

# Addendum 02 for RFB947500-01

Project Name: CHMHI Fleet Garage Repairs

DAS RFQ#: 947500-001

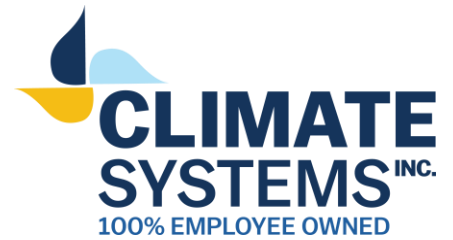
DAS Project #: 9475.00

Date: 11/11/25

**Bids Due: November 21<sup>st</sup> 2025 at 2:00 pm**

Contents:

- Cover Page (1 page)
- Substitution Request Approval (16 pages)
  - Greenheck – Low Leak Control Dampers
  - Greenheck – Axial HVAC Fans
  - Greenheck Air outlets & Inlets / Louvers
  - Macurco – CO / NO2 Gas Detection
  - Bleimo Sensors
  - Axial Fans



November 6, 2025

Durantem MEP Consulting  
3737 Woodland Ave, Suite 420  
West Des Moines, IA 50266

Re: **HHS CHMHI Fleet Garage Repairs – Cherokee Mental Health Institute**  
Cherokee, IA

Casey Adams,

We respectfully request approval to bid the following equipment on the above-referenced project:

<u>Section</u>	<u>Product Description</u>	<u>Manufacturer</u>
233300-2.01	Low Leak Control Dampers	Greenheck
233413	Axial HVAC Fans	Greenheck
233700	Air Outlets & Inlets / Louvers	Greenheck
230913	CO / NO2 Gas Detection	Macurco

**Approved per Casey Adams With Durantem**

Thank you for your consideration.  
Sincerely,

Neal Rabern  
Climate Systems Inc.

P 605-334-2164  
F 605-334-9642

3005 W. Russell St.  
Sioux Falls, SD 57107

[climatesystemsinc.com](http://climatesystemsinc.com)

**SUBSTITUTION REQUEST FORM**

Project: CHMI FLEET GARAGE Substitution Request Number: \_\_\_\_\_  
To: \_\_\_\_\_ From: REDDY  
Date: 11/5/25  
A/E Project Number: \_\_\_\_\_  
Re: SUBSTITUTION

Specification Title: INSTRUMENTATION Description: SENSORS  
Section: 230913 Page: 2 Article/Paragraph: 2.04

Proposed Substitution: BELIMO  
Manufacturer: BELIMO Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Trade Name: BELIMO Model No.: 2260214-SB

History:  New product  2-5 years old  5-10 yrs old  More than 10 years old  
Differences between proposed substitution and specified product: EQUAL

Point-by-point comparative data prepared by contractor and attached - REQUIRED BY A/E

Reason for not providing specified item: \_\_\_\_\_

Similar Installation:  
Project: \_\_\_\_\_ Architect: \_\_\_\_\_  
Address: \_\_\_\_\_ Owner: \_\_\_\_\_  
Date Installed: \_\_\_\_\_

Proposed substitution affects other parts of Work:  No  Yes; explain \_\_\_\_\_

Supporting Data Attached:  Drawings  Product Data  Samples  Tests  Reports  \_\_\_\_\_

# SUBSTITUTION REQUEST FORM

(Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: ROBERT EDDY

Signed by: [Signature]

Firm: EP SALES

Address: \_\_\_\_\_

Telephone: 612 325 4338

Attachments: \_\_\_\_\_

### A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 3300.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:  Contractor  Subcontractor  Supplier  Manufacturer  A/E  \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Ventilation on Demand



## Gas Monitoring Devices



Discover the advantages  
[www.belimo.com](http://www.belimo.com)

**BELIMO**<sup>®</sup>

# Innovation for peace of mind



HVAC system operation is critical for maintaining adequate safe indoor air quality (IAQ). Belimo gas monitoring systems provide accurate measurement, superior reliability, and easy installation. They can work as a standalone system or seamlessly integrate into major Building Management Systems (BMS). An intelligent peer-to-peer communication protocol allows users to configure and install a complete ventilation control system with only one monitor, or dozens, operating in multiple ventilation zones. The result is the assurance of occupant safety and comfort in buildings.



