



Ambiguard LST Range

Low surface temperature (LST) radiator system



Features and Benefits

- *Rounded corners with no sharp edges*
- *Easy to install (no special tools or fasteners required)*
- *Pencil proof 'closure lock' grilles (no screws)*
- *Lockable access panels (easy access for cleaning)*
- *Reflective backplate to enhance heating efficiency*

Material: Steel (1.2mm)

Heights: 440 – 2400mm

Widths: 500 – 2400mm

Finned Element Models: 2500

Outputs: 93 – 5172 watts



Ambiguard product range

Casings

Backplates (heat reflective) are fabricated from 1.2mm thick galvanised steel, include integral 'fold-out' emitter brackets and are pre-formed to provide a drilling and fixing template.

Side panels are manufactured from 1.2mm thick mild steel and finished in a polyester powder coating. They have rounded corners and removable/repositionable blanking plates, ready to accept TRV adjusters. Pipework cut-outs are available to be specified at time of order at extra cost.

Grilles are formed from polyester powder coated extruded aluminium with 'pencil proof' openings and are removable to allow cleaning, without the need for tools.

Front access panels are 1.2mm thick mild steel, finished in polyester powder coating and include robust key operated latches to enable easy access for venting, cleaning and maintenance.

Style A cases consist of backplate, side panels, top outlet grille, bottom inlet grille and front access panel.

Style B cases consist of backplate, side panels, top outlet grille, front facing inlet grille and front access panel.

Style C cases consist of backplate, side panels, top outlet grille, front facing inlet grille, plinth and front access panel. Plinths (Style C) are 1.2mm thick mild steel and finished in polyester powder coating, as well as removable and ready to fit into the side panels.

Style T cases consist of backplate, side panels, solid top, front facing inlet and outlet grilles and front access panel.

Style D cases consist of backplate, side panels, top outlet grilles, front facing inlet grilles and front access panels.

Test and working pressures/temperatures

All emitters are suitable for maximum cold test pressure of 10.5 bar and maximum working pressure of 8.0 bar.

Element emitters have a maximum working temperature of 110°C.

Automatic airvents maximum cold test pressure is 8.5 bar; maximum working pressure 8.5 bar @ 110°C.

The output of the Ambiguard range has been tested by BSRIA in accordance with BSEN442 at Δt 50°C.

Element emitter

Element emitters consist of finned tube blocks with aluminium fins mechanically bonded to the Ø15mm copper tube to ensure maximum heat transfer between fins and tube.

All bends and fittings within the element blocks shall be formed from brazed capillary fittings. All copper tube/aluminium element blocks are available in lengths to match the casings.

Types E11 and E21 shall be installed in 97mm deep casing; types E12 and E22 in 161mm deep casings and types E23 and E33 in 235mm deep casings.

Element blocks have plain Ø15mm OD tails, suitable for proprietary 15mm connection fittings and supplied with an automatic air vent which permits the element to be vented without removing the front access panel.

Finish

Backplates and internal brackets are self-finished hot dipped galvanised steel. Cases (front access panels, side panels, grilles and plinths) are degreased, iron phosphated and coated in polyester powder RAL 9010 white 30% gloss as standard.

Other colours are available at extra cost, please see page 31 for details.

Warranty

Each Ambiguard LST radiator is backed by a 5-year warranty in respect of defective materials and manufacture defects.

How to specify

1. Calculate the heat losses to be satisfied by the Ambiguard LST radiators. (Prefix code AG)
2. Choose the casing style for the room application. (Example Style B)
3. Decide on the emitter type - Element or Panel. (Example E11 Emitter)
4. Select the casing height. (Example 765mm height = 0765)
5. Select the casing width. (Example 1100mm width = 11)
6. Apply the correction factor if LPHW conditions are not $\Delta T=50^\circ\text{C}$.

Example code for above = AG-B-E11-0765-11 for Ambiguard Type B c/w E11 Emitter (H) 0765 (W) 1100 (D) 097

Ambiguard casing styles



Style A



Style B



Style C

Style D vertical casings
Image shown with optional external valve

Style T

Design features



Rounded corners with no sharp edges



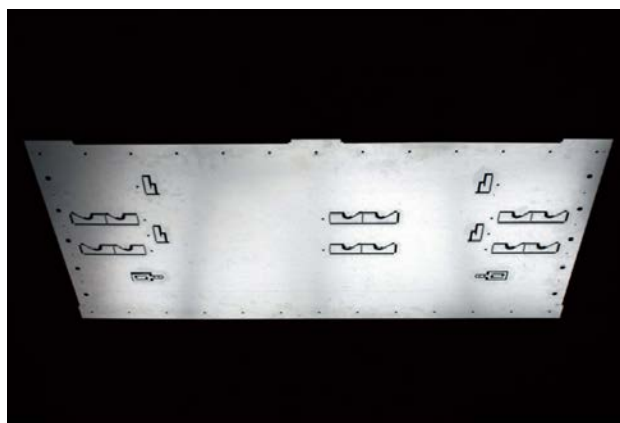
Lockable access panels



Pencil proof grilles



'Closure-lock' grilles (no screws)



Heat reflective backplate



Integral brackets



Internal TRV (tamper-proof)



External TRV (non-handed)



Installation sequence

Element emitters First Fix



Backplates (1st fix)

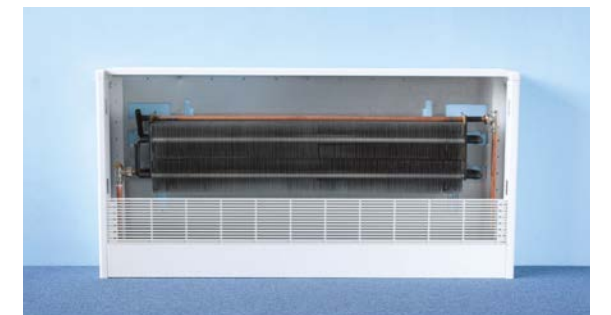


Emitters and valves (1st fix)

Element emitters Second Fix



Sideplates (2nd fix)



Grilles (2nd fix)



Casings (2nd fix)

Ambiguard Style A

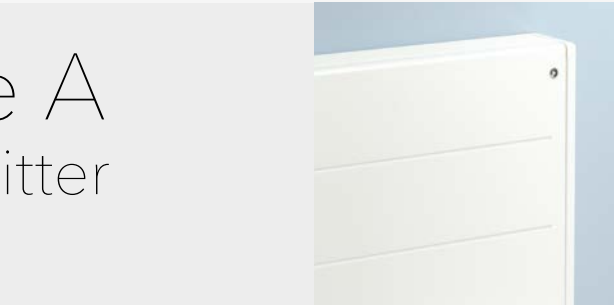
with finned element emitter

Overview

The Ambiguard Style A Casing c/w finned element LST is made from 1.2mm steel casing finished to Pure White semi matt RAL 9010 finish with 11 other preferred colours available at additional cost. The Ambiguard casing is supplied with rounded corners, lockable access panel, pencil proof grilles and a heat reflective backplate. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

Features

- Models - Wall Mounted with top outlet grille, bottom inlet grille and front access panel.
- Material - 1.2mm steel case (Emitters are of aluminium/copper finned construction)
- Finish - RAL 9010 Pure White semi matt finish
- Heights - 440 - 1140mm
- Widths - 500 - 2400mm
- Depths - Types E11 and E21 Emitter: 97mm
- Types E12 and E22 Emitter: 161mm
- Sizes - 600
- Outputs - 94 - 3794 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipe work cut-outs at additional cost to be specified with order. (See page 32 for additional information.)



Flat fronted version available on request

Ambiguard Style A

with finned element emitter

Technical

Casing Style Type A (Wall Mounted) with top and bottom inlet grille c/w E11 and E21 finned element case depth 97mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
440	E11	94	142	189	236	283	330	377	425	472	519	566	613	660	708	755	802	849	896
	E21	99	148	198	247	297	346	395	445	494	544	593	643	692	742	791	840	890	939
540	E11	140	210	280	350	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1329
	E21	146	219	292	365	437	510	583	656	729	802	875	948	1021	1094	1167	1239	1312	1385
640	E11	102	153	204	255	306	358	409	460	511	562	613	664	715	766	817	868	919	971
	E21	106	157	209	262	314	366	418	471	523	575	628	680	732	785	837	889	941	994
740	E11	105	157	209	262	314	366	418	471	523	575	628	680	732	785	837	889	941	994
	E21	152	228	304	380	456	532	608	684	760	836	912	988	1064	1140	1215	1291	1367	1443
840	E11	106	160	213	266	319	372	426	479	532	585	639	692	745	798	851	905	958	1011
	E21	158	237	317	396	475	554	633	712	791	871	950	1029	1108	1187	1266	1346	1425	1504
940	E11	108	162	216	269	323	377	431	485	539	593	647	700	754	808	862	916	970	1024
	E21	165	247	330	412	495	577	660	742	825	907	990	1072	1154	1237	1319	1402	1484	1567
1040	E11	109	163	217	272	326	381	435	489	544	598	652	707	761	815	870	924	978	1033
	E21	172	258	344	430	515	601	687	773	859	945	1031	1117	1203	1289	1375	1460	1546	1632
1140	E11	109	164	219	273	328	383	438	492	547	602	656	711	766	820	875	930	984	1039
	E21	179	269	358	448	537	627	716	806	895	985	1074	1164	1253	1343	1432	1522	1611	1701

