

Chapter 22 GRILLES & DIFFUSERS

MANUFACTURER/DISTRIBUTOR:

VENTIL-X-PERT

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Tel: [514-355-4540](tel:514-355-4540)

- 22.1 **NAILOR -- 61CD PATTERN 1A REGISTER**
- 22.2 **NAILOR -- 6155 RETURN / EXHAUST GRILLE**
- 22.3 **VENTEX -- 2215**
- 22.4 **VENTEX -- 3165 DAMPER**
- 22.5 **VENTEX -- 3965 INSULATED DAMPER**

SHOP DRAWING

Reviewed by: Samuel Charbonneau

Date: 21 juin 2016

Reviewed



Reviewed as noted



Resubmit



Out for approval

SIFEC NORTH INC.

SECTION 1:

GRILLES ET DIFFUSEURS



Q.A.T.

Qualité Air Totale • Total Air Quality

3049 Peugeot, Laval, Québec, H7L 5C4, tel: (450) 681-5355, mtl: (514) 990-0566, fax: (450) 681-5834

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CÉDULE POUR GRILLES ET DIFFUSEURS

CLIENT : LES ENTREPRISES SIFEC NORD INC.

INGÉNIEURS :

BON DE COMMANDE : #YGT12

NOTRE RÉFÉRENCE : #58794

PROJET : IGLOOLIK WATER & WASTERWATER

DATE: mercredi, 15 juin 2016

Légende sur plan	No. Modèle Nailor	Dimensions du conduit (POUCES) L X H	Description	No. de Dessin	Qté
	61CD-S-AW-A-1A-AB	10X4	G.R.	61C-1	3
	61CD-S-AW-A-1A-AB	12X6	G.R.	61C-1	3
	6155H-S-AW-A	14X14	G.R.	6100-8	1
	6155V-S-AW-A	48X36	G.R.	6100-8	1

NOMENCLATURE

G.A.: Grille d'alimentation
 R.A.: Registre d'alimentation
 G.R.: Grille de retour
 R.R.: Registre de retour
 V.C.F.: Volet coupe-feu
 C.C.F.: Clapet coupe-feu

G.T.: Grille de transfert
 G.P.: Grille de porte
 G.E.: Grille d'évacuation
 G.L.A.: Grille linéaire d'alim.
 G.L.R.: Grille linéaire de retour
 C.T.: Couverture thermique

R.E.: Registre d'évacuation
 R.L.: Registre de plancher
 Diff.: Diffuseur
 D.L.A.: Diffuseur linéaire d'alim.
 D.L.R.: Diffuseur linéaire de retour
 ACC.: Accessoires

NOTE : L'ENTREPRENEUR DOIT NOUS FOURNIR LES DIMENSIONS EXACTES (CONDUITS, COLLETS, ETC.) COULEUR (FINITION), ET LA CONFIGURATION (T-BAR, GYPSE, ETC.), LORS DE LA RELÂCHE

SHOP DRAWING

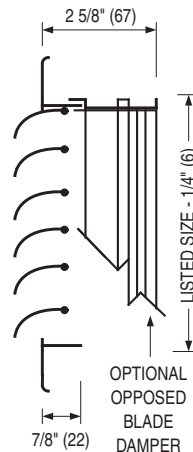
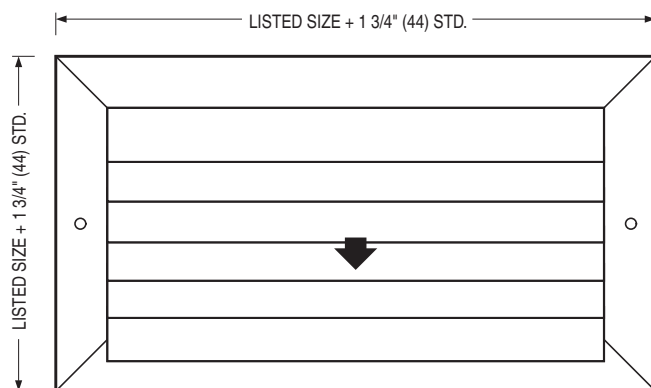
This review is solely for the verification of general design quality and does not alleviate the responsibility of the contractor for insuring that all specification, space and installation requirements are met.

Reviewed By: M.M. Reviewed ☒
 Reviewed as noted ☐
 Date: 24 June 2016 Resubmit ☐

CHIARELLI ENGINEERING LTD Page 419 of 2421

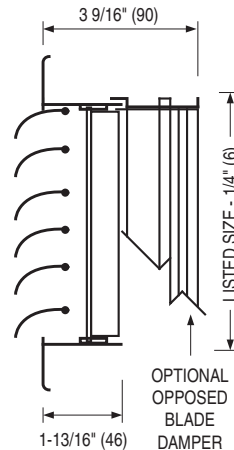
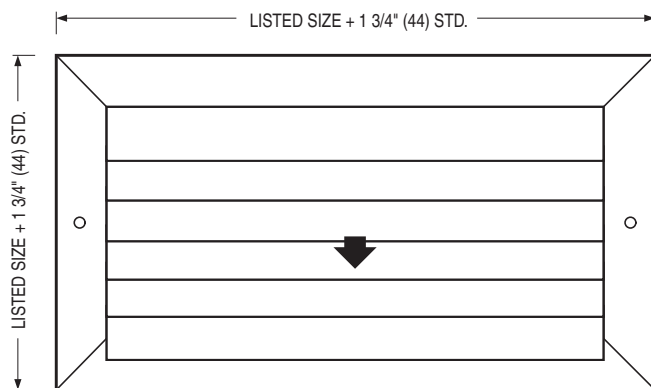


STEEL CURVED BLADE GRILLES & REGISTERS ONE-WAY DISCHARGE PATTERN MODELS: 61C(-O) AND 61CD(-O) TYPE S



☐ **MODEL 61C**
Curved Blade Grille
1-Way Discharge Pattern

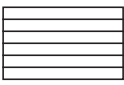
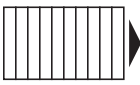
☐ **MODEL 61C-O**
Curved Blade Register
1-Way Discharge Pattern
(Includes O. B. Damper)



☒ **MODEL 61CD**
Curved Blade Grille with
rear directional vanes
1-Way Discharge Pattern

☐ **MODEL 61CD-O**
Curved Blade Register with
rear directional vanes
1-Way Discharge Pattern
(Includes O. B. Damper)

DESCRIPTION:

1. Construction: Corrosion-resistant steel. Curved vanes on 1" (25) centers. Frame is mechanically inter-locked for strength with hairline miters. Rear adjustable equalizing vanes on 61CD models are "teardrop" on 3/4" (19) centers. Roll-formed steel opposed blade damper on registers has screwdriver slot operator.
2. The min. size is 6" x 4" (152 x 102). The maximum size is 36" x 36" (914 x 914).
3. **Discharge Pattern Selection:**
☒ 1A ☐ 1B


4. Type S Surface mount frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
5. Curved blades are individually adjustable and regulate angle of discharge.
6. Standard fastening is Type A countersunk screwholes.
7. Standard finish is AW Appliance White.

OPTIONS:

1. Finish:
☐ SP Special _____.
2. Fastening:
☐ Type C Concealed mounting straps
☐ Type D Concealed screwholes in neck
☐ Type N None
3. ☐ Type FB Fixed Curved Blades
4. ☐ PF Plaster sub-frame
5. ☐ IS Insect screen
6. ☐ Other _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

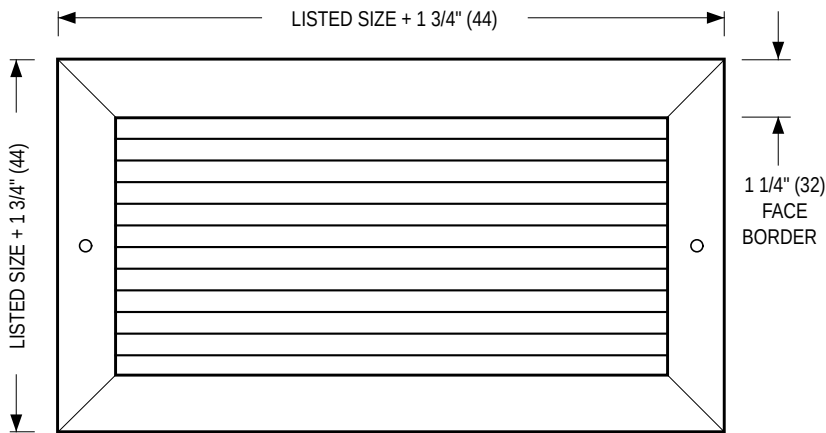
CONTRACTOR:

Dimensions are in inches (mm).

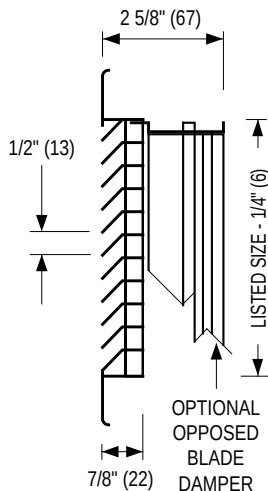
DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 1 - 11	6100	6100-6/13-10-00R	61C-1



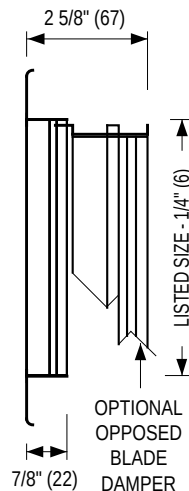
STEEL RETURN GRILLES & REGISTERS FIXED BLADES • 1/2" (13) CENTERS MODELS: 6155H(-O) AND 6155V(-O) TYPE S



Model 6155H



MODEL 6155H
Horizontal Blades



MODEL 6155V
Vertical Blades

☒ **MODEL 6155H**
Single Deflection Grille
Fixed 45° Horizontal Blades

☐ **MODEL 6155H-O**
Single Deflection Register
Fixed 45° Horizontal Blades
(Includes O. B. Damper)

☒ **MODEL 6155V**
Single Deflection Grille
Fixed 45° Vertical Blades

☐ **MODEL 6155V-O**
Single Deflection Register
Fixed 45° Vertical Blades
(Includes O. B. Damper)

DESCRIPTION:

1. Construction: Corrosion resistant steel. Roll-formed frame mechanically interlocked with reinforced mitered corners for strength. Streamlined shaped blades on 1/2" (13) centers are fixed at 45 degrees. Concealed reinforcing mullions on maximum 16" (406) centers. No see through when viewed from straight ahead.
2. Optional roll-formed steel opposed blade damper has a concealed lever operator.
3. Minimum size is 4" x 4" (102 x 102). Maximum size is 48" x 36" (1219 x 914).
4. Type S surface mount frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
5. Standard fastening is Type A countersunk screw holes.
6. Standard finish is AW Appliance White.

OPTIONS:

1. Finish:
☐ SP Special _____.
2. Fastening:
☐ Type N None.
3. ☐ PF Plaster frame
4. ☐ IS Insect screen
5. ☐ Other _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 7 - 11	6100	6100-38/17-10-00	6100-8

SHOP DRAWING

Reviewed by: Samuel Charbonneau

Date: 21 juin 2016

Reviewed



Reviewed as noted



Resubmit



Out for approval

SIFEC NORTH INC.

SECTION 3:

CÉDULE POUR VOLETS MOTORISÉS



Q.A.T.

