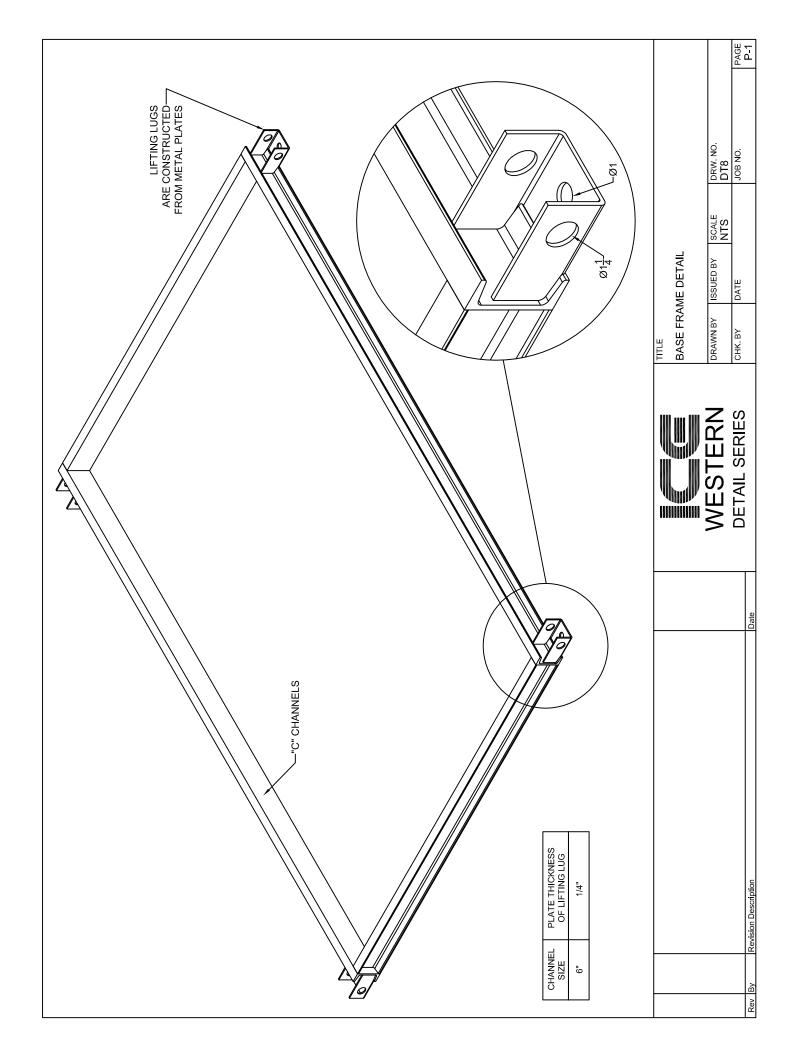
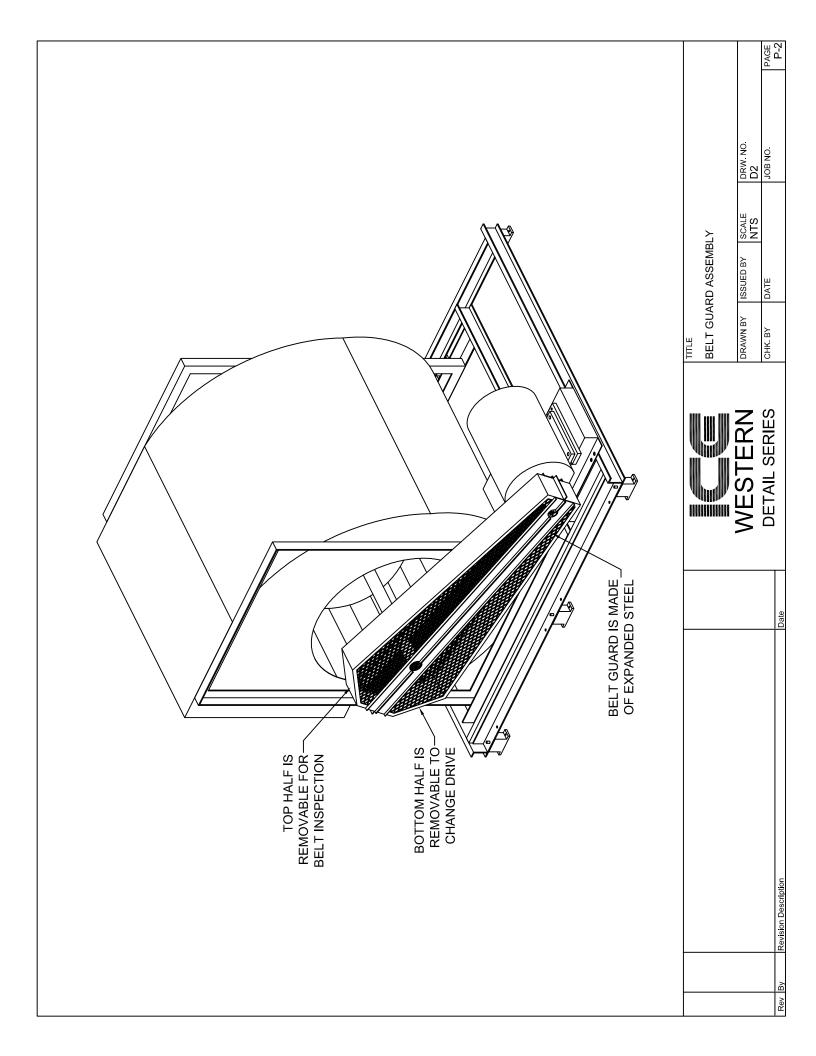
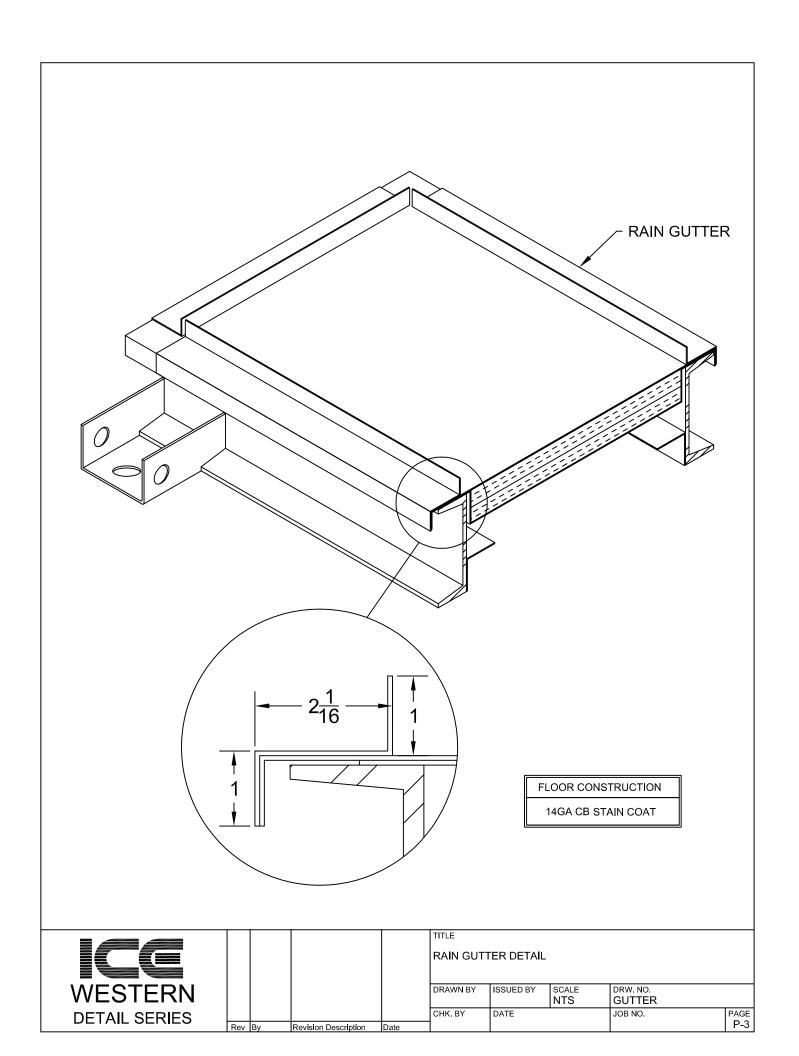
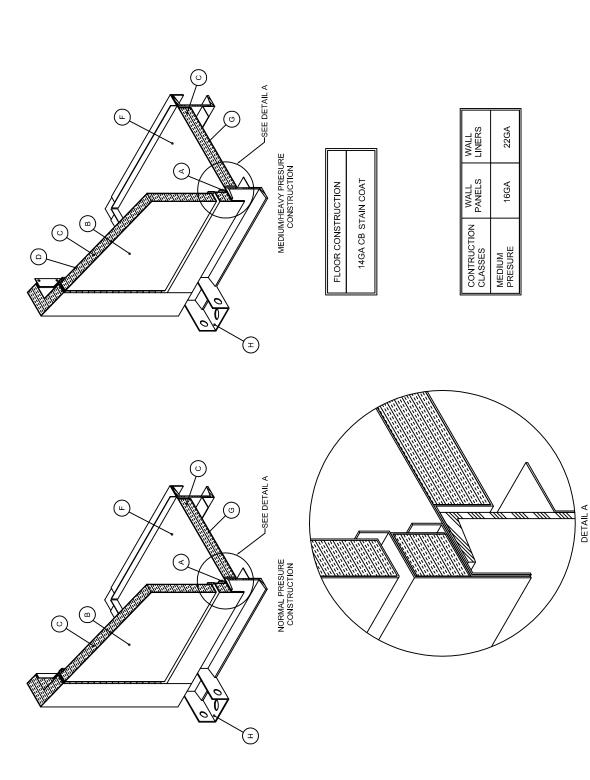
Construction Detail

