ROMA INSULATION SYSTEMS

Cold-store and deep-freeze construction

Quick-assembly cold-store panel, type P

DAMIT ALLES PASST. ROMA

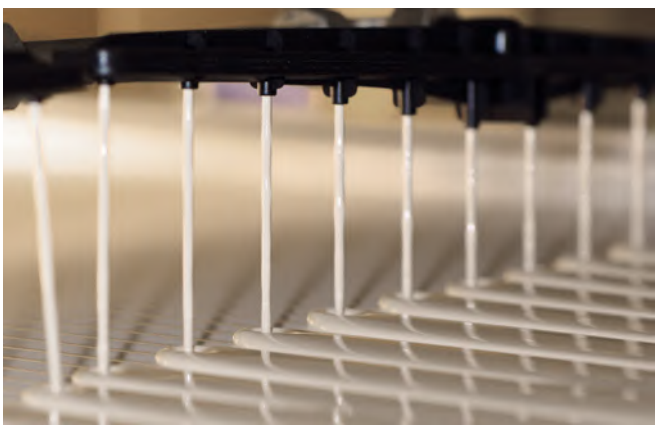
ROMA type P cold-store panels: Efficient in every way



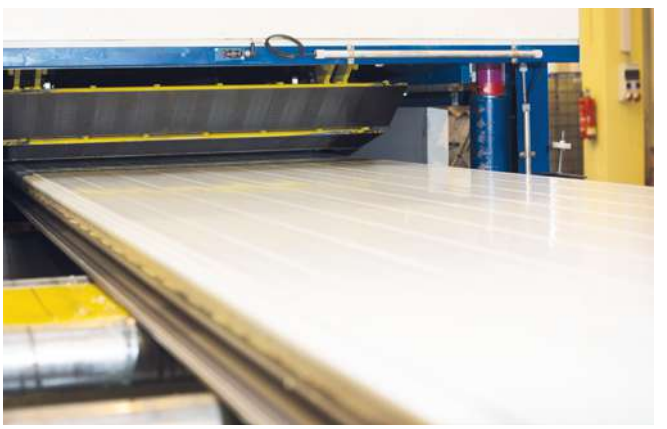
Optimal insulating performance and lasting product quality
Our sandwich panel elements offer excellent insulating performance thanks to our rigid PIR foam insulating core. ROMA construction elements enable highly energy-efficient operation of your cold-store thanks to its advanced technology. Metal cladding layers ensure high impact resistance and resistance to aging and corrosion. The force-locked connection of the stable cladding with rigid PIR foam delivers outstanding panel stiffness. Thanks to this technology – and depending on panel thickness and installation method – exceptionally wide purlin spacing and spans are possible. Nine insulating thicknesses ranging from 45 to 220mm make it possible to achieve efficient insulation in every application area.

The rapid assembly of the self-supporting panels saves valuable time, minimizing your investment. Another strength of ROMA cold-store panels: our proven construction system featuring high precision manufactured parts ensures a high quality standard and superior longevitiy is achieved.

In short: ROMA construction elements ensure optimal assembly and outstanding quality for all your structural and mechanical statics requirements.

