

ELPAN-WANPAN[®] Heating Systems

Thermal comfort through thermal encirclement



- ◆ Annual financial savings of 25%
- ◆ Even heat distribution in the entire room
- ◆ Elimination of draught and cold floors
- ◆ No damp or cold walls
- ◆ Fast adjustment of the temperature
- ◆ Quick and easy installation/mounting
- ◆ Free furnishing - no radiator in the way
- ◆ Removes chill from large windows



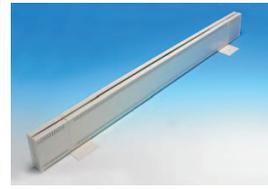
25% savings
each year on your heating bill
with Elpan-Wanpan thermal encirclement



ELPAN[®]



WANPAN[®]



ELPAN®



Design:

The Elpan heating system is a modular panel heating system. Not only is it invisible, but it also creates a comfortable thermal encirclement throughout the room. Read more about it on the back.

The Elpan panel provides an easy transfer between floor and wall. The system is actually thirty years old, but has been developed so that the design today is both modern and timeless at the same time.

The products:

The heating modules are available in three lengths: 120 cm, 85 cm and 40 cm. The modules are combined to form one long heating panel. It is 12 cm high and only 1.7 cm deep. Any spaces between the heating panels are covered with blank panels to give a uniform appearance all the way round the room. The panels are available in two colours: white, RAL 9010, and light grey, RAL 7035.



Control:

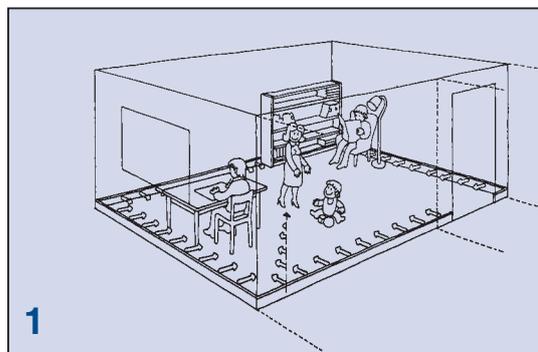
With the new precise control thermostats, the EI-heating panels are even more economical for heating homes or holiday cottages. The system can also be set to accommodate numerous temperature changes throughout the week, such as between night and day, or times when you are sleeping or at work.

Holiday cottages:

Elpan in a holiday home: With Elpan panels for holiday homes we also supply a new control system, which allows you to switch on the heating just by sending an SMS. So you can send a message a couple of hours before you arrive and walk into a lovely warm house.



Various heating



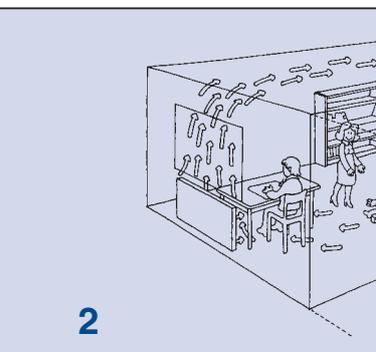
1

Type: Wanpan thermal encirclement.

Details: Mounted along the walls of the room just like skirtings. The thermal panel radiates 70% heating into the room which provides pleasant heating and very low difference in room temperature. Tests show less than one degree C. Very fast for heat adjustment and consequently fast day and night setbacks. Operates with low floor temperature most of the year.

Control and adjustment: Fast.

Economy and energy consumption: Good.



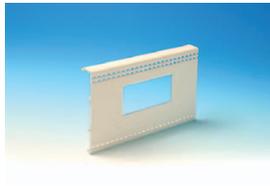
2

Type: Radiator.

Details: The radiator serves as a point of heat source, where it moves heat towards the ceiling, where it moves towards the floor. When the temperature is falling and there is a draught, the heat moves towards the radiator. The lowest temperature is at the floor, which means draught over the floor which means draught.

Control and adjustment: Fairly fast.

Economy and energy consumption: Fairly fast.



WANPAN®



Design and mode of operation:

The Wanpan heating system is a modular heating panel system designed to create thermal encirclement from gas, oil, district heating or similar sources of energy. The panels are mounted to the wall at the floor around the whole room. This creates a comfortable thermal encirclement effect and a stylish look. With the Wanpan system there are no visible feed pipes in the room, unlike with conventional radiators, as everything is concealed behind the panels. It is only necessary to supply one connection of hot water to each room if there is less than 15 m of panels.

The products:

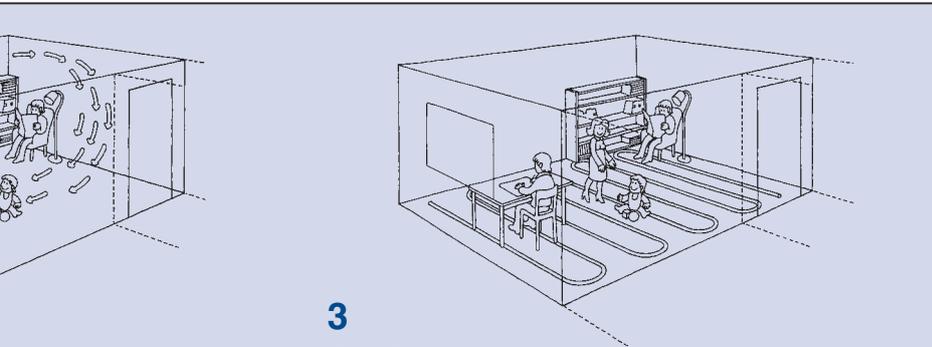
Wanpan modules are available in lengths from 40 cm, at 20 cm intervals up to a maximum of 320 cm. The modules are combined to form one long heating panel in the room. Any spaces between the heating modules are covered with dummy panels to give a uniform appearance all the way round the room. The panels are only 2.5 cm deep, and 13.5 cm high, including a 0.5 cm carpet edge cover. The panels are available in two colours: white, RAL 9010, and light grey, RAL 7035.