# Superior performance

Belimo's gas monitors provide air quality monitoring for commercial properties. Closely monitoring airborne pollutants to control fresh air ventilation improves the health and wellbeing of occupants, while minimizing excess ventilation, resulting in reduced energy and maintenance costs. Belimo gas monitors are factory calibrated and can monitor up to two gases simultaneously. All monitors feature audible and visual alarms and CAN bus communication, allowing for standalone operation and networking of up to 32 devices. Select models feature relays and analog outputs to control ventilation directly, as well as BACnet MS/TP, allowing for integration into a BMS. The monitors can be easily assigned to groups on site for ventilation zoning on the same network, significantly reducing control wiring and installation time. Gas monitors are wired via a daisy chain and are required to be calibrated annually. All gas monitoring products are backed by a five-year warranty, with the exception of sensor modules, which are backed by a one-year warranty.



## Seamless Integration

Enhanced communication and integration with major building management systems via BACnet MS/TP with select models.



## Modular Design

The compact modular design allows for easy installation and commissioning to ensure optimal system performance.



## Reliable and Dependable

Factory calibrated and designed from the highest quality materials delivering accurate and dependable readings.

“Belimo’s gas monitors with dual sensors are great for enclosed parking garage applications requiring both CO and NO<sub>2</sub> gas monitoring and alarm. The ability to control the ventilation system from any one monitor makes installation easier and lowers total installed cost.”

