



Providing comfort for the building environment



# Why choose Smith's?






If you require energy efficiency and versatility in your heating, the Smith's range is the ideal solution

For over twenty-five years, Smith's EP has been manufacturing and providing an extensive range of commercial and residential heating solutions. Part of the global family-owned US-based business, the Swan Group, Smith's works closely with architects, consultants, heating contractors and installers to deliver, via our stockist network, high quality products with industry-leading warranties on time, with an aftercare and technical support service that is second to none.

We take an active, innovative approach to new product development and creating tailored heating products to fulfil the creative requirements of a competitive and demanding customer base. We believe it is essential to be flexible in our partnerships, while remaining uncompromising on the high quality and care that goes into every product in our range. Smith's is an outward-looking, growing business and we are forging relationships with like-minded manufacturers across North America to ensure that we can provide additional new and essential heating solutions in areas where we do not specialise and where our partners excel.

Our latest price list showcases our principal commercial and residential products. At the same time, we have the ability and the will to work alongside clients at any point in the construction process, and collaborate to develop specific solutions for any and every need. We take great pride and go to great lengths to leave our customers not only satisfied but coming back again and again for solutions that are perfect for your project, each and every time.

## Table of content

Introduction	3	
Caspian Fan Convector	4-5	
HE Pedestal Radiation	6-7	
HE2 Heating Edge	8	
HE3 Silent Fin Heating Edge	9	
MINIB Natural Convectors - Wall	10	
MINIB Trench Units	11	
General information	12	
Contact details	12	



**Parker Wheat**  
CEO, Smith's Environmental, USA  
#ThinkSmiths



# Caspian UV

A range of fan convectors suitable for all kinds of commercial applications, from churches to office developments, with the ability to rapidly heat large areas with much greater efficiency than other heat emitters

## Applications

Showrooms and shops  
Entrance hall/Corridor  
Waiting room  
Meeting room/Hall/Club  
Changing room  
Bar/Tavern/Restaurant  
Place of worship  
School/Nursery  
Care home/Hospital  
Library



## Features

- Incorporating the latest ECM motor technology, which can result in running-cost savings as high as 80%, and with variable speed control as standard, the Caspian delivers heat quickly and quietly
- Caspian are compatible with most types of hydronic heating systems, functioning equally efficiently with conventional boilers, biomass technology or ground or air source heat pumps

## Motor

ECM standard

## Finish

Casing: zinc-coated 18 gauge steel

Polyester powdercoated: white RAL 9010.

Available to special order in any color and with anti-microbial or anti-bacterial paint (longer lead times may apply)

## Filter

MERV 6, 100% polyester, non-washable

## Installation

Maximum installation height for high or ceiling mounting, - 13' to underside

Pipework access holes on the rear and underside

Bleed valve accessible by removal of front casing

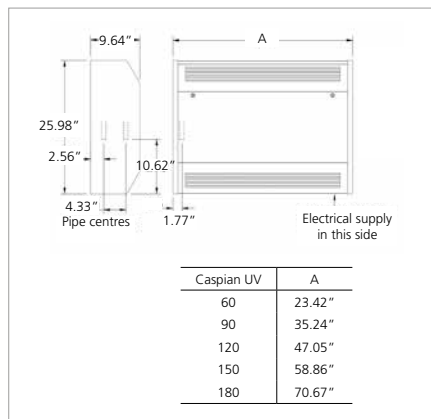
## Controls

Standard speed control: The speed controller powered by the 10V DC output from the motor, it provides infinitely variable, manual speed control between the pre-set factory upper and lower limits

