

Planar

Distinctive features with flexibility

With its flat, smooth front surface, complemented by elegant, integrated top grilles and side panels, the Stelrad Planar offers a stylish alternative for a multitude of applications.

The exceptionally slim profile and silk smooth surface add to the overall attractive appearance, providing an air of prestige which makes the Stelrad Planar the perfect choice for either domestic or commercial environments.

Elegance with imaginative construction

Supplied fully assembled, the Stelrad Planar radiator is easy to install.

Every model comes with a directional air vent to direct waterflow during venting, with convectors precision welded directly onto the waterways, to give greater efficiency and economy. In addition, all tappings are perfectly aligned, with best quality nickel-plated plugs and vents and the high definition pressings ensure smooth edges and corners.

Available with a choice of four heights and 74 models in the most popular sizes, the Planar range offers a wide range of outputs with outstanding heating performance.

Superb quality with pedigree

Manufactured by the UK market leader, under ISO 9000 quality system, the Stelrad Planar comes with an unequalled pedigree, strictly controlled independent laboratory testing ensuring that all Stelrad Planar radiators are guaranteed to perform to a maximum working pressure of 116 psi (8 bar) and conform to BS EN 442 - the European Standard for radiators.

The perfect solution for all prestigious heating applications, the Stelrad Planar comes complete with a 5 year Manufacturer's Warranty as a measure of the all round dependable quality and performance.



Stelrad Planar

50 Δt



Height	Length mm	Sections	Heat output		Heat output	
			Watts	Btu/hr	Watts	Btu/hr
300	500	15	235	802	465	1587
	1000	30	469	1600	929	3170
	1400	42	657	2242	1301	4439
	2000	60	938	3200	1858	6339
400	400	12	250	853	471	1607
	600	18	376	1283	706	2409
	800	24	501	1709	942	3214
	1000	30	626	2136	1177	4016
	1200	36	751	2562	1412	4818
	1400	42	876	2989	1648	5623
	1600	48	1002	3419	1883	6425
	1800	54	1127	3845	2119	7230
500	2000	60	1252	4272	2354	8032
	400	12	310	1058	564	1924
	600	18	464	1583	847	2890
	800	24	619	2112	1129	3852
	1000	30	774	2641	1411	4814
	1200	36	929	3170	1693	5777
	1400	42	1084	3699	1975	6739
	1600	48	1238	4224	2258	7704
600	1800	54	1393	4753	2540	8666
	2000	60	1548	5282	2822	9629
	400	12	364	1242	654	2231
	600	18	547	1866	980	3344
	800	24	729	2487	1307	4459
	1000	30	911	3108	1634	5575
	1200	36	1093	3729	1961	6691
	1400	42	1275	4350	2288	7807
1600	48	1458	4975	2614	8919	
1800	54	1640	5596	2941	10035	
2000	60	1822	6217	3268	11150	

40 Δt



30 Δt



Height	Length mm	Sections	Heat output		Heat output		Heat output		Heat output	
			Watts	Btu/hr	Watts	Btu/hr	Watts	Btu/hr	Watts	Btu/hr
300	500	15	176	600	348	1187	121	413	239	817
	1000	30	351	1197	695	2371	242	824	478	1632
	1400	42	491	1677	973	3320	338	1154	670	2286
	2000	60	702	2394	1390	4742	483	1648	957	3265
400	400	12	187	638	352	1202	129	439	243	828
	600	18	281	960	528	1802	194	661	364	1241
	800	24	375	1279	705	2404	258	880	485	1655
	1000	30	468	1598	880	3004	322	1100	606	2068
	1200	36	562	1917	1056	3604	387	1320	727	2481
	1400	42	655	2236	1233	4206	451	1539	849	2896
	1600	48	749	2557	1408	4806	516	1761	970	3309
	1800	54	843	2876	1585	5408	580	1980	1091	3723
2000	60	936	3195	1761	6008	645	2200	1212	4136	
500	400	12	232	791	422	1439	160	545	290	991
	600	18	347	1184	634	2162	239	815	436	1488
	800	24	463	1580	844	2881	319	1088	581	1984
	1000	30	579	1975	1055	3601	399	1360	727	2479
	1200	36	695	2371	1266	4321	478	1632	872	2975
	1400	42	811	2767	1477	5041	558	1905	1017	3470
	1600	48	926	3160	1689	5763	638	2175	1163	3968
	1800	54	1042	3555	1900	6483	717	2448	1308	4463
2000	60	1158	3951	2111	7202	797	2720	1453	4959	
600	400	12	272	929	489	1669	187	640	337	1149
	600	18	409	1396	733	2501	282	961	505	1722
	800	24	545	1861	978	3336	375	1281	673	2297
	1000	30	681	2325	1222	4170	469	1601	842	2871
	1200	36	818	2790	1467	5005	563	1921	1010	3446
	1400	42	954	3254	1711	5839	657	2240	1178	4020
	1600	48	1091	3721	1955	6671	751	2562	1346	4593
	1800	54	1227	4186	2200	7506	845	2882	1515	5168
2000	60	1363	4650	2444	8341	938	3202	1683	5742	

