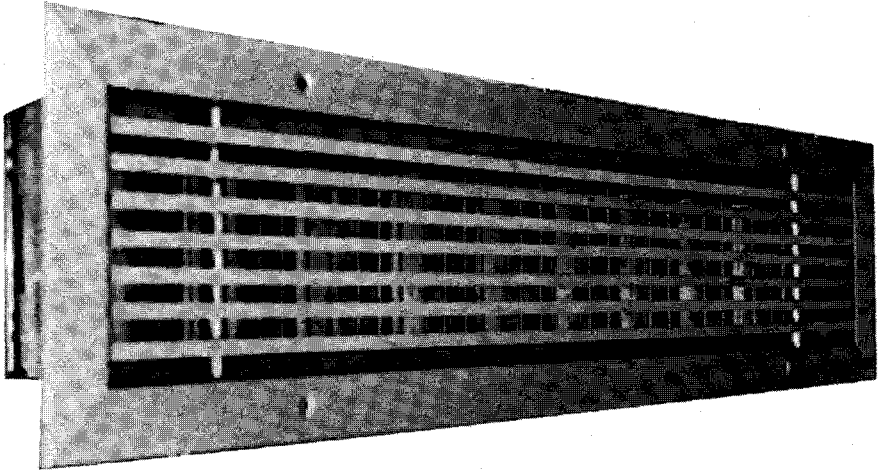
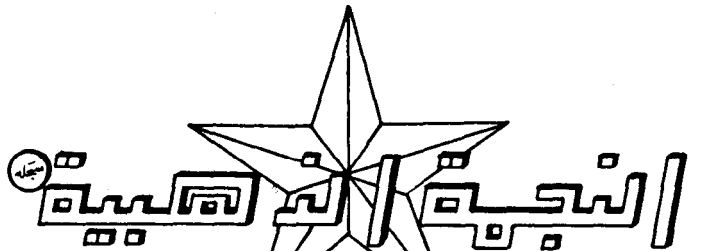




SAUDI AIR CONTROL SYSTEM
INDUSTRIAL REGISTRATION NO.353



EXTRUDED ALUMINUM LINEAR BAR GRILLES AND REGISTERS

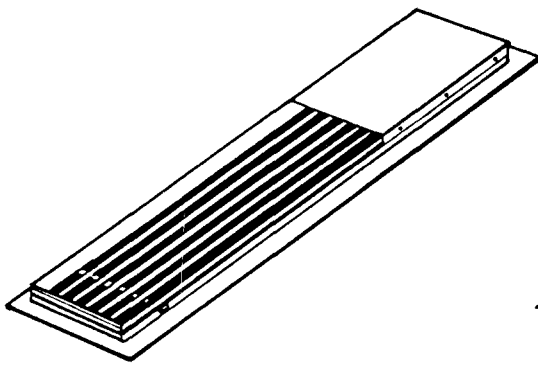
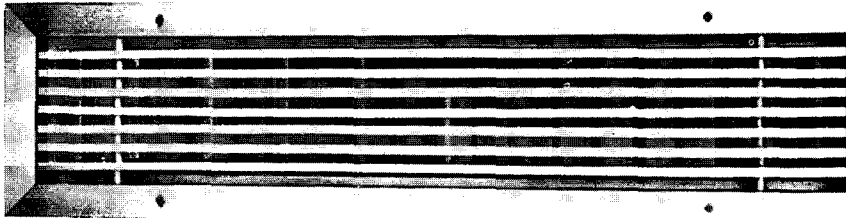


المصنع السعودي لصناعة فتحات وطوابق توزيع الهواء

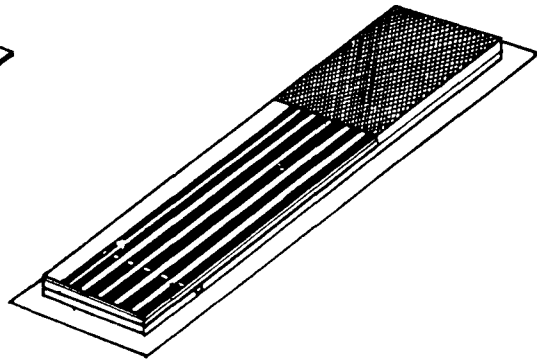
ترخيص صناعي رقم ٣٥٣ / ص

**EXTRUDED ALUMINUM LINEAR BAR GRILLES AND
REGISTERS**

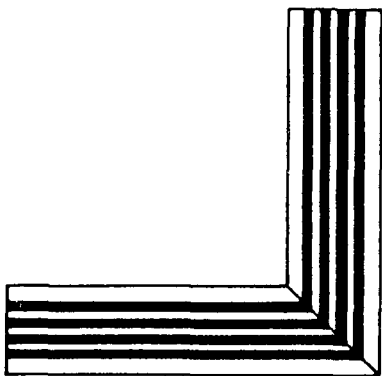
SERIES GLG and GLR 1, 2, 3, 4/5,6,7,8,9,10. and 11



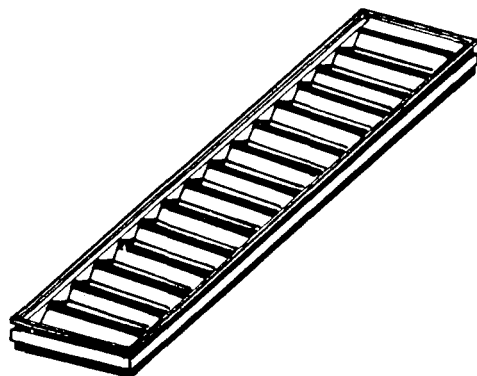
BLANK OFF PLATES



SCREEN



MITERED CORNERS



OPPOSED BLADE DAMPER

EXTRUDED ALUMINUM LINEAR BAR GRILLES AND REGISTERS

GLG Series Linear Bar Grilles and Registers are engineered for supply and return air distribution in heating, cooling, and ventilation applications and are suitable for sidewall, floor, sill and ceiling applications. Design provides a new concept in air movements though especially practical for building with curtain wan and glass construction. Also its pencil proof design provides valuable for floor installation.

MATERIALS

GLG Series Linear Bar Grilles and Registers are made from high grade aluminum extrusions for maximum strength, corrosion resistance, and dimensional stability. Manufactured by a mechanical assembly to assure rigidity and maintain straight line appearance.

DESIGN

Face bars of natural anodized extruded aluminum are assembled on a 3/16" steel rod with spacers between bars to produce straight, rigid and blemish free core sections. Standard Floor and Sill, Series GLG 1,2,3 and Sidewall and ceiling applications. Series GLG 4,5 ,6, are made of 1/4" bars with 1/2" centers and-available in three deflections 0°, 15° and 30°. Thin Line Series GLG 7 and 8 are made of 1/8" bars with 1/4" centers and are available in two deflections 0° and 15° . For Thin Line Series GLG 9,10 and 11 are made of 1/8" bars with 1/2" centers in three deflections 0°, 15° and 30°.

Linear Bar Grilles frames are made of extruded aluminum. Series GLG 1,2,3,4,,5 and 6 has a border width of 7/8" (21mm.), and for Series GLG 7,8,9,10 and 11 has a border width of 1-3/16" (29mm.). Frames can be supplied with face screw mounting holes as standard. Frames can be supplied also with steel snap-in friction springs for mounting floors, sills and sidewall applications and especially where specifications call for concealed installations. **AVAILABILITY**

GLG Series Linear Bar Grilles and Registers are available in different widths ranging from 1-1/2 to 12 inches as standard and also available up to 24" width upon request. Standard widths includes 1-1/2", 2", 2-1/2", 3", 3-1/2",4", 5" 6", 8", 10" and 12" Available virtually at any length from above widths with a minimum of 6" to a maximum of 8 ft. long in one piece. Longer units are formed by butting multiple grille sections. Individual sections are engineered for hairline butting to any desired length by means of alignment strips resulting a smooth and unbroken face appearance.

FINISH

Standard finish for all GLG Series Linear Bar Grilles and Registers is Natural Anodized.