BMS Control: Fans can be controlled using 0-10V output from BMS system

## Flow rate (USGPM)

Model	Average Water Temperature (°F)							
	110	120	130	140	150	160	170	180
Caspian 180 High	3.26	3.90	4.85	5.34	5.83	6.32	6.81	7.72
Caspian 180 Med	3.10	3.71	4.54	5.03	5.45	5.94	6.44	7.34
Caspian 180 Low	2.84	3.44	4.28	4.69	5.15	5.64	6.13	6.89
Caspian 150 High	2.57	3.12	3.94	4.39	4.85	5.30	5.75	6.51
Caspian 150 Med	2.33	2.86	3.67	4.09	4.50	4.96	5.38	6.28
Caspian 150 Low	2.08	2.59	3.33	3.75	4.28	4.73	5.19	6.02
Caspian 120 High	1.76	2.33	3.07	3.56	4.01	4.50	5.00	5.98
Caspian 120 Med	1.19	1.61	2.20	2.57	2.91	3.29	3.67	4.43
Caspian 120 Low	0.62	0.89	1.29	1.55	1.85	2.12	2.31	2.76
Caspian 90 High	1.32	1.78	2.35	2.69	3.03	3.37	3.63	4.16
Caspian 90 Med	1.00	1.32	1.74	2.01	2.27	2.54	2.73	3.18
Caspian 90 Low	0.66	0.87	1.14	1.32	1.48	1.67	1.82	2.12
Caspian 60 High	0.59	0.83	1.17	1.36	1.59	1.82	2.01	2.46
Caspian 60 Med	0.47	0.66	0.91	1.06	1.21	1.40	1.55	1.85
Caspian 60 Low	0.36	0.47	0.64	0.76	0.87	0.98	1.10	1.32



**Heat output**

Model	Air Volume (CFM)	Average Water Temperature (BTU/hr @ AWT in °F)								Maximum Power Consumption (W)	Sound Level (dBA)	Water Capacity (US Gallon)
		110	120	130	140	150	160	170	180			
Caspian 180 High	829	29344	35145	43675	48111	52547	56983	61419	69608	400	59	0.84
Caspian 180 Med	557	27980	33439	40946	45381	49135	53571	58006	66196			
Caspian 180 Low	286	25591	31050	38557	42311	46405	50841	55277	62101			
Caspian 150 High	671	23203	28150	35486	39581	43675	47770	51865	58689	300	59	0.68
Caspian 150 Med	460	20985	25762	33098	36851	40604	44699	48452	56642			
Caspian 150 Low	249	18767	23373	30027	33780	38557	42652	46746	54253			
Caspian 120 High	513	15866	20985	27638	32074	36169	40604	45040	53912	200	58	0.55
Caspian 120 Med	363	10748	14502	19790	23203	26273	29686	33098	39922			
Caspian 120 Low	212	5630	8019	11601	13990	16719	19108	20814	24909			
Caspian 90 High	356	11942	16037	21155	24226	27297	30368	32757	37534	200	53	0.4
Caspian 90 Med	265	9042	11942	15696	18084	20473	22861	24567	28662			
Caspian 90 Low	175	5971	7848	10236	11942	13307	15013	16378	19108			
Caspian 60 High	224	5289	7507	10544	12284	14331	16378	18084	22179	100	50	0.24
Caspian 60 Med	171	4265	5971	8189	9554	10919	12625	13990	16719			
Caspian 60 Low	118	3242	4265	5801	6824	7848	8872	9895	11942			

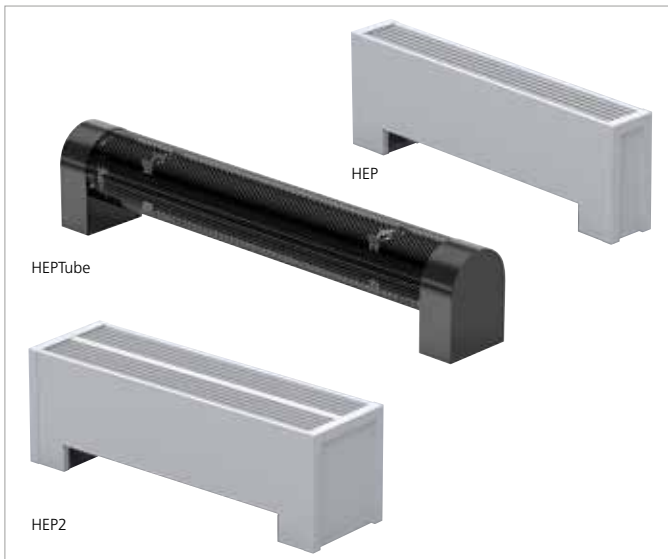
Output testing based on EN442 using average water temperature, 65°F entering air temperature, 18°F temperature drop

