

Electrical conductive Heating Paint

CSG IRE H10

10 Ohm (singel layer) / Sqr, 24 – 48 Volt VAC

Characteristics:

Aqueous, solvent-free, electrically conductive low-resistance Acrylic dispersion for indoor use.

Specification:

Color	Schwarz	Based on :	carbon
Form of delivery			liquide
Place of application			indoors
Solid content	%	45	ISO 3251
PH Value	pH	8	ISO 976
Viscosity	mPas	2000	ISO 2555
Rheology	newtonisch		
VOC	g/L	<0.2	
PAK*	mg/kg	0.002	ISTM
Pigment	µm	100	D90
• EU Limit (2010)	= 30mg/L		
Density	g/ml	1.15	ISO 2811-1
SD Value	m	0.1 m	ISTM

Film Properties:

Elektrical Resistance	Ω/□	10	ISTM /(1 Layer)
Film Resistance (24h)	°C	80	ISTM
Film Surface	Hardness		Flexible/hard
Tensil Strenght	N/mm ²	4.8	ISTM
SD Value	m	0.1	ISTM
Economy, 1 layer	m ² /L	5-7	ISTM (wet)
Steam and CO2	permeabel		ISTM

Hardening Recommendations:

MFT (minimum Temp.)	°C	10	ISTM
Dryingtime (RT)	h (20°C)	12-24	ISTM
Speed (belt)	m/min		not relevant

Storage:

Container size	L	5 L	Plastic Container
Storage Stability	M	12	Months
Frost Stability	F/T	5	ISTM (Frost/Thaw)

Original sealed containers can be stored in COATING SUISS E dispersions and varnishes at 20 ° C for 12 months from delivery. The recommended storage temperature is + 5 - 25 ° C. Freezing or temperatures above 30 ° C can negatively influence the viscosity and thus the average particle size and lead to sedimentation or coagulation. Contamination with Bacteria, fungi or algae can irreversibly damage the product.

Form of delivery:

Plastic can	1 Liter (Sample container)
Plastic canister	5 Liter (20 Liter / box)

Surface:

Excellent adhesion to almost all substrates such as old paint, pre-coated plasterboard, wallpaper, plaster, pre-coated concrete, pre-coated styrofoam, pre-coated wood, etc.

Processing:*

Particularly suitable and recommended for processing with a **Short-haired paint roller**. Absorbent substrates must be filled very well with primer concentrate to process economical quantities on the one hand and to ensure best adhesion on the other

Wall- & Ceiling Coating:

The black carbone based wall heating paint can preferably be top coated with white colored or bright colored pigmented plastic-based emulsion paints, dispersion silicate paints or silicone resin paints.

Application:

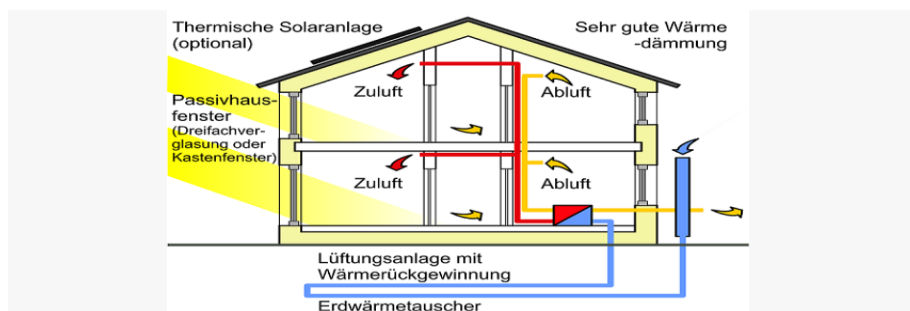
CSH-IRE-H5 can be processed like a normal wall paint with a roller. A single-layer coating is sufficient for the heating surface with 24 VAC. A second, thin layer should only be applied 10 cm wide at the edges above the current strips.

Electronic Controll & Regulation:

For a complete wall heating there are professional assemblies and Individual components, everything from a single source, available. Please contact us separately so that we can advise you fully.

Heat Demand Calculation:

- | | | |
|---|----|----------------------|
| • Damp old building without thermal insulation | => | 150 W/m ² |
| • Old building without thermal insulation | => | 120 W/m ² |
| • New building without thermal insulation | => | 80 W/m ² |
| • New building with standard thermal insulation | => | 60 W/m ² |
| • New building according to EnEV: | => | 40 W/m ² |
| • Passive house | => | 15W/m ² |



Hazardous Substances Ordinances:

Please refer to our current information on product safety
Safety data sheet. Preservative WITH & BIT.
SZID none / Registration: SZID 236308
No dangerous goods according to RID / ARD

Remark:

- (*) This is only general information. The specified values are not part of the product specification.
- CSG-IRE-H 5 runs almost perfectly. Due to the predominantly Newtonian rheology, almost splash-free when rolling.
- CSG-IRE-H5 is optimized for a permanent thermal load of 80 ° C. Due to the small layer thickness of approx. 100 microns, the layer heats up very quickly.
- Very even heat distribution. Due to the smooth surface, there are only a few ° C temperature differences.
- Electrically homogeneous and "hot spot" free heat (IR) - radiation is only obtained with a mechanical coating! Rolling, brushing or spraying is also possible, but never results in 100% homogeneous layer thicknesses.
- Impurities can be easily cleaned with water and a little washing-up liquid.
- Storage longer than 12 months from the date of shipment does not necessarily mean that the product is unusable. Before using a product that has been stored for a long time, you must first check the values in the specification. However, COATING SUISSE GmbH or its partners no longer assume any guarantee or liability after the expiry of the 12 months. The product must be stirred in any case, because after a long time some sediment has always formed