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Cover, clockwise from top left: K2 Softline Radiator, Vertex Radiator, Column Radiator, Style Radiator, Ladder Rail



Stelrad K1 and K2 Softline Compact Radiator



- All Stelrad radiators must be installed on a closed system or warranty is void
- Outside wood boilers without a heat exchanger are NOT on a closed system
- Heating PEX must be used, not potable water PEX
- Applies to all models
- All K1 and K2 radiators have a 1/2" BSP connection





Compact Radiators



Stelrad K1 Softline Compact Radiator Sizes and Technical Data

PART # (Inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	Rough-In from finished wall	Rough-In distance apart centre to centre**
K1 12 20	300	500	248	406	626	868	10	2 1/8" or 2 5/8"	23 3/4"
K1 12 24	300	600	298	488	750	1044	12	2 1/8" or 2 5/8"	27 1/2"
K1 12 32	300	800	398	651	1000	1392	16	2 1/8" or 2 5/8"	35 1/2 "
K1 12 36	300	900	445	728	1125	1556	18	2 1/8" or 2 5/8"	39 3/8"
K1 12 40	300	1000	496	812	1252	1737	21	2 1/8" or 2 5/8"	43 1/4"
K1 12 48	300	1200	597	976	1500	2088	24	2 1/8" or 2 5/8"	51 1/4"
K1 12 60	300	1500	744	1217	1878	2605	31	2 1/8" or 2 5/8"	63"
K1 12 72	300	1800	895	1464	2250	3132	36	2 1/8" or 2 5/8"	74 3/4"
K1 12 80	300	2000	992	1623	2504	3473	41	2 1/8" or 2 5/8"	82 5/8"
K1 12 98	300	2500	1240	2029	3131	4342	51	2 1/8" or 2 5/8"	102 3/8"
K1 12 120	300	3000	1488	2435	3756	5210	62	2 1/8" or 2 5/8"	122"
K1 18 16	450	400	295	482	744	1032	13	2 1/8" or 2 5/8"	19 5/8"
K1 18 20	450	500	368	603	930	1290	16	2 1/8" or 2 5/8"	23 3/4"
K1 18 24	450	600	442	723	1116	1548	19	2 1/8" or 2 5/8"	27 1/2"
K1 18 28	450	700	516	844	1302	1806	22	2 1/8" or 2 5/8"	31 1/2"
K1 18 32	450	800	589	964	1488	2064	26	2 1/8" or 2 5/8"	35 1/2"
K1 18 36	450	900	663	1085	1674	2322	29	2 1/8" or 2 5/8"	39 3/8"
K1 18 40	450	1000	737	1205	1859	2579	32	2 1/8" or 2 5/8"	43 1/4"
K1 18 44	450	1100	810	1326	2045	2837	35	2 1/8" or 2 5/8"	47 1/4"
K1 18 48	450	1200	884	1446	2231	3095	38	2 1/8" or 2 5/8"	51 1/4"
K1 18 55	450	1400	1031	1687	2604	3611	45	2 1/8" or 2 5/8"	59"
K1 18 64	450	1600	1179	1929	2976	4127	51	2 1/8" or 2 5/8"	67"
K1 18 72	450	1800	1326	2170	3348	4643	57	2 1/8" or 2 5/8"	74 3/4"
K1 18 80	450	2000	1473	2411	3720	5159	64	2 1/8" or 2 5/8"	82 5/8"
K1 18 86	450	2200	1621	2652	4092	5675	70	2 1/8" or 2 5/8"	90 1/2"
K1 18 94	450	2400	1768	2893	4464	6191	77	2 1/8" or 2 5/8"	98 1/2"
K1 18 100	450	2600	1915	3134	4836	6707	83	2 1/8" or 2 5/8"	106 1/4"
K1 18 110	450	2800	2063	3375	5208	7223	89	2 1/8" or 2 5/8"	114 1/8"
K1 18 120	450	3000	2210	3616	5579	7738	96	2 1/8" or 2 5/8"	122"

AWT = Average Water Temperature

* K1-08 models are discontinued.



Stelrad K1 Softline Compact Radiator Sizes and Technical Data

PART # (Inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	Rough-In from finished wall	Rough-In distance apart centre to centre**
K1 24 16	600	400	382	625	965	1338	17	2 1/8" or 2 5/8"	19 5/8"
K1 24 20	600	500	477	781	1206	1672	22	2 1/8" or 2 5/8"	23 3/4"
K1 24 24	600	600	573	937	1446	2006	26	2 1/8" or 2 5/8"	27 1/2"
K1 24 28	600	700	669	1094	1688	2341	30	2 1/8" or 2 5/8"	31 1/2"
K1 24 32	600	800	764	1250	1929	2675	35	2 1/8" or 2 5/8"	35 1/2"
K1 24 36	600	900	859	1406	2169	3009	39	2 1/8" or 2 5/8"	39 3/8"
K1 24 40	600	1000	955	1563	2411	3344	43	2 1/8" or 2 5/8"	43 1/4"
K1 24 44	600	1100	1050	1719	2652	3678	48	2 1/8" or 2 5/8"	47 1/4"
K1 24 48	600	1200	1146	1875	2893	4013	52	2 1/8" or 2 5/8"	51 1/4"
K1 24 55	600	1400	1337	2187	3375	4681	61	2 1/8" or 2 5/8"	59"
K1 24 64	600	1600	1528	2500	3857	5350	69	2 1/8" or 2 5/8"	67"
K1 24 72	600	1800	1719	2813	4340	6019	78	2 1/8" or 2 5/8"	74 3/4"
K1 24 80	600	2000	1910	3125	4822	6688	87	2 1/8" or 2 5/8"	82 5/8"
K1 24 86	600	2200	2101	3437	5304	7356	95	2 1/8" or 2 5/8"	90 1/2"
K1 24 94	600	2400	2292	3750	5786	8025	104	2 1/8" or 2 5/8"	98 1/2"
K1 24 100	600	2600	2483	4063	6268	8694	113	2 1/8" or 2 5/8"	106 1/4"
K1 24 110	600	2800	2674	4375	6751	9363	121	2 1/8" or 2 5/8"	114 1/8"
K1 24 120	600	3000	2864	4687	7232	10031	130	2 1/8" or 2 5/8"	122"
K1 28 16	700	400	435	712	1099	1524	20	2 1/8" or 2 5/8"	19 5/8"
K1 28 20	700	500	544	891	1374	1906	25	2 1/8" or 2 5/8"	23 3/4"
K1 28 24	700	600	653	1069	1649	2287	30	2 1/8" or 2 5/8"	27 1/2"
K1 28 28	700	700	762	1247	1924	2668	35	2 1/8" or 2 5/8"	31 1/2"
K1 28 32	700	800	871	1425	2198	3049	40	2 1/8" or 2 5/8"	35 1/2"
K1 28 36	700	900	980	1603	2473	3431	46	2 1/8" or 2 5/8"	39 3/8"
K1 28 48	700	1200	1304	2133	3298	4574	60	2 1/8" or 2 5/8"	51 1/4"

K1 Single Panel

- **Rough in measurements based on using Herz miniset valve item # VA-1773484C, VA-1773485P and V-CROSSH16C or P
- \bullet Deduct ½" total if using Herz valve sets, items: 3, 7, 8, 9, 10, 11, 12 or items 26, 31 and 36 used as a pair
- WE RECOMMEND USING OUR RADIATOR VALVES OR CONNECTORS TO ALL OUR RADIATORS AND TOWEL WARMERS. ALL STELRAD RADIATORS AND TOWEL WARMERS HAVE A BSP THREAD AND NOT NPT
- J-Brackets not an option for K1 or S1 models







Stelrad K2 Softline Compact Radiator Sizes and Technical Data

PART # (Inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	Rough-In from finished wall	Rough-In distance apart centre to centre**
K2 08 20	200	500	413	676	1053	1449	15	3" or 3 3/4"	23 3/4"
K2 08 24	200	600	496	812	1264	1740	17	3" or 3 3/4"	27 1/2"
K2 08 32	200	800	662	1083	1685	2320	22	3" or 3 3/4"	35 1/2"
K2 08 36	200	900	744	1218	1899	2610	25	3" or 3 3/4"	39 3/8"
K2 08 40	200	1000	826	1352	2107	2899	27	3" or 3 3/4"	43 1/4"
K2 08 48	200	1200	993	1624	2528	3480	31	3" or 3 3/4"	51 1/4"
K2 08 60	200	1500	1239	2028	3160	4348	38	3" or 3 3/4"	63"
K2 08 72	200	1800	1489	2436	3791	5220	45	3" or 3 3/4"	74 3/4"
K2 08 80	200	2000	1652	2703	4213	5797	49	3" or 3 3/4"	82 5/8"
K2 08 98	200	2500	2064	3378	5264	7244	60	3" or 3 3/4"	102 3/8"
K2 08 120	200	3000	2477	4054	6317	8693	72	3" or 3 3/4"	122"
K2 12 20	300	500	478	783	1208	1675	18	3" or 3 1/2"	23 3/4"
K2 12 24	300	600	574	940	1452	2010	22	3" or 3 1/2"	27 1/2"
K2 12 32	300	800	766	1253	1936	2680	29	3" or 3 1/2"	35 1/2 "
K2 12 36	300	900	861	1409	2178	3015	32	3" or 3 1/2"	39 3/8"
K2 12 40	300	1000	957	1566	2416	3351	37	3" or 3 1/2"	43 1/4"
K2 12 48	300	1200	1148	1879	2904	4020	43	3" or 3 1/2"	51 1/4"
K2 12 60	300	1500	1435	2349	3624	5026	55	3" or 3 1/2"	63"
K2 12 72	300	1800	1723	2819	4356	6030	65	3" or 3 1/2"	74 3/4"
K2 12 80	300	2000	1914	3131	4831	6701	74	3" or 3 1/2"	82 5/8"
K2 12 98	300	2500	2392	3914	6039	8376	92	3" or 3 1/2"	102 3/8"
K2 12 120	300	3000	2870	4697	7247	10052	111	3" or 3 1/2"	122"
K2 18 16	450	400	534	874	1349	1871	23	3" or 3 1/2"	19 5/8"
K2 18 20	450	500	668	1093	1686	2339	28	3" or 3 1/2"	23 3/4"
K2 18 24	450	600	801	1311	2024	2807	34	3" or 3 1/2"	27 1/2"
K2 18 28	450	700	935	1530	2361	3274	40	3" or 3 1/2"	31 1/2"
K2 18 32	450	800	1069	1749	2698	3742	46	3" or 3 1/2"	35 1/2"
K2 18 36	450	900	1202	1967	3035	4210	51	3" or 3 1/2"	39 3/8"
K2 18 40	450	1000	1336	2186	3373	4678	57	3" or 3 1/2"	43 1/4"
K2 18 44	450	1100	1470	2405	3710	5146	63	3" or 3 1/2"	47 1/4"
K2 18 48	450	1200	1603	2623	4047	5613	68	3" or 3 1/2"	51 1/4"
K2 18 55	450	1400	1870	3060	4722	6549	80	3" or 3 1/2"	59"
K2 18 64	450	1600	2138	3498	5397	7485	91	3" or 3 1/2"	67"
K2 18 72	450	1800	2404	3934	6071	8420	103	3" or 3 1/2"	74 3/4"
K2 18 80	450	2000	2672	4372	6746	9356	114	3" or 3 1/2"	82 5/8"
K2 18 86	450	2200	2939	4809	7420	10291	125	3" or 3 1/2"	90 1/2"
K2 18 94	450	2400	3206	5246	8095	11227	137	3" or 3 1/2"	98 1/2"
K2 18 100	450	2600	3473	5683	8769	12162	148	3" or 3 1/2"	106 1/4"
K2 18 110	450	2800	3740	6120	9444	13098	160	3" or 3 1/2"	114 1/8"
K2 18 120	450	3000	4008	6558	10119	14034	171	3"	122"

