



Laird Technologies offers ElectroVent EMI Shielding Ventilation Panels. Available in a wide choice of materials, platings, and mounting configurations, ElectroVent offers the designer new versatility to meet EMI, environmental, and mechanical requirements of system specifications.

ElectroVent Advantages:

- Wide choice of materials and finishes to meet a broad range of shielding effectiveness requirements
- Varied mounting configurations to meet environmental and space considerations
- Protective grille can be supplied
- Panel supplied with 0.25 (6,4) thick or 0.50 (12,7) thick honeycomb
- Full EMI test of panel to MIL-STD-285 to aid in the early stages of equipment panel design

Available Protective Grille

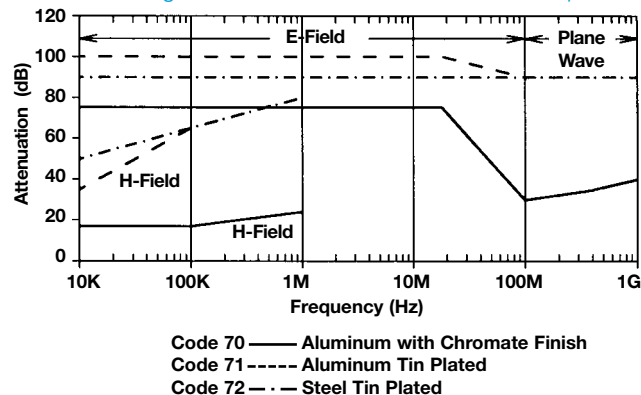
For high traffic areas, all EMI ventilation panels are available with grille installed to protect honeycomb from damage that could impede airflow or shielding effectiveness.

Table 1. Codes for Panel Materials and Plating Combinations

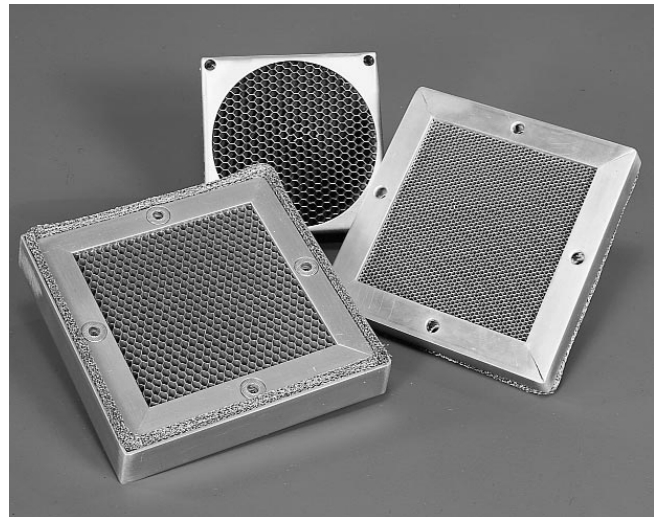
Code No.	Honeycomb Materials	Frame Materials	Plating	EMI Gasket
70	Aluminum Alloy MIL-C-7438	Aluminum Alloy 6063-T4	Chromate Coating MIL-C-5541 Class 3	Wire Knit: Monel QQ-N-281 Class A Elastomer: Neoprene MIL-R-6130 Type Grade A Medium
71	Aluminum Alloy MIL-C-7438	Aluminum Alloy 6063-T4	Tin Plating MIL-T-10727 Type 1	Wire Knit: Tin Coated Copper Clad Steel ASTM B 520 Elastomer: Neoprene MIL-R-6130 Type Grade A Medium
72	Steel SAE 1010	Aluminum Alloy 6063-T4* Chromate Coating	Honeycomb Only Tin Plate MIL-T-10727 Type 1	Wire Knit: Monel QQ-N-281 Class A Elastomer: Neoprene MIL-R-6130 Type Grade A Medium

*Available with tin plated steel frame if required.