Stelrad Planar

Weights & Measures

K1



K2



Height	Length		Wall to tap centre mm	Dry weight Kg	Water content Litres	Surface area m ² /m	Wall to tap centre mm	Dry weight Kg	Water content Litres	Surface area m ² /m
	mm	in								
300	500	19.7	54	5.94	0.95	1.05	76	9.80	1.85	1.75
	1000	39.4	54	11.88	1.89	2.09	76	19.60	3.70	3.51
	1400	55.1	54	16.63	2.65	2.93	76	27.44	5.18	4.91
	2000	78.7	54	23.76	3.78	4.18	76	39.20	7.40	7.02
400	400	15.7	54	6.45	0.94	1.18	76	10.56	1.87	1.97
	600	23.6	54	9.68	1.40	1.77	76	15.84	2.80	2.95
	800	31.5	54	12.90	1.87	2.36	76	21.12	3.74	3.94
	1000	39.4	54	16.13	2.34	2.95	76	26.40	4.67	4.92
	1200	47.2	54	19.36	2.81	3.54	76	31.68	5.60	5.90
	1400	55.1	54	22.58	3.28	4.13	76	36.96	6.54	6.89
	1600	63.0	54	25.81	3.74	4.72	76	42.24	7.47	7.87
	1800	70.9	54	29.03	4.21	5.31	76	47.52	8.41	8.86
2000	78.7	54	32.36	4.68	5.90	76	52.80	9.34	9.84	
500	400	15.7	54	8.16	1.12	1.52	76	13.28	2.25	2.53
	600	23.6	54	12.23	1.68	2.28	76	19.92	3.38	3.80
	800	31.5	54	16.31	2.24	3.04	76	26.56	4.50	5.06
	1000	39.4	54	20.39	2.80	3.80	76	33.20	5.63	6.33
	1200	47.2	54	24.47	3.36	4.56	76	39.84	6.76	7.60
	1400	55.1	54	28.55	3.92	5.32	76	46.48	7.88	8.86
	1600	63.0	54	32.62	4.48	6.08	76	53.12	9.01	10.13
	1800	70.9	54	36.70	5.04	6.84	76	59.76	10.13	11.39
2000	78.7	54	40.78	5.60	7.60	76	66.40	11.26	12.66	
600	400	15.7	54	9.86	1.30	1.86	76	16.00	2.64	3.10
	600	23.6	54	14.79	1.95	2.80	76	24.00	3.96	4.64
	800	31.5	54	19.72	2.60	3.73	76	32.00	5.28	6.19
	1000	39.4	54	24.65	3.25	4.66	76	40.00	6.60	7.74
	1200	47.2	54	29.58	3.90	5.59	76	48.00	7.92	9.29
	1400	55.1	54	34.51	4.55	6.52	76	56.00	9.24	10.84
	1600	63.0	54	39.44	5.20	7.46	76	64.00	10.56	12.38
	1800	70.9	54	44.37	5.85	8.39	76	72.00	11.88	13.93
2000	78.7	54	49.30	6.50	9.32	76	80.00	13.20	15.48	