Qualité Air Totale • Total Air Quality

3049 Peugeot, Laval, Québec, H7L 5C4, tel: (450) 681-5355, mtl: (514) 990-0566, fax: (450) 681-5834

CÉDULE POUR VOLETS MOTORISÉS

CLIENT: LES ENTREPRISES SIFEC NORD INC.

INGÉNIEURS:

BON DE COMMANDE : #YTG12

NOTRE RÉFÉRENCE : #58794

PROJET: IGLOOLIK WATER & WASTERWATER

DATE: mercredi, 15 juin 2016

Légende sur plan	No. Modèle ALUMAVENT	Dimensions du conduit (POUCES) L X H	Description	No. de dessin	Qté
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	3165, EN ALUMINIUM NON-ISOLÉ	48X36	V.M.	VM/1@2	2
	3965, EN ALUMINIUM ISOLÉ	48X6	V.M.	VM/3@5	1
	3965, EN ALUMINIUM ISOLÉ	48X36	V.M.	VM/3@5	1

NOTES :

x

24 June 2016

S.V.P. NOUS CONFIRMER SI LES VOLETS SEONT DE TYPE INSÉRÉS AU CONDUIT (MODÈLE #3161/3961) OU À BRIDES (MODÈLE #3165/3965)

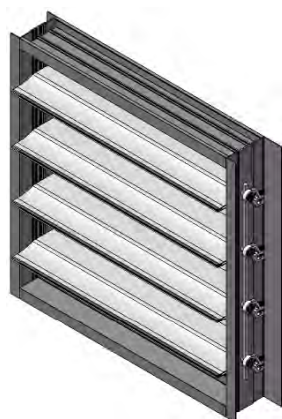
S.V.P. NOUS CONFIRMER SI LES LAMES SERONT PARALLÈLES OU À LAMES OPPOSÉES

SHOP DRAWING

This review is solely for the verification of general design quality and does not alleviate the responsibility of the contractor for insuring that all specification, space and installation requirements are met.

Reviewed By: M.M. Reviewed ☐
Reviewed as noted ☐
Date: _____ Resubmit ☐

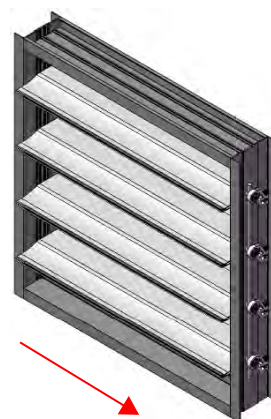
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CHIARELLI ENGINEERING LTD.



3160
Inséré au conduit



3161 Quick 'N' Stall
Inséré au conduit



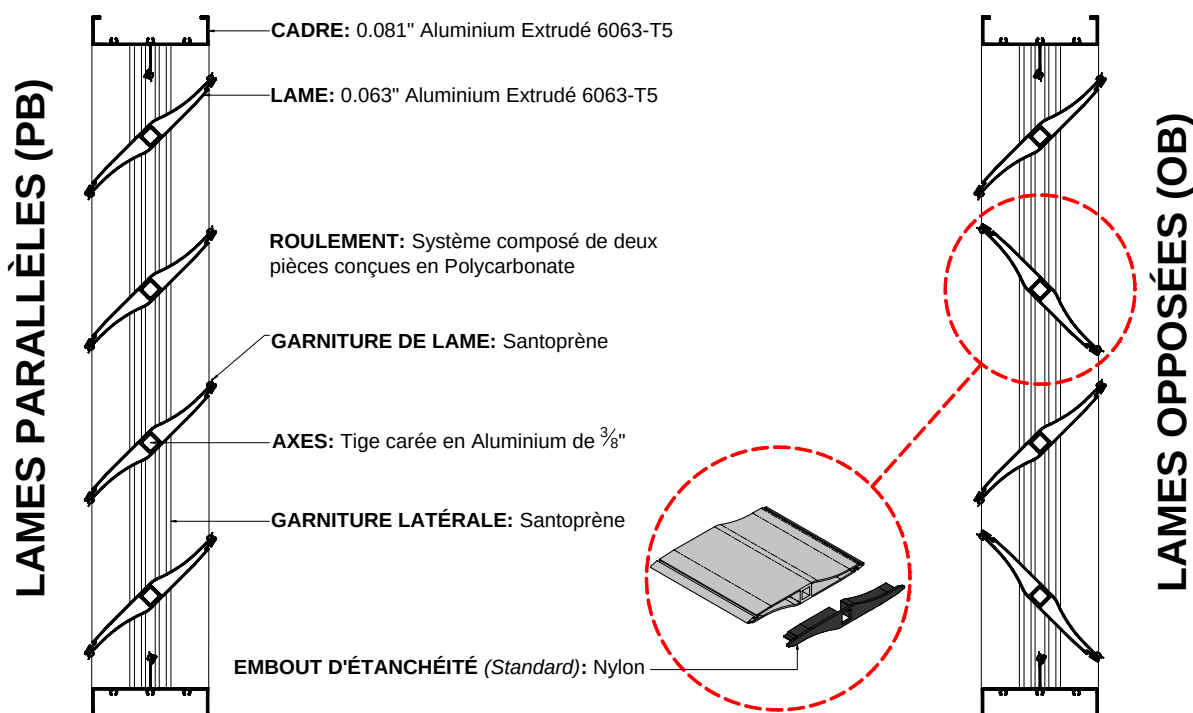
3165
Attaché au conduit

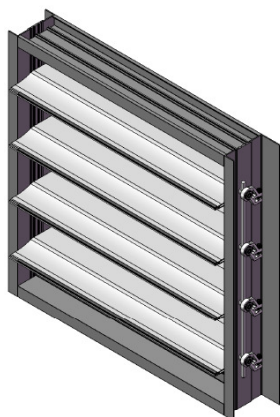
CONSTRUCTION STANDARD

Cadre: 4" (101 mm) – 3160/3165
5.25" (133 mm) – 3161
Profondeur lames ouvertes: 6.125" (156 mm)
Hauteur minimum: 8" (203 mm) – Lame simple
15" (381 mm) – Lame Multiple
Largeur maximum par panneau: 48" (1219 mm)
Hauteur maximum par panneau: 60" (1524 mm)
Pied² maximum par panneau: 20 pi²
Pression maximum du système: 4" w.g. (1 kPa)
Température d'opération: -40° to +180° F
Fini standard: Aluminium Naturel
Entrainement standard: Direct avec tige télescopique de 6"
Tringlerie: - Disimulée en dehors du flux d'air (3160/3161)
- En dehors du cadre (3165)
Embout d'étanchéité: En Nylon standard sur toutes les lames

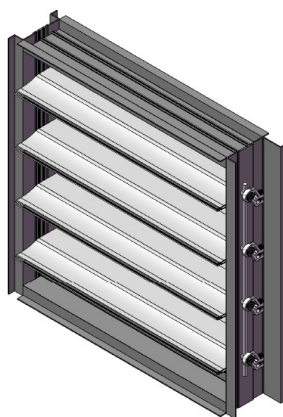
ACCESSOIRES DISPONIBLES

- Actuateurs [Honeywell, Belimo]
- Interrupteur de fin de course
- Axes de renvois avec ou sans roulement à billes
- Quadrants à main
- Opération par chaîne avec ressort de rappel
- Garniture en silicone (3100 SS)
- Construction eau salé – (3100 SW)

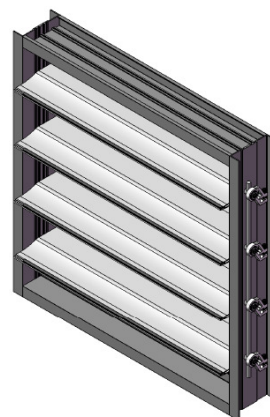




3160
Duct-Mount



3161 Quick 'N' Stall
Duct-Mount



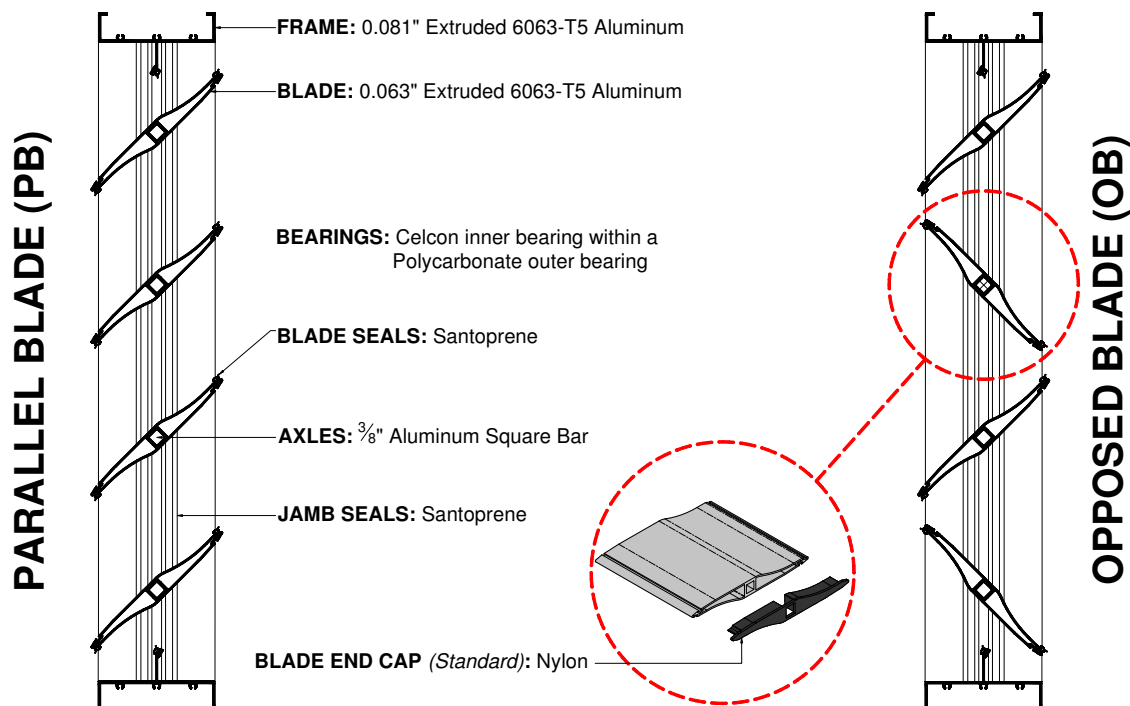
3165
Flanged-to-Duct

STANDARD CONSTRUCTION

Depth: 4" (101 mm) – 3160/3165
5.25" (133 mm) – 3161
Depth with Blades Open: 6.125" (156 mm)
Minimum Height: 8" (203 mm) - Single Blade
15" (381 mm) - Multiple Blade
Maximum Panel Width: 48" (1219 mm)
Maximum Panel Height: 60" (1524 mm)
Maximum Panel Size: 20 Sq.Ft.
Maximum System Pressure: 4" w.g. (1 kPa)
Operating Temperature Range: -40° to +180° F
Standard Finish: Mill
Standard Motor Installation: 6" Side Shaft Direct Drive
Linkage: Concealed in Frame (3160/3161)
Outside of Frame (3165)
Blade End Cap: Nylon

AVAILABLE ACCESSORIES

- Actuators [Honeywell, Belimo]
- End Switch for signaling peripheral devices
- Jack Shaft
- Hand Quadrants
- Chain Operation for manual operation spring closed
- Silicone Blade and Jamb Seals – Specify 3100 SS
- Salt Water Construction – Specify 3100 SW
- Available finish: Clear Anodized
- 4" Blade Construction