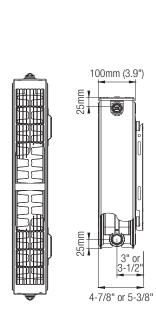
AWT = Average Water Temperature

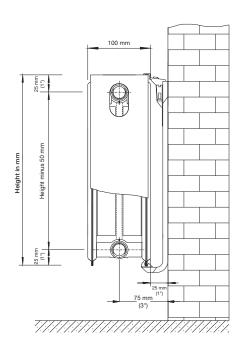


Stelrad K2 Softline Compact Radiator Sizes and Technical Data

PART # (Inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	Rough-In from finished wall	Rough-In distance apart centre to centre**
K2 24 16	600	400	675	1104	1704	2364	31	3" or 3 1/2"	19 5/8"
K2 24 20	600	500	844	1381	2131	2955	39	3" or 3 1/2"	23 3/4"
K2 24 24	600	600	1013	1657	2557	3546	46	3" or 3 1/2"	27 1/2"
K2 24 28	600	700	1181	1933	2983	4137	54	3" or 3 1/2"	31 1/2"
K2 24 32	600	800	1350	2209	3409	4728	62	3" or 3 1/2"	35 1/2"
K2 24 36	600	900	1519	2485	3835	5319	69	3" or 3 1/2"	39 3/8"
K2 24 40	600	1000	1688	2762	4261	5910	77	3" or 3 1/2"	43 1/4"
K2 24 44	600	1100	1856	3038	4687	6501	85	3" or 3 1/2"	47 1/4"
K2 24 48	600	1200	2025	3314	5113	7092	92	3" or 3 1/2"	51 1/4"
K2 24 55	600	1400	2362	3866	5965	8273	108	3" or 3 1/2"	59"
K2 24 64	600	1600	2700	4418	6817	9455	123	3" or 3 1/2"	67"
K2 24 72	600	1800	3038	4971	7669	10637	139	3" or 3 1/2"	74 3/4"
K2 24 80	600	2000	3375	5523	8521	11819	154	3" or 3 1/2"	82 5/8"
K2 24 86	600	2200	3713	6075	9374	13001	169	3" or 3 1/2"	90 1/2"
K2 24 94	600	2400	4050	6628	10226	14183	185	3" or 3 1/2"	98 1/2"
K2 24 100	600	2600	4388	7180	11078	15365	200	3" or 3 1/2"	106 1/4"
K2 24 110	600	2800	4725	7732	11930	16547	216	3" or 3 1/2"	114 1/8"
K2 24 120	600	3000	5063	8284	12783	17729	231	3" or 3 1/2"	122"
K2 28 16	700	400	764	1250	1929	2676	36	3" or 3 1/2"	19 5/8"
K2 28 20	700	500	955	1563	2412	3345	45	3" or 3 1/2"	23 3/4"
K2 28 24	700	600	1146	1876	2895	4015	53	3" or 3 1/2"	27 1/2"
K2 28 28	700	700	1338	2189	3377	4684	62	3" or 3 1/2"	31 1/2"
K2 28 32	700	800	1529	2501	3860	5353	71	3" or 3 1/2"	35 1/2"
K2 28 36	700	900	1720	2815	4343	6024	80	3" or 3 1/2"	39 3/8"
K2 28 48	700	1200	2293	3752	5790	8030	106	3" or 3 1/2"	51 1/4"

K2 Double Panel







J-Bracket

- **Rough in measurements based on using Herz miniset valve item # VA-1773484C, VA-1773485P and V-CROSSH16C or P
- Deduct ½" total if using Herz valve sets, items: 3, 7, 8, 9, 10, 11, 12 or items
 26, 31 and 36 used as a pair
- WE RECOMMEND USING OUR RADIATOR VALVES OR CONNECTORS TO ALL OUR RADIATORS AND TOWEL WARMERS.
 ALL STELRAD RADIATORS AND TOWEL WARMERS HAVE A BSP THREAD AND NOT NPT
- J-Brackets (Rough-in 3" from finished wall) available for all sizes of the K2 and S2 models

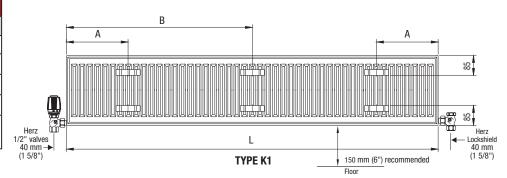


Stelrad Softline Compact Radiator K1 and K2 Technical Data

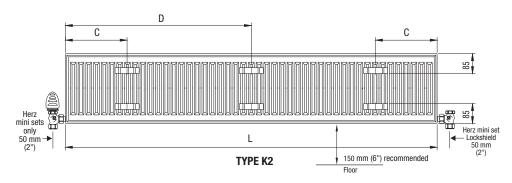
SOFTLINE COMPACT LUG POSITIONS

	K1										
L		Α	В								
	(mm) (Inches)		(mm)	(Inches)							
400	117	4.625	-	-							
500 - 1100	150	6	-	-							
1200 - 1600	150	6	-	-							
1800 - 3000	150	6	L/2 + 17	L/2 + .625							

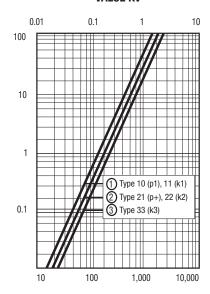
- 2 brackets for radiators 16" (400 mm) 64" (1600 mm) long
- 3 brackets for radiators 72" (1800 mm) 120" (3000 mm) long



K2									
L		D							
	(mm)								
400	133	-							
500 - 1100	133	5.25	-						
1200 - 1600	133	5.25	-						
1800 - 3000	133	5.25	(L/2)						



Pressure Drops VALUE KV



FLOWRATE I/h

Directions for the Metric Pressure Drop Chart based on 160°F supply Temperature

STEP 1: Find the flow Rate in GPM

The flow rate is the output of the radiator at 160°F divided by 10,000 = GPM

STEP 2: Convert From GPM to L/H

Multiply GPM x 227 = Flow Rate in L/H

STEP 3: Find Pressure Drop In kPA

Look up the chart from L/Hr to find the pressure drop in KPA

STEP 4: Convert kPA to Feet of Head

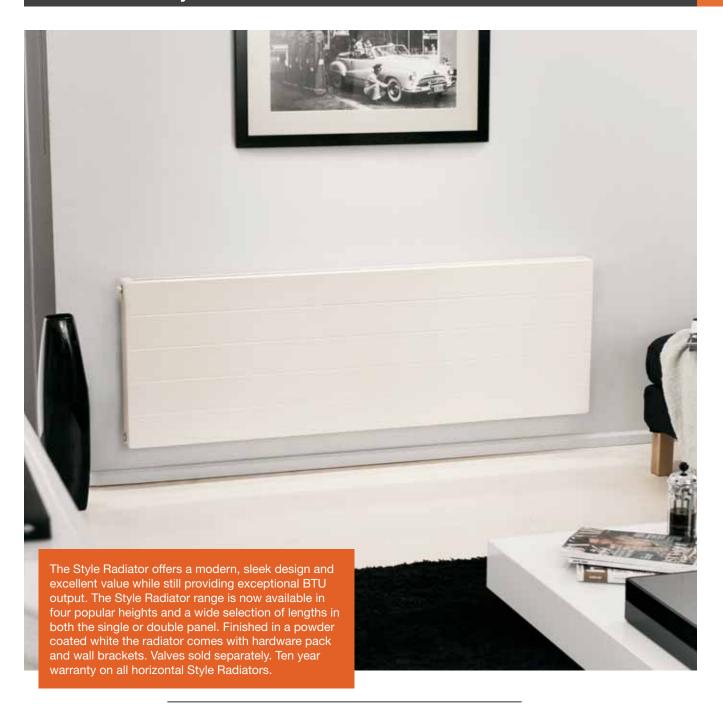
Multiply kPa x 0.3346 = Pressure drop in Feet of Head 1bar=33.46 ft/head

Example: K2 24 x 24

Output at 160°F is 3546 Flow Rate in GPM = 3546/10000 = .3546GPM GPM x 227 = litre/hour .3546 x 227 = 80.49 L/H 80.49 = 0.0008 bar 0.0008 x 33.46 = 0.026768 ft/h



Stelrad S1 and S2 Style Radiator



Model for illustration purposes only. Valves sold separately.

