

CELLTHERM 
Kühlzellen ■ Coldrooms

Celltherm Coldrooms

More than Meets the Eye!

CELLTHERM – A STRONG PARTNER FOR COLDROOMS

For over 30 years the name CELLTHERM has stood for high quality chiller and freezer rooms. As one of the leading suppliers in Europe, we are renowned for our versatile, individualised solutions, which are tailored to the specific needs and desires of our customers.

The customer is at the heart of everything we do. We have an experienced and dedicated team available both in Germany and abroad to personally assist our customers with support and advice every step of the way: from project planning through to after sales service. All company processes are structured to correspond exactly with the customer order. This

allows us to respond to our customers' wishes flexibly and innovatively within our streamlined organisation and remain true to our motto: CELLTHERM – More than Meets the Eye!

Whether a cost-effective standard cold-room or a precisely tailored custom solution, whether personalised support on site or professional installation: our goal is always absolute customer satisfaction with our products and services. To this end, we continuously invest in state-of-the-art production equipment, product improvements and personnel. So that you, our domestic and international customers, will continue to place your trust in us in the future!



Holger Bialdiga

Bart Verhoeven

TABLE OF CONTENTS

- 04 - **CELLTHERM – THE COMPANY**
- 07 - **CELLTHERM QUALITY**
- 08 - **CELLTHERM CHILLER AND FREEZER ROOMS**
- 10 - **THE CELLTHERM PANEL**
- 11 - **CELLTHERM FLOOR DESIGNS**
- 12 - **HINGED DOORS, HATCHES AND SERVICE DOORS**
- 14 - **ACCESSORIES AND SPARE PARTS**
- 15 - **CUSTOM PRODUCTS AND REFERENCES**
- 17 - **CELLTHERM SERVICES**
- 18 - **CELLTHERM'S EXPERT TEAM**
- 19 - **THE CELLTHERM CREDO**



CELLTHERM – THE COMPANY



BUSINESS LOCATION
▪ Gronau (Germany)

FOUNDED
▪ 1981

FACTORY PREMISES
▪ 50.000 m²

PRODUCTION AREA
▪ 14.000 m²

STAFF
▪ 75 employees

CELLTHERM – YOUR COLDROOM PROBLEM SOLVER

Since early 1982 CELLTHERM has been manufacturing PUR-foam insulated panels with foamed-in eccentric camlocks and PUR-insulated hinged doors for modular coldrooms as well as for test rooms and climate-controlled rooms at its company headquarters in Gronau / Germany. Today, with its strong international partners, CELLTHERM is a leading European manufacturer of modular insulation panels.



Our continued market success is based upon the manufacture of premium quality products in an efficient streamlined production. We are renowned not only for our innovative product solutions and flexibility in meeting challenging customer requirements, but also for our impressively short delivery times.



STATE-OF-THE-ART PRODUCTION TECHNOLOGY – FOCUS ON FLEXIBILITY AND QUALITY

For our customers from the wholesale and retail trades, the restaurant and catering sector, from food production and the food industry as well as those from the fields of pathology, pharmacy and laboratory technology, the name CELLTHERM is synonymous with superior quality products combined with the highest degree of flexibility and precision with an

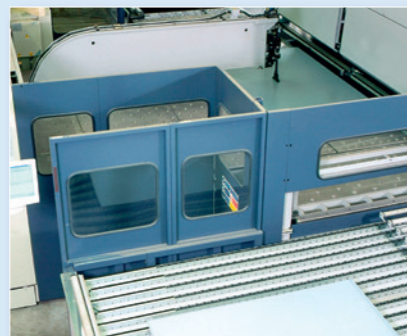
absolute adherence to delivery schedules. It is our aim to meet the increasing requirements of our customers in the future and this is why we continuously invest in the latest production technology. In fact, our products are presently manufactured in one of the technologically most advanced production plants for insulation panels in Europe.