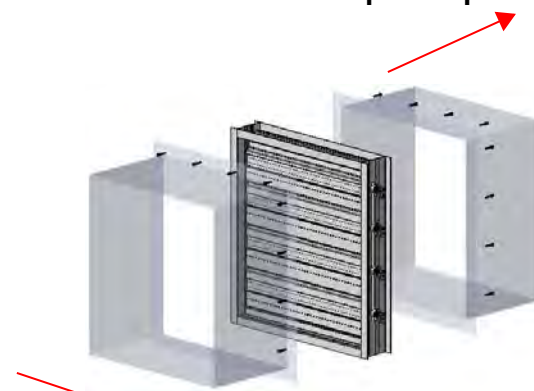




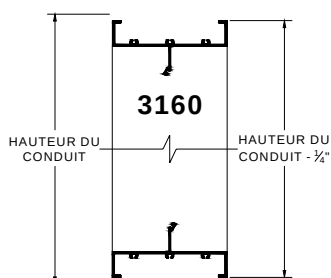
3160 – Inséré au conduit



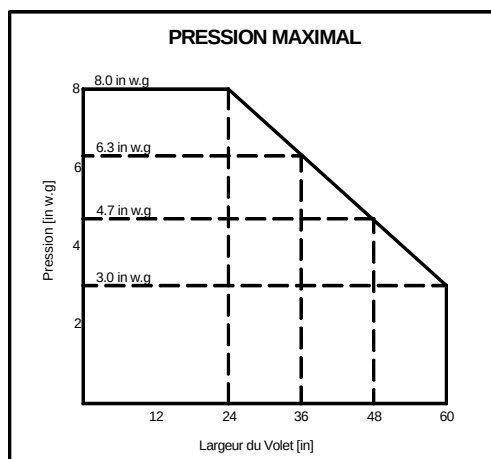
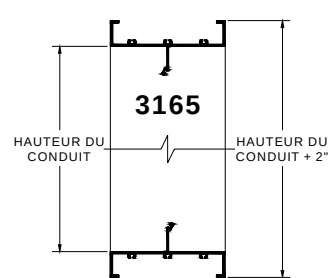
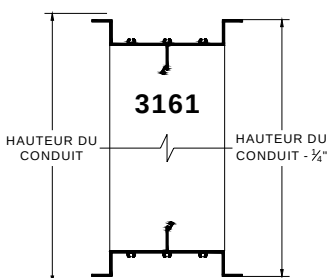
3161 – Inséré au conduit



3165 – Attaché au conduit

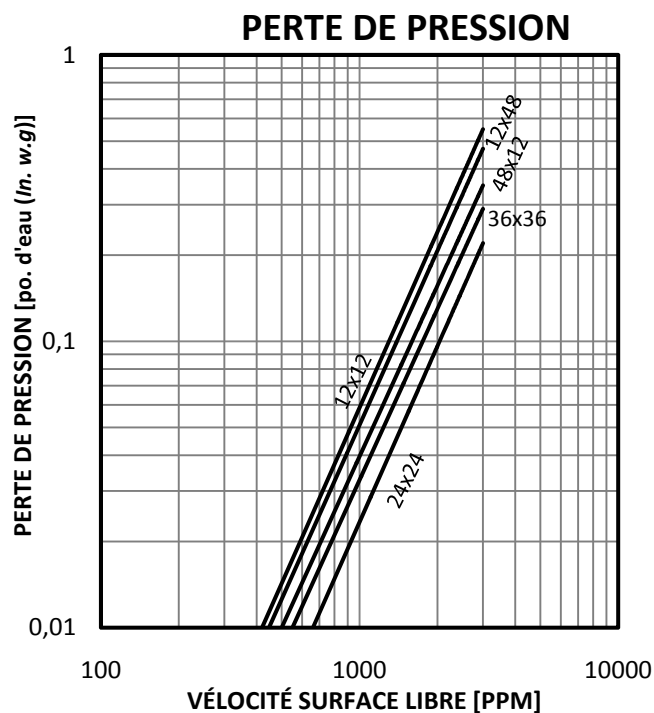


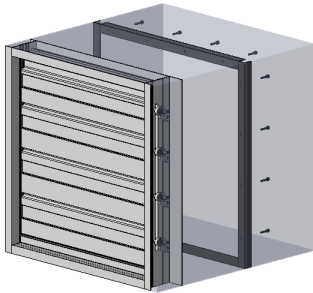
Configuration Inséré: 3160 / 3161
Configuration Attaché: 3165



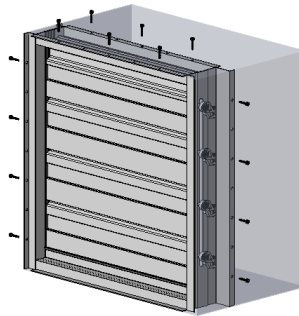
SPÉCIFICATION RECOMMANDÉES

Fournir et installer les volets motorisés Alumavent, modèle 3160/3161/3165. Les volets seront d'une profondeur de 4" (101 millimètres) et n'excèdent pas 6.125" (156 mm) lorsqu'en position ouverte. Les cadres de 4" (101mm) seront d'un alliage d'aluminium d'au moins 0.081" (2.06 mm) et les lames d'au moins 0.063". Chaque lame est conçue avec des embouts d'étanchéités en Nylon. Les garnitures coupe-froid sur les lames et les cadres seront en résine de vinyle du type 'Santoprène' et seront intégrées aux extrusions. Le transfert des charges sera effectué par des coussinets conçus en thermoplastique d'acétal fixés à une tige d'aluminium d'alliage 6063-T5 d'au moins 0.375" (9.53 mm) et d'une tige maîtresse en acier traitée. La tringlerie sera cachée en dehors du flux d'air permettant un bon fonctionnement dans des conditions d'opération variant entre -40°F (-40°C) à 180°F (82°C). L'étanchéité d'un volet de 48" (1220 mm) x 48" (1220 mm) n'excédera pas 8 PCM/ft² (40.6 l/s/m²) contre une pression de 4" w.g. (1 kPa). L'installation des volets de contrôle devra satisfaire les exigences émises par le manufacturier.

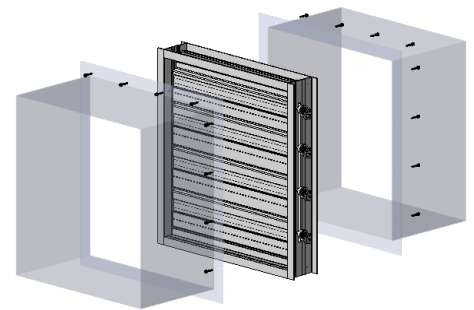




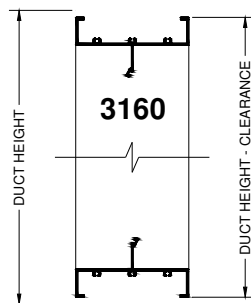
3160 – Duct-Mount



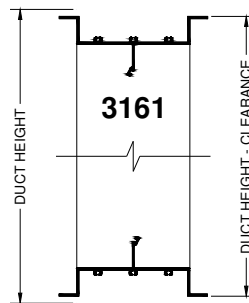
3161 – Duct-Mount



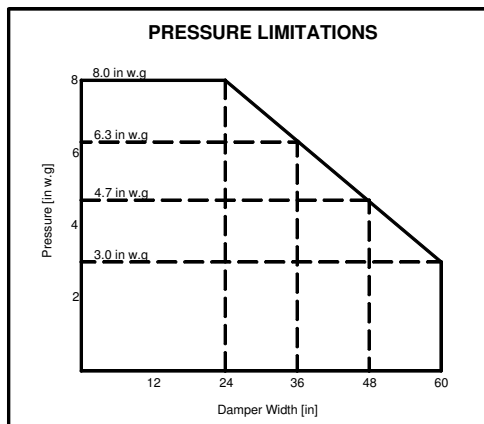
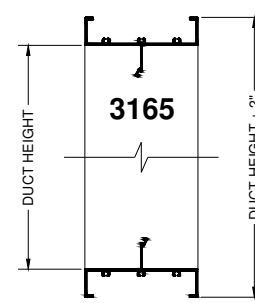
3165 – Flanged-to-Duct



For Duct-Mount Frame specify: 3160 / 3161
For Flanged-to-Duct Frame specify: 3165



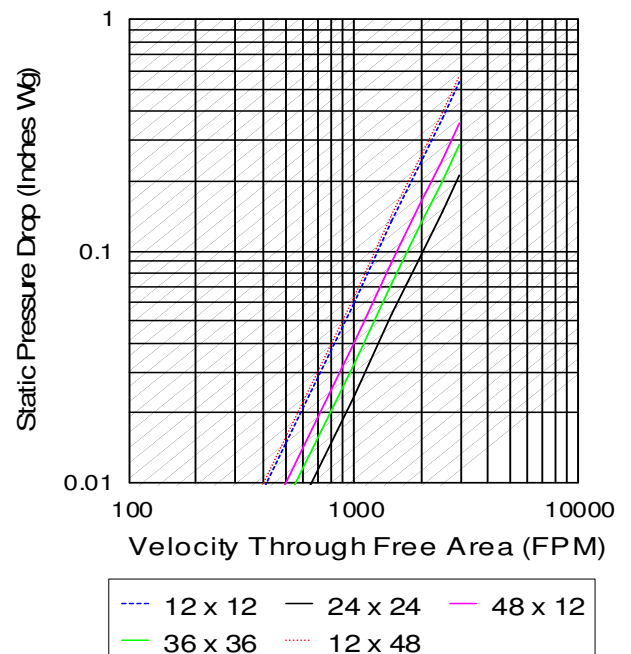
*For Models 3160 and 3161:
Clearance = 1/4" Overall for Single Panel Construction
Clearance = 1/2" Overall for Multiple Panel Construction



RECOMMENDED SPECIFICATION

Furnish and install control damper models 3160 / 3161 / 3165 as manufactured by Alumavent, Bolton Ontario. Dampers shall be 4" (101 mm) deep. Blades shall be 0.063" (1.60 mm) thick, hollow airfoil shape. Frames shall be 0.081" (2.06 mm) thick. Axles shall be 0.375" (9.53 mm) thick, Aluminum square bar. Blade and Jamb seals shall be Santoprene. Linkage is concealed in frame for models 3160 / 3161 and outside of frame for model 3165. Air leakage through a 48"x48" damper shall not exceed 8 CFM/ ft² (40.6 L/s/m²) against 4" w.g (1 kPa) static pressure at standard air. Operating temperature range shall be -40° to +180° F.

