

**SHOP  
DRAWING  
REVIEW**

<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

NOT REVIEWED  
REVIEWED  
REVIEWED AS NOTED  
REVISE AND RESUBMIT

w/ partial resubmit

This review by Hilditch Architect Inc. is for the sole purpose of ascertaining conformance with the general design concept features only, and does not in any way constitute review of the design of engineering elements which form part of the Contract Documents prepared by others. This review shall not mean that Hilditch Architect Inc. approves the design detail inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all trades.

***Hilditch Architect Inc.***

By: Sasha Stairs

Project No: 1809

Date Rec'd:

Date Rev'd: 2024.11.11

GC/CM: 2024.10.31

Consultant: 2024.11.11

HAI; reviewed for 51 pages total:

1. Refer to mechanical consultant comments; partial resubmit required.

## Submittal No. 02

### Exhaust Fans, Silencers and Dampers

**Project Name:**  
**Neshama Hospice**

**Owner:**  
**Neshama**

**Prime Consultant:**  
**Hilditch Architect Inc**

**General Contractor: Renok**

**SustainGlobe:**

1. The following equipment is approved with comments.

- DBF, SF-1, SF-2, EF-1 to EF-15
- Backdraft dampers, motorized dampers and smoke dampers

2. Silencers are not approved.  
Resubmission is required.

<b>SHOP DRAWING</b> <hr/> <b>SUBMITTAL REVIEW</b>	<b>JOB NAME</b>	Neshama Hospice
	<b>JOB #</b>	24-130
	<b>DATE</b>	Oct 31, 2024
<b>REVIEWED</b>	<p>This review is for general conformance of plans and specifications only. Approvals are subject to subcontractors performance within the confines of the contract documents. Review of dimensions will not serve to relieve the subcontractor of contractual responsibility for any deviation from the contract requirements.</p> <p><b>SPECIFICATION</b> 23 08 10</p> <p>✓ <b>SHOP DRAWING</b></p> <p><b>PRODUCT DATA</b></p> <p><b>DOCUMENTATION</b></p> <p><b>LETTER</b></p> <p><b>CHECKED BY:</b></p> <p><b>REVIEWED BY:</b></p> <p><b>TOTAL PAGES:</b> 49</p>	
<b>REJECTED</b>		
<b>REVIEW &amp; RESUBMIT</b>		
<b>REVIEW AS NOTED</b>		

### ***SustainGlobe Ltd.***

THIS DRAWING REVIEWED SOLELY FOR GENERAL CONFORMITY WITH DESIGN CONCEPTS. QUANTITIES, DETAILS, DIMENSIONS AND DESIGNS INHERENT IN THE SHOP DRAWINGS ARE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DATA WITH FIELD DIMENSIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN OF MANUFACTURED ITEMS, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION AND INSTALLATION OF EQUIPMENT.

**DATE RECEIVED:**

November 01, 2024

✓ **MECHANICAL**

❑ **ELECTRICAL**

❑ **OTHERS**

**THIS DRAWING IS:**

❑ **REVIEWED**

✓ **REVIEWED AS NOTED**

❑ **REVIEWED AND  
TO BE RESUBMIT**

**BY: TL**

**DATE: November 01, 2024**

**PROJ. NO.: 18031**





54 Audia Court, Unit 2  
Concord, ON L4K 3N5  
(905)-738-1400

## Submittal 24-256-004

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
NESHAMA HOSPICE	24-256 3 Cadillac Avenue North York, ON M3H 1R9	Oct 31, 2024

TO	FROM
Taranjeet Singh	PAUL LEDDY
COMPANY	COMPANY
1568796 ONTARIO INC. C/A RENOKREW	Consult Mechanical Inc.
EMAIL	EMAIL
taranjeet@renokrew.com	paul.l@consultmechanical.com
ADDRESS	ADDRESS
43 LEPAGE COURT TORONTO, ON M3J 1Z9	54 Audia Court, Unit 2 Concord, ON L4K 3N5

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### Title

Exhaust Fans

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### Description

Tag DBF- Reversomatic Model TLD 200L  
Tag SF1/SF2 - Greenheck Model SQ-90-VG  
Tag EF-11/13/14 - Greenheck Model SP-A510  
Tag EF-2/3/8/9 - Greenheck Model SP-A250  
Tag EF-4/5/6/7/8/10 - Greenheck Model SP-A390  
Tag EF1 - Greenheck Model SQ-97-VG  
Tag EF12 - Greenheck Model SQ-97-VG

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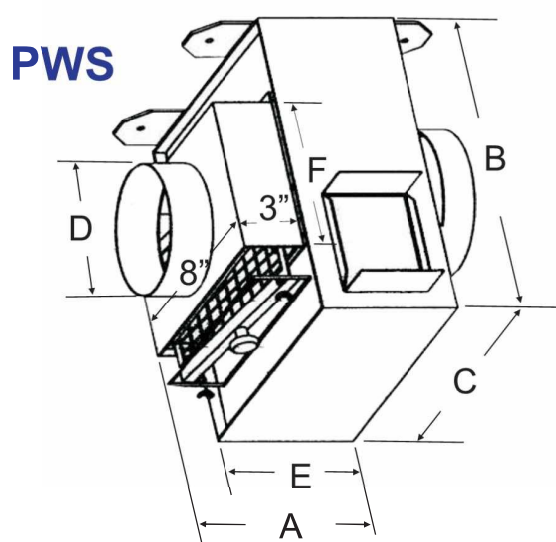
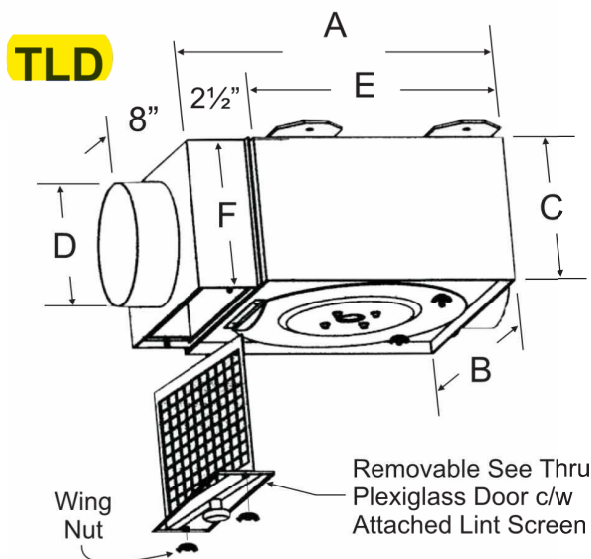
### Package Items

SPEC	SUBSECTION	ITEM	TYPE
M15 Schedule of Equipment	M15		Shop Drawings



## FANS WITH LINT TRAPS

### Maintenance Instruction



SustainGlobe:  
1. Dryer booster fan  
controlled by Amp  
sensor.

### DIMENSIONS:

MODEL	A	B	C	D (dia.)	E	F
<b>TLD200L</b>	<b>13"</b>	<b>11"</b>	<b>6"</b>	<b>5"</b>	<b>10.5"</b>	<b>6"</b>
TLD300L	14.5"	12"	8"	6"	12"	7"
PWS100L	6.5"	11"	9.5"	5"	4.5"	6"
PWS200L	6.5"	11"	9.5"	6"	4.5"	7"
PWS300L	7.5"	12.5"	11"	7"	5.5"	8"

#### NOTE:

- Lint trap must be cleaned monthly or as required by removing the two wing nuts and pulling the lint screen door down by the handle
- Clean fan assembly as required by removing two wing nuts from the main plate and motor will swing open
- Make sure the motor is unplugged to ensure there is no power to the motor
- Install fan combination lint trap where it is easily accessible for cleaning

Contractor:	<input type="checkbox"/> TLD - _____ <input type="checkbox"/> PWS - _____		
Architect:	Date	Supersedes	Drawing No.
Engineer:			

**Reversomatic Manufacturing Ltd.**

790 Rowntree Dairy Road, Woodbridge, ON Canada L4L 5V3 • Tel: 905-851-6701 • Fax: 905-851-8376  
www.reversomatic.com • info@reversomatic.com



# ***SUBMITTAL***

*Job Name:* **NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK**

*Engineer:* **SUSTAIN GLOBE LTD**

*Elevation: (ft)* **568**

*Date:* **10/30/2024**

*Submitted By:* **Amanda Stennett**

*Email:* **astennett@ehpricesales.com**

*Phone:* **(905)660-0066**

**E H PRICE LIMITED**

**571 CHRISLEA ROAD UNIT 3**

**WOODBIDGE, ON L4L 8A2**

**CA**

**Phone: (905)669-8988**

**Fax: (905)660-9121**

**Email Address: astennett@ehpricesales.com**



P.O. Box 410 Schofield, WI 54476 (715) 359-6171 FAX (715) 355-2399 [www.greenheck.com](http://www.greenheck.com)

## Model: SQ-90-VG

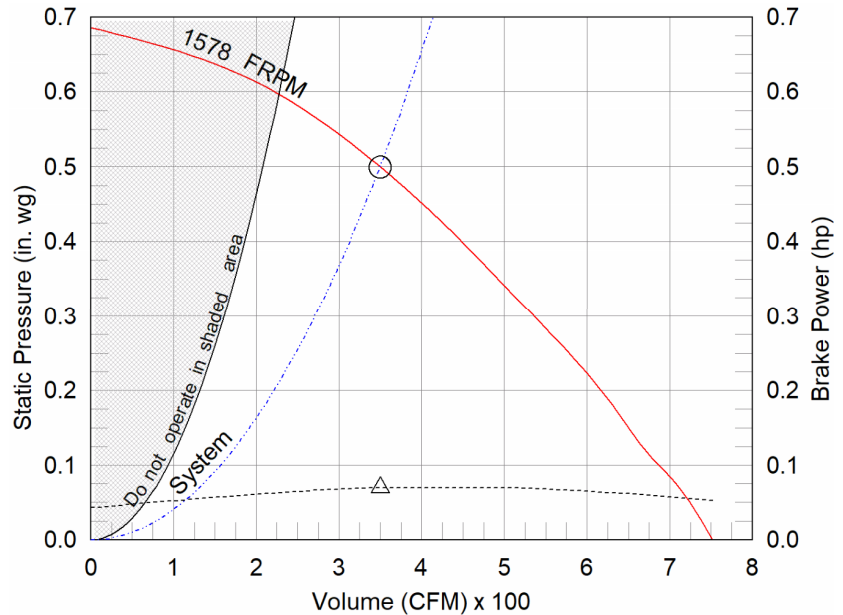
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	2
Weight w/o Acc's (lb)	34
Weight w/ Acc's (lb)	51

Performance	
Requested Volume (CFM)	350
Actual Volume (CFM)	350
Total External SP (in. wg)	0.5
Fan RPM	1578
Operating Power (hp)	0.07
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,492
Static Eff. (%)	39

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	350

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.38
Min. Circuit Ampacity (MCA)	2
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA



- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- - - Brake horsepower curve

### Nameplate Model: SQ-90-VG-X

#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	76	73	69	62	58	55	52	44	66	55	7.6
Radiated	75	68	59	52	47	36	33	31	57	46	4.2

#### Notes:

All dimensions shown are in units of in.  
 \*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory. MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).  
 LwA - A weighted sound power level, based on ANSI S1.4 dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International  
 Sones - calculated using AMCA 301 at 5 ft



## Model: SQ-90-VG

### Direct Drive Centrifugal Inline Fan

Tags: SF-1 SF-2

**Greenheck model SQ Mixed Flow meets or exceeds legacy centrifugal models SQ/BSQ in performance and features. SQ Mixed flow is an approved equal and can be considered a direct replacement for these models.**

#### Standard Construction Features:

- Galvanized steel housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-160) wheel - Two bolted access panels - Integral duct connection flanges - Ball bearing motors (sizes 97-160 and all vari-green motors), sleeve bearing motors (sizes 60-95) - Corrosion resistant fasteners

#### Selected Options & Accessories:

Motor - Vari-Green EC motor

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

Motor Cover

Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

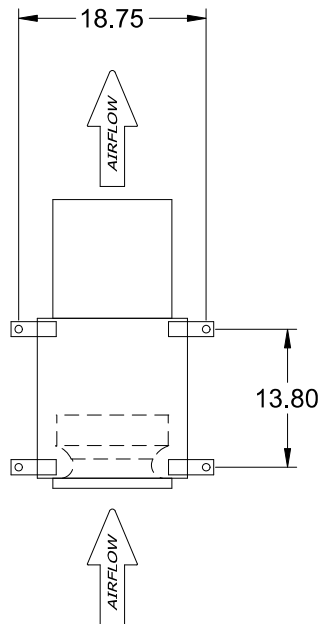
Unit Warranty: 1 Yr (Standard)

#### SustainGlobe:

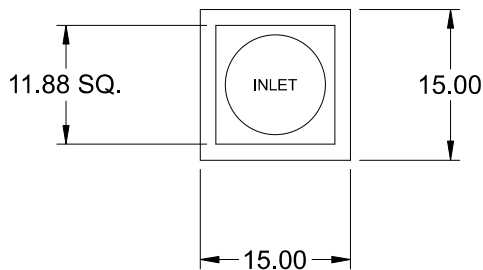
1. SF-1 and SF-2 controlled by Vari-Green control, remote dial with 0-10 VDC signal to control motor speed.
2. SF-1 and SF-2 completed with hanging rods, vibration isolators and disconnect.

