

Discovair



Your Source For Roof Accessories

Roof Accessories

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WEATHERHOOD

HW-1, HW-2, HW-3, HW-4 10

Roof Curb - Model CRS-45

Design Features – Sound attenuating insulated blades provide a dual function of weather protection and airborne sound reduction. The stepped blade provides additional weather protection than our straight blade design.

STANDARD CONSTRUCTION

ALL MATERIAL – EXTRUDED ALUMINUM 6063-T5 (KB-45)

FRAME

4" thick, .081" extruded aluminum in style #3

BLADES

.081" extruded aluminum approx. 6" spacing with 22 ga. perforated steel fastened to blade underside.

SOUND INSULATION

6# density pcf mineral wool insulation

FASTENERS

Plated steel, tek screw

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

60" W x 120"H

MULLION

Visible

MINIMUM SIZE

12" x 12"

UNDERSIZED

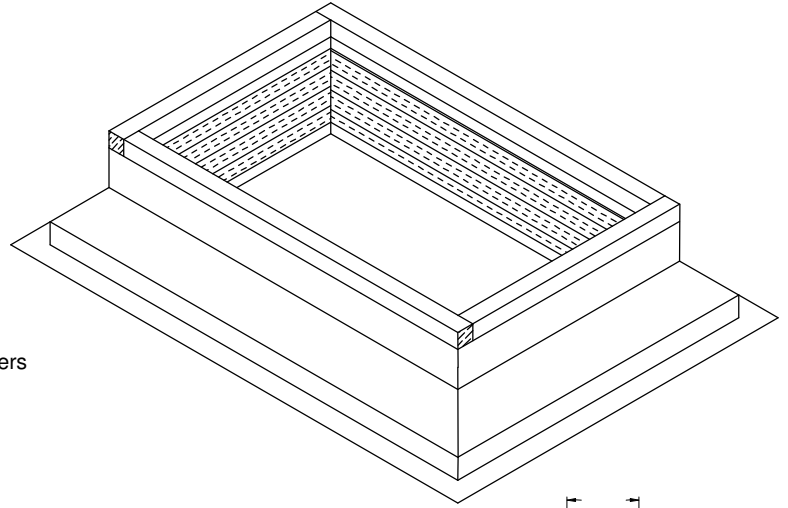
1/4" under ordered size unless specified Exact or Actual

SCREEN

3/4" x .051" flattened expanded aluminum bird screen, no frame

FINISH

Mill

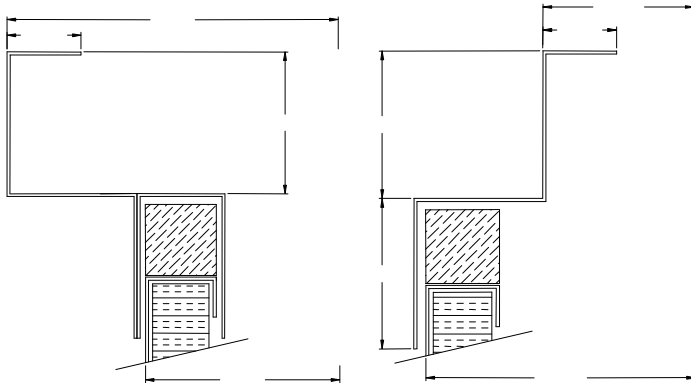
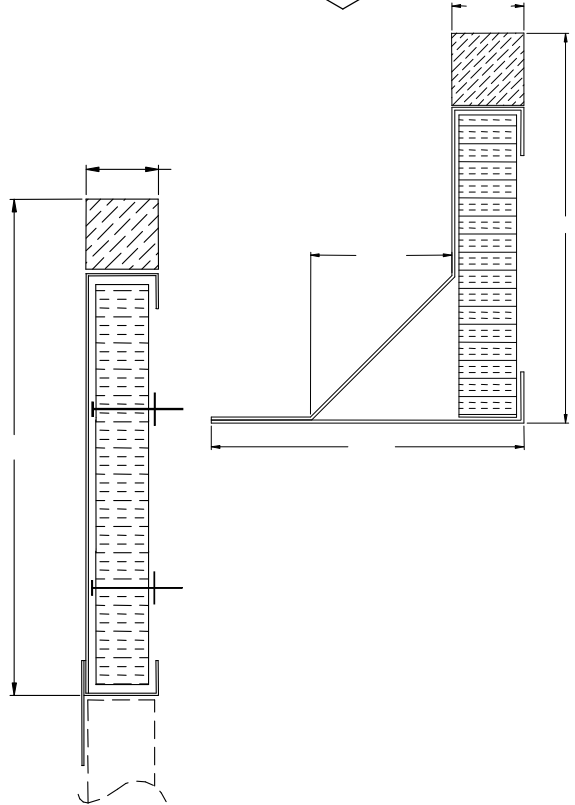


OPTIONAL CONSTRUCTION

MATERIAL – Available in .125" thk. aluminum BLADES and FRAME

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.



FRAME STYLES

DATE	ARCHITECT	CUSTOMER		
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



Discovair, LLC

PO Box 738 - Rockford, MI 49341
(616) 988-8040 Phone, (888) 228-1751 Fax

PENTHOUSES - EXTRUDED ALUMINUM PE-Series (P)ost & (M)itered

Design Features – Penthouses may be utilized as an attractive concealment of mechanical equipments and offer excellent air intake or relief while providing protection from outside elements. For storm-driven rain protection, a wind-drain rain louvers may be used.

