

DEPARTMENT OF CIVIL ENGINEERING FACULTY OF ENGINEERING KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND.

TYPE OF TEST

: Air Leakage and Pressure Drop Test for Volume Damper

TEST SPECIMEN

: Rectangular Volume Damper, Type : VL

The Specimen is 300 mm. Width and 500 mm. Height with 3 blades. The material is galvanized steel sheet.

BRAND

: STREAM AIR

CLIENT

: PCJ INDUSTRIES CO., LTD.

DATE OF TEST

: 13/05/2004

TEST MACHINES

: Wind Turnel (AEROTECH)

Tilting Multitube Manometer

TEST METHOD

: SOME PART OF AMCA STANDARD 500 D -98

TEST RESULTS

: Leakage 4.70 CFM/ft² at 1 inches water gauge Leakage 13.15CFM/ft² at 4 inches water gauge

Conformed to UL555S, Classification II

REMARK:-

- 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.
- 2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

(MR: LAEMTHONG LAOKHONGTHAVORN)
Head of Civil Engineering Laboratory



FACULTY OF ENGINEERING, KING MONGKUT 'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project:

RECTANGULAR VOLUME DAMPER

Ref. No. :

47537

"STREAM AIR" Type: VL

Sample From:

PCJ INDUSTRIES CO., LTD.

Submitted Date:

19/04/2004

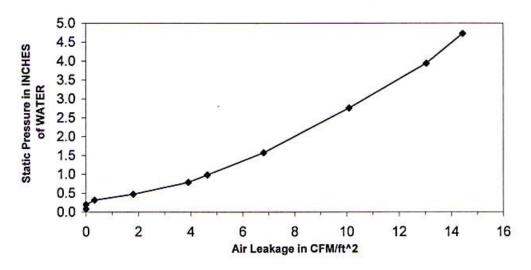
Method of testing:

Some Part of AMCA STANDARD 500 D -98

Date:

14/05/2004

Air Leakage - Damper Type : VL



REMARKS :-

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

(MR. LAEMTHONG LAOKHONGTHAVORN)



FACULTY OF ENGINEERING, KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project:

RECTANGULAR VOLUME DAMPER

Ref. No. :

47537

"STREAM AIR" Type: VL

Sample From:

PCJ INDUSTRIES CO., LTD.

Submitted Date :

19/04/2004

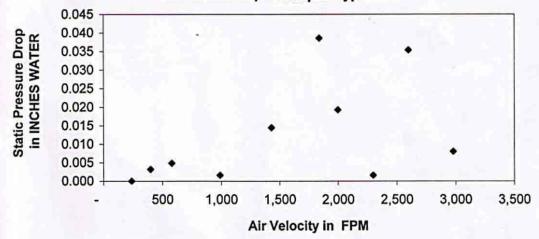
Method of testing:

Some Part of AMCA STANDARD 500 D -98

Date:

14/05/2004

Pressure Drop - Damper Type : VL



REMARKS :-

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

(MR. LAEMTHONG LAOKHONGTH)



DEPARTMENT OF CIVIL ENGINEERING FACULTY OF ENGINEERING KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND.

TYPE OF TEST

: Air Leakage and Pressure Drop Test for Round Volume

Damper, Low Leakage

TEST SPECIMEN

: Round Volume Damper, Low Leakage, Type :RVL

The Specimen is 300 mm. Diameter with 1 Blade.

The material is galvanized steel sheet.

BRAND

: STREAM AIR

CLIENT

: PCJ INDUSTRIES CO., LTD.

DATE OF TEST

: 21/06/2004

TEST MACHINES

: Wind Turnel (AEROTECH)

Tilting Multitube Manometer

TEST METHOD

: SOME PART OF UL 555S

TEST RESULTS

: Leakage 0.10 CFM/ft² at 1 inche water gauge

Leakage 2.48 CFM/ft² at 4 inches water gauge

Conformed to UL555S, Class I

REMARK:-

1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

NO ERASURE OR ALTERATIONS.

APPROVED BY:

(MR. LAEMTHONG LAOKHONGTHAVORN)
Head of Civil Engineering Laboratory



FACULTY OF ENGINEERING, KING MONGKUT 'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project:

ROUND VOLUME DAMPER, LOW LEAKAGE

Ref. No. :

47745

"STREAM AIR" Type: RVL

Sample From:

PCJ INDUSTRIES CO., LTD.