# SQ-90-VG

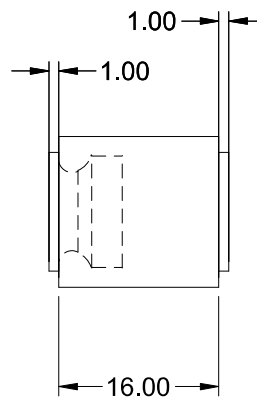
## Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

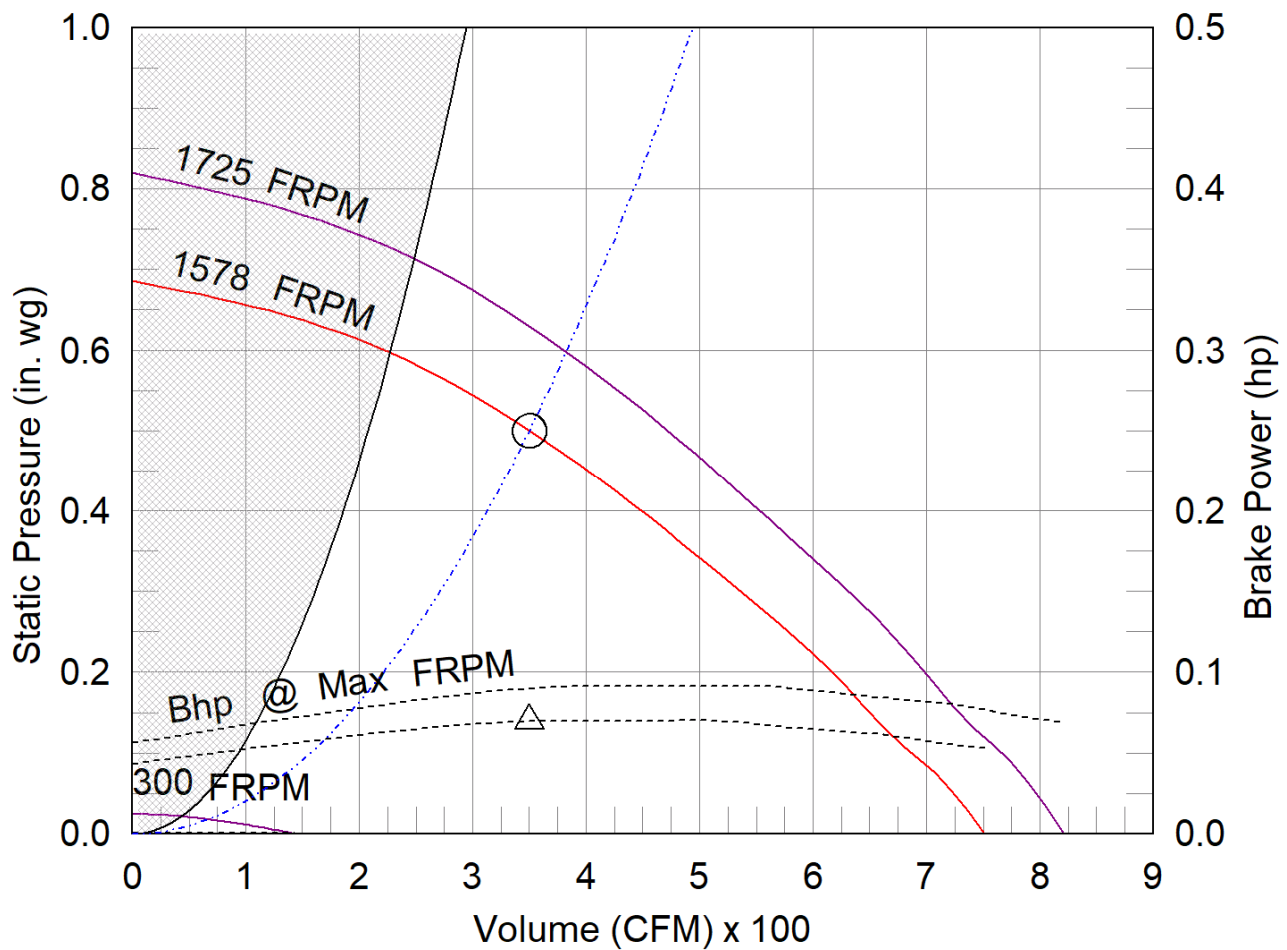
Notes: All dimensions shown are in units of in.

## SQ-90-VG

## Min/Max Fan Curve

### Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
350	350	0.5	1578	0.07



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve

## Model: SP-A510

### Ceiling Exhaust Fan

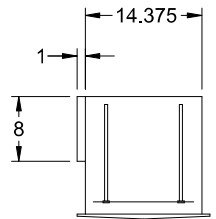
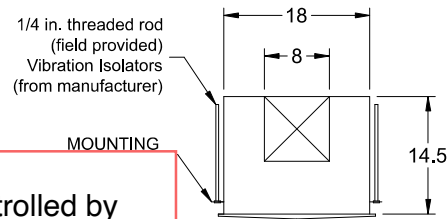
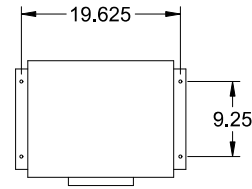
Tags: EF-11 EF-13 EF-14

#### Standard Construction Features:

- Galvanized steel housing - Sound absorbing insulation - White coated aluminum grille - Outlet duct collar with integral backdraft damper - Forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Square duct connection - Field rotatable discharge

#### Selected Options & Accessories:

Motor rated for continuous use  
 Motor with Thermal Overload  
 Motor with CSA Approval  
 Motor with 40 Degree C Ambient Temperature  
 UL/cUL 507 Listed - Electric Fan  
 Solid State Speed Control, 6 Amp, Shipped Loose  
 Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose  
 Adjustable easy installation mounting bracket  
 Aluminum Grille with White Enamel Finish  
 Polypropylene Wheel Material



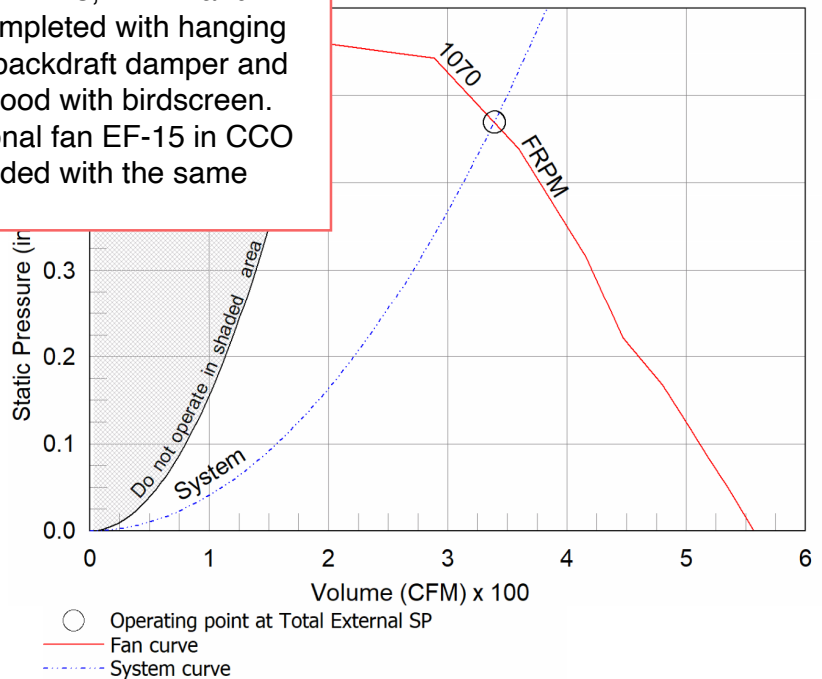
#### SustainGlobe:

1. EF-11, EF-13 controlled by reverse acting thermostat.
2. EF-14 and EF-15 controlled by wall switch.
2. EF-11, EF-13, EF-14 and EF-15 completed with hanging bracket, backdraft damper and weatherhood with birdscreen.
3. Additional fan EF-15 in CCO M-1 is added with the same model.

Dimensional	
Quantity	3
Weight w/o Acc's (lb)	31
Weight w/ Acc's (lb)	33

Performance	
Requested Volume (CFM)	350
Actual Volume (CFM)	339
Total External SP (in. wg)	0.469
Fan RPM	1070
* FLA (A)	3.3
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	4.0

Motor	
Motor Mounted	Yes
** Input Watts (W)	224
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	68	69	59	57	51	50	44	39	60	45	4.0

#### Notes:

All dimensions shown are in units of in.  
 \*FLA is approximate and will vary slightly with the motor.  
 Sones - calculated using AMCA 301 at 5 ft  
 \*\* Wattage is shown at free air.  
 \*\* Wattage is approximate and may vary between motors.



## Model: SP-A250

### Ceiling Exhaust Fan

Tags: EF-2 EF-3 EF-8 EF-9

#### Standard Construction Features:

- Corrosion resistant galvanized steel scroll and housing - Sound absorbing insulation - White designer non-yellowing grille - Rectangular outlet duct collar with integral spring loaded backdraft damper - Double inlet forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Field rotatable discharge

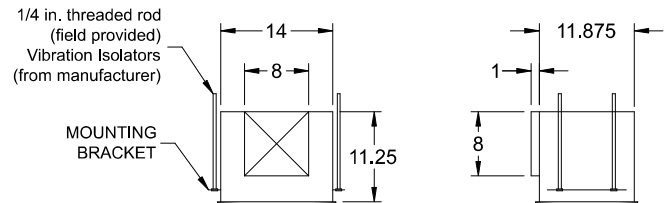
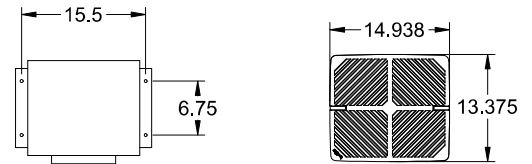
#### Selected Options & Accessories:

Motor rated for continuous use  
 Motor with Thermal Overload  
 Motor with CSA Approval  
 Motor with 40 Degree C Ambient Temperature  
 UL/cUL 507 Listed - Electric Fan  
 Solid State Speed Control, 6 Amp, Shipped Loose  
 Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose  
 Adjustable easy installation mounting bracket  
 Energy Star Certified  
 Standard Grille  
 Polypropylene Wheel Material  
 Can Be Used to Comply with: ASHRAE 62.2, California Title 24, and Washington State Energy Code

Dimensional	
Quantity	4
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	26

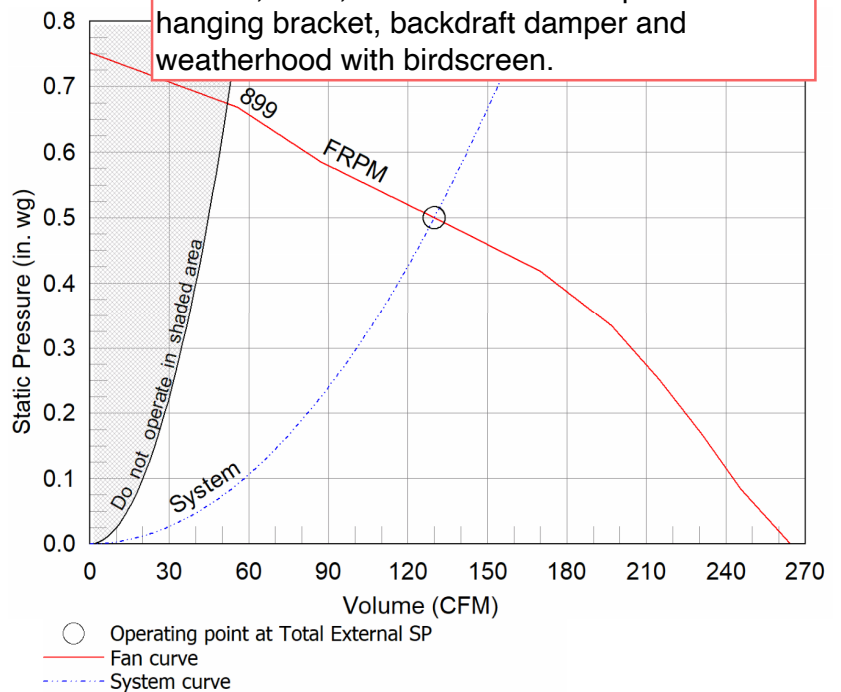
Performance	
Requested Volume (CFM)	130
Actual Volume (CFM)	130
Total External SP (in. wg)	0.5
Fan RPM	899
* FLA (A)	0.56
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	3.5

Motor	
Motor Mounted	Yes
** Input Watts (W)	83
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



#### SustainGlobe:

1. EF-2 controlled by digital 24 hours timer.
2. EF-3, EF-8 and EF-9 controlled by wall switch.
2. EF-2, EF-3, EF-8 and EF-9 completed with hanging bracket, backdraft damper and weatherhood with birdscreen.



#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	61	60	63	57	54	47	40	32	59	45	3.5

#### Notes:

All dimensions shown are in units of in.  
 \*FLA is approximate and will vary slightly with the motor.  
 Sones - calculated using AMCA 301 at 5 ft  
 \*\* Wattage is approximate and may vary between motors.



## Model: SP-A390

### Ceiling Exhaust Fan

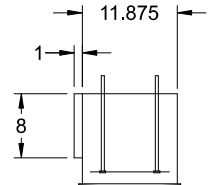
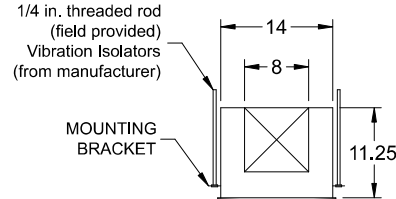
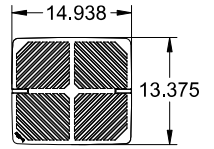
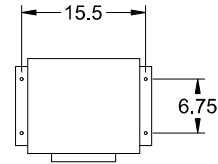
Tags: EF-4 EF-5 EF-6 EF-7 EF-8 EF-10

#### Standard Construction Features:

- Corrosion resistant galvanized steel scroll and housing - Sound absorbing insulation - White designer non-yellowing grille - Rectangular outlet duct collar with integral spring loaded backdraft damper - Double inlet forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Field rotatable discharge

#### Selected Options & Accessories:

Motor rated for continuous use  
Motor with Thermal Overload  
Motor with CSA Approval  
Motor with 40 Degree C Ambient Temperature  
UL/cUL 507 Listed - Electric Fan  
Solid State Speed Control, 6 Amp, Shipped Loose  
Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose  
Adjustable easy installation mounting bracket  
Standard Grille  
Polypropylene Wheel Material



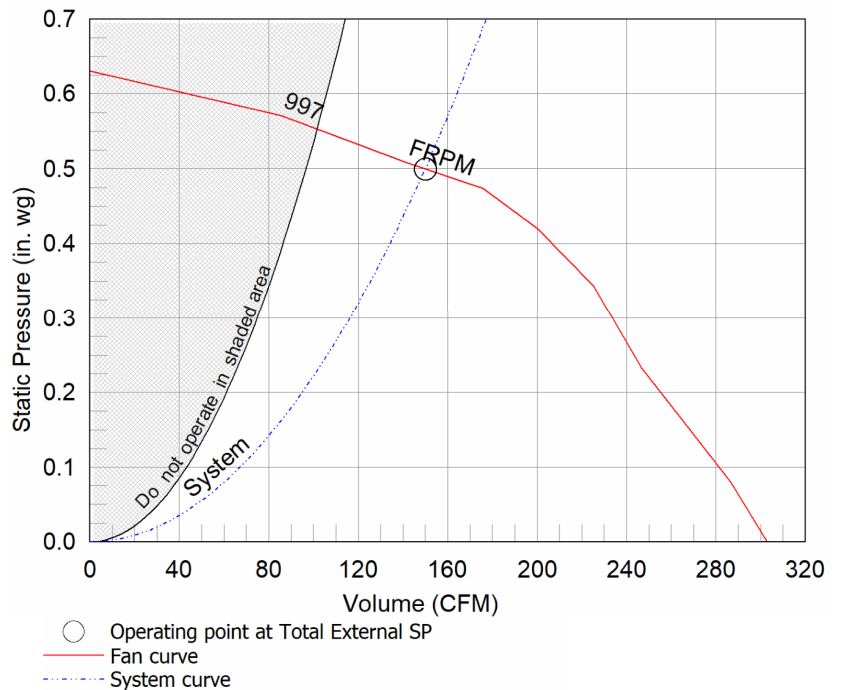
#### SustainGlobe:

1. EF-4 to EF-8 and EF-10 controlled by wall switch.
2. EF-4 to EF-8 and EF-10 completed with hanging bracket, backdraft damper and weatherhood with birdscreen.