View of the new production facility with its state-of-the-art production equipment



CNC-controlled sheet metal processing line for cutting to size, punching and bending sheet metal



- **MOST MODERN PRODUCTION TECHNOLOGY**
- **STREAMLINED, HIGHLY FLEXIBLE PRODUCTION PROCESS**
- **MORE THAN 30 YEARS OF EXPERIENCE**

CELLTHERM QUALITY – THE HIGHEST LEVEL OF PRECISION



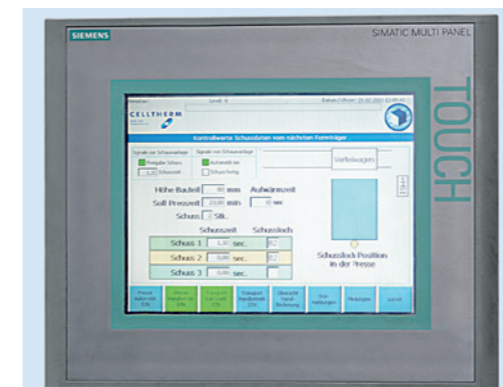
Integrated RFID System



Fully automated high-pressure dosing machine for PUR-foam

Automation where possible and flexibility where necessary: this motto is the basis for our actions in all areas of the company. Thus, we are able to manufacture products of the highest quality with the utmost

reliability. This holds true for customers purchasing a standard coldroom equally as well as those requiring a project-specific, bespoke solution.



Made-to-measure computer controlled production process



Seamless quality controls

Our quality management permeates all aspects of the company; whether it is in the form of automated control processes or ongoing visual inspections and functional checks.

Our customers value the precise dimensional accuracy, the incredible stability and

the indestructible, robust design of our coldrooms. The extraordinarily long lifespan of our products is the result of our high quality standard.

In terms of quality this means: CELLTHERM – More than Meets the Eye!

CELLTHERM COLDROOMS – TAILOR-MADE FOR A PERFECT FIT



MODULAR COLDROOM DESIGN

CELLTHERM coldrooms are manufactured to a modular design. The CELLTHERM panels are available in increments of 17.5 cm in width and depth and 15 cm in height. Upon request we can also customise the dimensions of our coldrooms.

SUPERIOR CAMLOCK TECHNOLOGY

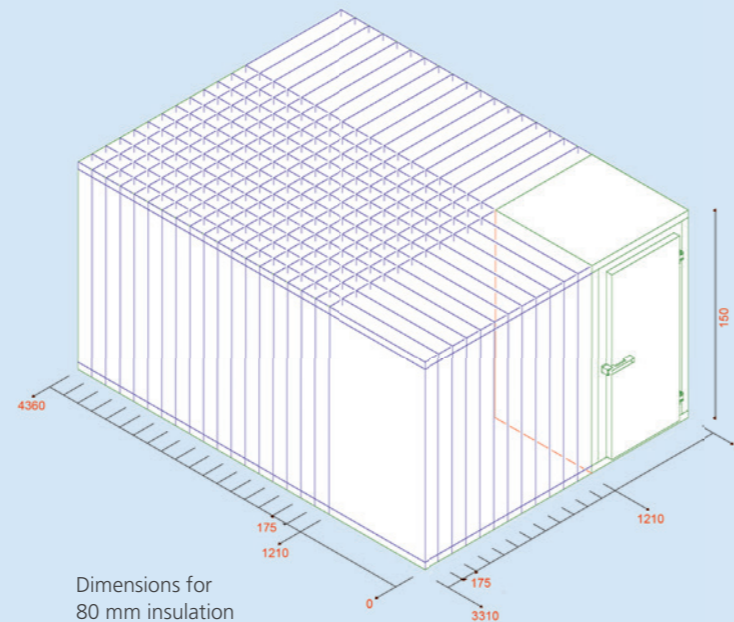
All CELLTHERM panels are equipped with foamed-in eccentric camlocks which guarantee the thermal efficiency of every joint. The camlock principle not only applies to interconnecting wall panels but also, to all interconnecting wall, floor and ceiling panels.

OPTIMUM USE OF SPACE

Due to the coldroom's modular design we have an ideal product solution on hand for virtually every conceivable need: from the proven standard room with tailor-made shelving system and plug-in refrigeration unit to multiple coldroom installations customised to the specific needs of the customer.