Base Frame Detail	.P-1
Belt Guard Assembly	.P-2
Rain Gutter Detail	P-3
STD Casing Construction	P-4
Sloped Roof Plan	P-5
Standard Corner Construction Detail	.P-6
STD Hinged Door Construction Detail	P-7
Panel Construction and J-Clip Construction Medium/Heavy Construction	P-8
Split Section Detail	P-9
Damper Assembly	.P-10
V-Bank Filter Assembly	P-11
Explosion Proof Box Detail	P-12
Explosion Proof Connection on Scroll Compressor Detail	P-13
Air-Foil Control Damper Specifications	.P-14
Access Door Specifications	P-17









Z-bar

This 2" collar is installed around the perimeter of the unit floor to ensure that the unit is internally watertight.

Casing (e)

are constructed out of satin coated steel. Wall panels are 2" thick. Roof seams are broken outward to provide a lapped watertight sea. All panel seams are caulked and sealed during assembly to produce an airtight unit. Wall and roof panels

C Insulation :

Walls are insulated with 2" thick, 1.5 lb/cubic ft density rigid neoprene coated insulation.

D Casing Liner:
Solid metal liner
is provided to protect the insulation.

E Floor:

Satin coated steel floor is installed on the base. Floor seams are continously welded.

F Base Liner:

Solid metal liner is provided to protect the insulation.

Base Construction :

The base is constructed from a perimeter channel iron frame with intermediate channel and angle iron supports.

