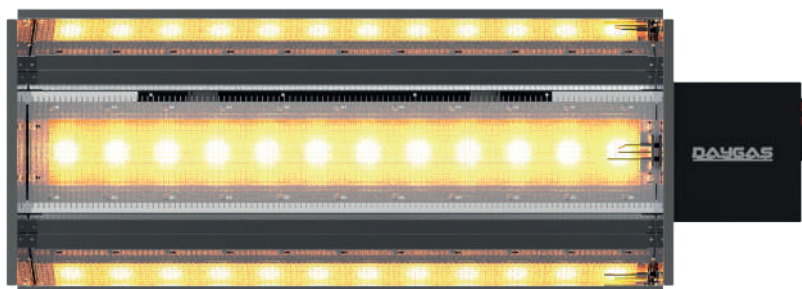


DAYGAS

Heating Systems

DSR SERIES GAS OPERATED RADIANT HEATERS TECHNICAL DOCUMENTATION



DSR Ceramic Radiant Series

Specially designed Daygas ceramic stone with high radiance, **effective and economical power in local heating analysis...**

- » Technology from the sun.
- » All metal parts are high temperature resistant, long-lasting aluminum - silicon alloy. (Except reflectors.)
- » The cable assemblies in the device are fireproof silicone cable resistant to high temperatures.

Ceramic Stones

Special production Daygas ceramic stones are used in Daygas ceramic radiant devices.

By choosing high-purity and high-quality cordierite, our infrared ceramic plate products of modern advanced science and technology have the characteristics of improving the efficiency of heat exchange, radiative gas heaters should give little convection heat, and the wavelength of radiation should be in the infrared range. In line with these desired conditions, stone selection and quality are very important as radiation occurs from the ceramic stone surface area.



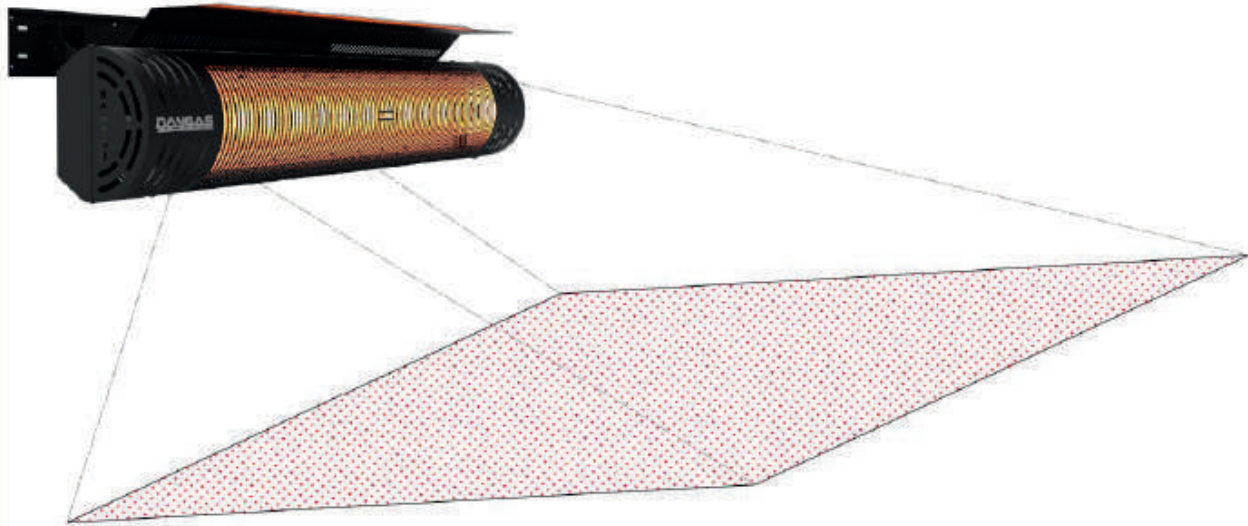
Cordierite is one of the most important phases in the $(2\text{MgO} \cdot 2\text{Al}_2\text{O}_3 \cdot 5\text{SiO}_2)$ $\text{MgO-Al}_2\text{O}_3\text{-SiO}_2$ system.

Cordierite ceramics have low coefficient of thermal expansion, excellent thermal shock resistance, high chemical resistance, high refractoriness and high mechanical strength.



DSR Ceramic Radiant Positioning Design

Capacity selection is made based on the hanging heights of ceramic radiant heaters. In the positioning of the ceramic stone radiant devices whose type and capacity are selected, the scanning angle under the device is taken into account and the analysis is done.



Since radiant devices heat with radiation, the one under the scanning angle is heated. Therefore, the regions outside the scanning angle cannot be heated.