Casing Style Type A (Wall Mounted) with top and bottom inlet grille c/w E12 and E22 finned element case depth 161mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
440	E12	217	325	434	542	650	759	867	976	1084	1192	1301	1409	1518	1626	1734	1843	1951	2060
	E22	225	338	451	564	676	789	902	1014	1127	1240	1352	1465	1578	1691	1803	1916	2029	2141
540	E12	292	438	584	730	876	1022	1168	1314	1460	1606	1752	1898	2044	2191	2337	2483	2629	2775
	E22	232	348	464	580	696	813	929	1045	1161	1277	1393	1509	1625	1741	1857	1973	2089	2205
640	E12	309	463	617	771	926	1080	1234	1388	1543	1697	1851	2005	2160	2314	2468	2623	2777	2931
	E22	238	356	475	594	713	832	951	1069	1188	1307	1426	1545	1663	1782	1901	2020	2139	2258
740	E12	322	483	645	806	967	1128	1289	1450	1612	1773	1934	2095	2256	2417	2579	2740	2901	3062
	E22	242	363	484	606	727	848	969	1090	1211	1332	1453	1574	1695	1817	1938	2059	2180	2301
840	E12	334	501	668	835	1002	1169	1336	1504	1671	1838	2005	2172	2339	2506	2673	2840	3007	3174
	E22	246	369	492	615	738	861	984	1107	1230	1353	1476	1599	1723	1846	1969	2092	2215	2338
940	E12	344	517	689	861	1033	1205	1377	1550	1722	1894	2066	2238	2411	2583	2755	2927	3099	3271
	E22	249	374	499	623	748	873	998	1122	1247	1372	1496	1621	1746	1870	1995	2120	2245	2369
1040	E12	353	530	707	883	1060	1237	1413	1590	1767	1943	2120	2297	2473	2650	2827	3003	3180	3357
	E22	252	378	505	631	757	883	1009	1135	1261	1388	1514	1640	1766	1892	2018	2144	2271	2397
1140	E12	361	542	723	903	1084	1265	1445	1626	1807	1987	2168	2348	2529	2710	2890	3071	3252	3432
	E22	252	378	505	631	757	883	1009	1135	1261	1388	1514	1640	1766	1892	2018	2144	2271	2397

Note: All Style A Wall Mounted models must be mounted 100mm above finished floor level.

Ambiguard Style B

with finned element emitter

Overview



The Ambiguard Style B Casing c/w finned element LST is made from 1.2mm steel casing finished to Pure White semi matt RAL 9010 finish with 11 other preferred colours available at additional cost. The Ambiguard casing is supplied with rounded corners, lockable access panel, pencil proof grilles and a heat reflective backplate. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipe work cut-outs at additional cost to be specified with order. (See page 32 for additional information.)

Features

- Models - With top outlet grille , front facing inlet grille and front access panel.
- Material - 1.2mm steel case (Emitters are of aluminium/copper finned construction)
- Finish - RAL 9010 Pure White semi matt finish
- Heights - 465 - 1165mm
- Widths - 500 - 2400mm
- Depths - Types E11 and E21 Emitter: 97mm
 - Types E12 and E22 Emitter: 161mm
 - Types E23 and E33 Emitter: 235mm
- Sizes - 720
- Outputs - 93 - 5172 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Flat fronted version available on request

Casing Style Type B (Floor Mounted) with top and bottom inlet grille c/w E11 and E21 finned element case depth 97mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
465	E11	93	140	186	233	280	326	373	420	466	513	559	606	653	699	746	793	839	886
565	E11	98	147	196	245	294	343	392	441	490	539	588	638	687	736	785	834	883	932
	E21	139	208	278	347	416	486	555	625	694	763	833	902	972	1041	1110	1180	1249	1319
665	E11	102	152	203	254	305	356	406	457	508	559	609	660	711	762	813	863	914	965
	E21	145	217	289	362	434	506	579	651	723	795	868	940	1012	1085	1157	1229	1302	1374
765	E11	104	156	208	260	313	365	417	469	521	573	625	677	729	781	833	885	938	990
	E21	151	226	301	377	452	527	603	678	753	829	904	979	1055	1130	1206	1281	1356	1432
865	E11	106	159	212	265	318	371	424	477	530	584	637	690	743	796	849	902	955	1008
	E21	157	236	314	393	471	550	628	707	785	864	942	1021	1099	1178	1256	1335	1413	1492
965	E11	108	161	215	269	323	376	430	484	538	591	645	699	753	806	860	914	968	1021
	E21	164	245	327	409	491	573	654	736	818	900	981	1063	1145	1227	1309	1390	1472	1554
1065	E11	109	163	217	271	326	380	434	488	543	597	651	706	760	814	868	923	977	1031
	E21	170	256	341	426	511	596	682	767	852	937	1023	1108	1193	1278	1363	1449	1534	1619
1165	E11	109	164	219	273	328	382	437	492	546	601	656	710	765	820	874	929	983	1038
	E21	178	266	355	444	533	621	710	799	888	976	1065	1154	1243	1332	1420	1509	1598	1687

Casing Style Type B (Floor Mounted) with top and bottom inlet grille c/w E12 and E22 finned element case depth 161mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
465	E12	215	322	430	537	644	752	859	966	1074	1181	1289	1396	1503	1611	1718	1825	1933	2040
565	E12	224	336	448	560	672	784	895	1007	1119	1231	1343	1455	1567	1679	1791	1903	2015	2127
	E22	288	433	577	721	865	1009	1153	1298	1442	1586	1730	1874	2019	2163	2307	2451	2595	2739
665	E12	231	346	462	577	693	808	924	1039	1155	1270	1386	1501	1616	1732	1847	1963	2078	2194
	E22	305	458	611	764	916	1069	1222	1375	1527	1680	1833	1986	2138	2291	2444	2597	2749	2902
765	E12	237	355	473	592	710	828	946	1065	1183	1301	1420	1538	1656	1775	1893	2011	2130	2248
	E22	320	480	639	799	959	1119	1279	1439	1599	1759	1918	2078	2238	2398	2558	2718	2878	3038
865	E12	241	362	483	603	724	845	965	1086	1207	1327	1448	1569	1689	1810	1931	2051	2172	2293
	E22	332	498	664	830	996	1162	1328	1494	1659	1825	1991	2157	2323	2489	2655	2821	2987	3153
965	E12	245	368	491	613	736	859	981	1104	1227	1349	1472	1595	1717	1840	1963	2085	2208	2331
	E22	342	514	685	856	1027	1198	1370	1541	1712	1883	2055	2226	2397	2568	2739	2911	3082	3253
1065	E12	249	373	498	622	746	871	995	1119	1244	1368	1493	1617	1741	1866	1990	2115	2239	2363
	E22	352	527	703	879	1055	1231	1407	1582	1758	1934	2110	2286	2461	2637	2813	2989	3165	3341
1165	E12	252	378	503	629	755	881	1007	1133	1259	1385	1510	1636	1762	1888	2014	2140	2266	2391
	E22	360	540	720	899	1079	1259	1439	1619	1799	1979	2159	2339	2519	2698	2878	3058	3238	3418

Casing Style Type B (Floor Mounted) with top and front facing bottom inlet grille c/w E23 and E33 finned Element case depth 235mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
665	E23	393	589	785	981	1178	1374	1570	1766	1963	2159	2355	2552	2748	2944	3140	3337	3533	3729
	E33	432	648	864	1080	1295	1511	1727	1943	2159	2375	2591	2807	3023	3239	3454	3670	3886	4102
765	E23	422	633	844	1055	1266	1477	1688	1899	2110	2321	2532	2743	2954	3165	3376	3587	3798	4008
	E33	464	696	928	1160	1392	1625	1857	2089	2321	2553	2785	3017	3249	3481	3713	3945	4177	4409
865	E23	448	672	896	1120	1343	1567	1791	2015	2239	2463	2687	2911	3135	3359	3583	3806	4030	4254
	E33	493	739	985	1231	1478	1724	1970	2217	2463	2709	2956	3202	3448	3694	3941	4187	4433	4680

Ambiguard Style C

with finned element emitter

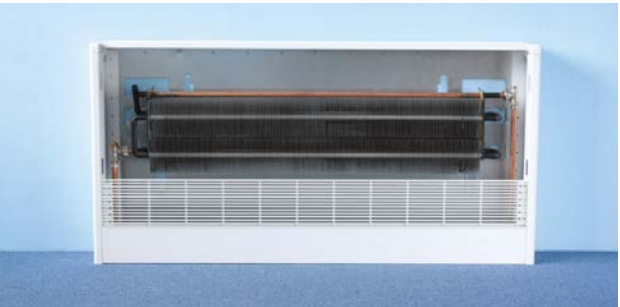
Overview



The Ambiguard Style C Casing c/w finned element LST is made from 1.2mm steel casing finished to Pure White semi matt RAL 9010 finish with 11 other preferred colours available at additional cost. The Ambiguard casing is supplied with rounded corners, lockable access panel, pencil proof grilles and a heat reflective backplate. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

Features

- Models - With top outlet grille , front facing inlet grille, 85mm high plinth and front access panel.
- Material - 1.2mm steel case (Emitters are of aluminium/copper finned construction)
- Finish - RAL 9010 Pure White semi matt finish
- Heights - 550 - 1150mm
- Widths - 500 - 2400mm
- Depths - Types E11 and E21 Emitter: 97mm
- Types E12 and E22 Emitter: 161mm
- Sizes - 520
- Outputs - 94 -3697 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Internal Style C casing with finned element

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipe work cut-outs at additional cost to be specified with order. (See page 32 for additional information.)