See page 16 for the new Style Vertical Radiator, now available in a 12" width.

Please allow seven to ten days for delivery. All Style Radiator orders are subject to AN AUTOMATIC 25% RESTOCKING FEE AND A 50% RESTOCKING FEE AFTER 30 DAYS.



10 Stelrad S1 and S2 Style Radiator Sizes and Technical Data

PART # (Inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	Rough-In from finished wall	Rough-In distance apart centre to centre**
S1 12 20	300	500	219	359	554	768	13	2 1/8" or 2 5/8"	23 3/4"
S1 12 40	300	1000	438	717	1107	1535	27	2 1/8" or 2 5/8"	43 1/4"
S1 12 60	300	1500	700	1145	1766	2450	40	2 1/8" or 2 5/8"	63"
S1 12 80	300	2000	877	1435	2214	3071	52	2 1/8" or 2 5/8"	82 5/8"
S1 18 20	450	500	324	530	818	1135	19	2 1/8" or 2 5/8"	23 3/4"
S1 18 24	450	600	389	636	982	1362	24	2 1/8" or 2 5/8"	27 1/2"
S1 18 32	450	800	519	849	1309	1816	32	2 1/8" or 2 5/8"	35 1/2"
S1 18 36	450	900	583	955	1473	2043	37	2 1/8" or 2 5/8"	39 3/8"
S1 18 44	450	1100	713	1166	1800	2496	45	2 1/8" or 2 5/8"	47 1/4"
S1 18 48	450	1200	777	1272	1963	2723	49	2 1/8" or 2 5/8"	51 1/4"
S1 18 64	450	1600	1037	1697	2618	3631	66	2 1/8" or 2 5/8"	67"
S1 18 72	450	1800	1166	1909	2945	4085	73	2 1/8" or 2 5/8"	74 3/4"
S1 24 20	600	500	420	687	1061	1471	28	2 1/8" or 2 5/8"	23 3/4"
S1 24 24	600	600	504	825	1273	1765	33	2 1/8" or 2 5/8"	27 1/2"
S1 24 32	600	800	672	1100	1697	2354	44	2 1/8" or 2 5/8"	35 1/2"
S1 24 36	600	900	756	1237	1908	2647	50	2 1/8" or 2 5/8"	39 3/8"
S1 24 44	600	1100	924	1512	2333	3236	61	2 1/8" or 2 5/8"	47 1/4"
S1 24 48	600	1200	1008	1650	2546	3531	66	2 1/8" or 2 5/8"	51 1/4"
S1 24 64	600	1600	1344	2200	3394	4708	88	2 1/8" or 2 5/8"	67"
S1 24 72	600	1800	1512	2475	3818	5296	100	2 1/8" or 2 5/8"	74 3/4"
S2 08 20	200	500	372	608	948	1304	17	3" or 3 3/4"	23 3/4"
S2 08 40	200	1000	744	1217	1896	2609	31	3" or 3 3/4"	43 1/4"
S2 08 60	200	1500	1115	1825	2844	3913	44	3" or 3 3/4"	63"
S2 08 80	200	2000	1487	2433	3792	5216	56	3" or 3 3/4"	82 5/8"
S2 12 20	300	500	421	689	1063	1474	27	3" or 3 1/2"	23 3/4"
S2 12 40	300	1000	842	1378	2126	2949	43	3" or 3 1/2"	43 1/4"
S2 12 60	300	1500	1263	2066	3188	4422	64	3" or 3 1/2"	63"
S2 12 80	300	2000	1684	2755	4251	5896	85	3" or 3 1/2"	82 5/8"
S2 18 20	450	500	588	962	1484	2058	32	3" or 3 1/2"	23 3/4"
S2 18 24	450	600	705	1154	1781	2470	39	3" or 3 1/2"	27 1/2"
S2 18 32	450	800	940	1538	2374	3292	52	3" or 3 1/2"	35 1/2"
S2 18 36	450	900	1058	1731	2671	3704	59	3" or 3 1/2"	39 3/8"
S2 18 44 S2 18 48	450	1100 1200	1293	2116 2308	3265 3561	4528 4939	73 79	3" or 3 1/2" 3" or 3 1/2"	47 1/4" 51 1/4"
S2 18 48 S2 18 64	450 450	1600	1410 1881	3078	4749	4939 6586	106	3" or 3 1/2"	67"
S2 18 64 S2 18 72	450 450	1800	2116	3462	5342	7409	106	3" or 3 1/2" 3" or 3 1/2"	74 3/4"
	600	500	743	1215			45	3" or 3 1/2"	23 3/4"
S2 24 20 S2 24 24	600	600	891	1458	1875 2250	2600 3120	53	3" or 3 1/2"	23 3/4"
S2 24 24 S2 24 32	600	800	1188	1944	2999	4160	71	3" or 3 1/2"	35 1/2"
S2 24 32 S2 24 36	600	900	1337	2187	3374	4680	80	3" or 3 1/2"	39 3/8"
S2 24 44	600	1100	1634	2673	4124	5720	98	3" or 3 1/2"	47 1/4"
S2 24 48	600	1200	1782	2916	4499	6240	106	3" or 3 1/2"	51 1/4"
S2 24 64	600	1600	2376	3888	5999	8320	142	3" or 3 1/2"	67"
S2 24 72	600	1800	2673	4374	6749	9360	161	3" or 3 1/2"	74 3/4"

S1-08 models are discontinued.

- Deduct 1/2" total if using Herz valve sets, items: 3, 7, 8, 9, 10, 11, 12 or items 26, 31 and 36 used as a pair.
- WE RECOMMEND USING OUR RADIATOR VALVES OR CONNECTORS TO ALL OUR RADIATORS AND TOWEL WARMERS. ALL STELRAD RADIATORS AND TOWEL WARMERS HAVE A BSP THREAD AND NOT NPT.

^{*}Rough in measurements based on using Herz miniset valve item# VA-1773484C, VA-1773485P and V-CROSSH16C or P.

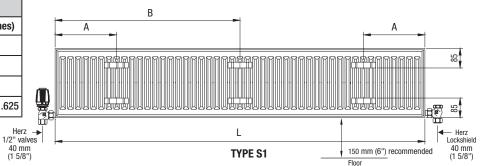


Stelrad Style S1 and S2 Rough-In and Technical Data

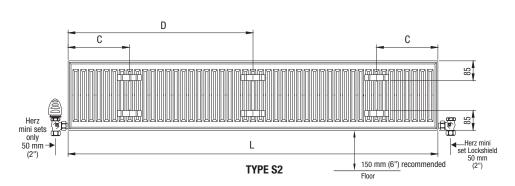
STYLE COMPACT LUG POSITIONS

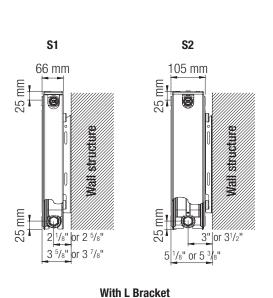
		S 1							
L		Α	В						
	(mm)	(Inches)	(mm)	(Inches)					
400	117	4.625	-	-					
500 - 1100	1100 150 6		-	-					
1200 - 1600	150	6	-	-					
1800 - 2000	150	6	L/2 + 17	L/2 + .625					

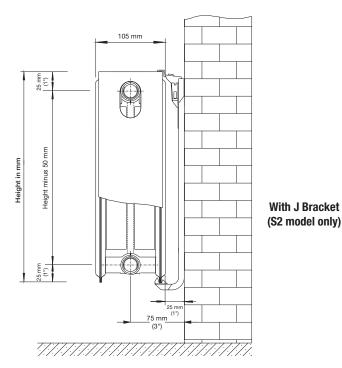
- 2 brackets for radiators 16" (400 mm) 64" (1600 mm) long
- 3 brackets for radiators 72" (1800 mm) 80" (2000 mm) long



	S 2						
L		C	D				
	(mm)						
400	133 5.25		-				
500 - 1100	133 5.25		-				
1200 - 1600	133	5.25	-				
1800 - 2000	133	5.25	(L/2)				







12 Classic Column Radiators





The column radiator is available in three different heights with either three or four bars and comes in a variety of lengths. Please note the last set of numbers in the part# denotes the number of sections NOT the finished length in inches. Each Classic Column comes with wall brackets and hardware pack. Floor brackets are available. See product # V-CLFS on page 29. Columns require a 1/2" BSP connection, valves sold separately. Warranty on Column Radiators is 5 years.

Not suitable for Glycol systems.

NEW! Non Scratch Bushing Wrench



V-CCWRENCH Item number 53 on page 29



See page 32 to calculate the heat output from existing cast iron column and tubular radiators.



Classic Column Radiator Sizes and Technical Data

IMPORTANT: Please note the last set of numbers in the PART# does NOT represent the length in inches but number of sections. Each section approximately 1.77 inches. For example C12-03-09 = 15.94 inches length.