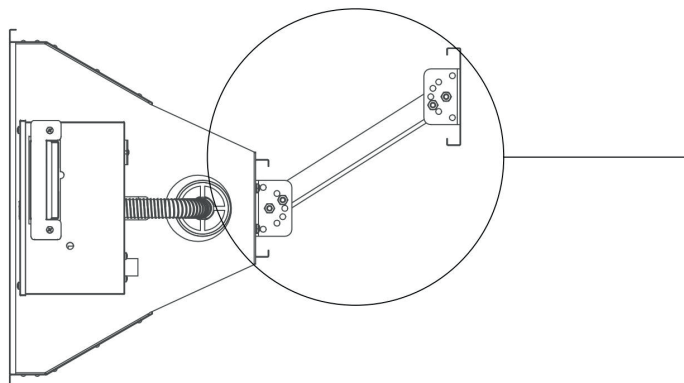
For example, in a cafeteria with 10 tables, there cannot be a scanning angle that appeals to all tables with 1 ceramic radiant (considering sma heights and device capacities); The design for this example can be done in 2 ways.

First of all, solution with low capacity ceramic radiants that will appeal to every table. Secondly, to provide heating with ceramic radiant with a higher capacity (12 stone ceramic appliances, etc.) that will appeal to 2 tables.

As well as device positioning, the mounting angles of the devices are another important issue.

Our cafe-restaurant type ceramic radiants allow easy mounting and fixing at the desired angle with special mounting feet. In addition to the mounting feet, chains, etc., for hanging especially on industrial type ceramic radiants. can be used. And in this suspension, mounting at desired angles is provided.

Application With Special Design Mounting Kit

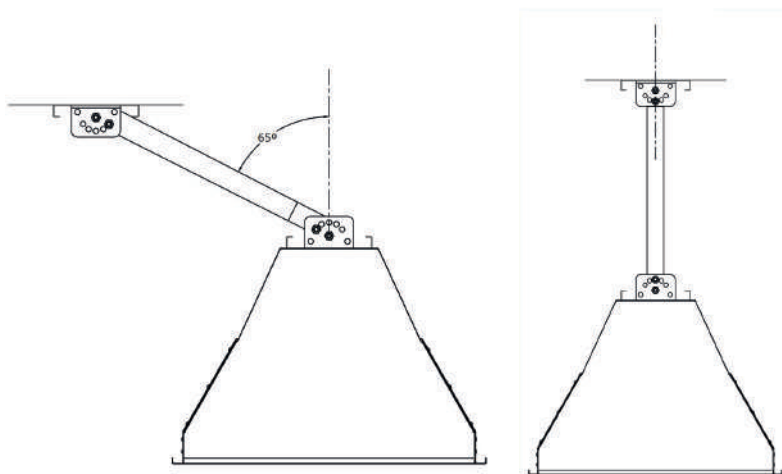
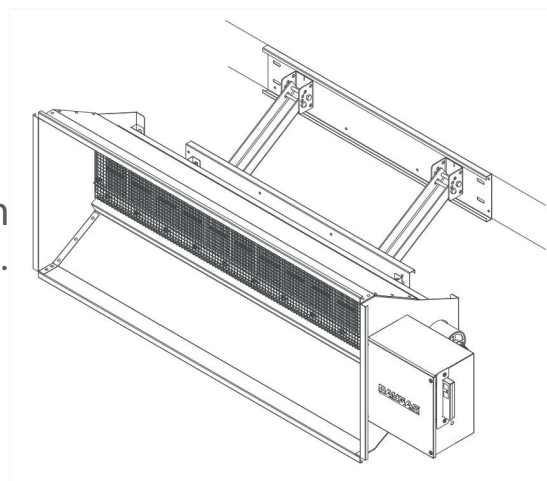


Let's examine the DSR Industrial 12 stone ceramic radiant as an application example of a special design mounting foot.

Specially designed feet are also available for mounting DSR Industrial ceramic radiants.

- » Devices can be mounted upside down (0°) with feet.
 - » Specially designed legs that allow angled (from 10 to 65°) mounting
- It is produced as 30-50-75 and 100 cm.

Angle-adjustable mounting can be made from both ends of the specially designed mounting feet.