**Robert Eddy, President**  
**EP Sales, Inc., Bloomington, MN**

# Intuitive design

Backlit Display

NEMA2, IP 44  
Rated Enclosure

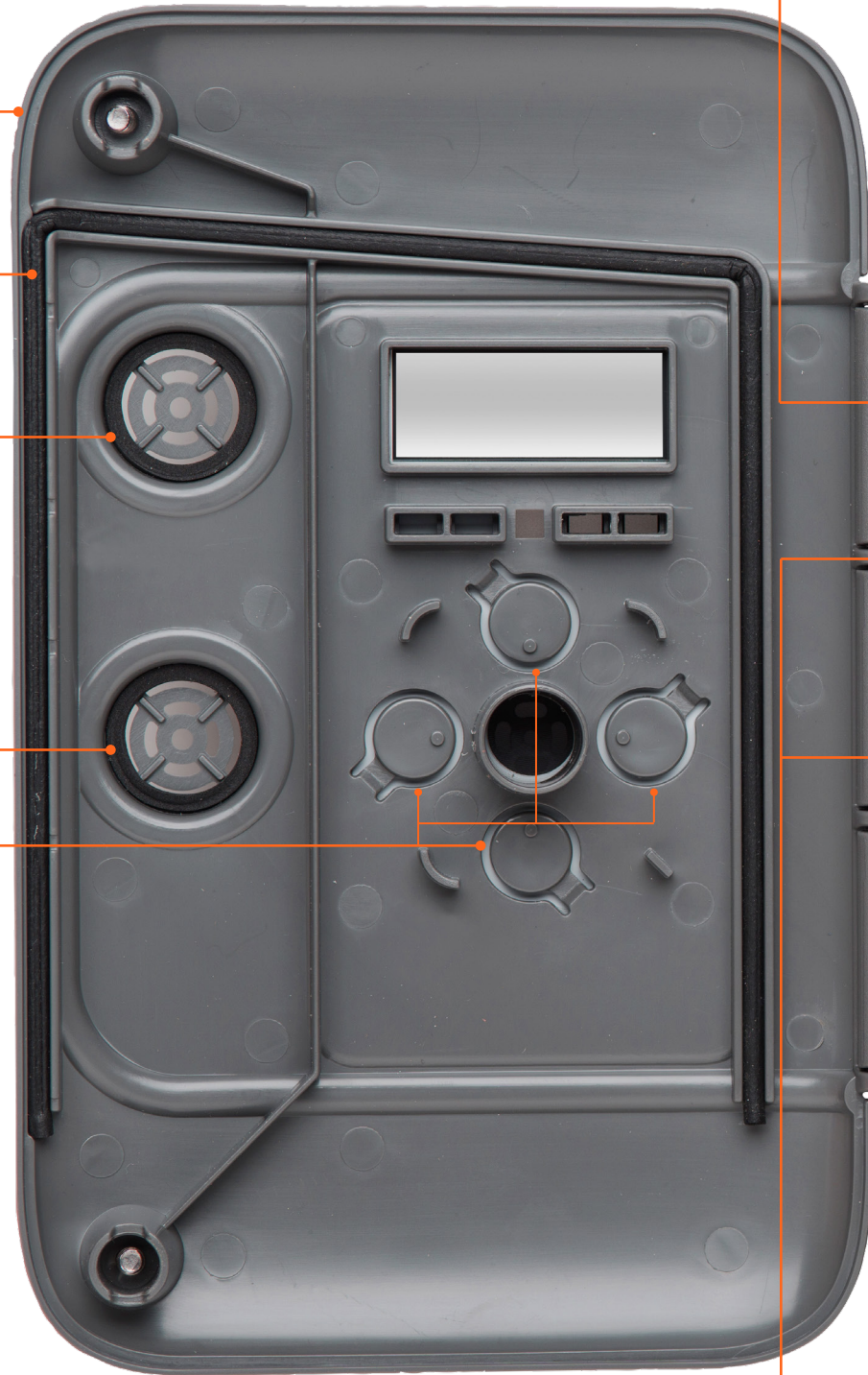
Inner Drip  
Seal

protects the electronics from condensation buildup

Programmable Interface

allows for easy access and configuration of 77 programmable settings

All vehicle emissions gas monitors (CO, NO<sub>2</sub>, CO + NO<sub>2</sub>) are certified under the gas and vapor detectors and sensors standards to UL.