YOUR ADVANTAGES:

- SIMPLE INSTALLATION
- STABILITY AND AIRTIGHT JOINTS
- ELIMINATION OF THERMAL BRIDGES AND FREEZE-THROUGHS ALONG THE PANEL JOINTS
- LOW ENERGY CONSUMPTION THANKS TO SUPERIOR INSULATION PROPERTIES



CELLTHERM COLDROOMS – EASY TO INSTALL AND DURABLE

SIMPLIFIED INSTALLATION THANKS TO CELLTHERM "PASSER-System"

The foamed-in camlocks ensure that CELLTHERM coldrooms are quick and easy to install. They eliminate the need for wrestling with corner or side posts or even time-consuming glueing and inefficient cutting of panels. The CELLTHERM "Passer-System" (adaptable fit) speeds up assembly

still further. With the help of the "Passer-System" the panels can even be assembled upside-down, since all CELLTHERM panels have alternating tongue and groove profiles along their edges. Thus, you save time and money on assembly!

SIMPLE COLDROOM CONVERSION

An additional advantage of using camlock technology: the panels can be unlocked and removed again. The hooks of our camlock fasteners are made of a single piece of corrosion-resistant steel. This means that our coldrooms can be assembled and dismantled or even expanded very quickly – indeed, repeatedly!

LONG LIFESPAN

The camlock technology ensures that the panels are securely lock-fitted together. This imparts a great deal of stability and resilience to the coldroom, which in turn, is reflected in a long service life.

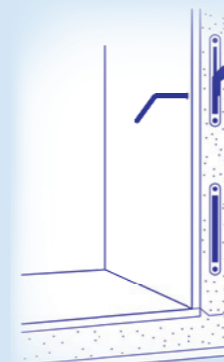
MADE-TO-MEASURE PARTITION WALL WITH CAMLOCKS

The partition walls in CELLTHERM coldrooms are designed with camlocks on all sides. This prevents unwelcome thermal bridges and ice formation in the joints between the chiller and freezer room. Another invaluable advantage for the user is the ability to customise the partition wall to their exact desired dimensions, precisely to the millimetre. Valuable storage space can thus be utilised to the maximum.

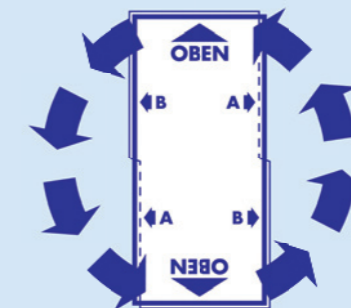
MINIMISED ENERGY COSTS

Thanks to the camlocks, the joints between the panels are sealed airtight. Ice formation as a result of leaking joints is a thing of the past. In addition, the camlock technology substantially improves the insulation performance of the joint in comparison to conventional panel connections. The result is a significant reduction in energy costs.

CELLTHERM – More than Meets the Eye!



Secure, efficient panel connection thanks to foamed-in camlocks



CELLTHERM "Passer-System" speeds up assembly

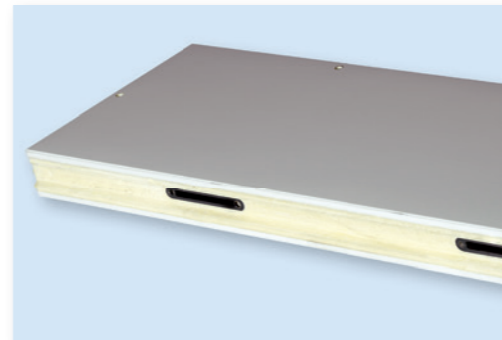


Made-to-measure partition walls with camlocks on all sides

THE CELLTHERM PANEL – WHAT MATTERS IS WHAT’S INSIDE

WE CURB YOUR ENERGY COSTS

The core of the CELLTHERM panel is pure polyurethane (PUR), currently the most efficient material for insulating coldrooms. We use an extremely environmentally-friendly, water-blown PUR-foam which is completely free of CFCs, HCFCs and HFCs and, of course, meets the EU-Halon ban guidelines. The high density of 40 - 45 kg/m³ further increases the already outstanding insulating properties. Thus guaranteeing minimised energy costs.