EN 442 Certification Data – CETIAT tested in accordance with BS EN 442

Type	K1				K2			
	300	400	500	600	300	400	500	600
Height	300	400	500	600	300	400	500	600
W/m at 75/65/20	469	626	774	911	929	1177	1411	1634
n-coefficients	1.30	1.29	1.28	1.27	1.29	1.30	1.31	1.32
Heated Surface Area (m ² /m)	2.09	2.95	3.80	4.66	3.51	4.92	6.33	7.74
Weight (kg/m)	11.88	16.13	20.39	24.65	19.60	26.40	33.20	40.00
Water Contents (l/m)	1.89	2.34	2.80	3.25	3.70	4.67	5.63	6.60

Stelrad Planar Vertical



50 Δt

40 Δt

30 Δt

Height	Length mm	Sections	Heat output		Heat output		Heat output	
			Watts	Btu/hr	Watts	Btu/hr	Watts	Btu/hr
1800	400	12	1476	5036	1104	3767	760	2594
	500	15	1845	6295	1380	4709	950	3242
	600	18	2214	7554	1656	5651	1140	3890
	700	21	2583	8813	1932	6592	1330	4539
2000	400	12	1584	5405	1185	4043	816	2783
	500	15	1980	6756	1481	5053	1020	3479
	600	18	2376	8107	1777	6064	1224	4175
	700	21	2772	9458	2073	7075	1428	4871
2200	400	12	1692	5773	1266	4318	871	2973
	500	15	2115	7216	1582	5398	1089	3716
	600	18	2538	8660	1898	6477	1307	4460
	700	21	2961	10103	2215	7557	1525	5203

Weights & Measures

K2



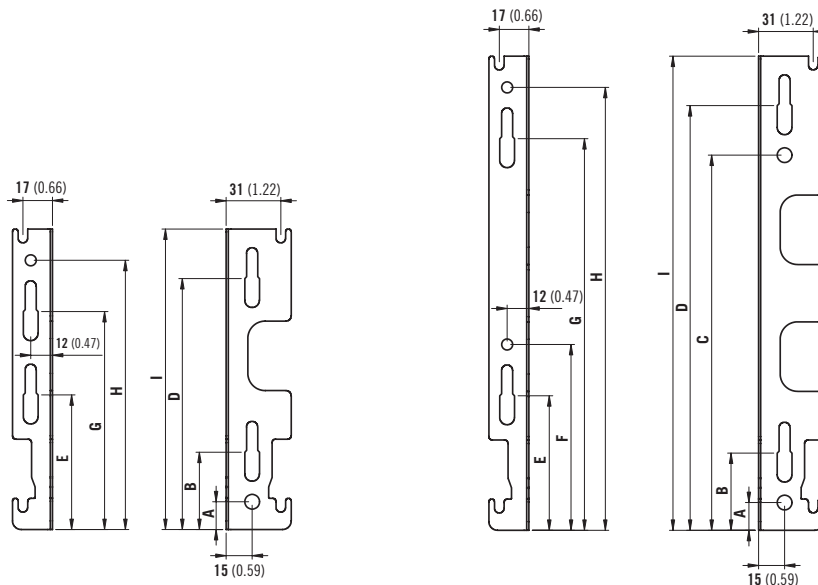
Height	Length		Wall to tap centre mm	Dry weight Kg	Water content Litres	Surface area m ² /m
	mm	in				
1800	400	15.7	65	42.12	6.36	11.96
	500	19.7	65	52.65	7.95	14.95
	600	23.6	65	63.18	9.54	17.94
	700	27.6	65	73.71	11.13	20.93
2000	400	15.7	65	46.56	7.08	15.10
	500	19.7	65	58.20	8.85	18.87
	600	23.6	65	69.84	10.62	22.64
	700	27.6	65	81.48	12.39	26.42
2200	400	15.7	65	50.64	8.04	15.46
	500	19.7	65	63.30	10.05	19.30
	600	23.6	65	75.96	12.06	23.16
	700	27.6	65	88.62	14.07	27.02

EN 442 Certification Data – CETIAT tested in accordance with BS EN 442

Type	K2		
	1800	2000	2200
Height	1800	2000	2200
W/m at 75/65/20	3690	3960	4230
n-coefficients	1.32	1.33	1.33
Heated Surface Area (m ² /m)	29.90	37.74	38.66
Weight (kg/m)	105.30	116.40	126.60
Water Contents (l/m)	15.90	17.70	20.10

Planar Horizontal mounting brackets

All dimensions in mm. Inches in brackets.