Audible and Visual Alarms

allow for on-demand ventilation and relay activation



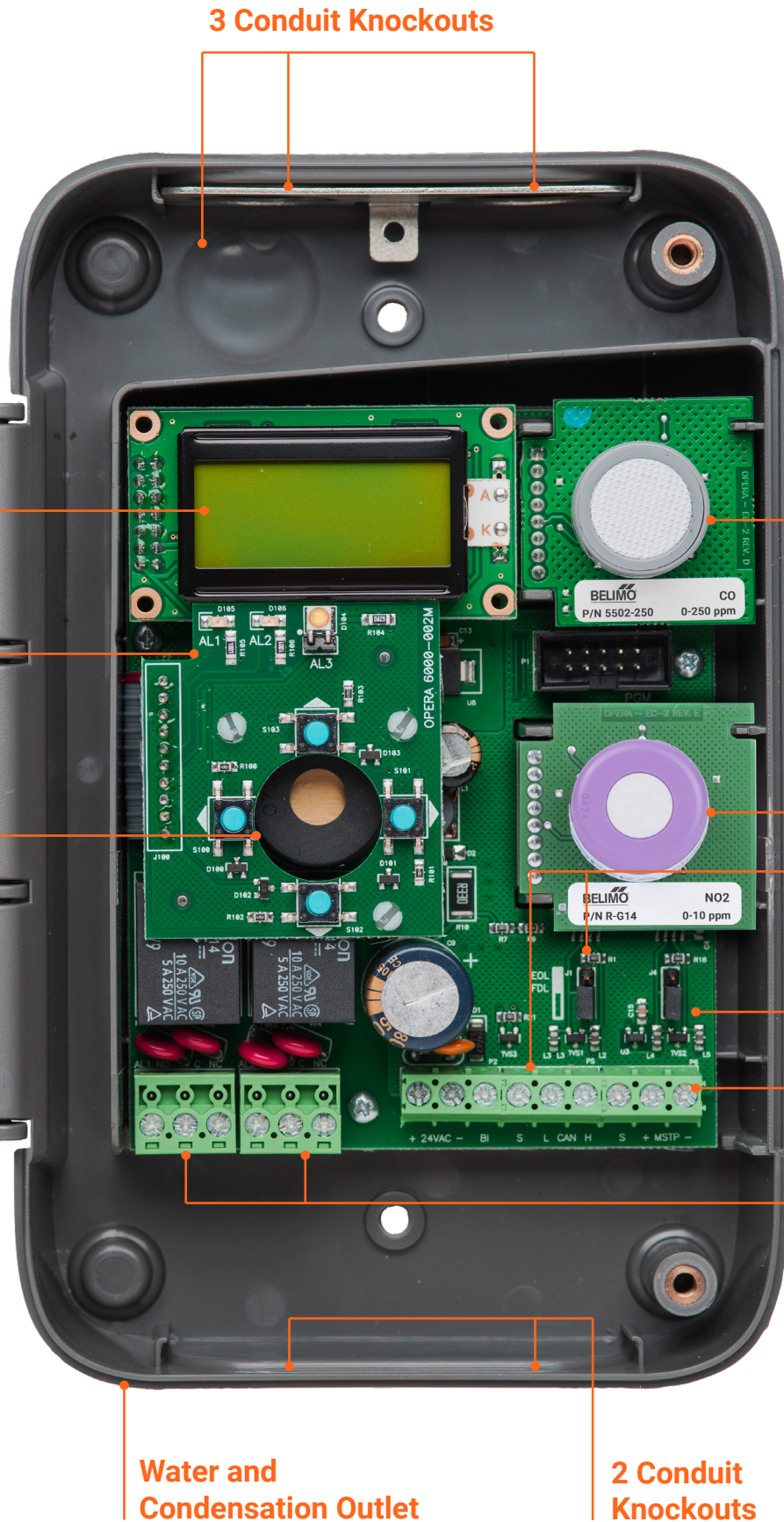
5-year warranty



Audible and Visual Alarms allow for on-demand ventilation and relay activation



Peer to peer communication allows daisy-chain installation of up to 32 devices, reducing cabling.



3 Conduit Knockouts

Water and Condensation Outlet

2 Conduit Knockouts

Factory Calibrated Hot Swappable Sensor Modules can monitor up to two gases using one device.

CAN bus Network Gateway allowing for standalone operation

BACnet MS/TP Network Gateway for integration into a BMS

SPDT Relays to directly control ventilation


**3 models available:**

- A = CAN bus, BACnet MS/TP, 1 Relay, 2 Analog Outputs
- B = CAN bus, BACnet MS/TP, 2 Relays\*
- C = CAN bus


\*Model -B shown in image

# Product range


## Vehicle Emissions

Application	Model #	Old Model #	Output signal				Measuring range			Communication	
			Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Carbon Monoxide	Nitrogen Dioxide	Measuring range	CAN bus	BACnet MS/TP
 Vehicle Emissions	22G02-5A	EXT-OP-6002-250-A	■	■		■		0...250 ppm	■	■	
	22G02-5B	EXT-OP-6002-250-B	■		■				■	■	
	22G02-5C	EXT-OP-6002-250-C	■						■		
	22G14-5A	EXT-OP-6014-A	■	■		■		0...10 ppm	■	■	
	22G14-5B	EXT-OP-6014-B	■		■				■	■	
	22G14-5C	EXT-OP-6014-C	■						■		
	22G0214-5A	EXT-6002-250-14-A	■	■		■		0...250 ppm CO, 0...10 ppm NO <sub>2</sub>	■	■	
	22G0214-5B	EXT-6002-250-14-B	■		■				■	■	
	22G0214-5C	EXT-6002-250-14-C	■						■		

## Indoor Air Quality

Application	Model #	Old Model #	Output signal				Measuring range			Communication	
			Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Carbon Dioxide	Measuring range	CAN bus	BACnet MS/TP	
 Indoor Air Quality	22G15-5A3	EXT-OP-6015-2000-A	■	■		■		0...2000 ppm	■	■	
	22G15-5B3	EXT-OP-6015-2000-B	■		■				■	■	
	22G15-5A5	EXT-OP-6015-5000-A	■	■		■		0...5000 ppm	■	■	
	22G15-5B5	EXT-OP-6015-5000-B	■		■				■	■	
	22G15-5B6	EXT-OP-6015-10000B	■		■			0...10000 ppm	■	■	
	22G15-5C6	EXT-OP-6015-10000C	■						■		

## Combustible and Toxic Gas Monitoring (Currently only available in Canada)

Application	Model #	Old Model #	Output signal				Measuring range								Communication				
			Active	1 SPDT relay	2 SPDT relays	2 analog 4...20 mA or 2...10 V	Ammonia	Methane	Propane	Hydrogen	Hydrogen Sulphide	Chlorine	Oxygen Leak	Oxygen Depletion	Measuring range	CAN bus	BACnet MS/TP		
 <p>Combustible and Toxic Gas</p>	22G04-5A	EXT-OP-6004-A	■	■		■	■									0...250 ppm	■	■	
	22G04-5B	EXT-OP-6004-B	■		■		■											■	■
	22G05-5A	EXT-OP-6005-A	■	■		■		■									0...50% LEL	■	■
	22G05-5B	EXT-OP-6005-B	■		■			■										■	■
	22G05-5C	EXT-OP-6005-C	■					■										■	
	22G06-5A	EXT-OP-6006-A	■	■		■			■									■	■
	22G06-5B	EXT-OP-6006-B	■		■				■									■	■
	22G06-5C	EXT-OP-6006-C	■						■									■	
	22G08-5A	EXT-OP-6008-A	■	■		■				■								■	■
	22G08-5B	EXT-OP-6008-B	■		■					■								■	■
	22G08-5C	EXT-OP-6008-C	■							■								■	
	22G16-5A	EXT-OP-6016-A	■	■		■					■						0...50 ppm	■	■
	22G16-5B	EXT-OP-6016-B	■		■						■							■	■
	22G17-5A	EXT-OP-6017-A	■	■		■						■					0...10 ppm	■	■
	22G17-5B	EXT-OP-6017-B	■		■							■						■	■
	22G22-5A	EXT-OP-6022-A	■	■		■							■				0...50% O <sub>2</sub>	■	■
	22G22-5B	EXT-OP-6022-B	■		■								■					■	■
	22G23-5A	EXT-OP-6023-A	■	■		■								■				■	■
	22G23-5B	EXT-OP-6023-B	■		■									■				■	■

