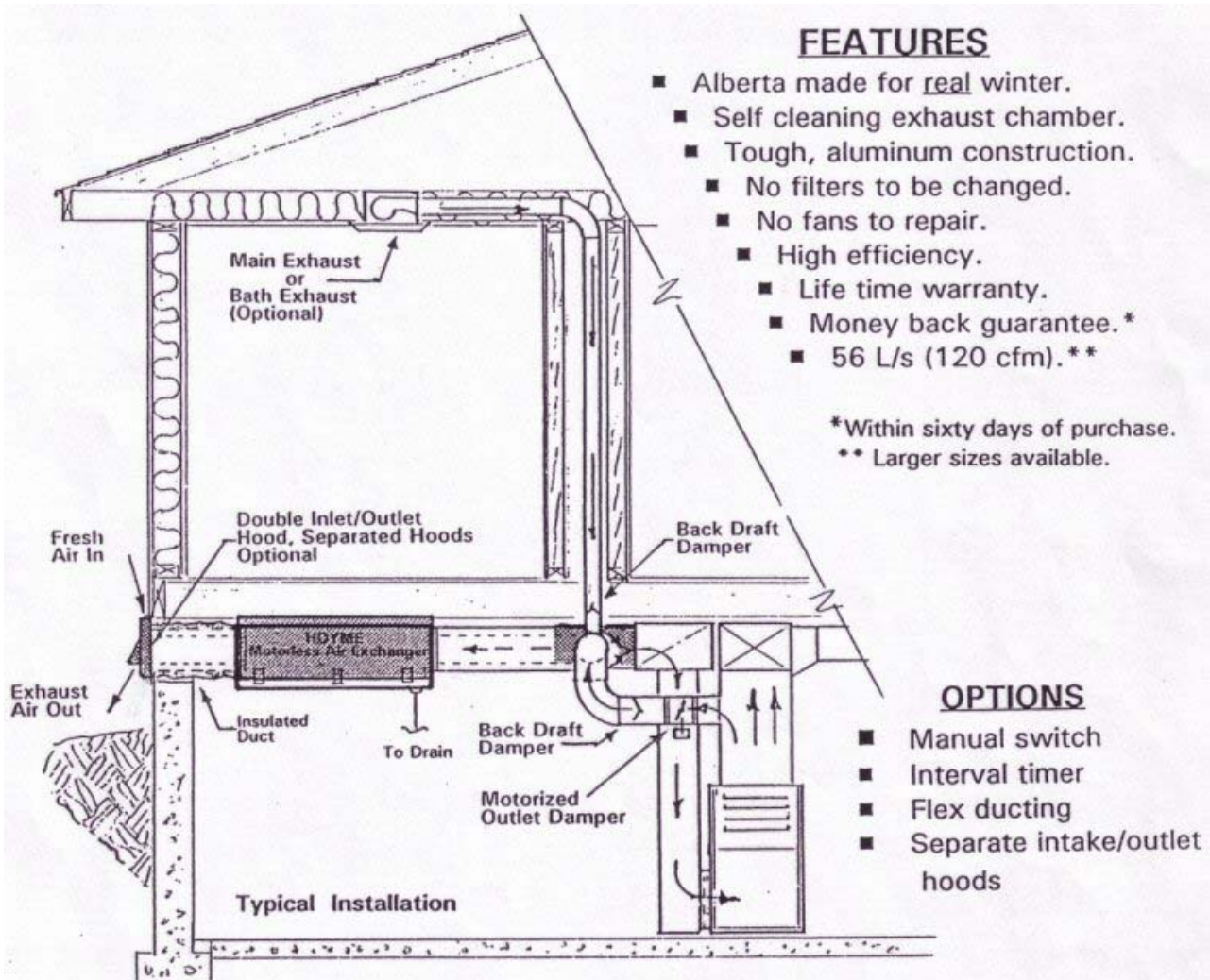


INSTALLATION INSTRUCTIONS FOR THE HOYME AIR EXCHANGER (HAE) 100 CFM, 200 CFM, 500 CFM MODELS



Inside view



FEATURES

- Alberta made for real winter.
- Self cleaning exhaust chamber.
- Tough, aluminum construction.
- No filters to be changed.
- No fans to repair.
- High efficiency.
- Life time warranty.
- Money back guarantee.*
- 56 L/s (120 cfm).**

*Within sixty days of purchase.

