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# MODEL PH811(S) PENTHOUSES MITERED CORNERS

Ruskin's PH811(S) mitered corner penthouses can be purchased at a more economical cost when ordered in standard sizes with standard features and finishes.

## STANDARD CONSTRUCTION

## **SIDES**

ELF811(S) louvers. Available with ELF81 and ELF81S louvers at additional cost. See appropriate louver specification sheet for louver construction details.

# **ROOF**

.063" (1.6) aluminum.

## STRUCTURAL SUPPORT

11/2" x 4" x 11/2" (38 x 102 x 38) 6063T5 extruded aluminum.

## **CORNERS**

Mitered.

#### **SCREEN**

<sup>3</sup>/<sub>4</sub>" x .051" (19 x 1) expanded flattened aluminum bird screen.

# **FINISH**

Mill.

# MINIMUM SIZE

12" x 12" x 2 tiers high.

### **MAXIMUM SIZE**

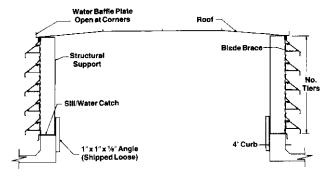
60" x 120" x 12 tiers high.

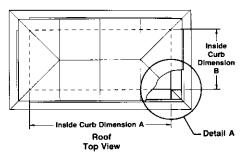
#### **VARIATIONS**

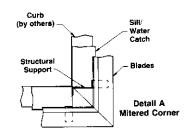
(At additional cost)

- Bitumastic roof undercoating.
- 1" (25) fiberglass roof insulation.
- A variety of finishes (baked enamel [modified fluoropolymer], Kynar, clear or color anodize, flurodize)
- A selection of bird and insect screens.

Dimensions in parenthesis ( ) indicate millimeters.







STAN	TIERS					
PH811(S)	PH81	PH81S	NO. BLADES			
10"	8"	10"	2			
15"	12"	14"	3			
20"	16"	19"	4			
25"	20"	24"	5			
31"	24"	29"	6			
36"	28"	33"	7			
41"	32"	38"	8			
46"	36"	43"	9			
51"	41"	48"	10			
56"	44"	52"	11			
61"	49"	57"	12			