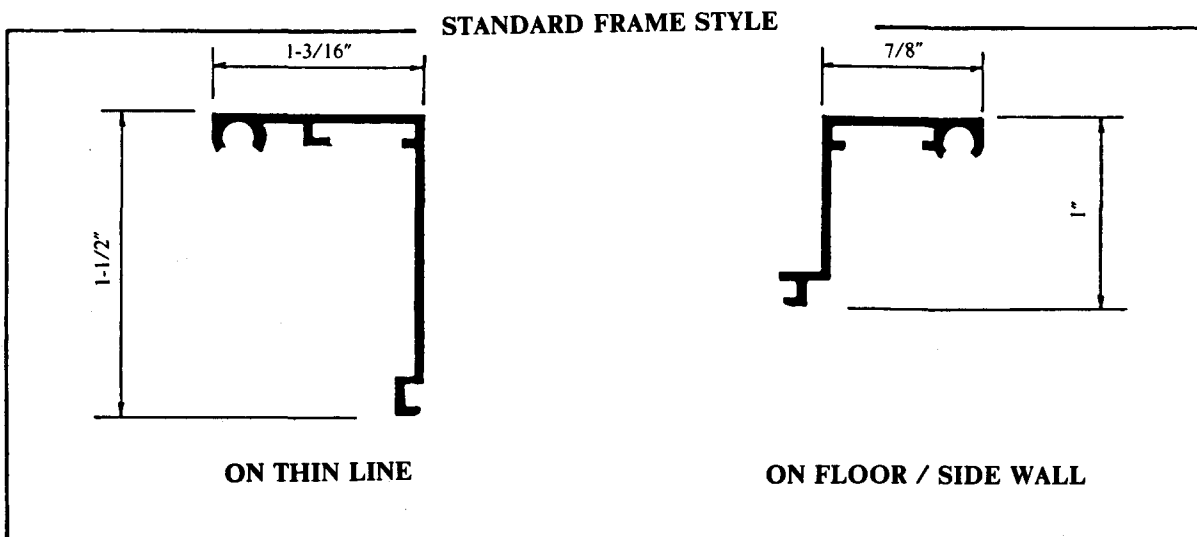
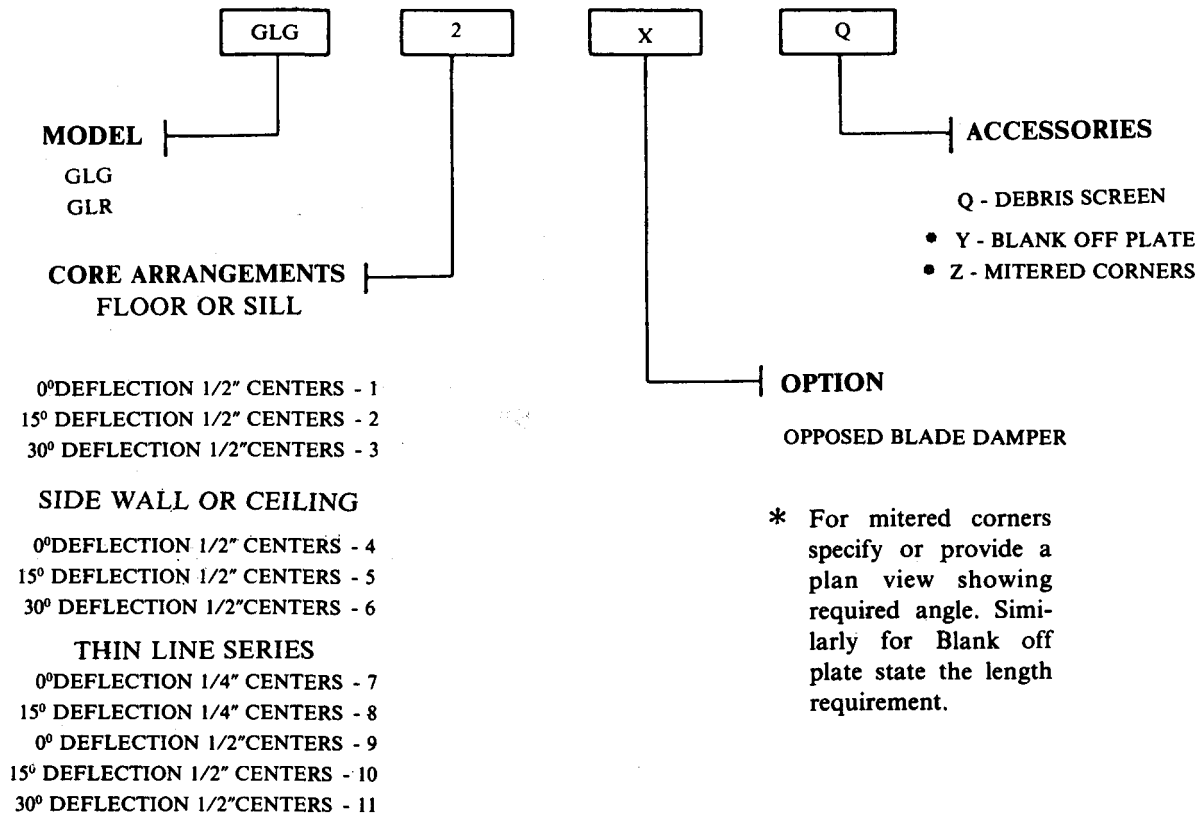
Other different anodized colors are available to meet architectural decorator requirements upon request as extra cost.

ACCESSORIES

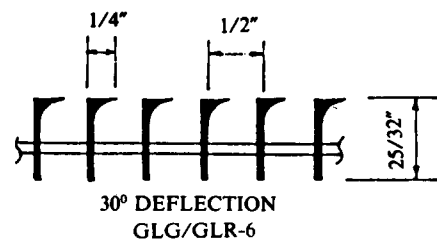
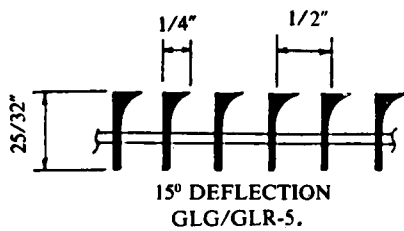
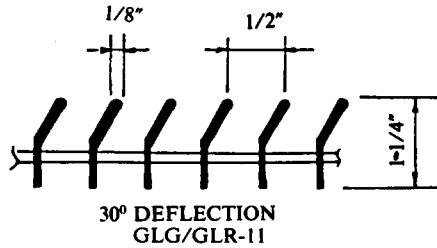
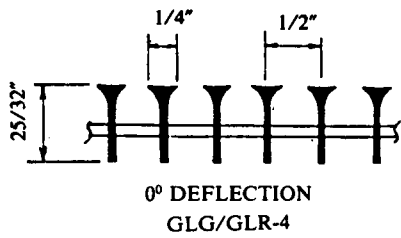
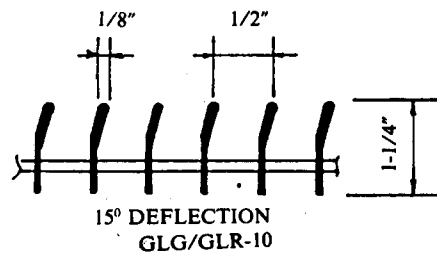
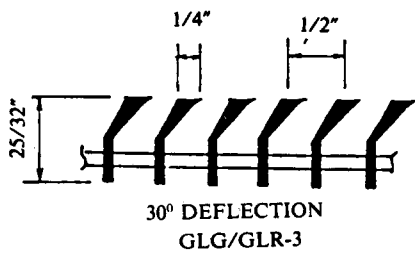
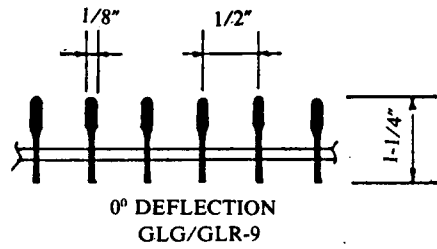
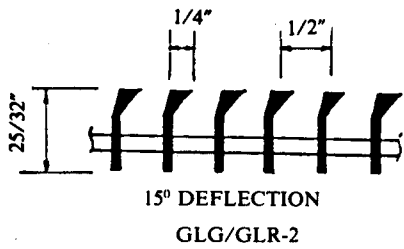
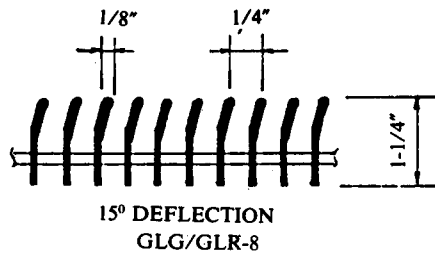
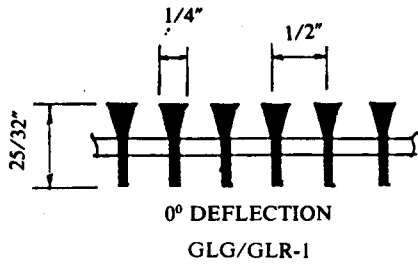
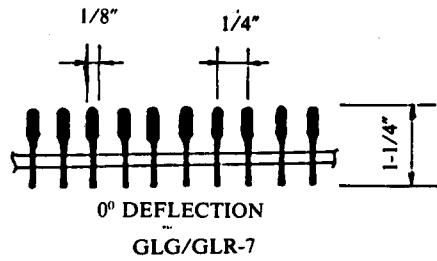
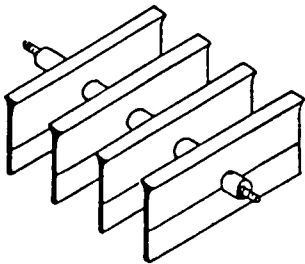
A complete variety of accessories and options are available for GLG Series Linear Bar Grilles and Registers including mitered corners, opposed blade damper, debris-screen, and blank off plate.