Pressure Drop

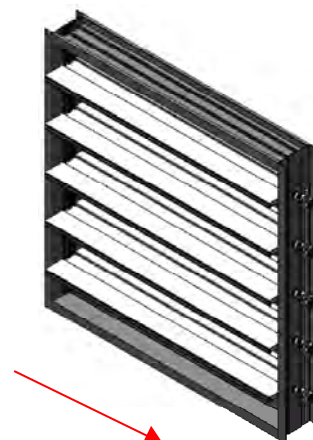




3960
Inséré au conduit



3961 Quick 'N' Stall
Inséré au conduit



3965
Attaché au conduit

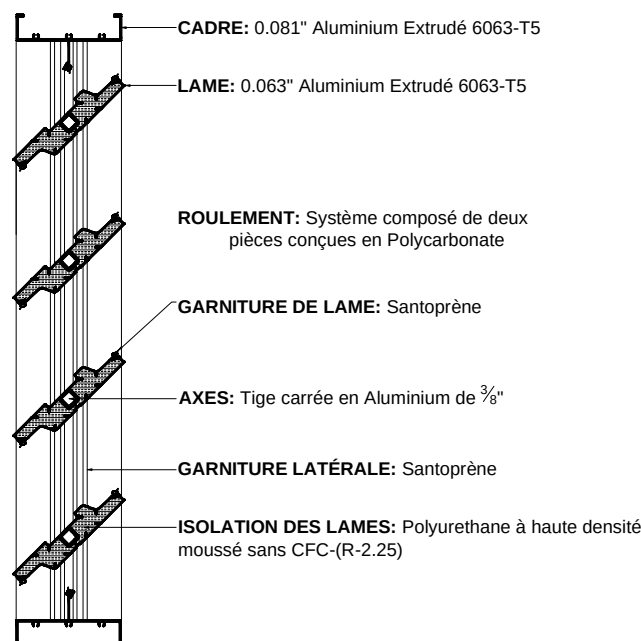
CONSTRUCTION STANDARD

Cadre: 4" (**101 mm**) – 3960/3965
5.25" (**133 mm**) – 3961
Profondeur lames ouvertes: 6.125" (**156 mm**)
Hauteur minimum: 8" (**203 mm**) – Lame simple
15" (**381 mm**) – Lame Multiple
Largeur maximum par panneau: 48" (**1219 mm**)
Hauteur maximum par panneau: 60" (**1524 mm**)
Pied² maximum par panneau: 20 pi²
Pression maximum du système : 4" w.g. (**1 kPa**)
Température d'opération: -40° to +180° F
Fini standard: Aluminium Naturel
Entrainement standard: Direct avec tige télescopique de 6"
Tringlerie: - Disimulée en dehors du flux d'air (3960/3961)
- En dehors du cadre (3965)

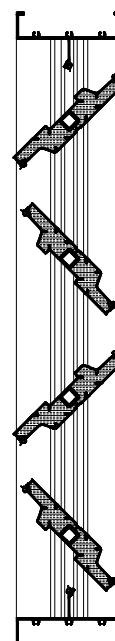
ACCESSOIRES DISPONIBLES

- Actuateurs [Honeywell, Belimo]
- Interrupteur de fin de course
- Axes de renvois avec ou sans roulement à billes
- Quadrants à main
- Opération par chaîne avec ressort de rappel
- Garniture en silicone (3900 SS)
- Construction eau salé – (3900 SW)
- Cadre isolé: polystyrène sur 3 côtés lorsqu'insérés et 4 côtés lorsqu'attachés

LAMES PARALLÈLES (PB)

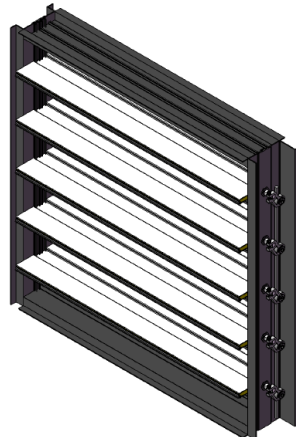


LAMES OPPOSÉES (OB)

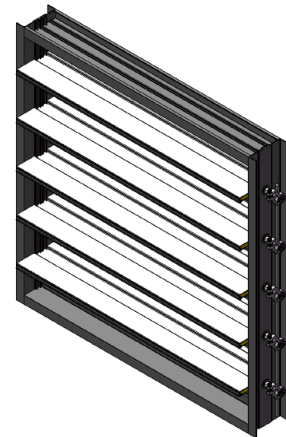




3960
Duct-Mount



3961 Quick 'N' Stall
Duct-Mount



3965
Flanged-to-Duct

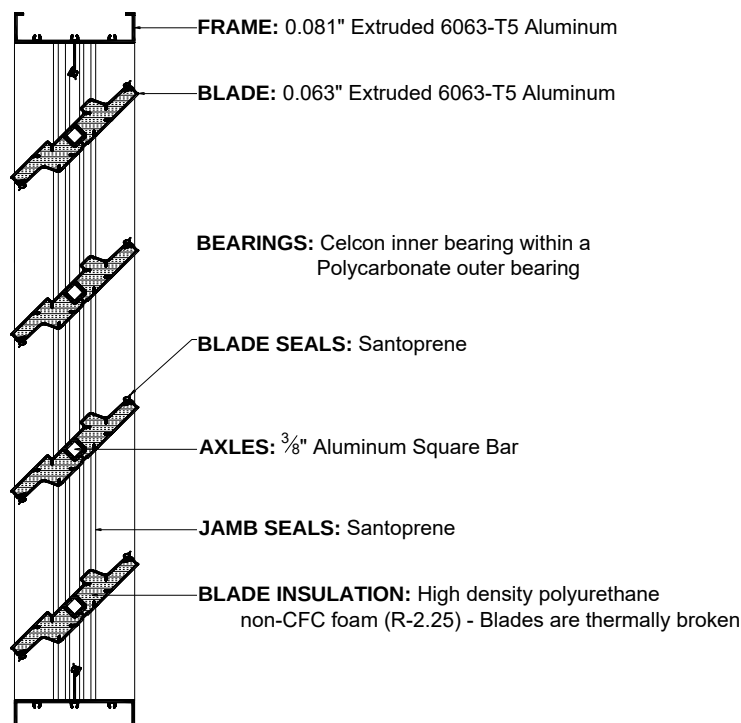
STANDARD CONSTRUCTION

Depth: 4" (101 mm) – 3960/3965
5.25" (133 mm) – 3961
Depth with Blades Open: 6.125" (156 mm)
Minimum Height: 8" (203 mm) - Single Blade
15" (381 mm) - Multiple Blade
Maximum Panel Width: 48" (1219 mm)
Maximum Panel Height: 60" (1524 mm)
Maximum Panel Size: 20 Sq.Ft.
Maximum System Pressure: 4" w.g. (1 kPa)
Operating Temperature Range: -40° to +180° F
Standard Finish: Mill
Standard Motor Installation: 6" Side Shaft Direct Drive
Linkage: Concealed in Frame (3960/3961)
Outside of Frame (3965)

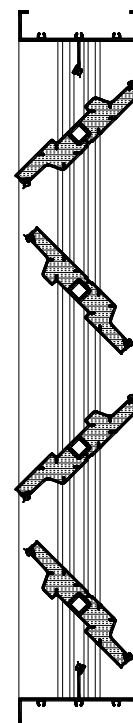
AVAILABLE ACCESSORIES

- Factory Supplied/Installed Actuators
- End Switch for signaling peripheral devices
- Jack Shaft
- Hand Quadrants
- Chain Operation for manual operation spring closed
- Silicone Blade and Jamb Seals – Specify 3900SI
- Salt Water Construction – Specify 3900SW
- Available finish: Clear Anodized
- Frame Insulation: Polystyrene Insulation

PARALLEL BLADE (PB)



OPPOSED BLADE (OB)

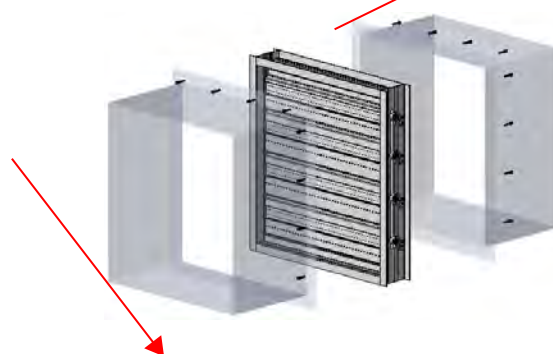




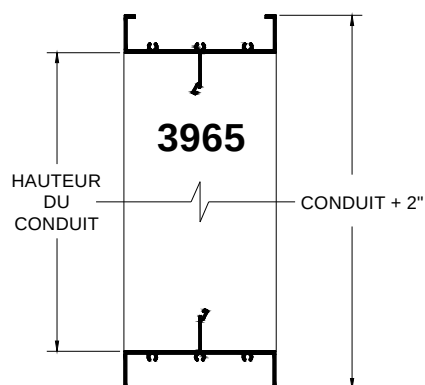
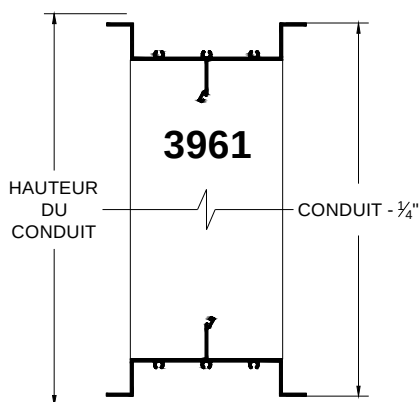
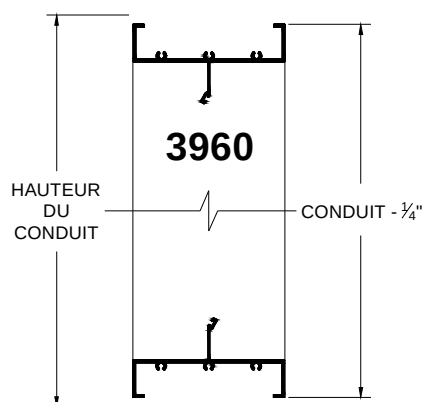
3960 – Inséré au conduit



3961 – Inséré au conduit



3965 – Attaché au conduit

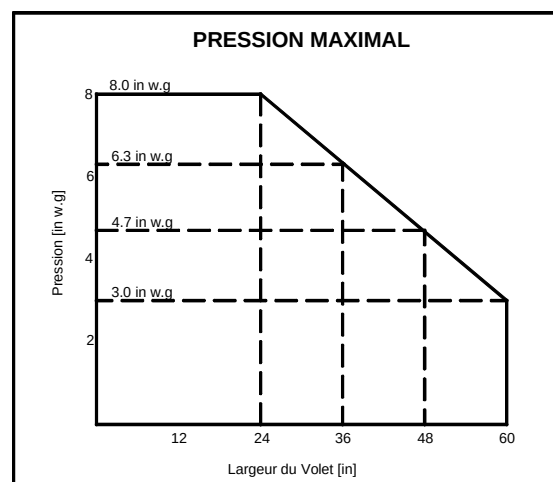


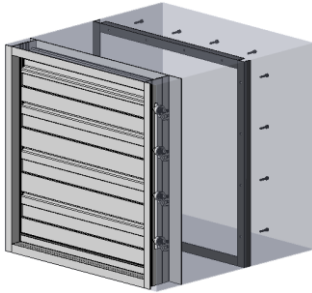
Configuration Inséré: 3960 / 3961

Configuration Attaché: 3965

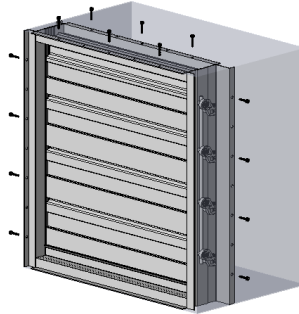
SPÉCIFICATION RECOMMANDÉES

Fournir et installer les volets motorisés Alumavent, modèle 3960/3961/3965. Les volets doivent porter le sceau de certification AMCA. Ils seront d'une profondeur de 4" (101 millimètres) et n'excèdent pas 6.125" (156 mm) lorsqu'en position ouverte. Les cadres de 4" (101mm) seront en aluminium d'au moins 0.081" (2.06 mm). Les lames seront d'un alliage d'aluminium d'au moins 0.063" (1.60 mm) avec bris thermique, injectées de polyuréthane haute densité sans CFC. Les garnitures coupe-froid sur les lames et les cadres seront en résine de vinyle du type 'Santoprène' et seront intégrées aux extrusions. Le transfert des charges sera effectué par des coussinets conçus en thermoplastique d'acétal fixés à une tige d'aluminium d'alliage 6063-T5 d'au moins 0.375" (9.53 mm) et d'une tige maîtresse en acier traitée. La tringlerie sera cachée en dehors du flux d'air permettant un bon fonctionnement dans des conditions d'opération variant entre -40°F (-40°C) à 180°F (82°C). L'étanchéité d'un volet de 36" (914 mm) x 36" (914 mm) n'excédera pas 3 PCM/pi² (15.2 l/s/m²) contre une pression de 4" w.g. (1 kPa), tel que les tests effectués par AMCA. L'installation des volets motorisés devra satisfaire les exigences émises par le manufacturier.