Dimensional	
Quantity	6
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	26

Performance	
Requested Volume (CFM)	150
Actual Volume (CFM)	150
Total External SP (in. wg)	0.5
Fan RPM	997
* FLA (A)	1.42
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	2.5

Motor	
Motor Mounted	Yes
** Input Watts (W)	135
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



#### Notes:

All dimensions shown are in units of in.  
\*FLA is approximate and will vary slightly with the motor.  
Sones - calculated using AMCA 301 at 5 ft  
\*\* Wattage is shown at free air.  
\*\* Wattage is approximate and may vary between motors.

#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	62	58	53	50	46	42	40	40	53	38	2.5





## Model: SQ-97-VG

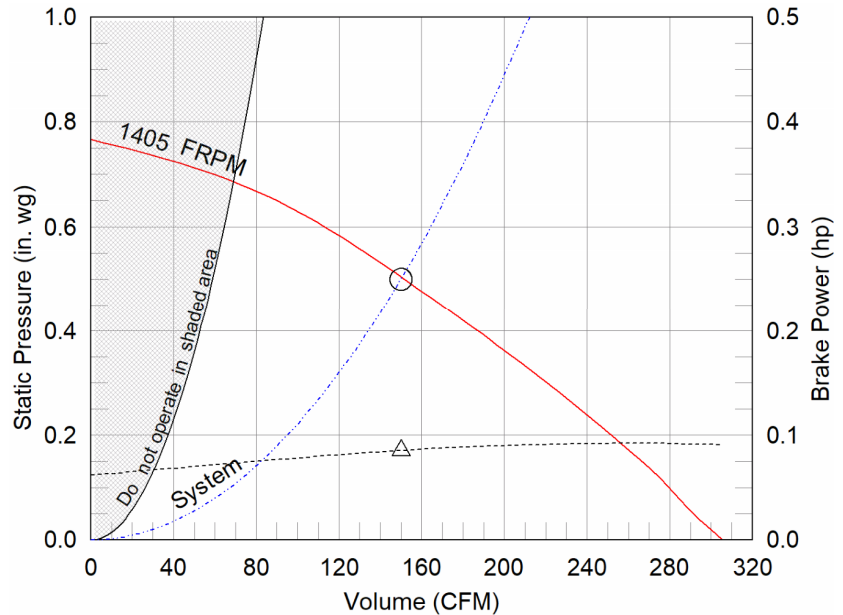
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	45
Weight w/ Acc's (lb)	56

Performance	
Requested Volume (CFM)	150
Actual Volume (CFM)	150
Total External SP (in. wg)	0.5
Fan RPM	1405
Operating Power (hp)	0.09
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,116
Static Eff. (%)	14

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	115

Motor	
Motor Mounted	Yes
Size (hp)	1/4
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	2.85
Min. Circuit Ampacity (MCA)	4
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA



- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- - - Brake horsepower curve

### SustainGlobe:

- EF-1 completed with hanging rods, and vibration isolators.
- EF-1 controlled by 24-hour digital timer.

### Nameplate Model: SQ-97-VG-X

#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	79	81	69	68	59	56	53	48	70	58	10.2
Radiated	78	76	59	58	48	37	34	35	63	51	6.0

### Notes:

All dimensions shown are in units of in.  
\*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory.MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).  
LwA - A weighted sound power level, based on ANSI S1.4 dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International  
Sones - calculated using AMCA 301 at 5 ft



## Model: SQ-97-VG

### Direct Drive Centrifugal Inline Fan

**Greenheck model SQ Mixed Flow meets or exceeds legacy centrifugal models SQ/BSQ in performance and features. SQ Mixed flow is an approved equal and can be considered a direct replacement for these models.**

#### Standard Construction Features:

- Galvanized steel housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-160) wheel - Two bolted access panels - Integral duct connection flanges - Ball bearing motors (sizes 97-160 and all vari-green motors), sleeve bearing motors (sizes 60-95) - Corrosion resistant fasteners

#### Selected Options & Accessories:

Motor - Vari-Green EC motor

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Aluminum Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

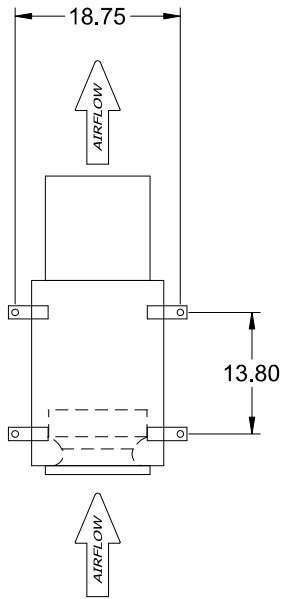
Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

Wheel Baffle

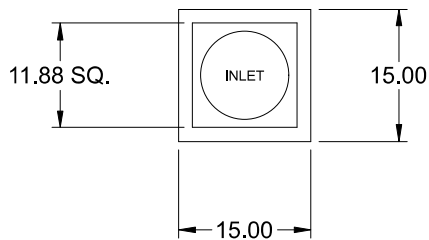
Unit Warranty: 1 Yr (Standard)

# SQ-97-VG

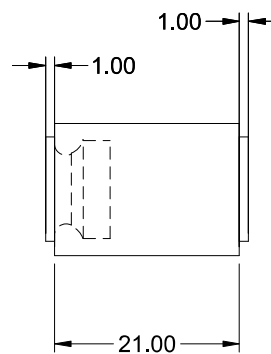
## Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

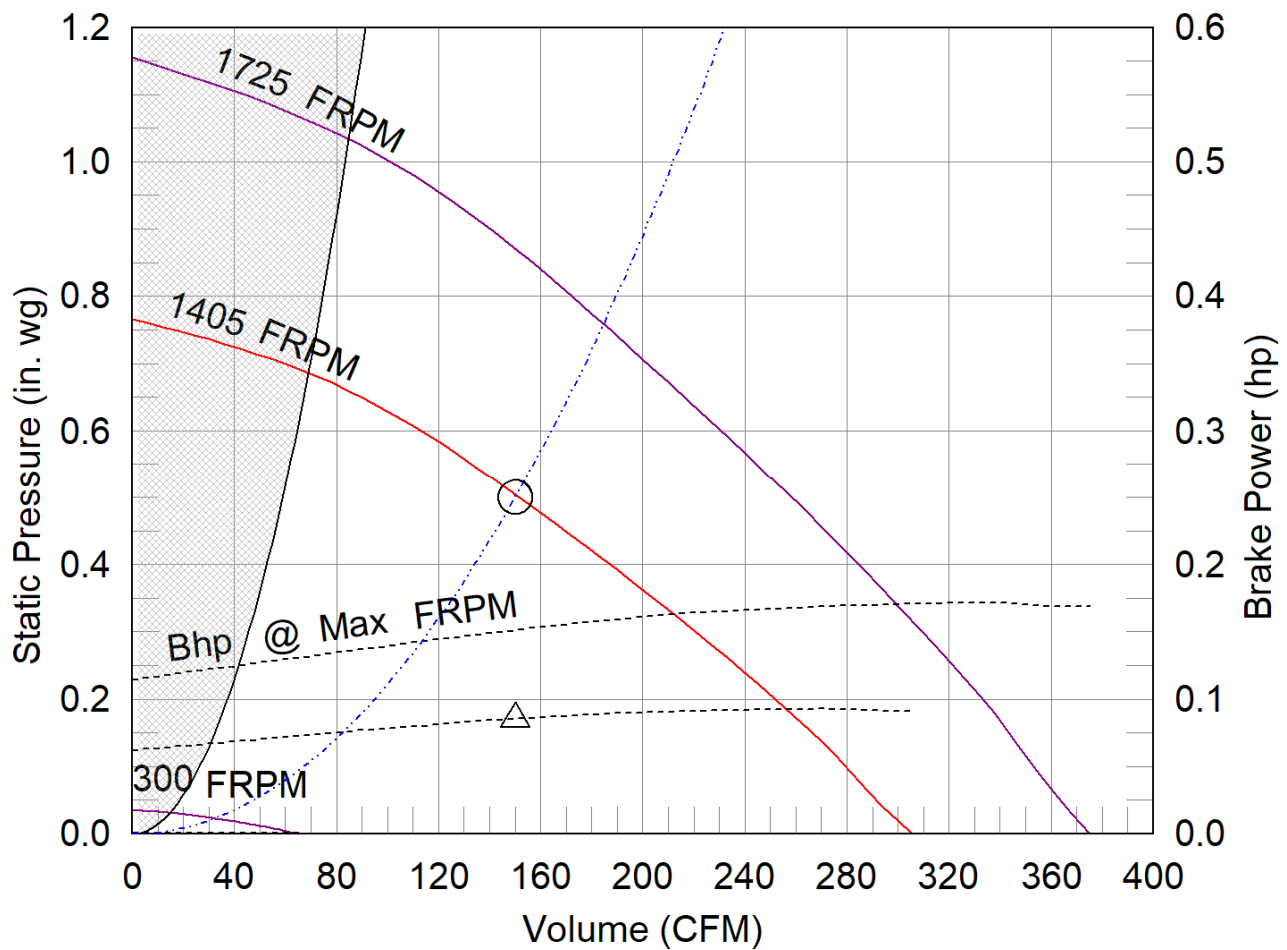
Notes: All dimensions shown are in units of in.

## SQ-97-VG

## Min/Max Fan Curve

### Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
150	150	0.5	1405	0.09



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve

## Model: SQ-90-VG

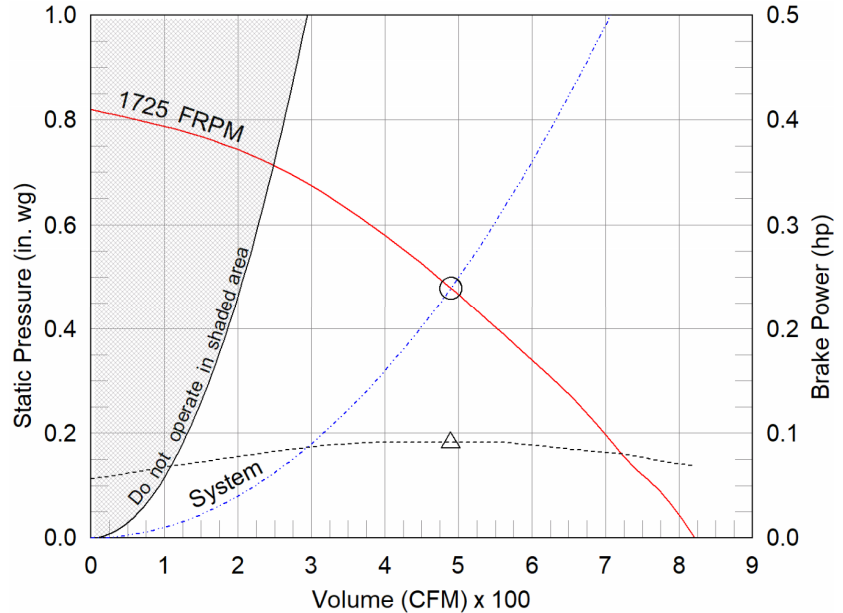
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	34
Weight w/ Acc's (lb)	51

Performance	
Requested Volume (CFM)	500
Actual Volume (CFM)	489
Total External SP (in. wg)	0.479
Fan RPM	1725
Operating Power (hp)	0.09
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,911
Static Eff. (%)	40

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	489

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.38
Min. Circuit Ampacity (MCA)	2
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA



- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- - - Brake horsepower curve

### Static Pressure Calculations

External SP	0.5 in. wg
Direct Drive RPM Adjustment	-0.021 in. wg
Total External SP	0.479 in. wg

### SustainGlobe:

- EF-12 controlled by reverse acting thermostat.
- EF-12 completed with hanging rods and vibration isolators.

### Nameplate Model: SQ-90-VG-X

#### Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	75	75	72	65	61	58	55	48	68	57	8.8
Radiated	74	70	62	55	50	39	36	35	59	48	4.7

### Notes:

All dimensions shown are in units of in.  
\*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory.MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).  
LwA - A weighted sound power level, based on ANSI S1.4 dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International  
Sones - calculated using AMCA 301 at 5 ft



## Model: SQ-90-VG

### Direct Drive Centrifugal Inline Fan

**Greenheck model SQ Mixed Flow meets or exceeds legacy centrifugal models SQ/BSQ in performance and features. SQ Mixed flow is an approved equal and can be considered a direct replacement for these models.**

#### Standard Construction Features:

- Galvanized steel housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-160) wheel - Two bolted access panels - Integral duct connection flanges - Ball bearing motors (sizes 97-160 and all vari-green motors), sleeve bearing motors (sizes 60-95) - Corrosion resistant fasteners

#### Selected Options & Accessories:

Motor - Vari-Green EC motor

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

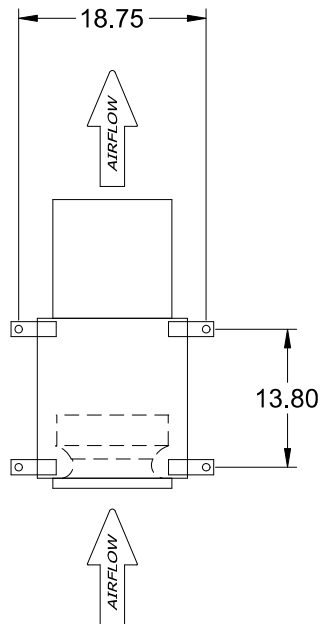
Motor Cover

Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

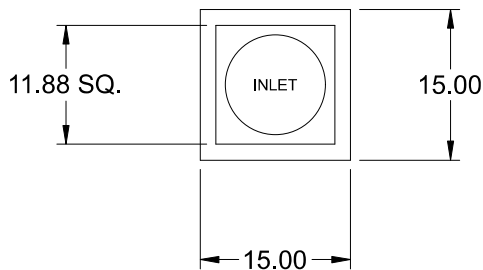
Unit Warranty: 1 Yr (Standard)

# SQ-90-VG

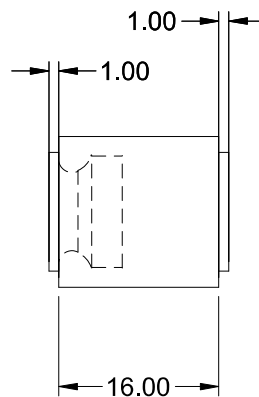
## Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

