



Figure 1: Elstein BSH construction panel 375 x 750 mm with HSR

The BSH construction panel system was developed for optimum use of Elstein's HTS and HSR ceramic panel radiators.

Elstein BSH construction panels are infrared radiation areas being factory assembled. The ceramic infrared panel radiators are fixed to the MBO mounting sheets and surrounded with a frame section made from extruded aluminium alloy and stainless steel capping sections.

The user only has to do the wiring, insert the BSH panel in a steel section frame to be made on site and connect the panel with the electricity mains.

The BSH system is ideal for heating all types of goods with a large area and can be installed in any position.

Elstein BSH construction panels are available in dimensions from 125 x 250 mm up to 1000 x 1500 mm and can be fitted with radiators with wattages up to 600 W.

Length in mm

Inner dim. (Outer dim.) [No. of rad.]	250 (267) [2]	375 (392) [3]	500 (517) [4]	625 (642) [5]	750 (767) [6]	875 (892) [7]	1000 (1017) [8]	1125 (1142) [9]	1250 (1267) [10]	1375 (1392) [11]	1500 (1517) [12]		Radiator wattage
125 (142) [1]	0.50 0.80 1.20	0.75 1.20 1.80	1.00 1.60 2.40	1.25 2.00 3.00	1.50 2.40 3.60	1.75 2.80 4.20	2.00 3.20 4.80	2.25 3.60 5.40	2.50 4.00 6.00	2.75 4.40 6.60	3.00 4.80 7.20	kW	250 W 400 W 600 W
250 (267) [2]	1.00 1.60 2.40	1.50 2.40 3.60	2.00 3.20 4.80	2.50 4.00 6.00	3.00 4.80 7.20	3.50 5.60 8.40	4.00 6.40 9.60	4.50 7.20 10.80	5.00 8.00 12.00	5.50 8.80 13.20	6.00 9.60 14.40	kW	250 W 400 W 600 W
375 (392) [3]	1.50 2.40 3.60	2.25 3.60 5.40	3.00 4.80 7.20	3.75 6.00 9.00	4.50 7.20 10.80	5.25 8.40 12.60	6.00 9.60 14.40	6.75 10.80 16.20	7.50 12.00 18.00	8.25 13.20 19.80	9.00 14.40 21.60	kW	250 W 400 W 600 W
500 (517) [4]	2.00 3.20 4.80	3.00 4.80 7.20	4.00 6.40 9.60	5.00 8.00 12.00	6.00 9.60 14.40	7.00 11.20 16.80	8.00 12.80 19.20	9.00 14.40 21.60	10.00 16.00 24.00	11.00 17.60 26.40	12.00 19.20 28.80	kW	250 W 400 W 600 W
625 (642) [5]	2.50 4.00 6.00	3.75 6.00 9.00	5.00 8.00 12.00	6.25 10.00 15.00	7.50 12.00 18.00	8.75 14.00 21.00	10.00 16.00 24.00	11.25 18.00 27.00	12.50 20.00 30.00	13.75 22.00 33.00	15.00 24.00 36.00	kW	250 W 400 W 600 W
750 (767) [6]	3.00 4.80 7.20	4.50 7.20 10.80	6.00 9.60 14.40	7.50 12.00 18.00	9.00 14.40 21.60	10.50 16.80 25.20	12.00 19.20 28.80	13.50 21.60 32.40	15.00 24.00 36.00	16.50 26.40 39.60	18.00 28.80 43.20	kW	250 W 400 W 600 W
875 (892) [7]	3.50 5.60 8.40	5.25 8.40 12.60	7.00 11.20 16.80	8.75 14.00 21.00	10.50 16.80 25.20	12.25 19.60 29.40	14.00 22.40 33.60	15.75 25.20 37.80	17.50 28.00 42.00	19.25 30.80 46.20	21.00 33.60 50.40	kW	250 W 400 W 600 W
1000 (1017) [8]	4.00 6.40 9.60	6.00 9.60 14.40	8.00 12.80 19.20	10.00 16.00 24.00	12.00 19.20 28.80	14.00 22.40 33.60	16.00 25.60 38.40	18.00 28.80 43.20	20.00 32.00 48.00	22.00 35.20 52.80	24.00 38.40 57.60	kW	250 W 400 W 600 W

Maximum surface rating 38.4 kW/m² Weight approx. 48 kg/m² Other dimensions and surface ratings available on request
The outer dimensions indicated in the table do not include the AL-square sections.