Ambiguard Style C

with finned element emitter

Technical



Casing Style Type C (Floor Mounted) with top and front facing bottom inlet grille and 85mm high plinth c/w E11 and E21 finned Element case depth 97mm

Case Height (mm)	Emitter Type	Case Width (mm)																
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
		Output Watts Δt 50°C																
550	E11	94	140	187	234	281	327	374	421	468	514	561	608	655	701	748	795	842
650	E11	98	147	197	246	295	344	393	442	491	541	590	639	688	737	786	835	885
	E21	139	209	278	348	417	487	556	626	695	765	835	904	974	1043	1113	1182	1252
750	E11	102	153	203	254	305	356	407	458	509	560	610	661	712	763	814	865	916
	E21	145	217	290	362	435	507	580	652	725	797	870	942	1014	1087	1159	1232	1304
850	E11	104	156	209	261	313	365	417	469	521	574	626	678	730	782	834	886	939
	E21	151	227	302	378	453	529	604	680	755	831	906	982	1057	1133	1208	1284	1359
950	E11	106	159	212	265	319	372	425	478	531	584	637	690	743	796	849	903	956
	E21	157	236	315	393	472	551	629	708	787	865	944	1023	1101	1180	1259	1337	1416
1050	E11	108	161	215	269	323	377	430	484	538	592	646	699	753	807	861	914	968
	E21	164	246	328	410	492	574	656	738	820	902	983	1065	1147	1229	1311	1393	1475
1150	E11	109	163	217	271	326	380	434	489	543	597	652	706	760	814	869	923	977
	E21	171	256	342	427	512	598	683	768	854	939	1025	1110	1195	1281	1366	1452	1537

Casing Style Type C (Floor Mounted) with top and front facing bottom inlet grille and 85mm high plinth c/w E12 and E22 finned Element case depth 161mm

Case Height (mm)	Emitter Type	Case Width (mm)																
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
		Output Watts Δt 50°C																
550	E12	215	323	431	538	646	753	861	969	1076	1184	1292	1399	1507	1615	1722	1830	1937
650	E12	224	336	449	561	673	785	897	1009	1121	1233	1346	1458	1570	1682	1794	1906	2018
	E22	289	434	579	723	868	1013	1157	1302	1447	1591	1736	1880	2025	2170	2314	2459	2604
750	E12	231	347	462	578	694	809	925	1041	1156	1272	1387	1503	1619	1734	1850	1965	2081
	E22	306	459	613	766	919	1072	1225	1378	1531	1684	1838	1991	2144	2297	2450	2603	2756
850	E12	237	355	474	592	711	829	948	1066	1184	1303	1421	1540	1658	1777	1895	2013	2132
	E22	320	481	641	801	961	1121	1282	1442	1602	1762	1922	2083	2243	2403	2563	2723	2884
950	E12	242	362	483	604	725	845	966	1087	1208	1329	1449	1570	1691	1812	1933	2053	2174
	E22	332	499	665	831	997	1164	1330	1496	1662	1829	1995	2161	2327	2493	2660	2826	2992
1050	E12	246	368	491	614	737	859	982	1105	1228	1350	1473	1596	1719	1841	1964	2087	2210
	E22	343	514	686	857	1029	1200	1372	1543	1715	1886	2057	2229	2400	2572	2743	2915	3086
1150	E12	249	373	498	622	747	871	996	1120	1245	1369	1494	1618	1743	1867	1991	2116	2240
	E22	352	528	704	880	1056	1232	1408	1584	1760	1936	2112	2288	2465	2641	2817	2993	3169

Ambiguard Style T with finned element emitter Overview

The Ambiguard Style T Casing c/w finned element LST is made from 1.2mm steel casing finished to Pure White semi matt RAL 9010 finish with 11 other preferred colours available at additional cost. The Ambiguard casing is supplied with rounded corners, lockable access panel, pencil proof grilles and a heat reflective backplate. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

Features

- Models - With solid top, top outlet and bottom inlet front facing grilles and front access panel.
- Material - 1.2 mm steel case (Emitters are of aluminium/copper finned construction)
- Finish - RAL 9010 Pure White semi matt finish
- Heights - 615 - 1015mm
- Widths - 500 - 2400mm
- Depths - Types E11 and E21 Emitter: 97mm
- Types E12 and E22 Emitter: 161mm
- Types E23 and E33 Emitter: 235mm
- Sizes - 500
- Outputs - 93 - 5172 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipe work cut-outs at additional cost to be specified with order. (See page 32 for additional information.)

Ambiguard Style T with finned element emitter Technical



Casing Style Type T (Floor Mounted) with Solid Top and top and bottom front facing inlet grilles c/w E11 and E21 finned Element case depth 97mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
615	E11	93	140	186	233	280	326	373	420	466	513	559	606	653	699	746	793	839	886
715	E11	98	147	196	245	294	343	392	441	490	539	588	638	687	736	785	834	883	932
	E21	139	208	278	347	416	486	555	625	694	763	833	902	972	1041	1110	1180	1249	1319
815	E11	102	152	203	254	305	356	406	457	508	559	609	660	711	762	813	863	914	965
	E21	145	217	289	362	434	506	579	651	723	795	868	940	1012	1085	1157	1229	1302	1374
915	E11	104	156	208	260	313	365	417	469	521	573	625	677	729	781	833	885	938	990
	E21	151	226	301	377	452	527	603	678	753	829	904	979	1055	1130	1206	1281	1356	1432
1015	E11	106	159	212	265	318	371	424	477	530	584	637	690	743	796	849	902	955	1008
	E21	157	236	314	393	471	550	628	707	785	864	942	1021	1099	1178	1256	1335	1413	1492

Casing Style Type T (Floor Mounted) with Solid Top and top and bottom front facing inlet grilles c/w E12 and E22 finned Element case depth 161mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
615	E12	215	322	430	537	644	752	859	966	1074	1181	1289	1396	1503	1611	1718	1825	1933	2040
715	E12	224	336	448	560	672	784	895	1007	1119	1231	1343	1455	1567	1679	1791	1903	2015	2127
	E22	288	433	577	721	865	1009	1153	1298	1442	1586	1730	1874	2019	2163	2307	2451	2595	2739
815	E12	231	346	462	577	693	808	924	1039	1155	1270	1386	1501	1616	1732	1847	1963	2078	2194
	E22	305	458	611	764	916	1069	1222	1375	1527	1680	1833	1986	2138	2291	2444	2597	2749	2902
915	E12	237	355	473	592	710	828	946	1065	1183	1301	1420	1538	1656	1775	1893	2011	2130	2248
	E22	320	480	639	799	959	1119	1279	1439	1599	1759	1918	2078	2238	2398	2558	2718	2876	3038
1015	E12	241	362	483	603	724	845	965	1086	1207	1327	1448	1569	1689	1810	1931	2051	2172	2293
	E22	332	498	664	830	996	1162	1328	1494	1659	1825	1991	2157	2323	2489	2655	2821	2987	3153

Casing Style Type T (Floor Mounted) with Solid Top and top and bottom front facing inlet grilles c/w E23 and E33 finned Element case depth 235mm

Case Height (mm)	Emitter Type	Case Width (mm)																	
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Output Watts Δt 50°C																	
815	E23	393	589	785	981	1178	1374	1570	1766	1963	2159	2355	2552	2748	2944	3140	3337	3533	3729
915	E23	422	633	844	1055	1266	1477	1688	1899	2110	2321	2532	2743	2954	3165	3376	3587	3798	4008
	E33	464	696	928	1160	1392	1625	1857	2089	2321	2553	2785	3017	3249	3481	3713	3945	4177	4409
1015	E23	448	672	896	1120	1343	1567	1791	2015	2239	2463	2687	2911	3135	3359	3583	3806	4030	4254
	E33	493	739	985	1231	1478	1724	1970	2217	2463	2709	2956	3202	3448	3694	3941	4187	4433	4680

Ambiguard Style D with finned element emitter Overview

The Ambiguard Style D Casing c/w finned element LST is made from 1.2mm steel casing finished to Pure White semi matt RAL 9010 finish with 11 other preferred colours available at additional cost. The Ambiguard casing is supplied with rounded corners, lockable access panel, pencil proof grilles and a heat reflective backplate. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipe work cut-outs at additional cost to be specified with order. (See page 32 for additional information.)