LINEAR BAR GRILLES AND REGISTERS

SELECTION GUIDE

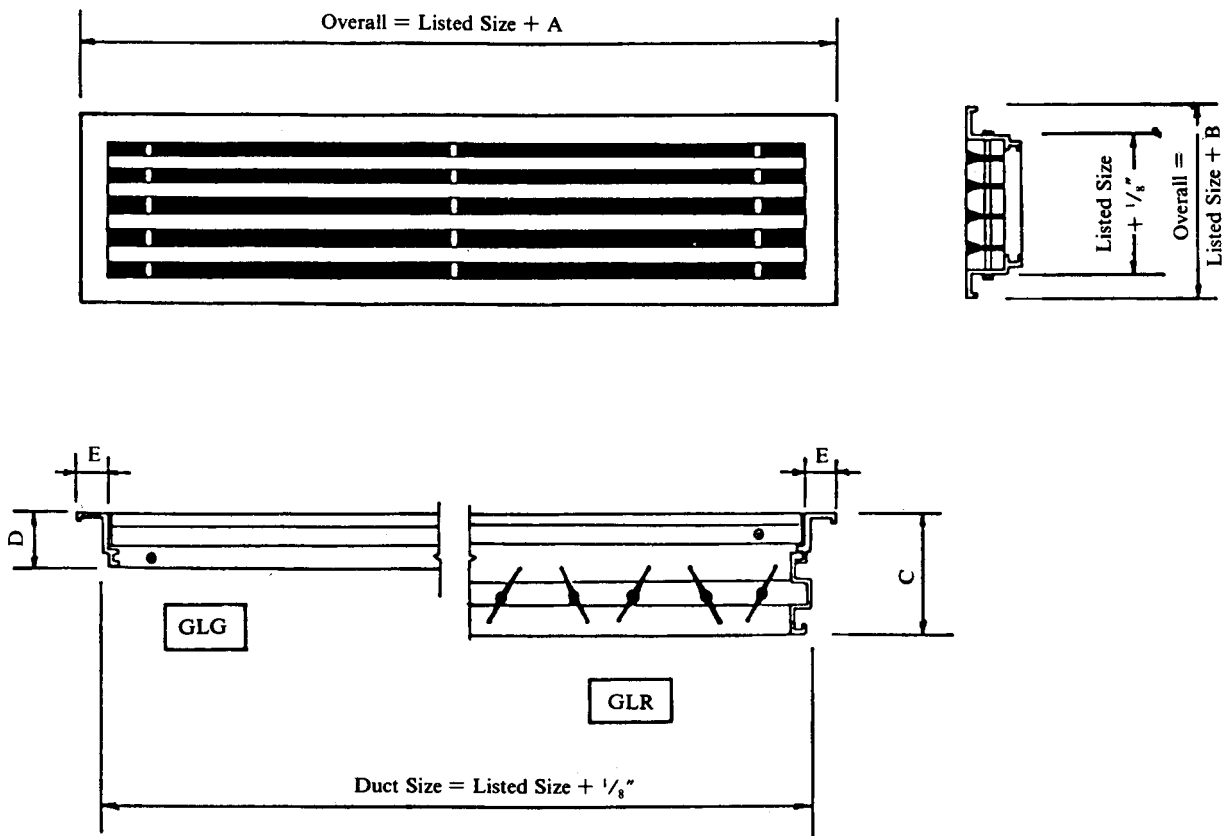


STANDARD BAR AND CORE STYLES



LINEAR BAR GRILLES AND REGISTERS

DIMENSIONAL DETAILS

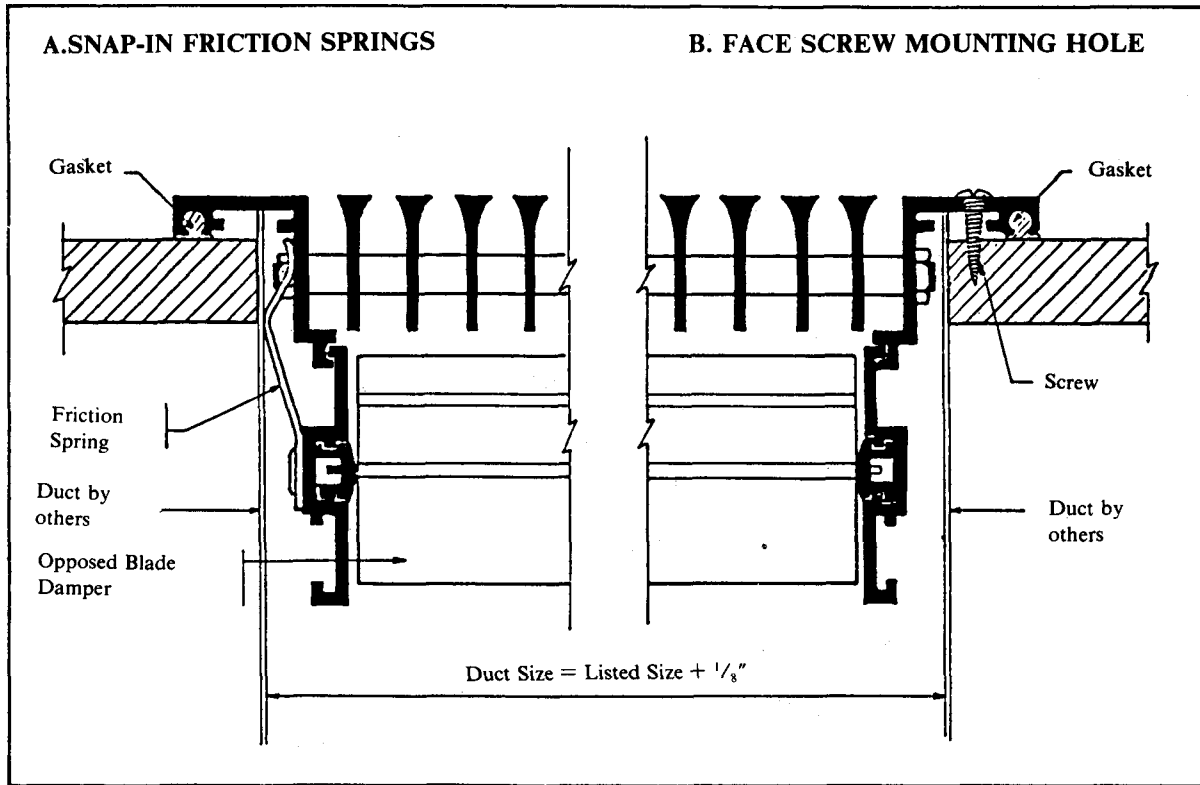


Frame Style	A	B	C	D	E
Standard Floor/Sidewall	1-5/8"	1-5/8"	2-3/8"	1"	7/8"
Standard. Thin Line Series	2"	2"	2-15/16"	1-1/2"	1-3/16"

