

INSTALLATION PLANNING

Consort Claudgen have many years experience of supplying complete heating packages for all types of industrial, commercial, retail and amenity applications.

We are always happy to provide technical information to help in planning individual heating schemes. If you require additional information please contact our Free Advisory Service. The following information is provided to help in planning the most efficient heating for each installation. However, since requirements can be affected significantly by factors such as activity levels, ambient conditions, building structure, efficiency and weather-proofing, the information should be regarded as a general guide.

Which heater?

This will depend on the nature, use and design of the interior; and one type or a mixture of products may be used. In general, fan-forced heaters and convectors are employed as space heaters, and radiants where more localised heat or immediate all-over warmth is required.

Radiant heating

Twinzone, Sunzone, Ceramiczone and Quartzzone heaters are specified where there is a need for localised heat or immediate, all-over warmth. Applications include commercial and industrial premises that are lightly constructed, naturally cold and perhaps infrequently used. They are also ideal for premises where staff occupy only small parts of a large area, such as warehouses, stores and workshops. To estimate the approximate total heating load needed in kilowatts (kW), use the following formula;

$$\text{Installed Load (kW)} = (A \times F) / 1000$$

where: A = floor area in square metres and F = appropriate heating factor from the following table;

Type of Building	Heating Factor F (Watts/sq.m)
Sports Hall	110-130
Shops and Supermarkets	130-160
Offices and Canteens	140-170
Workshops and Garages	150-180
Halls with some activity	160-200
Warehouses	170-210
Halls with little activity	180-220
School Halls	200-260
Churches	220-280

The lower figures relate to a well insulated building with few draughts, the higher figures being more appropriate for older buildings with insulation below modern standards. This table takes account of the different heating requirements of these premises for example, a church is assumed to need rapid heating from cold, for sedentary and perhaps elderly occupants, and as such has a higher recommendation than a sports hall.

Siting

For optimum absorption of radiant heat by occupants, heaters should be positioned so that heat reaches them at an angle of 45 degrees and schemes should be planned if possible so that the area to be heated is effectively covered by heaters which are all mounted at or close to this angle.

Noise level

Throughout our catalogue we have referred to the dBA Level of various fan heaters. The dBA level was recorded three metres from the product. To aid you in determining how quiet our products are, we have listed below some comparative noise levels:

- * 30dB Whisper
- * 50dB Rainfall
- * 60dB Normal Conversation

Cable requirements to remote switch

Model No.	Output (kW)	No of wires	Wire size (mm²)	Mains supply	
				Single phase	Three phase
Screen Zone					
HE7402	3.0	4+earth	1.5	●	
HE7420	4.5	4+earth	2.5	●	
HE7426	6.0	4+earth	4.0	●	
HE7433	9.0	5+earth	0.5	●	●
HE8320	4.5	4+earth	2.5	●	
HE8326	6.0	5+earth	0.5	●	●
CA1309S	9.0	5+earth	0.5	●	●
CA1312S	12.0	5+earth	0.5	●	●
CA1509S	9.0	5+earth	0.5		●
CA1512S	12.0	5+earth	0.5		●
CA1514S	14.0	5+earth	0.5		●
CA1516S	16.0	5+earth	0.5		●
RAC10HL	8.0 - 12.0	RJ45			●
RAC15HL	12.0 - 18.0	RJ45			●
RAC20HL	16.0 - 24.0	RJ45			●
RAC0603	3.0	4+earth	1.5	●	
RAC0604	4.5	4+earth	2.5	●	
RAC1006	6.0	4+earth	4.0	●	
RAC1306	6.0	5+earth	0.5	●	●
RAC1309	9.0	5+earth	0.5	●	●
RAC1509	9.0	5+earth	0.5	●	●
RAC1512	12.0	5+earth	0.5	●	●

The above wire sizes are for guidance only and may vary with the length of the cable run.
IET wiring regulations must be used to check correct cable size.

* It is essential that the electronic controller supplied with these products is wired with good quality screened cable 1.0mm² max.