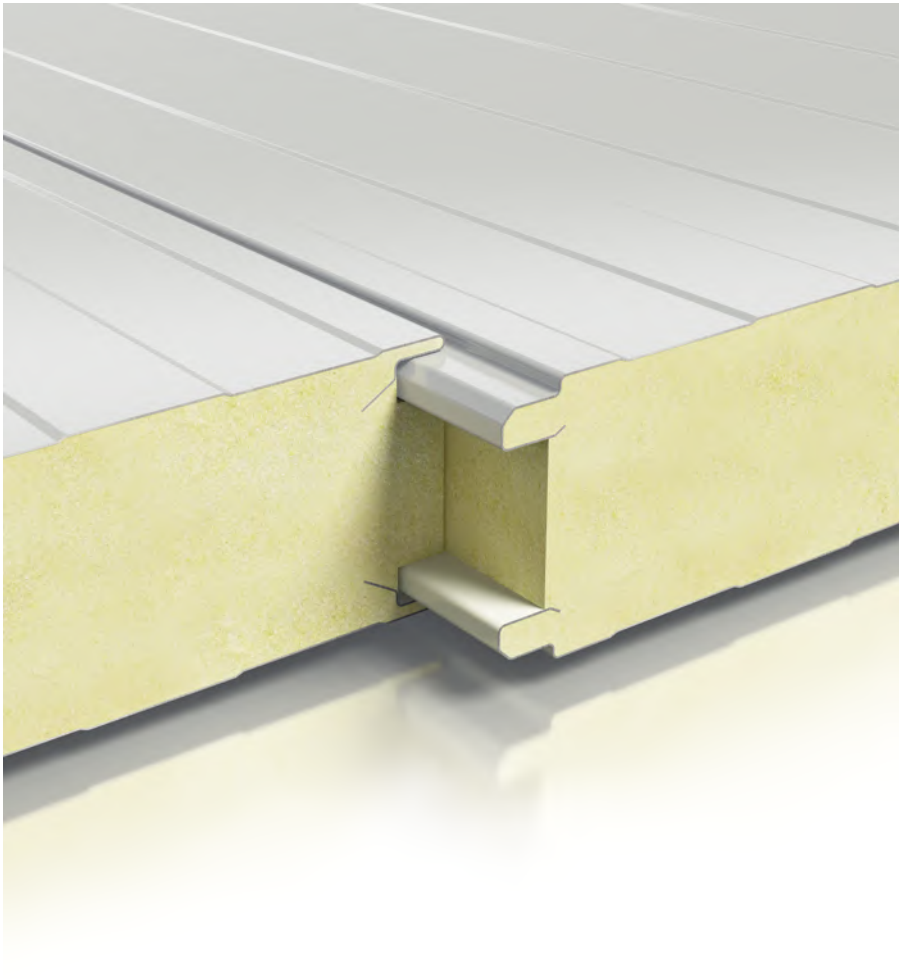


Consistent rigid foam quality throughout the panel cross-section

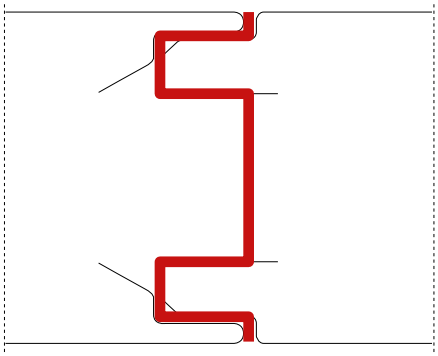


*) Foam System ROMA5 based on organic waste (Bio-Naphtha). Mass Balance Technology monitored by TÜV Nord.

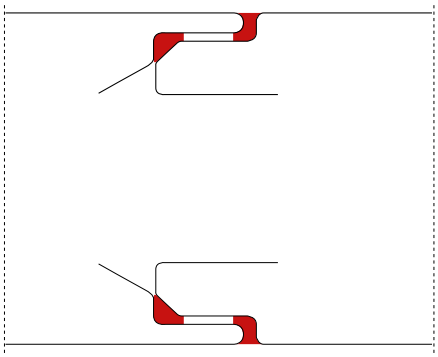
Assembly and joint technology



Highly precise insulating elements – one of the most important prerequisites for joint technology resistant to diffusion



A labyrinth effect serves as the basis for tight element joints.