H Lifting Lug:

Lifting lug is constructed from 1/4" metal plate

STD CASI	STERN DRAWN BY	IL SERIES CHK. BY
	WE	DETAI

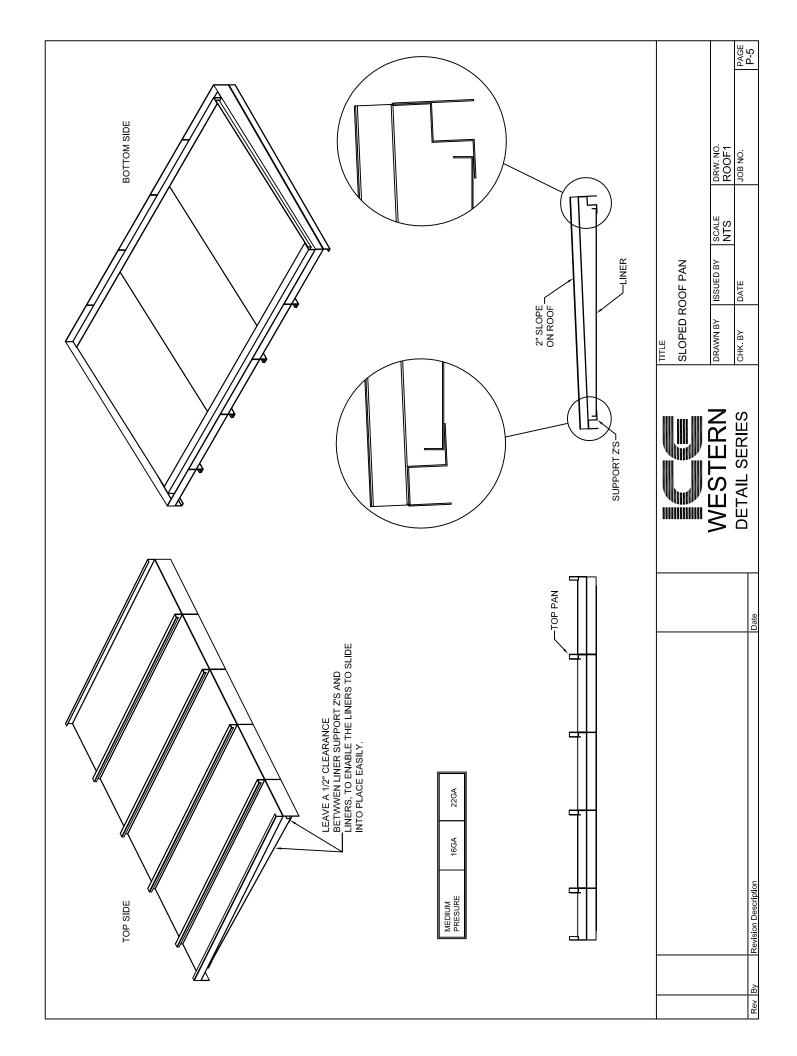
Rev By

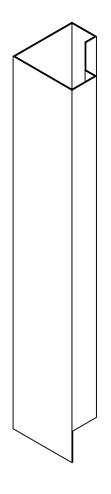
z	
ST:	
3	
STR	
Ö	
0	
NS/	
S	
STD	
0,	

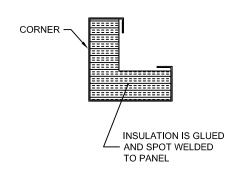
TITLE

DRW NO	DT2B	ON BOC
SCALE	NTS	
ISSUED BY		DATE
DRAWN BY		CHK. BY

PAGE P-4





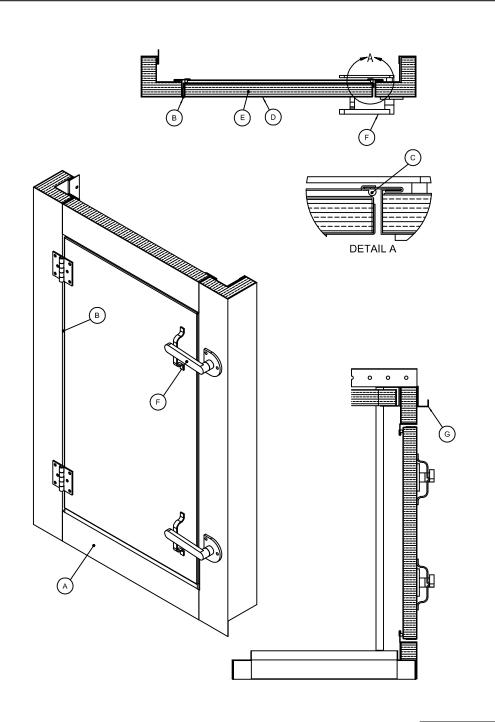


CONTRUCTION CLASSES	PANELS	LINERS
MEDIUM PRESURE	16GA	22GA



				TITLE	
				STANDARD) CC
				DRAWN BY	ISSI
				CHK. BY	DAT
Rev	Ву	Revision Description	Date		

STANDARD	CORNER C	CONSTRUCT	TON DETAIL	
DRAWN BY	ISSUED BY	SCALE NTS	DRW. NO. DT1B	
CHK. BY	DATE		JOB NO.	PAGE P-6



(A) Door Frame:

Door frames are made from 16 ga satin coated steel.

B Door Hinge:

Stailes steel piano hinges are used to attach the door.

(C) Door Seal:

Close cell neoprene bulb type seal is used around the door to prevent air leakage.

D Door Material :

Doors are manufactured from satin coated steel.

(E) Insulation:

Doors are inuslated with 2", 1.5 lbs./cubic ft.density rigid fiberglass insulation. A solid liner is provided to protect the insulation.

