VIBRO-ACOUSTICS®

Noise Control | Vibration Isolation | Restraint Systems

tel: 416-291-7371 1-800-565-8401
fax: 416-291-8049 1-888-811-2264
web: www.vibro-acoustics.com
eml: info@vibro-acoustics.com

CIRCULAR DISSIPATIVE CD

File No.: 03A-001 Date: 1-Feb-2012
Supersedes: 03A-09-97 Date: 09-97

QTY: 1 **TAG:** 1.. M66

Submitted for:	Dwg #: 116207-3	Rev.#: 0	Drawn by:	Rev. Date: 17 May 2016	Rev. by:

Project	Customer	Customer P.O. No.
Webster science bldg	Thermal Mechanics, Inc. - St. Louis	

V-A Project No.	V-A Project Manager	Consultant
228945		

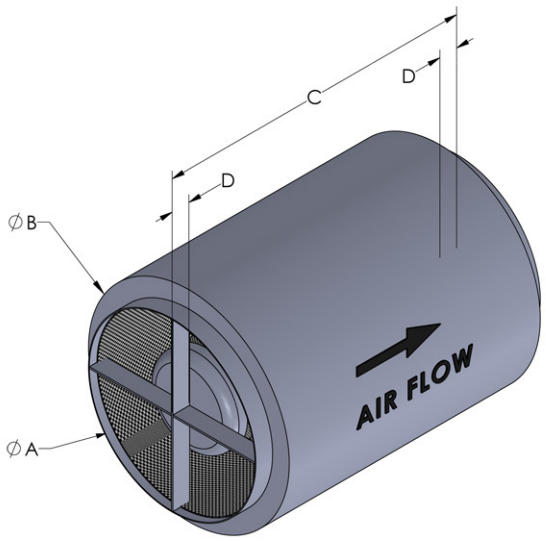
Performance for Model CD-MV-F1

Airflow		Velocity		Pressure Drop		Pressure Drop w/ System Effects*		Dynamic Insertion Loss (dB)							
CFM	**(L/s)**	FPM	**(m/s)**	in.w.g.	**(Pa)**	in.w.g.	**(Pa)**	63 Hz	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz
2800	**1323**	1,584	**8**	0.06	**15**	N/A	**N/A**	5	9	16	23	30	34	28	20

Silencer performance data has been obtained from tests conducted in a laboratory facility NVLAP accredited for the ASTM E477-06a test standard.

* Duct configuration must be known for at least 5 duct diameters upstream and downstream of the silencer to determine pressure drop with system effects

Dimensions and Weights



Silencer Size (**in**/mm)				Total Wt
A	B	C	D	(**lb**/kg)
18	**34**	**36**	**2**	**169**
457	864	914	51	77

Construction

Casing	22 Ga (0.85 mm) Galvanized
Perforated Liner	22 Ga (0.85 mm) Galvanized
Media Fill	Acoustic Grade Glass Fiber
Media Protection	None
End connections	2" (51) slip connections
Accessories	None

Ratings

Pressure rating	8 in.W.G (1992 Pa)	
Combustion rating (ASTM E84 or CAN/ULC S102)	Flamespread classification	<25
	Smoke development rating	<50

Notes

1. Customer to confirm all dimensions.
2. Silencer construction meets applicable requirements of SMACNA Duct Construction Standards, ASHRAE 62.1, UL181, ASTM C1071, NFPA 90A and NFPA 90B.
3. Lubricants and sealants used during manufacturing may contain silicone.
4. Gauges and thicknesses are based on SMACNA standard nominal and will vary within prescribed tolerances.
5. Electronic document links:

Dissipative Straight Silencers
Installation Instructions / Operation & Maintenance
NVLAP Accreditation

THERMAL MECHANICS, INC.

715 GODDARD AVENUE, CHESTERFIELD, MO 63005
VOICE (636) 532-1110 FAX (636) 532-7318

EQUIPMENT SUBMITTAL

PRODUCTION ON HOLD FOR APPROVAL

Production is on HOLD and will not be released or scheduled until receipt of approved submittals noting any changes required

June 24, 2016

Includes:	**Sound Attenuators for AHU**
Job Name:	Webster Science Bldg.
Contractor:	**ICON Mechanical**
TMI Ref #:	

By : Jim Fahrenhorst
-Representative-

WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: September 7, 2016

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mark Schaefer

Project No. WT 14127.01

[ ] UPS [ ] Courier [X] **Email**

Copies	No.	Description
1 PDF	238800M04	(Submittal No.'s) ~~(R&B CxSRC)~~
		(Cannon #238800-007) - (Paric #15051-0199) – ~~(WES #607)~~
		• **Sound Attenuator**

Submittal Review Comments

Provide erosion barrier/media protection as specified in section 238800 and as required to protect media.

c: **Kelvin Patel**
Kpatel@cannondesign.com

[ ] Furnish as Submitted
[X] ***Furnish as Noted**
[ ] Rejected
[ ] Revise & Resubmit
[ ] Reviewed
[ ]

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WTASHOP - Webster ISB - 23 8800-007

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
Date: 8/30/2016 3:50 PM
Subject: Webster ISB - 23 8800-007
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Attachments: 238800-007 Sound Attenuator Product Data.pdf

Attached for review.

Melissa Pirtle
Construction Admin
CANNONDESIGN
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797 • M
cannondesign.com

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

238800-007
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

238800
SPECIFICATION SECTION / PARAGRAPH

Icon Mechanical
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◉ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

8/29/16
DATE

To be completed by Reviewer

23 8800-007
CANNON DESIGN SUBMITTAL NUMBER

8/30/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0199

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 08/29/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Sound Attenuator Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		238800-007	1		08/29/2016	Sound Attenuator Product Data	Submitted

NOTES:

CC:

Signed: _____
Devin Gates

LETTER OF TRANSMITTAL

TO: Paric Corporation
77 West Port Plaza #250
St. Louis, MO 63146

ATTN: Jason Szachnieski, Devin Gates

DATE: 8/23/16
JOB # : 5768
RE: Webster ISB

We are sending you
( ) Attached ( ) Under separate cover
(X) Shop drawings ( ) Prints ( ) Plans ( ) Samples ( ) Specifications
( ) Copy of letter ( ) Change order ( ) Other

COPIES	DATE	NO.	DESCRIPTION
1	8/9/16	238800-2.8-I	Sound Attenuators

These are transmitted as checked below:

( ) For signature ( ) Approved as submitted ( ) Resubmit ( ) copies for approval
( ) For your use ( ) Approved as noted (X) Submit ( ) copies for distribution
( ) As requested ( ) Returned for corrections ( ) Return ( ) corrected prints
( ) For bids due ( ) Prints returned after loan to us
(X) For review and comment ( ) Other

Remarks: Please return by 9/5/16

COPY TO: file

SIGNED: Alex Chambers

Webster University ISB
Webster Groves, MO

Submittal #:	238800-2.8-I
Submittal Description:	Sound Attenuators
Return By:	9/5/16

Please Note: To avoid scheduling delays and equipment release delays, please submit by the "Return By" date.

CHECKED BY:

DESIGNER: ZL ENGINEER: MD

X	NO EXCEPTION TAKEN		MAKE CORRECTIONS NOTED
	SUBMIT SPECIFIED ITEM		REVISE AND RESUBMIT
	REJECTED		

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Equipment supplier is responsible for: dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and satisfactory performance of his work.

Job #:	5768
Date:	8/23/16
By:	ARC