PART # *H x B x S	HEIGHT (inches)	LENGTH (inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	STOCK Status
C12 3 09	11.8	15.94	300	405	446	688	954	15	stock
C12 3 13	11.8	23.03	300	585	644	994	1378	22	stock
C12 3 18	11.8	31.88	300	810	892	1376	1909	30	stock
C12 3 22	11.8	38.97	300	990	1090	1682	2333	37	stock
C12 3 27	11.8	47.83	300	1215	1338	2064	2863	46	stock
C12 3 31	11.8	54.92	300	1395	1536	2370	3287	53	stock
C20 3 09	19.7	15.94	500	405	734	1132	1570	24	stock
C20 3 13	19.7	23.03	500	585	1060	1635	2268	34	stock
C20 3 18	19.7	31.88	500	810	1467	2264	3140	48	stock
C20 3 22	19.7	38.97	500	990	1794	2767	3838	58	stock
C20 3 27	19.7	47.83	500	1215	2201	3396	4710	71	stock
C20 3 31	19.7	54.92	500	1395	2527	3899	5408	82	stock
C20 3 36	19.7	63.77	500	1620	2935	4528	6280	96	stock
C20 3 40	19.7	70.86	500	1800	3261	5031	6978	106	stock
C30 3 09	29.5	15.94	750	405	1079	1665	2313	34	stock
C30 3 13	29.5	23.03	750	585	1558	2405	3341	49	stock
C30 3 18	29.5	31.88	750	810	2158	3330	4618	68	stock
C30 3 22	29.5	38.97	750	990	2637	4069	5644	83	stock
C30 3 27	29.5	47.83	750	1215	3236	4994	6926	102	stock
C30 3 31	29.5	54.92	750	1395	3716	5735	7967	118	stock
C30 3 36	29.5	63.77	750	1620	4316	6660	9236	134	stock
C30 3 40	29.5	70.86	750	1800	4795	7399	10262	151	stock

PART # *H x B x S	HEIGHT (inches)	LENGTH (inches)	HEIGHT (mm)	LENGTH (mm)	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	STOCK Status
C12 4 09	11.8	15.94	300	405	575	888	1231	22	stock
C12 4 13	11.8	23.03	300	585	831	1282	1778	31	stock
C12 4 18	11.8	31.88	300	810	1151	1775	2462	43	stock
C12 4 22	11.8	38.97	300	990	1407	2170	3010	53	stock
C12 4 27	11.8	47.83	300	1215	1726	2663	3694	65	stock
C12 4 31	11.8	54.92	300	1395	1982	3058	4242	74	stock
C20 4 09	19.7	15.94	500	405	935	1443	2001	33	stock
C20 4 13	19.7	23.03	500	585	1350	2084	2890	47	stock
C20 4 18	19.7	31.88	500	810	1870	2885	4002	65	stock
C20 4 22	19.7	38.97	500	990	2286	3526	4891	80	stock
C20 4 27	19.7	47.83	500	1215	2805	4328	6003	98	stock
C20 4 31	19.7	54.92	500	1395	3221	4970	6893	113	stock
C20 4 36	19.7	63.77	500	1620	3740	5772	8004	132	stock
C20 4 40	19.7	70.86	500	1800	4156	6413	8894	145	stock
C30 4 09	29.5	15.94	750	405	1367	2106	2925	45	stock
C30 4 13	29.5	23.03	750	585	1975	3042	4225	65	stock
C30 4 18	29.5	31.88	750	810	2733	4216	5848	91	stock
C30 4 22	29.5	38.97	750	990	3340	5154	7149	112	stock
C30 4 27	29.5	47.83	750	1215	4100	6326	8774	137	stock
C30 4 31	29.5	54.92	750	1395	4710	7254	10075	158	stock
C30 4 36	29.5	63.77	750	1620	5466	8432	11696	182	stock
C30 4 40	29.5	70.86	750	1800	6074	9372	12998	203	stock

*H x B x S:

H = Height in approximate inches

B = Number of Bars

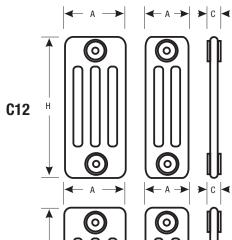
S = Number of Sections

Please allow seven to ten days for delivery. All Column Radiator orders are subject to

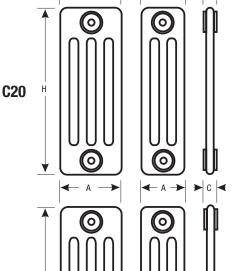
AN AUTOMATIC 25% RESTOCKING FEE AND A 50% RESTOCKING FEE AFTER 30 DAYS.



14 Classic Column Radiator Rough-In Dimensions

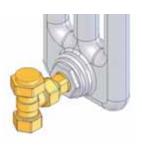


C12	HEIGHT (mm) H	DEPTH (mm) A	WIDTH (mm) C	WEIGHT (PER SECTION) KG'S	WATER CONTENT (PER SECTION) LITRES
3 COLUMN	300	107	45	0.77	0.67
4 COLUMN	300	148	45	1.09	0.9



C30

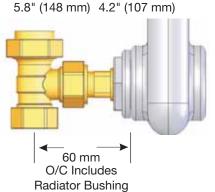
C20	HEIGHT (mm) H	DEPTH (mm) A	WIDTH (mm) C	WEIGHT (PER SECTION) KG'S	WATER CONTENT (PER SECTION) LITRES
3 COLUMN	500	107	45	1.2	0.91
4 COLUMN	500	148	45	1.65	1.22



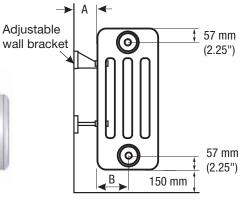
C30	HEIGHT (mm) H	DEPTH (mm) A	WIDTH (mm) C	WEIGHT (PER SECTION) KG'S	WATER CONTENT (PER SECTION) LITRES
3 COLUMN	750	107	45	1.72	1.21
4 COLUMN	750	148	45	2.31	1.62

Typical Wall Bracket Installation Opti

Optional Floor Standing Brackets

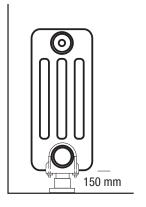


(0)



A= 30 or 40 mm

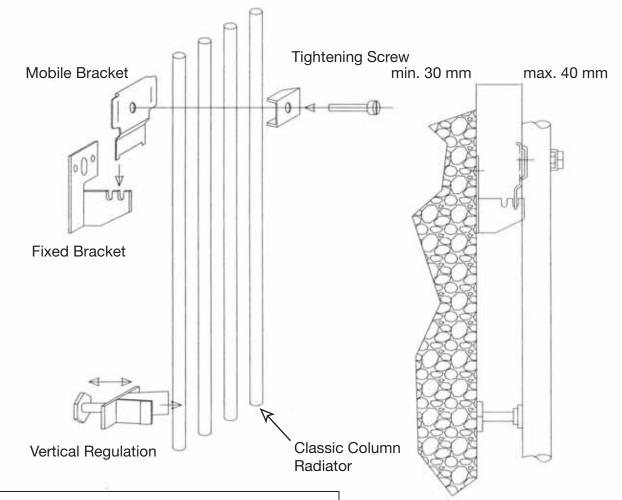
B= 3 COL- 53 mm 4 COL- 74 mm



Part # V-CLFS (sold in pairs)



Classic Column Wall Bracket Installation





Number of Wall or Floor Brackets Required

NUMBER OF SECTIONS	NUMBER OF BRACKETS
Up to 17	2
18 - 31	3
32 – 40	4

77mm (3.03")

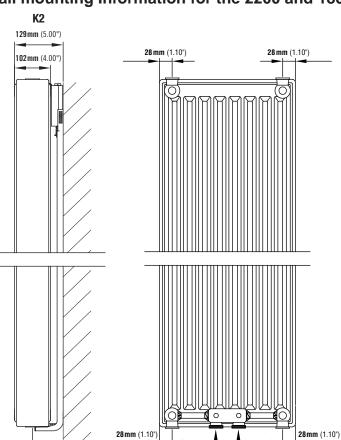


K2 Vertex Vertical Radiator and Style Vertical Radiator

Vertex and Style Mounting brackets

Height		Н	2	Н3		H4	
mm	in	mm	in	mm	in	mm	in
1800	70.87	70	2.75	1115	43.89	1615	63.58
2200	86.61	70	2.75	1315	51.77	2015	79.33

Wall mounting Information for the 2200 and 1800mm



Install Plugs (provided)

LENGTH minus 56 mm (2.20")

LENGTH





Style D-VSK2-16x72

Warranty 5 years on all vertical models.

PART #	LENGTH (mm)	HEIGHT (mm)	OUTPUT btu/hr 100 °F AWT	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lbs)	PIPE O/C (mm)	STOCK Status
D-VK2-12X72	300	1800	1155	1890	2946	4054	70	244	stock
D-VK2-12X86	300	2200	1352	2213	3448	4729	84	244	stock
D-VK2-16X72	400	1800	1546	2529	3941	5405	93	344	stock
D-VK2-16X86	400	2200	1803	2951	4598	6305	112	344	stock
D-VSK2-12X72	300	1800	1076	1761	2744	3777	72	244	stock
D-VSK2-12X86	300	2200	1238	2026	3158	4330	86	244	stock
D-VSK2-16X72	400	1800	1440	2357	3672	5036	95	344	stock
D-VSK2-16X86	400	2200	1651	2702	4210	5773	114	344	stock

