 4 7/8 inches (outer blades) to 5 7/8 inches (inner blades).

PHOTOGRAPHS OF TEST SAMPLE

TEST RESULTS

Air Performance

Pressure Drop Across Open Damper	Air Velocity (Free Area) (2.74 sq. ft.)
in. H_2O	FPM
0.010	741
0.025	1106
0.045	1471
0.070	1835
0.100	2199
0.130	2455
0.160	2712
0.190	2923
0.250	3365
0.300	3645



Air Leakage

Pressure Drop Across Closed Damper	Air Volume
in. H2O	SCFM
1.0	8
2.0	14
3.0	19
4.0	22
5.0	27
6.0	30
7.0	34
8.0	37
9.0	42
10.0	46

34 inch pounds of torque were applied to the damper shaft