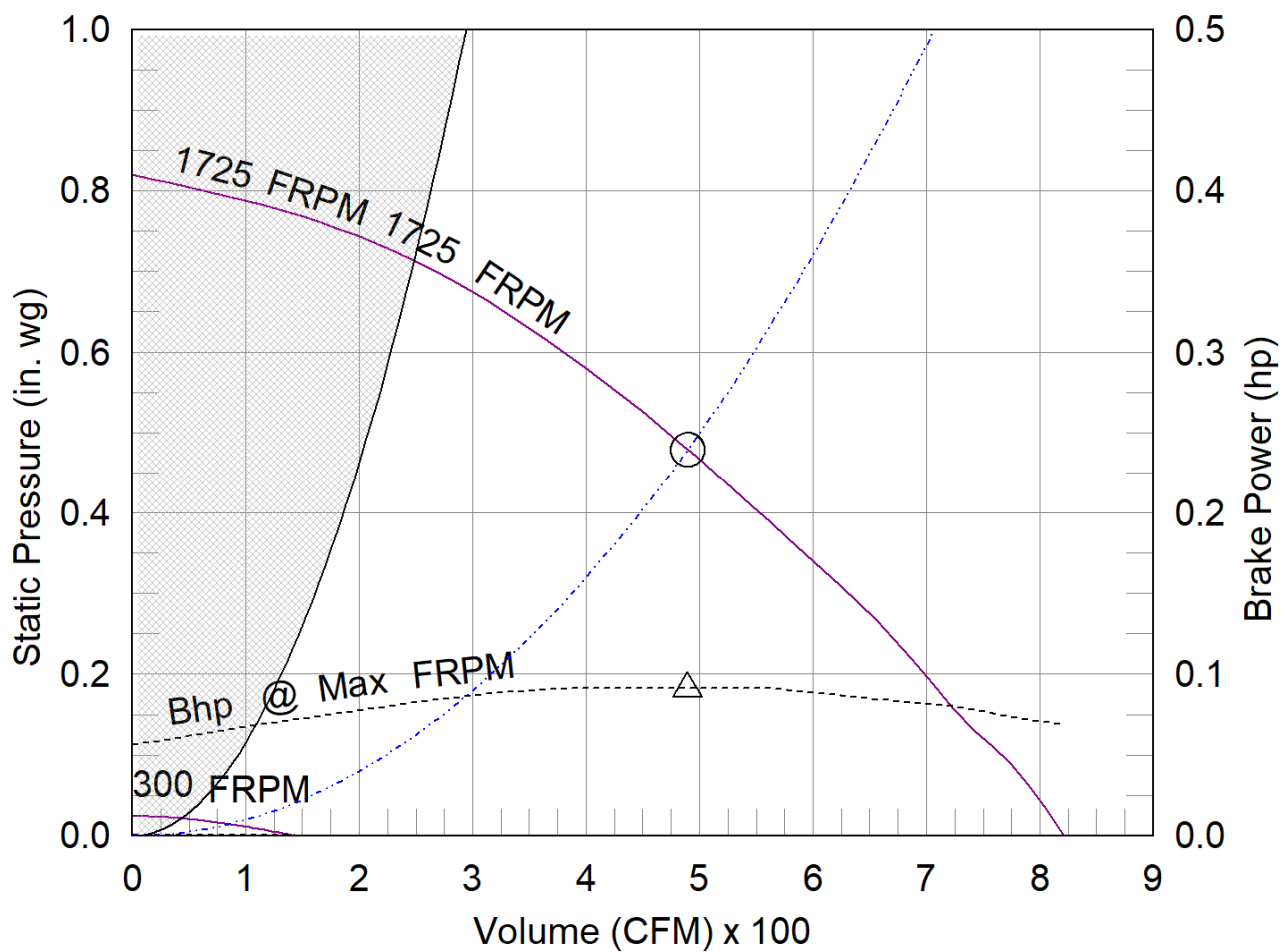
Notes: All dimensions shown are in units of in.

## SQ-90-VG

## Min/Max Fan Curve

### Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
500	489	0.479	1725	0.09



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve





54 Audia Court, Unit 2  
Concord, ON L4K 3N5  
(905)-738-1400

## Submittal 24-256-002

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
NESHAMA HOSPICE	24-256 3 Cadillac Avenue North York, ON M3H 1R9	Oct 31, 2024

TO	FROM
Taranjeet Singh	PAUL LEDDY
COMPANY	COMPANY
1568796 ONTARIO INC. C/A RENOKREW	Consult Mechanical Inc.
EMAIL	EMAIL
taranjeet@renokrew.com	paul.l@consultmechanical.com
ADDRESS	ADDRESS
43 LEPAGE COURT TORONTO, ON M3J 1Z9	54 Audia Court, Unit 2 Concord, ON L4K 3N5

---

### Title

EH Price Silencers

---

### Description

Tag - SL-1S-2A - Model ERMT122/2C Galvanized HTL2, 10GA, Perf Liner  
Tag - SL-1S-2B - Model ERMT122/3B Galvanized HTL2, 10GA, Perf Liner  
Tag - SL-1R-1A - Model ERMT122/6B Galvanized HTL2, 10GA, Perf Liner  
Tag - SL-1S-1B - Model ERMT122/6B Galvanized HTL2, 10GA, Perf Liner

---

### Package Items

SPEC	SUBSECTION	ITEM	TYPE
------	------------	------	------



# Noise Control Submittals

**Job Name:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK  
**Job Location:** NORTH YORK  
**Customer:** CONSULT MECHANICAL  
**Date Printed:** 10/30/2024  
**Spec Section:** 15 - HVAC

**Contact:** 571 Chrislea Rd., Unit 3  
Woodbridge, ON L4L 8A2



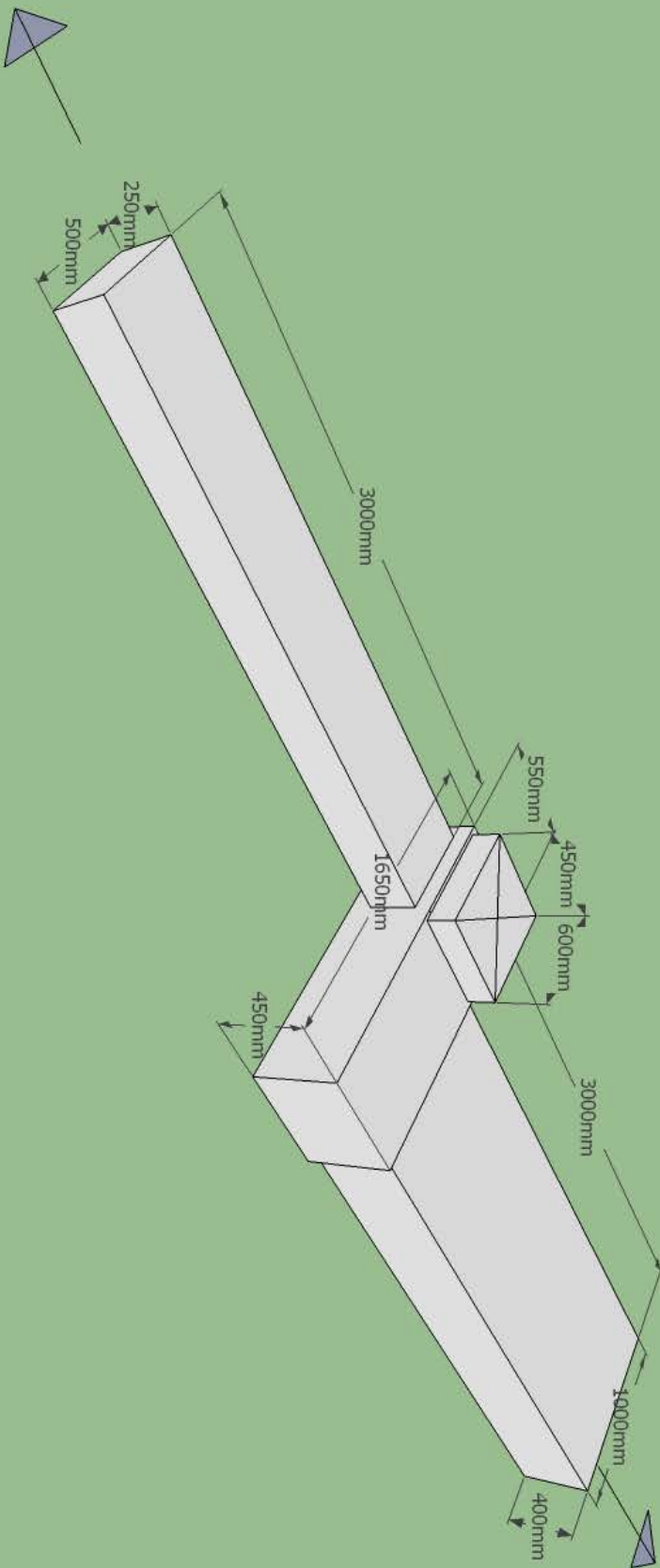
All-In-One  
Detailed Submittal Schedule  
Noise Control

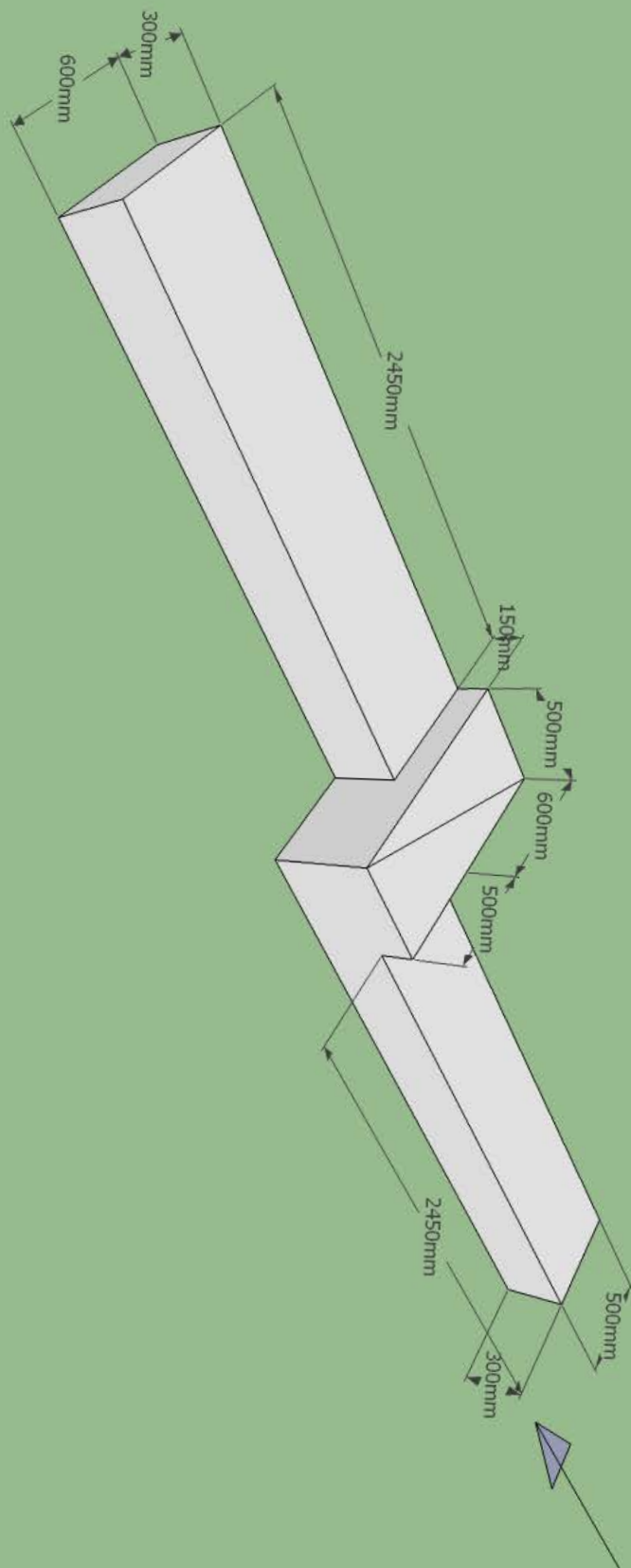
#	Qty	Model	Tag	Width (in)	Height (in)	Length (in)	In. Leg (in)	Out. Leg (in)	Direction	Flow (CFM)	Vel. (FPM)	PD (in. w.g.)	63	125	250	500	1K	2K	4K	8K	Line Instructions
71	1	ERMT122/2C	SL-15-2A	8.00	22.00	121.92	60.00	69.92	Forward	1428	1168	0.19	13	18	27	39	46	55	48	25	Transitional Elbow Silencer: Inlet dimension: 200x550 Outlet dimension: 250x550
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																					
72	1	ERMT122/3B	SL-15-2B	18.00	22.00	121.92	60.00	79.92	Forward	4573	1663	0.30	12	16	23	37	44	55	43	24	Transitional Elbow Silencer: Inlet dimension: 450x550 Outlet dimension: 400x1000
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																					
73	1	ERMT122/6B	SL-18-1A	12.00	24.00	121.92	73.92	60.00	Reverse	3274	1637	0.21	14	20	25	39	45	48	36	20	Transitional Elbow Silencer: Inlet dimension: 300x600 Outlet dimension: 500x600
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																					
74	1	ERMT122/6B	SL-18-1B	12.00	20.00	121.92	73.92	60.00	Reverse	2727	1636	0.21	14	20	25	39	45	48	36	20	Transitional Elbow Silencer: Inlet dimension: 300x500 Outlet dimension: 500x500
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																					

Contractor to confirm all items prior to release.

SustainGlobe:

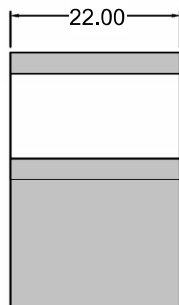
1. The manufacturer of the silencers is not originally specified Vibro-Acoustic. The silencers are custom units with specific geometry and configuration. The layout of the silencers shall follow the exact configuration as shown in the following pages.
2. Resubmit all silencers for review.



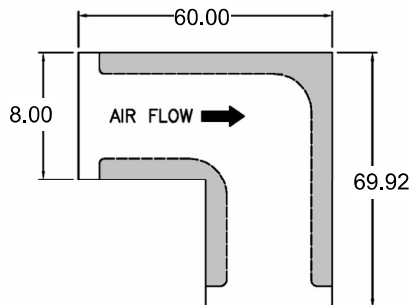


## Dimensions

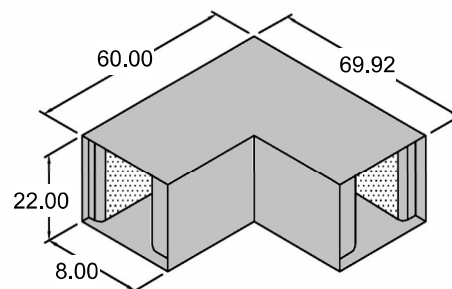
Quantity:	1	Width (in.):	8.00	Center Line (in.):	121.92
Weight (lb):	368	Height (in.):	22.00	Inlet Leg (in.):	60.00
		Configuration:	Un-Nested	Outlet Leg (in.):	69.92



END VIEW



TOP VIEW



ISO VIEW

This silencer is selected a 0.5 module configuration, as per image above.  
Images are generic representations of and not to scale. The actual configuration may not be shown.