# HE Pedestal Radiation

A new range of freestanding convector pedestal heaters, HEP, HEP2, and HEPTube in a variety of shapes, lengths and finishes

## Applications

Corridors  
Reception areas  
Rest rooms  
Changing rooms  
Conservatories  
Showrooms  
Display areas



## Features

- Perfect for beneath large windows, Smith's freestanding pedestal heaters help to minimise the problem of downward cold airflow commonly associated with glazed façades
- Fitting into the smallest of spaces, Smith's range of freestanding pedestal heaters provide a stylish solution without the need for wall hung heaters
- Comes in standard lengths from 2 to 8 feet
- Without fan for indoor environments
- Perfect for where sub-floor trench heating is not possible
- Heat source: boiler or heat pump

## Finish

Outer casing 18swg. Polyester powder coated in:



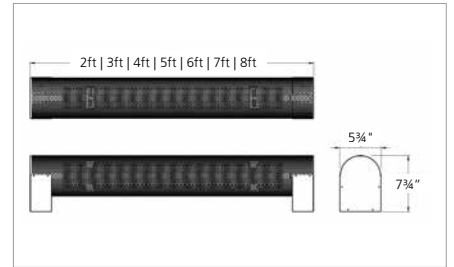
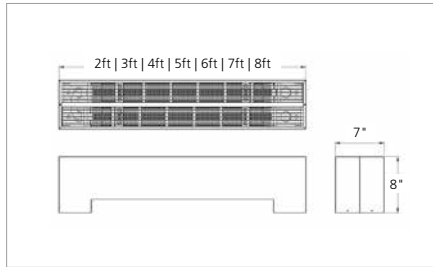
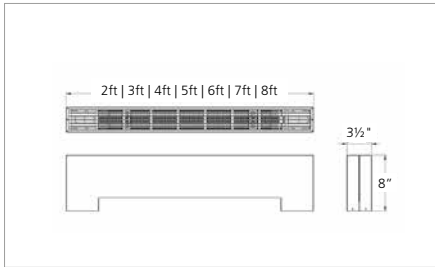
Black      Dove grey      Dark grey      Blue  
Any color finish is available.

## Installation

Supply and return connections 3/4" copper.  
Designed for system pressures up to 100 PSI.  
Suitable for two pipe central heating systems only.

## Customised requirements

Price and availability will be confirmed at the time of order.



**HEP**  
Rectangular design

**HEP2**  
Larger rectangular design

**HEPTube**  
Tubular design

**Heat output**

Length (ft)		Average Water Temperature (BTU/hr @ AWT in °F)												
		90	100	110	120	130	140	150	160	170	180	190	200	210
<b>HEP</b>														
2	2USGPM	134	220	305	410	515	646	777	909	1042	1185	1328	1471	1614
3	2USGPM	219	359	499	670	842	1056	1271	1487	1704	1938	2172	2406	2640
4	2USGPM	304	499	693	931	1169	1467	1765	2065	2366	2691	3016	3341	3666
5	2USGPM	389	638	887	1191	1496	1877	2259	2643	3028	3444	3860	4276	4692
6	2USGPM	474	778	1081	1452	1823	2288	2753	3221	3690	4197	4704	5211	5718
7	2USGPM	559	917	1275	1712	2150	2698	3247	3799	4352	4950	5548	6146	6744
8	2USGPM	644	1057	1469	1973	2477	3109	3741	4377	5014	5703	6392	7081	7770
<b>HEP2</b>														
2	2USGPM	238	395	543	736	909	1133	1371	1577	1838	2058	2340	2576	2878
3	2USGPM	389	646	888	1204	1487	1853	2242	2579	3006	3366	3827	4213	4707
4	2USGPM	540	897	1233	1672	2065	2573	3113	3581	4174	4674	5314	5850	6536
5	2USGPM	691	1148	1578	2140	2643	3293	3984	4583	5342	5982	6801	7487	8365
6	2USGPM	842	1399	1923	2608	3221	4013	4855	5585	6510	7290	8288	9124	10194
7	2USGPM	993	1650	2268	3076	3799	4733	5726	6587	7678	8598	9775	10761	12023
8	2USGPM	1144	1901	2613	3544	4377	5453	6597	7589	8846	9906	11262	12398	13852
<b>HEPTube</b>														
2	2USGPM	133	195	265	356	438	543	655	747	868	972	1099	1209	1344
3	2USGPM	218	319	434	583	717	889	1072	1223	1421	1591	1799	1979	2200
4	2USGPM	303	443	603	810	996	1235	1489	1699	1974	2210	2499	2749	3056
5	2USGPM	388	567	772	1037	1275	1581	1906	2175	2527	2829	3199	3519	3912
6	2USGPM	473	691	941	1264	1554	1927	2323	2651	3080	3448	3899	4289	4768
7	2USGPM	558	815	1110	1491	1833	2273	2740	3127	3633	4067	4599	5059	5624
8	2USGPM	643	939	1279	1718	2112	2619	3157	3603	4186	4686	5299	5829	6480



