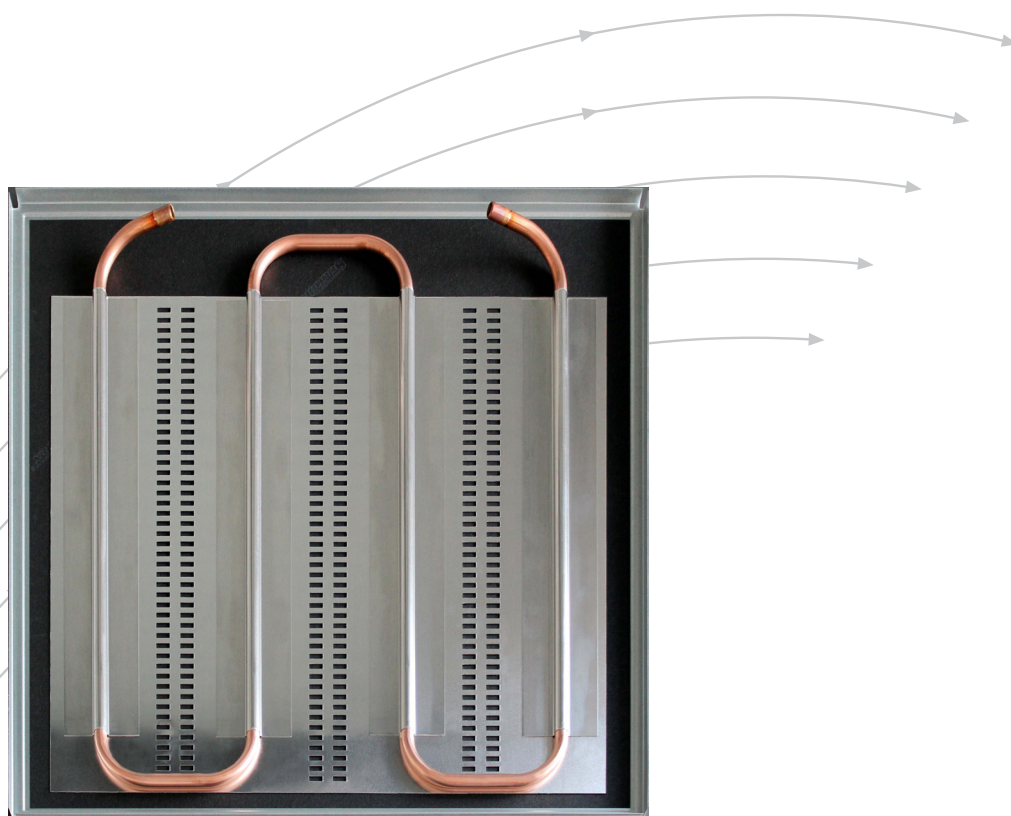


Chilled Ceiling System

- Type WK-D-PP
- Active metal ceiling tiles
- Maximum activation flexibility



TROX[®] TECHNIK



The art of handling air

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Contents · Description · Performance

Contents

Description · Performance	2
Installation step by step · Advantages	3
Services · References · Thermography photos	4

Description

The cooling elements Plug&Play (WK-D-PP) excels thanks to speed, simplicity and flexibility.

All metal ceiling tiles available on the market can be equipped with our flexible activation element. The proportion of convection and radiation is 50 % for each. This achieves maximum comfort from the chilled ceiling.

The ceiling tiles become cooling modules by equipping them with our activation elements (standard: Ø 12 mm with copper tube meanders).

The activation elements are permanently connected to one another directly at the construction site (or at the customer's request at the production facility) by means of high-performance adhesive tape. Optimum acoustic values as well as a uniform ceiling style are achieved with a continuous acoustic fleece fully covering all of the ceiling tiles.

Ceiling tiles

As an independent manufacturer, we can provide you with the latest products from all of our ceiling tile suppliers.

Optics

There are hardly any restrictions as to the geometry and colour. We can supply everything from standard powder coating to individual screen printing.

Perforation/Acoustics

Our chilled ceilings are available with different perforations.

Perforated ceilings have a positive effect on the acoustics of rooms.

Parts and characteristics

The metal ceiling tiles are ready for installation when delivered. The type of suspension system depends on the type of ceiling. The metal ceiling tiles are also available as hinged drop down tiles.

Connection system

Depending on the maximum pressure loss and the building or room construction, an appropriate number of cooling modules are interconnected with flexible hoses. Each water cycle can be locked off separately by using two mini ball valves. The connection to these mini ball valves as well as the connections to the cooling modules are carried out by using flexible, diffusion-proof tubes that are protected by a stainless steel overbraid. The installation by means of quick-release couplings is performed without tools and with minimal effort.

Leakage test

After installation by our experienced air-handling ceiling fitters, the entire chilled ceiling must be checked for tightness. This is performed using air or water via the pressure drop method.

Condensation

As with all chilled ceilings, the chilled water flow temperature must never fall below the room dew point (use a dew point monitor). Usual water temperature, flow 16 °C to 18 °C.

Output

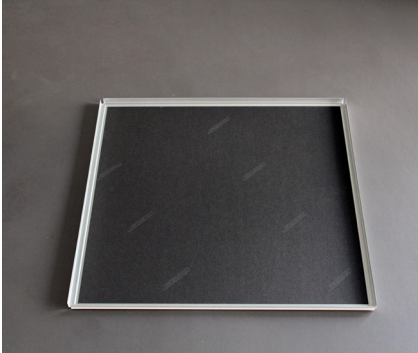
Ceiling tiles that cover the entire area:
Cooling capacity up to 110 W/m² active area according to DIN4715
(at Δt: 10 K)

Ceiling canopy:
Cooling capacity up to 125 W/m² active area according to DIN4715
(at Δt: 10 K)

We are happy to provide you with a project-specific design for binding specifications.