## Performance

Air Volume (cfm):	1428
Air Velocity (fpm):	1168
Air Direction:	Forward
Pressure Drop (in.w.g.):	0.19
Installed PD (in.w.g.):	0.25

### Dynamic Insertion Loss (dB)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
13	18	27	39	46	55	48	25

## Construction

Casing:	Equivalent to 7 GA *	Acoustic Media:	Glass Fiber	Inlet Connection:	2" Slip
Perforated Liner:	22 GA Galvanized	Media Protection:	Polymer Film	Outlet Connection:	2" Slip

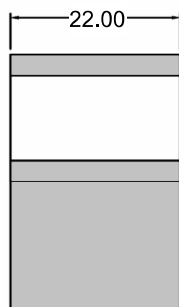
## Notes

- Price silencer material has flame spread classification < 25 and smoke development rating < 50 when tested in accordance with ASTM E84, UL723 and NFPA255.
- System effects assume fan at the silencer inlet and ideal at the silencer outlet.
- Price silencers consist of ASTM A653(M) steel casings and liners.
- Price silencers are tested in our NVLAP-Accredited sound lab.
- Performance data is derived from test data in conformance with ASTM-E477-20.
- Acoustic standoff is provided standard with polymer film liner.
- Stitch and caulk construction.
- Customer to confirm all dimensions.
- \* Silencer casing selected to be HTL Equivalent to 7 GA duct wall

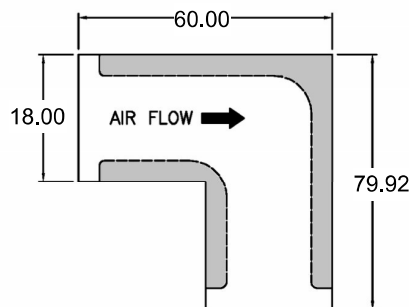
**PROJECT:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK **CUSTOMER:** CONSULT MECHANICAL **SUBMITTAL DATE:** 10/30/2024  
**ENGINEER:** **UNIT OF MEASURE:** Imperial **PRICE QUOTE NO:** Q24-008330  
**DESCRIPTION:** Elbow Medium Velocity Film Lined Silencer **DRAWING REVISION:** 5  
ERMT/S/I/121.92/2/C/I/8.00/22.00/121.92/8.00/22.00/1/16.00/0.5/60.00/69.92/52.00/61.92/HTL2/G/U/F/PL/S2/S2/0.00///OYL/P22///

## Dimensions

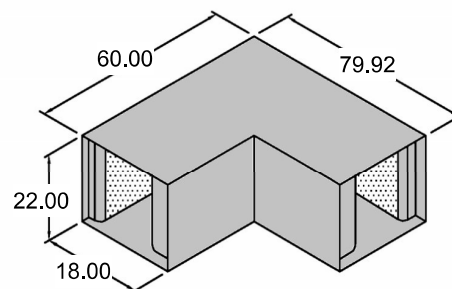
Quantity:	1	Width (in.):	18.00	Center Line (in.):	121.92
Weight (lb):	503	Height (in.):	22.00	Inlet Leg (in.):	60.00
		Configuration:	Un-Nested	Outlet Leg (in.):	79.92



END VIEW



TOP VIEW



ISO VIEW

Images are generic representations of and not to scale. The actual configuration may not be shown.

## Performance

Air Volume (cfm):	4573
Air Velocity (fpm):	1663
Air Direction:	Forward
Pressure Drop (in.w.g.):	0.30
Installed PD (in.w.g.):	0.39

### Dynamic Insertion Loss (dB)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
12	16	23	37	44	55	43	24

## Construction

Casing:	Equivalent to 7 GA *	Acoustic Media:	Glass Fiber	Inlet Connection:	2" Slip
Perforated Liner:	22 GA Galvanized	Media Protection:	Polymer Film	Outlet Connection:	2" Slip

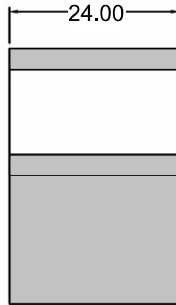
## Notes

- Price silencer material has flame spread classification < 25 and smoke development rating < 50 when tested in accordance with ASTM E84, UL723 and NFPA255.
- System effects assume fan at the silencer inlet and ideal at the silencer outlet.
- Price silencers consist of ASTM A653(M) steel casings and liners.
- Price silencers are tested in our NVLAP-Accredited sound lab.
- Performance data is derived from test data in conformance with ASTM-E477-20.
- Acoustic standoff is provided standard with polymer film liner.
- Stitch and caulk construction.
- Customer to confirm all dimensions.
- \* Silencer casing selected to be HTL Equivalent to 7 GA duct wall

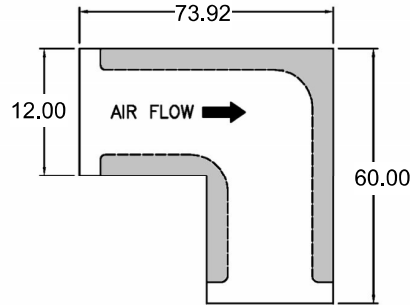
**PROJECT:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK **CUSTOMER:** CONSULT MECHANICAL **SUBMITTAL DATE:** 10/30/2024  
**ENGINEER:** **UNIT OF MEASURE:** Imperial **PRICE QUOTE NO:** Q24-008330  
**DESCRIPTION:** Elbow Medium Velocity Film Lined Silencer **DRAWING REVISION:** 5  
 ERMT/S/I/121.92/3/B/I/18.00/22.00/121.92/18.00/22.00/1/18.00/1.0/60.00/79.92/42.00/61.92/HTL2/G/U/F/PL/S2/S2/0.00///OYL/P22///

## Dimensions

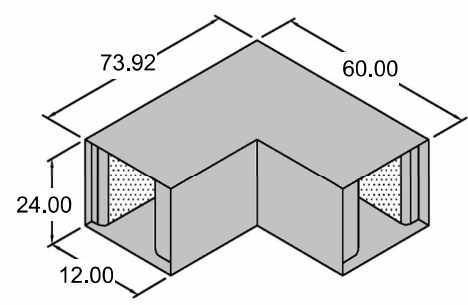
Quantity:	1	Width (in.):	12.00	Center Line (in.):	121.92
Weight (lb):	389	Height (in.):	24.00	Inlet Leg (in.):	73.92
		Configuration:	Un-Nested	Outlet Leg (in.):	60.00



END VIEW



TOP VIEW



ISO VIEW

This silencer is selected a 0.5 module configuration, as per image above.  
Images are generic representations of and not to scale. The actual configuration may not be shown.

## Performance

Air Volume (cfm):	3274
Air Velocity (fpm):	1637
Air Direction:	Reverse
Pressure Drop (in.w.g.):	0.21
Installed PD (in.w.g.):	0.29

### Dynamic Insertion Loss (dB)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
14	20	25	39	45	48	36	20

## Construction

Casing:	Equivalent to 7 GA *	Acoustic Media:	Glass Fiber	Inlet Connection:	2" Slip
Perforated Liner:	22 GA Galvanized	Media Protection:	Polymer Film	Outlet Connection:	2" Slip

## Notes

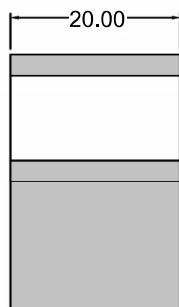
- Price silencer material has flame spread classification < 25 and smoke development rating < 50 when tested in accordance with ASTM E84, UL723 and NFPA255.
- System effects assume elbow with vanes at the silencer inlet and fan at the silencer outlet.
- Price silencers consist of ASTM A653(M) steel casings and liners.
- Price silencers are tested in our NVLAP-Accredited sound lab.
- Performance data is derived from test data in conformance with ASTM-E477-20.
- Acoustic standoff is provided standard with polymer film liner.
- Stitch and caulk construction.
- Customer to confirm all dimensions.
- \* Silencer casing selected to be HTL Equivalent to 7 GA duct wall

**PROJECT:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK **CUSTOMER:** CONSULT MECHANICAL **SUBMITTAL DATE:** 10/30/2024  
**ENGINEER:** **UNIT OF MEASURE:** Imperial **PRICE QUOTE NO:** Q24-008330  
**DESCRIPTION:** Elbow Medium Velocity Film Lined Silencer **DRAWING REVISION:** 5  
ERMT/S/I/121.92/6/B/I/12.00/24.00/121.92/12.00/24.00/1/24.00/0.5/73.92/60.00/61.92/48.00/HTL2/G/U/F/PL/S2/S2/0.00///OYL/P22///

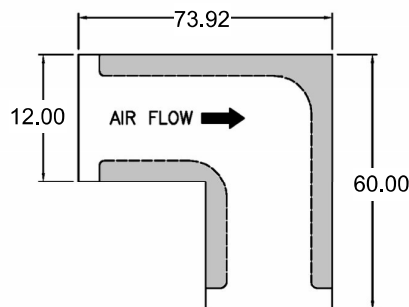


## Dimensions

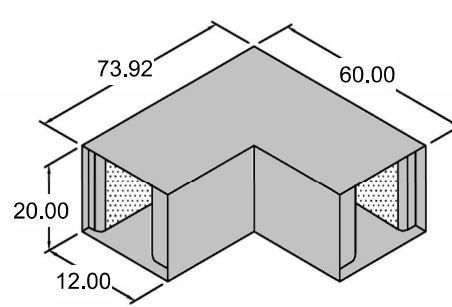
Quantity:	1	Width (in.):	12.00	Center Line (in.):	121.92
Weight (lb):	346	Height (in.):	20.00	Inlet Leg (in.):	73.92
		Configuration:	Un-Nested	Outlet Leg (in.):	60.00



END VIEW



TOP VIEW



ISO VIEW

This silencer is selected a 0.5 module configuration, as per image above.

Images are generic representations of and not to scale. The actual configuration may not be shown.

## Performance

Air Volume (cfm):	2727
Air Velocity (fpm):	1636
Air Direction:	Reverse
Pressure Drop (in.w.g.):	0.21
Installed PD (in.w.g.):	0.29

### Dynamic Insertion Loss (dB)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
14	20	25	39	45	48	36	20

## Construction

Casing:	Equivalent to 7 GA *	Acoustic Media:	Glass Fiber	Inlet Connection:	2" Slip
Perforated Liner:	22 GA Galvanized	Media Protection:	Polymer Film	Outlet Connection:	2" Slip

## Notes

- Price silencer material has flame spread classification < 25 and smoke development rating < 50 when tested in accordance with ASTM E84, UL723 and NFPA255.
- System effects assume elbow with vanes at the silencer inlet and fan at the silencer outlet.
- Price silencers consist of ASTM A653(M) steel casings and liners.
- Price silencers are tested in our NVLAP-Accredited sound lab.
- Performance data is derived from test data in conformance with ASTM-E477-20.
- Acoustic standoff is provided standard with polymer film liner.
- Stitch and caulk construction.
- Customer to confirm all dimensions.
- \* Silencer casing selected to be HTL Equivalent to 7 GA duct wall

**PROJECT:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK **CUSTOMER:** CONSULT MECHANICAL **SUBMITTAL DATE:** 10/30/2024  
**ENGINEER:** **UNIT OF MEASURE:** Imperial **PRICE QUOTE NO:** Q24-008330  
**DESCRIPTION:** Elbow Medium Velocity Film Lined Silencer **DRAWING REVISION:** 5  
 ERMT/S/I/121.92/6/B/I/12.00/20.00/121.92/12.00/20.00/1/24.00/0.5/73.92/60.00/61.92/48.00/HTL2/G/U/F/PL/S2/S2/0.00///OYL/P22///

United States Department of Commerce  
National Institute of Standards and Technology



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# Certificate of Accreditation to ISO/IEC 17025:2017

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NVLAP LAB CODE: 200874-0

## Price Sound Laboratory

Winnipeg, Manitoba  
Canada

is accredited by the *National Voluntary Laboratory Accreditation Program* for specific services,  
listed on the *Scope of Accreditation*, for:

## Acoustical Testing Services

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué on ISO/IEC 17025).*

2024-06-03 through 2025-06-30

Effective Dates



A handwritten signature in blue ink, reading "Peter S. Landon".

For the National Voluntary Laboratory Accreditation Program

Silencer Schedule														<div><div>PRICE®</div><div>NOISE CONTROL</div></div>																											
Project Name: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK														Date: 10/30/2024																											
Engineer:																																									
Contractor:																																									
Customer:														Revision: 5																											
Units: Imperial																																									
Silencer Information														Duct System Information					Dynamic Insertion Loss (dB)																						
Tag	Qty	Model	Width (in)	Height (in)	Duct Dia. (in)	Length (in)	LegA (in)	LegB (in)	Air Direction	Flow (CFM)	Velocity (FPM)	PD (in. w.g.)	PD w/SE (in. w.g.)	63	125	250	500	1k	2k	4k	8k																				
SL-1S-2A	1	FRMT122/2	8.00	22.00		121.92	60.00	69.92	Forward	1428	1168	0.19	0.25	13	18	27	39	46	55	48	25																				
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																																									
SL-1S-2B	1	FRMT122/3	18.00	22.00		121.92	60.00	79.92	Forward	4573	1663	0.30	0.39	12	16	23	37	44	55	43	24																				
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																																									
SL-1R-1A	1	FRMT122/6	12.00	24.00		121.92	73.92	60.00	Reverse	3274	1637	0.21	0.29	14	20	25	39	45	48	36	20																				
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																																									
SL-1R-1B	1	FRMT122/6	12.00	20.00		121.92	73.92	60.00	Reverse	2727	1636	0.21	0.29	14	20	25	39	45	48	36	20																				
Const Notes: Galvanized, HTL2 (10 GA), 22GA Perf Liner, Fiberglass, Polymer Film, Inlet: 2" Slip, Outlet: 2" Slip																																									



54 Audia Court, Unit 2  
Concord, ON L4K 3N5  
(905)-738-1400

## Submittal 24-256-003

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
NESHAMA HOSPICE	24-256 3 Cadillac Avenue North York, ON M3H 1R9	Oct 31, 2024

TO  
Taranjeet Singh  
COMPANY  
1568796 ONTARIO INC. C/A RENOKREW  
EMAIL  
taranjeet@renokrew.com  
ADDRESS  
43 LEPAGE COURT TORONTO, ON M3J 1Z9

FROM  
PAUL LEDDY  
COMPANY  
Consult Mechanical Inc.  
EMAIL  
paul.l@consultmechanical.com  
ADDRESS  
54 Audia Court, Unit 2  
Concord, ON L4K 3N5

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### Title

EH Price Dampers

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### Description

Tag FD - Price Model FDD-B  
Tag SD - Price Model SSD-3V-201  
Tag BDD - Price Model BDD-2X  
Tag MD-1 - Tamco Series 9000  
Tag MD-2 - Tamco Series 9000  
Tag MD-3 - Tamco Series 9000

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### Package Items

SPEC	SUBSECTION	ITEM	TYPE
Drawing M-20 Mechanical Spec	M20		Shop Drawings



# Dampers Submittals

**Job Name:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK  
**Job Location:** NORTH YORK  
**Customer:** CONSULT MECHANICAL  
**Date Printed:** 10/30/2024  
**Spec Section:** 15 - HVAC

**Contact:** 571 Chrislea Rd., Unit 3  
Woodbridge, ON L4L 8A2



**All-In-One**  
**Detailed Submittal Schedule**  
**Dampers**

#	Qty	Model	Tag	Width, Height	Design	Mtg Pos	Fire Rating	Temp	Sleeve Length
31	4	FDD	FD	14.00, 6.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
32	6	FDD	FD	12.00, 4.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
33	7	FDD	FD	10.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
34	2	FDD	FD	12.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
35	12	FDD	FD	12.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
36	1	FDD	FD	20.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
37	1	FDD	FD	34.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
38	4	FDD	FD	10.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
39	2	FDD	FD	14.00, 7.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
40	1	FDD	FD	14.00, 14.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
41	1	FDD	FD	10.00, 4.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
42	2	FDD	FD	18.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
43	1	FDD	FD	14.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
44	1	FDD	FD	46.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
45	1	FDD	FD	36.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
46	1	FDD	FD	18.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
47	1	FDD	FD	26.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
48	2	FDD	FD	10.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
49	1	FDD	FD	7.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
50	1	FDD	FD	6.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet   V - Vertical   1.5HR - 1.5 Hour   165 - 165 Degrees									
51	1	FDD	FD	36.00, 12.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream   H - Horizontal   1.5HR - 1.5 Hour   165 - 165 Degrees									
52	1	FDD	FD	36.00, 6.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream   H - Horizontal   1.5HR - 1.5 Hour   165 - 165 Degrees									
53	2	FDD	FD	14.00, 14.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream   H - Horizontal   1.5HR - 1.5 Hour   165 - 165 Degrees									
54	1	FDD	FD	10.00, 6.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream   H - Horizontal   1.5HR - 1.5 Hour   165 - 165 Degrees									
55	1	FDD	FD	8.00, 0.00	RC	H	1.5HR	165	0.00
RC - Round Inlet   H - Horizontal   1.5HR - 1.5 Hour   165 - 165 Degrees									

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all fire dampers prior to release.