THE RIGHT INSULATION THICKNESS FOR EVERY APPLICATION

Insulation thicknesses	80 mm	100 mm	120 mm	150 mm
Application Range ¹⁾	chilling / freezing	combination coldrooms	deep-freezing to -30°C	deep-freezing <-30°C
Temperature differences (inside/outside)	up to 40 K	up to 50 K	up to 55 K	up to 70 K
Fire protection classification	B1, B2, B3 for all insulation thicknesses			

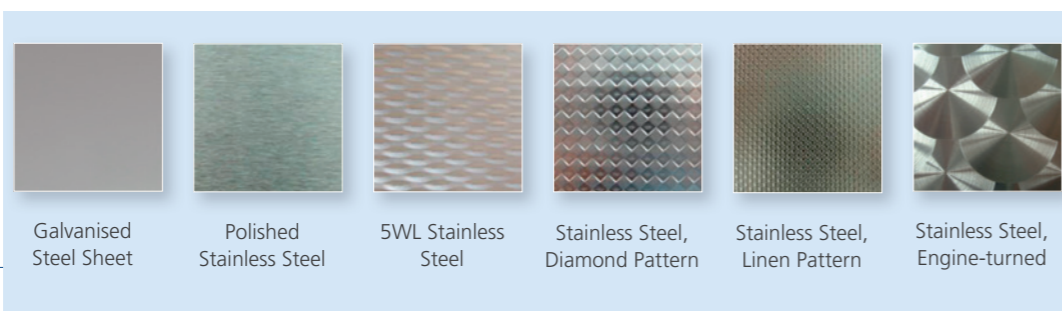
¹⁾ Recommendation

ROBUST CLADDING

We are one of the few manufacturers to use high quality galvanised steel with cladding of 0.63 mm for our standard wall panels. We even offer our stainless steel cladding with a material thickness of 0.8 mm. Thicker cladding not only improves the stability and resilience of our

coldrooms; it also significantly reduces sensitivity to denting.

True to the saying: CELLTHERM – More than Meets the Eye!



CELLTHERM FLOORS – THE RIGHT SOLUTION FOR EVERY NEED

THE CLASSIC CHOICE – CELLTHERM GRP FLOOR

Robust and long-lasting, cost-efficient and slip-resistant. Formed of an anti-slip patterned phenolic resin bonded onto a waterproof multiplex board, our GRP floor proves an unbeatable solution for a variety of applications in terms of costs and benefits.



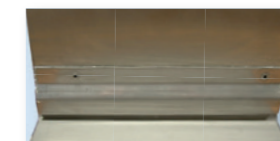
THE ELEGANT CHOICE – CELLTHERM STAINLESS STEEL FLOORS

We also offer an optional 0.8 mm thick stainless steel floor of non-slip pattern rolled steel plate. The stainless steel plate for this floor design is waterproof bonded across the entire surface to a nine-layer multiplex board. This gives an even distribution of load that is far superior to that of conventional chipboard and considerably lengthens the service life of the floor. For demanding environments this floor design is also available in a material thickness of 1.5 mm or 2.0 mm.



THE INDESTRUCTIBLE CHOICE – 3 mm STAINLESS STEEL FLOORS

For floors subject to extreme wear we have developed an exceptionally durable 3 mm thick stainless steel floor. We supply this as a flat panel floor or – for applications involving a great deal of condensation – as a ‘dished base’ with a drip edge. The ‘dished base’ is bonded to the floor panel and is covered around the coldroom walls forming an impenetrable barrier to protect the vital insulation below. The drip edge ensures that all condensation reaches the base where it can do no harm.



A WIDE VARIETY OF CUSTOMISED SOLUTIONS

Whether aluminium corrugated sheet metal, galvanised steel sheet, welded floors, coved edges, floorless coldrooms in U-profiles or floor panels with tiled surfaces: when it comes to floor design we know (almost) no limits!

