



Technical Data Sheet HECK AERO iP

(Hochleistungsdämmputz Innen, high-performance insulating plaster for indoor areas)

HECK AERO iP:

Dry mixed mortar T, CS I, W0 according to DIN EN 998-1

Properties:

- Highly heat-insulating mortar (with approx. 2cm, the minimum heat insulation according to DIN 4108-2 can already be achieved, if the existing U-value (thermal transmittance) of the existing wall is $\leq 1,4 [W/(m^2 \cdot K)]$)
- Excellent processing by hand or using a machine
- Ideally suitable for memorials
- Highest permeability
- Capillary-active (can store moisture temporarily and release it in the case of relief)
- Colour shade: white

Areas of Application:

- Highly heat-insulation for interior area for new and old buildings with an insulating layer thickness of up to 60 mm. Greater layer thicknesses on request
- As a capillary-active system with Rajasil KFP OWA (Kalkfeinputz ohne Wasserabweisung, fine lime plaster without water-repellent properties) for heat insulation and mildew prevention
- Ideally suitable for timbering buildings as capillary-active interior heat insulation
- Ideally suitable for mixed masonry buildings and difficult substrates
- Reveal insulation in indoor areas
- The user is liable for any other use exceeding these areas of application

Composition:

White cement (chromate-free), hydrated lime, aerogel granules, mineral lightweight aggregates

Technical Data:

Thermal conductivity $\lambda_{23^\circ C/50\%}$ (DIN EN 12667)	0.036 W/(m·K)
Water vapour diffusion μ (EN 1015-19)	≤ 5
Water absorption according to DIN EN 998-1	$C \geq 0.4 \text{ kg}/(\text{m}^2 \cdot \text{min}^{0.5})$, W0
Bulk density	Approx. 0.18 kg/dm ³
Cured mortar gross density	Approx. 0.25 kg/dm ³
Compressive strength (28 days)	Approx. 0.5 N/mm ²
Reaction to fire (DIN EN 13501-1)	Building material class A2 (non-combustible)

Consumption:

Approx. 1.8 – 2.0 kg/m²/cm. Consumption values are reference values and greatly depend on the surface and processing technique. Precise consumption must be determined on the object if necessary.

Plaster Base/Plaster Base Preparation:

All surfaces must have sufficient load-bearing capacity, be absorbent and be free from dust. Remove dust and loose parts from the plaster base. Remove old and crumbling joint mortar down to a depth of 2cm.

<i>Massive surface with sufficient load-bearing capacity</i>	<i>Smooth, poorly absorbing surface with sufficient load-bearing capacity</i>	<i>Highly and/or differently absorbing surface with sufficient load-bearing capacity</i>	<i>Surface with insufficient load-bearing capacity (loose plaster)</i>
New building: no further preparation Old building: Rajasil SPB applied reticularly	Reticular rough cast with Rajasil SPB Scratch coat with HECK K+A PLUS	Completely coating rough cast with Rajasil SPB	Plaster base Distanet (20 – 30 mm) or Welnet (> 30 mm)

Surfaces made from wood wool lightweight building boards, e.g. facings of roller shutter boxes, require special measures to avoid cracking (see DIN EN 13168).

Processing and Surface Temperature:

During the processing and drying phase, the temperature must not fall below +5°C. Lower temperatures during the curing phase can have a lasting adverse effect on product properties. At high temperatures and/or under wind load, additional measures must be taken to prevent excessively fast dehydration of the mixing water. In poorly ventilated rooms, sufficient supply of fresh air must be ensured.

Application:

Layer thicknesses 2 to 6 cm, not more than 50 mm/layer (in the case of rough and absorbing surfaces).

Mix a bag of dry mortar with approx. 9-10 l of cold tap water in a clean mortar mixing container using a power stirrer.

First stir half of the bag until the mortar is completely wetted with mixing water and then stir the remaining mortar. After a maturing period of 5 minutes, stir it again thoroughly.

Processing is possible with standard commercially available plastering machines (e.g. PFT G4 with spiral casing D8-1.5 wf, insulating plaster spiral, hose with a minimum length of 20 m, 30 m is ideal, spray nozzle with a diameter of 18 mm, water flow of approx. 400-500 l/h).

When applied by hand, apply a thin layer using the trowel and spread mortar only afterwards. Then press on the mortar and smooth it using the slat to achieve a level surface. In case of multiple layers, roughen the individual plaster layers. Recommended drying period of approx. 7 days per cm of plaster thickness. Drying period of at least 14 days for the application of the subsequent finishing coat under optimum ambient and surface conditions.

Secondary Treatment:	The freshly applied HECK AERO iP Hochleistungsdämmputz [HECK AERO iP high-performance insulating plaster] must be protected from too quick water withdrawal (sun, wind, high temperatures), frost and rain.
Finish:	<p>After the drying period has been complied with, a thin layer of Rajasil KFP OWA (Kalkfeinputz ohne Wasserabweisung, fine lime plaster without water-repellent properties) is applied. Then, HECK AGG (Armierungsgewebe fein; reinforcement mesh, fine) is embedded into the fresh plaster.</p> <p>As a finishing coat, Rajasil KFP OWA is applied using a trowel to achieve a uniform plaster thickness and felted or smoothed accordingly.</p> <p>For the coloured design, a coat without diffusion barrier using Rajasil SIF INTERIOR (Silikat-Innenfarbe, silicate interior paint) is recommended.</p>
Notes:	<p>For the other system components, the respectively applicable technical data sheets must be observed.</p> <p>Plaster joint connections must be carried out by a cut with the trowel. Construction elements, such as window sills, must be integrated elastically into the plaster system.</p> <p>Tools must be cleaned with water immediately after they have been used.</p>
Safety Instructions:	<p>HECK AERO iP contains lime and cement and fresh mortar thus produces an alkaline reaction. Avoid contact with the skin and immediately wash off any splashes. If product gets in eyes, thoroughly rinse with water immediately and seek medical advice. If swallowed, immediately consult a doctor. Wear suitable protective gloves at work. Keep material out of the reach of children.</p> <p>European list of wastes 010410</p> <p>For further information, see safety data sheet</p>
Storage:	Dry and well ventilated, storage time approx. 9 months in the original container.



The information given herein is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part. We reserve the right to make any changes according to technological progress or further operational developments. This information merely describes the properties of our products and services, and no warranty is intended or implied. The customer is not released from the obligation to conduct careful inspection of the functions and applications of these products by qualified personnel. This also applies to existing third-party intellectual property rights. Reference to trade names used by other companies is neither a recommendation nor does it imply that other similar products could not be used. With this publication, all earlier Technical Data Sheets become invalid.

HECK Wall Systems GmbH
Thörlauer Straße 25
95615 Marktredwitz / Germany
Phone: +49 9231 802-0
Fax: +49 9231 802-330
www.wall-systems.com