Features

- Models - With top outlet grille , front facing inlet grille and front access panel.
- Material - 1.2mm steel case (Emitters are of aluminium/copper finned construction)
- Finish - RAL 9010 Pure White semi matt finish
- Heights - 1500 - 2400mm
- Widths - 500 - 1200mm
- Depths - Types E22 Emitter: 161mm
Types E23 Emitter: 235mm
- Sizes - 160
- Outputs - 367 - 2854 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years

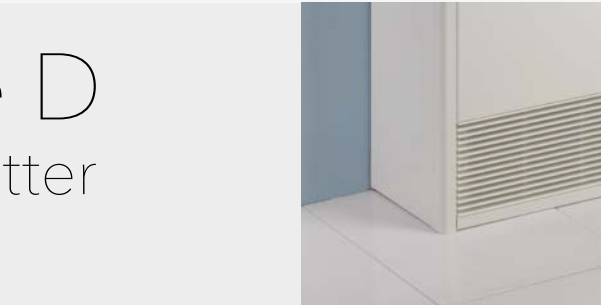


Image shown with optional external valve fitted

Ambiguard Style D with finned element emitter Technical



Casing Style D (floor mounted) with top and bottom front facing grilles c/w E22 finned element case depth 161mm

Case Height (mm)	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
Emitter Type	E22	E22	E22	E22	E22	E22	E22	E22	E22	E22
Case Width (mm)	Output Watts Δt 50°C									
500	367	369	371	374	378	382	387	392	398	404
600	550	553	557	562	567	574	581	589	597	606
700	734	737	742	749	756	765	774	785	796	808
800	917	922	928	936	945	956	968	981	995	1010
900	1100	1106	1114	1123	1134	1147	1161	1177	1194	1212
1000	1284	1290	1299	1310	1323	1338	1355	1373	1393	1414
1100	1467	1475	1485	1497	1512	1529	1549	1569	1592	1617
1200	1651	1659	1670	1685	1701	1721	1742	1766	1791	1819

Casing Style D (floor mounted) with top and bottom front facing grilles c/w E23 finned element case depth 235mm

Case Height (mm)	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
Emitter Type	E23	E23	E23	E23	E23	E23	E23	E23	E23	E23
Case Width (mm)	Output Watts Δt 50°C									
500	540	555	568	580	591	601	610	619	627	634
600	811	832	852	870	886	902	916	929	940	951
700	1081	1109	1136	1160	1182	1202	1221	1238	1254	1268
800	1351	1387	1420	1450	1477	1503	1526	1548	1567	1585
900	1621	1664	1704	1740	1773	1803	1831	1857	1881	1902
1000	1891	1942	1988	2030	2068	2104	2136	2167	2194	2219
1100	2162	2219	2271	2320	2364	2404	2442	2476	2508	2536
1200	2432	2496	2555	2610	2659	2705	2747	2786	2821	2854

All outputs shown are watts at 75/65/20°C Δt50°C EN442 operating conditions.

Case weights

Casing Style Type A (Wall Mounted) with top and bottom inlet grille

Case Height (mm)	Case Depth (mm)	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
440	97	6.4	7.5	8.6	9.7	10.7	11.8	12.9	14.0	15.1	16.2	17.3	18.4	19.5	20.6	21.7	22.8	23.9	25.0	26.1	27.2
	161	7.6	8.8	10.0	11.3	12.5	13.7	15.0	16.2	17.4	18.6	19.9	21.1	22.3	23.6	24.8	26.0	27.2	28.5	29.7	30.9
540	97	7.6	8.9	10.2	11.5	12.8	14.1	15.4	16.7	18.0	19.3	20.6	21.9	23.2	24.5	25.8	27.1	28.4	29.7	31.0	32.3
	161	8.9	10.4	11.8	13.2	14.7	16.1	17.5	19.0	20.4	21.8	23.3	24.7	26.1	27.6	29.0	30.4	31.9	33.3	34.7	36.2
640	97	8.8	10.3	11.8	13.3	14.8	16.3	17.8	19.3	20.8	22.4	23.9	25.4	26.9	28.4	29.9	31.4	32.9	34.4	35.9	37.4
	161	10.3	11.9	13.6	15.2	16.8	18.5	20.1	21.7	23.4	25.0	26.7	28.3	29.9	31.6	33.2	34.8	36.5	38.1	39.8	41.4
740	97	10.0	11.7	13.4	15.2	16.9	18.6	20.3	22.0	23.7	25.4	27.1	28.8	30.5	32.3	34.0	35.7	37.4	39.1	40.8	42.5
	161	11.6	13.5	15.3	17.2	19.0	20.8	22.7	24.5	26.4	28.2	30.1	31.9	33.7	35.6	37.4	39.3	41.1	42.9	44.8	46.6
840	97	11.2	13.2	15.1	17.0	18.9	20.8	22.7	24.6	26.6	28.5	30.4	32.3	34.2	36.1	38.0	40.0	41.9	43.8	45.7	47.6
	161	13.0	15.0	17.1	19.1	21.2	23.2	25.3	27.3	29.4	31.4	33.4	35.5	37.5	39.6	41.6	43.7	45.7	47.8	49.8	51.9
940	97	12.5	14.6	16.7	18.8	20.9	23.1	25.2	27.3	29.4	31.5	33.7	35.8	37.9	40.0	42.1	44.2	46.4	48.5	50.6	52.7
	161	14.3	16.6	18.8	21.1	23.3	25.6	27.8	30.1	32.3	34.6	36.8	39.1	41.3	43.6	45.8	48.1	50.3	52.6	54.8	57.1
1040	97	13.7	16.0	18.3	20.7	23.0	25.3	27.6	29.9	32.3	34.6	36.9	39.2	41.6	43.9	46.2	48.5	50.9	53.2	55.5	57.8
	161	15.7	18.1	20.6	23.1	25.5	28.0	30.4	32.9	35.3	37.8	40.2	42.7	45.1	47.6	50.1	52.5	55.0	57.4	59.9	62.3
1140	97	14.9	17.4	20.0	22.5	25.0	27.5	30.1	32.6	35.1	37.7	40.2	42.7	45.2	47.8	50.3	52.8	55.3	57.9	60.4	62.9
	161	17.0	19.7	22.4	25.0	27.7	30.3	33.0	35.7	38.3	41.0	43.6	46.3	48.9	51.6	54.3	56.9	59.6	62.2	64.9	67.7
Approx weight per case kg																					

Casing Style Type B (Floor Mounted) with top and bottom inlet grille

Case Height (mm)	Case Depth (mm)	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
465	97	6.7	7.8	9.0	10.1	11.3	12.4	13.6	14.7	15.9	17.0	18.1	19.3	20.4	21.6	22.7	23.9	25.0	26.2	27.3	28.5
	161	7.9	9.2	10.5	11.8	13.0	14.3	15.6	16.9	18.2	19.4	20.7	22.0	23.3	24.6	25.8	27.1	28.4	29.7	31.0	32.2
565	97	7.9	9.2	10.6	11.9	13.3	14.6	16.0	17.4	18.7	20.1	21.4	22.8	24.1	25.5	26.8	28.2	29.5	30.9	32.2	33.6
	161	9.3	10.8	12.2	13.7	15.2	16.7	18.2	19.7	21.1	22.6	24.1	25.6	27.1	28.6	30.0	31.5	33.0	34.5	36.0	37.5
665	97	9.1	10.7	12.2	13.8	15.3	16.9	18.4	20.0	21.6	23.1	24.7	26.2	27.8	29.3	30.9	32.5	34.0	35.6	37.1	38.7
	161	10.6	12.3	14.0	15.7	17.4	19.1	20.8	22.4	24.1	25.8	27.5	29.2	30.9	32.6	34.3	35.9	37.6	39.3	41.0	42.7
	235	13.0	15.0	17.0	19.0	21.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0	36.0	38.0	39.0	41.0	43.0	45.0	47.0	49.0
765	97	10.3	12.1	13.8	15.6	17.4	19.1	20.9	22.7	24.4	26.2	27.9	29.7	31.5	33.2	35.0	36.7	38.5	40.3	42.0	43.8
	161	12.0	13.9	15.8	17.7	19.5	21.4	23.3	25.2	27.1	29.0	30.9	32.8	34.7	36.6	38.5	40.4	42.3	44.1	46.0	47.9
	235	15.0	17.0	19.0	21.0	23.0	25.0	27.0	29.0	31.0	33.0	35.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0	54.0
865	97	11.5	13.5	15.5	17.4	19.4	21.4	23.3	25.3	27.3	29.2	31.2	33.2	35.1	37.1	39.1	41.0	43.0	45.0	46.9	48.9
	161	13.3	15.4	17.5	19.6	21.7	23.8	25.9	28.0	30.1	32.2	34.3	36.4	38.5	40.6	42.7	44.8	46.9	49.0	51.1	53.2
	235	16.0	18.0	21.0	23.0	25.0	28.0	30.0	32.0	34.0	37.0	39.0	41.0	44.0	46.0	48.0	51.0	53.0	55.0	57.0	60.0
965	97	12.8	14.9	17.1	19.3	21.4	23.6	25.8	28.0	30.1	32.3	34.5	36.6	38.8	41.0	43.1	45.3	47.5	49.7	51.8	54.0
	161	14.7	17.0	19.3	21.6	23.9	26.2	28.5	30.8	33.1	35.4	37.7	40.0	42.3	44.6	46.9	49.2	51.5	53.8	56.1	58.4
1065	97	14.0	16.4	18.7	21.1	23.5	25.9	28.2	30.6	33.0	35.4	37.7	40.1	42.5	44.9	47.2	49.6	52.0	54.4	56.7	59.1
	161	16.0	18.5	21.0	23.5	26.1	28.6	31.1	33.6	36.1	38.6	41.1	43.6	46.1	48.6	51.1	53.6	56.1	58.6	61.1	63.6
1165	97	15.2	17.8	20.4	22.9	25.5	28.1	30.7	33.3	35.8	38.4	41.0	43.6	46.2	48.7	51.3	53.9	56.5	59.0	61.6	64.2
	161	17.4	20.1	22.8	25.5	28.2	30.9	33.6	36.4	39.1	41.8	44.5	47.2	49.9	52.6	55.3	58.0	60.7	63.4	66.2	68.9
Approx weight per case kg																					