# SUBSTITUTION REQUEST FORM

Project: CHMI FLEET GARAGE Substitution Request Number: \_\_\_\_\_  
To: \_\_\_\_\_ From: Reddy  
Re: SUBSTITUTION Date: 11/5/25  
A/E Project Number: \_\_\_\_\_

Specification Title: AXIAL HVAC FANS Description: \_\_\_\_\_  
Section: 233413 Page: 1 Article/Paragraph: 2.01

Proposed Substitution: S+P  
Manufacturer: S+P Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Trade Name: S+P Model No.: \_\_\_\_\_

History:  New product  2-5 years old  5-10 yrs old  More than 10 years old  
Differences between proposed substitution and specified product: EQUAR  
SAME AAFG

Point-by-point comparative data prepared by contractor and attached - REQUIRED BY A/E

Reason for not providing specified item: \_\_\_\_\_

Similar Installation:  
Project: \_\_\_\_\_ Architect: \_\_\_\_\_  
Address: \_\_\_\_\_ Owner: \_\_\_\_\_  
Date Installed: \_\_\_\_\_

Proposed substitution affects other parts of Work:  No  Yes; explain \_\_\_\_\_

Supporting Data Attached:  Drawings  Product Data  Samples  Tests  Reports  \_\_\_\_\_

## SUBSTITUTION REQUEST FORM

(Continued)

The Undersigned certifies:

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Submitted by: ROBERT EDDY

Signed by: \_\_\_\_\_

Firm: EP SALES

Address: \_\_\_\_\_

Telephone: 612 325-338

Attachments: \_\_\_\_\_

### A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 3300.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:     Contractor     Subcontractor     Supplier     Manufacturer     A/E     \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**S&P USA**

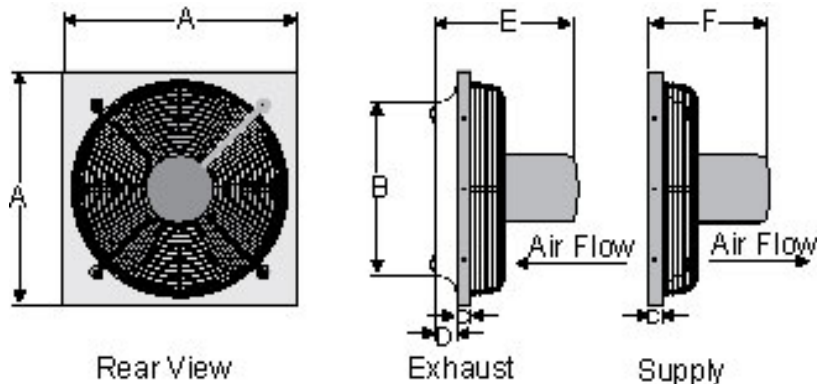
Qty: 2  
 Tag: EF-1-THRU EF-2  
 Project: CHEROKEE IA GARAGE  
 Optimizer Version 2.0  
 Printed: 2025-11-04

**GED12-1/10**

**Sidewall Propeller Fan-Direct Drive (V.S.C.) Exhaust**

**STANDARD FEATURES:**

OSHA Motor Side Guard Standard • Direct Drive for Low Maintenance • Statically and Dynamically Balanced Propeller • Speed Controllable Motors • 5 Year Fan and 1 Year Motor Warranty • Motors Rated for Continuous Duty • Heavy Gauge Welded Galvanized Construction • Integral Deep Spun Inlet