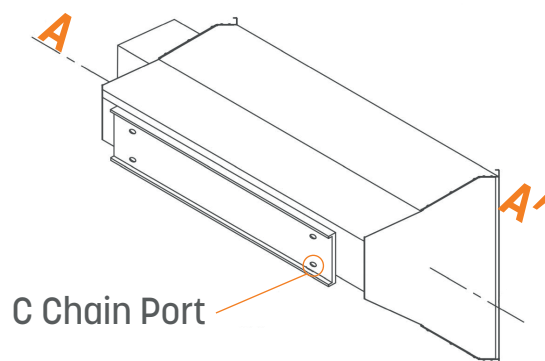
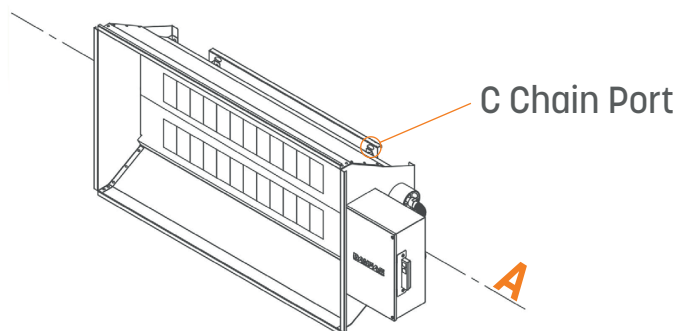
As seen in the example on the left; The devices can be mounted at an angle of 65 degrees from where they are suspended or directly upside down.

* 75 cm mounting feet are shown in the example.



Application With Chain Suspension

Chain etc. let's examine the DSR Industrial 24 stone ceramic radiant as an example of installation application.



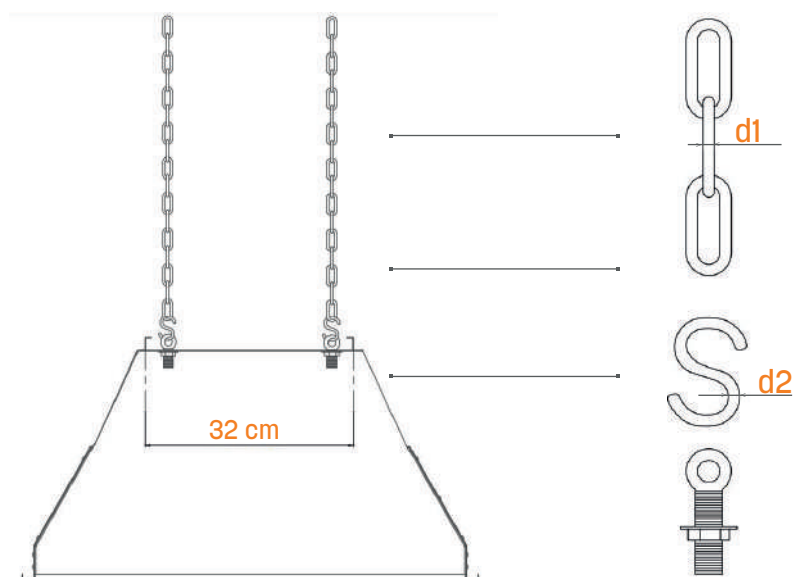
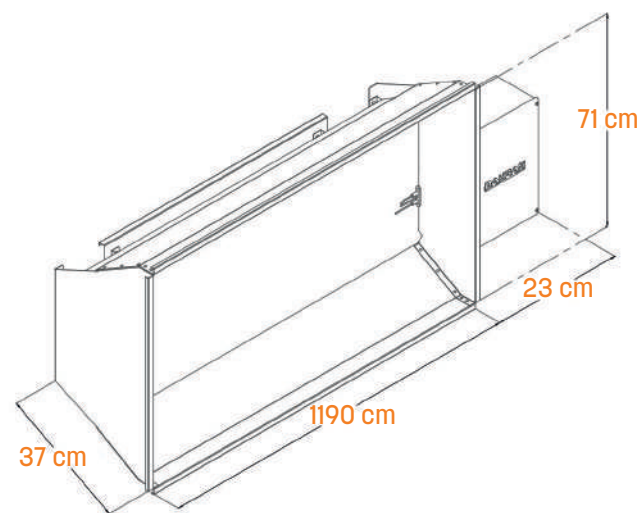
Angle Mounting Application →



If there is a beam where the devices will be hanged, it is recommended to fix it with a beam clamp. If there is no beam, steel dowels etc. can be fixed using.

DSR Industrial ceramic heaters, chain etc. It is suitable for mounting between 0 and 50° in suspension.

* The ratio of chain lengths to each other should be checked.



Link chain should be used to hang radiant devices.
The chain section diameter (**d1**) must be a minimum of 4 mm or greater and the material must comply with DIN5685 requirements.

Use as interconnector S hook cross section diameter (**d2**) must be at least 4 mm or larger and comply with DIN5685 requirements.

Stainless steel hook hole bolts should be used at the connection points of the chains to the device. M10 (metric 10) class full thread bolts should be used.





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