Figure 1. Shielding Effectiveness for Various Materials and Plating Combinations at 10-12 Inch Lbs Torque

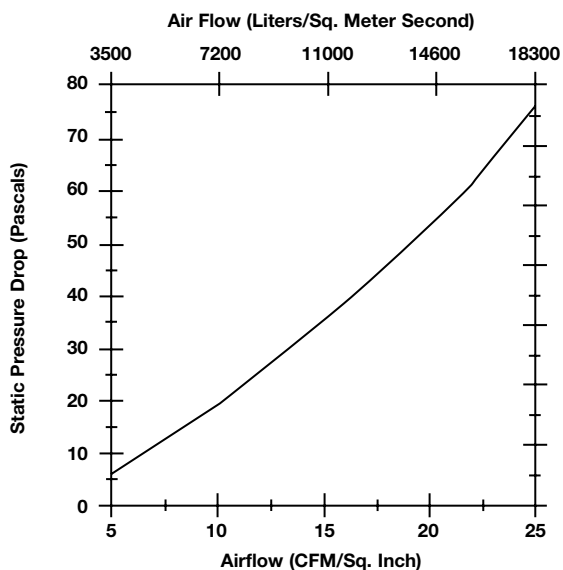


All dimensions shown are in inches (millimeters) unless otherwise specified.



Vent panels range from 3 in. (76,2 mm) to 18 in. (457,2 mm) square in standard sizes, and can be ordered with either 0.50 in. (12,7 mm) thick or space-saving 0.25 in. (6,4 mm) thick honeycombs.

Figure 2. Air Flow vs. Resistance for Straight Honeycomb Panel



Vent Panel Size Determination

1. Customer determines fan size and velocity based on their calculated cooling requirements.
Example: Fan @ 240 CFM velocity with static pressure of 0.035 inches H₂O.
2. Determine panel opening size so as not to impede airflow
 - A From Figure 2 graph intersect 0.035 inches on Y axis
 - B Draw line to curve—this intersects at 6 CFM/in²
 - C Required vent opening = (240 ÷ 6) = 40 sq. in. opening
 - D Choose vent size with 40 sq. in. opening or larger



ElectroVent Shielding Ventilation Panels

Figure 3. Channel Mount

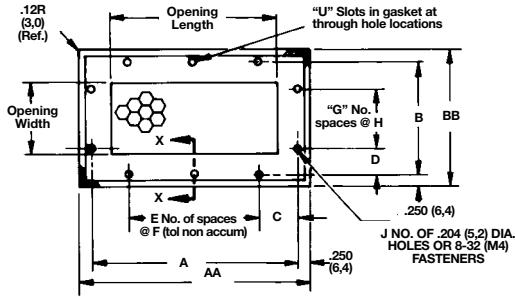
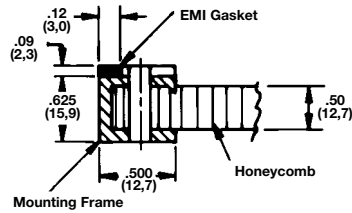


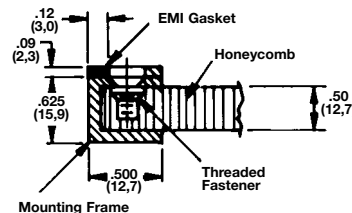
Table 2. Tolerances

Dimensional Location	Size Range with Tolerance		
	0-4 (0-101,6)	4.1-12.0 (104,1-304,8)	12.1 to 24.0 (307,3-609,6)
Length and Width	±.020 (±.51)	±.031 (±.79)	±.040 (±1.02)
Hole Location	±.010 (±.25)	±.015 (±.38)	±.020 (±.51)
Square	±.007 (±.178)	±.015 (±.38)	±.040 (± 1.02)

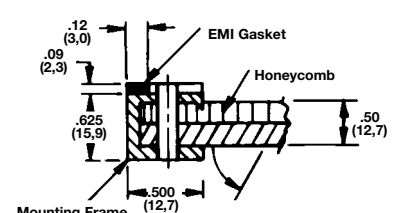
Section X-X (Rotate 900) for 0.50 in. (12,7 mm) Thick Vent 0.125 in. (3,2 mm) Cell