OTV	INSIDE C	URB DIM.	NO. TIERS	VARIATIONS				
QTY.	Α	В		VARIATIONS				

PROJECT ARCH./ENGR. REPRESENTATIVE LOCATION
CONTRACTOR
DATE

# INTAKE AND EXHAUST AIR CAPACITY

						PRESSURE DROP - in.w.g.										
THROAT	AREA	CURB	LOUVER	LOUVER	TIERS	.01	.015	.025	.042	.062	.084	.107	.135	.170		
AxB DIM.	SQ.FT.	1	O.D.	HEIGHT	NO. BLADES	THROAT VELOCITY - fpm (m/s)										
				Diin.	DLAULS	<b>200</b> (61)	<b>300</b> (91)	<b>400</b> (122)	<b>500</b> (190)	<b>600</b> (183)	<b>700</b> (213)	800 (244)	900 (274)	<b>1000</b> (305)		
12" x 12"	1.0	20" x 20"	28" x 28"	10	2	200 cfm	300 cfm	400 cfm	500 cfm	600 cfm	700 cfm	800 cfm	900 cfm	1000 cfm		
12" x 18"	1.5	20" x 26"	28" x 34"	10	2	300 cfm	450 cfm	600 cfm	750 cfm	900 cfm	1050 cfm	1200 cfm	1350 cfm	1500 cfm		
12" x 24"	2.0	20" x 32"	28" x 40"	10	2	400 cfm	600 cfm	800 cfm	1000 cfm	1200 cfm	1400 cfm	1600 cfm	1800 cfm	2000 cfm		
12" x 30"	2.5	20" x 38"	28" x 46"	10	2	500 cfm	750 cfm	1000 cfm	1250 cfm	1500 cfm	1750 cfm	2000 cfm	2250 cfm	2500 cfm		
18" x 18"	2.25	26" x 26"	34" x 34"	15	3	450 cfm	675 cfm	900 cfm	1125 cfm	1350 cfm	1575 cfm	1800 cfm	2025 cfm	2250 cfm		
18" x 24"	3.0	26" x 32"	34" x 40"	15	3	600 cfm	900 cfm	1200 cfm	1500 cfm	1800 cfm	2100 cfm	2400 cfm	2700 cfm	3000 cfm		
18" x 30"	3.75	26" x 38"	34" x 46"	15	3	750 cfm	1125 cfm	1500 cfm	1875 cfm	2250 cfm	2625 cfm	3000 cfm	3375 cfm	3750 cfm		
18" x 36"	4.5	26" x 44"	34" x 52"	15	3	900 cfm	1350 cfm	1800 cfm	2250 cfm	2700 cfm	3150 cfm	3600 cfm	4050 cfm	4500 cfm		
24" x 24"	4.0	32" x 32"	40" x 40"	15	3	800 cfm	1200 cfm	1600 cfm	2000 cfm	2400 cfm	2800 cfm	3200 cfm	3600 cfm	4000 cfm		
24" x 30"	5.0	32" x 38"	40" x 46"	20	4	1000 cfm	1500 cfm	2000 cfm	2500 cfm	3000 cfm	3500 cfm	4000 cfm	4500 cfm	5000 cfm		
24" x 36"	6.0	32" x 44"	40" x 52"	20	4	1200 cfm	1800 cfm	2400 cfm	3000 cfm	3600 cfm	4200 cfm	4800 cfm	5400 cfm	6000 cfm		
24" x 42"	7.0	32" x 50"	40" x 58"	20	4	1400 cfm	2100 cfm	2800 cfm	3500 cfm	4200 cfm	4900 cfm	5600 cfm	6300 cfm	7000 cfm		
24" x 48"	8.0	32" x 56"	40" x 64"	20	4	1600 cfm	2400 cfm	3200 cfm	4000 cfm	4800 cfm	5600 cfm	6400 cfm	7200 cfm	8000 cfm		
30" x 30"	6.25	38" x 38"	46" x 46"	20	4	1250 cfm	1875 cfm	2500 cfm	3125 cfm	3750 cfm	4375 cfm	5000 cfm	5625 cfm	6250 cfm		
30" x 36"	7.5	38" x 44"	46" x 52"	25	5	1500 cfm	2250 cfm	3000 cfm	3750 cfm	4500 cfm	5250 cfm	6000 cfm	6750 cfm	7500 cfm		
30" x 42"	8.75	38" x 50"	46" x 58"	25	5	1750 cfm	2625 cfm	3500 cfm	4375 cfm	5250 cfm	6125 cfm	7000 cfm	7875 cfm	8750 cfm		
30" x 48"	10.0	38" x 56"	46" x 64"	25	5	2000 cfm	3000 cfm	4000 cfm	5000 cfm	6000 cfm	7000 cfm	8000 cfm	9000 cfm	10000 cfm		
30" x 54"	11.25	38" x 62"	46" x 70"	25	5	2250 cfm	3375 cfm	4500 cfm	5625 cfm	6750 cfm	7875 cfm	9000 cfm	10125 cfm	11250 cfm		