Case weights

Casing Style Type C (Floor Mounted) with top and bottom inlet grille and plinth

Case Height (mm)	Case Depth (mm)	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
550	97	7.7	9.0	10.3	11.7	13.0	14.3	15.6	17.0	18.3	19.6	20.9	22.2	23.6	24.9	26.2	27.5	28.9	30.2	31.5	32.8
	161	9.1	10.5	12.0	13.4	14.9	16.3	17.8	19.2	20.7	22.2	23.6	25.1	26.5	28.0	29.4	30.9	32.3	33.8	35.2	36.7
650	97	8.9	10.4	12.0	13.5	15.0	16.6	18.1	19.6	21.1	22.7	24.2	25.7	27.2	28.8	30.3	31.8	33.3	34.9	36.4	37.9
	161	10.4	12.1	13.7	15.4	17.1	18.7	20.4	22.0	23.7	25.3	27.0	28.7	30.3	32.0	33.6	35.3	36.9	38.6	40.3	41.9
750	97	10.1	11.9	13.6	15.3	17.1	18.8	20.5	22.3	24.0	25.7	27.5	29.2	30.9	32.6	34.4	36.1	37.8	39.6	41.3	43.0
	161	11.8	13.6	15.5	17.4	19.2	21.1	22.9	24.8	26.7	28.5	30.4	32.3	34.1	36.0	37.8	39.7	41.6	43.4	45.3	47.1
850	97	11.4	13.3	15.2	17.2	19.1	21.0	23.0	24.9	26.8	28.8	30.7	32.6	34.6	36.5	38.5	40.4	42.3	44.3	46.2	48.1
	161	13.1	15.2	17.3	19.3	21.4	23.5	25.5	27.6	29.7	31.7	33.8	35.9	37.9	40.0	42.1	44.1	46.2	48.3	50.3	52.4
950	97	12.6	14.7	16.9	19.0	21.1	23.3	25.4	27.6	29.7	31.8	34.0	36.1	38.3	40.4	42.5	44.7	46.8	49.0	51.1	53.2
	161	14.5	16.7	19.0	21.3	23.6	25.8	28.1	30.4	32.6	34.9	37.2	39.5	41.7	44.0	46.3	48.5	50.8	53.1	55.3	57.6
1050	97	13.8	16.1	18.5	20.8	23.2	25.5	27.9	30.2	32.6	34.9	37.2	39.6	41.9	44.3	46.6	49.0	51.3	53.6	56.0	58.3
	161	15.8	18.3	20.8	23.3	25.7	28.2	30.7	33.2	35.6	38.1	40.6	43.1	45.5	48.0	50.5	53.0	55.4	57.9	60.4	62.8
1150	97	15.0	17.6	20.1	22.7	25.2	27.8	30.3	32.9	35.4	38.0	40.5	43.1	45.6	48.2	50.7	53.2	55.8	58.3	60.9	63.4
	161	17.2	19.9	22.5	25.2	27.9	30.6	33.3	35.9	38.6	41.3	44.0	46.7	49.3	52.0	54.7	57.4	60.0	62.7	65.4	68.1
Approx weight per case kg																					

Casing Style Type T (Floor Mounted) with Solid Top and top and bottom front facing grilles

Case Height (mm)	Case Depth (mm)	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
615	97	8.5	9.9	11.4	12.9	14.3	15.8	17.2	18.7	20.1	21.6	23.0	24.5	26.0	27.4	28.9	30.3	31.8	33.2	34.7	36.1
	161	10.0	12.0	13.0	15.0	16.0	18.0	19.0	21.0	23.0	24.0	26.0	27.0	29.0	31.0	32.0	34.0	35.0	37.0	38.0	40.0
815	97	11.0	13.0	15.0	17.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	31.0	33.0	35.0	37.0	39.0	41.0	43.0	44.0	46.0
	161	13.0	15.0	17.0	19.0	21.0	23.0	25.0	27.0	29.0	31.0	33.0	35.0	37.0	39.0	41.0	43.0	45.0	47.0	49.0	51.0
	235	15.0	18.0	20.0	22.0	24.0	26.0	28.0	31.0	33.0	35.0	37.0	39.0	42.0	44.0	46.0	48.0	50.0	53.0	55.0	57.0
915	97	12.0	14.0	16.0	18.0	20.0	22.0	25.0	27.0	29.0	31.0	33.0	35.0	37.0	39.0	41.0	43.0	45.0	47.0	49.0	51.0
	161	14.0	16.0	18.0	21.0	23.0	25.0	27.0	29.0	32.0	34.0	36.0	38.0	40.0	43.0	45.0	47.0	49.0	51.0	54.0	56.0
	235	17.0	19.0	22.0	24.0	26.0	29.0	31.0	34.0	36.0	38.0	41.0	43.0	46.0	48.0	50.0	53.0	55.0	58.0	60.0	62.0
1015	97	13.0	16.0	18.0	20.0	22.0	25.0	27.0	29.0	32.0	34.0	36.0	38.0	41.0	43.0	45.0	47.0	50.0	52.0	54.0	57.0
	161	15.0	18.0	20.0	23.0	25.0	27.0	30.0	32.0	35.0	37.0	39.0	42.0	44.0	47.0	49.0	51.0	54.0	56.0	59.0	61.0
	97	18.0	21.0	24.0	26.0	29.0	31.0	34.0	37.0	39.0	42.0	44.0	47.0	50.0	52.0	55.0	58.0	60.0	63.0	65.0	68.0
Approx weight per case kg																					

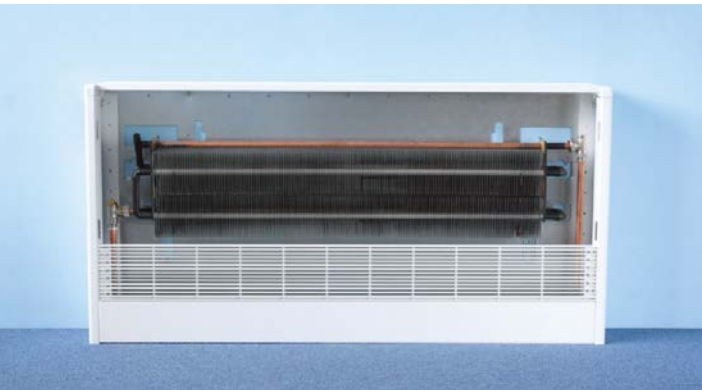
Casing Style Type D (Floor Mounted) with top and bottom front facing grilles

Case Height (mm)	Case Depth (mm)	Case Width (mm)									
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
500	161	21.9	23.3	24.6	26.0	27.3	28.7	30.0	31.4	32.7	34.1
	235	26.0	27.5	29.1	30.6	32.2	33.7	35.3	36.8	38.4	39.9
600	161	25.3	26.9	28.4	30.0	31.5	33.1	34.6	36.2	37.7	39.3
	235	29.6	31.3	33.1	34.8	36.6	38.3	40.1	41.9	43.6	45.4
700	161	28.7	30.5	32.2	34.0	35.7	37.5	39.3	41.0	42.8	44.5
	235	33.1	35.1	37.1	39.0	41.0	43.0	44.9	46.9	48.8	50.8
800	161	32.1	34.1	36.0	38.0	39.9	41.9	43.9	45.8	47.8	49.8
	235	36.7	38.9	41.1	43.2	45.4	47.6	49.7	51.9	54.1	56.2
900	161	35.5	37.7	39.8	42.0	44.2	46.3	48.5	50.7	52.8	55.0
	235	40.3	42.7	45.1	47.5	49.8	52.2	54.6	56.9	59.3	61.7
1000	161	38.9	41.3	43.6	46.0	48.4	50.7	53.1	55.5	57.9	60.2
	235	43.9	46.5	49.1	51.7	54.2	56.8	59.4	62.0	64.5	67.1
1100	161	42.3	44.9	47.4	50.0	52.6	55.2	57.7	60.3	62.9	65.5
	235	47.5	50.3	53.1	55.9	58.7	61.4	64.2	67.0	69.8	72.5
1200	161	45.7	48.4	51.2	54.0	56.8	59.6	62.4	65.1	67.9	70.7
	235	51.1	54.1	57.1	60.1	63.1	66.0	69.0	72.0	75.0	78.0
Approx weight per case kg											

