



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 100767807

Date: May 31, 2012

REPORT NO. 100767807CRT-001b

STATIC PRESSURE TESTS ON A
24 BY 24 INCH PAR PERFORATED
RETURN DIFFUSER

RENDERED TO

TRANSWALL OFFICE SYSTEMS INC.
TRANSWALL INC
1220 WILSON DRIVE
WESTCHESTER, PA 19380

INTRODUCTION

This report gives the results of tests conducted on a 24 by 24 inch par perforated return diffuser. The test results include Static Pressure versus Airflow. The sample was selected and supplied by the client and was received at the laboratories on May 29, 2012. The sample appeared to be in new unused condition upon receipt.

AUTHORIZATION

Signed Intertek Quotation No. 500383208.

TEST METHOD

The diffuser was tested in accordance with the ASHRAE 70-2006 Standard "Method of Testing for Rating the Performance of Air Outlets and Inlets", which incorporates ADC 1062: GRD-84 Test Code for Grilles, Registers and Diffusers. The diffuser was installed in the facility and supplied with measured volumes of air.

DESCRIPTION OF TEST SPECIMEN

24 BY 24 INCH PERFORATED RETURN DIFFUSER

The diffuser was constructed from sheet metal. The diffuser measured 23 3/4 inches wide by 23 3/4 inches high from the face, was equipped with a 22 inch wide by 22 inch high inlet, and had a perforated face. The diffuser was tested with return air only.

EQUIPMENT

Equipment	Calibration Date	Due Date	S/N	Model	Asset
Dwyer Manometer	3/16/2012	3/16/2013	F020	215	F020
Dwyer Manometer	3/16/2012	3/16/2013	S445	424-5	F056
Dwyer Manometer	3/16/2012	3/16/2013	509D	400	F235
Thermometer	12/15/2012	12/15/2013	34841	T-3521	T335
Thermometer	12/15/2012	12/15/2013	2C4992	T-3421	T955

RESULTS OF TESTS

24 BY 24 INCH PAR PERFORATED RETURN DIFFUSER

Supply Air Volume, SCFM	97	136	160	167	186
Static Pressure, in. H ₂ O	0.000	0.000	0.000	0.000	0.000

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: May 31, 2012

Report Approved By:



Brian Cyr
Engineer
Acoustical Testing

Attachments: None

Report Reviewed By:



James R. Kline
Engineer/Quality Supervisor
Acoustical Testing



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 100767807

Date: May 31, 2012

REPORT NO. 100767807CRT-001a

**STATIC PRESSURE TESTS ON A
24 BY 24 INCH PAR PERFORATED RETURN DIFFUSER
WITH ACOUSTICAP**

RENDERED TO

**TRANSWALL OFFICE SYSTEMS INC.
TRANSWALL INC
1220 WILSON DRIVE
WESTCHESTER, PA 19380**

INTRODUCTION

This report gives the results of tests conducted on a 24 by 24 inch par perforated return diffuser with Acousticap. The test results include Static Pressure versus Airflow. The sample was selected and supplied by the client and was received at the laboratories on May 29, 2012. The sample appeared to be in new unused condition upon receipt.

AUTHORIZATION

Signed Intertek Quotation No. 500383208.

TEST METHOD

The diffuser was tested in accordance with the ASHRAE 70-2006 Standard "Method of Testing for Rating the Performance of Air Outlets and Inlets", which incorporates ADC 1062: GRD-84 Test Code for Grilles, Registers and Diffusers. The diffuser was installed in the facility and supplied with measured volumes of air.

DESCRIPTION OF TEST SPECIMEN

24 BY 24 INCH PAR PERFORATED RETURN DIFFUSER WITH ACOUSTICAP

The diffuser was constructed from sheet metal. The diffuser measured 23 3/4 inches wide by 23 3/4 inches high from the face, was equipped with a 22 inch wide by 22 inch high inlet, and had a perforated discharge face. The diffuser was tested with return air only. The Acousticap was installed on the back of the diffuser per manufacturer's instructions.

EQUIPMENT

Equipment	Calibration Date	Due Date	S/N	Model	Asset
Dwyer Manometer	3/16/2012	3/16/2013	F020	215	F020
Dwyer Manometer	3/16/2012	3/16/2013	S445	424-5	F056
Dwyer Manometer	3/16/2012	3/16/2013	509D	400	F235
Thermometer	12/15/2012	12/15/2013	34841	T-3521	T335
Thermometer	12/15/2012	12/15/2013	2C4992	T-3421	T955

RESULTS OF TESTS

24 BY 24 INCH PAR PERFORATED RETURN DIFFUSER WITH ACOUSTICAP

Return Air Volume, SCFM	97	136	160	167	186
Static Pressure, in. H ₂ O	0.010	0.020	0.030	0.040	0.050