(F) Handles:

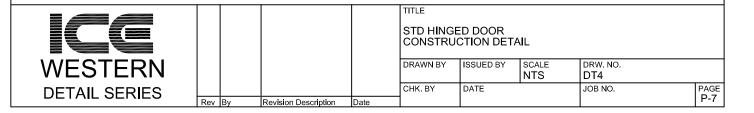
Heavy duty cast handles of non-corrosive alloy of zinc and aluminum are installed on both sides of the door for easy access.

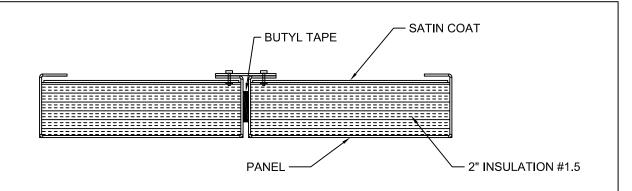
(Vent-Lok model 310)

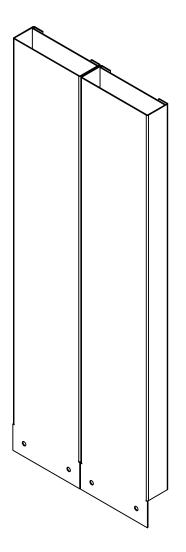
(G) Rain Lip:

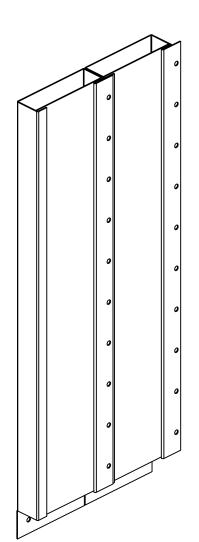
A rain lip is provided on outdoor units.