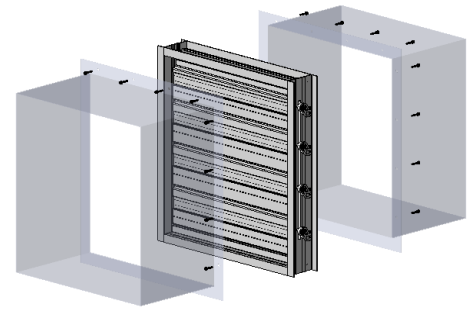




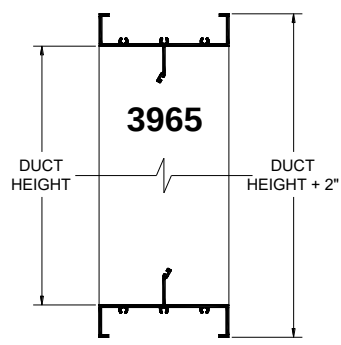
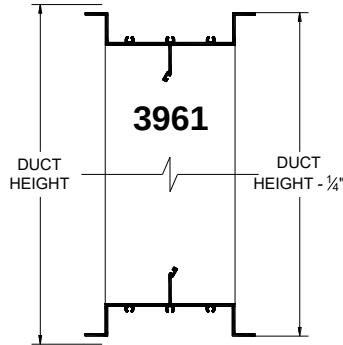
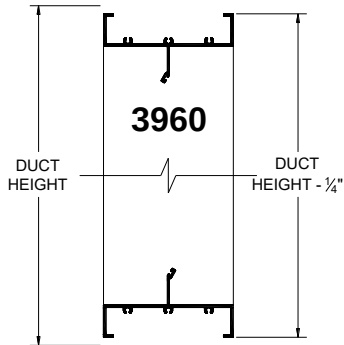
3960 – Duct-Mount



3961 – Duct-Mount



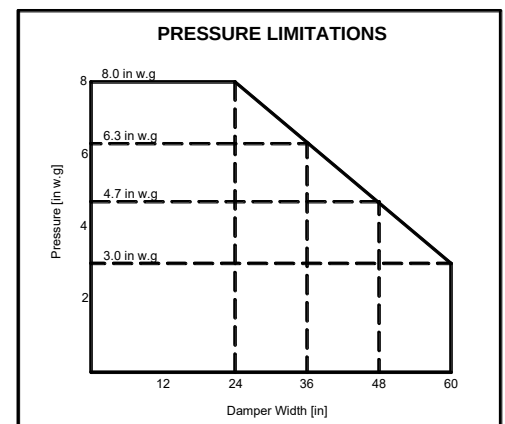
3965 – Flanged-to-Duct



For Duct-Mount Frame specify: 3960 / 3961
For Flanged-to-Duct Frame specify: 3965

RECOMMENDED SPECIFICATION

Furnish and install control damper models 3960 / 3961 / 3965 as manufactured by Alumavent, Bolton Ontario. Dampers must be licensed to bear the AMCA seal. Dampers shall be 4" (101 mm) deep. Blades shall be 0.063" (1.60 mm) thick, thermally broken with high density Polyurethane non-CFC injected foam insulation. Frame shall be 0.081" (2.06 mm) thick, with polystyrene insulation. Axles shall be 0.375" (9.53 mm) thick, Aluminum square bar. Blade and Jamb seals shall be Santoprene. Linkage is concealed in frame for models 3960 / 3961 and outside of frame for model 3965. Air leakage through a 36"x36" (914 mm x 914 mm) damper shall not exceed 3 CFM/ft² (15.2 L/s/m²) against 4" w.g (1.0 kPa) static pressure at standard air (as per AMCA testing). Operating temperature range shall be -40° to +180° F.



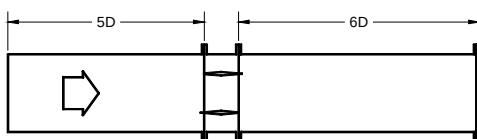


Figure 5.3

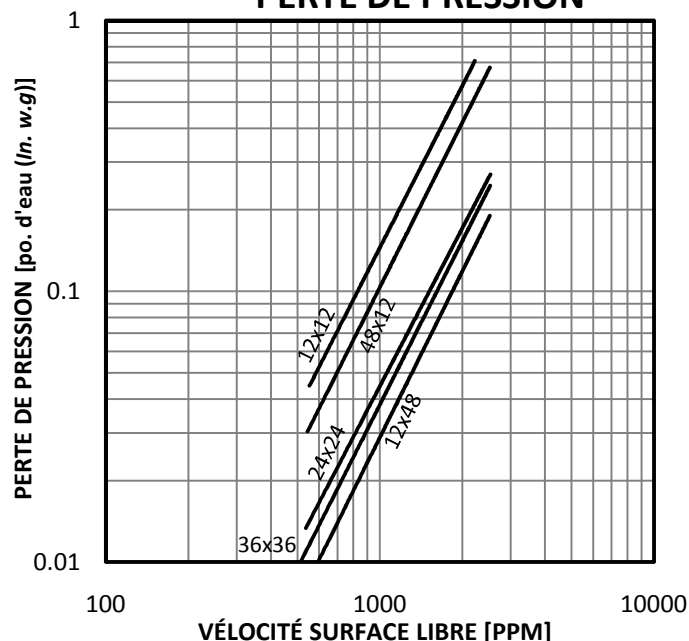
CERTIFICATION AMCA

Alumavent Inc. certifie que les volets de la série 3900 isolé sont licenciés et peuvent porter le sceau AMCA. Tous les résultats des tests sont fondés sur la procédure de la publication 511 de l'AMCA et ont remplis les exigences du programme de certification des performances de l'AMCA. Ce sceau ne s'applique qu'aux résultats des performances en matière de l'aération et de l'étanchéité.



VOLETS MOTORISÉS SÉRIE 3900 – PERTE DE PRESSION	
Vélocité [PPM]	Perte de Pression [po d'eau]
12x12 (po)	
553.6	0.044
891.4	0.119
1051.9	0.161
2021.4	0.554
2221.7	0.740
24x24 (po)	
536.8	0.014
776.9	0.025
1101.1	0.056
2066.3	0.182
2530.1	0.272
36x36 (po)	
500.4	0.01
750.6	0.021
1006.1	0.036
2019.5	0.161
2526.6	0.249
12x48 (po)	
545	0.008
772.8	0.018
1095.3	0.035
2055.5	0.126
2519.2	0.187
48x12 (po)	
544.6	0.029
772.2	0.064
1094.4	0.1228
2053.1	0.439
2516	0.661

PERTE DE PRESSION



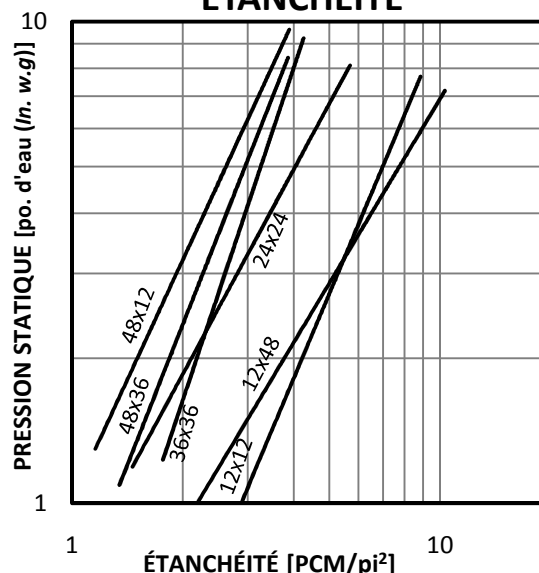
Résultats : selon AMCA Standard 500-D

Configuration du test Voir Figure 5.3

DÉFINITION DES CLASSES D'ÉTANCHÉITÉ				
CLASS	ÉTANCHÉITÉ $\text{pi}^3/\text{min}/\text{pi}^2$ ($\text{L/s}/\text{m}^2$)			
	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)

CLASSIFICATIONS D'ÉTANCHÉITÉ DU VOLETS MOTORISÉ DE LA SÉRIE 3900				
Dimension de volet Largeur x Hauteur	PRESSION po d'eau (kPa)			
	1" (0.25 kPa)	4" (1.0 kPa)	8" (2.0 kPa)	
12"x12" (305x305 mm)	1A	1	1	
24"x24" (610x610 mm)	1A	1	1	
36"x36" (914x914 mm)	1A	1	1	
12"x48" (305x1219 mm)	1A	1	1	
48"x12" (1219x305 mm)	1A	1	1	
48"x36" (1219x914 mm)	1A	1	1	

ÉTANCHÉITÉ



Les tests ont été effectués selon le standard AMCA 500-D-98. Le couple de rotation appliqué est de 6 po.-lbs./pi² avec un volet à lames parallèles. Ce standard AMCA stipule que l'étanchéité est basée sur une utilisation à des températures variant entre 50°F (10°C) and 104°F (40°C).