FLOOR DESIGNS

MATERIAL	Floor type	Resilience ¹⁾	Non-slip properties	Range of application
	GRP	200 kg	R 11	Wear tolerance Trolleys with rubber wheels
	Stainless steel: - 0.8 mm - 1.5 mm - 2.0 mm	150 kg 200 kg 300 kg	R 11 + R 12 R 11 + R 12 R 11 + R 12	similar to GRP + pallet jack (manual operation) + electric pallet jack with low loading
	Stainless steel 3 mm plate + trough	400 kg	R11 + R12	+ electric pallet jack with heavy loading

¹⁾ per rubber wheel (4 cm²)

CELLTHERM HINGED DOORS – HALLMARK OF EVERY COLDROOM

LONG-LASTING AND TOUGH

The door is one of the components of the coldroom subjected to the most wear and stress. For this reason, we pay the utmost attention to the manufacture of our hinged doors. We produce our door leaf from the same high quality materials that we use in our panels. The adjustable rising hinges, the threshold plate of 1.5 mm thick stainless steel, the strong yet supple door seals and the indestructible jumbo handle all add up to a durable door of superior quality. The special plastic from which we manufacture our door profiles is extremely resistant to impact and suitable for extremes of temperature providing profiles that have proved to be exceptionally resilient and long-lasting.



IMPECCABLE HYGIENE

CELLTHERM hinged doors meet the highest hygienic requirements. The rubber seals are acid-resistant and grease-resistant as well as easy to replace. They can be thoroughly cleaned without a problem. No wood is used in the manufacture of the door.



VERSATILE AND FLEXIBLE USES

CELLTHERM hinged doors are available in chiller or freezer designs with your choice of left-hand or right-hand hinged in a wide variety of dimensions and cladding finishes. Upon request we will custom-build your door to your own specifications, accurate to the millimetre. We are also happy to supply double-leaf or inward-opening doors.

COLDROOM AND HINGED DOOR IN ONE

At CELLTHERM you get your panels and hinged doors from a single source. Your advantage: Materials, dimensions and logistics for panels and doors are perfectly coordinated. Thus, CELLTHERM provides one-stop shopping for all your coldroom needs!

EASY OPERATION, MAINTENANCE-FREE

Our hinged doors are easy to assemble. The door frames are tightly camlocked with the adjacent panels. Thanks to hinges that can be adjusted in three dimensions, any minor unevenness in the site floor can be easily compensated. With the exception of cleaning the rubber seals, the door is completely maintenance-free.

CELLTHERM hinged doors

– Your advantages

- Long-lasting and tough
- Impeccable hygiene
- Versatile and flexible uses
- Easy operation - maintenance-free
- Coldroom and hinged door in one

CELLTHERM HINGED DOORS, SERVICE DOORS AND HATCHES – A WORLD UNTO THEMSELVES

HINGED DOORS AND HATCHES – A CELLTHERM SPECIALTY

CELLTHERM hatches are manufactured to the same high standards as the hinged doors. Naturally, hatches and hinged doors can be combined in a single application: proven solutions for preservation units in bakeries and mortuary refrigeration compartments.



DOUBLE-LEAF HINGED DOORS – THE COMPLETE PACKAGE

With our double-leaf doors the entire width of the doorway can be utilised as both door blades can be opened together.



A HOST OF OPTIONS

A vast range of options is available for our hinged doors and hatches: we can provide customised viewing windows and computer openings, diverse impact protection and handle designs, sealing and profile systems, doorstops and hinges. Whether designed for assembly in panels or clamp-frames or prepared for masonry fitting.



SLIDING DOORS – SAFE, STURDY, HYGIENIC

When it comes to sliding doors our customers can also expect first class workmanship, exclusive use of high quality materials and a well-thought out design. We have the perfect solution for every application – safe, sturdy and hygienic.



GLASS DOORS – CLEARLY A GOOD CHOICE

Our range of doors is rounded off by a large selection of „walk-in“ and „roll-in“ glass doors. In combination with the precisely fitted CELLTHERM panels and a top quality gravity-feed merchandising system, our customers can receive a dedicated package solution in which all the elements are perfectly coordinated.



