

# GUARDIAN

## Submittal

Style "GSBS-P"  
Slope Top Enclosures  
Element Ratings

Partially Perforated Enclosure

### Specification

**ENCLOSURE:**

- STYLE : "GSBS-P"
- OUTLET: Slope Partially Perforated
- LENGTHS: 2' thru 8' in 6" Increments
- MATERIAL  14 Ga. C.R.S. Std.  
 12 Ga. C.R.S. Opt'l.
- FINISH:  Baked Primer  
 Factory Baked Powder Opt'l.

- ACCESSORIES:** All overlapping, extend to wall at top. Bottom returns to wall, holes provided for fasteners.
- 14 Ga. Std.
  - 12 Ga. Opt'l.

**ELEMENT:**

- TYPE: Cu/Al (Mechanically Expanded)
- LENGTHS: 2'0" thru 12'6" in 1" Increments.
- 3/4" Cu Tube Available up to 8'0" Max.
- One End Flared, Std.
- See Catalog for Working Pressures.

**ELEMENT:**

- TYPE: Steel (Mechanically Expanded)
- LENGTHS: 2'0" thru 12'6" in 1" Increments.
- NPT Threads Both Ends (standard)
- Beveled Ends for Field Weld
- See Catalog for Working Pressures.

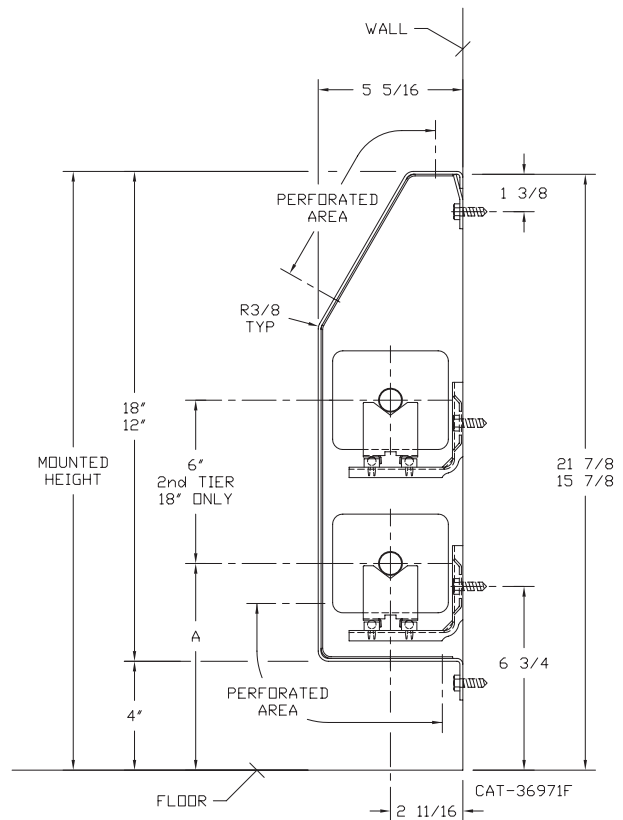
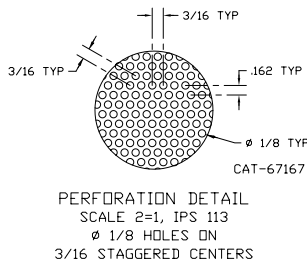
**BACKPLATE:**

- TYPE:  Partial Backplate
- LENGTHS: 8' Only
- MATERIAL:  14 Ga. Painted Std.  
 12 Ga. Opt'l.
- TYPE:  Full Backplate
- LENGTHS: 2' thru 8' in 6" Increments
- MATERIAL:  14 Ga. Painted Std.  
 12 Ga. Opt'l.

- BRACKETS:**  Wall Mtd B.B. Hanger

GSBS-12P     GSBS-18P

ELEMENT TUBE SIZE	FIN SIZE HEIGHT x WIDTH	CRADLE NUMBER	A
3/4" COPPER	3 5/8 x 4 1/4	2	7 9/16
3/4" COPPER	4 1/4 x 4 1/4	3A	7 15/16
1" COPPER	3 5/8 x 4 1/4	2	7 3/4
1" COPPER	4 1/4 x 4 1/4	2	7 3/4
1 1/4" COPPER	3 5/8 x 4 1/4	2	7 7/8
1 1/4" COPPER	4 1/4 x 4 1/4	2	7 7/8
1" STEEL	4 1/4 x 4 1/4	2	7 7/8
1 1/4" STEEL	4 1/4 x 4 1/4	2	8 1/16
2" STEEL	4 1/4 x 4 1/4	1	7 13/16



**STERLING**  
COMMERCIAL HYDRONIC PRODUCTS  
260 North Elm St., Westfield, MA 01085  
(413) 564-5535 Fax: (413) 562-8437  
www.sterlingheat.com



PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_  
 ARCHITECT: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_  
 PO NUMBER: \_\_\_\_\_