## Dynamic Fire Damper, Horizontal and Vertical

### Model

Dynamic Fire Damper **FDD-B**

#### Standard Construction:

**Frame:** Roll Formed Galvanized Steel with Safety Edge.

**Blades:** Roll Formed Galvanized Steel, Curtain-Type

**Springs:** Stainless Steel.

**Fusible Link:** U.L. Listed 165°F

#### 1½ & 3 Hr. Vertical:

**Min. Size:** 6"w X 4"h (152mm x 102mm)

**Max. Single Section:** 36"w X 32"h (914mm x 813mm)

**Max. Size:** 72"w X 32"h (1829mm x 813mm)

#### 1½ & 3 Hr. Horizontal:

**Min. Size:** 6"w X 4"h (152mm x 102mm)

**Max. Single Sect.:** 24"w X 21"h (610mm x 533mm)

**Max. Size:** 36"w X 32"h (914mm x 813mm)

#### Optional Construction:

- ☐ For factory supplied sleeve see submittal for FDD-B c/w sleeve
- ☐ 3 Hour Rating
- ☐ 212°F fusible link (vertical only, 24"x21" (610mm x 533mm) max size)

**Notes:** Dampers are furnished approximately ¼" (6mm) smaller than given duct dimensions.

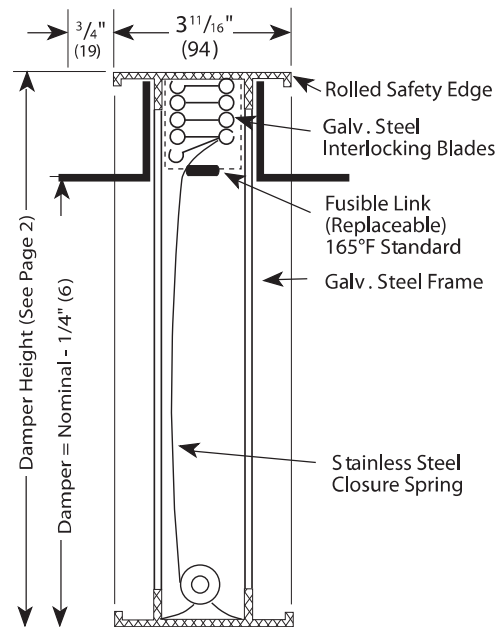
UL/ULC Approved for Use in Static and Dynamic Systems.

#### Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

### FDD-VB



DESIGNED AND TESTED IN ACCORDANCE WITH UL-555 AND ULC-S112. MEETS ALL NFPA-90A REQUIREMENTS FOR FIRE DAMPERS.

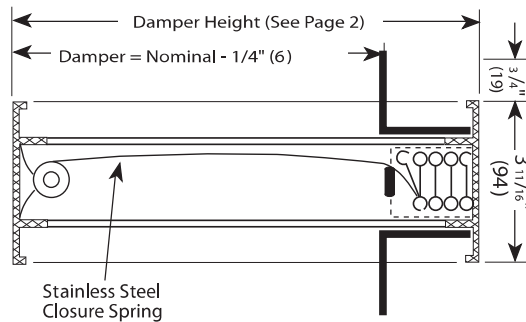
LISTED AND LABELLED BY:



#### SustainGlobe:

1. Size and Quantity of fire damper shall follow the updated mechanical drawings. Mechanical contractor to provide size and quantity.

### FDD-HB



**PROJECT:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

**ENGINEER:**

**CUSTOMER:** CONSULT MECHANICAL

**SUBMITTAL DATE:** 10/30/2024

**SPEC. SYMBOL:** FD

**PRICE®**

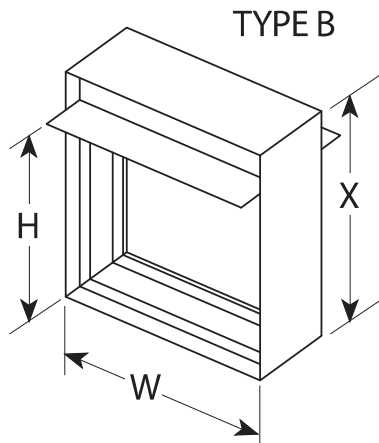
May / 08

245015

■ **Model FDD-B**  
1½, 3 Hour Rated  
"B" Style

**PRICE®**

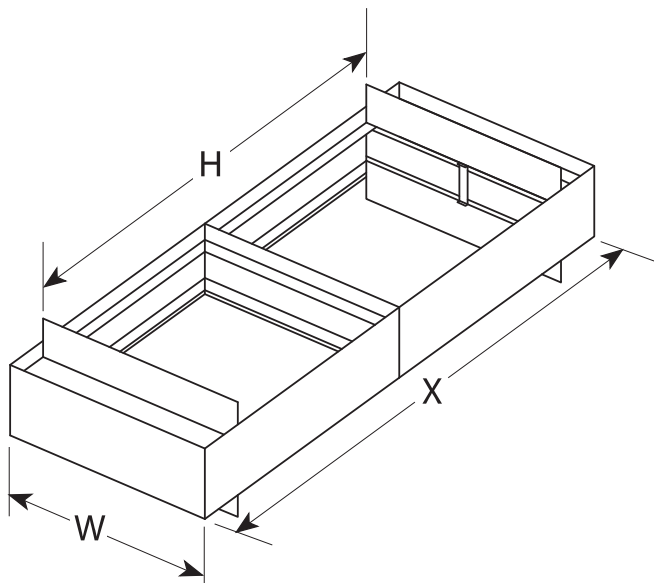
**Dynamic Fire Damper, Horizontal and Vertical**



W = Width (Duct)  
H = Height (Duct)  
 $X = H + B$   
B = Blade Stack  
(see chart)

For dampers one section high:

Duct Height (H)	B
up to 20" (508)	2" (51)
21" (533) to 32" (813)	3" (76)



For HORIZONTAL dampers two sections high:

Duct Height (H)	B
up to 32" (813)	4" (102)

Note: See maximum section size for relevant hourly rating and mounting position to determine which chart to use.



## Dynamic Fire Damper, Horizontal and Vertical

### Model

Dynamic Fire Damper

**FDD-C**

### Standard Construction:

**Frame:** Roll Formed Galvanized Steel with Safety Edge.

**Blades:** Roll Formed Galvanized Steel, Curtain-Type

**Springs:** Stainless Steel.

**Fusible Link:** U.L. Listed 165°F.

### 1½ & 3 Hr. Vertical:

**Min. Size:** 5"w x 3"h (127mm x 76mm) or 5" (127) round

**Max. Single Section:** 35"w x 32"h (889mm x 813mm)

### Max. Size:

71"w X 32"h (1803mm x 813mm)

### 1½ & 3 Hr. Horizontal:

**Min. Size:** 5"w x 3"h (152mm x 102mm) or 5" (127) round

**Max. Single Sect.:** 23"w x 20"h (584mm x 508mm)

**Max. Size:** 35"w X 32"h (889mm x 813mm)

### Optional Construction:

- ☐ For factory supplied sleeve see submittal for FDD-C c/w sleeve.
- ☐ 3 Hour Rating
- ☐ 212°F fusible link (vertical only, 23"x20" (584mm x 508mm) max size)

**Notes:** Dampers are furnished approximately ¼" (6mm) smaller than given duct dimensions.

UL/ULC Approved For Use in Static and Dynamic Systems.

### Models:

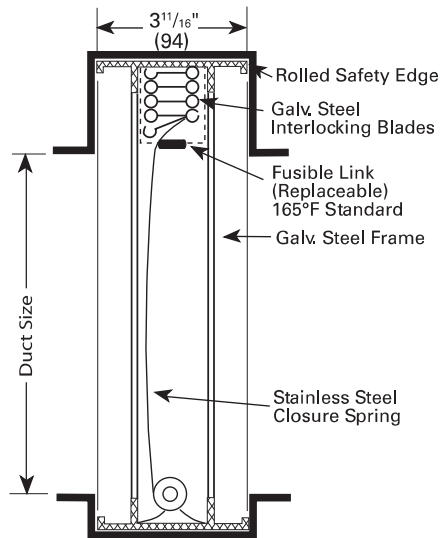
- ☐ FDD-RC - round inlet
- ☐ FDD-SRC - square/rectangular inlet
- ☐ FDD-OVC - oval inlet

### Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

### FDD-C-V

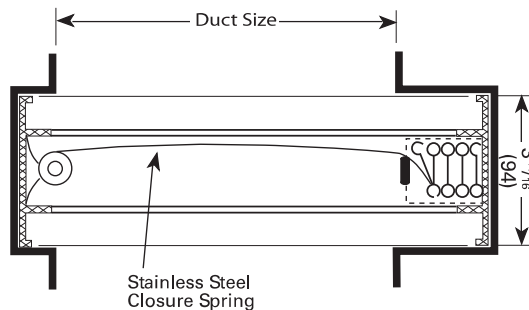


DESIGNED AND TESTED IN ACCORDANCE WITH UL-555 AND ULC-S112. MEETS ALL NFPA-90A REQUIREMENTS FOR FIRE DAMPERS.

LISTED AND LABELLED BY :



### FDD-C-H



<b>PROJECT:</b> NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK		<b>price®</b>	
<b>ENGINEER:</b>			
<b>CUSTOMER:</b> CONSULT MECHANICAL		Feb / 14	
<b>SUBMITTAL DATE:</b> 10/30/2024	<b>SPEC. SYMBOL:</b> FD	245018	

■ **Model FDD-C**  
1½, 3 Hour Rated  
"C" Style

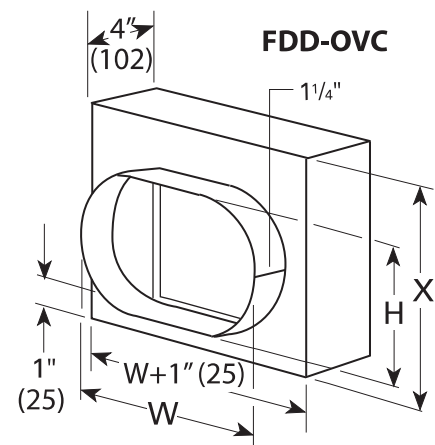
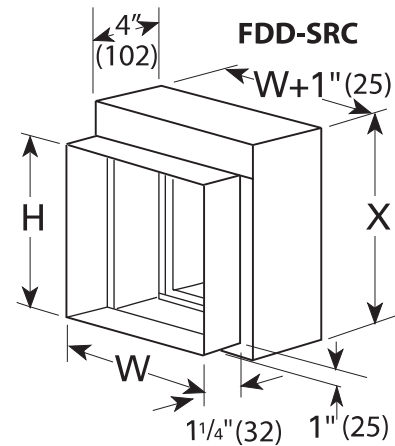
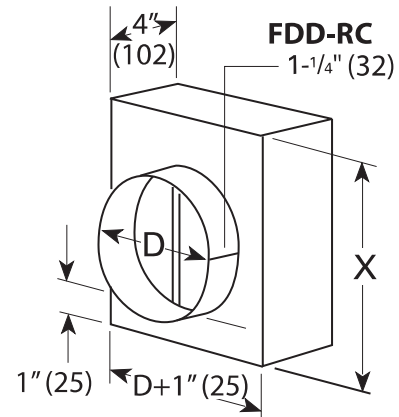
**PRICE®**

**Dynamic Fire Damper, Horizontal and Vertical**

**SIZE CHART**

Duct Height	Type C Damper Height
Inches	Inches
3	6
4	7
5	8
6	9
7	10
8	11
9	12
10	13
11	14
12	15
13	16
14	17
15	18
16	19
17	20
18	21
19	22
20	23
21	25
22	26
23	27
24	28
25	29
26	30
27	31
28	32
29	33
30	34
31	35
32	36

X = DAMPER HEIGHT



W = Width (Duct)

H = Height (Duct)

X = Variable (See Size Chart)



# Dampers Submittals

**Job Name:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK  
**Job Location:** NORTH YORK  
**Customer:** CONSULT MECHANICAL  
**Date Printed:** 10/30/2024  
**Spec Section:** 15 - HVAC

**Contact:** 571 Chrislea Rd., Unit 3  
Woodbridge, ON L4L 8A2



All-In-One  
Detailed Submittal Schedule  
Dampers

#	Qty	Model	Tag	Width, Height	Design	Temp	Sleeve Length	Sleeve Gauge	Mtg Angles	Option 1	Option 2	Option 3	Option 4
56	4	SSD	SD	14.00, 6.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type   250 - 250F   20GA - 20 Gauge( Default )   FRA2 - 2 Side   PO - Power Open/Spring Return Closed   120VAC - 120VAC Electric   EX-RH - External Right Hand   MS4104 - Honeywell MS4104 -120V													
57	8	SSD	SD	12.00, 8.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type   250 - 250F   20GA - 20 Gauge( Default )   FRA2 - 2 Side   PO - Power Open/Spring Return Closed   120VAC - 120VAC Electric   EX-RH - External Right Hand   MS4104 - Honeywell MS4104 -120V													
58	6	SSD	SD	12.00, 6.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type   250 - 250F   20GA - 20 Gauge( Default )   FRA2 - 2 Side   PO - Power Open/Spring Return Closed   120VAC - 120VAC Electric   EX-RH - External Right Hand   MS4104 - Honeywell MS4104 -120V													
59	6	SSD	SD	10.00, 10.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type   250 - 250F   20GA - 20 Gauge( Default )   FRA2 - 2 Side   PO - Power Open/Spring Return Closed   120VAC - 120VAC Electric   EX-RH - External Right Hand   MS4104 - Honeywell MS4104 -120V													

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all Smoke Dampers prior to release.