**Performance**

Fan RPM	Flow (CFM)	SP (in W.G.)	Power (HP)	FEP Actual (kW)	FEI	SE	TE	FPM (TS)	FPM (OV)
1295	1000	.15	.071	0.1	1.94	33%	52%	4068	1162

Altitude (Feet): n/a      Temperature (Fahrenheit): n/a      Density (Lb/Ft3): .075

**Motor Information: (Wired for 115V)**

HP	RPM	Volts/PH/Hz	Enclosure	Efficiency	Mounted
.1	1550	115V/1PH/60HZ	OPEN DRIP PROOF	STANDARD	YES

**Dimensions (Inches)**

A	16.00	B	12.50	C	1.00	D	2.00	E	14.00
F	12.00	G		H		I		J	
K		L		M		N		O	
P		Q		R		S		T	
U		V		W		X		Y	

Note: Accessories may effect dimensions shown.

Avg. Shipping Weight (Lbs)\*: 35

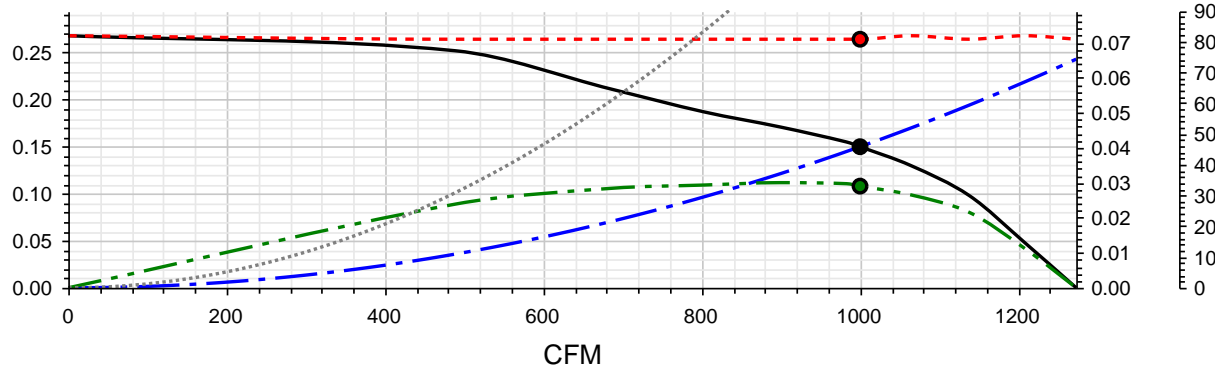
\*Includes fan, motor, and packaging.



**Sound Power Levels - Octave Bands**

LwA	dBA	Sones	1	2	3	4	5	6	7	8
66	54	7.6	74	75	68	60	59	56	50	41

in W.G.



— Fan Curve    - - - System Curve    - - - - Horsepower    - - - - Static Efficiency    ..... Stall Curve

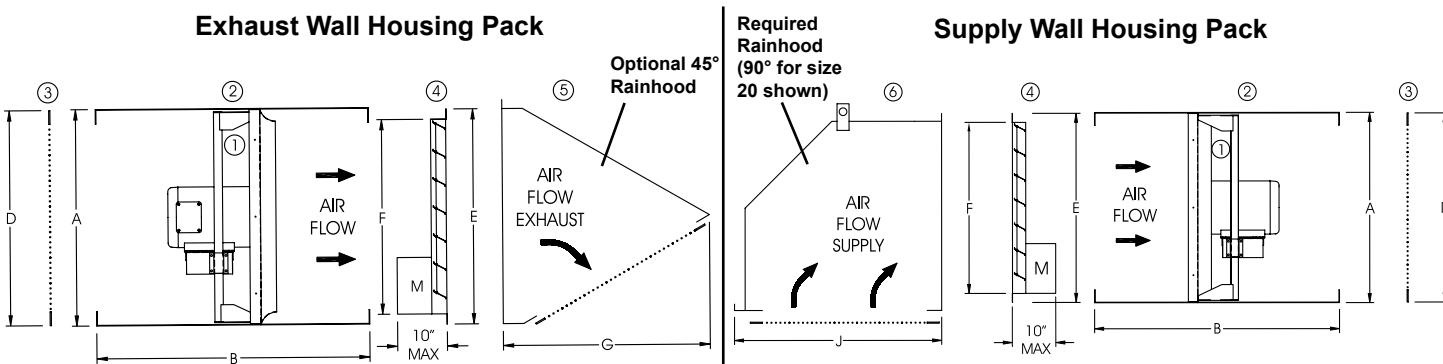
**Accessories:**

NEMA1 1PH 115V .5HP MAX SW/ASSY • MOUNT & WIRE DISCONNECT FOR G • GED12 1/10HP 1550RPM GED BLADE 4WG CW • 3/8" HUB ADAPTER • ASSY WALL HOUSING PCK-DPR-GRD EXH G/DF1012 • LABEL UL/CUL 705 LISTED POWER VENT (709) • RAINHOOD EXHAUST/SUPPLY 10-12" GALVANIZED KNOCK-DOWN