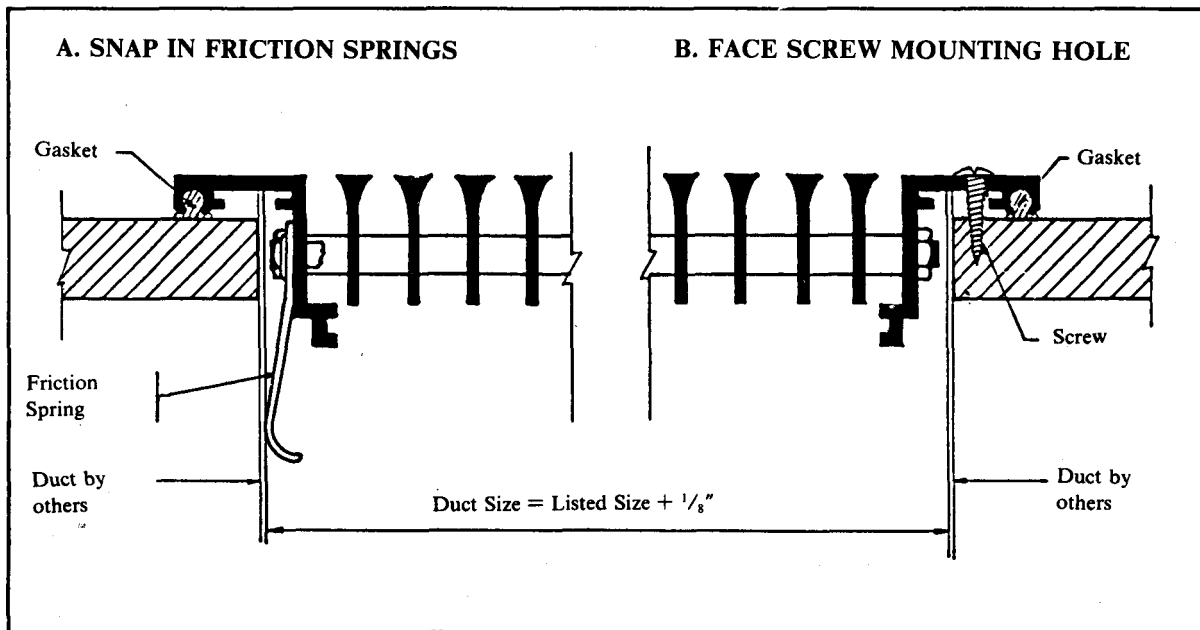
INSTALLATION DETAILS

FLOOR, SILL AND SIDEWALL APPLICATIONS

SUPPLY



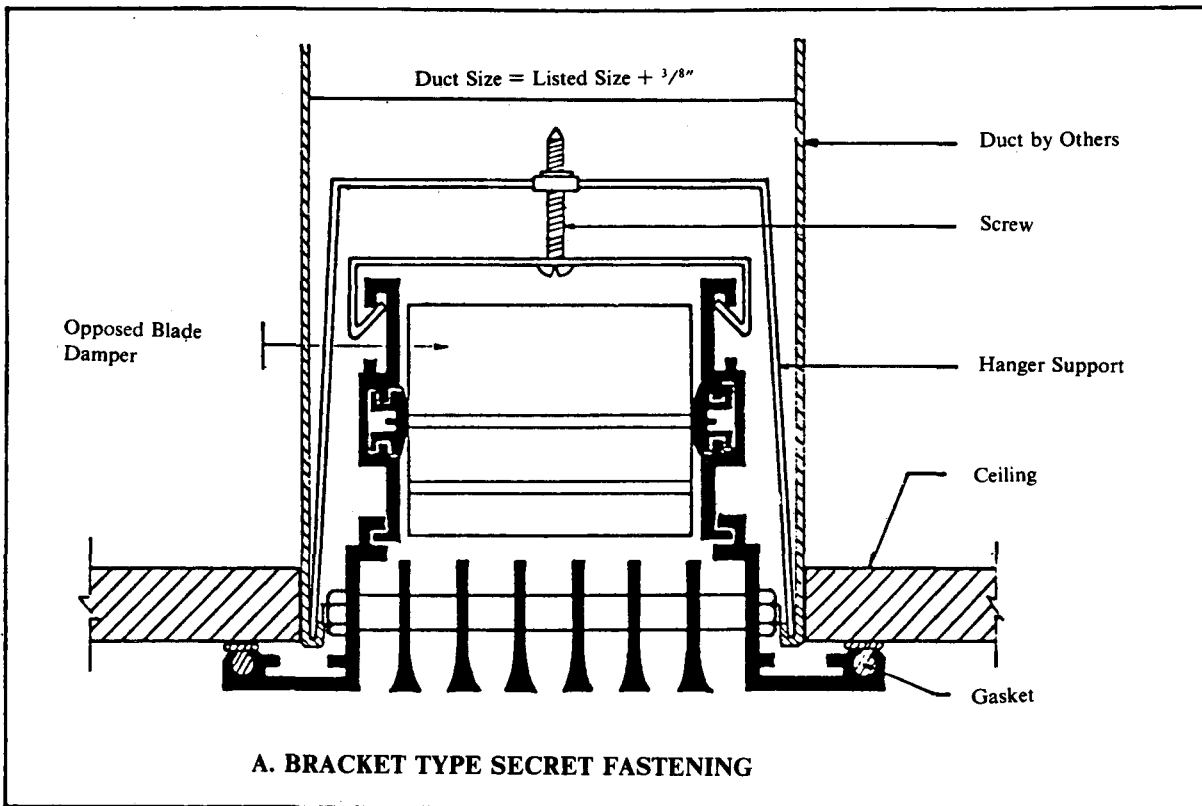
RETURN



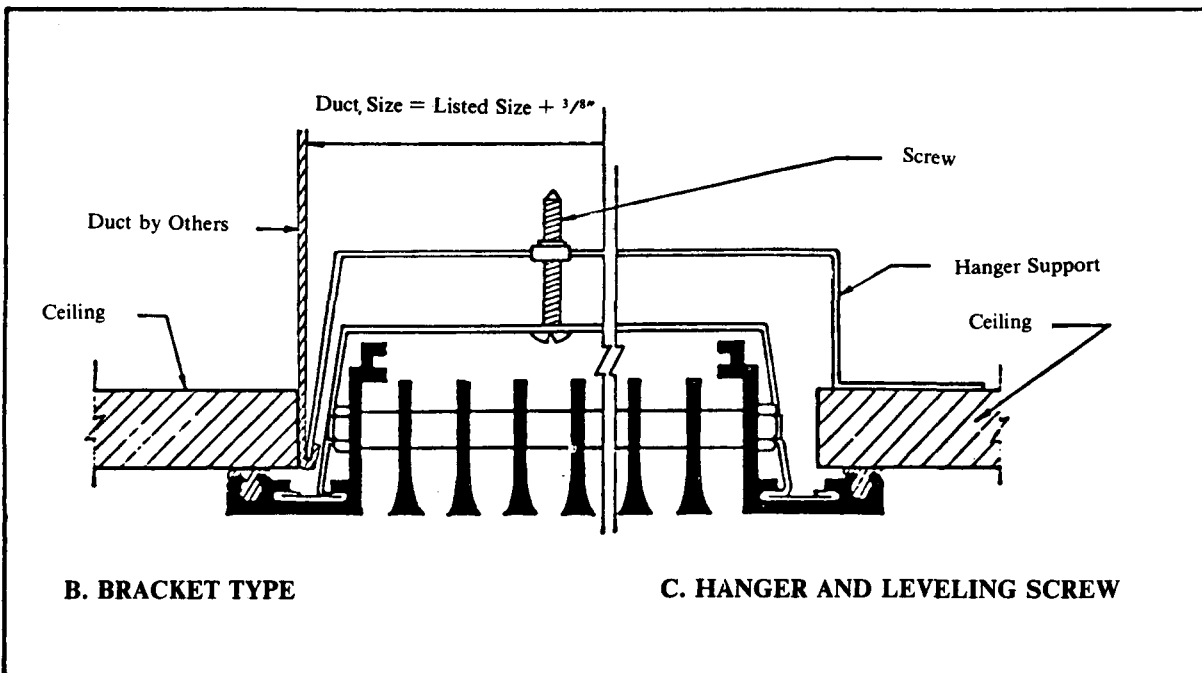
INSTALLATION DETAILS

CEILING APPLICATIONS

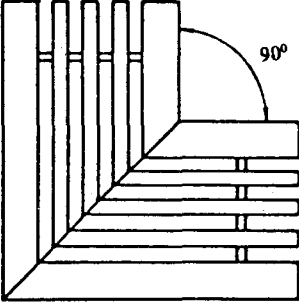
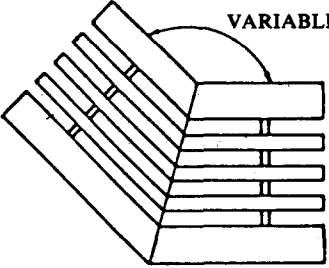
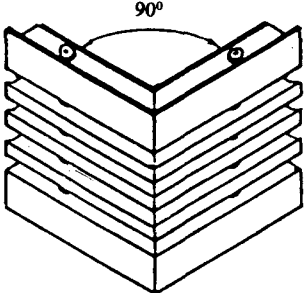
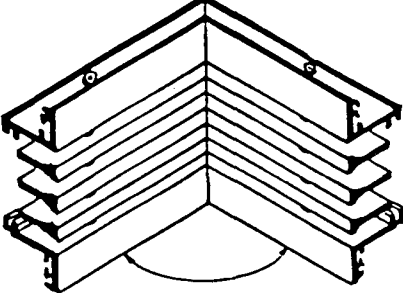
SUPPLY



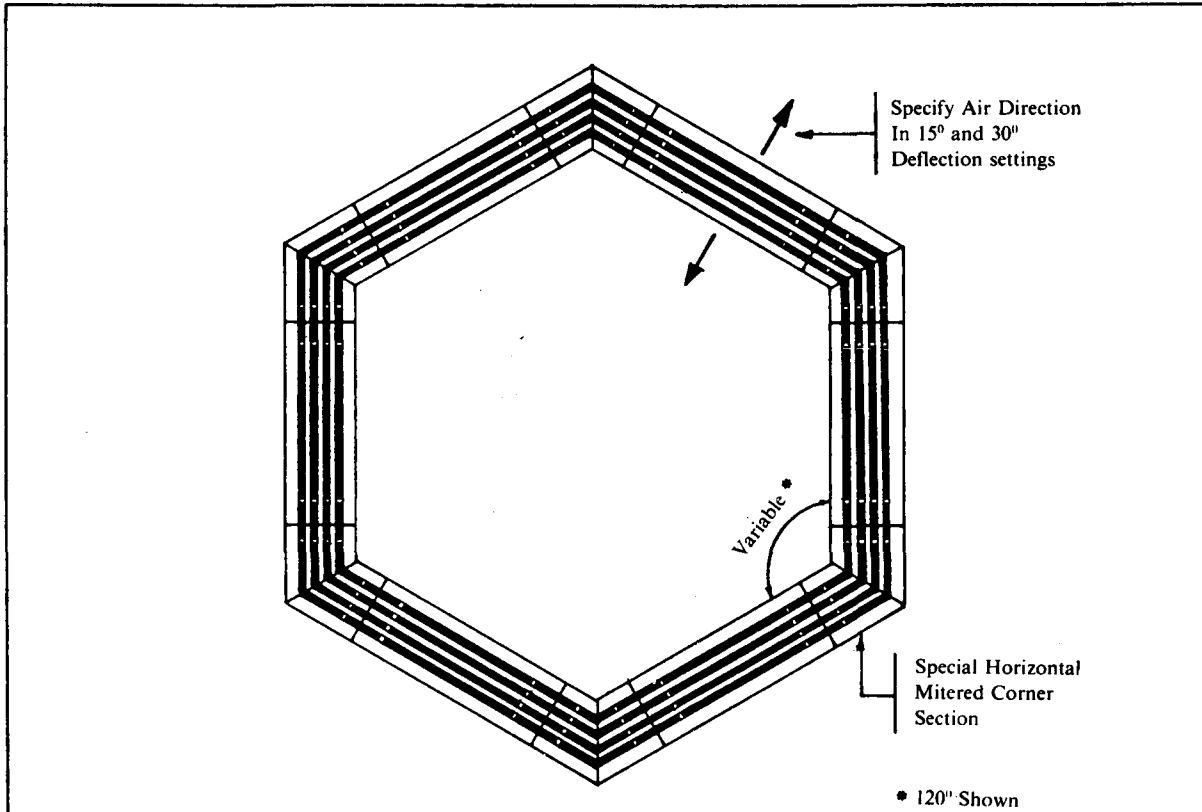
RETURN



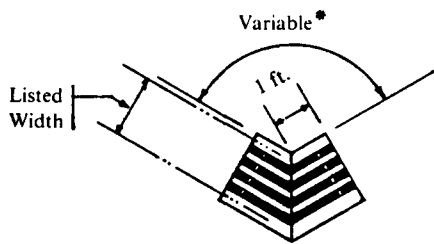
OPTIONAL MITERED CORNER SECTIONS

	<p style="text-align: center;"><i>STANDARD 90° HORIZONTAL MITERED CORNER SECTION</i></p> <p>Available in floor, sill or ceiling applications. This standard corner sections are available in 0°, 15° and 30° deflection settings with an angle of 90°. When specifying a corner section with 15° or 30° deflection settings, it is important to specify the direction of its throw either towards the inside or outside of the corner. For inactive corner sections, it is not provided with damper or other accessories.</p>
	<p style="text-align: center;"><i>SPECIAL HORIZONTAL MITERED CORNER SECTION</i></p> <p>Available in floor, sill or ceiling applications. This special corner section includes an angle greater than 90° and less than 