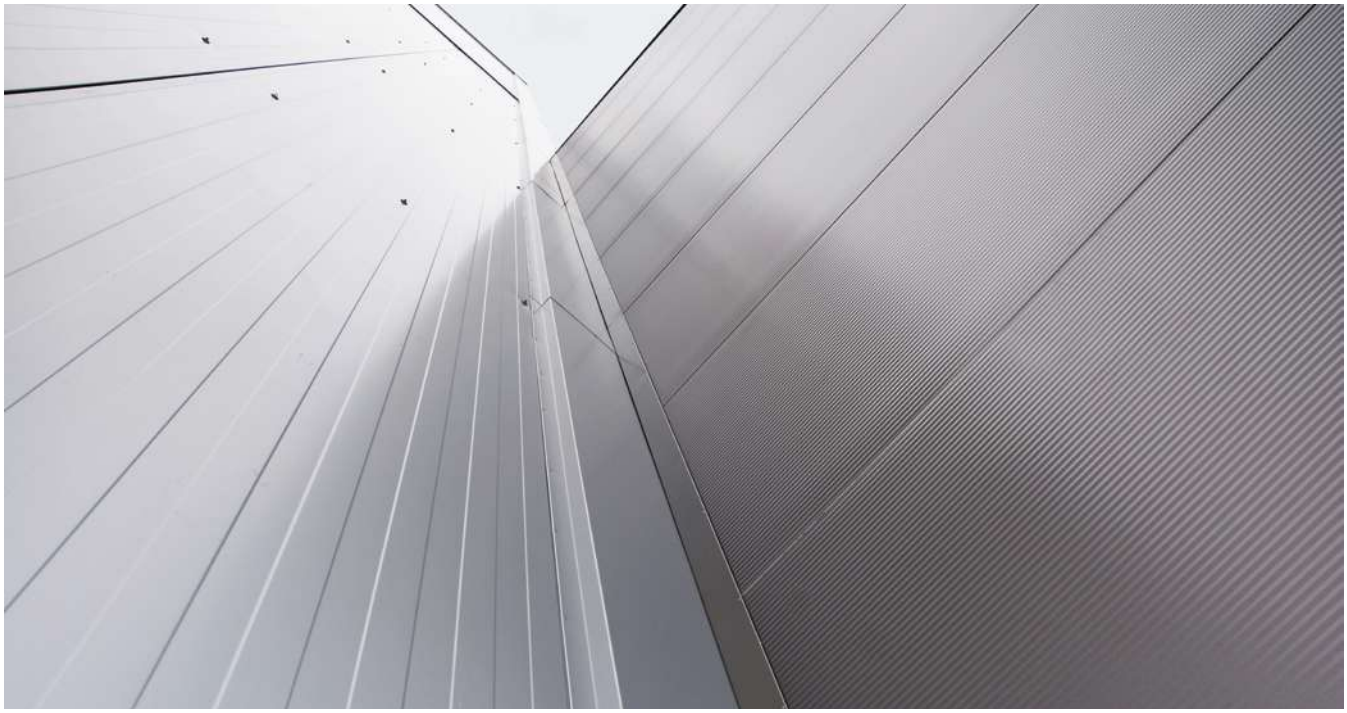
Four sealing methods

Advanced joints result in extreme seal tightness
One of the most important requirements for diffusion-resistant joint seals is the precision-manufactured elements. In order to achieve this high level of precision and seal tightness, ROMA only mills the tongue-and-groove foam profile after complete cool-down.

Labyrinth effect
The ROMA quick-assembly insulating panel stands out because of the carefully planned geometric design of its joint path. This labyrinth-like joint path as well as the twofold joint overlap achieves the best possible seal. This trademark ROMA construction feature allows the use of durable seals at four critical points. Deeply interlinked element joints cover the two seals facing inward – this provides the seals with optimal protection against the effects of weather and mechanical damage.

The load-bearing construction of your choice
Our quick-assembly insulating panels are suitable for all load-bearing construction. Whether you use steel or reinforced concrete – the self-supporting ROMA construction elements allow customized planning of any size project.

Efficiency
in every detail



30m tall deep-freeze high-bay storage warehouse

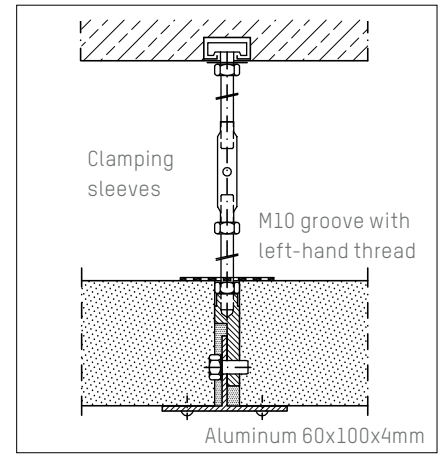


Ski Sport Hall, Oberhof

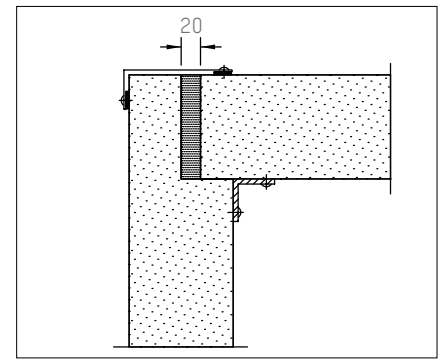
Minimal cost –
maximum efficiency
The precise accuracy and easy-to-fit tongue-and-groove design optimizes assembly times. ROMA quick-assembly insulating panels can be transported and mounted using various lifting equipment for rapid and easy laying. Because of its low weight, efficient assembly by hand is possible for smaller projects.

ROMA construction elements can be assembled on the outside as well as the inside of load-bearing constructions. The flexible construction system allows insulating elements to be laid vertically or horizontally. You also benefit from the versatility of our insulating panels, which can be used as wall or roof panels.

Do you plan to complete a special building project? That is no problem with ROMA – because our quick-assembly insulating panels can be processed using standard tools. For example, cutting out door, window and other penetration openings is quick and easy. This is a key benefit and accommodates unexpected changes in plans during construction such as extension or conversion work on the physical structure.