Type 8620-Through Hole

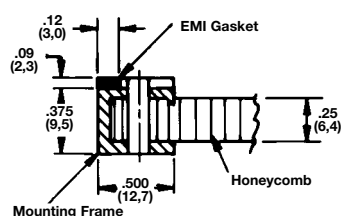


Type 8621-Captive Fastener

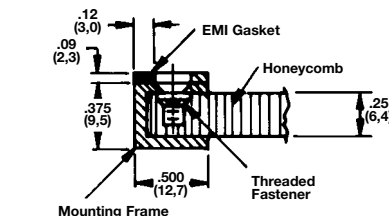


***Type 8622-Drip-Proof with Through Hole
*Type 8623-With Fastener**

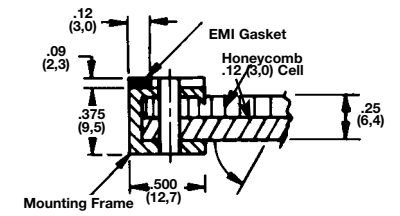
Section X-X (Rotate 900) for 0.25 in. (6,4 mm) Thick Vent 0.062 in. (1,6 mm) Cell



***Type 8624-Through Hole**



***Type 8625-Captive Fastener**



***Type 8626-Drip-Proof with Through Hole
*Type 8627-With Fastener**

Table 3. Part No. and Dimension Tabulation

Base Part No.	Opening		Frame Dimensions										
	Width	Length	AA	BB	A	B	C	D	E	F	G	H	J
XXXX-0303-ZZ	3.00 (76,2)	3.00 (76,2)	4.00 (101,6)	4.00 (101,6)	3.50 (88,9)	3.50 (88,9)	1.75 (44,5)	1.75 (44,5)	-	-	-	-	4
XXXX-0305-ZZ	3.00 (76,2)	5.00 (127,0)	6.00 (152,4)	4.00 (101,6)	5.50 (139,7)	3.50 (88,9)	1.00 (25,4)	1.75 (44,5)	1	3.50 (88,9)	-	-	6
XXXX-0311-ZZ	3.00 (76,2)	11.00 (279,4)	12.00 (304,8)	4.00 (101,6)	11.50 (292,1)	3.50 (88,9)	1.25 (31,8)	1.75 (44,5)	3	3.00 (76,2)	-	-	10
XXXX-0404-ZZ	4.00 (101,6)	4.00 (101,6)	5.00 (127,0)	5.00 (127,0)	4.50 (114,3)	4.50 (114,3)	0.75 (19,1)	2.25 (57,2)	1	3.00 (76,2)	-	-	6
XXXX-0409-ZZ	4.00 (101,6)	9.00 (228,6)	10.00 (254,0)	5.00 (127,0)	9.50 (241,3)	4.50 (114,3)	1.25 (31,8)	2.25 (57,2)	2	3.50 (88,9)	-	-	8
XXXX-0505-ZZ	5.00 (127,0)	5.00 (127,0)	6.00 (152,4)	6.00 (152,4)	5.50 (139,7)	5.50 (139,7)	1.00 (25,4)	1.00 (25,4)	1	3.50 (88,9)	1	3.50 (88,9)	8
XXXX-0511-ZZ	5.00 (127,0)	11.00 (279,4)	12.00 (304,8)	6.00 (152,4)	11.50 (292,1)	5.50 (139,7)	1.25 (31,8)	1.00 (25,4)	3	3.00 (76,2)	1	3.50 (88,9)	12
XXXX-0606-ZZ	6.00 (152,4)	6.00 (152,4)	7.00 (177,8)	7.00 (177,8)	6.50 (165,1)	6.50 (165,1)	1.50 (38,1)	1.50 (38,1)	1	3.50 (88,9)	1	3.50 (88,9)	8
XXXX-0609-ZZ	6.00 (152,4)	9.00 (228,6)	10.00 (254,0)	7.00 (177,8)	9.50 (241,3)	6.50 (165,1)	1.25 (31,8)	1.50 (38,1)	2	3.50 (88,9)	1	3.50 (88,9)	10
XXXX-0714-ZZ	7.00 (177,8)	14.00 (355,6)	15.00 (381,0)	8.00 (203,2)	14.50 (368,3)	7.50 (190,5)	0.75 (19,1)	0.75 (19,1)	4	3.25 (82,6)	2	3.00 (76,2)	16
XXXX-0909-ZZ	9.00 (228,6)	9.00 (228,6)	10.00 (254,0)	10.00 (254,0)	9.50 (241,3)	9.50 (241,3)	1.25 (31,8)	1.25 (31,8)	2	3.50 (88,9)	2	3.50 (88,9)	12
XXXX-1111-ZZ	11.00 (279,4)	11.00 (279,4)	12.00 (304,8)	12.00 (304,8)	11.50 (292,1)	11.50 (292,1)	1.25 (31,8)	1.25 (31,8)	3	3.00 (76,2)	3	3.00 (76,2)	16
XXXX-1414-ZZ	14.00 (355,6)	14.00 (355,6)	15.00 (381,0)	15.00 (381,0)	14.50 (368,3)	14.50 (368,3)	1.25 (31,8)	1.25 (31,8)	4	3.00 (76,2)	4	3.00 (76,2)	20
XXXX-1818-ZZ	18.00 (457,2)	18.00 (457,2)	19.00 (482,6)	19.00 (482,6)	18.50 (469,9)	18.50 (469,9)	1.75 (44,5)	1.75 (44,5)	5	3.00 (76,2)	5	3.00 (76,2)	24