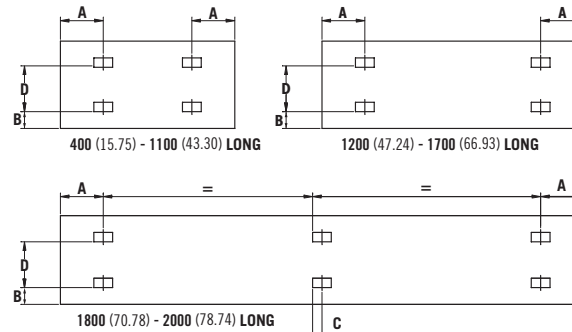
K1 and K2
(300mm)

K1 and K2
(400, 500 & 600mm)

Dimensions	mm	in	mm	in	mm	in	mm	in
	300	11.81	400	15.75	500	19.69	600	23.62
A	16	0.62	16	0.62	16	0.62	16	0.62
B	44	1.73	44	1.73	44	1.73	44	1.73
C	-	-	216	8.50	316	12.44	416	16.37
D	144	5.66	244	9.60	344	13.54	444	17.48
E	77	3.03	77	3.03	77	3.03	77	3.03
F	-	-	107	4.21	107	4.21	107	4.21
G	125	4.92	225	8.85	325	12.79	425	16.73
H	155	6.10	255	10.03	355	13.97	455	17.91
I	173	6.81	273	10.74	373	14.68	473	18.62

K1 and K2 lug positions

All dimensions in mm. Inches in brackets.



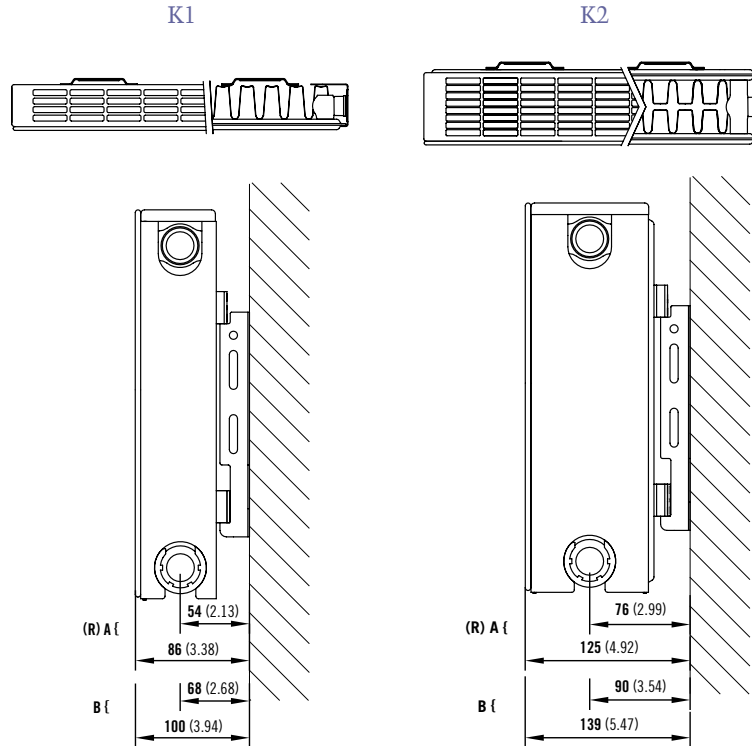
Dimensions	mm	in
A	400mm	117 4.61
A	500 - 1100mm	150 5.91
A	1200 - 2000mm	283 11.14
B	All	60 2.36
C	1800 - 3000mm	17 0.67

Dimensions	mm	in
A	400 - 1100mm	133 5.24
A	1200 - 2000mm	267 10.50
B	All	60 2.36

Panel Height	mm	in	mm	in
D	300	11.81	155	6.10
D	400	15.75	255	10.04
D	500	19.69	355	13.98
D	600	23.62	455	17.93