DOOR PANELS	DOOR LINERS
16GA	22GA









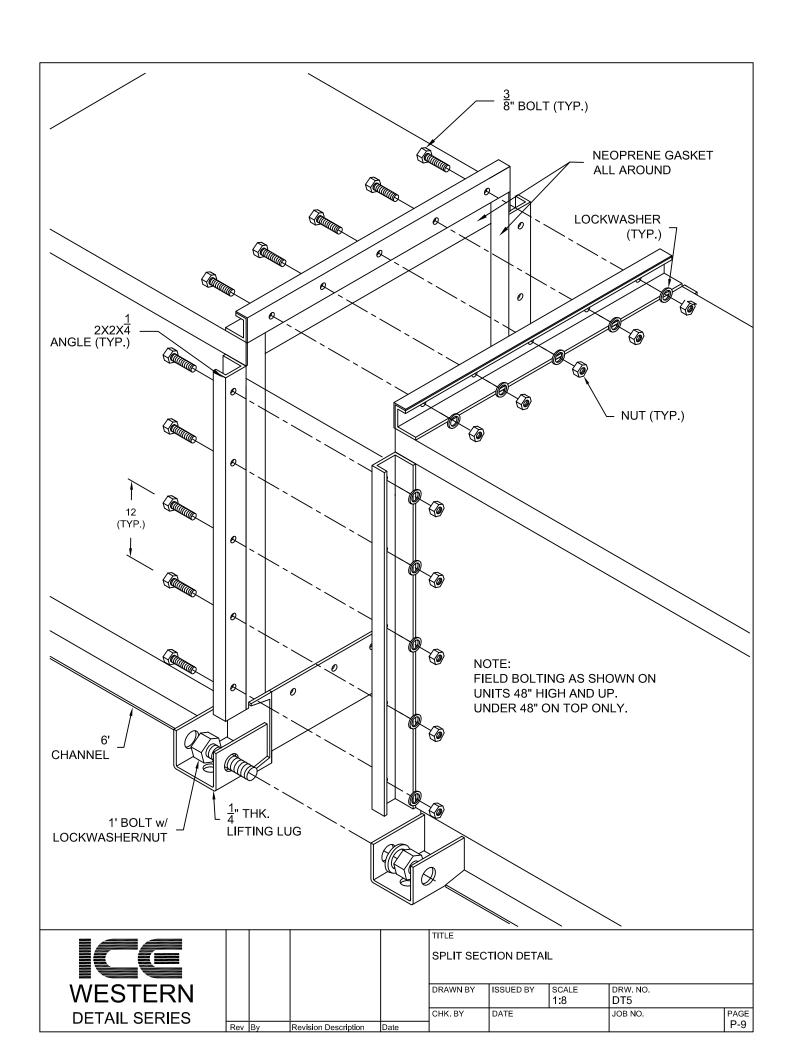
CONTRUCTION CLASSES	PANELS	LINERS
MEDIUM PRESURE	16GA	22GA

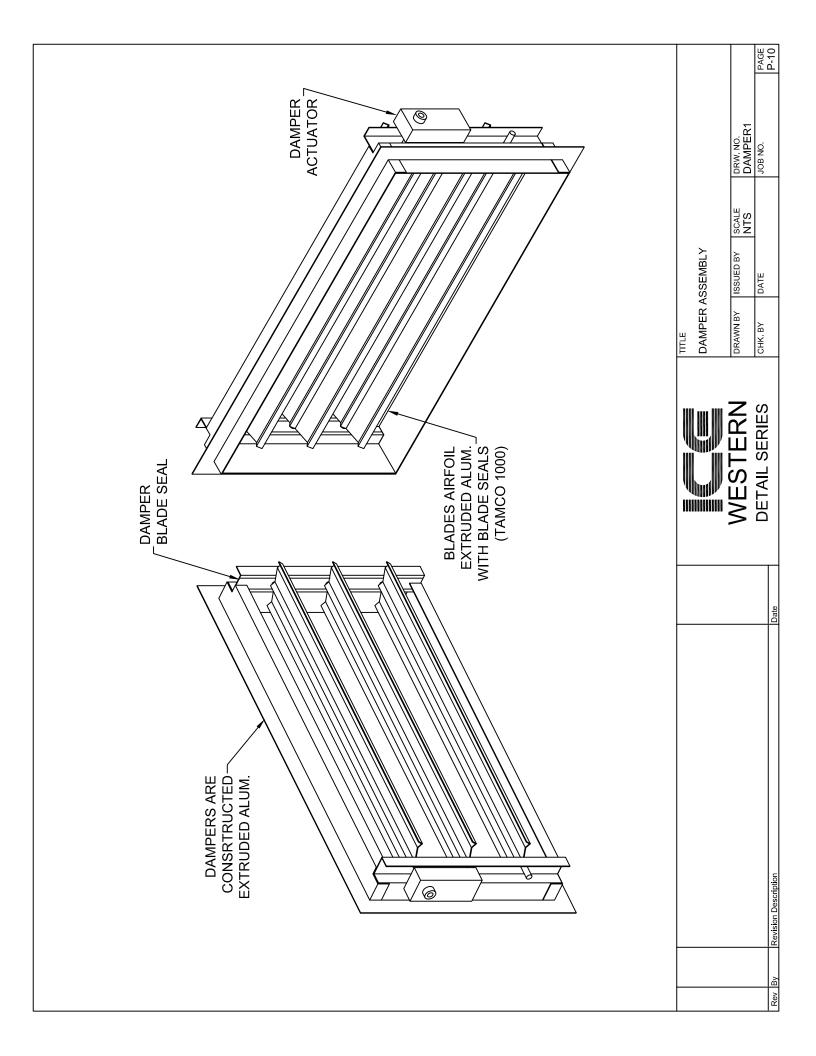


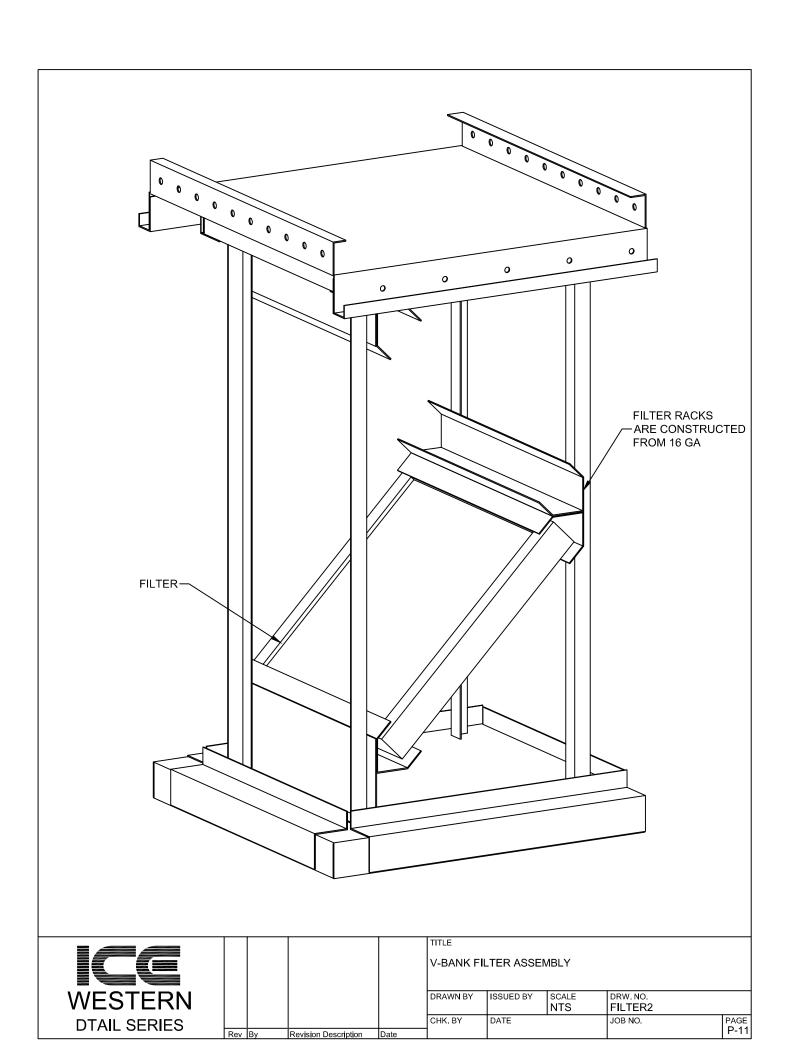
				PANEL COI J-CLIP CON	
				MEDIUM/HI	
				DRAWN BY	ISSUED BY
				CHK. BY	DATE
Rev	By	Revision Description	Date		