180° and are available in 0°, 15° and 30° deflections settings. When specifying a corner section with a 15° or 30° deflection settings, it is important to specify the direction of its throw either towards the inside or outside of the corner. For inactive corner sections, it is not provided with damper or other accessories.</p>
	<p style="text-align: center;"><i>VERTICAL OUTSIDE MITERED CORNER SECTION</i></p> <p>Designed for sidewall applications at the junctions of two outside walls. This type of corner section has a standard angle of 90° and are available in 0°, 15° and 30° deflection settings. For inactive corner sections, it is not provided with damper or other accessories.</p>
	<p style="text-align: center;"><i>VERTICAL INSIDE MITERED CORNER SECTION</i></p> <p>Designed for sidewall applications at the junction of two inside walls. This type of corner section has a standard angle of 90° and are available in 0°, 15° and 30° deflection settings. For inactive corner sections, it is not provided with damper or other accessories.</p>

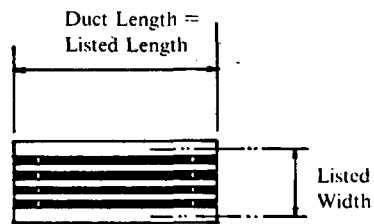
PLAN VIEW



A PLAN VIEW SHOWING A LINEAR GRILLE APPLICATIONS



MITERED CORNER



CENTER SECTION



PERFORMANCE DA TA SERIES

GLG and GLR 1,2,4 and 5

(0° and 15° DEFLECTION; 1/2" SPACING)