STANDARD CONSTRUCTION

ALL MATERIAL – EXTRUDED ALUMINUM 6063-T5 (KB-45)

FRAME

.081" thk. extruded aluminum (see frame styles)

BLADES

.081" thk. extruded aluminum, (see blade styles)

ROOF

.063" formed aluminum (5005-H34), undercoated with black tar for anti-condensation

LOUVER AND ROOF SUPPORTS

Aluminum angles designed for (25) psf wind load. Consult Discovair engineers for heavier loads

FASTENERS

Plated steel screws

MAXIMUM SIZE

Unlimited, to be shipped in pre-assembled sections

MAXIMUM FACTORY ASSEMBLY SIZE

120"L x 84"W x 84"H

(Type of finish may limit maximum sizes)

MULLION

Invisible

MINIMUM SIZE

12"L x 12"W x 12"H

UNDERSIZED

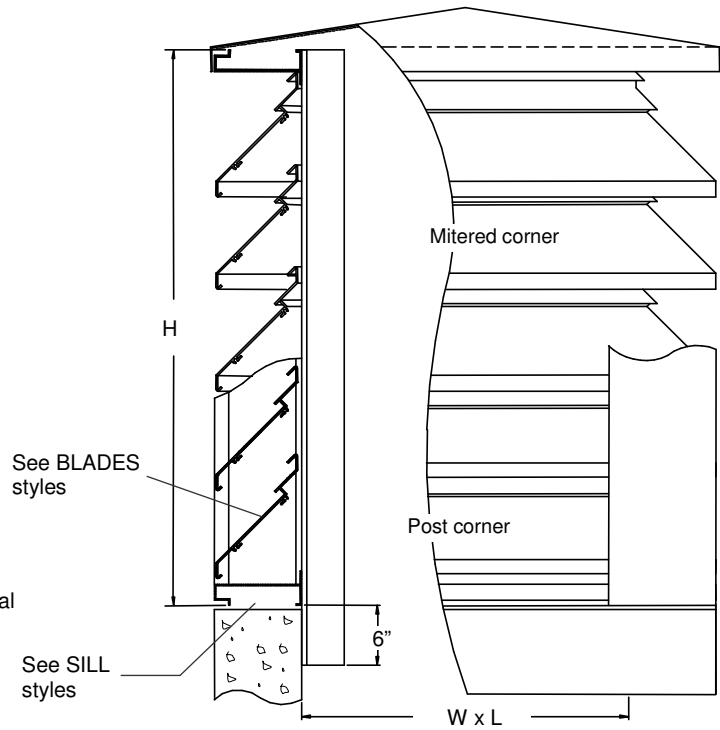
1/4" under ordered size unless specified Exact or Actual

SCREEN

3/4" x .051" expanded aluminum bird screen

FINISH

Mill



VERT. SECT / ELEVATION

OPTIONAL CONSTRUCTION

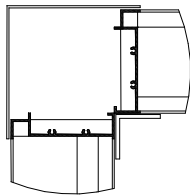
BLADES, FRAME & ROOF - Available in heavier gauge material

SCREEN - Many styles available please consult screen listing

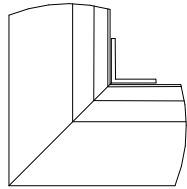
FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

MULLION – Visible for architectural preference

CONSTRUCTION – Fully welded construction

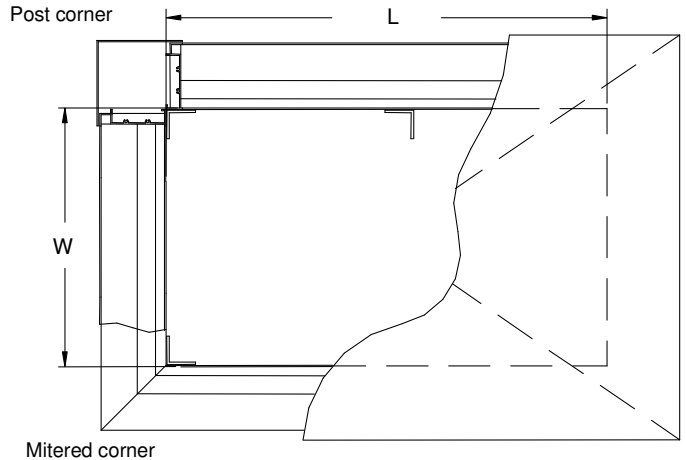


P – series
Post Corners



M – series
Mitered Corners

CORNER STYLES



PLAN VIEW

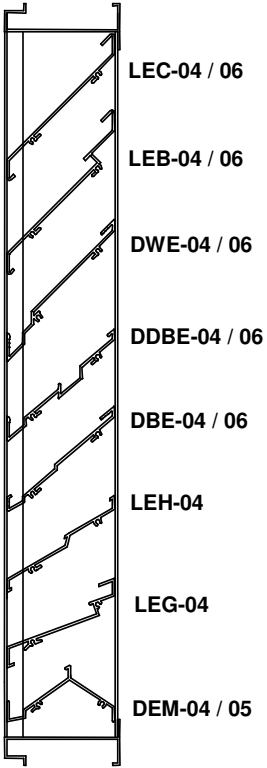
DATE	ARCHITECT / ENGR				CUSTOMER
PROJECT					
ITEM	QTY	W	L	H	DESCRIPTION



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PENTHOUSES – EXTRUDED ALUMINUM PE-Series (P or M)