SustainGlobe:  
1. Size and Quantity of smoke damper shall follow the updated mechanical drawings. Mechanical contractor to provide size and quantity.

## Low Leakage Smoke Damper

### Model

Low Leakage Smoke Damper **SSD-3V-201**

### Features

- The SSD-3V-201 series Smoke Dampers have been designed and tested to exceed all U.L., U.L.C. and N.F.P.A. requirements for smoke dampers. These U.L. leakage rated dampers are intended for use in engineered smoke control systems to provide extremely tight shut off.
- U.L. 555S and U.L.C. S112.1 listed and labelled as Leakage Class I rated Smoke Damper with airflow in both directions. Class I provides for a maximum leakage of 8 cfm per sq. ft. at 4 inch static pressure. As we are constantly expanding our U.L./U.L.C. listings, we suggest you contact the factory for further information.
- The SSD-3V-201 damper's rigid frame and integrally braced corners provide true damper alignment that generally resists being installed out of square or out of flat. This insures onsite performance equal to test results.
- The SSD-3V-201 exceeds N.F.P.A. 90A & 92 smoke damper requirements and is recommended for applications that call for tight sealing requirements. The SSD-3V-201 provides excellent control of smoke movement or containment as the smoke management system demands.
- The SSD-3V-201 may be equipped with factory installed electric or pneumatic operators.

### Standard Construction:

**Frame:** Roll-formed galvanized steel hat-section with staked corners with integral bracing.

**Blades:** 16 ga. Roll-formed galvanized steel.

Minimum width: 4 1/4" (108mm)

Maximum width: 7 1/4" (184mm)

**Bearings:** Bronze Oilite, press-fit into frame.

**Axles:** Square, plated steel.

**Seals:** Pressure sensitive 450°F silicone blade edge seals and flexible metal jamb seals.

**Linkage:** Concealed in frame. Linkage bars are 12ga. galvanized steel.

**Finish:** Mill galvanized.

### Sizes:

Minimum Size: 8"w x 6"h.  
(203 mm x 152 mm)

Maximum UL Listed Size:  
Single Section: 36"w x 48"h  
(914 mm x 1219 mm)

### Multiple Assembly:

144"w x 96"h (3658mm x 2438mm)

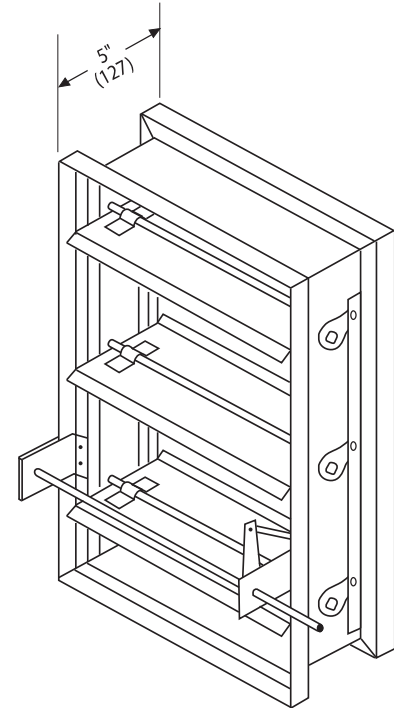
**Notes:** Dampers are furnished approximately 1/4" (6mm) smaller than given duct dimensions.

- Not recommended with blades running vertically.

### Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.



LISTED AND LABELLED BY:



**U.L. 555S CLASSIFIED**  
**AT 250°F OR 350°F**  
**DEPENDENT UPON**  
**MOTOR/OPERATOR**  
\*SEE MOTOR/OPERATOR SCHEDULE

<b>PROJECT:</b> NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK		<b>price</b> <sup>®</sup>	
<b>ENGINEER:</b>			
<b>CUSTOMER:</b> CONSULT MECHANICAL		Jul / 06	
<b>SUBMITTAL DATE:</b> 10/30/2024	<b>SPEC. SYMBOL:</b> SD	245040	

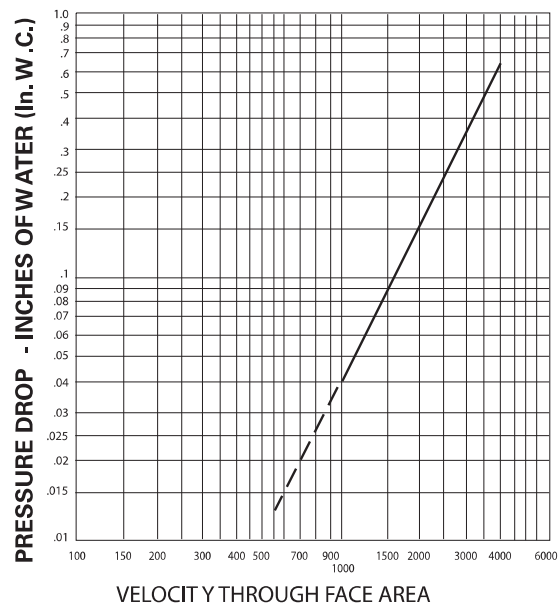
**Model SSD-3V-201**  
 U.L. 555S Classified  
 Class 1



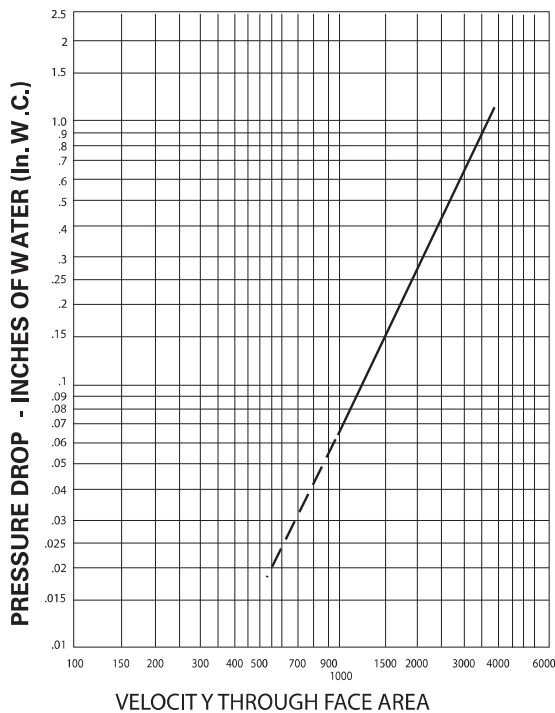
## Low Leakage Smoke Damper

Pressure drop testing was done by an independent laboratory to AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.

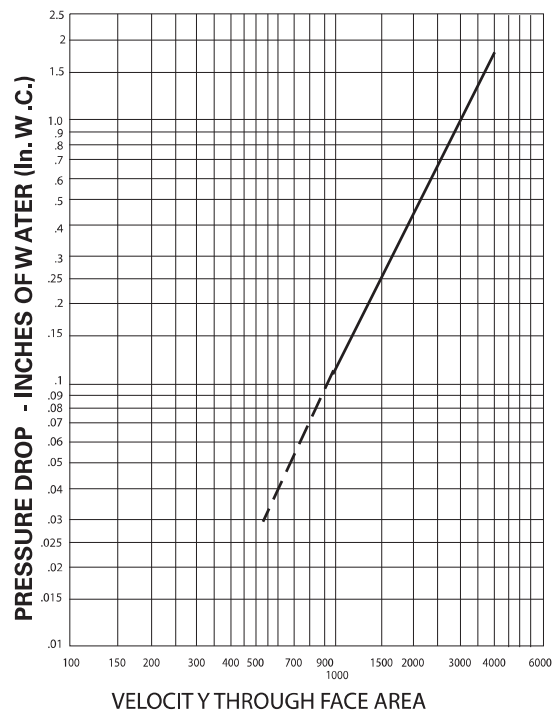
DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 X 12





# Dampers Submittals

**Job Name:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK  
**Job Location:** NORTH YORK  
**Customer:** CONSULT MECHANICAL  
**Date Printed:** 10/30/2024  
**Spec Section:** 15 - HVAC

**Contact:** 571 Chrislea Rd., Unit 3  
Woodbridge, ON L4L 8A2



**All-In-One**  
**Detailed Submittal Schedule**  
**Dampers**

#	Qty	Model	Tag	Width, Height	Design	Mtg Pos	Sections
60	1	BDD	BDD	24.00, 10.00	2X	V	1, 1
2X - Extruded Aluminum   V - Vertical							
61	1	BDD	BDD	20.00, 12.00	2X	V	1, 1
2X - Extruded Aluminum   V - Vertical							
62	2	BDD	BDD	12.00, 8.00	2X	V	1, 1
2X - Extruded Aluminum   V - Vertical							
63	2	BDD	BDD	10.00, 8.00	2X	V	1, 1
2X - Extruded Aluminum   V - Vertical							

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all Backdraft dampers prior to release.

SustainGlobe:  
1. Size and Quantity of backdraft damper shall follow the updated mechanical drawings. Mechanical contractor to provide size and quantity.



## Extruded Aluminum Backdraft Damper

### Standard Construction:

**Frame:** Extruded aluminum.

**Blades:** Extruded aluminum.

**Axles:**  $\frac{3}{16}$ " (4.8 mm) dia. aluminum.

**Seals:** Vinyl blade seals.

**Linkage:** Heavy gauge aluminum brackets with aluminum linkage bar.

**Finish:** Mill aluminum.

### Sizes:

Minimum Damper Size:

Single Blade - 6"w x 6"h (152 mm x 152 mm)

Maximum Damper Size: Single Section - 40"w x 52"h (1016 mm x 1321 mm)

**Maximum Velocity:** 2500 fpm

### Options:

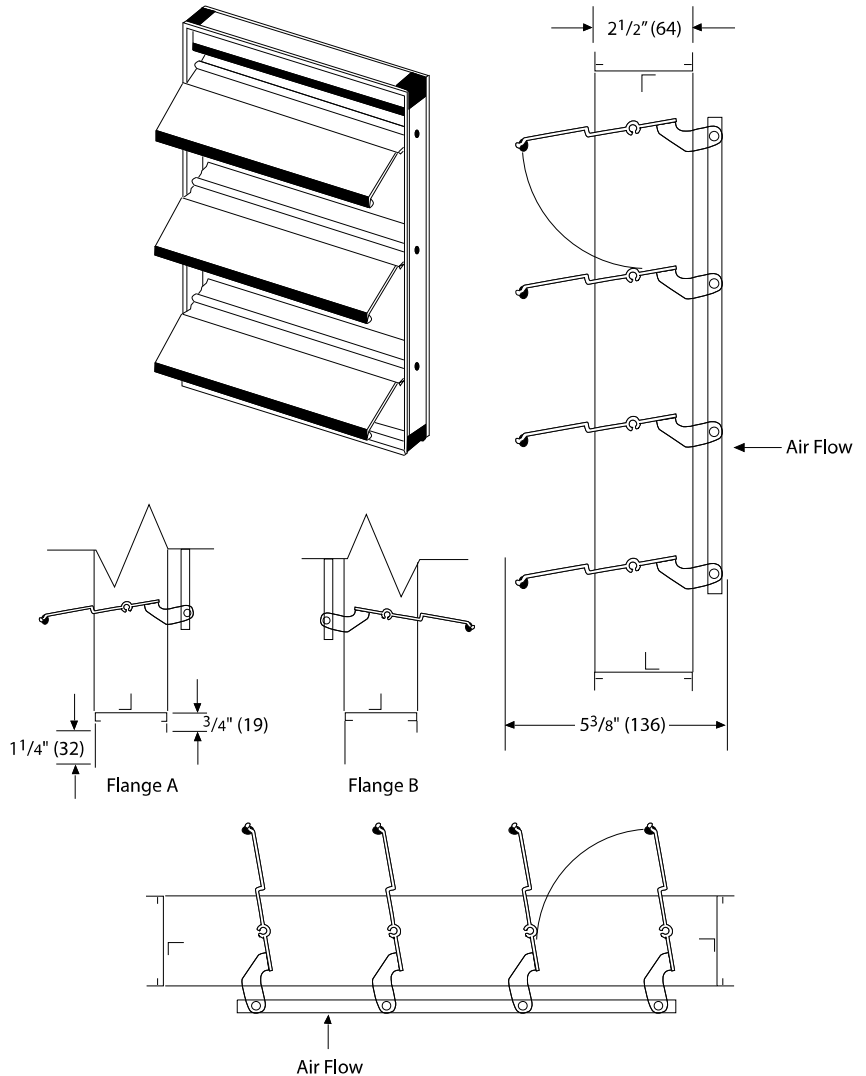
**Counterweight:** Assist or Retard


**Flange:**  $1\frac{1}{4}$ " (32 mm) Flange frame (front or rear)

**Mounting:** Horizontal mount (up blast only)

### Notes:

- All dampers are fabricated  $\frac{1}{4}$ " (6mm) under listed size unless specified "actual or exact".
- Dampers must be installed square and free from racking.



<b>PROJECT:</b> NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK			
<b>ENGINEER:</b>			
<b>CUSTOMER:</b> CONSULT MECHANICAL		Feb / 11	
<b>SUBMITTAL DATE:</b> 10/30/2024	<b>SPEC. SYMBOL:</b> BDD	245089	

# Model BDD-2X

## Extruded Aluminum Backdraft Damper



### Performance Data

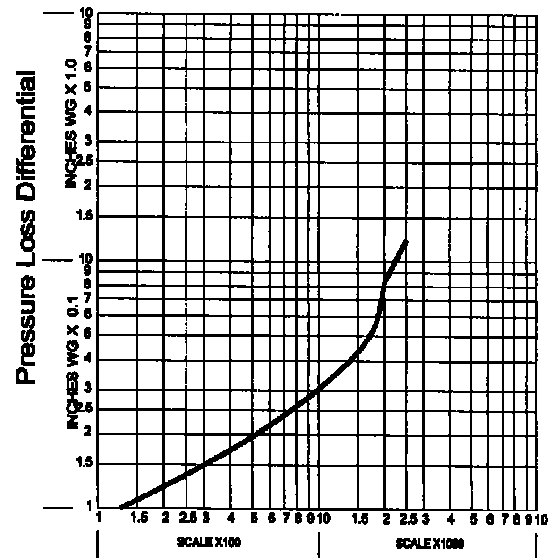
The following performance data and tables are developed from testing a 24" x 24" (610mm x 610mm) BDD-2X Backdraft Damper in accordance with AMCA Standard 500 using figure 5.5 (vertical mount, no ductwork upstream or downstream). The data represented has been corrected to represent standard air density, .075 lb/ft<sup>3</sup>. Testing to AMCA standard 500 is performed under laboratory conditions. Actual field and environmental conditions may exist that will not allow the dampers to perform and operate in this manner. Horizontal mounted dampers may require high flows and create larger pressure drops. The BDD-2X is an extruded aluminum frame and blade damper and it is recommended for velocities up to 2500 fpm.