LISTED SIZES (inches) Ak/FT.	VELOCITY (Vk), fpm	400	500	600	700	800	900	1000	1200	
	TOTAL PRESS., " H ₂ O	.013	.02	.028	.038	.05	.062	.077	.11	
1½" Ak = .046	CFM/FT.	19	23	28	32	37	42	46	55	
	NC	15	25	30	32	35	40	45	50	
	THROW, Ft.	SIDEWALL	5-8	6-10	8-12	9-14	10-16	12-19	13-21	15-25
		FLOOR; SILL	5-6	5-8	6-10	7-12	8-13	9-14	10-16	13-20
2" Ak = .069	CFM/FT.	28	35	42	48	55	62	69	83	
	NC	13	18	23	28	32	35	40	45	
	THROW, Ft.	SIDEWALL	6-10	8-13	9-15	11-18	13-20	14-23	16-25	19-30
		FLOOR;SILL	5-8	6.10	7-12	9-14	10-16	11-18	13-20	15-23
2½" Ak = .092	CFM/FT.	37	46	55	65	74	83	92	110	
	NC	13	18	23	28	32	35	40	45	
	THROW, Ft.	SIDEWALL	7-12	9-15	11-17	13-20	15-23	16-26	18-29	22-35
		FLOOR. SILL	5-9	7-12	9-14	11-16	12-18	13-20	14-22	16-28
3" Ak = .11	CFM/FT.	44	55	66	77	88	99	110	132	
	NC	13	18	23	28	32	35	40	45	
	THROW, Ft.	SIDEWALL	8-13	10-16	12-19	14-22	16-25	18-28	20-32	24-38
		FLOOR: SILL	.6-10	8-13	9-15	11-18	13-20	14-22	15-25	19-30
3½" Ak = .14	CFM/FT.	56	70	84	98	112	126	140	168	
	NC	14	19	24	29	33	36	41	46	
	THROW, Ft.	SIDEWALL	9-14	11-18	13-22	16-25	18-29	20-32	22-36	27-43
		FLOOR; SILL	7-12	9-14	11-17	12-20	14-23	16-25	18-28	21-34
4" Ak = .16	CFM/FT.	64	80	96	112	128	144	160	192	
	NC	14	19	24	29	33	36	41	46	
	THROW, Ft.	SIDEWALL	10-15	12-19	15-23	17-27	19-31	22-35	24-39	29-46
		FLOOR; SILL	9-14	11-17	13-21	15-25	18-28	20-31	22-35	26-42
5" Ak = .21	CFM/FT.	84	105	126	147	168	189	210	252	
	NC	15	20	25	30	34	37	42	47	
	THROW, Ft.	SIDEWALL	13-20	16-25	19-30	22-35	25-40	28-45	31-50	38-60
		FLOOR; SILL	10-16	13-20	15-24	18-28	20-32	23-36	.25-40	30-48
6" Ak = .25	CFM/FT.	100	125	150	175	200	225	250	300	
	NC	15	20	25	30	34	37	42	47	
	THROW, Ft.	SIDEWALL	14-22	17-27	21-33	24-38	27-43	31-49	34-54	41-65
		FLOOR; SILL	11-18	14-22	16-26	19-31	22-35	25-39	27-43	33-52
8" Ak = .35	CFM/FT.	140	175	210	245	280	315	350	420	
	NC	16	21	25	31	35	38	43	48	
	THROW, Ft.	SIDEWALL	16-26	20-32	24-39	28-45	32-52	36-58	40-64	48-77
		FLOOR: SILL	13-21	16-26	20-31	23-36	26-41	29-46	32-52	39-62
10" Ak = .46	CFM/FT.	184	230	276	322	386	414	460	552	
	NC	16	21	26	31	35	38	43	48	
	THROW, Ft.	SIDEWALL	19-30	23-37	28-44	32-52	37-59	42-66	46-74	55-88
		FLOOR; SILL	51-24	19-30	22-36	.26-41	30-47	33-53	37-59	44-71
12" Ak = .53	CFM/FT.	212	265	318	371	427	477	530	636	
	NC	17	22	27	32	36	39	44	49	
	THROW, Ft.	SIDEWALL	20-32	25-40	30-48	35-55	40-63	43-71	50-79	59-95
		FLOOR; SILL	16-26	20-32	24-38	28-44	32-51	36-57	40-63	48-76

NOTE: For Damper Addition: Add 2db to listed NC; Multiply listed total pressure values by 1.5. For Return: Add 4db to listed NC; Multiply listed total pressure values by 0.8. For performance notes, see page no. 17.


GOLDEN STAR
SAUDI AIR CONTROL SYSTEM

PERFORMANCE DATA

SERIES GLG and GLR 3 and 6

(30° DEFLECTION; 1/2" SPACINGS)

LISTED SIZES (inches) Ak/FT.	VELOCITY (Vk), fpm	400	500	600	700	800	900	1000	1200	
	TOTAL PRESS., " H ₂ O	.012	.019	.027	.037	.048	.061	.074	.107	
1½" Ak = .039	CFM/FT.	16	20	24	27	31	35	39	47	
	NC	15	25	31	33	36	41	46	51	
	THROW, Ft.	SIDEWALL	4-6	5-8	6-9	7-10	8-12	8-13	9-15	11-18
		FLOOR; SILL	2-3	3-4	3-4	3-5	4-6	4-7	5-7	6-9
2" Ak = .059	CFM/FT.	24	30	35	41	47	53	59	71	
	NC	13	18	24	29	33	36	41	46	
	THROW.	SIDEWALL	5-7	6-9	7-11	8-13	9-14	10-16	11-18	14-91
		FLOOR; SILL	3-4	3-5	4-6	4-6	5-7	5-8	6-9	7-11
2½" Ak = .078	CFM/FT.	31	39	47	55	62	70	78	94	
	NC	13	18	24	29	33	36	41	46	
	THROW, Ft.	SIDEWALL	6-9	7-11	8-13	9-15	11-17	12-19	13-21	16-25
		FLOOR; SILL	3-4	4-5	4-6	5-7	5-8	6-9	7-10	8-12
3" Ak = .094	CFM/FT.	38	47	57	66	75	85	94	113	
	NC	13	18	24	29	33	36	41	46	
	THROW. Ft.	SIDEWALL	6-9	7-12	9-14	10-16	12-18	13-20	14-23	17-27
		FLOOR; SILL	3-5	4-6	4-7	5-8	6-9	6-10	7-11	8-13
3½" Ak = .12	CFM/FT.	48	60	72	84	96	108	120	144	
	NC	14	19	25	30	34	37	42	47	
	THROW.	SIDEWALL	7-10	8-13	10-15	11-18	13-20	15-23	16-25	19-30
		FLOOR; SILL	3-5	4-6	5-8	6-9	6-10	7-11	8-12	9-15
4" Ak = .14	CFM/FT.	56	70	84	98	112	126	140	168	
	NC	14	19	25	30	34	37	42	47	
	THROW, Ft.	SIDEWALL	7-11	9-14	11-17	12-19	14-22	16-25	17-27	31-33
		FLOOR; SILL	4-6	5-7	5-8	6-10	7-11	8-12	9-13	10-16
5" Ak = .18	CFM/FT.	72	90	108	126	144	162	180	216	
	NC	15	20	26	31	35	38	43	48	
	THROW, Ft.	SIDEWALL	9-15	12-18	12-22	16-25	18-29	21-33	23-36	27-43
		FLOOR; SILL	5-8	6-10	7-11	9-13	10-15	11-17	12-19	14-22
6" Ak = .21	CFM/FT.	84	105	126	147	168	189	210	252	
	NC	15	20	26	31	35	38	43	48	
	THROW, Ft.	SIDEWALL	10-16	13-20	15-24	17-27	20-31	22-35	25-39	29-47
		FLOOR; SILL	5-8	7-10	8-12	9-14	10-16	12-18	13-20	15-24
8" Ak = .3	CFM/FT.	120	150	180	210	240	270	300	360	
	NC	16	21	27	32	36	39	44	49	
	THROW, Ft.	SIDEWALL	10-19	12-23	15-28	17-33	19-37	22-42	24-46	29-56
		FLOOR; SILL	6-10	8-12	9-15	11-17	12-19	14-22	15-24	18-29
10" Ak = .39	CFM/FT.	156	195	234	273	312	351	390	468	
	NC	16	21	27	32	36	39	44	49	
	THROW, Ft.	SIDEWALL	• 14-21	17-27	20-32	23-37	27-42	30-48	33-53	40-63
		FLOOR; SILL	7-11	9-14	11-17	12-19	14-22	16-25	17-27	21-33
12" Ak = .45	CFM/FT.	180	225	270	315	360	405	450	540	
	NC	17	22	27	33	37	40	45	50	
	THROW, Ft.	SIDEWALL	15-23	18-29	22-34	25-40	29-46	32-51	36-57	43-68
		FLOOR; SILL	8-12	10-15	11-18	13-21	15-24	17-27	19-29	22-35

NOTE: For Damper Addition: Add 2db to listed NC; Multiply listed total pressure values by 1.5. For Return: Add 4db to listed NC; Multiply listed total pressure values by 0.8. For performance notes, see page no. 17.