Outputs based on entering water temperature (EWT) with a 65°F Entering Air temperature.  
Output is based on performance tests undertaken by BSRIA. The test data can be verified on the BSRIA website (report 607 10/1). This includes calibration information.

# HE2 Heating Edge

HE2 Heating Edge high capacity hybrid element is a perimeter heating (baseboard) product that consists of a unique, patented “coil block” and mounting system

## Applications

Corridors  
Reception areas  
Offices  
Greenhouses  
Housing authorities  
Affordable housing  
Apartments  
Residential applications



The concept behind the product is to deliver very high BTU/hr capacities (output) using minimal footage compared to conventional baseboard. It's also designed with a mounting system that does away with all brackets and hangers, making for much easier installations.

## Features

- High capacity - superior low temperature performance range
- Attractive perforated cover design
- Easy to install, rust resistant and easy to clean
- Simple two piece mounting system – no brackets or hangers
- Available in a variety of lengths from 2 ft. up to 8 ft.
- New enhanced scrub board fin design for maximum airflow
- Two pipe supply
- Accessories available

## Low temperature applications

Where Heating Edge HE2 really shines is in low temperature applications. Geothermal heat pumps, solar thermal and PVT collectors and condensing boilers are all great ways to save energy and reduce fossil fuel usage. All achieve their highest efficiencies when delivering low temperature water. The challenge faced when it comes to heating effectively with traditional baseboard is that supply water temperatures need to be at least 140°F in order to deliver enough BTU's to sufficiently heat a space at design temperature. Not so with Heating Edge. Due to HE2's unique two pipe design, it's able to deliver comparable BTU/hr using 100°F supply water - all in an attractive package.

## Finish

Materials of construction include all aluminum “patented” fins at 47.3 per LF, mechanically bonded to two 3/4” (075) type L copper tubes (“Coil Block”) covered by a 20 gauge perforated, painted cover all mounted to a backplate.

## Installation\*\*

HE2's unique design allows performance outputs exceeding those of traditional single pipe baseboard designs. When installed with a parallel supply connection it is recommended that a minimum flow rate of 1.5 gpm be maintained to maximize efficiency and performance.

## Hot water performance ratings

	Flow Rate GPM	PD in ft of H <sub>2</sub> O	Average Water Temperature (BTU/hr/ft @ AWT in °F)													
			90	100	110	120	130	140	150	160	170	180	190	200	210	
Two supplies parallel	1.5**	0.0044	130	205	290	385	460	546	637	718	813	911	1009	1113	1215	
parallel	4	0.0481	134	224*	314*	412*	516*	626*	741*	862*	976*	1115*	1249*	1386*	1526	
Top supply bottom return	1.5	0.0088	101	165*	226*	289*	356*	426*	498*	572*	647*	725*	805*	885*	970	
bottom return	4	0.0962	142	201*	271*	341*	415*	492*	569*	648*	728*	811*	894*	979*	1064	
Bottom supply top return	1.5	0.0088	99	162	221	283	349	418	488	561	634	710	788	867	957	
top return	4	0.0962	135	195	259	305	380	464	552	634	710	793	874	959	1039	
Bottom supply no return	1.5	0.0044	75	127	169	208	260	311	362	408	470	524	576	629	685	
no return	4	0.0481	85	140	203	265	334	410	472	536	599	662	723	788	850	