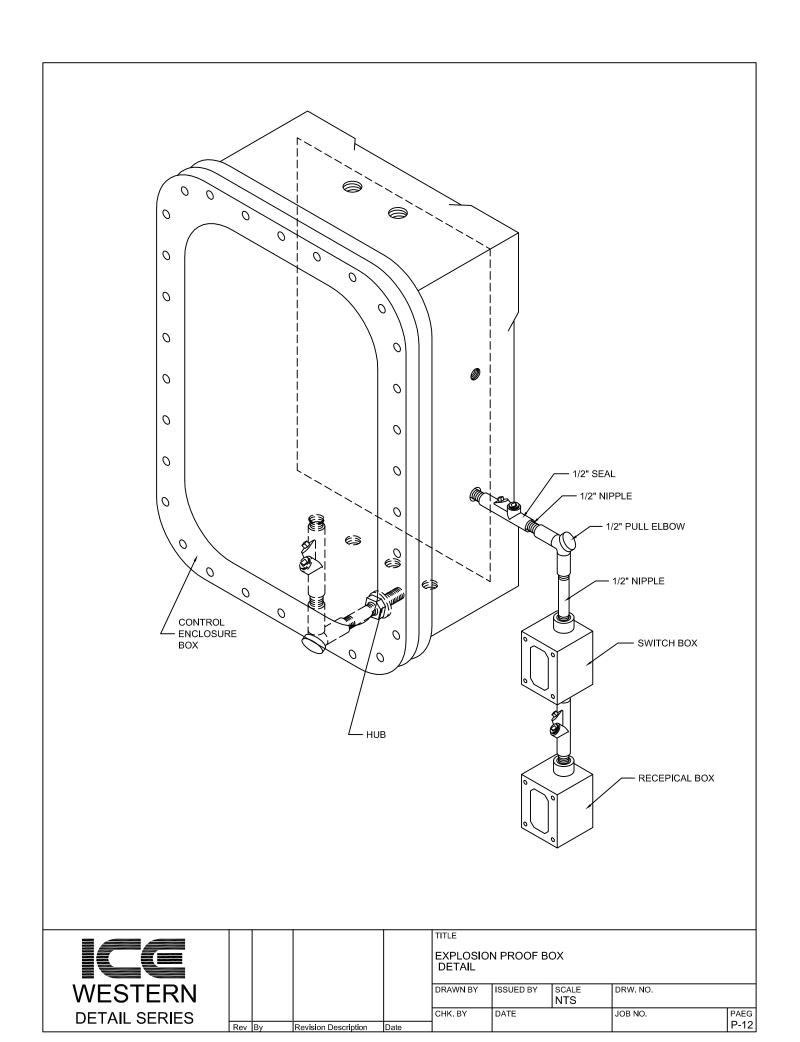
TION AND TION DNSTRUCTION

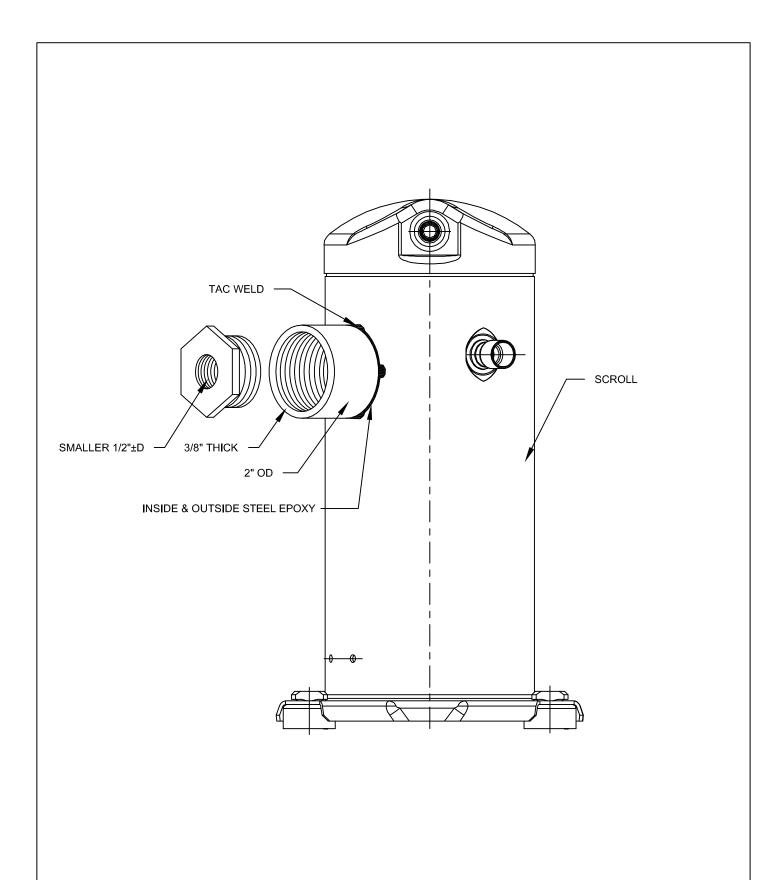
RAWN BY	ISSUED BY	NTS	DT3	
CHK. BY	DATE		JOB NO.	PAGE P-8













Davi	D	Davisias Dassistias	Data
Rev	Ву	Revision Description	Date

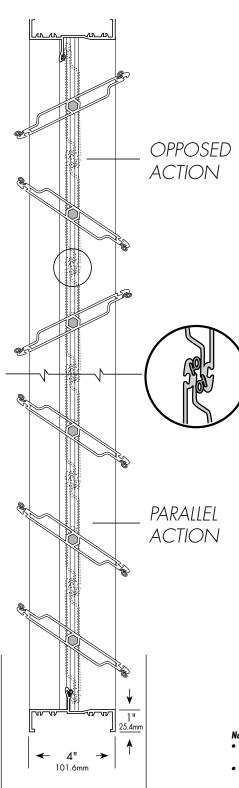
EXPLOSION PROOF CONNECTION ON SCROLL COMPRESSOR DETAIL

DRAWN BY ISSUED BY SCALE NTS DRW. NO.

CHK. BY DATE JOB NO.