Sizes and configurations not shown are available upon request.

*Not available in Material Code 72.

All dimensions shown are in inches (millimeters) unless otherwise specified.



Figure 4. Groove Gasket Channel Mount

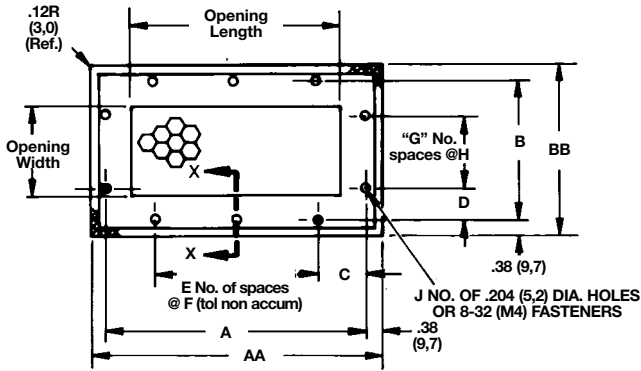
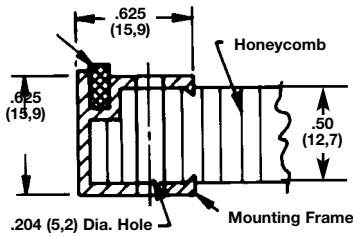


Table 4. Tolerances

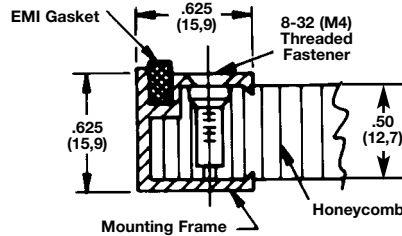
Dimensional Location	Size Range with Tolerance		
	0-4 (0-101,6)	4.1-12.0 (104,1-304,8)	12.1 to 24.0 (307,3-609,6)
Length and Width	±.020 (±.51)	±.031 (±.79)	±.040 (±1,02)
Hole Location	±.010 (±.25)	±.015 (±.38)	±.020 (±.51)
Square	±.007 (±.178)	±.015 (±.38)	±.040 (± 1,02)

Section X-X (Rotate 900) for 0.50 in. (12,7 mm) Thick Vent 0.125 in. (3,2 mm) Cell

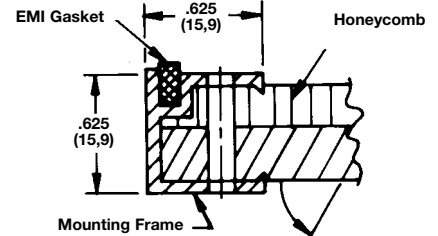
EMI Gasket



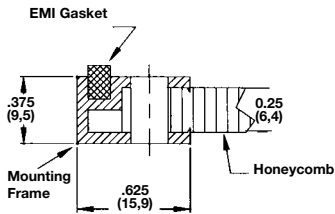
Type 8628



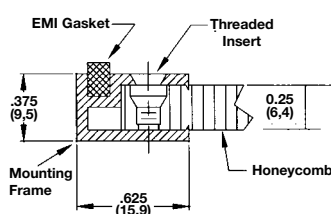
Type 8629-Captive Fastener



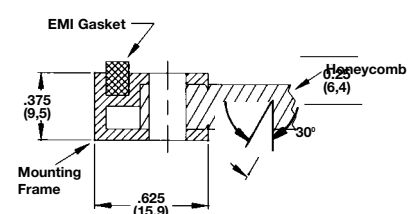
*Type 8630- Drip-Proof with Through Hole
*Type 8631- Drip-Proof with Captive Fastener