All ratings include a 15% heating effect factor. EAT=65°F. Pressure drop in feet of H<sub>2</sub>O per LF. \* Where marked (\*) Heating Edge (HE2) output is based on performance tests witnessed by BSRIA. The test data can be verified on the BSRIA website (report 55944/2). This includes calibration information. The catalogue data above is presented in accordance with the American IBR laboratory testing protocol for baseboard heating. This allows a 15% heating effect factor to be applied to the test values.



# HE3 Silent Fin Heating Edge

Ideal for both residential and commercial applications, Silent Fin is designed to provide maximum heat output at lower temperatures

## Applications

Corridors  
Reception areas  
Offices  
Greenhouses  
Housing authorities  
Affordable housing  
Apartments  
Residential applications



Silent Fin Heating Edge baseboard from Smith's Environmental is the perfect complement to today's high efficiency heating equipment. Silent Fin incorporates an efficient design with attractive, robust construction. The coil block is made up of a single 3/4" copper tube encased in aluminum fins featuring exclusive embossed channels designed to promote turbulent air flow thereby maximizing their heat transfer capabilities. Incorporating a Tabbed 5-Point Space Design to ensure continued performance, the aluminum fins help to create "Best-in-Class" performance outputs at both high and low temperatures.

The attractive cover features a perforated grille providing maximum free space thereby permitting maximum convective flow of heated air. This ingenious design also enhances safety by reducing the likelihood of human contact with the heated coil block.

## Features

- Superior low temperature performance
- Quiet delivery of heat
- Attractive design
- Perfect for use with solar thermal, geothermal or condensing boilers
- Single pipe design - suitable for residential or commercial applications
- Accessories available

## Finish

The coil block is made up of a single 3/4" copper tube encased in aluminum fins.

## Installation

Designed for ease of installation, the coil block includes pre-installed "glide clips" which have the effect of reducing the noises usually associated with baseboard heaters. The clips also include a molded cradle designed to accommodate return piping in areas where this is required. With an attractive durable finish, the cover is easily removed for cleaning and redecorating. Because the back plate, pre-drilled 16" on center for convenience, is not part of the finished look, it can be installed before decorative phase of construction is complete.

## Hot water performance ratings

	Entering Water Temperature (BTU/hr/ft @ EWT in °F)												
	90	100	110	120	130	140	150	160	170	180	190	200	210
1USGPM	117*	189	261*	342	423*	500	576*	686	795*	888	980*	1080	1179*
2USGPM	141*	201	262*	362	463*	560	657*	750	843*	928	1012*	1110	1208*
4USGPM	143*	220	296*	382	468*	566	665*	791	917*	1020	1123*	1230	1337*



\* Where marked (\*) Heating Edge HE3 Silent Fin® output is based on performance tests undertaken by BSRIA. The test data can be verified on the BSRIA website (report 58930/1). This includes calibration information. The catalog data above is presented in accordance with the American IBR protocol for baseboard heating. This allows a 15% heating effect factor to be applied to the test values.

# MINIB Natural Convectors - Wall

MINIB by Smith's Natural Convectors incorporate an efficient design with attractive, robust construction suitable for almost any indoor environment

## Applications

Hallways/Corridors  
 Reception areas  
 Waiting rooms  
 Offices  
 Lounge areas  
 Conference rooms  
 Walkways  
 Churches/Auditoriums



The main advantage of these convectors is that they are efficient, modern, economical and aesthetic heaters suitable for almost any indoor environment. Low cost to run, they provide even heat throughout a space. Low water content, compact design and no electricity needed, they are an economical way to provide comfort and style to any room.