** Larger sizes available.

OPTIONS

- Manual switch
- Interval timer
- Flex ducting
- Separate intake/outlet hoods

*(LARGER SIZES AVAILABLE UPON REQUEST)

** (MANUAL SWITCH, INTERVAL TIMER AND FLEX DUCTING ARE OPTIONAL)

INSTALLATION INSTRUCTIONS for the 100 & 200 CFM MOTORLESS AIR EXCHANGER (HAE)

READ COMPLETE INSTRUCTIONS BEFORE STARTING THE INSTALLATION OF THIS PRODUCT.
THIS INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ENFORCING AUTHORITIES
Air supply and installation shall be in accordance with National Building Codes and/or Local Codes.

DESIGNED TO BE INTER-CONNECTED TO A CONTINUALLY RUNNING FURNACE FAN SYSTEM.
Motorized dampers are not usually required except in areas having long periods of cold weather. Heat during the firing cycle usually melts the ice formed and is drained off through a ½" plastic hose.

1. SELECT LOCATION FOR THE **HAE**, PREFERABLY CLOSE TO OUTSIDE WALL. BOTTOM COVER MUST BE EXPOSED FOR CLEANING. MOUNT THE **HAE** SECURELY USING SCREWS AND TWO METAL BRACKETS SUPPLIED **#10**. **NOTE:** TO ASSIST WATER DRAINAGE, MOUNT **HAE** LEVEL WITH 1/2" DRAIN SPOUT TOWARDS FURNACE AND ALL 5" DIA. DUCTS TO SLOPE TOWARDS THE **HAE**. **SUGGESTION:** TO ASSIST AIR FLOW AND DRAINAGE, USE RIGID DUCTING INSTEAD OF FLEX i.e. GALV., PLASTIC OR AL.
2. CUT AN 8" HOLE ON RETURN PLENUM, (9" ON 200 CFM MODEL) PREFERABLY ON FLAT SIDE OF DROP PLENUM JUST PAST INNER CORNER AND MOUNT **DOUBLE PLENUM CONNECTOR #3**.
3. SELECT LOCATION ON THE HOT SUPPLY PLENUM CLOSE TO THE FURNACE AND CUT A 5" HOLE FOR THE ADJUSTABLE **MANUAL DAMPER #5b**. (SEE **BALANCING AIR FLOW** ON PAGE 2)
4. IF OTHER EXHAUST FANS ARE DIRECTED THROUGH THE HAE, MOUNT BACKDRAFT DAMPER **#5a** TO MANUAL DAMPER **#5b**.
5. JOIN THE DOUBLE PLENUM CONNECTOR **#3** TO **#5a** or **#5b** ON THE SUPPLY PLENUM WITH 5" DIAMETER SILVER DUCTING **#8** SUPPLIED. (OPT. EXHAUST KIT LOCATION. SEE SEPARATE SHEET)
6. CUT 8" (9" FOR 200 CFM) OPENING IN OUTSIDE WALL AND INSERT DOUBLE HOOD **#2** FROM OUTSIDE. FASTEN INTO PLACE WITH PROPER SCREWS. ***(IF TWO SEPARATE OUTSIDE HOODS ARE USED, SEE INFORMATION ON THE HAE-2001-KIT, PAGE 2)** THEN CONTINUE WITH 7.
7. FASTEN 5" DIA. FLEX DUCTING **#6** TO THE 5" SLEEVE OF THE DOUBLE HOOD ***(OR TO THE TWO-HOOD CONNECTOR)**. FASTEN 5" SLEEVE WITH A SHEET METAL SCREW. **STRETCH** THE 5" DIA. FLEX DUCTING TO REACH THE **HAE** AND CUT TO LENGTH.
8. FEED 8" (9") INSULATED FLEX DUCTING **#7** OVER THE 5" NON-INSULATED DUCTING AND FASTEN TO THE 8" (9") DIA. DOUBLE HOOD ***(OR TWO-HOOD CONNECTOR)***. **STRETCH** 8" (9") DIA. DUCTING TO REACH **HAE** AND CUT TO LENGTH.
9. FASTEN THE LOOSE END OF 5" FLEX DUCTING **#6** TO 5" **HAE** EXTENSION SLEEVE **#6a** INSERT EXTENSION SLEEVE **#6a** INTO THE END OF **HAE** AND FASTEN WITH SHEET METAL SCREW.
10. STRETCH AND CONNECT LOOSE END OF 8" (9") INSULATED DUCTING **#7** TO THE **HAE**. (DUCTING THAT IS NOT STRETCHED REDUCES AIR FLOW SPACE BETWEEN 5"& 8" (9")DIA. DUCTS.)
11. FOLLOW THE ABOVE PROCEDURE WHEN CONNECTING FLEX DUCTING BETWEEN THE **HAE** AND DOUBLE PLENUM CONNECTOR **#3**. INSULATED DUCTING IS NOT RECOMENDED HERE.