Type 8677



Type 8678 - Captive Fastener



Type 8679 - Drip-Proof with Through Hole
Type 8680 - Drip-Proof with Fastener

Table 5. Part No. and Dimension Tabulation

Base Part No.	Opening		Frame Dimensions										
	Width	Length	AA	BB	A	B	C	D	E	F	G	H	J
XXXX-0303-ZZ	3.00 (76,2)	3.00 (76,2)	4.25 (108,0)	4.25 (108,0)	3.50 (88,9)	3.50 (88,9)	1.75 (44,5)	1.75 (44,5)	-	-	-	-	4
XXXX-0305-ZZ	3.00 (76,2)	5.00 (127,0)	6.25 (158,8)	4.25 (108,0)	5.50 (139,7)	3.50 (88,9)	1.00 (25,4)	1.75 (44,5)	1	3.50 (88,9)	-	-	6
XXXX-0311-ZZ	3.00 (76,2)	11.00 (279,4)	12.25 (311,2)	4.25 (108,0)	11.50 (292,1)	3.50 (88,9)	1.25 (31,8)	1.75 (44,5)	3	3.00 (76,2)	-	-	10
XXXX-0404-ZZ	4.00 (101,6)	4.00 (101,6)	5.25 (133,4)	5.25 (133,4)	4.50 (114,3)	4.50 (114,3)	0.75 (19,1)	2.25 (57,2)	1	3.00 (76,2)	-	-	6
XXXX-0409-ZZ	4.00 (101,6)	9.00 (228,6)	10.25 (260,4)	5.25 (133,4)	9.50 (241,3)	4.50 (114,3)	1.25 (31,8)	2.25 (57,2)	2	3.50 (88,9)	-	-	8
XXXX-0505-ZZ	5.00 (127,0)	5.00 (127,0)	6.25 (158,6)	6.25 (158,6)	5.50 (139,7)	5.50 (139,7)	1.00 (25,4)	1.00 (25,4)	1	3.50 (88,9)	1	3.50 (88,9)	8
XXXX-0511-ZZ	5.00 (127,0)	11.00 (279,4)	12.25 (311,2)	6.25 (158,6)	11.50 (292,1)	5.50 (139,7)	1.25 (31,8)	1.00 (25,4)	3	3.00 (76,2)	1	3.50 (88,9)	12
XXXX-0606-ZZ	6.00 (152,4)	6.00 (152,4)	7.25 (184,2)	7.25 (184,2)	6.50 (165,1)	6.50 (165,1)	1.50 (38,1)	1.50 (38,1)	1	3.50 (88,9)	1	3.50 (88,9)	8
XXXX-0609-ZZ	6.00 (152,4)	9.00 (228,6)	10.25 (260,4)	7.25 (184,2)	9.50 (241,3)	6.50 (165,1)	1.25 (31,8)	1.50 (38,1)	2	3.50 (88,9)	1	3.50 (88,9)	10
XXXX-0714-ZZ	7.00 (177,8)	14.00 (355,6)	15.25 (387,4)	8.25 (209,6)	14.50 (368,3)	7.50 (190,5)	0.75 (19,1)	0.75 (19,1)	4	3.25 (82,6)	2	3.00 (76,2)	16
XXXX-0909-ZZ	9.00 (228,6)	9.00 (228,6)	10.25 (260,4)	10.25 (260,4)	9.50 (241,3)	9.50 (241,3)	1.25 (31,8)	1.25 (31,8)	2	3.50 (88,9)	2	3.50 (88,9)	12
XXXX-1111-ZZ	11.00 (279,4)	11.00 (279,4)	12.25 (311,2)	12.25 (311,2)	11.50 (292,1)	11.50 (292,1)	1.25 (31,8)	1.25 (31,8)	3	3.00 (76,2)	3	3.00 (76,2)	16
XXXX-1414-ZZ	14.00 (355,6)	14.00 (355,6)	15.25 (387,4)	15.25 (387,4)	14.50 (368,3)	14.50 (368,3)	1.25 (31,8)	1.25 (31,8)	4	3.00 (76,2)	4	3.00 (76,2)	20
XXXX-1818-ZZ	18.00 (457,2)	18.00 (457,2)	19.25 (489,0)	19.25 (489,0)	18.50 (469,9)	18.50 (469,9)	1.75 (44,5)	1.75 (44,5)	5	3.00 (76,2)	5	3.00 (76,2)	24

Sizes and configurations not shown are available upon request.