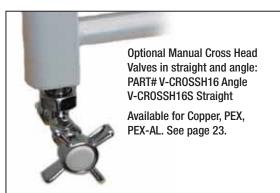


Ladder Rail Towel Warmers

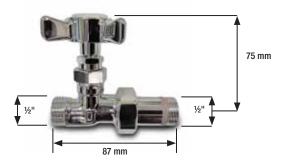








Manual Straight Cross Head Valves



Copper and Pex Connectors not shown



18 Ladder Rail Towel Warmers Rough-In and Technical Data

DESCRIPTION	MODEL	HEIGHT mm (inches)	LENGTH mm (inches)	OUTPUT btu/hr 120 °F AWT	OUTPUT btu/hr 140 °F AWT	OUTPUT btu/hr 160 °F AWT	WEIGHT (Lb.)
Ladder Rail Straight White	D-TSW 27x16	678 (27)	400 (16)	447	691	958	10
Ladder Rail Straight White	D-TSW 30x20	760 (30)	500 (20)	595	919	1274	13
Ladder Rail Straight White	D-TSW 30x24	760 (30)	600 (24)	714	1101	1527	16
Ladder Rail Straight White	D-TSW 48x20	1211 (48)	500 (20)	885	1366	1894	21
Ladder Rail Straight White	D-TSW 48x24	1211 (48)	600 (24)	1050	1621	2248	24
Ladder Rail Straight White	D-TSW 69x20	1744 (69)	500 (20)	1306	2015	2795	31
Ladder Rail Straight White	D-TSW 69x24	1744 (69)	600 (24)	1545	2384	3306	35
Ladder Rail Straight Chrome	D-TSC 27x16	678 (27)	400 (16)	373	576	798	10
Ladder Rail Straight Chrome	D-TSC 30x20	760 (30)	500 (20)	496	766	1062	13
Ladder Rail Straight Chrome	D-TSC 30x24	760 (30)	600 (24)	594	917	1272	16
Ladder Rail Straight Chrome	D-TSC 48x20	1211 (48)	500 (20)	737	1138	1578	21
Ladder Rail Straight Chrome	D-TSC 48x24	1211 (48)	600 (24)	875	1350	1873	25
Ladder Rail Straight Chrome	D-TSC 69x20	1744 (69)	500 (20)	1088	1678	2328	31
Ladder Rail Straight Chrome	D-TSC 69x24	1744 (69)	600 (24)	1287	1986	2754	35
Ladder Rail Curved White	D-TCW 30x20	760 (30)	500 (20)	629	970	1345	14
Ladder Rail Curved White	D-TCW 30x24	760 (30)	600 (24)	753	1162	1611	16
Ladder Rail Curved White	D-TCW 48x20	1211 (48)	500 (20)	952	1469	2037	21
Ladder Rail Curved White	D-TCW 48x24	1211 (48)	600 (24)	1129	1743	2417	25
Ladder Rail Curved White	D-TCW 69x20	1744 (69)	500 (20)	1405	2167	3006	31
Ladder Rail Curved White	D-TCW 69x24	1744 (69)	600 (24)	1661	2563	3555	35
Ladder Rail Curved Chrome	D-TCC 30x20	760 (30)	500 (20)	534	823	1142	14
Ladder Rail Curved Chrome	D-TCC 30x24	760 (30)	600 (24)	639	986	1368	16
Ladder Rail Curved Chrome	D-TCC 48x20	1211 (48)	500 (20)	793	1224	1697	21
Ladder Rail Curved Chrome	D-TCC 48x24	1211 (48)	600 (24)	941	1452	2014	25
Ladder Rail Curved Chrome	D-TCC 69x20	1744 (69)	500 (20)	1170	1805	2504	33
Ladder Rail Curved Chrome	D-TCC 69x24	1744 (69)	600 (24)	1384	2136	2962	36

DESCRIPTION	MODEL	HEIGHT mm (inches)	LENGTH mm (inches)	DISTANCE BETWEEN CONNECTIONS mm (inches)	DISTANCE FROM WALL mm (inches)
Ladder Rail Straight White	D-TSW 27X16	678 (27)	400 (16)	356 (14)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 30X20	760 (30)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 30X24	760 (30)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 48X20	1211 (48)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 48X24	1211 (48)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 69X20	1744 (69)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight White	D-TSW 69X24	1744 (69)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 27X16	678 (27)	400 (16)	356 (14)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 30X20	760 (30)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 30X24	760 (30)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 48X20	1211 (48)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 48X24	1211 (48)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 69X20	1744 (69)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Straight Chrome	D-TSC 69X24	1744 (69)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 30X20	760 (30)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 30X24	760 (30)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 48X20	1211 (48)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 48X24	1211 (48)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 69X20	1744 (69)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved White	D-TCW 69X24	1744 (69)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 30X20	760 (30)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 30X24	760 (30)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 48X20	1211 (48)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 48X24	1211 (48)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 69X20	1744 (69)	500 (20)	456 (18)	71-82 (2 3/4-3 1/4)
Ladder Rail Curved Chrome	D-TCC 69X24	1744 (69)	600 (24)	556 (21 7/8)	71-82 (2 3/4-3 1/4)

#TUBES

14

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2 3/8"

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2 3/8"

2 1/4"

2 3/8"

2 1/4"

2 3/8"

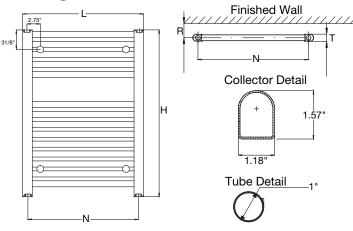
2 1/4"

2 3/8"



Ladder Rail Towel Warmers Rough-In and Technical Data

Straight Ladder Rail



MODEL	LENGTH	HEIGHT	N	R	T
D-TSW 27x16	15 3/4"	26 3/4"	14"	2 3/4"-3 1/4"	1 1/8"
D-TSW 30x20	19 5/8"	30"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSW 30x24	23 5/8"	30"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TSW 48x20	19 5/8"	47 5/8"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSW 48x24	23 5/8"	47 5/8"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TSW 69x20	19 5/8"	68 5/8"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSW 69x24	23 5/8"	68 5/8"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TSC 27x16	15 3/4"	26 3/4"	14"	2 3/4"-3 1/4"	1 1/8"
D-TSC 30x20	19 5/8"	30"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSC 30x24	23 5/8"	30"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TSC 48x20	19 5/8"	47 5/8"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSC 48x24	23 5/8"	47 5/8"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TSC 69x20	19 5/8"	68 5/8"	18"	2 3/4"-3 1/4"	1 1/8"
D-TSC 69x24	23 5/8"	68 5/8"	21 7/8"	2 3/4"-3 1/4"	1 1/8"
D-TCW 30x20	19 5/8"	30"	18"	2 3/4"-3 1/4"	2 1/4"
D-TCW 30x24	23 5/8"	30"	21 7/8"	2 3/4"-3 1/4"	2 3/8"
D-TCW 48x20	19 5/8"	47 5/8"	18"	2 3/4"-3 1/4"	2 1/4"

47 5/8"

68 5/81

68 5/8"

30"

47 5/81

47 5/8"

68 5/81

68 5/8"

21 7/8"

21 7/8'

21 7/8"

21 7/8'

2 3/4"-3 1/4"

2 3/4"-3 1/4"

2 3/4"-3 1/4"

2 3/4"-3 1/4"

2 3/4"-3 1/4"

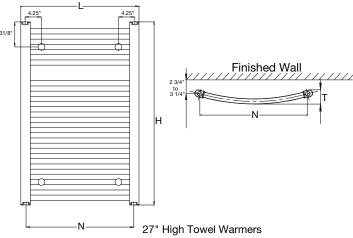
2 3/4"-3 1/4"

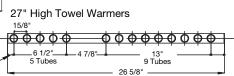
2 3/4"-3 1/4"

2 3/4"-3 1/4"

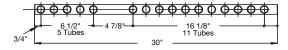
21 7/8" 2 3/4"-3 1/4"

Curved Ladder Rail

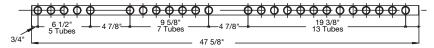




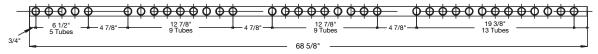
30" High Towel Warmers



48" High Towel Warmers



69" High Towel Warmers



D-TCW 48x24

D-TCW 69x20

D-TCW 69x24

D-TCC 30x20

D-TCC 30x24

D-TCC 48x20

D-TCC 48x24

D-TCC 69x20

D-TCC 69x24

23 5/8"

19 5/8"

23 5/8"

19 5/8"

23 5/8"

19 5/8"

23 5/8"

19 5/8"

23 5/8"

Thermostatic Radiator Valve Sets

1. Herz Angle 1/2" Mini Set for PEX Pipe

PRODUCT CODE: VA-1773485P



Set of 1/2" angle nickel plated brass thermostatic control valves for connection to 1/2" PEX pipe. (Uses M22 x 1/2" PEX compression fittings Part # V-1606603 included). Chrome pipe can be used model # V-C16600

The valve kit includes:

- Bi-directional supply valve which can be fitted on the supply or return of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- . This valve will fit all Express Radiant's Stelrad radiators

2. Herz Angle 1/2" Mini Set for Copper Pipe

PRODUCT CODE: VA-1773484C



Set of $\frac{1}{2}$ " angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " copper pipe. (Uses M22 x $\frac{1}{2}$ " copper compression fittings Part # V-1606602 included)

The valve kit includes:

- Bi-directional supply valve which can be fitted on the supply or return of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- . This valve will fit all Express Radiant's Stelrad radiators

3. Herz Angle Valve Set For NPT 1/2" Pipe Thread

PRODUCT CODE: VA-NPTTRVSET



Set of $\frac{1}{2}$ " robust angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " NPT pipe thread.

The valve kit includes:

- Supply valve which must be fitted on the supply of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/32" or 4mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators

4. Herz Straight Valve Set For NPT 1/2" Pipe Thread

PRODUCT CODE: VA-NPTST



Set of $\frac{1}{2}$ " robust straight nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " NPT pipe thread.

The valve kit includes:

- Supply valve which must be fitted on the supply of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

5. Herz Straight Valve Set For Copper

PRODUCT CODE: VA-ST1773367C



Set of $\frac{1}{2}$ " straight nickel plated brass thermostatic control valves for compression connection to $\frac{1}{2}$ " copper pipe. (Uses G3/4 X $\frac{1}{2}$ " Copper Fittings Part # V-1627616 included). Chrome pipe can be used Model # V-C16600.

The valve kit includes:

- . Supply valve which must be fitted on the supply of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C.
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers



Thermostatic Radiator Valve Sets

6. Herz Straight Valve Set For PEX

PRODUCT CODE: VA-ST1773367P



Set of $\frac{1}{2}$ " straight nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " PEX pipe. (Uses G3/4 X $\frac{1}{2}$ " PEX Fittings Part # V-1609803 included)

The valve kit includes:

- Supply valve which must be fitted on the supply of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

7. Herz Reverse Angle (LH) Valve Set For NPT ½" Pipe Thread

PRODUCT CODE: VA-NPTLH



Set of ½" reverse angle nickel plated brass thermostatic control valves for connection to ½" NPT pipe thread. This valve pattern allows the thermostatic head to be mounted in a vertical configuration on the left side of the radiator.