## Features

- Wall mounted convectors, without fan for dry environments. For special applications please contact your local representative
- Narrowest wall mounted convectors with natural convection
- Very high output
- Short response time

## Finish

Anodized painted: silver, light bronze, dark bronze RAL 9016 semi-gloss (white). Grille: silver  
 The exclusive coil block is made up of 3/4" copper tube encased in aluminum fins

## Dimensions

Width: 4.5" (NU1 and 2)  
 Design height: 7" (NU1) 13.75" (NU2)  
 Length: 35.4" to 78.64"  
 Connection: 1/2"

CAUTION: the decorative convector grille must not be exposed to weight load or covered.

## Heat output

Length (inches)	35.4	39.32	48.75	58.5	68.25	78.64
<b>NU1</b>						
Output BTU's	1730	1972	2579	3187	3791	4395
Flow rate US gallon/minute	0.17	0.20	0.26	0.32	0.38	0.44
<b>NU2</b>						
Output BTU's	2241	2552	3336	4118	4903	5687
Flow rate US gallon/minute	0.23	0.26	0.34	0.42	0.49	0.57

Outputs tested @20°F temperature drop, 65°F entering air. Flow temperature 170°F, Return temperature 150°F

# MINIB Natural Trench Units - PT4

MINIB by Smith's Trench natural heating units (without fans) come in 14 styles made of stainless steel and 6 economy sizes made of galvanized steel

## Applications

Residential  
 Light Commercial  
 Shopping malls/Showrooms  
 Walkways  
 Exhibit halls  
 Churches  
 Conservatories  
 Reception/Lounge areas  
 Offices/Conference rooms  
 Waiting rooms/Hotels



Each model type comes in eight (8) different lengths ranging from 35.4" (2.95 feet) through 117.96" (9.83 feet) with capacities based on three (3) different EAT and four (4) different EWT. All based on 2 GPM. The unit on this page is called the PT4 which is our most popular model.

**As you review the product, dimensions, capacities and specifications please be mindful that there are many variants that could fit your needs if the PT4 does not.**

**Please call Smith's Environmental Products at 781 986 2525 for sales help or contact your local representative.**

## Features

- High natural convection efficiency at low EWT
- Short reaction time
- Lightweight
- Minimum requirements for operation and maintenance
- Available with or without valves

## Finish

Stainless steel casing  
 Aluminum cover panels with cross bar strengthen struts  
 Anodized aluminum grill – linear or rolled  
 Anchor feet at each corner  
 Coil is copper with bonded aluminum fins at 10 FPI  
 Rubber vibration isolation pad  
 145 PSIG working pressure  
 For dry environments of less than 75% RH

## Dimensions

Width 11.91" x Height 4.91"  
 Length 35.4"-117.96" (2.95 feet - 9.83 feet)

## Heat output

Length (inches)	35.4	39.32	48.75	58.5	68.25	78.64	97.5	117.96
Output BTU/hr	1177	1375	1863	2354	2846	3337	4316	5299
Flow rate US gallon/minute	0.11	0.14	0.19	0.24	0.29	0.34	0.44	0.53

Outputs tested @20°F temperature drop, 65°F entering air. Flow temperature 170°F, Return temperature 150°F



## General Information

### Happy to help

Smith's Environmental Products Ltd is one of the leading manufacturers of heating products in the US. We are committed to achieving the highest standards and our faith is supported by a free five year parts warranty guarantee with every product. Our customer service is second to none and we are happy to offer any help and guidance that you might need.

### Information and advice

A product brochure containing full technical specifications is available to download from our website or in hard copy from our office. Also available on our website are individual product data sheets, installation & user guides.

Alternatively contact our office 8:00am to 6:00pm Monday to Friday.

Smith's Environmental Products  
300 Pond Street  
Randolph, MA 02368

[SmithsEP.com](http://SmithsEP.com)

**(781) 986-2525**

[info@SmithsEP.com](mailto:info@SmithsEP.com)

[@SmithsEP\\_US](https://twitter.com/SmithsEP_US)

[#ThinkSmiths](https://www.facebook.com/ThinkSmiths)

Issue 01 | January 2018