NOTE: FASTEN ALL DUCTING IN A NEAT AND TIDY MANNER, FREE FROM PUNCTURES, EXCESSIVE HEAT AND WEAR. CAREFULLY TAPE ALL ENDS. SUPPORT FLEX DUCTING AS LEVEL AS POSSIBLE TO PREVENT WATER POCKETS FORMING DURING DEFROSTING MODE.

12. CONNECT 1/2" DRAIN HOSE **#9**. TO PROVIDE PROPER DRAINAGE, LEVEL OF HOSE MUST **ALWAYS** BE LOWER THAN THE BOTTOM OF THE **HAE**.

HAE INSTRUCTIONS (Continued)

BALANCING AIR FLOW: The **INLET** duct is to be left wide open to allow for maximum fresh air flow during continual operation of the furnace fan. This **air flow can be increased** by adding a 90 degree elbow faced downstream inside the return plenum. The **STALE air leaving can also be increased** by adding a 90 degree elbow faced upstream inside the supply plenum. This stale air leaving can also be regulated by adjusting the **MANUAL EXHAUST DAMPER #5b. Suggestion:** Set this manual exhaust damper to be two-thirds open for starters.

TEST FOR MANUAL DAMPER SETTING WHILE FURNACE FAN IS RUNNING BUT FLAME IS NOT FIRING:
1) If outside temperature is zero (C), then incoming air should enter the plenum at approximately 18 (C) while the air leaving should read approximately 10 (C). **2)** If outside temperature is -30 (C), then incoming air should enter the plenum at approximately 14 (C) while the air leaving should read approximately 0 (C). Adjust the manual damper to arrive at these approximate temperatures. Ice formed by the damp air leaving will melt during the times furnace fires. **REMEMBER:** AIR MUST LEAVE THE DWELLING TO ALLOW AIR TO ENTER AND THAT AIR ENTERING MUST BE WARMED BY THE RIGHT AMOUNT OF AIR LEAVING.

>MODEL "HAE-2000- XXX" C/W: ITEMS #1, 2, 3, 5b, 6a, 9, & 10. OTHER ITEMS ARE OPTIONAL.

- #1 - HAE-2000 AIR EXCHANGER. (W=14", H=13", L=50").
- #2* 8" (9") DOUBLE HOOD, (INLET & EXHAUST).
- #3 - DOUBLE PLENUM CONNECTOR, (SUPPLY & RETURN).
- #4 - 8" (9") INLET DAMPER, 24VAC, 5 WATTS, POWER CLOSED.
- #5 - 5" EXHAUST DAMPER, 24VAC, 5 WATTS, POWER OPEN.
- #5a- 5" BACKDRAFT DAMPER OR ADJUSTABLE MANUAL DAMPER #5b
- #6 - 5" FLEX DUCTING. NOT INSULATED, 25 FT.. CUT TO LENGTH AS REQUIRED.
- #6a - 5" HAE EXTENSION SLEEVE X 4.
- #7 - 8" (9") FLEX DUCTING, INSULATED, 25 FT.. CUT TO LENGTH AS REQUIRED.
- #8 - 5" SILVER FLEX DUCTING X 4 FT.
- #9 - 1/2" PLASTIC DRAIN HOSE X 15 FT.
- #10 - MOUNTING BRACKETS X 2.
- #11 - 8" (9") DUCT CLAMPS X 4; 5" DUCT CLAMPS X 6.