The valve kit includes:

- . Supply valve which must be fitted on the supply (left) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/32" or 4mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

8. Herz Reverse Angle (RH) Valve Set For NPT ½" Pipe Thread

PRODUCT CODE: VA-NPTRH



Set of $\frac{1}{2}$ " reverse angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " NPT pipe thread. This valve pattern allows the thermostatic head to be mounted in a vertical configuration on the right side of the radiator.

The valve kit includes:

- Supply valve which must be fitted on the supply (right) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/32" or 4mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

9. Herz Reverse Angle (RH) Valve Set For PEX Pipe

PRODUCT CODE: VA-PEXRH



Set of $\frac{1}{2}$ " reverse angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " PEX. This valve pattern allows the thermostatic head to be mounted vertical on the right side of the radiator. (Uses G3/4 X $\frac{1}{2}$ " PEX Fittings Part #V-1609803 Included)

The valve kit includes:

- . Supply valve which must be fitted on the supply (right) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

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Thermostatic Radiator Valve Sets

10. Herz Reverse Angle (LH) Valve Set For PEX Pipe

PRODUCT CODE: VA-PEXLH



Set of $\frac{1}{2}$ " reverse angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " PEX. This valve pattern allows the thermostatic head to be mounted vertical on the left side of the radiator. (Uses G3/4 X $\frac{1}{2}$ " PEX Fittings Part # V-1609803 Included)

The valve kit includes:

- Supply valve which must be fitted on the supply (left) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

11. Herz Reverse Angle (LH) Valve Set For Copper Pipe

PRODUCT CODE: VA-CULH



Set of $\frac{1}{2}$ " reverse angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " copper. This valve pattern allows the head to be mounted vertical on the left side of the radiator. (Uses G3/4 X $\frac{1}{2}$ " Copper Fittings Part # V-1627616 Included)

The valve kit includes:

- . Supply valve which must be fitted on the supply (left) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

12. Herz Reverse Angle (RH) Valve Set For Copper Pipe

PRODUCT CODE: VA-CURH



Set of $\frac{1}{2}$ " reverse angle nickel plated brass thermostatic control valves for connection to $\frac{1}{2}$ " copper. This valve pattern allows the head to be mounted vertical on the right side of the radiator. (Uses G3/4 X $\frac{1}{2}$ " Copper Fittings Part # V-1627616 Included)

The valve kit includes:

- Supply valve which must be fitted on the supply (right) side of the radiator
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)
- Thermostatic operating head with temperature settings from 6°C 28°C with frost protection at 6°C
- This valve will fit all Express Radiant's Stelrad radiators and towel warmers

13. Herz Two-pipe Bypass Valve



½" Two-pipe bypass valve with reverse angle thermostatic valve and head for copper and PEX connections

FOR COPPER	FOR PEX
VA-171750110C-08 (08")	VA-171750110P-08 (08")
VA-171750110C-12 (12")	VA-171750110P-12 (12")
VA-171750110C-18 (18")	VA-171750110P-18 (18")
VA-171750110C-24 (24")	VA-171750110P-24 (24")
VA-171750110C-28 (28")	VA-171750110P-28 (28")

PRODUCT CODES:

14. Herz One-pipe Bypass Valve



1/2" One-pipe bypass valve with reverse angle thermostatic valve and head for copper and PEX connections

FOR COPPER	FOR PEX
VA-1717301C-08 (08")	VA-1717301P-08 (08")
VA-1717301C-12 (12")	VA-1717301P-12 (12")
VA-1717301C-18 (18")	VA-1717301P-18 (18")
VA-1717301C-24 (24")	VA-1717301P-24 (24")
VA-1717301C-28 (28")	VA-1717301P-28 (28")



Chrome Radiator Valves

15. Manual ½" Angle Cross Head Valves

PRODUCT CODE: V-CROSSH16-P or V-CROSSH16-C



½" angle chrome plated brass classic cross head radiator valves Has compression fitting to fit standard ½" copper or ½" PEX tubing

- These attractive operating valves require 12 mm Allen key to secure the tail piece into the radiator or towel warmer. (Not Included)
- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Sold in pairs

16. Manual ½" Straight Cross Head Valves PRODUCT CODE: V-CROSSH16-SP or V-CROSSH16-SC



 $\ensuremath{\mathcal{V}}$ angle chrome plated brass classic cross head radiator valves

Has compression fitting to fit standard 1/2" copper or 1/2" PEX tubing

- These attractive operating valves require a 12 mm Allen key to secure the tail piece into the radiator or towel warmer. (Not Included)
- This will fit all Express Radiant's Stelrad radiators and towel warmers
- · Sold in pairs

17. Angled TRV Valve

PRODUCT CODE: VA-CHROMETRVSET-C or VA-CHROMETRVSET-P



1/2" angle chrome plated brass valve set with chrome thermostatic head Has compression fitting to fit standard 1/2" copper or 1/2" PEX tubing

- These attractive operating valves require a 12 mm Allen key to secure the tail piece into the radiator or towel warmer. (Not Included)
- This will fit all Express Radiant's Stelrad radiators and towel warmers

18. Straight TRV Valve

PRODUCT CODE: VA-CHROMETRVSET-SC or VA-CHROMETRVSET-SP



½" straight chrome plated brass valve set with chrome thermostatic head Has compression fitting to fit standard ½" copper or ½" PEX tubing

- These attractive operating valves require a 12 mm Allen key to secure the tail piece into the radiator or towel warmer. (Not Included)
- This will fit all Express Radiant's Stelrad radiators and towel warmers

19. Angled Chrome Plated Lockshield

PRODUCT CODE: V- CHROMELS-P or V-CHROMELS-C



Has compression fitting to fit standard $\frac{1}{2}$ " copper or $\frac{1}{2}$ " PEX tubing

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Sold in pairs

20. Straight Chrome Plated Lockshield

PRODUCT CODE: V- CHROMELS-SP or V-CHROMELS-SC



Has compression fitting to fit standard ½" copper or ½" PEX tubing

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Sold in pairs



24 Radiator Connectors

21. Herz 1/2" Pex Compression Connector

PRODUCT CODE: V-1609803



G 3/4" X 1/2" PEX Compression Connector

22. Herz 1/2" Copper Compression Connector

PRODUCT CODE: V-1627616



G 3/4" X $\frac{1}{2}$ " Copper Compression Connector

23. Herz M22 x 1/2" PEX Compression Connector

Product Code: V-1606603



M22 X 1/2" PEX Compression Connector

24. Herz M 22 X 1/2" Copper Compression Connector

PRODUCT CODE: V-1606602



M22 X 1/2" Copper Compression Connector

25. Herz Straight 1/2" NPT Union Connector

PRODUCT CODE: V-1414401 (Single) VA-1414401 (Pair)



1/2" NPT straight nickel plated brass union radiator connector (s)

• This will fit all Express Radiant, Stelrad radiators and towel warmers

Radiator Connectors 25

26. Herz Angle ½" NPT Union Connector

PRODUCT CODE: V-1414501 (Single) VA-1414501 (Pair)



1/2" NPT angle nickel plated brass union radiator connector (s)

• This will fit all Express Radiant, Stelrad radiators and towel warmers

27. Herz Angle Connectors for Copper Pipe PRODUCT CODE: V-1624201C (Single) VA-1624201C (Pair)



1/2" copper compression angle nickel plated brass with a radiator connector (s) (Uses M22 X 1/2" Copper Fittings Part # 1/1665 1/2 likely led)

Chrome pipe can be used Model # 1/4 (1/5 b)

- This will fit all Express the anis Serial radiators and towel warmers
- Rough in A total less in a me rough-ins on pages 4 to 7 and 10

28. Herz Angle Connectors for PEX Pipe PRODUCT CODE: V-1624201P (Single) VA-1624201P (Pair)



 $\frac{1}{2}$ " PEX compression angle nickel plated brass unit in diator connector (s) (Uses M22 X $\frac{1}{2}$ " PEX Fittings Part # V_160 to 3

- This will fit all Express Radian 's at the leators and towel warmers
- Rough in 2" total | S. thin he rough-ins on pages 4 to 7 and 10

29. Herz Straight ½" Copper Connectors PRODUCT CODE: V-1300231C (Single) VA-1300231C (Pair)



½" Copper compression straight nickel plated brass radiator connector (s) (Uses G3/4" x ½" copper connector Part # V-1627616 included) Chrome pipe can be used model # V-C16600

- . No tape or dope required
- This will fit all Express Radiant's Stelrad radiators and towel warmers

30. Herz Straight ½" PEX Connectors

PRODUCT CODE: V-1300231P (Single) VA-1300231P (Pair)



½" PEX compression straight nickel plated brass radiator connector (s) (Uses G3/4" x ½" PEX connector Part # V-1609803 included)

- No tape or dope required
- This will fit all Express Radiant's Stelrad radiators and towel warmers



26 Radiator Valves

31. Herz Angle 1/2" Lockshield Valve

PRODUCT CODE: V-1374801P (PEX) V-1374801C (Copper)



 $\ensuremath{{1}\!\!{/}}\xspace_{\ensuremath{{2}}\xspace}$ PEX and Copper Compression

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)

Valves shown with PEX Connectors

32. Herz Thermostatic ½" Angle Valve Body

PRODUCT CODE: V-1772437P (PEX) V-1772437C (Copper)



Valves shown with PEX Connectors

1/2" PEX and Copper Compression

• This will fit all Express Radiant's Stelrad radiators

33. Herz Thermostatic 1/2" Reverse Angle Left Hand Valve Body

PRODUCT CODE: V-1775991



Herz Thermostatic Reverse Angle

- Left Hand Valve Body
- 1/2" NPT
- This will fit all Express Radiant's Stelrad radiators

34. Herz Thermostatic ½" Reverse Angle Right Hand Valve Body

PRODUCT CODE: V-1775891



Herz Thermostatic Reverse Angle

- Right Hand Valve Body
- ½" NPT
- . This will fit all Express Radiant's Stelrad radiators

35. Herz Angle ½" NPT Thermostatic Valve Body

PRODUCT CODE: V-1772456



1/2" NPT pipe thread angle nickel plated brass thermostatic radiator control valve

• This will fit all Express Radiant's Stelrad radiators

Radiator Valves

36. Herz Angle 1/2" NPT Lockshield Valve

PRODUCT CODE: V-1342456



½" NPT pipe thread angle nickel plated brass return lockshield valve used for isolation and flow balancing

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Return lockshield valve for flow balancing or isolation operated by a 5/32" or 4mm Allen key (not supplied)

37. Herz Straight 1/2" NPT Thermostatic Valve Body

PRODUCT CODE: V-1772391



1/2" NPT pipe thread straight nickel plated brass thermostatic radiator control valve

• This will fit all Express Radiant's Stelrad radiators and towel warmers

38. Herz Straight 1/2" NPT Lockshield Valve

PRODUCT CODE: V-1372341



 $\frac{1}{2}$ " NPT pipe thread straight nickel plated brass return lockshield valve used for isolation and flow balancing

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)

39. Herz Straight ½" Thermostatic Valve Body

PRODUCT CODE: V-1773367P (PEX) V-1773367C (Copper)



1/2" PEX or Copper straight nickel plated brass thermostatic radiator control valve

• This will fit all Express Radiant's Stelrad radiators and towel warmers

40. Herz Straight 1/2" Lockshield Valve

PRODUCT CODE: V-1373311P (PEX) V-1373311C (Copper)



½" PEX or Copper straight nickel plated brass return lockshield valve used for isolation and flow balancing.