30" x 60"	12.5	38" x 68"	46" x 76"	30	6	2500 cfm	3750 cfm	5000 cfm	6250 cfm	7500 cfm	8750 cfm	10000 cfm	11250 cfm	12500 cfm		
36" x 36"	9.0	44" x 44"	52" x 52"	25	5	1800 cfm	2700 cfm	3600 cfm	4500 cfm	5400 cfm	6300 cfm	7200 cfm	8100 cfm	9000 cfm		
36" x 42"	10.5	44" x 50"	52" x 58"	25	5	2100 cfm	3150 cfm	4200 cfm	5250 cfm	6300 cfm	7350 cfm	8400 cfm	9450 cfm	10500 cfm		
36" x 48"	12.0	44" x 56"	52" x 64"	30	6	2400 cfm	3600 cfm	4800 cfm	6000 cfm	7200 cfm	8400 cfm	9600 cfm	10800 cfm	12000 cfm		
36" x 54"	13.5	44" x 62"	52" x 70"	30	6	2700 cfm	4050 cfm	5400 cfm	6750 cfm	8100 cfm	9450 cfm	10800 cfm	12150 cfm	13500 cfm		
36" x 60"	15.0	44" x 68"	52" x 76"	30	6	3000 cfm	4500 cfm	6000 cfm	7500 cfm	9000 cfm	10500 cfm	12000 cfm	13500 cfm	15000 cfm		
36" x 72"	18.0	44" x 80"	52" x 88"	35	7	3600 cfm	5400 cfm	7200 cfm	9000 cfm	10800 cfm	12600 cfm	14400 cfm	16200 cfm	18000 cfm		
48" x 48"	16.0	56" x 56"	64" x 64"	35	7	3200 cfm	4800 cfm	6400 cfm	8000 cfm	9600 ctm	11200 cfm	12800 cfm	14400 cfm	16000 cfm		
48" x 60"	20.0	56" x 68"	64" x 76"	35	7	4000 cfm	6000 cfm	8000 cfm	1000 cfm	12000 cfm	14000 cfm	16000 cfm	18000 cfm	20000 cfm		
48" x 72"	24.0	56" x 80"	64" x 88"	40	8	4800 cfm	7200 cfm	9600 cfm	12000 cfm	14400 cfm	16800 cfm	19200 cfm	21600 cfm	24000 cfm		
48" x 84"	28.0	56" x 92"	64" x 100"	40	8	5600 cfm	8400 cfm	11200 cfm	14000 cfm	16800 cfm	19600 cfm	22400 cfm	25200 cfm	28000 cfm		
48" x 96"	32.0	56" x 104"	64" x 112"	45	9	6400 cfm	9600 cfm	12800 cfm	16000 cfm	19200 cfm	22400 cfm	25600 cfm	28800 cfm	32000 cfm		
48" x 108"	36.0	56" x 116"	64" x 124"	45	9	7200 cfm	10800 cfm	14400 cfm	18000 cfm	21600 cfm	25200 cfm	28800 cfm	32400 cfm	36000 cfm		
60" x 60"	25.0	68" x 68"	76" x 76"	40	8	5000 cfm	7500 cfm	10000 cfm	12500 cfm	15000 cfm	17500 cfm	20000 cfm	22500 cfm	25000 cfm		
60" x 72"	30.0	68" x 80"	76" x 88"	45	9	6000 cfm	9000 cfm	12000 cfm	15000 cfm	18000 cfm	21000 cfm	24000 cfm	27000 cfm	30000 cfm		
60" x 84"	35.0	68" x 92"	76" x 100"	50	10	7000 cfm	10500 cfm	14000 cfm	17500 cfm	21000 cfm	24500 cfm	28000 cfm	31500 cfm	35000 cfm		
60" x 96"	40.0	68" x 104"	76" x 112"	50	10	8000 cfm	12000 cfm	16000 cfm	2000 cfm	24000 cfm	28000 cfm	32000 cfm	36000 cfm	40000 cfm		
60" x 108"	45.0	68" x 116"	76" x 124"	55	11	9000 cfm	13500 cfm	18000 cfm	22500 cfm	27000 cfm	31500 cfm	36000 cfm	40500 cfm	45000 cfm		
60" x 120"	50.0	68" x 124"	76" x 136"	55	11	10000 cfm	15000 cfm	20000 cfm	25000 cfm	30000 cfm	35000 cfm	40000 cfm	45000 cfm	50000 cfm		

**EXAMPLE:** To find the pressure drop through a 30" x 30" penthouse, 20" high, with 5000 cfm air flow, locate the throat dimension. Move across the chart to airflow and up to pressure drop. Pressure drop will be .107" w.g.