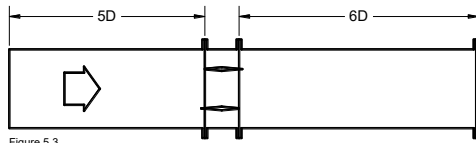
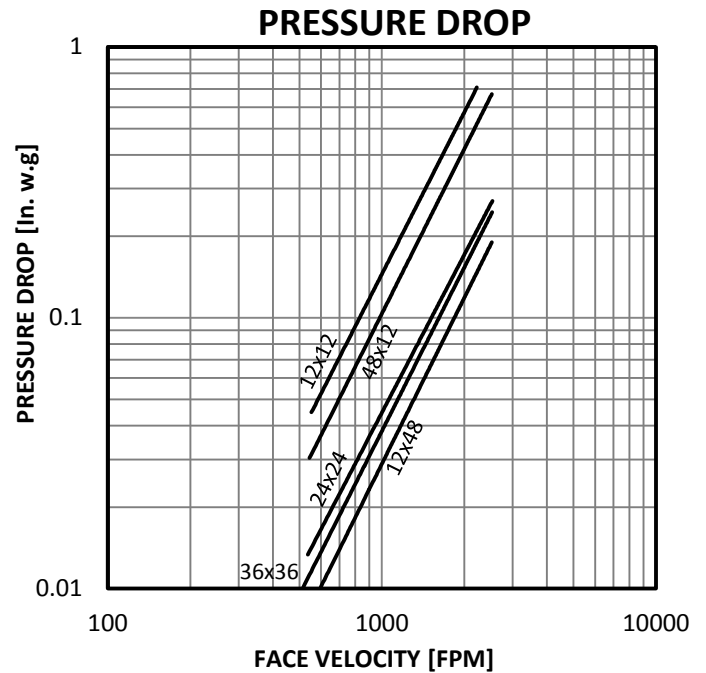


Figure 5.3

3900 SERIES CONTROL DAMPER PRESSURE DROP	
Velocity [FPM]	Pressure Drop [in. w.g]
12x12 (inches)	
553.6	0.044
891.4	0.119
1051.9	0.161
2021.4	0.554
2221.7	0.740
24x24 (inches)	
536.8	0.014
776.9	0.025
1101.1	0.056
2066.3	0.182
2530.1	0.272
36x36 (inches)	
500.4	0.01
750.6	0.021
1006.1	0.036
2019.5	0.161
2526.6	0.249
12x48 (inches)	
545	0.008
772.8	0.018
1095.3	0.035
2055.5	0.126
2519.2	0.187
48x12 (inches)	
544.6	0.029
772.2	0.064
1094.4	0.1228
2053.1	0.439
2516	0.661

CERTIFIED RATINGS

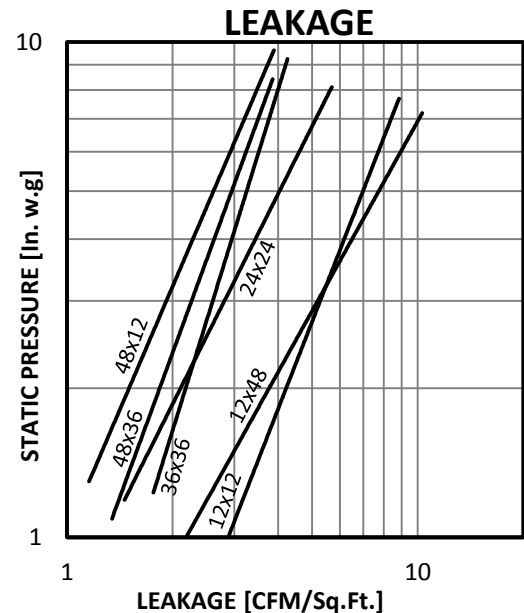
Alumavent Inc. certifies that the 3900 Series Insulated Control Dampers shown here are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and air leakage ratings.



Ratings Based on: AMCA Standard 500-D Intake Ducted Test Figure 5.3 Setup

DEFINITION OF LEAKAGE CLASSIFICATION				
CLASS	LEAKAGE ft ³ /min/ft ² (L/s/m ²)			
	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)

3900 SERIES CONTROL DAMPER LEAKAGE RATING			
DAMPER SIZE Width x Height	PRESSURE in w.g (kPa)		
	1" (0.25 kPa)	4" (1.0 kPa)	8" (2.0 kPa)
12"x12" (305x305 mm)	1A	1	1
24"x24" (610x610 mm)	1A	1	1
36"x36" (914x914 mm)	1A	1	1
12"x48" (305x1219 mm)	1A	1	1
48"x12" (1219x305 mm)	1A	1	1
48"x36" (1219x914 mm)	1A	1	1



Leakage test was conducted in accordance with AMCA Standard 500-D-98. Holding torque applied was 6 in.-lbs./sq.ft on parallel blade dampers. AMCA Standard 500-D-98 states that air leakage is based on operation between 50°F (10°C) and 104°F (40°C).

DWG. 3960-3961-3965 AUGUST 2010

SHOP DRAWING

Reviewed by: Samuel Charbonneau

Date: 21 juin 2016

Reviewed



Reviewed as noted



Resubmit



Out for approval

SIFEC NORTH INC.**SECTION 4:****CÉDULE POUR PERSIENNES**

Q.A.T.

Qualité Air Totale • Total Air Quality

3049 Peugeot, Laval, Québec, H7L 5C4, tel: (450) 681-5355, mtl: (514) 990-0566, fax: (450) 681-5834

CHARTRE DES DIMENSIONS POUR PERSIENNES

CLIENT : LES ENTREPRISES SIFEC NORD INC.

INGÉNIEURS :

BON DE COMMANDE : #YTG12

NOTRE RÉFÉRENCE : #58794

PROJET : IGLOOLIK WATER & WASTERWATER

DATE : mercredi, 15 juin 2016

Modèle	Accessoires	Dimensions (POUCES)		No. de dessin	Qté
		Largeur	Hauteur		
2215	<i>C/A Pare-Oiseaux en acier</i>	6	6	PERS/1-2	1
2215	<i>C/A Pare-Oiseaux en acier</i>	12	6	PERS/1-2	2
2215	<i>C/A Pare-Oiseaux en acier</i>	12	12	PERS/1-2	1
2215	<i>C/A Pare-Oiseaux en acier</i>	16	8	PERS/1-2	1
2215	<i>C/A Pare-Oiseaux en acier</i>	48	36	PERS/1-2	1
2215	<i>C/A Pare-Oiseaux en acier</i>	48	44	PERS/1-2	1

NOTES:

x

24 June 2016

S.V.P. INDIQUER LA COULEUR ET LE NUMERO DU FABRIQUANT DE LA
PEINTURE REQUISE.

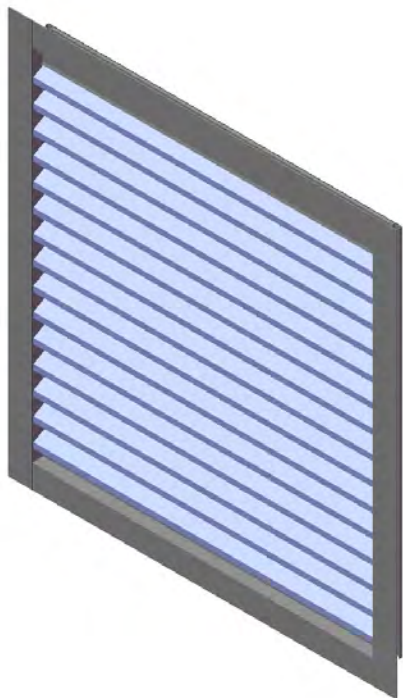
SVP NOUS INDIQUER SI LES PERSIENNES SONT REQUISES AVEC CADRE EN
FLANGE « L » (MODÈLES 2215) OU AVEC CADRE EN « U » (MODÈLE 2210)

SHOP DRAWING

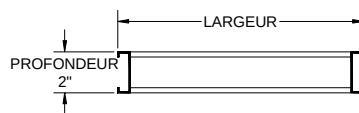
This review is solely for the verification of general design quality and does not alleviate the responsibility of the contractor for insuring that all specification, space and installation requirements are met.

Reviewed By: _____ M.M. Reviewed ☐
Reviewed as noted ☐
Date: _____ Resubmit ☐

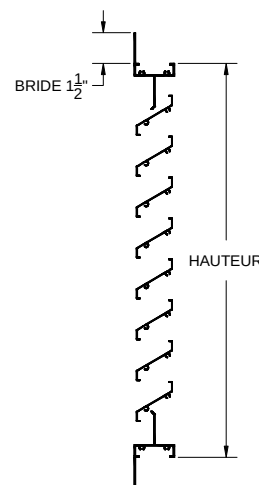
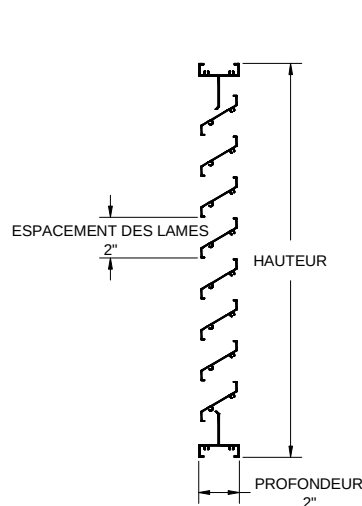
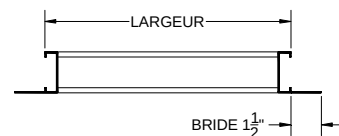
CHIARELLI ENGINEERING LTD.
Page 435 of 2421



MODÈLE 2210
CADRE: EN "U"
INSÉRÉ (DM)



MODÈLE 2215
CADRE: EN "L"
À BRIDE (FM)



PERFORMANCE			
PERSIENNE DE	SURFACE TOTALE	SURFACE LIBRE pi ²	SURFACE LIBRE %
48" x 48"	16 pi ²	8.51 pi ²	53.2%
(1219 x 1219 mm)	(1.49 m ²)	(0.79 m ²)	
POINT INITIAL D'ENTRAÎNEMENT D'EAU POUR 0.01 oz./Pi ² EN SURFACE LIBRE:			478 FPM

CONSTRUCTION STANDARD

PROFONDEUR:	2" (51 mm)
MATÉRIEL:	ALUMINIUM EXTRUDÉ- 6063-T5
ÉPAISSEUR CADRE:	0.062" (1.57 mm)
ÉPAISSEUR LAMES:	0.062" (1.57 mm)
INCLINAISON LAMES:	30°
ESPACEMENT LAMES:	2" (51 mm)
GRILLAGE AVIAIRE:	ACIER GALVANISÉ 19 GA. - 1/2" x 1/2"
FINI:	ALUMINIUM NATUREL

LIMITATION: SECTION DE PERSIENNE SIMPLE

	MINIMUM	MAXIMUM
LARGEUR	12" (305 mm)	72" (1829 mm)
HAUTEUR	8" (203 mm)	72" (1829 mm)
SURFACE	0.67 pi ² (0.06 m ²)	36 pi ² (3.34 m ²)

* POUR PERMETTRE UN DÉGAGEMENT LES PERSIENNES SERONT FABRIQUÉES COMME SUIV (À MOINS D'INDICATION CONTRAIRE): - SECTION SIMPLE -1/4" (6.4 mm)
- SECTION MULTIPLE -1/2" (12.7 mm)

ACCESSOIRES DISPONIBLES

FINI:	GRILLAGES:
• PEINTURE ÉLECTROSTATIQUE	• DU TYPE AVIAIRE
• DURANAR	• 1/2" x 1/2" EN ALUMINIUM
• ANODISÉ	• CADRAGE EN ALUMINIUM
• CLAIR	• MOUSTIQUAIRE
• BRONZE 'LIGHT'	• 18 x 14 'MESH'
• BRONZE 'MEDIUM'	
• BRONZE FONCÉ	
• ANODISÉ NOIR	
• SEUIL SPÉCIAL	
• BARREAUX ANTI-VANDALES	
• SUPPORT À FILTRES	
• ATTACHES EN ACIER INOXYDABLE	
• PORTE D'ACCÈS SUR CHARNIÈRE	
• CONSTRUCTION SOUDÉE	
• FORMES GÉOMÉTRIQUES	
• CONSTRUCTION ROBUSTE	
• CONSTRUCTION À LAMES CONTINUES	

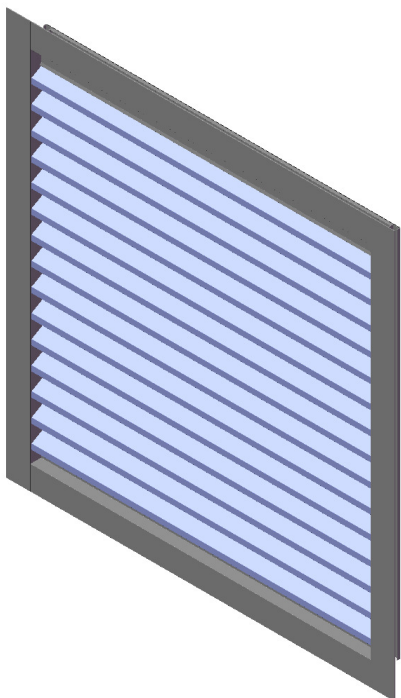
PANNEAU OBTURATEUR (ALUMINIUM):

