

# ЕЛЕКТРОЛУКС Electrolux

## IHS CPF - Flexible Printed Film

### FLOOR WARMING

IHS's CPF floor warming system provides even, comfortable warmth that permeates a room. With floor warming, not only are surfaces warmed and people made comfortable, but the floor is warmed to just the right amount for it to be the most pleasant to walk and live upon.

IHS-CPF flexible heating film is a leading solution for all parquet, laminates and wall to wall carpets covering. It is ideal for houses and high rise apartment buildings. Each room is individually controlled with an air and floor sensing thermostat assuring optimal comfort and electricity costs savings.



IHS's CPF radiant floor warming systems are extremely energy efficient. Homeowners throughout the world use floor warming systems not only for their increased comfort levels, but also because they use as much as 20% less energy than other forms of heating, since all the heat energy is directed into the living space rather than heating the air along the walls. Our production facilities are controlled by the most advanced systems available -ensuring that your heating system will be no less than the best everywhere.

Our experiences in heating technology make us a world leader in all manner of flexible conductive circuits. Let us help you make your warming a pampering experience.

### Low Temperature Heating (LTH)

With LTH systems users' comfort increases on many aspects: More radiant heat transfer, less temperature gradients, more comfortable floor temperature, less draught and air turbulence;

The Indoor Air Quality is positively influenced: less dust mites, better perceived air quality through lower air temperatures, and less SBS symptoms due to less suspended particles and decreased dust singe);

### Energy Costs Saving

A further reduction of the energy use of buildings (needed to meet future global targets for emission

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reduction) implies that we look at ways to improve the heat generation process. The radiant heat transmission component of LT-systems is higher than for High Temperature systems. For example, due to large surfaces and Low Temperatures the radiant component of floor and wall heating is about 50 to 70%. For conventional HT-radiators this is only 30 to 50% and even less for conventional HT-convectors.

IHS's CPF carbon heating elements are composed of a uniformed carbon coating over a polyester film. Electrical energy is brought into the film from factory connected 'cold' cable leads, which connect to the copper strips & here it is transformed without loss into thermal energy.

In order to allow for a broad introduction of low energy heating systems in the next decade it is necessary to start changing our heat distribution systems into systems suitable for Low Temperature water distribution and Electric Radiant heating, as we do.

Thickness of the film	225 to 400 micron
Power	70w/M <sup>2</sup> to 180 w/M <sup>2</sup>
Sizes (width overall)	40cm to 100 cm
Rolls	100 to 150 mt
Buss Bar	Copper/ Tinned Copper

## Technical data:

- Description – Laminate polyethylene (polyester) carbon coated heating elements.
- Power Supply - 230/115 volts AC
- Standard power density - 120 watts per sqm (available from 60-200w)
- Individual element rating 10 amps
- Maximum rated surface temperature 60 deg C
- Connection – in parallel to thermostat with floor sensor
- Standard widths - 53 cm, 40 cm, 60 cm, 100 cm
- Approvals CE & Nemko approved
- Element length – max 100- 150 linear meters
- Recommended power density between 50% -100% increases on the buildings net heat loss per sq/m – this will facilitate reasonable warm-up times from cold – usual output for domestic installations 80-120watts per sqm over a typical room/building.
- Suitable for primary heating or comfort heat source
- Recommended control – digital thermostat with floor sensor
- Factory made cold cable connections from elements connected together in parallel at connection box before thermostat.
- Thermostat with temperature limiter - IHS's CPF carbon heating elements is operated by an electronic thermostat specially designed for under floor heating with a temperature limiter for operation under wood floor in 28-30°C.
- Cold cables 1.5mm diameter double insulated cable as required for under floor installation
- **Installation below timber or laminate floating floor** – 6mm Depron insulation is laid out & completely covers existing floor (concrete or timber) carbon film is laid directly on top of the Depron layer & covered with a moisture barrier before wood or laminate floating floor is laid.

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