Finned elements

weights and water contents

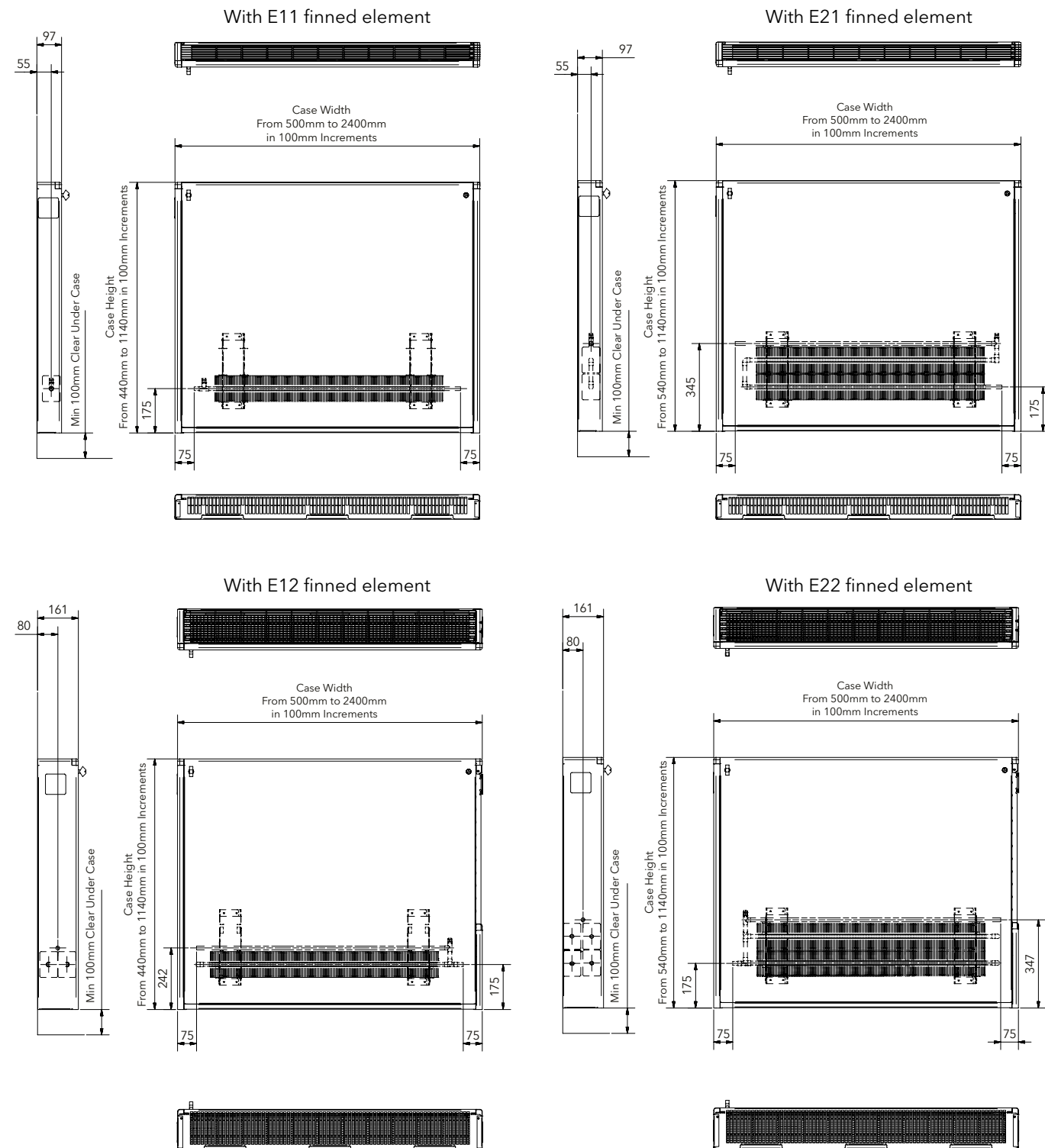
Emitter Type	E11		E21		E12		E22		E23		E23	
Case Width (mm)	Water Content Litres	Weight kg	Water Content Litres	Weight kg	Water Content Litres	Weight kg	Water Content Litres	Weight kg	Water Content Litres	Weight kg	Water Content Litres	Weight kg
500	0.08	0.6	0.15	1.1	0.15	1.1	0.31	2.3	0.46	3.4	0.69	4.4
600	0.09	0.7	0.18	1.5	0.18	1.5	0.37	2.9	0.55	4.4	0.83	5.8
700	0.11	0.9	0.22	1.8	0.22	1.8	0.43	3.6	0.65	5.3	0.97	7.3
800	0.12	1.1	0.25	2.1	0.25	2.1	0.49	4.2	0.74	6.3	1.11	8.7
900	0.14	1.2	0.28	2.4	0.28	2.4	0.55	4.8	0.83	7.3	1.25	10.1
1000	0.15	1.4	0.31	2.7	0.31	2.7	0.62	5.5	0.92	8.2	1.39	11.6
1100	0.17	1.5	0.34	3.1	0.34	3.1	0.68	6.1	1.02	9.2	1.52	13.0
1200	0.18	1.7	0.37	3.4	0.37	3.4	0.74	6.8	1.11	10.1	1.66	14.5
1300	0.20	1.9	0.40	3.7	0.40	3.7	0.80	7.4	1.20	11.1	1.80	15.9
1400	0.22	2.0	0.43	4.0	0.43	4.0	0.86	8.0	1.29	12.1	1.94	17.3
1500	0.23	2.2	0.46	4.3	0.46	4.3	0.92	8.7	1.39	13.0	2.08	18.8
1600	0.25	2.3	0.49	4.7	0.49	4.7	0.99	9.3	1.48	14.0	2.22	20.2
1700	0.26	2.5	0.52	5.0	0.52	5.0	1.05	10.0	1.57	14.9	2.36	21.7
1800	0.28	2.7	0.55	5.3	0.55	5.3	1.11	10.6	1.66	15.9	2.49	23.1
1900	0.29	2.8	0.59	5.6	0.59	5.6	1.17	11.2	1.76	16.9	2.63	24.5
2000	0.31	3.1	0.62	6.2	0.62	6.2	1.23	12.4	1.85	18.6	2.77	26.7
2100	0.32	3.3	0.65	6.5	0.65	6.5	1.29	13.0	1.94	19.5	2.91	28.2
2200	0.34	3.4	0.68	6.8	0.68	6.8	1.36	13.7	2.03	20.5	3.05	29.6
2300	0.35	3.6	0.71	7.2	0.71	7.2	1.42	14.3	2.13	21.5	3.19	31.1
2400	0.37	3.7	0.74	7.5	0.74	7.5	1.48	14.9	2.22	22.4	3.33	32.5



Internal Style C casing with finned element

Style A

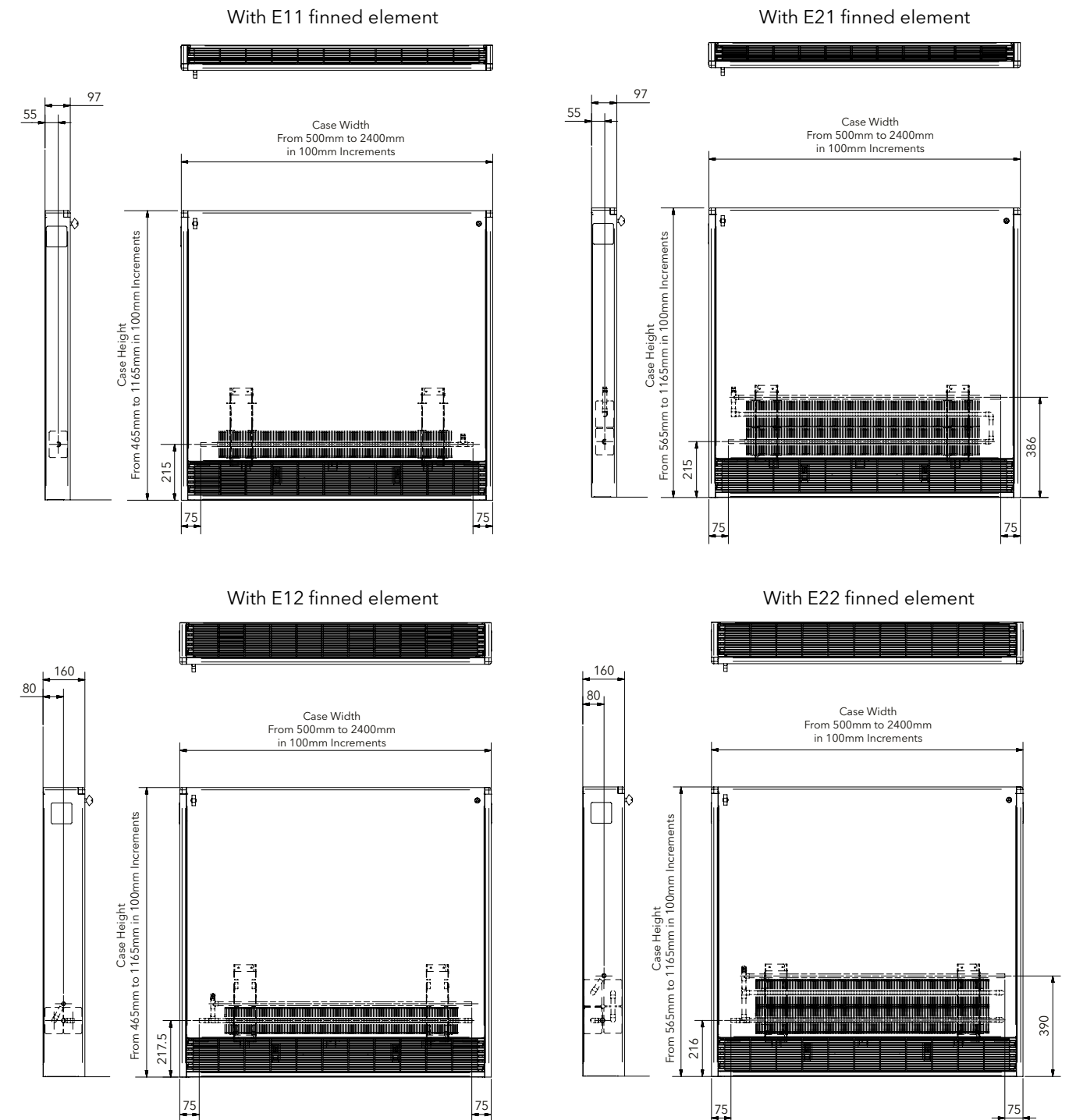
Outline details with finned elements
(not to scale)