Electrical fittings:

Electrical fittings can also be mounted on the Wanpan panels themselves. The electrician puts in the cables before the panels are fitted, and sockets and switches can be mounted on the dummy panels. This also means that sockets can be positioned all the way around the room, which reduces the amount of cabling for lamps, home offices, TVs etc.



ing systems



3

Type: Floor heating.

Details: Floor heating provides a high temperature at the floor, declining up through the room. Floor heating has a great disadvantage as it responds very slowly to adjustment. Night and day setbacks have not time enough to react. On cold days where the sun is shining through the window and provides free heating with other heating systems, the floor heating will not have time to react.

Control and adjustment: Very slow control.

Economy and energy consumption: Medium due to control problems.

ump that sends up the heat to the opposite wall while the air oozes down the wall and back ure is when the air moves back and a cold floor.

st.

on: Medium.

Lots more information at:
www.wanpan.dk
 &
www.elpan.dk
 Contact us at:
elpan@wanpan.dk



Advantages:

In the past, building construction has been carried out with materials designed from the point of view of technological preconditions. Elpan – Wanpan products are designed from the standpoint of human thermal requirements. This means that using them provides greater indoor comfort and better thermal welfare in buildings, as a result of:

- ◆ No damp walls, and so fewer house mites
- ◆ Elimination of draughts and floor air currents
- ◆ Comfortable thermal encirclement
- ◆ Relatively lower air flow

The choice of designs and colours is an important part of creating comfortable surroundings for people to live in, which in turn have an even greater importance for well-being and everyday inspiration.

Thermal encirclement:

Elpan – Wanpan thermal systems are based on the principle of thermal encirclement, which creates a more even distribution of heat throughout the room, as the heat is conducted at a lower temperature evenly distributed along the walls.

This is quite different to other heating systems such as underfloor heating or conventional radiators.

Underfloor heating produces a very high temperature on the floor, which can be uncomfortable to stand on without footwear, while the temperature is lower the farther from the heat source, and there is a long delay when the temperature is changed.

Conventional radiators produce a high temperature immediately above the radiator, and a warm layer under the ceiling. The lowest temperature is at floor height, and this causes discomfort from draughts.

Cleaning:

The design and execution of the panels make it very easy to clean the Elpan - Wanpan panels with a vacuum or a moist cloth.

Savings of 25%:

Several tests have documented that the principle of thermal encirclement provides savings of 25%. Tests were made in the following way: Energy in a traditionally heated home was measured over one year, and after that the heating system was replaced by Elpan – Wanpan. The outcome was 20-37% energy savings in the homes and a pronounced improvement of comfort. This is indeed the best documentation for the outstanding performance of thermal encirclement.

Furnishing:

A home mounted with Elpan-Wanpan panels may be furnished as you like it. There will be no radiators in the way and you don't have the large radiators under windows that constitute an eyesore in any home.



Construction:

Elpan panels are made from polyester-coated steel plates. All metal components are treated with iron phosphate to protect against rust. Elpan systems are supplied as complete heating systems with modules for connection to a 230 volt supply, and electronic thermostats and timers for each room. The Elpan system is approved by Demko and CE, as well as by public authorities in a number of countries.

Construction:

Wanpan panels are made from coated aluminium profiles, with copper supply and return pipes. The Wanpan system is supplied as a complete heating system with heating modules with copper pipe connectors and automatic thermostatic control for each room. The Wanpan system is approved for a working pressure up to 16 bar, and is approved for usage by public authorities in a number of countries.



Dimensions:

Elpan is available in the following colours:
 WhiteRAL 9010
 Light grey.....RAL 7035

Elpan panels are available in the following module sizes:
 A: 18 x 124 x 1200 mm, 170 W
 B: 18 x 124 x 1200 mm, 120 W
 C: 18 x 124 x 850 mm, 110 W
 D: 18 x 124 x 400 mm, 40 W

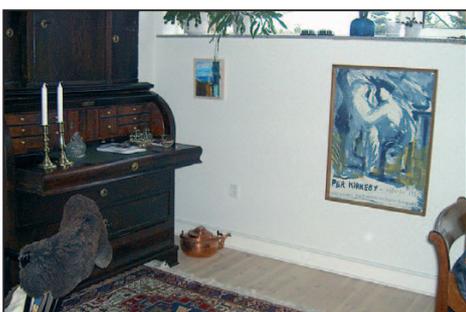
Dimensions:

Wanpan is available in the following colours:
 White.....RAL 9010
 Light greyRAL 7035

Wanpan panels are available in the following module sizes:
 24 x 136 x 400 mm
 24 x 136 x 600 mm
 24 x 136 x 800 mm

and the same intervals up to
 24 x 136 x 3000 mm
 24 x 136 x 3200 mm

Lots more information at www.wanpan.dk & www.elpan.dk. Contact us at elpan@wanpan.dk



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 Heating Systems A/S

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