GOLDEN STAR
SAUDI AIR CONTROL SYSTEM

PERFORMANCE DATA

SERIES GLG and GLR 7 and 8

(0° and 15° DEFLECTION; 1/4" (SPACINGS))

LISTED SIZES (inches) Ak/FT.	VELOCITY (Vk), fpm	400	500	600	700	800	900	1000	1200	
	TOTAL PRESS.. "H2O	.013	.019	.028	.038	.049	.062	.076	.109	
1½" Ak = .058	CFM/FT.	23.	29	35	41	47	52	58	70	
	NC	15	22	30	35	40	42	45	48	
	THROW, Ft.	SIDEWALL	6-10	8-12	9-14	11-17	12-19	14-21	15-24	18-28
		FLOOR; SILL	5-8	6-10	7-11	8-13	10-15	11-17	12-19	14-22
2" Ak = .079	CFM/FT.	32	40	48	55	63	71	79.	95	
	NC	13	20	28	32	35	38	40	45	
	THROW. Ft.	SIDEWALL	7-11	9-14	11-17	12-19	14-22	16-25	17-27	21-33
		FLOOR: SILL	6-9	7-11	8-13	10-15	11-17	12-20	14-22	16-26
2½" Ak = .1	CFM/FT.	40	50	60	70	80	90	100	120	
	NC	13	20	28	32	35	38	40	45	
	THROW. Ft.	SIDEWALL	8-13	10-16	12-19	14-22	16-25	18-28	19-31	23-37
		FLOOR: SILL	6-10	8-12	9-15	11-17	12-20	14-22	15-24	18-29
3" Ak = .12	CFM/FT.	48	60	72	84	96	108	120	144	
	NC	13	20	28	32	35	38	40	45	
	THROW. Ft.	SIDEWALL	9-14	11-17	13-20	15-24	17-27	19-30	21-34	25-40
		FLOOR: SILL	7-11	9-14	10-16	12-19	14-21	15-24	17-27	20-32
3½" Ak = .14	CFM/FT.	56	70	84	98	112	126	140	168	
	NC	14	21	29	33	36	39	41	46	
	THROW. Ft.	SIDEWALL	9-15	12-18	14-22	16-26	18-29	21-33	23-36	27-44
		FLOOR: SILL	8-12	9-15	11-17	13-20	15-23	16-26	18-29	22-34
4" Ak = .16	CFM/FT.	64	80	96	112	128	144	160	192	
	NC	14	21	29	33	36	39	41	46	
	THROW. Ft.	SIDEWALL	10-16	12-20	15-24	17-27	20-31	22-35	24-39	29-47
		FLOOR: SILL	8-13	10-16	14-19	14-22	16-25	17-28	19-31	23-37
5" Ak = .20	CFM/FT.	80	100	120	140	160	180	200	240	
	NC	15	22	30	34	37	40	42	47	
	THROW. Ft.	SIDEWALL	12-20	16-25	19-29	22-34	25-39	28-44	31-49	37-58
		FLOOR; SILL	9-16	11-20	13-24	16-28	18-31	20-35	22-39	26-47
6" Ak = .25	CFM/FT.	100	125	150	175	200	225	250	300	
	NC	15	22	30	34	37	40	42	47	
	THROW. Ft.	SIDEWALL	14-22	17-27	21-33	24-38	27-44	31-49	34-54	41-65
		FLOOR: SILL	11-18	14-22	17-26	19-31	22-35	25-39	27-44	33-52
8" Ak = .33	CFM/FT.	132	165	198	231	264	297	330	396	
	NC ¹	16	23	31	35	38	41	43	48	
	THROW, Ft.	SIDEWALL	16-25	20-32	24-38	28-44	32-50	35-56	39-63	47-75
		FLOOR: SILL	13-20	16-25	19-30	22-35	25-40	28-45	32-50	38-60
10" Ak = .41	CFM/FT.	164	205	246	287	328	369	410	492	
	NC	16	23	31	35	38	41	43	48	
	THROW, Ft.	SIDEWALL	18-28	22-35	26-42	31-49	35-56	39-63	44-70	52-83
		FLOOR: SILL	14-23	18-28	21-34	25-39	28-45	32-50	35-56	42-67
12" Ak = .5	CFM/FT.	200	250	300	350	400	450	500	600	
	NC	17	24	32	36	39	42	44	49	
	THROW, Ft.	SIDEWALL	20-31	24-39	29-46	34-54	39-62	43-69	48-77	58-92
		FLOOR: SILL	16-25	20-31	23-37	27-43	31-49	35-55	39-62	46-74

NOTE: For Damper Addition: Add 2db to listed NC; Multiply listed total pressure values by 1.5. For Return: Add 4db to listed NC; Multiply listed total pressure values by 0.8. For performance notes, see page no. 17.


GOLDEN STAR
SAUDI AIR CONTROL SYSTEM

PERFORMANCE DATA

SERIES GLG and GLR 9 & 10

(0° and 15" DEFLECTION; 1/2" (SPACINGS))

LISTED •SIZES (inches) Ak/FT.	VELOCITY (Vk). fpm	400	500	600	700	800	900	1000	1200	
	TOTAL PRESS.. "H2O	.014	.021	.03	.041	.053	.067	.082	.117	
1½" Ak = .087	CFM/FT.	35	44	52	61	70	78	87	104	
	NC	20	28	31	35	38	40	43	45	
	THROW. Ft.	SIDEWALL	8-14	9-15	11-17	13-20	15-23	16-26	18-29	22-34
		FLOOR: SILL	6-9	7-12	9-14	10-16	12-18	13-21	14-23	17-27
2" Ak = .12	CFM/FT.	48	60	72	84	96	108	120	144	
	NC	18	24	26	30	33	35	38	40	
	THROW. Ft.	SIDEWALL	9-14	11-17	13-20	15-24	17-27	19.-30	21-34	25-40
		FLOOR: SILL	7-11	9-14	10-16	12-19	14-21	15-24	17-27	20-32
2½" Ak = .15	CFM/FT.	60	75	90	105	120	135	150	180	
	NC	18	24	26	30	33	35	38	40	
	THROW. Ft.	SIDEWALL	10-15	12-19	14-23	17-27	19-30	21-34	24-38	28-45
		FLOOR: SILL	8-12	10-15	11-18	13-21	15-24	17-27	19-30	22-36
3" Ak = .18	CFM/FT.	72	90	108	126	144	162	180	216	
	NC	18	24	26	30	33	35	38	40	
	THROW. Ft.	SIDEWALL	11-17	13-21	16-25	18-29	21-33	23-37	26-41	31-49
		FLOOR; SILL	8-13	11-17	12-20	15-23	16-26	19-29	21-33	25-39
3½" Ak = .21	CFM/FT.	84	165	126	147	168	189	210	252	
	NC	19	25	27	31	34	36	39	41	
	THROW, Ft.	SIDEWALL	11-18	14-22	17-27	20-31	22-36	25-40	28-44	33-53
		FLOOR: SILL	9-14	11-18	13-21	16-25	18-28	20-32	22-31	26-42
4" Ak = .24	CFM/FT.	96	120	144	168	192	216	240	288	
	NC	19	25	27	31	34	36	39	41	
	THROW. Ft.	SIDEWALL	12-19	15-24	18-29	21-33	24-38	27-43	30-48	36-57
		FLOOR: SILL	10-15	12-19	14-23	17-26	19-30	21-34	24-37	28-45
5" Ak = .3	CFM/FT.	120	150	180	210	240	270	300	360	
	NC	20	26	28	32	35	37	40	42	
	THROW. Ft.	SIDEWALL	15-24	19-30	23-36	26-42	30-48	34-54	37-60	44-71
		FLOOR: SILL	12-19	15-24	18-29	21-34	24-38	27-43	30-48	36-57
6" Ak = .37	CFM/FT.	148	185	222	259	296	333	370	444	
	NC	20	26	28	32	35	37	40	42	
	THROW. Ft.	SIDEWALL	17-27	21-33	25-40	29-46	33-53	37-60	42-66	50-79
		FLOOR; SILL	14-22	17-27	20-32	23-37	27-43	30-48	33-53	40-64
8" Ak = .46	CFM/FT.	184	230	276	322	368	414	460	552	
	NC	21	27	29	33	36	38	41	43	
	THROW. Ft.	SIDEWALL	19-30	23-37	28-44	33-52	37-59	42-66	46-74	55-88
		FLOOR: SILL	15-24	19-30	22-36	26-42	30-47	33-53	37-59	44-71
10" Ak = .61	CFM/FT.	244	305	366	427	488	549	610	732	
	NC	21	27	29	33	36	38	41	43	
	THROW. Ft.	SIDEWALL	22-34	27-43	32-51	37-60	43-68	48-76	53-85	64-102
		FLOOR; SILL	17-27	22-54	26-41	30-48	34-54	38-61	43-68	51-81
12" Ak = .73	CFM/FT.	292	365	438	511	584	657	730	876	
	NC	22	28	30	34	37	39	42	44	
	THROW. Ft.	SIDEWALL	24-37	29-47	35-56	41-65	47-74	52-84	58-93	70-111
		FLOOR: SILL	19-30	24-37	28-45	33-52	37-60	42-67	47-74	56-89