> MODEL "HAE-2001-XXX":

EXCHANGES THE 8" (9") DOUBLE HOOD FOR: A 6" (8") INLET HOOD; A 5" EXHAUST HOOD AND A TWO-HOOD CONNECTOR (#2a). OUTSIDE HOODS SHOULD BE PLACED AT LEAST 6 FT. APART AND THE INSIDE TWO-HOOD CONNECTOR AS CLOSE AS POSSIBLE TO THE OUTSIDE HOODS. JOIN 6" DIA. OF CONNECTOR TO 6" INLET HOOD & JOIN 5" DIA. OF CONNECTOR TO 5" EXHAUST HOOD WITH INSULATED DUCTING. TWO-HOOD CONNECTOR MUST ALSO BE INSULATED. FASTEN CONNECTOR WITH METAL STRAPS. RETURN TO INSTRUCTION NO. 7.

NOTE: ALL COMPONENTS MAY BE ORDERED SEPARATELY. SEE PRICE LIST FOR DETAILS.

SPECS: HAE-XXXX-100 CFM AIR EXCHANGER: W=14", H=13", L=50". ALUMINUM CASE & CORE.

HAE-XXXX- 200 CFM AIR EXCHANGER: W=14", H=17", L=50". ALUMINUM CASE & CORE.

SHIPPING WEIGHT OF "HAE-2000/2001-100/200"=53 LBS. (24Kg). TWO CARTONS.

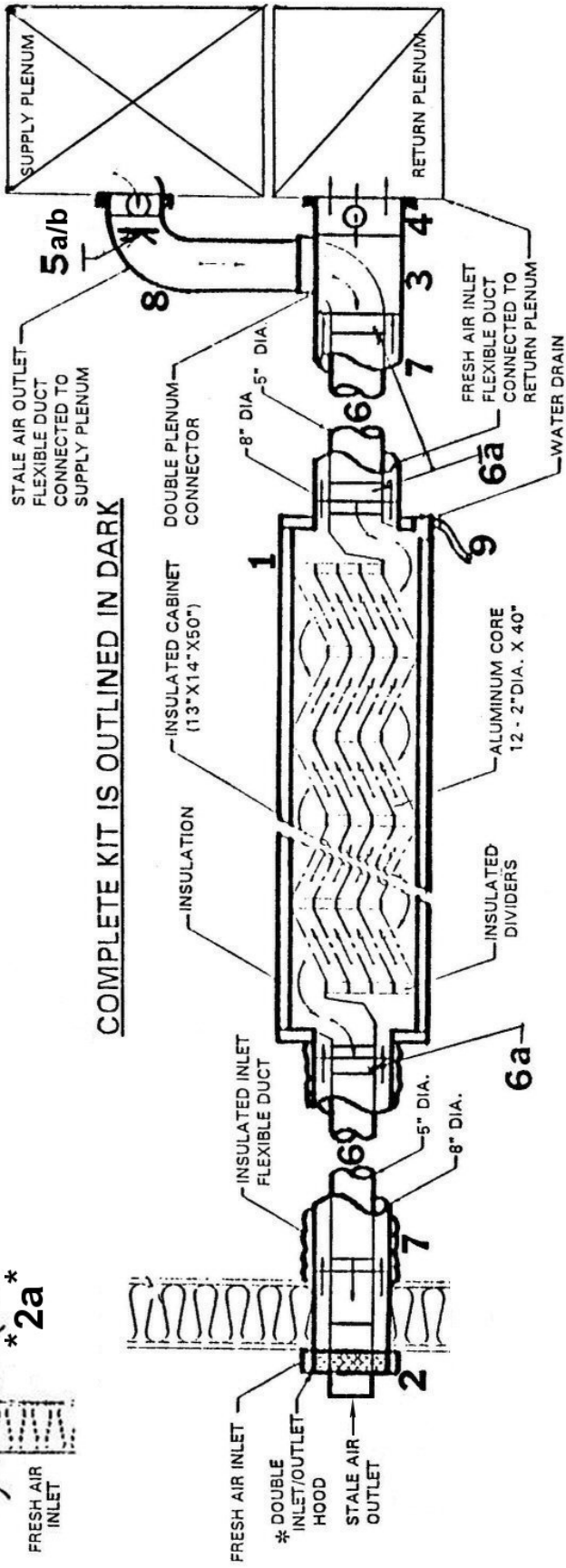
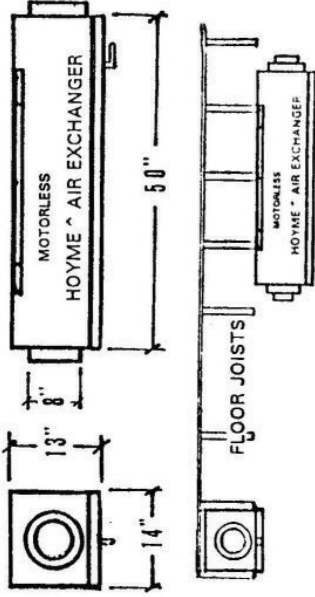
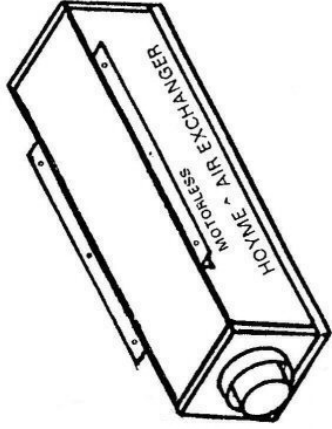
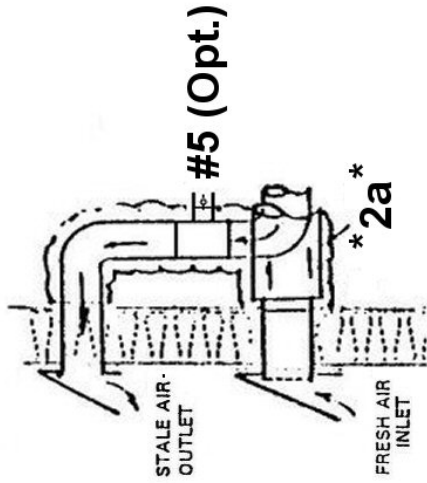
EXHAUST KIT: FOR BATHROOM, KITCHEN AND OTHER AREAS, SEE FIG. 2