Planar wall mounting information

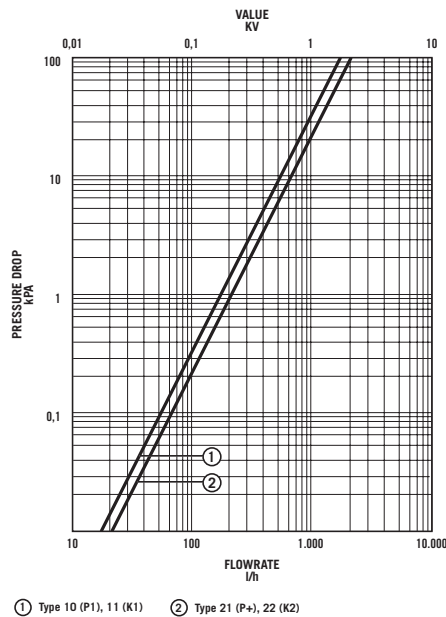
All dimensions in mm. Inches in brackets.



Planar bracket position

A = Closest to Wall B = Furthest from Wall (R) = Recommended Mounting Position

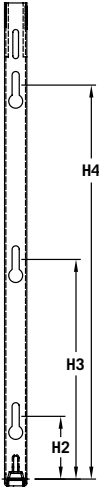
Pressure drops



Planar Vertical mounting brackets

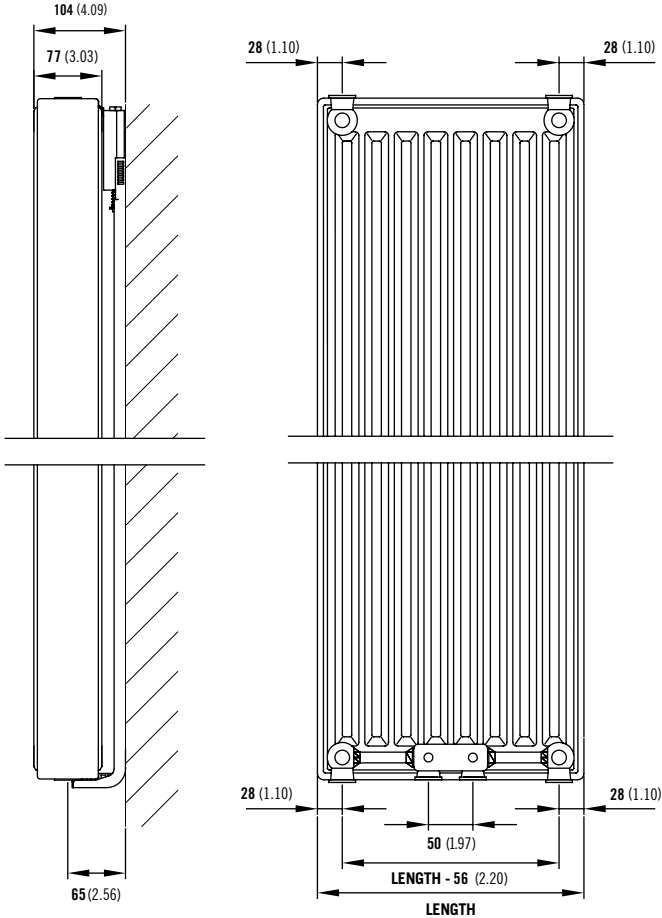
All dimensions in mm. Inches in brackets.

Height	H2		H3		H4		
	mm	in	mm	in	mm	in	
1800	70.87	70	2.75	1115	43.89	1615	63.58
2000	78.74	70	2.75	1215	47.83	1815	71.46
2200	86.61	70	2.75	1315	51.77	2015	79.33



Planar Vertical wall mounting information

All dimensions in mm. Inches in brackets.



Comes complete with Stelrad's class leading safety bracket.



Elegant top grilles and side panels.



Floor standing brackets provide a practical solution, where situations, such as floor to ceiling windows or tiled walls, create installation difficulties.