Figure 2: Overview of the standard dimensions, outer dimensions (), number of radiators [] and the connected loads in kW

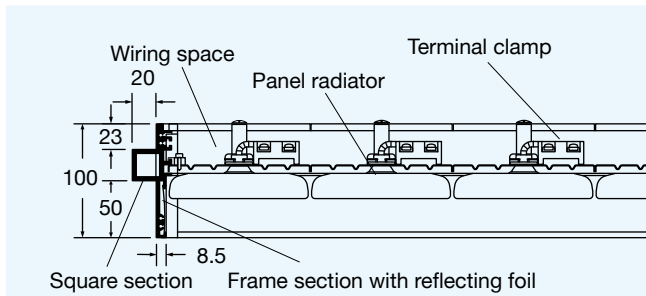


Fig. 3: Structural design of the BSH construction panel
Dimensions in mm



Fig. 4: Wiring space of a BSH construction panel

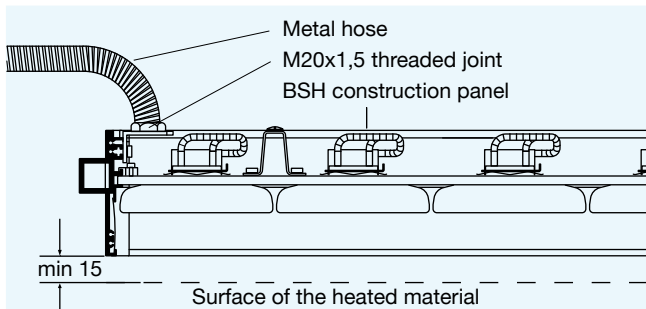


Fig. 5: Arrangement of the connection unit for establishing the mains connection. Dimensions in mm



Fig. 6: BSH construction panel, inserted in a steel section frame

Standard scope of delivery (variants available on request)

Ceramic infrared radiators HTS and T-HTS or HSR and T-HSR, fitted

Radiators can be chosen from the radiator power ratings 250 W, 400 W and 600 W. Mixed radiator wattages can also be fitted. One radiator with integrated thermocouple (T-HTS or T-HSR respectively) is provided for each construction panel.

Extruded AL-frame sections with AL-square section and capping sections made from stainless steel, fitted

These components are used to surround the ceramic infrared radiators fixed to the MBO mounting sheets. The square section with a side upstand enables the BSH construction panels to be hung into a steel section frame to be built on site.

AK bipolar terminal clamps, fitted and connected with radiator power leads

For the electrical wiring of the individual radiators in connection with heat resistant insulated nickel wires and connection of the thermocouple radiator with the heat resistant insulated thermo line.

Mounting units, enclosed, individual parts are not fitted

A mounting unit contains an angle section, up to 3 heat resistant flexible metal hoses 1m long as well as M20- and other screw fitting accessories. The hoses are used to hold the nickel wire and thermo line and to protect them from mechanical stress. The mounting units can be fixed to anywhere on the BSH frame section.

Wiring material (nickel wire, thermo line), enclosed

Nickel wire (2.5 mm², max. 500 °C, max. 11 A) is supplied for the electrical wiring of the ceramic infrared radiators. The thermo line (1 mm², max. 400 °C) is used to connect the thermocouple to the controller. The Elstein product range includes a compensating line (1 mm², max. 100 °C) for extending this connection outside the IR radiation area.

Our instructions for mounting, operation and safety must be observed.