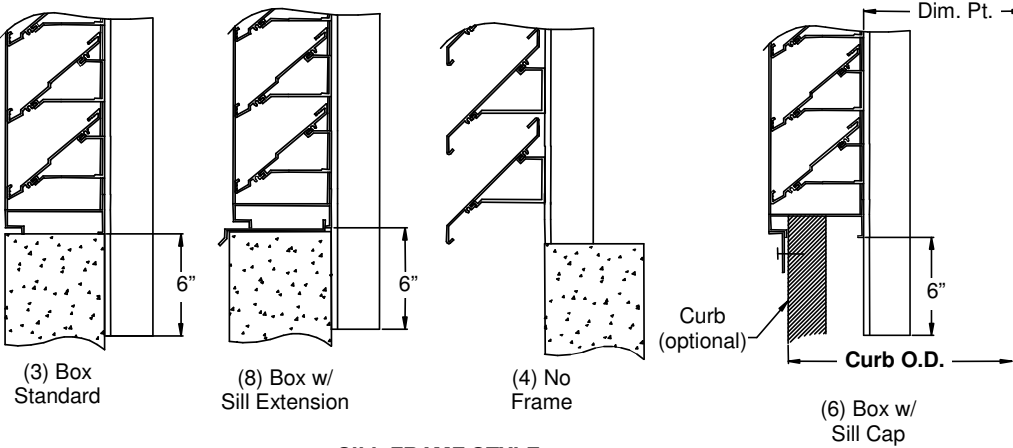


BLADE STYLES

BLADE STYLES							
Model #	Depth	Blade Style	Blade Spacing	Free Area (4' x 4' unit)	Water Penetration (.01 oz. H ₂ O) FPM	Pressure Drop @ 1000 FPM	
LEC-04	4"	Straight @ 45°	4-1/2" oc.	50%	879	.18" wg.	
LEC-06	6"	Straight @ 45°	6-1/2" oc.	56%	906	.15" wg.	
LEB-04	4"	Hooked @ 45°	5" oc.	47%	930	.18" wg.	
LEB-06	6"	Hooked @ 45°	6-1/2" oc.	54%	852	.16" wg.	
DWE-04	4"	Drainable @ 45°	4-1/2" oc.	52%	910	.17" wg.	
DWE-06	6"	Drainable @ 45°	6-1/2" oc.	55%	939	.17" wg.	
DDBE-04	4"	Dual drain @ 40°	3-1/2" oc.	53%	1051	.12" wg.	
DDBE-06	6"	Dual drain @ 35°	5" oc.	52%	1243	.13" wg.	
DBE-04	4"	Drainable @ 40°	3-1/2" oc.	60%	1016	.12" wg.	
DBE-06	6"	Drainable @ 35°	4-3/4" oc.	63%	970	.12" wg.	
LEH-04	4"	Hooked @ 30°	3" oc.	63%	713	.16" wg.	
LEG-04	4"	Hooked @ 20°	2-1/2" oc.	52%	690	.17" wg.	
DEM-04	4"	Drain / sight proof	2" oc.	55%	1100	.27" wg.	
DEM-05	5"	Drain / sight proof	2" oc.	57%	1121	.27" wg.	

Notes:

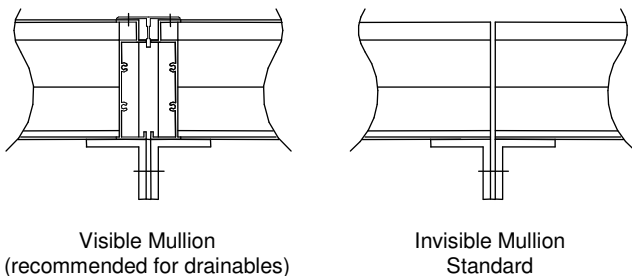
- Above performances are based on 4' x 4' unit, smaller sizes have less free areas than larger sizes.
- Wind-driven rain louvers may be used for storm-driven rain protection. Consult factory for more information.
- Any type of louver blades not shown above can be used as penthouses, i.e. adjustable louvers, combination louvers, or vertical blade configuration. Consult factory for availability.
- Back-draft dampers, control dampers, motorized/non-motorized can be installed in the throat of penthouses or roof curbs.
- Removable roof or insulated roof is available as an option.
- Roof curbs are available as option (see roof curbs section)
- Drainable louvers are best recommended with post corners and visible mullion to prevent water from cascading.



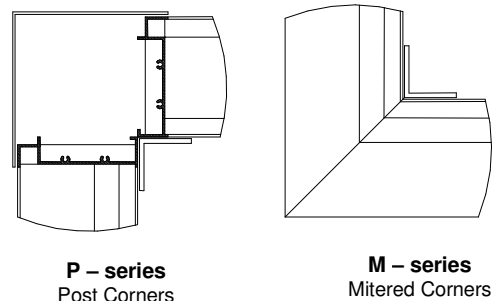
SILL FRAME STYLE

ROOF CURBS	
LOUVER DEPTH	CURB – O.D. ACTUAL
4"	Dim. Pt. + 6"
5"	Dim. Pt. + 8"
6"	Dim. Pt. + 10"

Note:
Curb thickness shall be no more than 3" thick to fit inside the bottom frame.