Robust, packaging protects the radiator during storage and transit.



All fixing requirements are complete within the packaging.



Optional extension pieces for easy replacement.



Optional 3/4 inch valve adaptor for connection without performance reduction.



The Stelrad STARS Heatloss Calculator contains an inbuilt U value calculator.

Save time and effort by using the Stelrad STARS program – the perfect solution for accurate sizing and design flexibility.

Planar temperature table

TEMPERATURES

Factors for differences between mean water temperature and room temperature in °C and °F other than 50°C (90°F)

°C		°F	
5	0.050	10	0.057
10	0.123	20	0.142
15	0.209	30	0.240
20	0.304	40	0.348
25	0.406	50	0.466
30	0.515	60	0.590
35	0.629	70	0.721
40	0.748	80	0.858
45	0.872	90	1.000
50	1.000	100	1.147
55	1.132	110	1.298
60	1.267	120	1.454
65	1.406	130	1.613
70	1.549	140	1.776
75	1.694	-	-

To apply the factors shown in the table above to our quoted outputs, multiply the quoted output by the chosen operating factor to give new output.

To apply the factor to required output, divide required output by factor to give correct radiator from the Stelrad Planar range.

Testing and operating pressures

All models are high pressure tested to withstand 152.3 psi (10.5 bar), to perform at a maximum working pressure of 116 psi (8 bar) at a maximum temperature of 95°C.

Connections

Each Stelrad Planar Horizontal radiator has 4 x 1/2 inch connections as standard. The Planar Vertical has 6 x 1/2 inch connections. There is also a 3/4 inch valve adaptor available, which provides a 3/4 inch connector option to the valve without reducing performance.

Applications

Planar radiators are suitable for two pipe installations. For single pipe applications, it is advisable to use diversion tees in the pipework, as this will assist in obtaining design performance from the radiators.

Although the Stelrad Planar is suitable for Microbore pipework, the back tappings make it unsuitable for twin entry valves.

Installation

Everything required for installation can be found within the robust packaging.

Brackets are of a strong design, with open top and deep slots, which facilitate easy and secure installation. Plastic inserts seat the radiator precisely on the bracket minimising expansion and contraction noise.

The neat nickel-plated plug and vent provide a watertight joint, whilst complementing the superior finish.

To facilitate easy one off replacement nickel-plated brass extension pieces are also available, complete with sealing washer, in 20mm, 30mm and 40mm options.

Recommended height from the floor to the base of the radiator is 150 mm minimum. This allows adequate airflow when the radiator is placed on the bracket.

Caution

When designing for domestic systems we recommend that the Stelrad Planar be used only in heating systems complying with British Standard Code of Practice for Central Heating for Domestic Premises BS EN 2828:2003 and BS EN 12831:2003.

Single feed, indirect cylinders are not recommended as should interchange of water occur, fresh aerated water would enter the heating system, resulting in corrosion.

Water treatment

On completion of the installation, the system should be properly flushed and filled in accordance with the British Standard Code of Practice for the Treatment of Water in Domestic Hot Water Central Heating Systems BS 7593:2006.

This will remove flux residues and installation debris, which might promote corrosion and damage within the system.

If it is decided to apply a high performance corrosion inhibitor to maximise the working life of the system, it should be applied in accordance with the manufacturer's instructions and should be suitable for the particular metals within the system.

A comprehensive range of quality chemicals including inhibitors, cleaners, leak sealers and noise reducers that protect and maintain central heating systems can be obtained from:

Sentinel Performance Solutions Ltd
The Heath Business & Technical Park, Runcorn,
Cheshire WA7 4QX

Tel: 01928 588 330 (UK)

Fernox - Cookson Electronics,
Forsyth Road, Sheerwater, Woking,
Surrey GU21 5RZ

Tel: 01483 793200

Two coat paint process

Each Stelrad Planar radiator is subjected to a multi stage cleaning process before the paint is applied.

This involves several rinsing stages, including an iron phosphate and demineralisation rinse.

The first coat of paint is applied by dipping and the radiator is then stoved and cooled. The second powder coat is applied and the radiator goes through a final curing stage. It is then allowed to cool prior to packaging.