COMMERCIAL: MODEL "HAE-COMM-500"

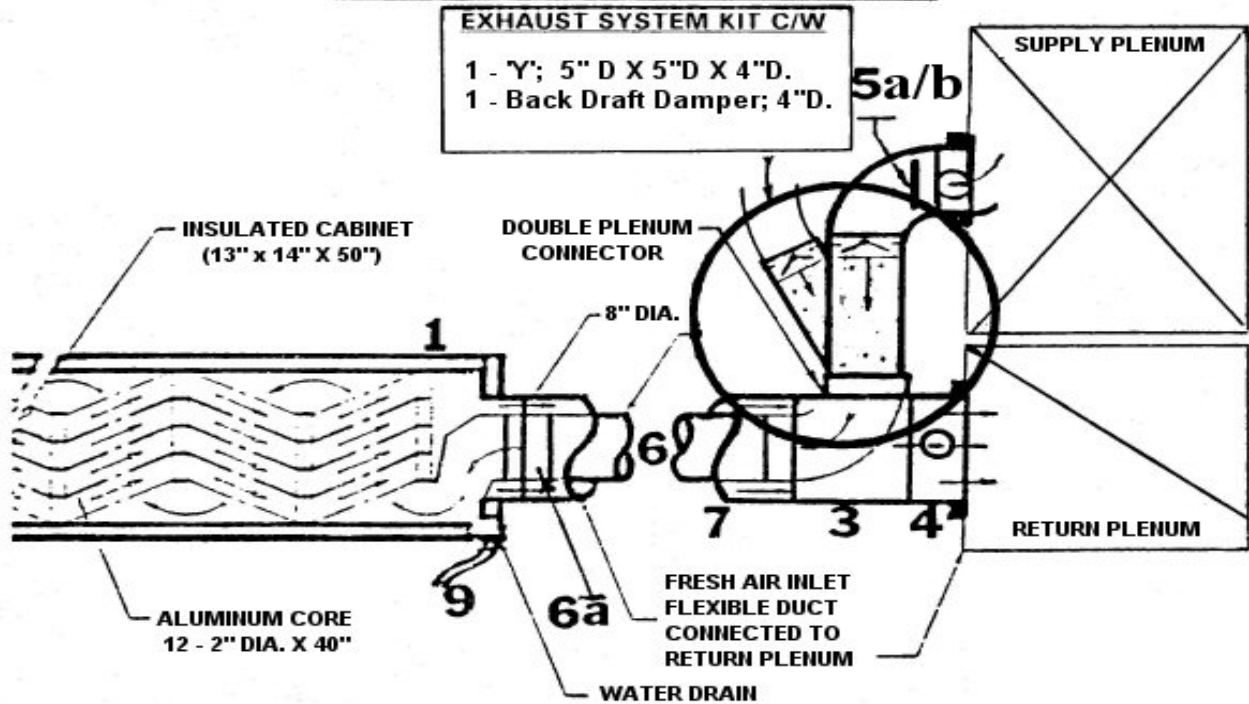
500CFM, W=14", H=23", L=100" SEE FIG. 3

MOTORLESS AIR EXCHANGER

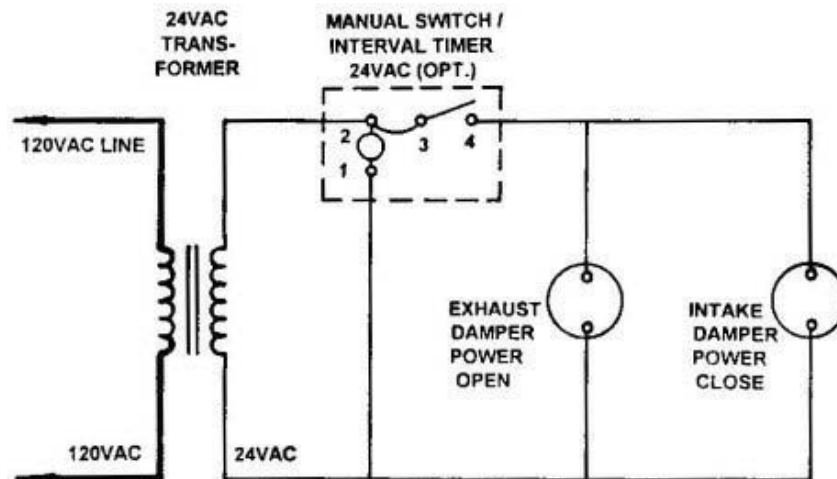
WITH HEAT RECOVERY - FURNACE FAN DOES IT ALL



EXHAUST SYSTEM KIT



SCHEMATIC WIRING DIAGRAM FOR DAMPERS USED IN THE 'HAE' DEFROSTING CYCLE (OPT.)



DEFROSTING CYCLE:

APPROXIMATELY 1 TO 2 HR / 24HRS. OF DEFROSTING INCREASES THE EFFICIENCY OF HEAT TRANSFER. DURING THIS CYCLE, INTAKE DAMPER CLOSES TO STOP COLD AIR INTAKE WHILE EXHAUST AIR IS ALLOWED TO FLOW THROUGH THE UNIT AND IS DIRECTED BACK INTO THE HOUSE THROUGH EXHAUST DAMPER #5 (see diagram 2a). WATER IS DRAINED OFF THROUGH ½" PLASTIC HOSE.

COMMERCIAL MOTORLESS AIR EXCHAGER “HAE-COMM-500” = 500CFM.

WIDTH = 14”, HEIGHT = 23”, LENGTH = 100”.
SHIPPING WEIGHT = 80 LBS



FIG. 3

The regular commercial ‘HAE-COMM-500’ is 14” x 23” x 100” and handles up to 500 CFM. This unit has two 8” diameter intakes and two 8” diameter exhaust ports projecting out both ends. C/W 15’ of ½” plastic drain hose and four metal hanger brackets. Installer is to supply 8” diameter ducting, two all-weather hoods, manual balancing damper and other necessary connectors for intake and exhaust. Fans may also be necessary if not connecting to a forced air heating system.



Interior view (bottom)