# ASSEMBLED WALL HOUSING PACK SIDEWALL PROPELLER FANS - DIRECT DRIVE MODELS GED/GSD - EXHAUST & SUPPLY

This heavy-gauge, all galvanized G-90 steel housing provides a simple solution to installing a fan and all required accessories in a rough wall opening. It can be used in exhaust or supply applications. Depending on space and maintenance requirements, the wall housing may be installed inward or outwards of the building. All housings ship with the fan, shutter and guard assembled to lessen jobsite installation costs. **Rainhoods (not included in packs) are required for all supply applications, and motorized shutters are strongly recommended.**



Fan Size	A (S.Q.) O.D. ①	Wall Housing ②	Minimum Wall Opening	Flat Guard ③	Damper ④		Rainhood Exhaust/Supply 45 Deg. ⑤	Rainhood Supply 90 Deg. ⑥
					B Length	F		
10/12	17	26	17 1/2	16	14 1/2	12	16 1/4	-
14/16	21	26	21 1/2	20	18 1/2	16	20 1/4	-
18	25	26	25 1/2	24	22 1/2	20	24 1/4	-
20	25	26	25 1/2	24	22 1/2	20	24 1/4	44 1/2

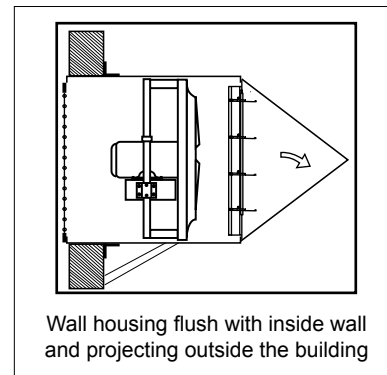
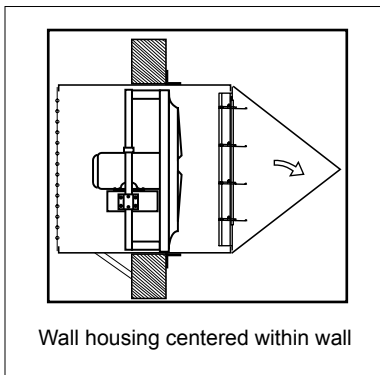
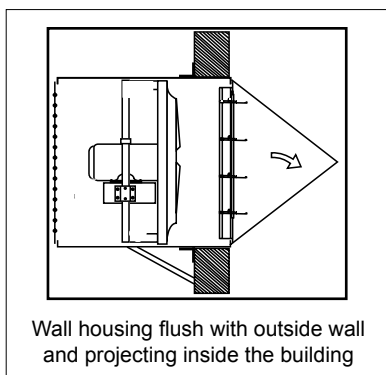
#### NOTES:

- (1) Dimensions include fastener heads (approx 5/8" extra).
- (2) Housing ship assembled with fan unless ordered K.D.
- (3) Standard material is G90 galvanized. Aluminum optional
- (4) Angle mounting flanges ship loose and are an option.
- (5) CAUTION: Housing position when mounted may require additional support.
- (6) Data applies to exhaust and supply fan models unless shown otherwise.

**CAUTION:** When wall housing extends outside the building, field caulking and/or flashing of seams and unused prepunched mounting holes is required.

#### TYPICAL MOUNTING ARRANGEMENTS

The most common mounting arrangement (below left) leaves a clean building exterior and allows access to the fan, motor and drives from inside the building. Additional bracing angle, rod or cable (field provided) should be used in addition to the mounting angles to support the fan and wall housing assembly.