#### Position Data

Blade Position	Δ P (in. wg)	Velocity (fpm)
5% Open	0.07	45
25% Open	0.15	325
50% Open	0.25	800
75% Open	0.40	1400
100% Open	0.45	1625

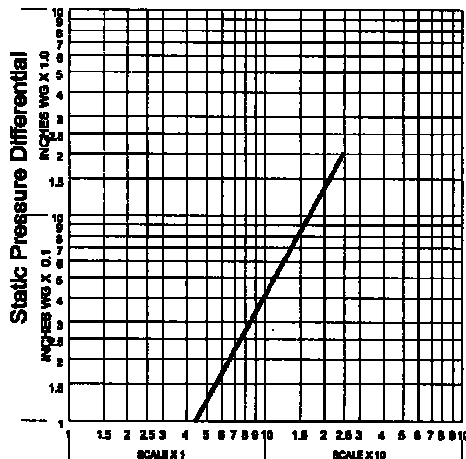
### PRESSURE DROP (Exhaust)

#### BDD-2X



#### DUCT VELOCITY

### Leakage



#### Air Leakage in CFM/Sq. Ft.

#### Width - Inches

	6	12	16	20	24	28	32	36	40
6	0.07	0.19	0.26	0.34	0.41	0.49	0.56	0.63	0.71
12	0.20	0.51	0.72	0.92	1.13	1.33	1.53	1.74	1.94
16	0.31	0.77	1.07	1.38	1.69	2.00	2.30	2.61	2.92
20	0.41	1.02	1.43	1.84	2.25	2.66	3.07	3.48	3.89
24	0.51	1.28	1.79	2.30	2.82	3.33	3.84	4.35	4.86
28	0.61	1.54	2.15	2.76	3.38	3.99	4.61	5.22	5.84
32	0.72	1.79	2.51	3.23	3.94	4.66	5.38	6.09	6.81
36	0.82	2.05	2.87	3.69	4.51	5.32	6.14	6.96	7.78
40	0.92	2.30	3.23	4.15	5.07	5.99	6.91	7.83	8.76
44	1.02	2.56	3.58	4.61	5.63	6.66	7.68	8.70	9.73
48	1.13	2.82	3.94	5.07	6.20	7.32	8.45	9.58	10.70
52	1.23	3.07	4.30	5.53	6.76	7.99	9.22	10.45	11.68

#### Height (inches)



E. H. Price  
571 Chrislea Road, Unit 3,  
Woodbridge, ON, L4L 8A2

**REFERENCE**  
**R20205601**

**QUOTE DATE:** 07/09/2024  
**REVISION DATE:** 10/30/2024

# SUBMITTAL

Project: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

Engineer:

Submitted by: E. H. PRICE (WOODBIDGE)

571 CHRISLEA ROAD UNIT 3

571 CHRISLEA ROAD, UNIT 3

WOODBIDGE, ON, CAN

L4L 8A2

---

**Contact:**

**Project:** NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

**Engineer:**

**SustainGlobe:**

1. Size and Quantity of motorized damper shall follow the updated mechanical drawings. Mechanical contractor to provide size and quantity.

---

*Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.*



E. H. Price  
571 Chrislea Road, Unit 3,  
Woodbridge, ON, L4L 8A2

## REFERENCE R20205601

QUOTE DATE: 07/09/2024  
REVISION DATE: 10/30/2024

Item	Qty	Opening Dimension Width(A) x Height(B)			Series	Option	Profile	Blade Type	Install Type	Cfg
1	1	900	x	150	9000		SP	OPPOSED	FLANGED TO	1LFS
		DRIVE LEFT DRIVE BOTH SIDES MD-1								
2	1	350	x	175	9000		SP	OPPOSED	FLANGED TO	1LFS
		DRIVE LEFT DRIVE BOTH SIDES MD-2								
3	1	350	x	175	9000		SP	OPPOSED	FLANGED TO	1LFS
		DRIVE LEFT DRIVE BOTH SIDES MD-3								

The list provided below is for reference purpose only. Contractor to confirm quantity, tag, size, blade style / mounting style of all dampers prior to release.

**\*\*NOT INCLUDING ACTUATORS\*\***

Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.



E. H. Price  
571 Chrislea Road, Unit 3,  
Woodbridge, ON, L4L 8A2

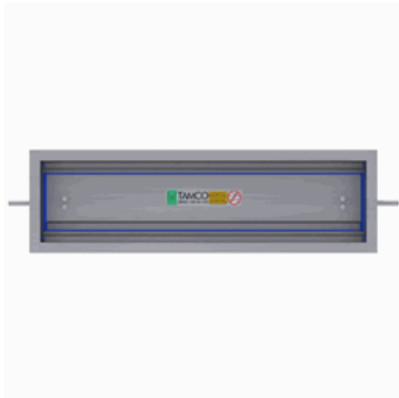
## REFERENCE R20205601

QUOTE DATE: 07/09/2024  
REVISION DATE: 10/30/2024

### Contact:

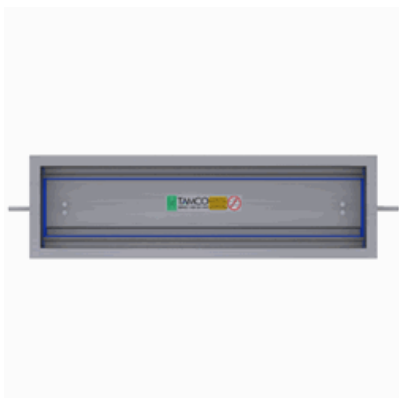
Project: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

### Engineer:



A  
DRIVE LEFT DRIVE BOTH SIDES

<b>Item</b>	<b>1</b>
Qty:	1
<b>Opening Dimensions:</b>	
Width (A) x Height (B)	900 x 150
<b>Finished Outside Dimensions:</b>	
Width (A) x Height (B)	949 x 200
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
<b>MD-1</b>	



A  
DRIVE LEFT DRIVE BOTH SIDES

<b>Item</b>	<b>2</b>
Qty:	1
<b>Opening Dimensions:</b>	
Width (A) x Height (B)	350 x 175
<b>Finished Outside Dimensions:</b>	
Width (A) x Height (B)	400 x 225
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
<b>MD-2</b>	



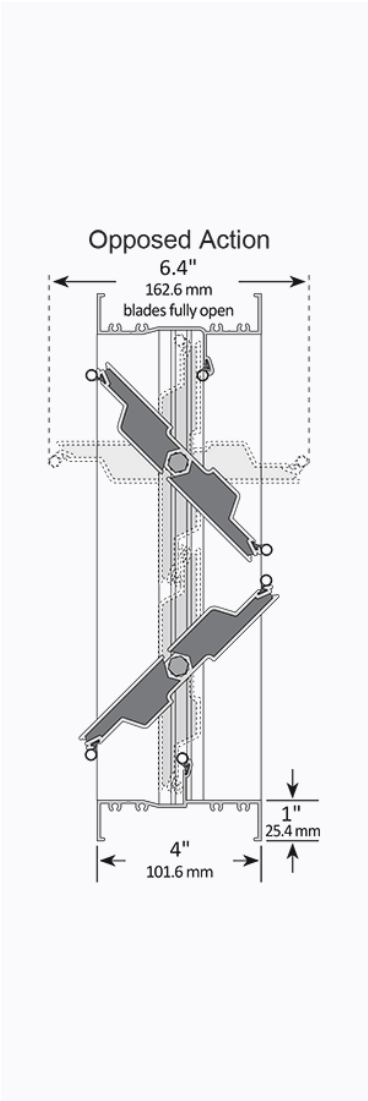
A  
DRIVE LEFT DRIVE BOTH SIDES

<b>Item</b>	<b>3</b>
Qty:	1
<b>Opening Dimensions:</b>	
Width (A) x Height (B)	350 x 175
<b>Finished Outside Dimensions:</b>	
Width (A) x Height (B)	400 x 225
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
<b>MD-3</b>	

Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.

Questions? Contact ABHI SHAH  
905-669-8988

STANDARD PROFILE



- Extruded aluminum (6063-T5) damper frame is not less than 0.080" (2.03 mm) in thickness. Damper frame is 4" (101.6 mm) deep x 1" (25.4 mm), with mounting flanges on both sides of frame.
- Blades are maximum 6" (152.4 mm) deep extruded aluminum (6063-T5) air-foil profiles, internally insulated with expanded polyurethane foam and thermally broken. Complete blade has an insulating factor of R-2.29 and a temperature index of 55 (tested to AAMA 1502.7 Test Method). All blades are symmetrically pivoted.
- Blade seals are extruded EPDM. Frame seals are extruded silicone. Seals are secured in an integral slot within the aluminum extrusions. Blade and frame seals are mechanically fastened to prevent shrinkage and movement over the life of the damper.
- Bearings are composed of a Celcon inner bearing - fixed around a 7/16" (11.11 mm) aluminum hexagon blade pivot pin - rotating within a polycarbonate outer bearing inserted in the frame. This eliminates action between metal-to-metal or metal-to-plastic riding surfaces.
- Adjustable 7/16" (11.11 mm) hexagonal drive rod, U-bolt fastener, and hexagonal retaining nuts are zinc-plated steel. These provide a positive connection to blades and linkage.
- Aluminum and corrosion-resistant zinc-plated steel linkage hardware is installed in the frame side, complete with cup-point trunnion screws for a slip-proof grip.
- Dampers are designed for operation in temperatures ranging from -40°F (-40°C) to 212°F (100°C).
- Leakage Class 1A at 1 in w.g. (0.25 kPa) static pressure differential. Standard air leakage data is certified under the AMCA Certified Ratings Program.
- Dampers are custom made to required size, without blanking off free area. The blade stop is set at a fixed height and is a continuous and integral part of the top and bottom frames.
- Dampers selected with blade action as shown to the left.
- Dampers selected with install type as shown below.
- Installation of dampers must be in accordance with TAMCO's current on-line installation guidelines. (Printed installation guidelines are provided with each damper shipment, however all technical information available on TAMCO's web site at [www.tamcodampers.com](http://www.tamcodampers.com) supersedes information contained within printed versions.)
- Intermediate structural support is required to resist applied pressure loads for dampers that consist of two or more sections in both height and width. (See TAMCO Aluminum Damper Installation Guidelines.)

FLANGED TO DUCT TYPE ▼

- > For SP and NP Profiles, finished damper O.D. is 2" (50.8 mm) greater than opening width and height dimensions.
- > For WP Profile, finished damper O.D. is 3.25" (82.6 mm) greater than opening width and height dimensions.

MINIMUM SECTION SIZE:

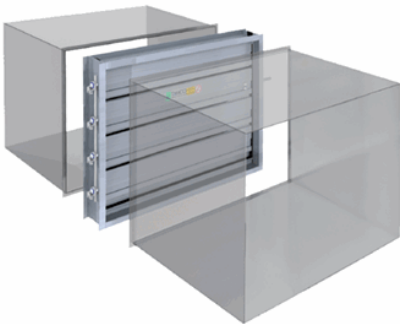
4½"w x 4¼"h (115 mm x 108 mm)

MAXIMUM SECTION SIZE:

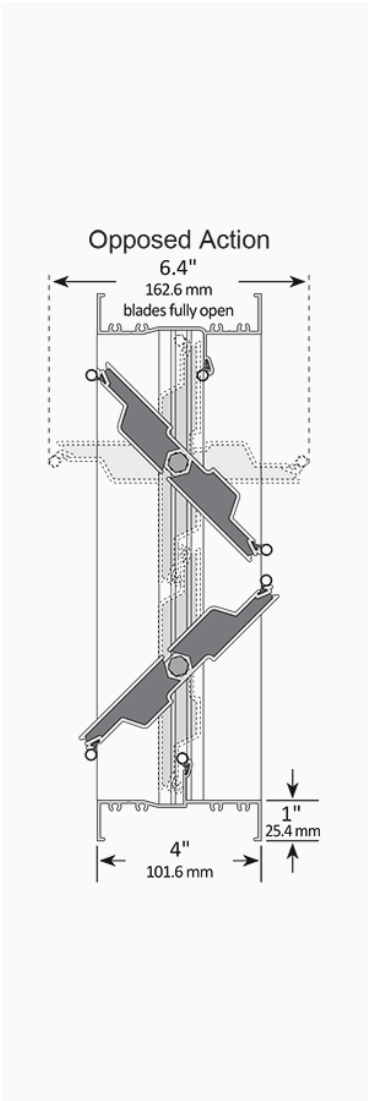
25 ft² (2.3 m²)

60"w x 60"h or (1524 mm x 1524 mm) or

48"w x 75"h (1220 mm x 1905 mm)



STANDARD PROFILE

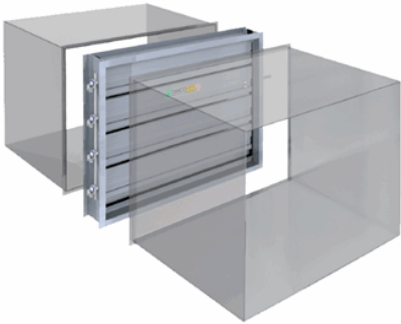


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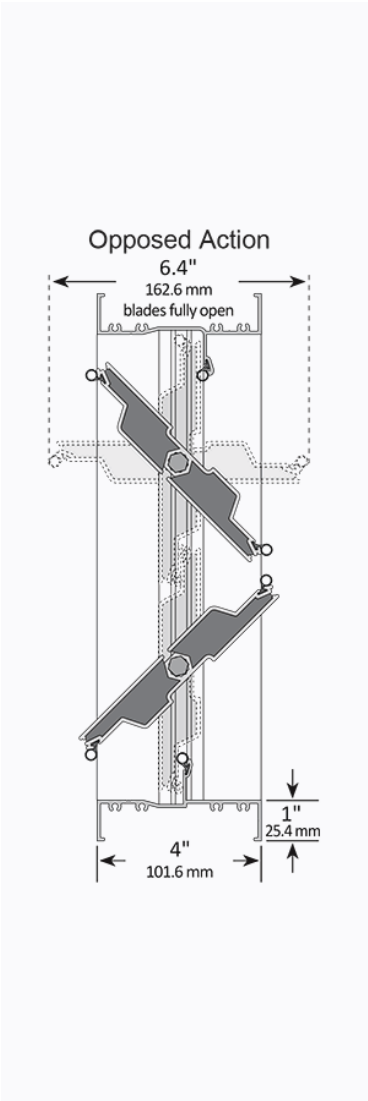
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MINIMUM SECTION SIZE:	
4½"w x 4¼"h	(115 mm x 108 mm)
MAXIMUM SECTION SIZE:	
25 ft²	(2.3 m²)
60"w x 60"h or	(1524 mm x 1524 mm) or
48"w x 75"h	(1220 mm x 1905 mm)



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