SECTIONAL AND ROLL-UP DOORS

Sectional and roll-up doors from CELLTHERM provide a secure and effective solution when the space in front of the coldroom is limited. Completely thermally insulated, easy to operate and thermally isolated: ideal for use in coldrooms.



CELLTHERM ACCESSORIES – DIVERSE AND SOPHISTICATED

CELLTHERM REFRIGERATION UNITS

More and more frequently our coldrooms are being equipped with plug-in refrigeration units. We offer the ideal solution for a wide range of applications from our comprehensive selection of wall-mount, ceiling-mount and split units: simple to install and operate, powerful, reliable and good value.



SHELVING SYSTEMS IN ALUMINIUM AND STAINLESS STEEL

Shelving is precisely coordinated to the CELLTHERM modular sizes, ensuring that maximum storage capacity is utilised within the coldroom. The range of shelving options available ensures the flexibility and versatility to meet the customers' needs.



ACCESS RAMPS FOR ALL INSULATION THICKNESSES

With the aid of an access ramp, trolleys and mobile containers can easily be pushed into the coldroom. Here too, the customer can choose from a wide variety of dimensions, heights and surface materials.



STRIP CURTAINS REDUCE ELECTRICITY COSTS

Strip curtains are a simple solution for reducing energy consumption, especially in freezer coldrooms. CELLTHERM offers permanent, fixed and sliding systems. The individual strips can simply be replaced.



PUSH-DOWN LEVER – STURDY AND DURABLE

A popular option for the door handle is the push-down lever. It can be opened easily using the elbow without having to put down what you are carrying.



OBTAINING SPARE PARTS – QUICK AND UNCOMPLICATED

Our sales team would be glad to consult with you about further products from our (almost) unlimited range of accessories and spare parts. As a premium quality supplier we feel it is extremely important that the most common parts are always available on short notice. So that you get the help quickly and directly when you need it, „urgently“ on the spot.

All our accessory and spare parts have something in common: they meet CELLTHERM's high quality standards and they have been proven in extensive product tests over the long term.

CELLTHERM PRODUCTS – EXPRESSIONS OF OUR COMPETENCE



COLDROOM SOLUTIONS FOR BAKERIES

CELLTHERM is a recognised specialist when it comes to the particular demands of bakery refrigeration. Whether fermentation coldrooms, blast freezers, preservation units or storage coldrooms: we supply the whole product package for bakeries.

MERCHANDISER COLDROOMS WITH GLASS DOORS

Our merchandiser coldroom with glass doors are used increasingly in petrol stations, kiosks, wholesale markets and supermarkets. Optimum merchandise presentation is seamlessly combined with maximum operating efficiency (simple rear-loading and removal) and minimum energy consumption.

CUSTOM PRODUCTIONS

We ensure that absolutely every millimetre of scarce and valuable space in the storage room is used to the best advantage. Cladding of pillars, allowance for on-site ceiling support beams and wall projections, construction of tunnel projections or sloped corners:

CELLTHERM provides you with the coldroom for all situations.

MACHINE CASINGS

Many production processes, particularly in the food industry, take place in temperature-controlled environments. For this, CELLTHERM supplies made-to-measure machine casings with service doors and inspection port holes. We can also incorporate sound insulation into the designs if required.



CELLTHERM PRODUCTS – EXPRESSIONS OF OUR COMPETENCE



WE CAN ALSO HANDLE LARGE-SCALE JOBS!

Thanks to the modular design, the maximum size of our coldrooms is (virtually) unlimited. Structural elements such as sliding doors, windows or glass doors can be easily integrated: always prepared in our factory and easy to install, just like the transfer coldroom depicted here.



COLDROOMS FOR PATHOLOGY FACILITIES, PHARMACIES AND LABORATORIES

Coldroom installations with hatches and hinged doors or with lateral loading: our custom solutions for the sensitive area of mortuary refrigeration have proven themselves worldwide. So too our trade solutions for pharmacies, laboratories or diagnostic and testing coldrooms for industry.