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: May 31, 2012

Report Approved By:



Brian Cyr
Engineer
Acoustical Testing

Report Reviewed By:



James R. Kline
Engineer/Quality Supervisor
Acoustical Testing

Attachments: None



REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 100767807

Date: May 31, 2012

REPORT NO. 100767807CRT-001d

STATIC PRESSURE TESTS ON A
24 BY 24 INCH OMNI RETURN AIR GRILLE

RENDERED TO

TRANSWALL OFFICE SYSTEMS INC.
TRANSWALL INC
1220 WILSON DRIVE
WESTCHESTER, PA 19380

INTRODUCTION

This report gives the results of tests conducted on a 24 by 24 inch Omni return air grille. The test results include Static Pressure versus Airflow. The sample was selected and supplied by the client and was received at the laboratories on May 29, 2012. The sample appeared to be in new unused condition upon receipt.

AUTHORIZATION

Signed Intertek Quotation No. 500383208.

TEST METHOD

The grille was tested in accordance with the ASHRAE 70-2006 Standard "Method of Testing for Rating the Performance of Air Outlets and Inlets", which incorporates ADC 1062: GRD-84 Test Code for Grilles, Registers and Diffusers. The grille was installed in the facility and supplied with measured volumes of air.

DESCRIPTION OF TEST SPECIMEN

24 BY 24 INCH OMNI RETURN AIR GRILLE

The grille was constructed from extruded aluminum. The grille measured 23 3/4 inches wide by 23 3/4 inches high from the face, was equipped with a 14 inch diameter outlet, and had a single inlet that wrapped around the perimeter on the face. The grille was tested with return air only.

EQUIPMENT

Equipment	Calibration Date	Due Date	S/N	Model	Asset
Dwyer Manometer	3/16/2012	3/16/2013	F020	215	F020
Dwyer Manometer	3/16/2012	3/16/2013	S445	424-5	F056
Dwyer Manometer	3/16/2012	3/16/2013	509D	400	F235
Thermometer	12/15/2012	12/15/2013	34841	T-3521	T335
Thermometer	12/15/2012	12/15/2013	2C4992	T-3421	T955

RESULTS OF TESTS

24 BY 24 INCH OMNI RETURN AIR GRILLE

Supply Air Volume, SCFM	60	103	114	135	142
Inlet Static Pressure, in. H ₂ O	0.005	0.010	0.015	0.020	0.020

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: May 31, 2012

Report Approved By:



Brian Cyr
Engineer
Acoustical Testing

Report Reviewed By:



James R. Kline
Engineer/Quality Supervisor
Acoustical Testing

Attachments: None



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REPORT NO. 100767807CRT-001c

**STATIC PRESSURE TESTS ON A
24 BY 24 INCH OMNI RETURN AIR GRILLE
WITH ACOUSTICAP DOME ONLY**

RENDERED TO

**TRANSWALL OFFICE SYSTEMS INC.
TRANSWALL INC
1220 WILSON DRIVE
WESTCHESTER, PA 19380**

INTRODUCTION

This report gives the results of tests conducted on a 24 by 24 inch Omni return air grille with Acousticap dome only. The test results include Static Pressure versus Airflow. The sample was selected and supplied by the client and was received at the laboratories on May 29, 2012. The sample appeared to be in new unused condition upon receipt.

AUTHORIZATION

Signed Intertek Quotation No. 500383208.

TEST METHOD

The grille was tested in accordance with the ASHRAE 70-2006 Standard "Method of Testing for Rating the Performance of Air Outlets and Inlets", which incorporates ADC 1062: GRD-84 Test Code for Grilles, Registers and Diffusers. The grille was installed in the facility and supplied with measured volumes of air.

DESCRIPTION OF TEST SPECIMEN

24 BY 24 INCH OMNI RETURN AIR GRILLE WITH ACOUSTICAP DOME ONLY

The grille was constructed from sheet metal. The grille measured 23 3/4 inches wide by 23 3/4 inches high from the face, was equipped with a 14 inch diameter outlet, and had a single inlet that wrapped around the perimeter on the face. The grille was tested with return air only. The Acousticap dome was installed on the back of the grille per manufacturer's instructions.

EQUIPMENT

Equipment	Calibration Date	Due Date	S/N	Model	Asset
Dwyer Manometer	3/16/2012	3/16/2013	F020	215	F020
Dwyer Manometer	3/16/2012	3/16/2013	S445	424-5	F056
Dwyer Manometer	3/16/2012	3/16/2013	509D	400	F235
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RESULTS OF TESTS

24 BY 24 INCH OMNI RETURN AIR GRILLE WITH ACOUSTICAP DOME ONLY

Supply Air Volume, SCFM	60	103	114	135	142
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