Submitted Date:

22/07/2004

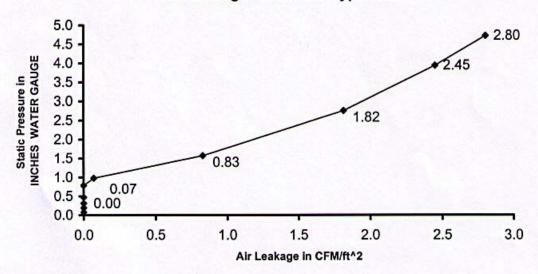
Method of testing:

Some Part of UL555S

Date:

21/06/2004

Air Leakage - DAMPER Type:RVL



REMARKS :-

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

(MR. LAEMTHONG LAOKHONGTHAVORN)



FACULTY OF ENGINEERING, KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project:

ROUND VOLUME DAMPER, LOW LEAKAGE

Ref. No.:

47745

"STREAM AIR" Type: RVL

Sample From:

PCJ INDUSTRIES CO., LTD.

Submitted Date:

22/07/2004

Method of testing:

Some Part of UL555S

Date:

21/06/2004

0.180 | 0.160 | 0.140 | 0.120 | 0.100 | 0.080 | 0.060 | 0.040 |

1,500

Air Velocity in FPM

2,000

REMARKS :-

Static Pressure Drop in INCHES WATER GAUGE

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

500

1,000

2) NO ERASURE OR ALTERATIONS.

0.020

APPROVED BY:

2,500

3,000

3,500

MR. LAEMFOONG LAOKHONGTHAVORN



DEPARTMENT OF CIVIL ENGINEERING FACULTY OF ENGINEERING KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND.

TYPE OF TEST

: Air Leakage and Pressure Drop Test for Volume Damper

TEST SPECIMEN

: Flat Oval Volume Damper, Type : OVL

The Specimen is 750 mm. Width and 250 mm. Height with 1 blades. The material is galvanized steel sheet.

BRAND

: STREAM AIR

CLIENT

: PCJ INDUSTRIES CO., LTD.

DATE OF TEST

: 13/05/2004

TEST MACHINES : Wind Turnel (AEROTECH)

Tilting Multitube Manometer

TEST METHOD

: SOME PART OF AMCA STANDARD 500 D -98

TEST RESULTS

: Leakage 5.96 CFM/ft² at 1 inches water gauge Leakage 15.77CFM/ft² at 4 inches water gauge Conformed to UL555S, Classification II

REMARK :-

CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

AEMTHONG LAOKHONGTHAVORN) Head of Civil Engineering Laboratory



FACULTY OF ENGINEERING, KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project :

FLAT OVAL VOLUME DAMPER "STREAM AIR"

Ref. No. :

47537

Type: OVL

Sample From:

PCJ INDUSTRIES CO., LTD.

Submitted Date:

19/04/2004

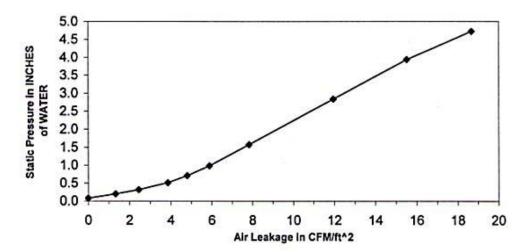
Method of testing:

Some Part of AMCA STANDARD 500 D -98

Date :

14/05/2004

Air Leakage - Damper Type : OVL



REMARKS :-

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

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APPROVED BY:

(MR. LAEMTHONG LAOKHONGTHAVORN)

FACULTY OF ENGINEERING, KING MONGKUT'S INSTITUTE OF TECHNOLOGY LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project:

FLAT OVAL VOLUME DAMPER "STREAM AIR"

Ref. No.:

47537

Type: OVL

Sample From:

PCJ INDUSTRIES CO., LTD.

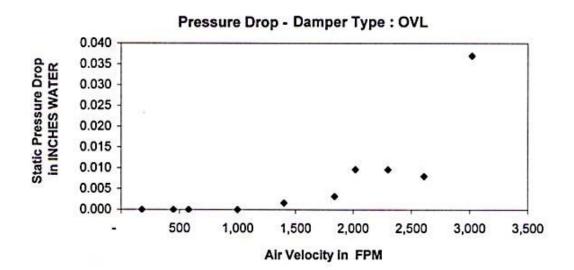
Submitted Date: 19/04/2004

Method of testing:

Some Part of AMCA STANDARD 500 D -98

Date :

14/05/2004



REMARKS :-

Note: 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

2) NO ERASURE OR ALTERATIONS.

APPROVED BY:

TR. LAEMTHONG LAOKHONGTHAVORN)