NOTE: For Damper Addition: Add 2db to listed NC; Multiply listed total pressure values by 1.5. For Return: Add 4db to listed NC; Multiply listed total pressure values by 0.8. For performance notes, see page no. 17.


GOLDEN STAR
SAUDI AIR CONTROL SYSTEM

PERFORMANCE DATA

SERIES GLG and GLR11

(30° DEFLECTION; 1/2" (SPACINGS))

LISTED SIZES (inches) Ak/FT.	VELOCITY (Vk). fpm	400	500	600	700	800	900	1000	1200
	TOTAL PRESS., "H2O	.013	.02	.029	.039	.051	.064	.079	.113
1½" Ak = .074	CFM/FT.	30	37	45	52	59	67	74	89
	NC	20	28	32	36	39	41	44	46
	THROW. Ft.	SIDEWALL	5-8	7-10	8-12	9-14	10-16	12-18	13-20
2" Ak = .10	FLOOR; SILL	3-4	3-5	4-6	5-7	5-8	6-9	6-10	8-12
	CFM/FT.	40	50	60	70	80	90	100	120
	NC	18	24	27	31	33	36	39	41
	THROW, Ft.	SIDEWALL	6-10	8-12	9-14	10-16	12-19	13-21	15-23
2½" Ak = .13	FLOOR; SILL	3-5	4-6	5-7	5-8	6-9	7-10	7-11	9-14
	CFM/FT.	52	65	78	91	104	117	130	156
	NC	18	24	27	31	33	36	39	41
	THROW, Ft.	SIDEWALL	7-11	9-13	10-16	12-19	13-21	15-24	17-26
3" Ak = .15	FLOOR; SILL	4-5	4-7	5-8	6-9	7-10	8-12	8-13	10-15
	CFM/FT.	60	75	90	105	120	135	150	180
	NC	18	24	27	31	33	36	39	41
	THROW. Ft.	SIDEWALL	7-12	9-14	11-17	13-20	14-23	16-26	18-28
3½" Ak = .18	FLOOR; SILL	4-6	5-7	6-9	6-10	7-11	8-13	9-14	11-17
	CFM/FT.	72	90	108	126	144	162	180	216
	NC	19	25	28	32	34	37	40	42
	THROW, Ft.	SIDEWALL	8-13	10-16	12-19	14-22	16-25	18-28	20-31
4" Ak = .20	FLOOR; SILL	4-6	5-8	6-9	7-11	8-12	9-14	10-15	11-18
	CFM/FT.	80	100	120	140	160	180	200	240
	NC	19	25	28	32	34	37	40	42
	THROW. Ft.	SIDEWALL	9-13	11-17	13-20	15-23	17-26	19-29	21-33
5" Ak = .26	FLOOR; SILL	4-7	5-8	6-10	7-11	8-13	9-14	10-16	12-19
	CFM/FT.	104	130	156	182	208	234	260	312
	NC	20	26	29	33	35	38	41	43
	THROW, Ft.	SIDEWALL	11-18	14-22	17-26	19-30	22-35	25-39	27-43
6" Ak = .32	FLOOR; SILL	6-9	7-12	9-14	10-16	12-18	13-20	14-23	17-27
	CFM/FT.	128	160	192	224	256	288	320	384
	NC	20	26	29	33	35	38	41	43
	THROW. Ft.	SIDEWALL	12-19	15-24	18-29	21-34	24-39	27-43	30-48
8" Ak = .39	FLOOR; SILL	7-10	8-13	10-15	11-18	13-26	14-22	16-25	19-29
	CFM/FT.	156	195	234	273	312	351	390	468
	NC	21	27	30	34	36	39	42	44
	THROW, Ft.	SIDEWALL	14-21	17-27	20-32	23-37	27-42	30-48	33-53
10" Ak = .52	FLOOR; SILL	8-11	9-14	11-17	12-19	14-22	16-25	17-27	21-33
	CFM/FT.	208	260	312	364	416	468	520	624
	NC	21	27	30	34	36	39	42	44
	THROW. Ft.	SIDEWALL	16-25	19-31	23-37	27-43	31-49	35-55	38-61
12" Ak = .62	FLOOR; SILL	8-13	10-16	12-19	14-22	16-25	18-29	20-32	24-38
	CFM/FT.	248	310	372	434	496	558	620	744
	NC	22	28	31	35	37	40	43	45
	THROW. Ft.	SIDEWALL	17-27	21-31	25-40	29-47	34-53	38-60	42-67
	FLOOR: SILL	9-14	11-17	13-21	15-24	17-28	20-31	22-35	26-41

NOTE: For Damper Addition: Add 2db to listed NC; Multiply listed total pressure values by 1.5. For Return: Add 4db to listed NC; Multiply listed total pressure values by 0.8. For performance notes, see page no. 17.

PERFORMANCE NOTES

THROW —is the distance measured in feet that the air stream travels from outlet at a given terminal velocity. The throw is based on a maximum terminal velocity of 50 fpm. and a minimum terminal velocity of 100 fpm. The throw ratings are based on a 4 ft. length of grille with a 0° deflection setting and room and air supply temperature difference of 20°F. Use a correction factors from table one for grille length other than 4 ft.

SIDEWALL THROW - is based on an 8 to 10 ft. mounting height.

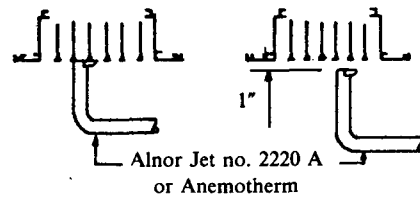
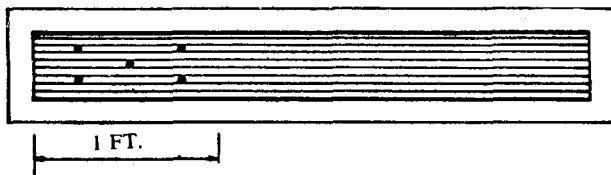
FLOOR AND SILL THROW - is based on an 8 to 10 ft. ceiling height and considering a 30" mounting height for sill.

SOUND DATA - Noise Criteria (NC) Level, db is based on 8db room attenuation and 4 ft. length of grille; re: 10¹² Watt.

TABLE 1 - Correction Factors for Grille Length (other than 4 ft.)

Grille Length. Ft.	1"	2"	4"	6"	8"	10"
Add to Listed NC	-6	-3	0	+2	+3	+5
Multiply Listed Throw by	.7	.8	1.0	1.2	1.4	1.6

BALANCING PROCEDURE



1. Set the damper into fully open position.
2. To measure the air flow, take several readings for at least a minimum of 5 readings per linear foot from the face of the grille between deflection bars for Effective Velocity (V_k), then average the value of V_k.
3. Calculate CFM.
 Total CFM = Average Effective Velocity (V_k), fpm X A_k X Active Length, ft.