MULLION STYLE



CORNER STYLES

PENTHOUSES - FORMED STEEL PF-Series (P)ost & (M)itered

Design Features – Penthouses may be utilized as an attractive concealment of mechanical equipments and offer excellent air intake or relief while providing protection from outside elements. For storm-driven rain protection, a wind-drain rain louvers may be used.

STANDARD CONSTRUCTION

FRAME

20 gauge formed galvanized steel, (see frame styles)

BLADES

20 gauge formed galvanized steel, (see blade styles)

ROOF

20 gauge formed galvanized steel, undercoated with black tar for anti-condensation

LOUVER AND ROOF SUPPORTS

Aluminum angles designed for (25) psf wind load. Consult DOWCO engineers for heavier loads

FASTENERS

Plated steel screws

MAXIMUM SIZE

Unlimited, to be shipped in pre-assembled sections

MAXIMUM FACTORY ASSEMBLY SIZE

120"L x 84"W x 84"H

(Type of finish may limit maximum sizes)

MULLION

Visible

MINIMUM SIZE

12"L x 12"W x 12"H

UNDERSIZED

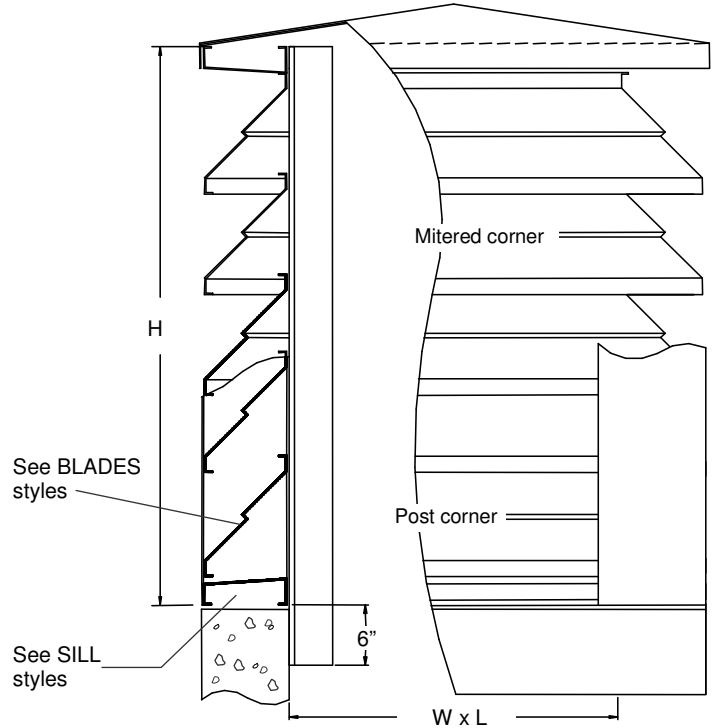
1/4" under ordered size unless specified Exact or Actual

SCREEN

1/2" mesh x 19 gauge galvanized bird screen

FINISH

Mill



VERT. SECT / ELEVATION

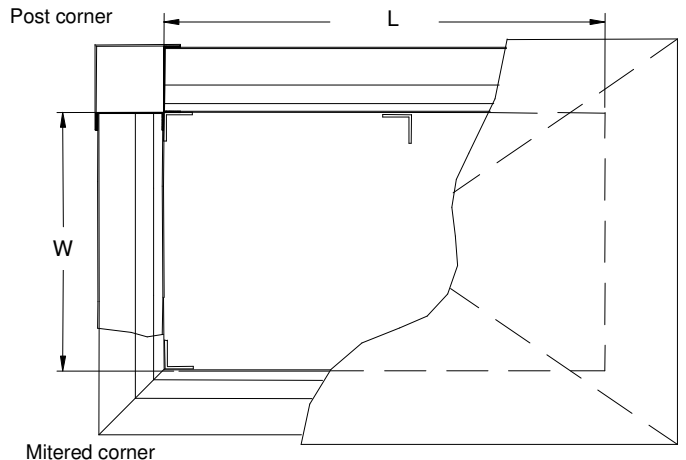
OPTIONAL CONSTRUCTION

BLADES, FRAME & ROOF - Available in heavier gauge material, (304) or (316) stainless steel

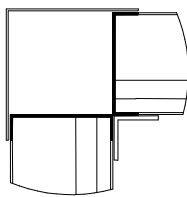
SCREEN - Many styles available please consult screen listing
FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

MULLION – Invisible for architectural preference

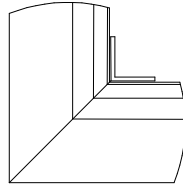
CONSTRUCTION – Fully welded construction



PLAN VIEW



P – series
Post Corners



M – series
Mitered Corners

CORNER STYLES

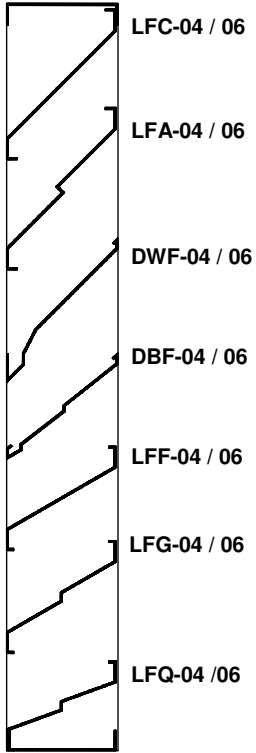
DATE	ARCHITECT / ENGR			CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



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PENTHOUSES – FORMED STEEL

PF-Series (P or M)

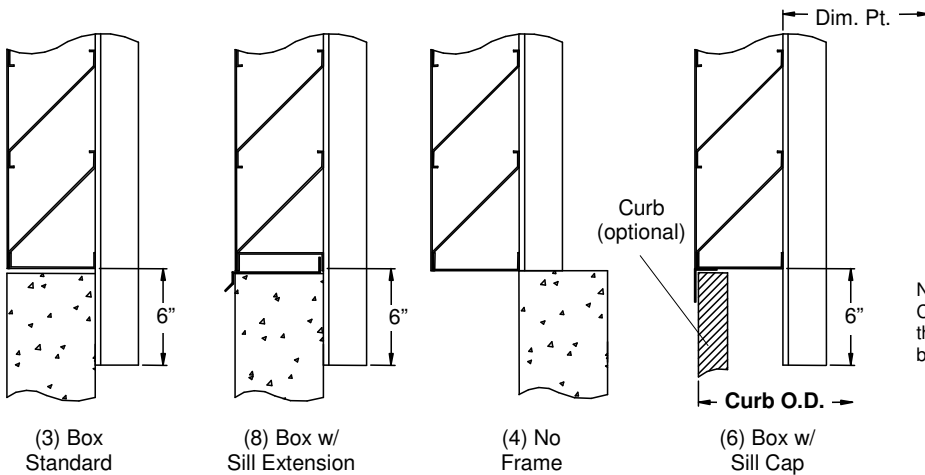


BLADE STYLES

BLADE STYLES							
Model #	Depth	Blade Style	Blade Spacing	Free Area (4' x 4' unit)	Water Penetration (.01 oz. H ₂ O) FPM	Pressure Drop @ 1000 FPM	
LFC-04	4"	Straight @ 45°	4-3/8" oc.	53%	650	.18" wg.	
LFC-06	6"	Straight @ 45°	6" oc.	53%	680	.17" wg.	
LFA-04	4"	Hooked @ 45°	5-3/8" oc.	50%	672	.18" wg.	
LFA-06	6"	Hooked @ 45°	6-1/2" oc.	48%	710	.17" wg.	
DWF-04	4"	Drainable @ 45°	4-1/2" oc.	58%	822	.17" wg.	
DWF-06	6"	Drainable @ 45°	6-3/8" oc.	57%	821	.15" wg.	
DBF-04	4"	Drainable @ 40°	3" oc.	58%	973	.16" wg.	
DBF-06	6"	Drainable @ 35°	3-1/2" oc.	60%	1010	.14" wg.	
LFF-04	4"	Straight @ 30°	3" oc.	56%	650	.13" wg.	
LFF-06	6"	Straight @ 30°	4-1/16" oc.	61%	710	.13" wg.	
LFG-04	4"	Hooked @ 30°	3-5/8" oc.	60%	660	.15" wg.	
LFG-06	6"	Hooked @ 30°	5" oc.	60%	715	.14" wg.	
LFQ-04	4"	Hooked @ 20°	2-1/2" oc.	55%	610	.08" wg.	
LFQ-06	6"	Hooked @ 20°	3-1/4" oc.	55%	680	.08" wg.	

Notes:

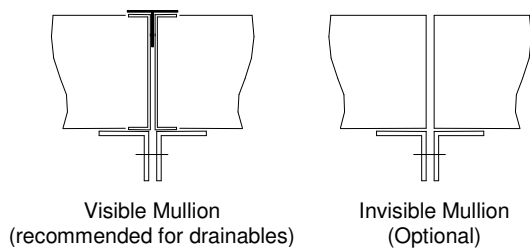
1. Above performances are based on 4' x 4' unit, smaller sizes have less free areas than larger sizes.
2. Wind-driven rain louvers may be used for storm-driven rain protection. Consult factory for more information.
3. Any type of louver blades not shown above can be used as penthouses, i.e. adjustable louvers, combination louvers, or vertical blade configuration. Consult factory for availability.
4. Back-draft dampers, control dampers, motorized or non-motorized can be installed in the throat of penthouses or roof curbs.
5. Removable roof or insulated roof is available as an option.
6. Roof curbs are available as option (see roof curbs section)
7. Drainable louvers are best recommended with post corners and visible mullion to prevent water from cascading.



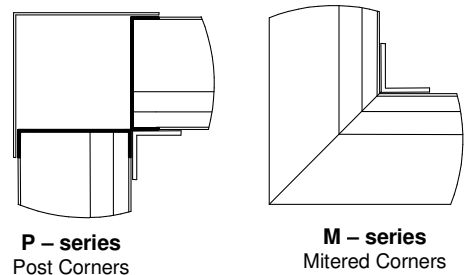
SILL FRAME STYLE

ROOF CURBS	
LOUVER DEPTH	CURB – O.D. ACTUAL
4"	Dim. Pt. + 7.125"
6"	Dim. Pt. + 11.125"

Note:
Curb thickness shall be no more than 3-1/2" thick to fit inside the bottom frame.



MULLION STYLE



CORNER STYLES

Roof Hood Gravity Ventilator - Models: GHR-51 / SHR-51 / AHR-51 - series

Design Features – Economical gravity ventilator to cover and protect roof top openings. This dual-purpose design has a pitched roof stressed for wind and snow loads, and may be used as an outside air intake or for pressure relief exhaust applications.

STANDARD CONSTRUCTION

BASE

- 18 gauge galvanized steel
Models: **GHR-51e (exhaust) / GHR-51i (intake)**
- 18 gauge (304) stainless steel
Models : **SHR-51e (exhaust) / SHR-51i (intake)**
- .063" thick alloy 5005 H-34 formed aluminum
Models: **AHR-51e (exhaust) / AHR-51i (intake)**

HOOD

- 18 gauge galvanized steel
Models: **GHR-51e (exhaust) / GHR-51i (intake)**
- 18 gauge (304) stainless steel
Models : **RHS-15e (exhaust) / SHR-51i (intake)**
- .063" thick alloy 5005 H-34 formed aluminum
Models: **AHR-15e (exhaust) / AHR-51i (intake)**

BASIC CONSTRUCTION

Welded and mechanical type (rivets or screws)

MAXIMUM THROAT SIZE

60" W x 120" L

For larger size – consult factory

MAXIMUM THROAT SIZE FACTORY ASSEMBLED UNIT

48" W X 60" L (larger sizes shipped in sections for field assembly)

MINIMUM SIZE

12" W x 12" L

SCREEN

1/2" Mesh x 19 ga. galv. bird screen – **GHR-51, AHR-51**
1/2" Mesh x 14 ga. stainless steel screen – **SHR-51**

FINISH

Mill

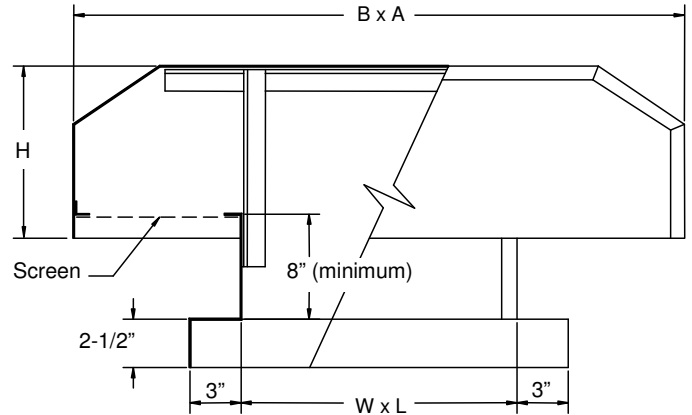
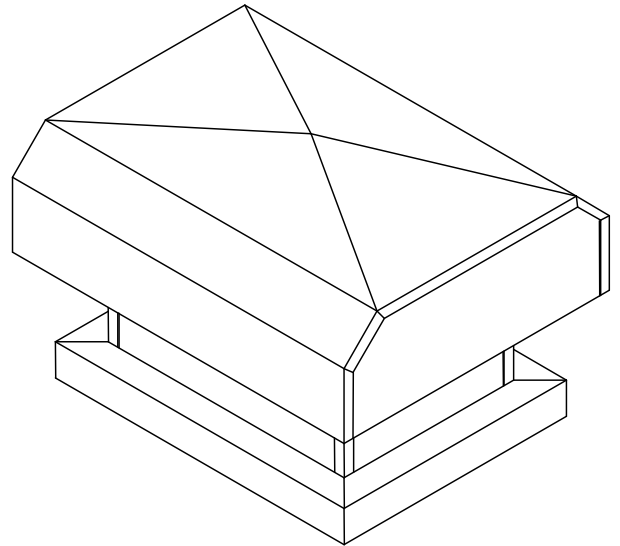
OPTIONAL CONSTRUCTION

BASE & HOOD – Available in heavier construction up to 10 gauge

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, baked epoxy or enamel, Kynar, or Powder coat. Anodized for aluminum.

INSULATION – Anti-condensation coating under hood, solid fiberglass insulation with aluminum backing.

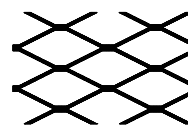


SECTION / ELEVATION

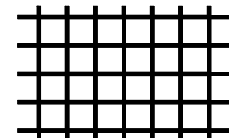
SPECIAL PURPOSE CONSTRUCTION

- Damper mounted in throat
- Fully welded construction
- Security bars in throat
- Hinged at throat for swing up access (will affect "H" dimension)
- Filter racks

SCREEN STYLES



Expanded Aluminum



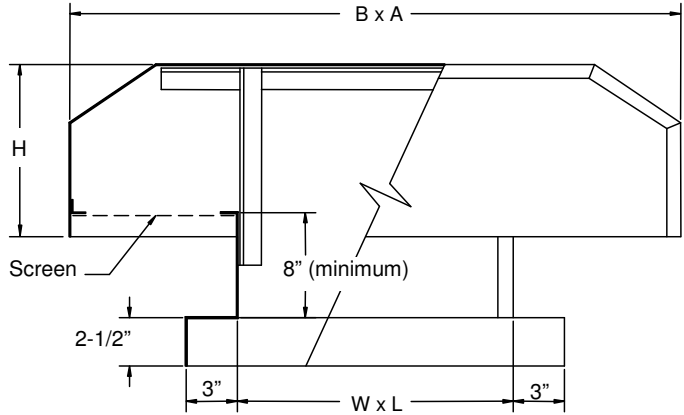
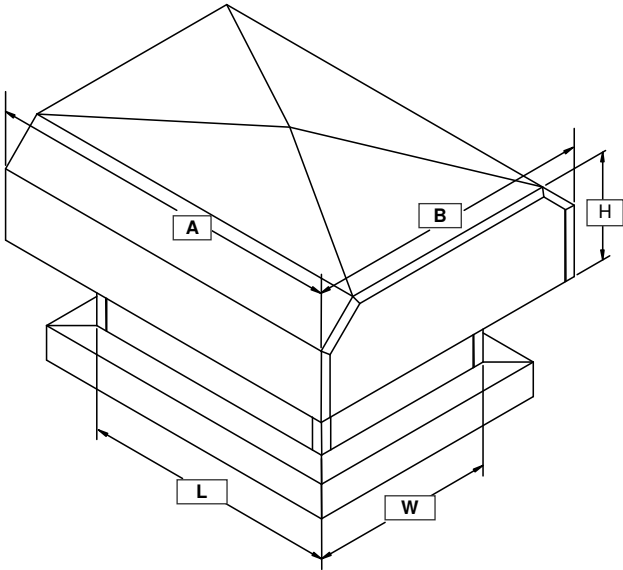
Wire Mesh
Standard

DATE	ARCHITECT / ENGINEER			CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



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GHR-51 / SHR-51 / AHR-51 SPECIFICATIONS



To determine the throat velocity in fpm:
 CFM (volume of air) divided by throat area (sq. ft)

To size a gravity ventilator: in Sq. Ft. (throat area)
 CFM (volume of air) divided by required velocity (FPM)
 Then choose either for exhaust or intake.

STATIC PRESSURE LOSS (inches w.g.)				
Throat Velocity	100 %		200 %	
	Exhaust	Intake	Exhaust	Intake
300 FPM	.011	.017	.009	
400 FPM	.020	.030	.013	
500 FPM	.031	.048	.020	
600 FPM	.045	.070	.030	
700 FPM	.064	.095	.040	
800 FPM	.080	.124	.053	
900 FPM	.105	.159	.068	
1000 FPM	.122	.197	.082	
1100 FPM	.150	.235	.101	
1200 FPM	.185	.281	.120	

		LENGTH - L (inches)															
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	
12	H	7	8	8	8	9	9	9	9	9	9	9	9	9	9	9	
	A	25	30	40	46	53	60	60	70	77	83	90	96	102	108	114	
	B	19	22	22	22	22	22	24	24	24	24	24	25	25	25	25	
18	H		9	9	10	10	10	11	11	11	11	11	11	11	12	12	
	A		35	39	48	55	60	71	79	87	85	94	100	106	112	119	
	B		27	30	30	32	32	30	30	30	34	34	34	34	34	35	
24	H			10	11	11	12	12	12	13	13	13	13	13	13	14	
	A			44	50	60	60	72	78	85	91	97	104	110	116	120	
	B			34	36	36	38	39	40	40	41	41	42	43	43	44	
30	H				12	12	13	13	14	14	14	15	15	15	15	15	
	A				48	60	65	74	84	91	94	104	108	114	120	120	
	B				46	46	46	46	46	46	48	48	50	50	51	54	
36	H					13	14	14	15	15	16	16	16	17	17	17	
	A					60	71	77	75	83	90	98	106	113	120	128	
	B					52	52	53	60	60	60	60	60	60	60	60	
42	H						15	15	16	16	17	17	18	18	18	19	
	A						70	78	86	95	104	113	122	124	127	133	
	B						60	60	60	60	60	60	60	60	65	67	
48	H							16	17	17	18	18	19	19	20	20	
	A							88	88	91	102	109	116	120	120	136	
	B							60	67	70	72	72	72	74	79	79	
54	H								18	18	19	19	20	20	21	21	
	A								89	96	104	111	118	120	132	139	
	B								74	76	76	78	79	81	82	82	
60	H									19	20	20	21	22	22	22	
	A									98	106	113	120	126	134	134	
	B									82	83	84	86	88	91	94	
66	H										21	21	22	22	23	24	
	A										103	111	122	129	136	146	
	B										94	94	94	94	94	94	
72	H											22	23	23	24	25	
	A											120	135	140	154	164	
	B											94	94	94	94	94	
78	H												24	24	25	26	
	A												144	154	165	181	
	B												92	92	92	92	
84	H													25	26	26	
	A													127	138	147	
	B													118	118	118	
90	H														27	27	
	A														148	157	
	B														118	118	
96	H															28	
	A															167	
	B															120	