- PANNEAU NON ISOLÉ
- PANNEAU ISOLÉ
 - ISOLATION 1" (25.4 mm)
 - ISOLATION 2" (50.8 mm)

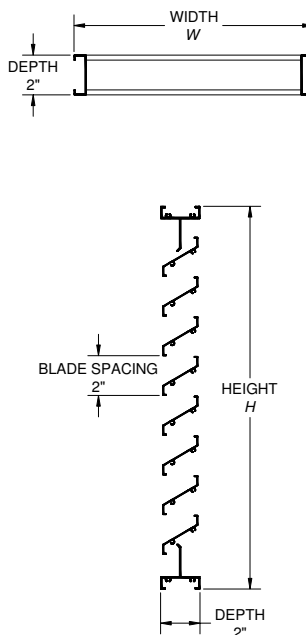


LOUVERS & BACK DRAFT DAMPERS

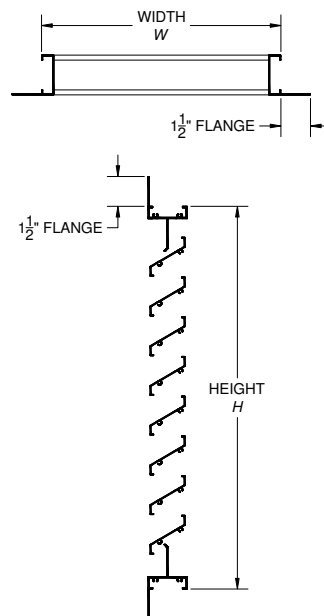
2210 / 2215
2" DEEP EXHAUST LOUVER



MODEL: 2210
FRAME: CHANNEL FRAME
DUCT-MOUNT (DM)



MODEL: 2215
FRAME: FLANGE FRAME
FLANGE-MOUNT (FM)



PERFORMANCE			
LOUVER UNIT SIZE	TOTAL AREA	FREE AREA	53.2%
48" x 48"	16 ft ²	8.51 ft ²	
(1219 x 1219 mm)	(1.49 m ²)	(0.79 m ²)	
BEGINNING POINT OF WATER PENETRATION AT 0.01 oz./ft ² FREE AREA			478 FPM

STANDARD CONSTRUCTION	
DEPTH:	2" (51 mm)
MATERIAL:	EXTRUDED ALUMINUM - 6063-T5 ALLOY
FRAME THICKNESS:	0.062" (1.57 mm)
BLADE THICKNESS:	0.062" (1.57 mm)
BLADE ANGLE:	30°
BLADE CENTRES:	2" (51 mm)
BIRDSCREEN:	19 GA. GALVANIZED BIRDSCREEN - 1/2" x 1/2" OPENINGS
FINISH:	MILL

SIZE LIMITATIONS: SINGLE SECTION LOUVER		
	MINIMUM	MAXIMUM
WIDTH	12" (305 mm)	72" (1829 mm)
HEIGHT	8" (203 mm)	72" (1829 mm)
AREA	0.67 ft ² (0.06 m ²)	36 ft ² (3.34 m ²)

*LOUVER WILL BE MANUFACTURED 1/4" (6.4 mm) SMALLER (SINGLE SECTION) AND 1/2" (12.7 mm) SMALLER (MULTIPLE SECTION) THAN GIVEN OPENING DIMENSIONS UNLESS OTHERWISE SPECIFIED

AVAILABLE ACCESSORIES		
FINISH: - BAKED ENAMEL FINISH - DURANAR FINISH - ANODIZED FINISH - CLEAR ANODIZED - LIGHT BRONZE - MEDIUM BRONZE - DARK BRONZE - BLACK ANODIZED - EXTENDED SILLS - SECURITY BARS - FILTER RACKS - STAINLESS STEEL FASTENERS - HINGED ACCESS DOORS - ALL WELDED CONSTRUCTION - CUSTOM GEOMETRIC SHAPES - CONTINUOUS LINE CONSTRUCTION WITH HIDDEN MULLIONS TO PROVIDE AN UNINTERRUPTED APPEARANCE	SCREENS: - BIRDSCREEN 1/2" x 1/2" INTER CRIMPED ALUMINUM - ALUMINUM BIRDSCREEN WITH FRAME - INSECT SCREEN 18 x 14 MESH	BLANK-OFF PANELS (ALUMINUM): VARIOUS GAUGES - NON-INSULATED BLANK-OFF PANELS - INSULATED BLANK-OFF PANELS 1" (25.4 mm) INSULATION 2" (50.8 mm) INSULATION

DWG. 2210 / 2215 MARCH 2010


SURFACE LIBRE (PI²)

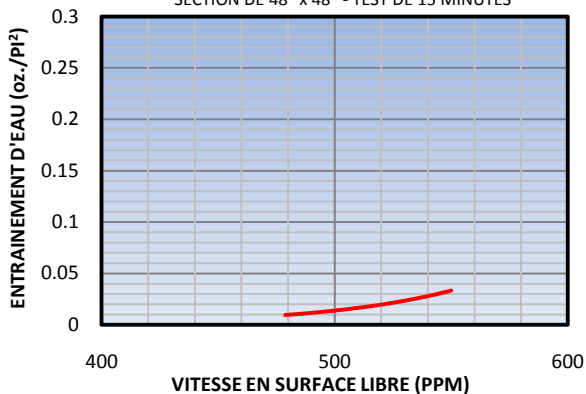
		LARGEUR (PO)															
		12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72
HAUTEUR (PO)	8	0.17	0.23	0.29	0.36	0.42	0.48	0.54	0.61	0.67	0.73	0.79	0.86	0.92	0.98	1.05	1.11
	12	0.35	0.48	0.61	0.73	0.86	0.99	1.12	1.25	1.38	1.51	1.64	1.77	1.90	2.03	2.16	2.29
	16	0.53	0.72	0.92	1.11	1.31	1.50	1.70	1.90	2.09	2.29	2.48	2.68	2.88	3.07	3.27	3.46
	20	0.70	0.97	1.23	1.49	1.75	2.02	2.28	2.54	2.80	3.07	3.33	3.59	3.85	4.11	4.38	4.64
	24	0.88	1.21	1.54	1.87	2.20	2.53	2.86	3.19	3.51	3.84	4.17	4.50	4.83	5.16	5.49	5.82
	28	1.06	1.46	1.85	2.25	2.64	3.04	3.44	3.83	4.23	4.62	5.02	5.41	5.81	6.20	6.60	6.99
	32	1.24	1.70	2.17	2.63	3.09	3.55	4.01	4.48	4.94	5.40	5.86	6.32	6.79	7.25	7.71	8.17
	36	1.42	1.95	2.48	3.01	3.53	4.06	4.59	5.12	5.65	6.18	6.71	7.23	7.76	8.29	8.82	9.35
	40	1.60	2.19	2.79	3.38	3.98	4.57	5.17	5.76	6.36	6.96	7.55	8.15	8.74	9.34	9.93	10.53
	44	1.78	2.44	3.10	3.76	4.42	5.09	5.75	6.41	7.07	7.73	8.39	9.06	9.72	10.38	11.04	11.70
	48	1.96	2.69	3.41	4.14	4.87	5.60	6.33	7.05	7.78	8.51	9.24	9.97	10.70	11.42	12.15	12.88
	52	2.14	2.93	3.73	4.52	5.31	6.11	6.90	7.70	8.49	9.29	10.08	10.88	11.67	12.47	13.26	14.06
	56	2.31	3.18	4.04	4.90	5.76	6.62	7.48	8.34	9.21	10.07	10.93	11.79	12.65	13.51	14.37	15.23
	60	2.49	3.42	4.35	5.28	6.21	7.13	8.06	8.99	9.92	10.84	11.77	12.70	13.63	14.56	15.48	16.41
	64	2.67	3.67	4.66	5.66	6.65	7.64	8.64	9.63	10.63	11.62	12.62	13.61	14.61	15.60	16.59	17.59
	68	2.85	3.91	4.97	6.03	7.10	8.16	9.22	10.28	11.34	12.40	13.46	14.52	15.58	16.64	17.70	18.77
	72	3.03	4.16	5.29	6.41	7.54	8.67	9.80	10.92	12.05	13.18	14.31	15.43	16.56	17.69	18.82	19.94

SURFACE LIBRE (%)

	LARGEUR (PO)																
	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	
HAUTEUR (PO)	8	25.3%	26.0%	26.4%	26.7%	26.9%	27.1%	27.2%	27.3%	27.4%	27.5%	27.5%	27.6%	27.6%	27.6%	27.7%	27.7%
	12	34.7%	35.7%	36.3%	36.7%	37.0%	37.2%	37.4%	37.5%	37.7%	37.7%	37.8%	37.9%	38.0%	38.0%	38.0%	38.1%
	16	39.5%	40.6%	41.3%	41.7%	42.1%	42.3%	42.5%	42.7%	42.8%	42.9%	43.0%	43.1%	43.1%	43.2%	43.2%	43.3%
	20	42.3%	43.5%	44.3%	44.8%	45.1%	45.4%	45.6%	45.7%	45.9%	46.0%	46.1%	46.2%	46.2%	46.3%	46.3%	46.4%
	24	44.2%	45.5%	46.2%	46.8%	47.1%	47.4%	47.6%	47.8%	47.9%	48.0%	48.1%	48.2%	48.3%	48.4%	48.4%	48.5%
	28	45.5%	46.9%	47.7%	48.2%	48.6%	48.9%	49.1%	49.3%	49.4%	49.5%	49.6%	49.7%	49.8%	49.8%	49.9%	50.0%
	32	46.6%	47.9%	48.7%	49.3%	49.7%	49.9%	50.2%	50.3%	50.5%	50.6%	50.7%	50.8%	50.9%	51.0%	51.0%	51.1%
	36	47.3%	48.7%	49.5%	50.1%	50.5%	50.8%	51.0%	51.2%	51.4%	51.5%	51.6%	51.7%	51.8%	51.8%	51.9%	51.9%
	40	48.0%	49.4%	50.2%	50.8%	51.2%	51.5%	51.7%	51.9%	52.0%	52.2%	52.3%	52.4%	52.4%	52.5%	52.6%	52.6%
	44	48.5%	49.9%	50.8%	51.3%	51.7%	52.0%	52.3%	52.4%	52.6%	52.7%	52.8%	52.9%	53.0%	53.1%	53.1%	53.2%
	48	48.9%	50.3%	51.2%	51.8%	52.2%	52.5%	52.7%	52.9%	53.1%	53.2%	53.3%	53.4%	53.5%	53.5%	53.6%	53.7%
	52	49.3%	50.7%	51.6%	52.2%	52.6%	52.9%	53.1%	53.3%	53.5%	53.6%	53.7%	53.8%	53.9%	53.9%	54.0%	54.1%
	56	49.6%	51.0%	51.9%	52.5%	52.9%	53.2%	53.4%	53.6%	53.8%	53.9%	54.0%	54.1%	54.2%	54.3%	54.4%	54.4%
	60	49.9%	51.3%	52.2%	52.8%	53.2%	53.5%	53.7%	53.9%	54.1%	54.2%	54.3%	54.4%	54.5%	54.6%	54.6%	54.7%
	64	50.1%	51.6%	52.4%	53.0%	53.4%	53.8%	54.0%	54.2%	54.3%	54.5%	54.6%	54.7%	54.8%	54.8%	54.9%	55.0%
	68	50.3%	51.8%	52.7%	53.2%	53.7%	54.0%	54.2%	54.4%	54.6%	54.7%	54.8%	54.9%	55.0%	55.1%	55.1%	55.2%
	72	50.5%	52.0%	52.9%	53.4%	53.9%	54.2%	54.4%	54.6%	54.8%	54.9%	55.0%	55.1%	55.2%	55.3%	55.3%	55.4%