- This will fit all Express Radiant's Stelrad radiators and towel warmers
- Return lockshield valve for flow balancing or isolation operated by a 5/16" or 8mm Allen key (not supplied)

41. Herz ½" Angle NPT Low Pressure Drop Valve Set (No Head) PRODUCT CODE: VA-1772411



½" NPT pipe thread angle nickel plated brass thermostatic valve set suitable for mono flow single pipe systems that require a very low pressure drop across the supply and return valves.

• This will fit all Express Radiant's Stelrad radiators

28 Controls

42. Herz Non-Electric Mini Thermostatic Head

PRODUCT CODE: V-1920060



Thermostatic head, liquid filled. Operating temperature range: 6°C - 28°C Frost protection at 6°C, comfort level at scale mark 3

- Fits all Herz thermostatic valve bodies
- Used for sensing room temperature and automatically adjusting flow of liquid through valve body and radiator or heat emitter

Accessories

43. M28 to M30 Adaptor

PRODUCT CODE: V-1635760



Converts Herz radiator TRV valves from M28 to M30 thread

44. Herz Replacement Valve Inserts

PRODUCT CODE: V-1639091 V-1639090



Replacement valve insert for all ½" thermostatic Herz valves. This can be changed with system under pressure using Herz change tool V-1778000 or during routine maintenance. See page 28 Item #45.

Herz Replacement Valve Insert, PRODUCT CODE V-1639091 (NOT for Mini Sets)
Herz Replacement Valve Insert, PRODUCT CODE V-1639090 (for Mini Sets)

45. Herz Valve Insert Change Tool

PRODUCT CODE: V-1778000



Herz valve insert change tool.

· For changing valve insert without draining down system or radiator

46. Herz Multi-purpose Key

PRODUCT CODE: V-1662500



Herz multi-purpose key

· For adjusting lockshield valves and bleeding radiators

47. Stelrad Radiator Air Bleeder Key

PRODUCT CODE: V-VENT KEY



Air bleeder key used for all Express Radiant's Stelrad radiators and towel warmers now on a convenient key ring

48. ½" X 24" Chrome Tubing

PRODUCT CODE: V-C16600



1/2" chrome plated brass tubing 24" long

- Will fit to all Herz copper compression valves
- Easy to solder just remove chrome plating with file and solder to any fitting or use compression fittings

Accessories 29

49. 1/2" X 8" Chrome and White Radsnaps

PRODUCT CODE: V-RSC8 (Chrome) V-RSW8 (White)



½" chrome or white pipe covering sleeves, 10 pieces 8" long

- The pipe sleeves can be installed easily around exposed piping and give the appearance of white or chrome pipework
- The individual pieces can be cut with scissors to the required length and snapped around the exposed pipe

50. 1/2" X 40" Chrome and White Pipesnaps PRODUCT CODE: V-PIPESNAPC (Chrome) V-PIPESNAPW (White)

1/2" o
• The ap
• The sna

½" chrome or white pipe covering sleeves, 3 pieces 40" (1m) long

- The pipe sleeves can be installed easily around exposed piping and give the appearance of white or chrome pipework
- The individual pieces can be cut with scissors to the required length and snapped around the exposed pipe

51. Softline and Style Radiator Floor Standing Bracket



Universal floor standing bracket with adjustable height setting for Stelrad Compact Softline Radiator

- Not available for the 8" model radiator
 2 brackets required for 16" to 64" length radiators
 3 brackets required for 72" to 120" length radiators
- Sold as single

PRODUCT CODE: V-FS BRACKET-K1
PRODUCT CODE: V-FS BRACKET-K2

52. Classic Column Floor Standing Brackets



Floor standing brackets for classic column radiators

- Up to 18 sections 2 brackets recommended
 18 31 sections 3 brackets recommended
 32 40 sections 4 brackets recommended
- · Sold in pairs

53. Non Scratch Bushing Wrench

PRODUCT CODE: V-CCWRENCH

PRODUCT CODE: V-CLFS



Plastic wrench to avoid scratches when used to tighten the bushings on column radiators



30 Accessories

54. White Ladder Rail Brackets

PRODUCT CODE: V-WBLRCW (Curved white) V-WBLRSW (Straight white)



Replacement wall brackets for Stelrad ladder rail towel warmers

• Includes hardware accessories pack

55. Chrome Ladder Rail Brackets

PRODUCT CODE: V-WBLRCC (Curved chrome) V-WBLRSC (Straight chrome)



Replacement wall brackets for Stelrad ladder rail towel warmers

· Includes hardware accessories pack

56. Extensions



Extensions for radiator valve connections

· Fits all Herz valves

PRODUCT CODE: V-EXT20 20mm (¾") PRODUCT CODE: V-EXT30 30mm (1¾6") PRODUCT CODE: V-EXT40 40mm (1½")

57. Threaded Tail Piece

PRODUCT CODE: V-1621801



- 3" long union connector tail piece for Herz valves
- Cut to length
- Suitable for all Herz valves except the Herz minisets items #1 VA-1773485P and Item #2 VA-1773484C and chrome valves

58. Softline and Style Radiator L Wall Brackets



PRODUCT CODE: V-WB200 200mm (8")
PRODUCT CODE: V-WB300 300mm (12")

PRODUCT CODE: V-WB450 450mm (18")
PRODUCT CODE: V-WB600 600mm (24")

PRODUCT CODE: V-WB700 700mm (28")



Accessories

59. J-Brackets



- Wall mounted through the top grille and in the lower welding seam for easy placement
- Sold in singles
- . Suitable for K2 and S2 type radiators only

PRODUCT CODE: V-JBracket 200 200mm (8")
PRODUCT CODE: V-JBracket 300 300mm (12")
PRODUCT CODE: V-JBracket 450 450mm (18")
PRODUCT CODE: V-JBracket 600 600mm (24")
PRODUCT CODE: V-JBracket 700 700mm (28")



60. Stelrad Radiator Replacement Hardware Pack



Stelrad hardware pack for for compact and style radiators in 12", 18", 24" and 28" inch heights.

 Includes nickel plated air vent, blank plug and bracket isolators. PRODUCT CODE: V-HARDWARE

(For 12", 18", 24", 28" radiators, PICTURED)

PRODUCT CODE: V-HARDWARE8

(For K2 and S2 8" models)

61. Stelrad Ladder Rail Replacement Hardware Pack

PRODUCT CODE: V-LRHARDWARE



Hardware pack for all types of Stelrad ladder rails

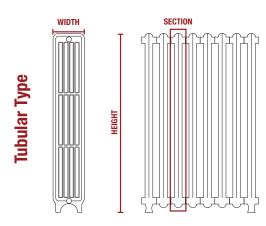
Replacement top grilles and end panels are available as a special order and not carried as stock.



Calculating Existing Cast Iron Radiator Output in BTU's/Hr

WIDTH SECTION

HEIGHT



To find the output of a cast iron radiator, you need to know the surface area in square feet of the radiator. Follow these steps to calculate the square feet of radiation. NOTE: Column and Tube cast iron radiators are the two main types.

Step #1. Calculate the square footage of one section of the radiator.

- Measure height of section
- Measure width of section
- Find square feet of section in Chart # 1 for COLUMN or Chart # 2 for TUBE type radiator

Step #2. Multiply the square feet of the one section by the number of sections. Equals the cast iron radiator's total square foot of radiation.

Step #3. Multiply the total square foot of the radiator by the BTU output per square foot according to the heating supply temperature, Chart #3.

Please note that a house heated with all cast iron radiators, the supply temperature generally does not exceed 140°F or 90 BTU's per square foot output for the cast iron radiator.