Note: Flow and return pipework, TRVs and LSVs omitted for clarity

Style B

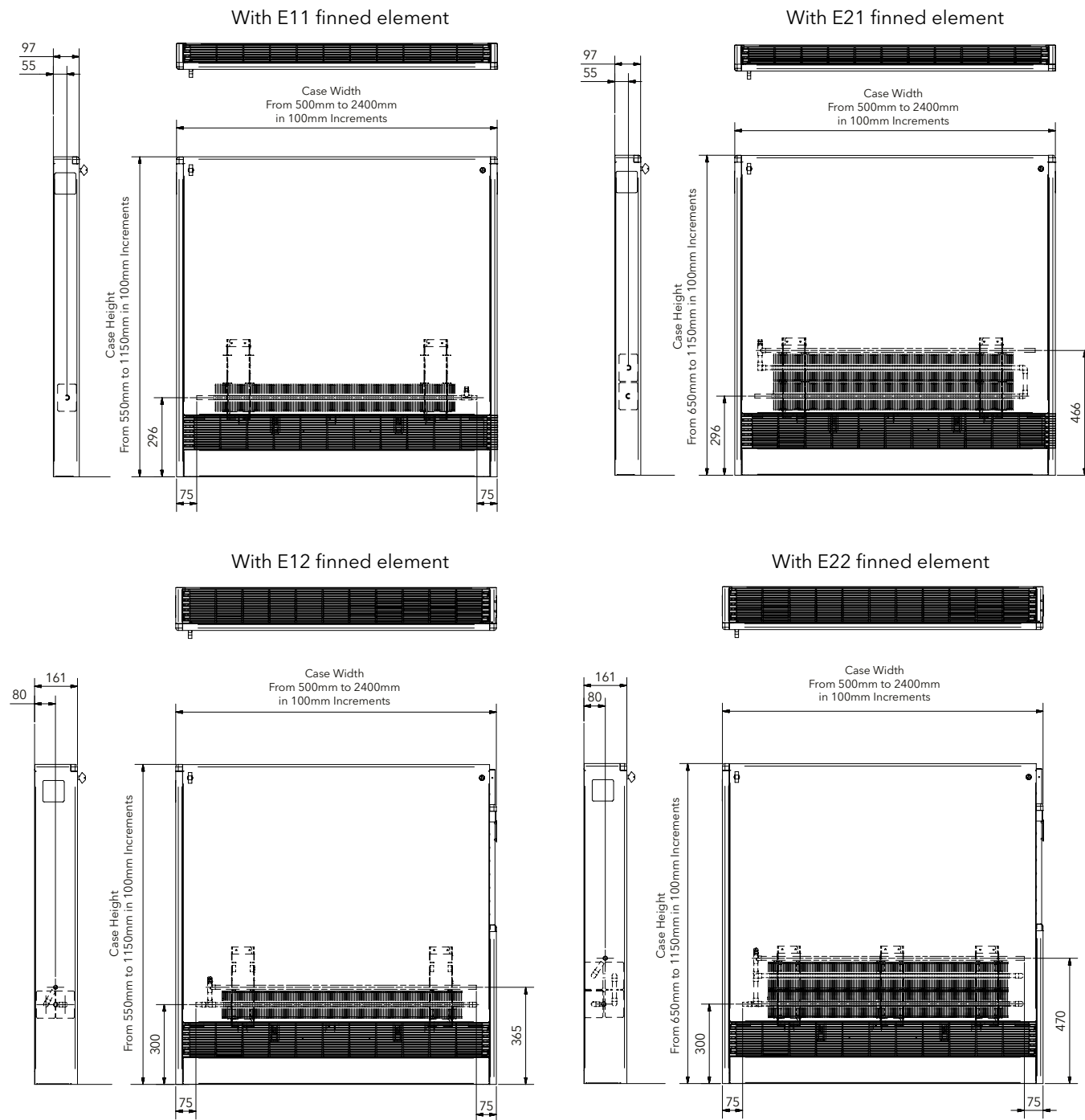
Outline details with finned elements
(not to scale)



Note: Flow and return pipework, TRVs and LSVs omitted for clarity

Style C

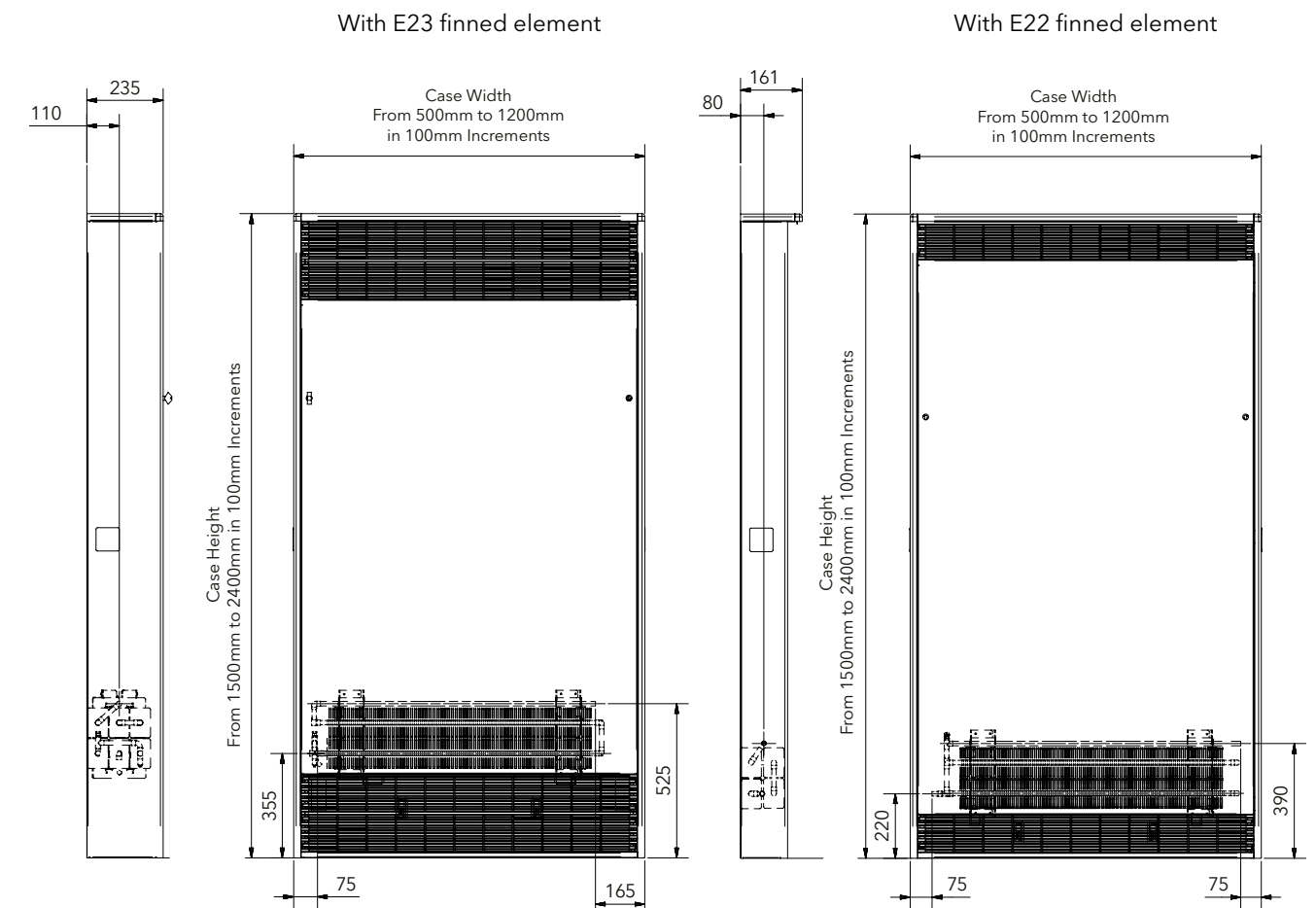
Outline details with finned elements
(not to scale)



Note: Flow and return pipework, TRVs and LSVs omitted for clarity

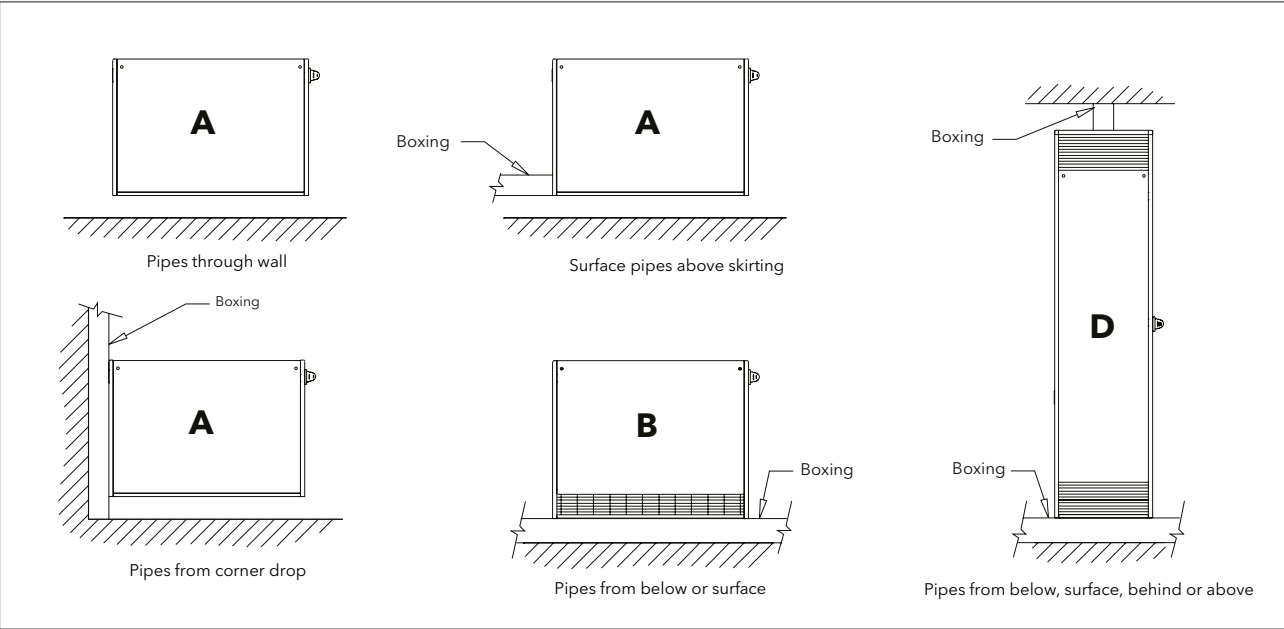
Style D

Outline details with finned elements
(not to scale)