EXCLUSIVE FEATURES

CELLTHERM even has plenty to offer for those special requests: exquisite cladding, custom lacquer finishes and deluxe lighting systems are just a few of the options that we have in store for our more discerning customers.



THE CELLTHERM STANDARD COLDROOM

Last, but not least, our premium quality standard coldroom with its countless combination possibilities is often the ideal solution. Together with the made-to-measure shelving system and the dependable refrigeration unit, they form an unbeatable trio that guarantees you are always on the safe side!



CELLTHERM SERVICES – WELL-KNOWN JUST-IN-TIME PRINCIPLE

SHORT DELIVERY TIMES



We understand that high quality products go hand in hand with first class service. For this reason, we place a great deal of importance on reliable logistics, absolute adherence to delivery dates and prompt customer service. Extremely short delivery times of usually two weeks for standard coldrooms and three weeks for custom productions are the rule at CELLTHERM thanks to streamlined production processes and sophisticated warehouse logistics.

SMOOTH-RUNNING DELIVERY



Our many years of collaboration with a select group of logistics providers guarantee a trouble-free, punctual and damage-free delivery of our products at home as well as abroad.

We hold our partner companies to the same just-in-time principle as ourselves. However, even we are unable to control traffic congestion, accidents or capricious weather.

EXPERT INSTALLATION



CELLTHERM has an extensive network of highly trained and dependable installation teams both in Germany and abroad who possess decades of experience in installing CELLTHERM coldrooms. Because we understand: there is no high quality coldroom without superior installation service.

COMPREHENSIVE AFTER-SALES SERVICE



It holds true for our service performance as well:

CELLTHERM – More than Meets the Eye!

The service life of CELLTHERM coldrooms is extremely long and we don't leave you out in the rain after delivery and installation. We keep a large number of spare parts in stock for you or order them for you on short notice. We are also happy to consult with you about repair options and support you with our service teams in Germany and abroad. We understand that a customer complaint is an opportunity for further improvement of our service: accordingly we expedite the proper measures through our complaint management system in a quick, straightforward, and agreeable manner.

CELLTHERM'S EXPERT TEAM

OUR SALES TEAM – STRONG TOGETHER

Our entire organisation is centred around our customers. In the Administration Department at CELLTHERM there is not one employee who does not have direct customer contact. We work in close collaboration with our subsidiaries and

partners abroad to prevent delays and misunderstandings right from the start. Competent consultation, quick processing of quotations and orders and a personal touch are the distinguishing characteristics of our expert teams in Germany and abroad.



EXPORT & SALES

POSITION	CONTACT PARTNER	TELEPHONE	FAX
Management and Export	Holger Bialdiga h.bialdiga@celltherm.de	+49 2565 705 11	+49 2565 705 64
Management and Production	Bart Verhoeven b.verhoeven@celltherm.de	+49 2565 705 10	+49 2565 705 64
Export, Quotation and Refrigeration	Andreas Reining a.reining@celltherm.de	+49 2565 705 14	+49 2565 705 64
Export, Order Processing and Material Planning	Gaby Vennekötter g.vennekoetter@celltherm.de	+49 2565 705 16	+49 2565 705 60

THE CELLTHERM CREDO

- OUR GOAL IS TO EXCITE OUR CUSTOMERS
- WE ARE BIG ON QUALITY
- FLEXIBILITY IS OUR STRENGTH
- OUR RECIPE FOR SUCCESS STARTS WITH PERSONALISED CUSTOMER SERVICE
- THE CELLTHERM TEAM OF EXPERTS IS OUR FOUNDATION



CELLTHERM Isolierung GMBH

Coldrooms
Am Buddenbrook 78
D - 48599 Gronau - Epe

Tel. +49(0)2565-705 0
Fax. +49(0)2565-705 64

www.celltherm.de
info@celltherm.de

CELLTHERM Coldrooms Ltd.

Unit 4, Acan Way
Narborough, Leicester LE19 2GW
Great Britain

Tel. +44(0)1 16-275 1331
Fax. +44(0)1 16-275 1304

www.celltherm.co.uk
sales@celltherm.co.uk

With Compliments from: