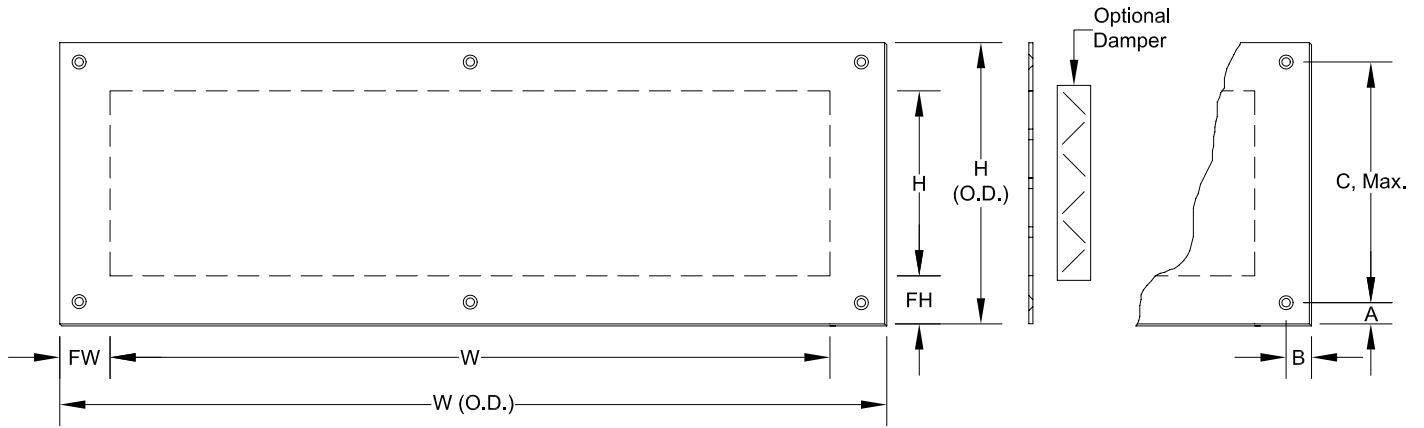


PATTERN HA150 ARCHITECTURAL STAMPED GRILLE



PATTERN HA150

1-1/2" HALF SHELL

58% OPEN

NO. OF PATTERNS	W INCHES	H INCHES	NO. OF PATTERNS	W INCHES	H INCHES	NO. OF PATTERNS	W INCHES	H INCHES
1	2.437	1.485	11	29.307	12.735	21	56.177	23.985
2	5.124	2.610	12	31.994	13.860	22	58.864	25.110
3	7.811	3.735	13	34.681	14.985	23	61.551	26.235
4	10.498	4.860	14	37.368	16.110	24	64.238	27.360
5	13.185	5.985	15	40.055	17.235	25	66.925	28.485
6	15.872	7.110	16	42.742	18.360	26	69.612	29.610
7	18.559	8.235	17	45.429	19.485	27	72.299	30.735
8	21.246	9.360	18	48.116	20.610	28	74.986	31.860
9	23.933	10.485	19	50.803	21.735	29	77.673	32.985
10	26.620	11.610	20	53.490	22.860	30	80.360	34.110

Qty.	O.D. Size W x H	Duct Size W x H	Pattern Size W x H	No. of Patterns W x H	Material	Thickness

Minimum Flange Allowed "F"	Actual "F"		Mounting Holes				Mounting Option	Finish	O.B.D.	Tag
	FW	FH	A & B	C	No. Holes					

SCREW SIZE: #8 x 1", #10 x 1-1/2", Other _____
HEAD STYLE: Flat Head Phillips Flat Head Slotted Pan Head Phillips Other _____
SCREW MATERIAL: Steel Stainless Brass Bronze **SCREW FINISH:** Mill Mill, Lacquered As Grille Painted
 Mill, Oxidized & Lacquered

NOTE: Corner of holes may have a small radii as required for manufacturing.
 To maintain KEES' policy of continuous product improvement, we reserve the right to change prices, specifications, ratings or dimensions without notice or obligation.

Project		Location	
Engineer			
Architect		Dwg. No.	SD-HA150
Contractor		Date	04/09



KEES INCORPORATED
 400 S. Industrial Dr.
 Elkhart Lake, WI 53020
 Phone: (920) 876-3391
 Fax: (920) 876-3065
 Website: www.kees.com