		LENGTH - L (inches)															
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	
12	H	7	8	8	8	9	9	9	9	9	9	9	9	9	9	9	
	A	26	30	40	47	47	60	60	79	87	83	90	96	102	108	114	
	B	25	26	29	29	35	30	35	30	30	34	35	35	35	36	36	
18	H		9	9	10	10	10	11	11	11	11	11	11	11	12	12	
	A		37	45	48	56	60	69	75	82	87	98	104	112	120	125	
	B		35	37	42	42	45	45	46	46	45	46	46	46	46	46	
24	H			10	11	11	12	12	12	13	13	13	13	13	13	14	
	A			46	57	60	65	66	74	82	90	97	105	112	120	128	
	B			46	46	51	54	60	60	60	60	60	60	60	60	60	
30	H				12	12	13	13	14	14	14	15	15	15	15	15	
	A				60	63	73	82	91	101	110	103	108	114	120	126	
	B				53	60	60	60	60	60	60	70	72	73	74	75	
36	H					13	14	14	15	15	16	16	16	17	17	17	
	A					75	77	77	86	94	97	104	110	117	120	130	
	B					60	66	76	76	81	82	71	85	88	87		
42	H						15	15	16	16	17	17	18	18	18	19	
	A						84	86	88	93	100	109	113	116	121	137	
	B						71	79	86	90	91	91	94	91	94	94	
48	H							16	17	17	18	18	19	19	20	20	
	A							91	98	104	110	118	130	144	154	163	
	B							85	88	91	92	91	94	91	91	91	
54	H								18	18	19	19	20	20	21	21	
	A								108	117	127	138	150	161	172	182	
	B								89	91	91	91	91	91	91	91	
60	H									19	20	20	21	22	22	22	
	A									130	140	153	166	178	146	154	
	B									91	92	91	91	91	118	118	
66	H										21	21	22	22	23	24	
	A										158	155	176	156	161	172	
	B										91	94	94	118	118	118	
72	H											22	23	23	24	25	
	A											144	153	162	175	187	
	B											117	118	118	118	118	
78	H												24	24	25	26	
	A												166	178	158	168	
	B												118	118	142	142	
84	H													25	26	26	
	A													168	169	171	
	B													134	142	150	
90	H														27	27	
	A														181	193	
	B														142	142	
96	H															28	
	A															192	
	B															152	

GHR-51e
 SHR-51e
 AHR-51e
 Exhaust
 100 % (1:1)

GHR-51i
 SHR-51i
 AHR-51i
 Intake
 200 % (2:1)

Weather Hood Models - HW-1, HW-2, HW-3, HW-4

Design Features – Protect louvers, dampers or fan systems from outside elements. Supplied with standard 1-1/2" flange on all sides ready for wall mount installation.

STANDARD CONSTRUCTION

MATERIAL

18 gauge galvanized steel – Galvanized construction
 .063" thk. formed aluminum 5005-H34 – Aluminum construction

ASSEMBLY

Stitch welded construction

MINIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM FACTORY ASSEMBLY SIZE

120" w x 60 h" x 60" d (allows for best handling)
 (Type of finish may limit maximum single section)

MINIMUM SIZE

12" x 12" x 12"

UNDERSIZED

1/4" under ordered size unless specified Exact or Actual

SCREEN

1/2" Mesh x 19 ga. galvanized screen – Galvanized construction
 3/4" Mesh x 050 expanded alum. screen – Aluminum construction

FINISH

Mill

OPTIONAL CONSTRUCTION

MATERIAL – Available in heavier construction

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

SPECIAL PURPOSE CONSTRUCTION

Fully welded construction

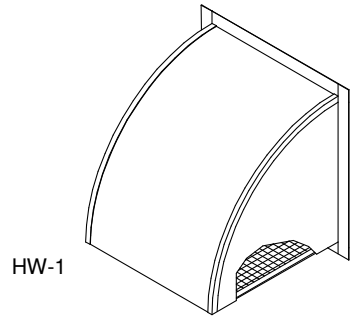
Security bars

Filter racks

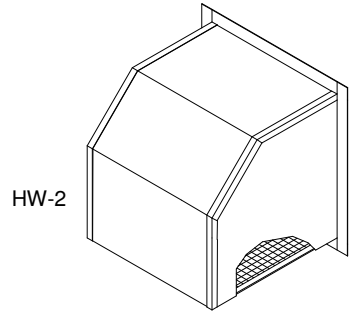
Hinged as walk through door or for swing out for access

Sleeved for ductwork connection

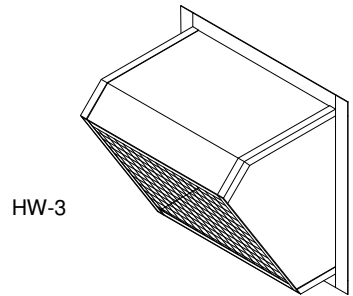
** Consult DOWCO for additional technical information.



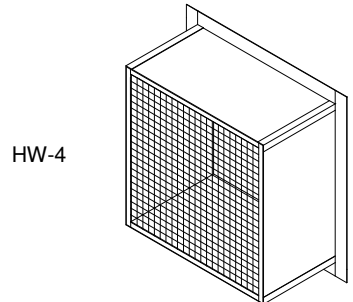
HW-1



HW-2

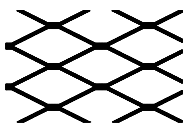


HW-3

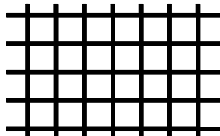


HW-4

TYPICAL SCREEN STYLES



Expanded Aluminum
Std. for alum. const.



Wire Mesh
Std. for galv. const.

DATE	ARCHITECT			CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



Discoverair, LLC
 PO Box 738 - Rockford, MI 49341
 (616) 988-8040 Phone, (888) 228-1751 Fax