ENTRAÎNEMENT D'EAU - 2210 / 2215

SECTION DE 48" x 48" - TEST DE 15 MINUTES



POINT INITIAL D'ENTRAÎNEMENT D'EAU À 478 PPM POUR 0.01 oz./PI²

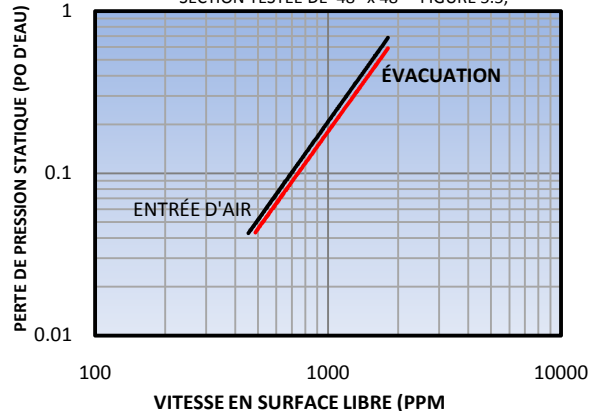
*LES DONNÉES EXCLUENT L'EFFET DU GRILLAGE AVIAIRE

SPÉCIFICATION RECOMMANDÉES

Fournir et installer les persiennes fixes modèle 2210 / 2215 fabriquées par Ventex inc, Bolton (On). Elles seront d'une profondeur de 2" (50 mm). Les lames et les cadres seront d'un alliage d'aluminium 6063-T5 d'au moins 0.062" (1.57 mm). Les persiennes seront fournies avec un grillage en acier galvanisé 1/2" x 1/2" de 19 ga. Fini couleur en usine par un procédé environnementale à base de poudre électrostatique. Choix de couleur parmi la charte Ventex inc.

PERTE DE PRESSION 2210 / 2215

SECTION TESTÉE DE 48" x 48" - FIGURE 5.5,



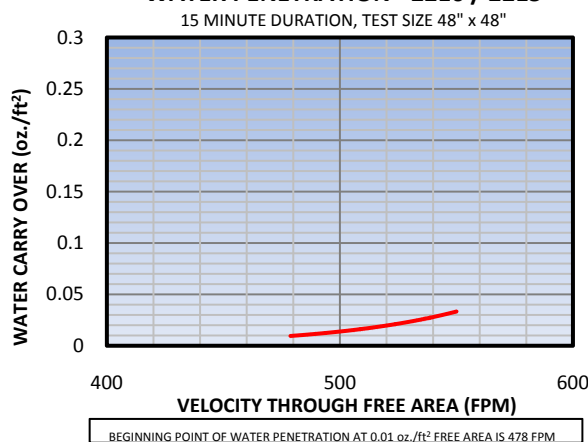
FREE AREA (Sq. Ft.)

HEIGHT (INCHES)	WIDTH (INCHES)															
	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72
8	0.17	0.23	0.29	0.36	0.42	0.48	0.54	0.61	0.67	0.73	0.79	0.86	0.92	0.98	1.05	1.11
12	0.35	0.48	0.61	0.73	0.86	0.99	1.12	1.25	1.38	1.51	1.64	1.77	1.90	2.03	2.16	2.29
16	0.53	0.72	0.92	1.11	1.31	1.50	1.70	1.90	2.09	2.29	2.48	2.68	2.88	3.07	3.27	3.46
20	0.70	0.97	1.23	1.49	1.75	2.02	2.28	2.54	2.80	3.07	3.33	3.59	3.85	4.11	4.38	4.64
24	0.88	1.21	1.54	1.87	2.20	2.53	2.86	3.19	3.51	3.84	4.17	4.50	4.83	5.16	5.49	5.82
28	1.06	1.46	1.85	2.25	2.64	3.04	3.44	3.83	4.23	4.62	5.02	5.41	5.81	6.20	6.60	6.99
32	1.24	1.70	2.17	2.63	3.09	3.55	4.01	4.48	4.94	5.40	5.86	6.32	6.79	7.25	7.71	8.17
36	1.42	1.95	2.48	3.01	3.53	4.06	4.59	5.12	5.65	6.18	6.71	7.23	7.76	8.29	8.82	9.35
40	1.60	2.19	2.79	3.38	3.98	4.57	5.17	5.76	6.36	6.96	7.55	8.15	8.74	9.34	9.93	10.53
44	1.78	2.44	3.10	3.76	4.42	5.09	5.75	6.41	7.07	7.73	8.39	9.06	9.72	10.38	11.04	11.70
48	1.96	2.69	3.41	4.14	4.87	5.60	6.33	7.05	7.78	8.51	9.24	9.97	10.70	11.42	12.15	12.88
52	2.14	2.93	3.73	4.52	5.31	6.11	6.90	7.70	8.49	9.29	10.08	10.88	11.67	12.47	13.26	14.06
56	2.31	3.18	4.04	4.90	5.76	6.62	7.48	8.34	9.21	10.07	10.93	11.79	12.65	13.51	14.37	15.23
60	2.49	3.42	4.35	5.28	6.21	7.13	8.06	8.99	9.92	10.84	11.77	12.70	13.63	14.56	15.48	16.41
64	2.67	3.67	4.66	5.66	6.65	7.64	8.64	9.63	10.63	11.62	12.62	13.61	14.61	15.60	16.59	17.59
68	2.85	3.91	4.97	6.03	7.10	8.16	9.22	10.28	11.34	12.40	13.46	14.52	15.58	16.64	17.70	18.77
72	3.03	4.16	5.29	6.41	7.54	8.67	9.80	10.92	12.05	13.18	14.31	15.43	16.56	17.69	18.82	19.94

FREE AREA (%)

HEIGHT (INCHES)	WIDTH (INCHES)															
	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72
8	25.3%	26.0%	26.4%	26.7%	26.9%	27.1%	27.3%	27.3%	27.4%	27.5%	27.5%	27.6%	27.6%	27.6%	27.7%	27.7%
12	34.7%	35.7%	36.3%	36.7%	37.0%	37.2%	37.4%	37.5%	37.7%	37.7%	37.8%	37.9%	38.0%	38.0%	38.0%	38.1%
16	39.5%	40.6%	41.3%	41.7%	42.1%	42.3%	42.5%	42.7%	42.8%	42.9%	43.0%	43.1%	43.1%	43.2%	43.2%	43.3%
20	42.3%	43.5%	44.3%	44.8%	45.1%	45.4%	45.6%	45.7%	45.9%	46.0%	46.1%	46.2%	46.2%	46.3%	46.3%	46.4%
24	44.2%	45.5%	46.2%	46.8%	47.1%	47.4%	47.6%	47.8%	47.9%	48.0%	48.1%	48.2%	48.3%	48.4%	48.4%	48.5%
28	45.5%	46.9%	47.7%	48.2%	48.6%	48.9%	49.1%	49.3%	49.4%	49.5%	49.6%	49.7%	49.8%	49.8%	49.9%	50.0%
32	46.6%	47.9%	48.7%	49.3%	49.7%	49.9%	50.2%	50.3%	50.5%	50.6%	50.7%	50.8%	50.9%	51.0%	51.0%	51.1%
36	47.3%	48.7%	49.5%	50.1%	50.5%	50.8%	51.0%	51.2%	51.4%	51.5%	51.6%	51.7%	51.8%	51.8%	51.9%	51.9%
40	48.0%	49.4%	50.2%	50.8%	51.2%	51.5%	51.7%	51.9%	52.0%	52.2%	52.3%	52.4%	52.4%	52.5%	52.6%	52.6%
44	48.5%	49.9%	50.8%	51.3%	51.7%	52.0%	52.3%	52.4%	52.6%	52.7%	52.8%	52.9%	53.0%	53.1%	53.1%	53.2%
48	48.9%	50.3%	51.2%	51.8%	52.2%	52.5%	52.7%	52.9%	53.1%	53.2%	53.3%	53.4%	53.5%	53.5%	53.6%	53.7%
52	49.3%	50.7%	51.6%	52.2%	52.6%	52.9%	53.1%	53.3%	53.5%	53.6%	53.7%	53.8%	53.9%	53.9%	54.0%	54.1%
56	49.6%	51.0%	51.9%	52.5%	52.9%	53.2%	53.4%	53.6%	53.8%	53.9%	54.0%	54.1%	54.2%	54.3%	54.4%	54.4%
60	49.9%	51.3%	52.2%	52.8%	53.2%	53.5%	53.7%	53.9%	54.1%	54.2%	54.3%	54.4%	54.5%	54.6%	54.6%	54.7%
64	50.1%	51.6%	52.4%	53.0%	53.4%	53.8%	54.0%	54.2%	54.3%	54.5%	54.6%	54.7%	54.8%	54.8%	54.9%	55.0%
68	50.3%	51.8%	52.7%	53.2%	53.7%	54.0%	54.2%	54.4%	54.6%	54.7%	54.8%	54.9%	55.0%	55.1%	55.1%	55.2%
72	50.5%	52.0%	52.9%	53.4%	53.9%	54.2%	54.4%	54.6%	54.8%	54.9%	55.0%	55.1%	55.2%	55.3%	55.3%	55.4%

WATER PENETRATION - 2210 / 2215

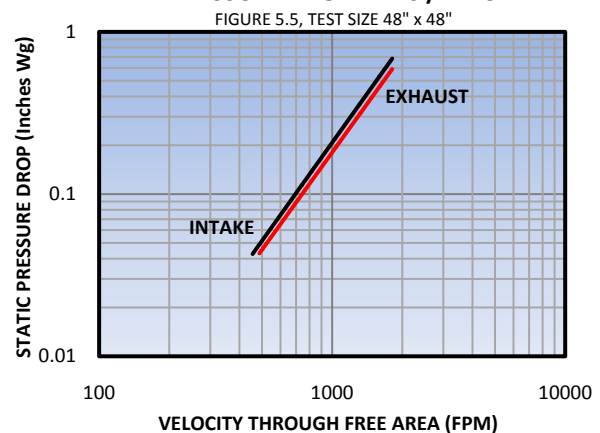


*TEST RESULTS DO NOT INCLUDE THE EFFECTS OF BIRDSCREEN

RECOMMENDED SPECIFICATION

Furnish and install stationary louver models 2210 / 2215 as manufactured by Ventex Inc, Bolton, Ontario. Louvers must be licensed to bear the AMCA seal. Louvers shall be 2" (51 mm) deep. Blades shall be 0.062" (1.57 mm) extruded 6063-T5 aluminum alloy and frame shall be 0.062" (1.57 mm) extruded 6063-T5 aluminum alloy. Louvers shall have 19 gauge galvanized 1/2" x 1/2" birdscreen. All materials shall be factory finished after assembly with Polyester Powder Coat in a color selected from the Ventex Color Chart.

PRESSURE DROP- 2210 / 2215



CERTIFIED RATINGS

Ventex Inc. certifies that the models 2210 / 2215 shown here are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The Certified Ratings Seal applies to air performance and water penetration ratings.