Subject to change unless approved in submittal by Soler & Palau

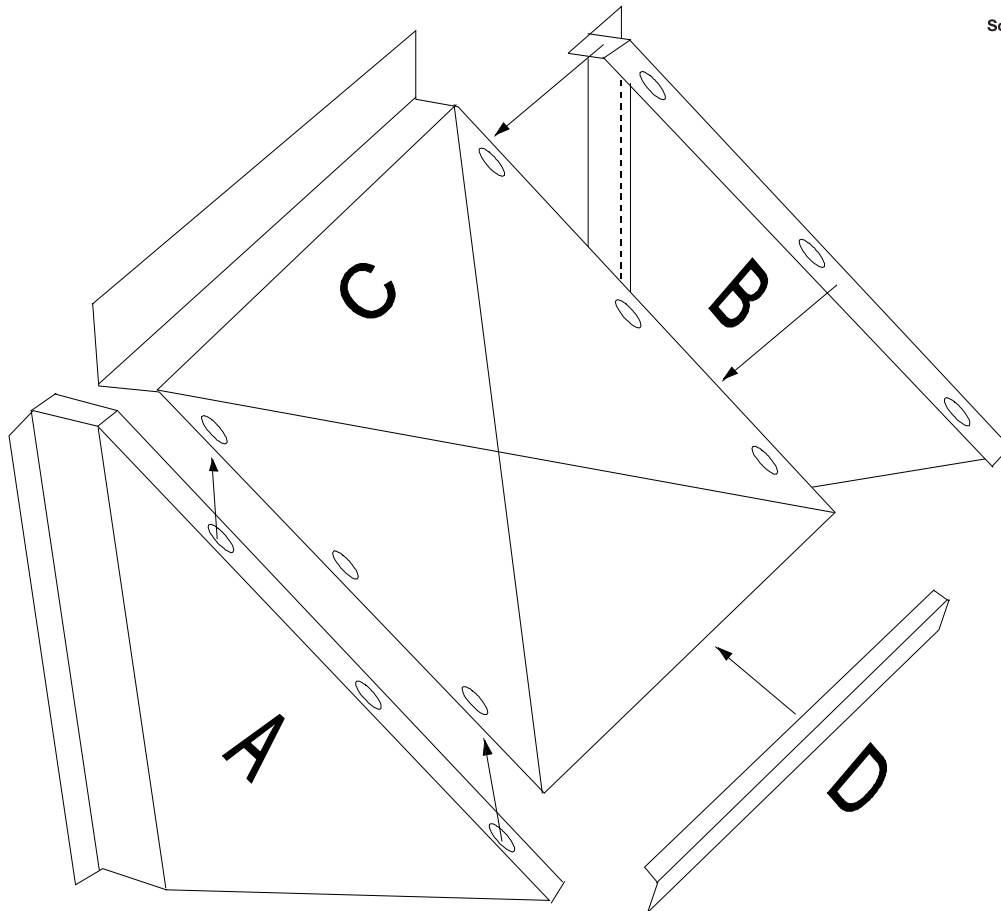
WHP-G\_SUBMITTAL\_0514

# SIDEWALL PROPELLER FAN ACCESSORY RAINHOOD - K.D. (Knocked Down) FOR FIELD ASSEMBLY



6393 Powers Avenue  
Jacksonville, Florida 32217-2298  
P: 800.961.7370 / F: 800.961.7379  
www.solerpalau-usa.com




Soler&Palau  
Ventilation Group



## ASSEMBLY INSTRUCTION FOR KNOCKED DOWN RAINHOODS

1. Align side "A" with top (C).
2. Fasten securely with 1/4" sheet metal screws provided.
3. Attach side "B" following the same steps.
4. On sizes 48" and larger, attached support angle (D) to front edge as shown, with sheet metal screws provided.
5. Attach (optional) wire birdguard (when purchased) to factory flanges/rain channels or to field provided 1 1/2" X 1 1/2" galvanized formed angle (approx. 18 ga.).
6. Securely fasten to factory wall box flanges (drill as required) and thoroughly flash and caulk wall opening and seams.

## Accessories

Application	Model #	Old Model #	Output signal					Communication	
			Active	1 SPDT relay	2 SPDT relays	4 SPDT relays	2 analog 4...20 mA or 2...10 V	CAN bus	BACnetMS/TP
 Communication Modules	C-22G-5A	EXT-OP-6000-A	■	■			■	■	
	C-22G-5B	EXT-OP-6000-B	■		■			■	
	C-22G-5C	EXT-OP-6000-C	■				■		
 Relay Unit	C-22G-50	EXT-OP-6100	■			■	■		
 High-Low Kit	A-22G-A14	EXT-OP-6000-HL							

For all gas monitoring accessories, please see the Product Guide and Price List on the Belimo website.