Ceiling hangers



Wall-ceiling joint
You can find solution recommendations like this on our website:
www.romakowski.com

Quality Made in Germany

**Metal cladding layers –
durable, easy to maintain and hygienic**
Choose from a wide range of metal cladding layers for your specific purpose: Various materials, surface structures, coatings and paint finishes cover a wide range of function and design tasks.

ROMA cladding layers are rugged, easy to care for, hygienic and require almost no maintenance. Additional protection against rot and microorganisms can be achieved by sealing the element connections with specialized ROMASIL duroplast silicone.

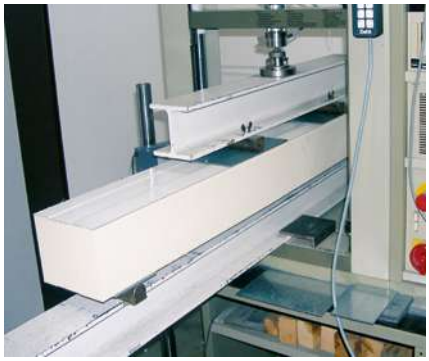


Special coating for use in maritime environments: Deep-freeze high-bay storage in warehouse in Grimbsby

**Top quality –
security for our customers**
ROMA quality ensures that construction companies and specialists in making cold-store and deep-freeze units have efficient products with the best structural mechanics. We have four of the world's most advanced production plants for PIR and rock wool sandwich panel elements. Quick-assembly insulating panels for cold-store units are continuously produced at our factories. Regular internal and independent monitoring ensures a consistently high quality standard.



Continuous sandwich panel manufacturing with the most advanced and largest double conveyor belt production line in the world



Computer-aided quality checks: bending test



This fire test is one of many quality assurance checks during production.



Continuous manufacturing checks throughout the company

Properties, technical data, product overview

ROMA is a leading manufacturer of wall and roof sandwich panel elements for industrial and cold store construction.

We develop, manufacture and market complete systems for industrial construction engineering as well as cold-store and deep-freeze cell and cell-door construction. Climate test chambers, cleanrooms, and specialized climate-control applications are also part of our product portfolio. We have over 75 years of success and experience in highly specialized construction sectors.
Ever since its founding, our family-run company has always manufactured top-quality products Made in Germany.

Approval
General building authority and building law approval for use as walls/roofs/ceiling. Notification of approval Z-10.4-549 of the DIBt, Berlin and CE marking in accordance with DIN EN 14509.

Planning details
Please consult our most recent technical data sheets for detailed planning specifications.

www.romakowski.com/en/insulation-systems/downloads



Please see our color chart for more information on cladding layers and color options.

Cladding layers	
Standard version	Galvanized steel, profiled on both sides
Surface and color	Polyester-coated, RAL 9001, 9002, 9006, 9010
Special version	One side smooth, microprofiled or w-profiled; both sides smooth; further coatings and colors on request

Fire tests	
D	B1 acc. to DIN 4102 – fire-resistant
CH	Class 5.3 acc. to VKF Bern
EU	Euro-Class B-s2, d0 (DIBt approval), Euro-Class B-s1, d0, acc. to EN 13501-1 P120 EI 30, P200 EI 60, acc. to EN 13501-2
FM	FM Approval (4880, 4881, 4482, 4471)

System dimensions	
Unit width	1170mm
Module width	1150mm
Available length	Up to 20m, depending on panel thickness
Custom sizes	On request
Insulating thickness	45, 60, 80, 100, 120, 140, 170, 200, 220mm

Weights, thermal insulation and spans

ROMA quick-assembly insulating panels	**Insulation thickness**	**Panel weight approx.**[1]	**U-value** certified to EN 14509 with joint [2]	**Roof element spans,** self-supporting single-field loadbearing units depending on load type[3] EN 14509 without bending
Typ	**mm**	**kg/m²**	**W/(m²·K)**	**m**
ROMA P 45	45	12.1	0.540	to 5.11
ROMA P 60	60	12.7	0.388	to 6.31
ROMA P 80	80	13.5	0.285	to 7.70
ROMA P 100	100	14.3	0.226	to 8.73
ROMA P 120	120	15.1	0.187	to 9.57
ROMA P 140	140	15.9	0.160	to 10.31
ROMA P 170	170	17.1	0.131	to 11.23
ROMA P 200	200	18.3	0.111	to 11.89
ROMA P 220	220	19.1	0.101	to 12.25

[1] The element weights refer to the standard version (external 0.6mm/internal 0.6mm)

[2] $\lambda_{declared}$ = 0,022 [W/mK]

[3] Including repair load of P = 1.0kN, 150Pa negative/positive pressure, both sides t = 0.6mm, profiled

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