# Sloping Top Enclosures – Partially Perforated – GSBS-P

ELEMENT RATINGS  
All Ratings are Based on 3 FPS Velocity

TUBE SIZE	CATALOG DESIGNATION	FIN SIZE HEIGHT X WIDTH	FINS PER FT.	FIN THICKNESS IN INCHES	ENCLOSURE DEPTH AND HEIGHT IN INCHES	TIERS AND CENTERS IN INCHES	MOUNTING HEIGHT IN INCHES	STEAM 215° FACTOR 1.00	HOT WATER (AVG.)										
									200°	190°	180°	170°	160°	150°	140°	130°	120°	110°	100°
									0.86	0.78	0.69	0.61	0.53	0.45	.40	.33	.26	.20	.15
3/4"	C3/4-433	3-5/8" X 4-1/4"	32	.020	12B	1	16	1090	940	850	750	660	580	490	440	360	280	220	160
					18B	1	22	1290	1110	1010	890	790	680	580	520	430	340	260	190
					"	2 @ 6 CL	"	1940	1670	1510	1340	1180	1030	870	780	640	500	390	290
3/4"	C3/4-434	3-5/8" X 4-1/4"	40	.020	12B	1	16	1310	1130	1020	900	800	690	590	520	430	340	260	200
					18B	1	22	1550	1330	1210	1070	950	820	700	620	510	400	310	230
					"	2 @ 6 CL	"	2270	1950	1770	1570	1380	1200	1020	910	750	590	450	340
3/4"	C3/4-435	3-5/8" X 4-1/4"	<b>50</b>	<b>.020</b>	12B	1	16	1430	1230	1120	990	870	760	640	570	470	370	290	210
					<b>18B</b>	<b>1</b>	<b>22</b>	<b>1790</b>	<b>1540</b>	<b>1400</b>	<b>1240</b>	<b>1090</b>	<b>950</b>	<b>810</b>	<b>720</b>	<b>590</b>	<b>470</b>	<b>360</b>	<b>270</b>
					"	2 @ 6 CL	"	2400	2060	1870	1660	1460	1270	1080	960	790	620	480	360
1"	C433	3-5/8" X 4-1/4"	32	.020	12B	1	16	1140	980	890	790	700	600	510	460	380	300	230	170
					18B	1	22	1340	1150	1050	920	820	710	600	540	440	350	270	200
					"	2 @ 6 CL	"	2020	1740	1580	1390	1230	1070	910	810	670	530	400	300
1"	C434	3-5/8" X 4-1/4"	40	.020	12B	1	16	1270	1090	990	880	770	670	570	510	420	330	250	190
					18B	1	22	1510	1300	1180	1040	920	800	680	600	500	390	300	230
					"	2 @ 6 CL	"	2210	1900	1720	1520	1350	1170	990	880	730	570	440	330
1"	C435	3-5/8" X 4-1/4"	50	.020	12B	1	16	1430	1230	1120	990	870	760	640	570	470	370	290	210
					18B	1	22	1790	1540	1400	1240	1090	950	810	720	590	470	360	270
					"	2 @ 6 CL	"	2390	2060	1860	1650	1460	1270	1080	960	790	620	480	360
1-1/4"	C1433	3-5/8" X 4-1/4"	32	.020	12B	1	16	1180	1010	920	810	720	630	530	470	390	310	240	180
					18B	1	22	1390	1200	1080	960	850	740	630	560	460	360	280	210
					"	2 @ 6 CL	"	2100	1810	1640	1450	1280	1110	950	840	690	550	420	320
1-1/4"	C1434	3-5/8" X 4-1/4"	40	.020	12B	1	16	1300	1120	1010	900	790	690	590	520	430	340	260	200
					18B	1	22	1540	1320	1200	1060	940	820	690	620	510	400	310	230
					"	2 @ 6 CL	"	2250	1940	1760	1550	1370	1190	1010	900	740	590	450	340
1-1/4"	C1435	3-5/8" X 4-1/4"	50	.020	12B	1	16	1430	1230	1120	990	870	760	640	570	470	370	290	210
					18B	1	22	1790	1540	1400	1240	1090	950	810	720	590	470	360	270
					"	2 @ 6 CL	"	2400	2060	1870	1660	1460	1270	1080	960	790	620	480	360
3/4"	C3/4-43	4-1/4" SQ.	32	.020	12B	1	16	1210	1040	940	830	740	640	540	480	400	310	240	180
					18B	1	22	1430	1230	1120	990	870	760	640	570	470	370	290	210
					"	2 @ 6 CL	"	2130	1830	1660	1470	1300	1130	960	850	700	550	430	320
3/4"	C3/4-44	4-1/4" SQ.	40	.020	12B	1	16	1320	1140	1030	910	810	700	590	530	440	340	260	200
					18B	1	22	1560	1340	1220	1080	950	830	700	620	510	410	310	230