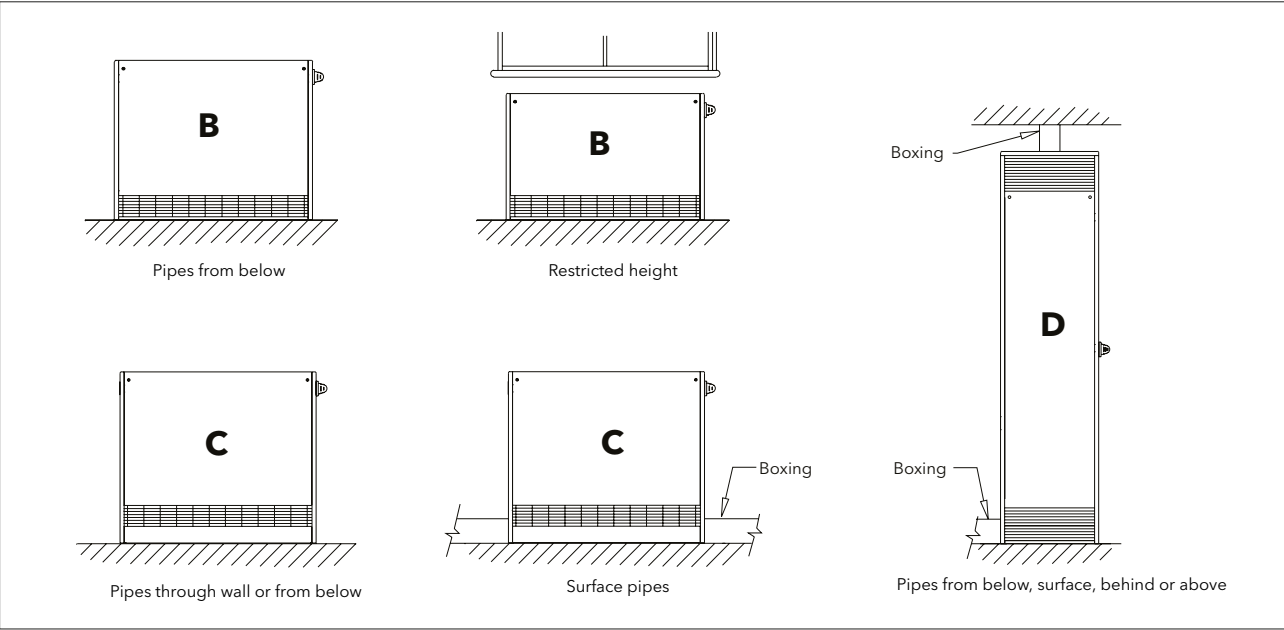


Note: Flow and return pipework, TRVs and LSVs omitted for clarity

Installation suggestions - 'wet floor' areas



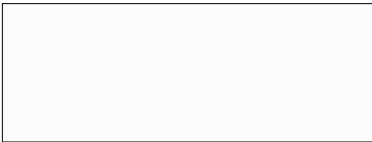
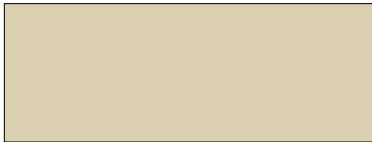
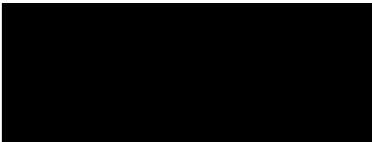
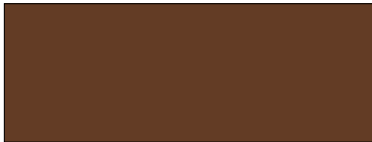
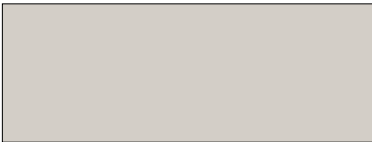
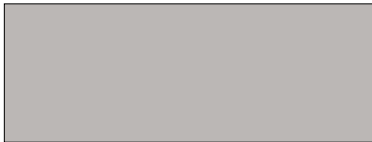
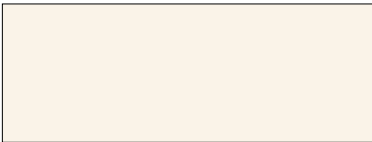
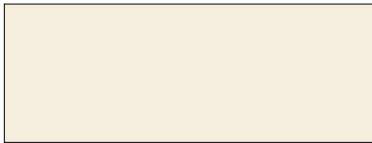
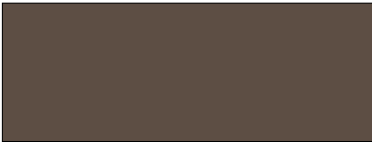
Installation suggestions - 'dry floor' areas



Colour chart

Preferred colour range

The Ambiguard case is finished to RAL 9010 30% gloss finish as standard. There are 11 other preferred colours in the range, with a minimum order of 5 units available at additional cost. (Note: other colours and antibacterial finishes are available to be specified on a price on application basis)

	Pure White Standard Finish RAL 9010 Semi-matt		Oatmeal BS 10 B 17 Gloss
	Black BS 00 E 53 Matt		Nut Brown RAL 8011 Matt
	Flake Grey BS 10 A 03 Semi-matt		Goosewing Grey BS 00 A 05 Gloss
	Gardenia BS 10 B 15 Gloss		Brilliant White Gloss*
	Magnolia BS 08 B 15 Semi-matt		Stone Leatherette Semi-gloss**
	Vandyke Brown BS 08 B 29 Semi-gloss		Cream Leatherette Semi-gloss***

Gloss levels

Some variation in gloss levels will arise and depend upon the colour, texture and manufacturing process. Generally, gloss levels range from matt to gloss and can be specified as an approximate percentage.

Matt	Semi-matt	Satin	Semi-gloss	Gloss
10%	30%	50%	70%	90%

Note:

- Colours have been reproduced digitally to achieve an approximation; colour and shade will vary, depending upon a digital or hard copy of this sheet being viewed. Gloss levels have not been shown.
- * Brilliant White is a special white gloss finish, which approximately matches BS 00 E 55 'White' in colour.
 - ** Stone Leatherette is a special textured finish, which approximately matches BS 10 B 15 'Gardenia' in colour.
 - *** Cream Leatherette is a special textured finish, which approximately matches BS 10 C 31 'Buttermilk' in colour.

Ambiguard Internal Valve (Code AG-VLVTRV-INTERN)

The Ambiguard Internal Valve kit is an internal control and consists of a ½" angle TRV and LSV pattern valve body, remote sensing phial and TRV head.

Note: The Ambiguard Internal valve is not suitable for the following models with E21 finned elements.



Case Style	Case Height
B	565
C	650
T	715

Ambiguard External Valve (Code AG-VLVTRV-EXTERN)

The Ambiguard External Valve kit is an external control and consists of a ½" angle TRV and LSV pattern valve body, remote transmitter sensor and TRV head.



Note: All Ambiguard valves are for use on two pipe systems. The TRVs provided are not bi-directional and must always be connected to the flow pipework. All kits are provided with 15mm copper adaptors to provide the connection to both the inlet and outlet of the valve to either ½" BSP or 15mm connection.

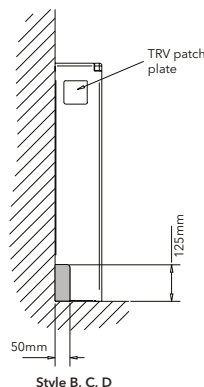
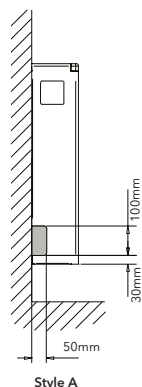
Correction factor table

The outputs shown within this brochure are based on BS EN442, 75-65-20°C operating conditions, giving a Δt of 50°C. For Δt 's other than this, a correction factor must be applied. This correction factor table assumes an averaged exponent of 1.30. If a more accurate exponent / correction factor is required, please contact MHS Radiators.

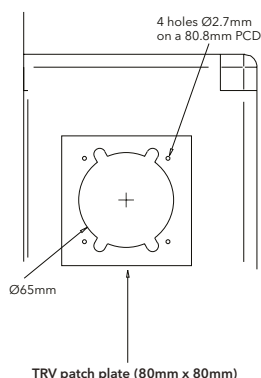
Example: Output required @ 82-71-21°C Δt 55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions.

Δt	CF
60	1.267
59	1.24
58	1.213
57	1.186
56	1.159
55.5	1.145
55	1.132
54	1.105
53	1.079
52	1.052
51	1.026
50	1.000
45	0.872
40	0.748
35	0.629

Pipe cut-outs (optional)



TRV preparation



Water Treatment: These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a good emulsion water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828 & 12831: 2003 and BS 7593: 2006

IMPORTANT: Failure to observe these requirements will render the guarantee on the product void. Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.

This publication is issued subject to alteration or withdrawal without notice. The illustrations and specifications are not binding in detail.



MHS Radiators Limited, 3 Juniper West, Fenton Way, Southfields Business Park, Basildon, Essex SS15 6SJ
Tel: 0345 521 5666 Fax: 01268 888260

orders@mhsradiators.co.uk enquiries@mhsradiators.co.uk www.mhsradiators.co.uk



SALES OFFICE - 0345 521 5666