PAGE P-13

SPECIFICATIONS



6"

152.4mm

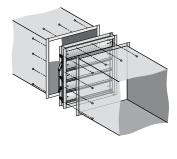
fully open

SERIES 1000 AIR-FOIL CONTROL DAMPER

- Extruded aluminum (6063T5) damper frame is not less than .080" (2.03mm) in thickness. Damper frame is 4" deep.
- Blades are extruded aluminum (6063T5) profiles.
- Blade seals are extruded EPDM. Frame seals are extruded silicone. Seals are secured in an integral slot within the
 aluminum extrusions
- Bearings are composed of a Celcon inner bearing fixed to a 7/16" (11.11mm) aluminum hexagon blade pin, rotating
 within a polycarbonate outer bearing inserted in the frame, resulting in no metal-to-metal or metal-to-plastic contact.
- Linkage hardware is installed in the frame side and constructed of aluminum and corrosion-resistant, zinc-plated steel, complete with cup-point trunnion screws for a slip-proof grip.
- Dampers are designed for operation in temperatures ranging between -40°F (-40°C) and 212°F (100°C).
- Leakage does not exceed 3 cfm/ft.2 (15.2 l/s/m²) against 1" (.25 kPa) w.g. differential static pressure.
- Dampers are available with either opposed blade action or parallel blade action.
- Dampers are made to size required without blanking off free area.
- Dampers are available in two mounting types: i.e., "Installed in Duct" or "Flanged to Duct".
- Installation of dampers must be in accordance with current manufacturer's installation guidelines provided with each shipment of TAMCO dampers. (Note that all technical information available on TAMCO's web site at www.tamco.ca supersedes and takes precedence over all information contained within the printed catalog.)
- Intermediate or tubular steel 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

2" added to duct width & height dimensions



"INSTALLED IN DUCT" TYPE

1/2" deducted for clearance from width 8 height dimensions unless otherwise specified



Note:

- To reduce pressure drop, use "Flanged to Duct" type for sizes under 9 ft.² (.83m²).
- Suitable for operation in breathable air environments within stated temperature range.
- Dampers sized for duct openings exceeding 37½" (953mm) in height are equipped with a stiffener bar at mid-height to strengthen and maintain air leakage tolerances.
- For open blade clearance in tight spaces, consider the Series 1400 4" wide air-foil blade option.

For additional information, refer to:

- Series 1000 SW Specification Sheet
- Series 1500, 1500 SW, 1000 & 1000 SW Pressure Drop
- Series 1500, 1500 SW, 1000 & 1000 SW Free Area Charts
- Aluminum Standard Configurations
- TAMCO Aluminum Damper Torque Requirements
- Multiple-Section Horizontal Jack Shafts
- Configurations Using Vertical Jack Shafts
- Multiple-Section Damper Jumpers
- Square-to-Round Transition Option
- TAMCO Aluminum Damper Installation Guidelines
- Series 1400 4" Wide Air-Foil Blade Control Damper Specification Sheet
- Series 1400 4" Wide Air-Foil Blade Control Damper Free Area Charts

PERFORMANCE DATA

S E R I E S 1 0 0 0

AIR-FOIL CONTROL DAMPERS

LEAKAGE RATING

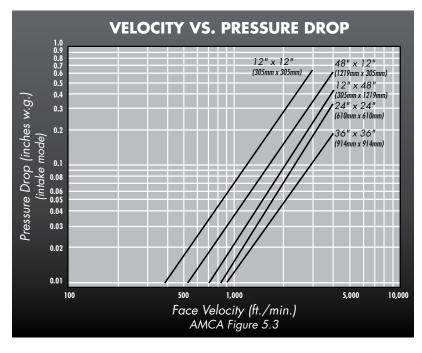
Damper Width	1 in. w.g.	4 in. w.g.	8 in. w.g.
12" (305mm)	1A	1	11
24 " (610mm)	1A	1	11
36" (914mm)	1A	1	n/a
48" (1219mm)	1A	1	n/a
60" (1524mm)	1A	1	n/a

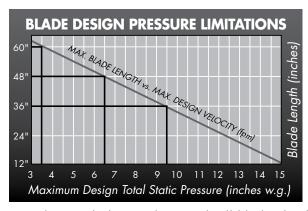
Leakage testing was conducted in accordance with AMCA Standard 500-D-98. Holding torque applied was 5.2 in.-lbs./sq. ft. on opposed blade dampers and 7 in.-lbs./sq. ft. on parallel blade dampers AMCA Standard 500-D-98 states that air leakage is based on operation between $50^{\circ}F$ ($10^{\circ}C$) and $104^{\circ}F$ ($40^{\circ}C$). All tests were performed with 120 in.-lbs. in resulting in a maximum of 120 in.-lbs./ft² with the $12'' \times 12''$ damper.

The following sizes of TAMCO Series 1000 dampers were tested: $12" \times 12" (305 \text{ mm} \times 305 \text{ mm}), 24" \times 24" (610 \text{ mm} \times 610 \text{ mm}), 48" \times 12" (1219 \text{ mm} \times 305 \text{ mm})$ $12" \times 48" (305 \text{ mm} \times 1219 \text{ mm}), 36" \times 36" (914 \text{ mm} \times 914 \text{ mm}), 60" \times 36" (1524 \text{ mm} \times 914 \text{ mm}).$

LEAKAGE CLASS DEFINITIONS

Pressure	LEAKAGE, ft ³ /min/ft ² (l/s/m ²)				
11033616	Required Rating		Extended Ranges (Opt.)		
Class	1" / 0.25 kPa	4" / 1.0 kPa	8" / 2.0 kPa	12" / 3.0 kPa	
1A	3 / 15.2	n/a	n/a	n/a	
1	4 / 20.3	8 / 40.6	11 / 55.9	14 / 71.1	
2	10 / 50.8	20 / 102	28 / 142	35 / 178	
3	40 / 203	80 / 406	112 / 569	140 / 711	





Series 1000 dampers exceeding the maximum design pressure due to blade length may be used by reducing the width of the damper sections and/or by increasing the number of sections per damper to maintain a blade width compatible with the required system pressure.

(Example: 1 section damper of 60"w X 36"h (1524mm x 914mm) at 5" (1.24kPa) w.g. would need to be built in 2 sections of 30"w X 36"h (762mm x 914mm).)