1. Sq. Ft. Radiation Per Section for COLUMN TYPE Radiators

HEIGHT (inches)	4-1/2" WIDE ONE COLUMN	7-1/2" WIDE Two Column	9" WIDE Three Column	11-1/2" WIDE Four Column	13" WIDE Five Column
13	-	-	-	-	3
16	•	•	•	-	3-3/4
18	-	-	2-1/4	3	4-1/4
20	1-1/2	2	-	-	5
22	-	-	3	4	-
23	1-2/3	2-1/3	•	-	-
26	2	2-2/3	3-3/4	5	-
32	2-1/2	3-1/3	4-1/2	6-1/2	-
38	3	4	5	8	-
45	-	5	6	10	-

2. Sq. Ft. Radiation Per Section for TUBE TYPE Radiators

HEIGHT (inches)	5" WIDE Three Tube	7" WIDE Four Tube	8-3/4" WIDE FIVE TUBE	9-3/4" WIDE SIX TUBE	12-1/2" WIDE Seven Tube
14	-	-	-	-	2-1/2
17	-	-	-	-	3
20	1-3/4	2-1/4	2-2/3	3	3-2/3
23	2	2-1/2	3	3-1/2	-
26	2-1/3	2-3/4	3-1/2	4	4-3/4
32	3	3-1/2	4-1/3	5	-
38	3-1/2	4-1/4	5	6	-

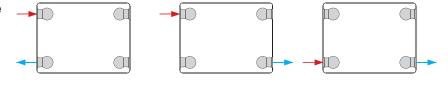
3. Heat Emissions for Cast Iron Radiators

DESIGN OR AVERAGE Water temperature	HEAT EMISSION RATES BTUH PER SQ. FT.	DESIGN OR AVERAGE Water Temperature	HEAT EMISSION RATES BTUH PER SQ. FT.
110° F	30	180° F	170
120° F	50	185° F	180
130° F	70	190° F	190
140° F	90	195° F	200
150° F	110	200° F	210
160° F	130	205° F	220
170° F	150	210° F	230
175° F	160	215° F	240

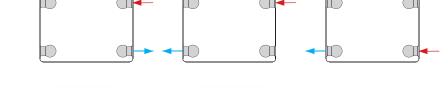
Piping Options for Stelrad Steel Panel Radiators

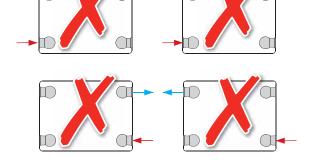
Radiator Piping Connection Methods

Compact Softline, Style and Classic Column Piping Options

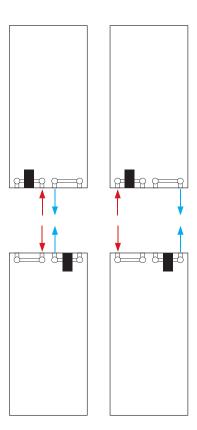


Please Note: The return always needs to be at the bottom of the radiator





K2 Vertex and Style Vertical Radiator Piping Options





4	Notes

Express Radiant Ltd. Conditions of Sale (Canada & US)

UNLESS VARIED BY EXPRESS RADIANT LTD. IN WRITING, ALL GOODS ARE SOLD ONLY UPON THE FOLLOWING TERMS AND CONDITIONS:

- 1. Quotations: Are valid for acceptance for 28 days from the date shown unless withdrawn by us before that date and are subject to our written acceptance of the Buyer's order.
- 2. **Prices and Discounts:** Are subject to alteration without notice and are given as a guide only as all Goods, as hereinafter defined, are sold at prices ruling on date of dispatch. Prices are exclusive of applicable taxes which will be added to the Buyer's invoice where applicable.
- 3. Delay and Cancellations: Any delivery date indicated shall be regarded as an estimate only, although we shall make every effort to ensure prompt delivery. Whilst every effort will be made to carry out the contract, its due performance is subject to cancellation by us without compensation or to such variation as we my find necessary as a result of a scarcity of labour, materials or supplies, or because of any Act of God, war, strike, lockout or other labour dispute, fire, the elements, legislation, or (without prejudice to the generality of the foregoing) any other cause beyond our control.
- 4. **Delivery & Risk:** Delivery shall be when the goods set out in the applicable invoice (the "Goods") have been delivered to the Buyer's premises or to such other place as the Buyer may require. This risk shall pass to the Buyer when the Goods have been delivered.
- 5. Transport: Will be effected or arranged by us and Goods will be delivered to destinations in agreed areas carriage paid unless:
 (a) value of order for Goods is less than \$100; or (b) we are informed by the Buyer in writing that the Goods are to be transported by other special delivery, the extra carriage charges for which will be added to the Buyer's invoice.
- 6. Damage in Transit: we will entertain no claim for Goods lost or damaged in transit unless notification of the nature and extent of such a claim is received by us and the Carrier either upon receipt of delivery of damaged Goods, or within 28 days of receipt of delivery of the damaged Goods. Our liability shall in no circumstances exceed the invoiced value of the Goods lost or damaged. Goods subject to claim, shall be stored free of charge for inspection. They shall not be returned to nor accepted by us without written consent.
- 7. Exclusion of Warranties:
 - (a) THE BUYER ACKNOWLEDGES THAT EXPRESS RADIANT LTD. ("EXPRESS") IS NOT THE MANUFACTURER OF THE GOODS. EXPRESS MAKES NO REPRESENTATION OR WARRANTY, EXPRESS, IMPLIED OR STATUTORY AS TO THE CONDITION FOR FITNESS OF THE GOODS AND HEREBY SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. EXPRESS WILL, HOWEVER, USE COMMERCIALLY REASONABLE EFFORTS, AS REQUESTED BY THE BUYER, TO ASSIST THE BUYER IN ENFORCING ANY WARRANTY THAT THE MANUFACTURER OF THE GOODS MAY HAVE IN EFFECT. EXPRESS SHALL HAVE NO LIABILITY FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL, INCIDENTAL, SPECIAL, COLLATERAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES (INCLUDING WITHOUT LIMITATION LOSS OF GOODWILL, LOSS OF PROFITS OR REVENUES, LOSS OF SAVINGS, LOSS OF USE, INTERRUPTION OF BUSINESS AND CLAIMS OF BUYERS ARISING OUT OF THE USE OF THE GOODS OR OTHERWISE. EXPRESS SPECIFICALLY DISCLAIMS ANY WARRANTY THAT THE GOODS ARE IN COMPLIANCE WITH ANY APPLICABLE GOVERNMENTAL REQUIREMENTS OR REGULATIONS.
 - (b) Goods subject to claim shall not be returned to us and we will not accept them without our prior written consent.
 - (c) Any returned Goods that we accept back after 30 days will be subject to an automatic restocking fee of: 25% on panel radiators, ladder rails; 50% on columns and style radiators; 25% on all valves and accessories. NO RETURNS ACCEPTED AFTER 180 DAYS FROM DATE OF INVOICE.
- 8. Dimensions and Illustrations: Our price lists and publicity brochures have been prepared with every care but their accuracy is not guaranteed and we reserve the right to vary such information without notice. Exact dimensions will be provided on application.
- 9. Payment: All invoices shall be due for payment on the terms set out therein which shall be net 30 days. Default in payment of any invoice shall entitle us to treat any outstanding contracts between us and the Buyer as repudiated by the Buyer, however such repudiation shall in no way relieve the Buyer of its obligations to pay amounts then outstanding to Express, including interest thereon.

10. Ownership:

- (a) Notwithstanding any passing of risk to the Buyer we retain ownership of the Goods the subject matter of this contract the property in which shall not pass to the Buyer and the Buyer shall keep any Goods delivered to is as bailee for and on our behalf until we have received full payment of the price of all Goods (whether or not the Goods are delivered in installments and some have been paid for by the Buyer) and all other sums due at any time whatsoever from the Buyer to us.
- (b) Until ownership of the Goods has been passed to the Buyer, the Buyer:
 - (i) shall insure the delivered Goods against any loss or damage with an insurance company of repute:
 - (ii) shall store the delivered Goods separately or in some other way ensure that they are readily identifiable as our property.
 - (iii) Irrevocably authorizes our representatives at any time and from time to time (whether or not payment is due) to repossess the Goods and for such purpose to enter any premises occupied by the Buyer or where the Goods are or are thought to be and to sever the Goods from anything to which they are attached without being responsible for any damage caused
 - (iv) Shall keep the delivered Goods free from any charge, lien or other encumbrance.
 - (A) If while under our ownership the Goods or any of them are processed or incorporated into other Goods (the "New Goods") then, provided the goods remain a readily identifiable and removable part of the New Goods, the provision of clauses (a) and (b) shall apply.
 - (B) We (acting on our own account not as agent for the Buyer) may sell or agree to sell any of the Goods or the New Goods in our possession on such terms as we may in our sole discretion consider appropriate.
 - (C) We shall be entitled to a general lien over all Goods and materials of the Buyer which are in our possession or control from time to time for any sums due at any time whatsoever from the Buyer to us.
 - (D) Nothing in this clause 10 shall affect any other of our rights or remedies.
 - (E) The provisions of this clause 10 shall survive termination of the contract for any reason.

11. Limitation of Liability:

- (a) The rights conferred by these conditions shall so far as legally possible replace and exclude all common law, statutory or other warranties or conditions whether express or implied. Save as specifically mentioned above we do not accept liability, in tort or contract or otherwise, for any direct or indirect loss or damage, howsoever arising.
- (b) In no event will Express be liable for any indirect, incidental, consequential, special, punitive or exemplary damages, or any other damages (including, without limitation, damages for loss of business profits, business interruption, personal injury, failure to meet any duty including acts of good faith or of reasonable care, lack of diligence, and for any other pecuniary or other loss whatsoever) arising out of or in any way connected with the use of the Goods, the delay in delivery of the Goods, even in the event of fault, tort (including negligence), strict liability, breach of contract, or breach of warranty of Express and even if Express has been advised of the possibility of such damages. These limitations and exclusions regarding damages apply even if any remedy fails.
- (c) Notwithstanding the foregoing, in no event will Express be liable to the Buyer for any amount in excess of the price paid by the Buyer to Express for the Goods.
- (d) Some jurisdictions do not allow the exclusion of certain warranties or the limitation or exclusion of liability for incidental or consequential damages. Accordingly, some of the above limitations may not apply to the Buyer.
- 12. Waiver: Our rights shall not be affected or restricted by any indulgence or forbearance to the Buyer. No waiver by us of any breach shall operate as a waiver of any wlater breach.
- 13. Variation of Conditions: No variation of these conditions or the particulars in our acceptances shall be valid unless agreed by us in writing.
- 14. Law: This agreement shall be governed by the laws of the Province of Ontario and the laws of Canada applicable therein. Any dispute regarding this agreement shall be referred to a single arbitrator appointed by a Judge of the Superior Court of Justice sitting in Toronto, which arbitration shall proceed in accordance with the provisions of the *Arbitration Act*, 1991 (Ontario), as amended.



ExpressRadiant