*Not available in Material Code 72.

All dimensions shown are in inches (millimeters) unless otherwise specified.



Figure 5. Recess Mount

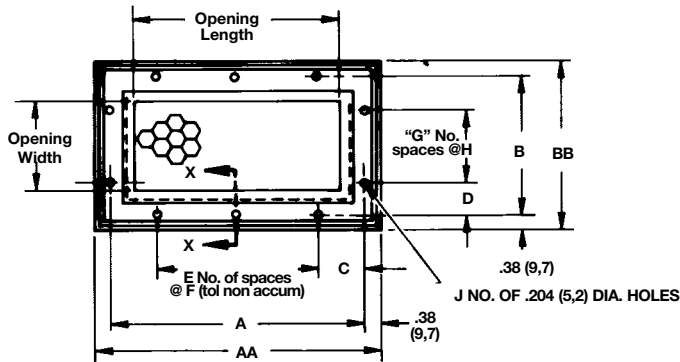
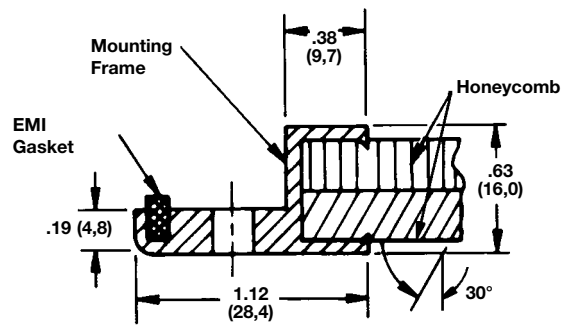
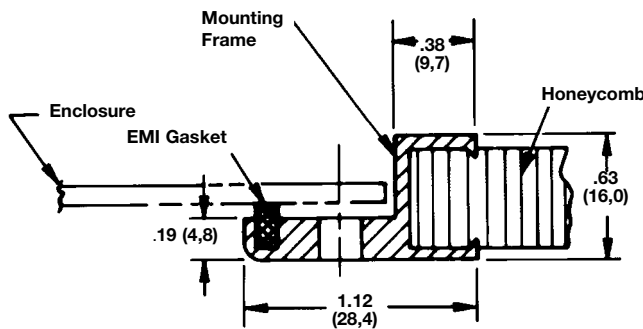


Table 6. Tolerances

Dimensional Location	Size Range with Tolerance		
	0-4 (0-101,6)	4.1-12.0 (104,1-304,8)	12.1 to 24.0 (307,3-609,6)
Length and Width	±.020 (±.51)	±.031 (±.79)	±.040 (±1,02)
Hole Location	±.010 (±.25)	±.015 (±.38)	±.020 (±.51)
Square	±.007 (±.178)	±.015 (±.38)	±.040 (±1,02)

Section X-X (Rotate 900) for 0.50 in. (12,7 mm) Thick Vent 0.125 in. (3,2 mm) Cell