					"	2 @ 6 CL	"	2180	1870	1700	1500	1330	1160	980	870	720	570	440	330
3/4"	C3/4-45	4-1/4" SQ.	50	.020	12B	1	16	1470	1260	1150	1010	900	780	660	590	490	380	290	220
					18B	1	22	1830	1570	1430	1260	1120	970	820	730	600	480	370	270
					"	2 @ 6 CL	"	2370	2040	1850	1640	1450	1260	1070	950	780	620	470	360
1"	C43	4-1/4" SQ.	32	.020	12B	1	16	1210	1040	940	830	740	640	540	480	400	310	240	180
					18B	1	22	1430	1230	1120	990	870	760	640	570	470	370	290	210
					"	2 @ 6 CL	"	2160	1860	1680	1490	1320	1140	970	860	710	560	430	320
1"	C44	4-1/4" SQ.	40	.020	12B	1	16	1490	1280	1160	1030	910	790	670	600	490	390	300	220
					18B	1	22	1730	1490	1350	1190	1060	920	780	690	570	450	350	260
					"	2 @ 6 CL	"	2390	2060	1860	1650	1460	1270	1080	960	790	620	480	360
1"	C45	4-1/4" SQ.	50	.020	12B	1	16	1570	1350	1220	1080	960	830	710	630	520	410	310	240
					18B	1	22	1980	1700	1540	1370	1210	1050	890	790	650	510	400	300
					"	2 @ 6 CL	"	2260	1940	1760	1560	1380	1200	1020	900	750	590	450	340
1-1/4"	C143	4-1/4" SQ.	32	.020	12B	1	16	1240	1070	970	860	760	660	560	500	410	320	250	190
					18B	1	22	1430	1230	1120	990	870	760	640	570	470	370	290	210
					"	2 @ 6 CL	"	2170	1870	1690	1500	1320	1150	980	870	720	560	430	330
1-1/4"	C144	4-1/4" SQ.	<b>40</b>	<b>.020</b>	12B	1	16	1470	1260	1150	1010	900	780	660	590	490	380	290	220
					18B	1	22	1700	1460	1330	1170	1040	900	770	680	560	440	340	260
					<b>18B</b>	<b>2 @ 6 CL</b>	<b>22</b>	<b>2350</b>	<b>2020</b>	<b>1830</b>	<b>1620</b>	<b>1430</b>	<b>1250</b>	<b>1060</b>	<b>940</b>	<b>780</b>	<b>610</b>	<b>470</b>	<b>350</b>
1-1/4"	C145	4-1/4" SQ.	<b>50</b>	<b>.020</b>	<b>12B</b>	<b>1</b>	<b>16</b>	<b>1540</b>	<b>1320</b>	<b>1200</b>	<b>1060</b>	<b>940</b>	<b>820</b>	<b>690</b>	<b>620</b>	<b>510</b>	<b>400</b>	<b>310</b>	<b>230</b>
					18B	1	22	1940	1670	1510	1340	1180	1030	870	780	640	500	390	290
					"	2 @ 6 CL	"	2220	1910	1730	1530	1350	1180	1000	890	730	580	440	330
1"	S43	4-1/4" SQ.	32	.032	12B	1	16	1140	980	890	790	700	600	510	460	380	300	230	170
					18B	1	22	1230	1060	960	850	750	650	550	490	410	320	250	180
					"	2 @ 6 CL	"	2030	1750	1580	1400	1240	1080	910	810	670	530	410	300
1"	S44	4-1/4" SQ.	40	.032	12B	1	16	1290	1110	1010	890	790	680	580	520	430	340	260	190
					18B	1	22	1390	1200	1080	960	850	740	630	560	460	360	280	210
					"	2 @ 6 CL	"	2150	1850	1680	1480	1310	1140	970	860	710	560	430	320
1"	S45	4-1/4" SQ.	50	.032	12B	1	16	1370	1180	1070	950	840	730	620	550	450	360	270	210
					18B	1	22	1470	1260	1150	1010	900	780	660	590	490	380	290	220
					"	2 @ 6 CL	"	2200	1890	1720	1520	1340	1170	990	880	730	570	440	330
1-1/4"	S143	4-1/4" SQ.	32	.032	12B	1	16	1130	970	880	780	690	600	510	450	370	290	230	170
					18B	1	22	1220	1050	950	840	740	650	550	490	400	320	240	180
					"	2 @ 6 CL	"	2010	1730	1570	1390	1230	1070	900	800	660	520	400	300
1-1/4"	S144	4-1/4" SQ.	40	.032	12B	1	16	1280	1100	1000	880	780	680	580	510	420	330	260	190
					18B	1	22	1380	1190	1080	950	840	730	620	550	460	360	280	210
					"	2 @ 6 CL	"	2140	1840	1670	1480	1310	1130	960	860	710	560	430	320
1-1/4"	S145	4-1/4" SQ.	50	.032	12B	1	16	1340	1150	1050	920	820	710	600	540	440	350	270	200