SUGGESTED SPECIFICATIONS

SERIES 1000 AIR-FOIL CONTROL DAMPER

- 1.0 Extruded aluminum (6063T5) damper frame shall not be less than .080" (2.03mm) in thickness. Damper frame to be 4" deep.
- **1.1** Blades to be extruded aluminum (6063T5) profiles.
- **1.2** Blade seals shall be of extruded EPDM. Frame seals shall be extruded silicone. Seals are to be secured in an integral slot within the aluminum extrusions.
- **1.3** Bearings are to be composed of a Celcon inner bearing fixed to a ⁷/16" (11.11mm) aluminum hexagon blade pin, rotating within a polycarbonate outer bearing inserted in the frame, resulting in no metal-to-metal or metal-to-plastic contact.
- **1.4** Linkage hardware shall be installed in the frame side and constructed of aluminum and corrosion-resistant, zinc-plated steel, complete with cup-point trunnion screws for a slip-proof grip.
- 1.5 Dampers are to be designed for operation in temperatures ranging between -40°F (-40°C) and 212°F (100°C).
- **1.6** Dampers shall be available with either opposed blade action or parallel blade action.
- 1.7 Leakage shall not exceed 3 cfm/ft² (15.2 l/s/m²) against 1" (.25 kPa) w.g. differential static pressure.
- 1.8 Pressure drop of a fully open 48" x 48" (1220mm x 1220mm) damper shall not exceed .02" (.004kPa) w.g. at 1000 fpm (5.08 m/s).
- **1.9** Dampers shall be made to size required without blanking off free area.
- **1.10** Dampers shall be available in two mounting types: i.e., "Installed in Duct" or "Flanged to Duct".
- 1.11 Installation of dampers must be in accordance with current manufacturer's installation guidelines provided with each shipment of dampers.
- **1.12** Intermediate or tubular steel structural support is required to resist applied pressure loads for dampers that consist of two or more sections in both height and width.

Access Door Series ...

JUL Recognized Component

Double Wall Access Door

R Factor of 6.5 per inch of door thickness

Field Reglazeable Windows

Field Replaceable Gaskets

Zero Total CFM Air Leak ... at 10.0" wg

Air Infiltration Performance Valid for Inswing and Outswing Doors

Foamed Santoprene® – Extruded
Gasket Impervious to Virtually all
Chemicals and Highly Flexible in
Extreme Heat and Cold

Door Thicknesses Available: 1", 1.5", 1.7", 2.0",4"0.

Specifications



DOOR TYPE

 High performance double wall access doors for HVAC air handling units. Prehung, insulated, galvanized door leaf with aluminum frame.

DOOR CONSTRUCTION

- Two inch thick door, pressure injected with 2.2 pounds of polyurethane foam per cubic foot.
- · Hot dipped galvanized steel finish.
- Extruded aluminum perimeter framing with steel sheets front
 - and back bond with the polyurethane foam to create a seamless rigid panel with an insulating value of R13.
 - Thermal door panel uses a high density polyurethane thermal break.

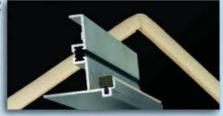
MASTER FRAME CONSTRUCTION

- Frame is fabricated of commercial quality aluminum extrusions.
- Master frame is shipped completely assembled with hinges and door attached.
- Thermal frame uses a high density polyurethane thermal break.
- Frame is prepared for installation into wall panel with .250 diameter holes through the installation flange of the top, bottom and both vertical frame members.
- T Frame is used for inswing application.
- Z Frame is used for outswing application.



GASKET

 AJ Manufacturing's proprietary Santoprene® gasket is press-fitted into frame for maximum air and water seal and is field replaceable.



DOOR HARDWARE



- Door panel is prepped with extruded aluminum reinforcing blocks at all latch locations to provide maximum strength and performance.
- Stainless steel hinges standard on all doors.

DOOR LITES

- · Insulated tempered glass in the following sizes:
 - 8" x 8" View Area Thermal pane clear/clear, wire/clear or wire/wire
 - 11" x 11" View Area Thermal pane clear/clear, wire/clear or wire/wire
- · After-market lites and reglazing kits are also available.

OPTIONS

- Thermal
- Galvanized
- Non-thermal
- Galvannealed
- Stainless 304 2B
- · Windows
- · Smooth aluminum · Embossed aluminum
- Outswing
- · Inswing





Independent Test Results

Independent lab tests

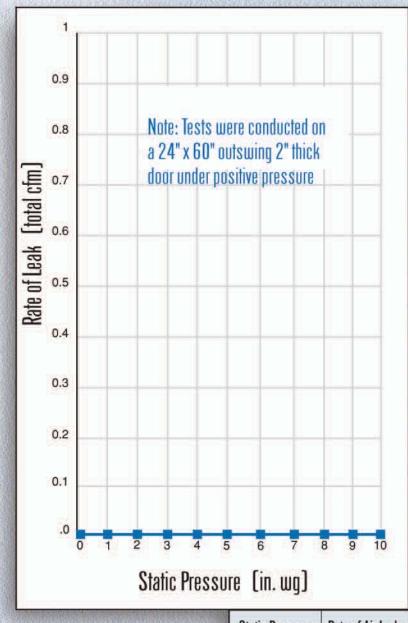
confirm **zero** total cfm air

leak at 10.0" wg static pressure

for a 24" x 60" outswing 2"

thick model with two hinges

and two latch points.



Static Pressure (in.wg)	Rate of Air Leak (total cfm)
0.3	0.0
1.2	0.0
2.0	0.0
3.0	0.0
4.0	0.0
5.0	0.0
6.0	0.0
7.0	0.0
8.0	0.0
9.0	0.0
10.0	0.0