PATTERN HA150

1-1/2" HALF SHELL

58% OPEN

NO. OF PATTERNS	W INCHES	H INCHES	NO. OF PATTERNS	W INCHES	H INCHES	NO. OF PATTERNS	W INCHES	H INCHES
31	83.047	35.235	56		63.360	81		91.485
32	85.734	36.360	57		64.485	82		92.610
33	88.421	37.485	58		65.610	83		93.735
34	91.108	38.610	59		66.735	84		94.860
35	93.795	39.735	60		67.860	85		95.985
36	96.482	40.860	61		68.985	86		97.110
37	99.169	41.985	62		70.110	87		98.235
38	101.856	43.110	63		71.235	88		99.360
39	104.543	44.235	64		72.360	89		100.485
40	107.230	45.360	65		73.485	90		101.610
41	109.917	46.485	66		74.610	91		102.735
42	112.604	47.610	67		75.735	92		103.860
43	115.291	48.735	68		76.860	93		104.985
44	117.978	49.860	69		77.985	94		106.110
45		50.985	70		79.110	95		107.235
46		52.110	71		80.235	96		108.360
47		53.235	72		81.360	97		109.485
48		54.360	73		82.485	98		110.610
49		55.485	74		83.610	99		111.735
50		56.610	75		84.735	100		112.860
51		57.735	76		85.860	101		113.985
52		58.860	77		86.985	102		115.110
53		59.985	78		88.110	103		116.235
54		61.110	79		89.235	104		117.360
55		62.235	80		90.360	105		118.485



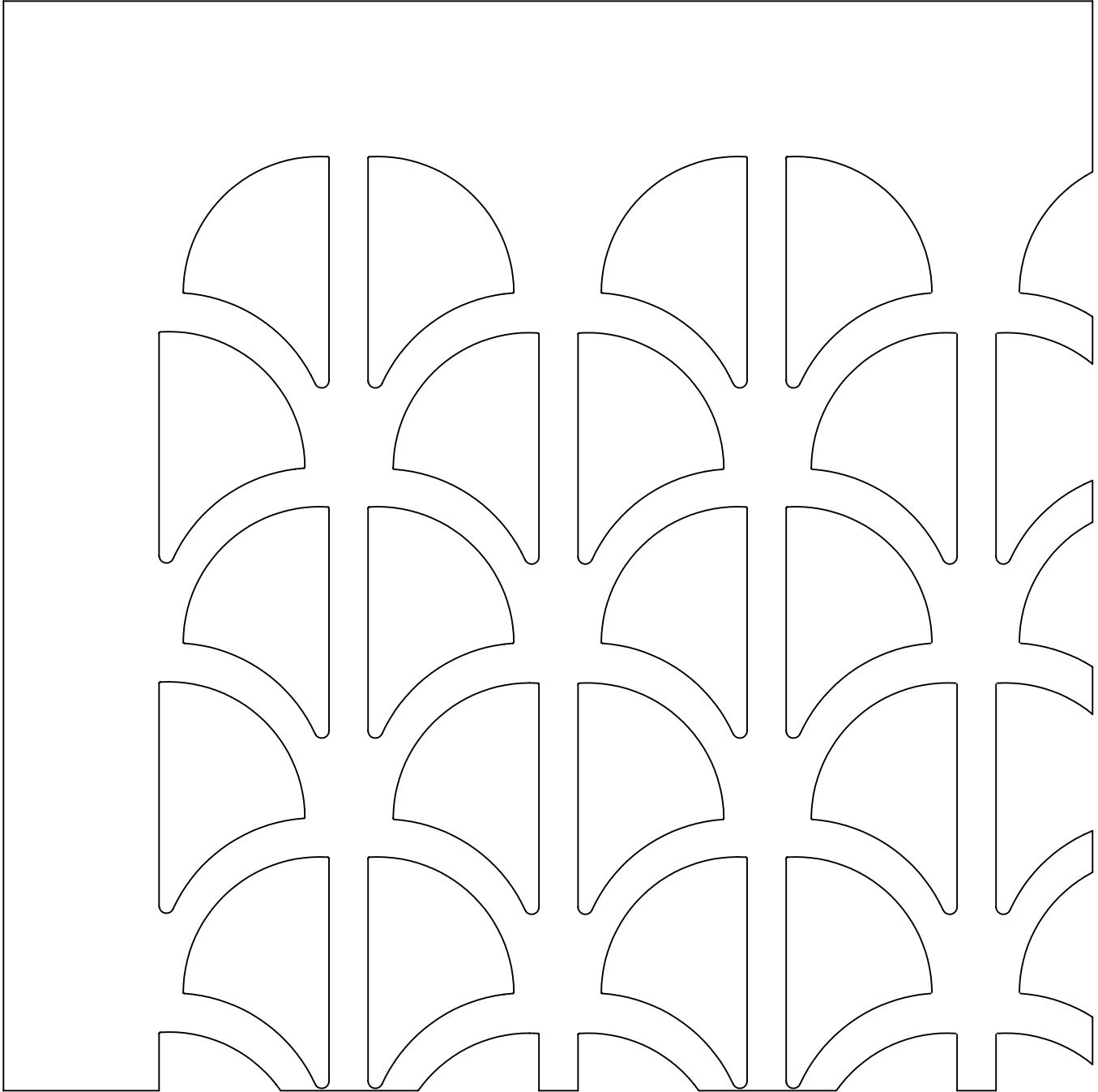
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DECORATIVE STAMPED GRILLE HOLE PATTERN

PATTERN HA150 - HALF SHELL

FULL SCALE



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