Type 8632

*Type 8633 - Drip-Proof

Table 7. Part No. and Dimension Tabulation

Base Part No.	Opening		Frame Dimensions										
	Width	Length	AA	BB	A	B	C	D	E	F	G	H	J
XXXX-0303-ZZ	3.00 (76,2)	3.00 (76,2)	5.25 (133,4)	5.25 (133,4)	4.50 (114,3)	4.50 (114,3)	2.25 (57,2)	2.25 (57,2)	-	-	-	-	4
XXXX-0305-ZZ	3.00 (76,2)	5.00 (127,0)	7.25 (184,2)	5.25 (133,4)	6.50 (165,2)	4.50 (114,3)	1.75 (44,5)	2.25 (57,2)	1	3.50 (88,9)	-	-	6
XXXX-0311-ZZ	3.00 (76,2)	11.00 (279,4)	13.25 (336,6)	5.25 (133,4)	12.50 (317,5)	4.50 (114,3)	1.75 (44,5)	2.25 (57,2)	3	3.00 (76,2)	-	-	10
XXXX-0404-ZZ	4.00 (101,6)	4.00 (101,6)	6.25 (158,8)	6.25 (158,8)	5.50 (139,7)	5.50 (139,7)	1.00 (25,4)	1.00 (25,4)	1	3.50 (88,9)	1	3.50 (88,9)	8
XXXX-0409-ZZ	4.00 (101,6)	9.00 (228,6)	11.25 (285,8)	6.25 (158,8)	10.50 (266,7)	5.50 (139,7)	0.75 (19,1)	1.00 (25,4)	3	3.00 (76,2)	1	3.50 (88,9)	12
XXXX-0505-ZZ	5.00 (127,0)	5.00 (127,0)	7.25 (184,2)	7.25 (184,2)	6.50 (165,1)	6.50 (165,1)	0.50 (12,7)	1.50 (38,1)	2	2.75 (69,9)	1	3.50 (88,9)	10
XXXX-0511-ZZ	5.00 (127,0)	11.00 (279,4)	13.25 (336,6)	7.25 (184,2)	12.50 (317,5)	6.50 (165,1)	1.00 (25,4)	1.50 (38,1)	3	3.50 (88,9)	1	3.50 (88,9)	12
XXXX-0606-ZZ	6.00 (152,4)	6.00 (152,4)	8.25 (209,6)	8.25 (209,6)	7.50 (190,5)	7.50 (190,5)	0.75 (19,1)	0.75 (19,1)	2	3.00 (76,2)	2	3.00 (76,2)	12
XXXX-0609-ZZ	6.00 (152,4)	9.00 (228,6)	11.25 (285,8)	8.25 (209,6)	10.50 (266,7)	7.50 (190,5)	0.75 (19,1)	0.75 (19,1)	3	3.00 (76,2)	2	3.00 (76,2)	14
XXXX-0714-ZZ	7.00 (177,8)	14.00 (355,6)	16.25 (412,8)	9.25 (235,0)	15.50 (393,7)	8.50 (215,9)	0.75 (19,1)	0.75 (19,1)	4	3.25 (82,6)	2	3.00 (76,2)	16
XXXX-0909-ZZ	9.00 (228,6)	9.00 (228,6)	11.25 (285,8)	11.25 (285,8)	10.50 (266,7)	10.50 (266,7)	0.75 (19,1)	0.75 (19,1)	3	3.00 (76,2)	3	3.00 (76,2)	16
XXXX-1111-ZZ	11.00 (279,4)	11.00 (279,4)	13.25 (336,6)	13.25 (336,6)	12.50 (317,5)	12.50 (317,5)	1.00 (25,4)	1.00 (25,4)	3	3.50 (88,9)	3	3.50 (88,9)	16
XXXX-1414-ZZ	14.00 (355,6)	14.00 (355,6)	16.25 (412,8)	16.25 (412,8)	15.50 (393,7)	15.50 (393,7)	0.75 (19,1)	0.75 (19,1)	4	3.50 (88,9)	4	3.50 (88,9)	20
XXXX-1818-ZZ	18.00 (457,2)	18.00 (457,2)	20.25 (514,4)	20.25 (514,4)	19.50 (495,3)	19.50 (495,3)	0.75 (19,1)	0.75 (19,1)	6	3.00 (76,2)	6	3.00 (76,2)	28

Sizes and configurations not shown are available upon request.

*Not available in Material Code 72.

How to Order ElectroVent Panels:

When vent size has been determined, select mounting frame configuration from the types shown in Figures 3, 4, and 5 on pages 11-12. Insert the type designation into the space occupied by the letters XXXX. Insert material/plating code from Table 1 on page 9 in place of the letters ZZ.

Example:

1. From Table 3 on page 10 for panel opening size of 3.0 x 3.0, Base Part No. is XXXX-0303-ZZ.
2. Type mounting chosen from Section X-X is 8620.
3. From Table 1 on page 9, materials/plating code is 70.
4. Ordering part number is 8620-0303-70.