Installation step by step · Advantages

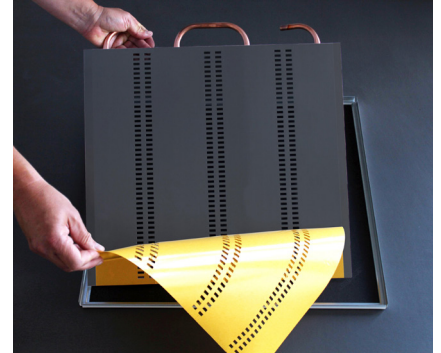
Installation step by step



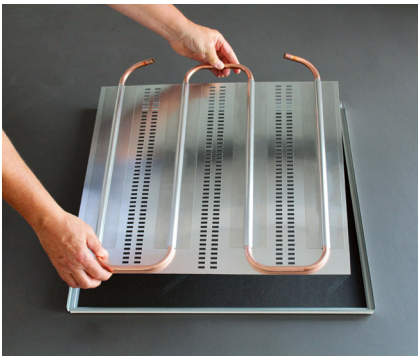
Standard ceiling tile including acoustic fleece is delivered to the construction site.



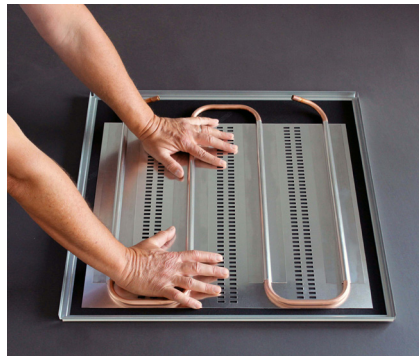
The WK-D-PP element is delivered to the construction site. The element is coated unilaterally with high-performance adhesive tape.



The protective film of the adhesive tape is removed from the WK-D-PP element.



WK-D-PP is placed into the ceiling tile that is to be activated in the desired position. It is important to carry out assembly and/or installation on a flat surface.



WK-D-PP is manually connected to the ceiling tile by pressure. The elements are connected by using high-performance adhesive tape with strong



The ceiling tile is activated by means of WK-D-PP and can be further installed.

Advantages Plug & Play Activation Elements

- + Fast manufacture (standard sizes)
- + Savings in transport costs
- + Minimised transport damage
- + Reduced delivery times
- + Easy, fast and tool-free assembly
- + Installation on site
- + Optimal contact thanks to flat adhesive

- + Low elemental mass
- + Maximum flexibility until installation
- + Quick response times to changes
- + Can be used with and without fleece
- + Available with acoustic perforation
- + High temperature stability
- + Ideal for retrofitting

Services · References · Thermography photos

Services TROX HESCO Schweiz AG

- Advice
- Design
- Sizing
- Customised interfaces
- Creation of the design and project schedules
- Maximum cooling capacity
- Water dispersion
- Creation of activation elements
- Ceiling construction
- Assembly of the activation
- Connecting the flextubes
- Tightness checks and controls
- Filling, rinsing, venting
- Thermographic images including thermographic protocol
- Final documentation
- Handover to the builder or constructor

Reference projects

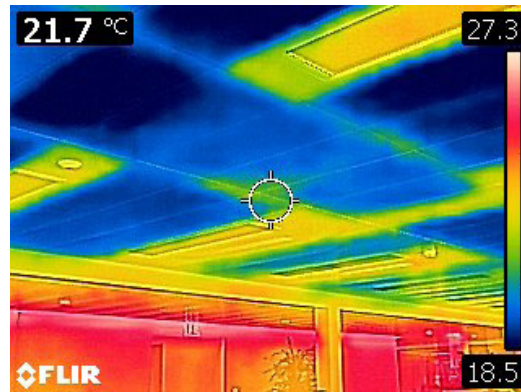
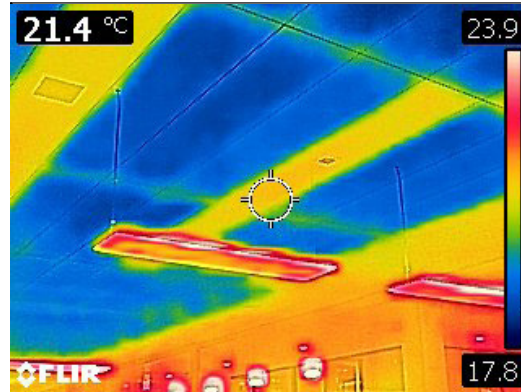
- Regionales Blutspendezentrum [Regional Blood Donation Centre], St. Gallen, Switzerland
- Kantonsspital Baden Dialyse [Cantonal Hospital Baden Dialysis], Brugg, Switzerland
- Pepsico, Geneva, Switzerland
- Klinik Stephanshorn Radiologie [Stephanshorn Radiology Clinic], St. Gallen, Switzerland
- Klausstrasse 4, Zurich
- IWAG Strassenverkehrsamt [IWAG Road Traffic Office], Büro [Office] 137, Bern, Switzerland
- Apotheke & Papeterie [Pharmacy & Stationer], Endingen, Switzerland
- Werkhof Schöntal [Schöntal Maintenance and Operation Centre], Winterthur, Switzerland
- Nestlé Research Centre, Lausanne, Switzerland
- SPIDA Personalvorsorge [SPIDA personnel benefit plans], Zurich, Switzerland

Please don't hesitate to contact Trox so that we can support your project from its inception.

Metal chilled ceilings that cover



Thermographic images



We reserve the right to make design and shade of colour changes (02/2019)