



REFRIGERATION SOLUTIONS

Cold and freezer rooms

# **TECTOCELL STANDARD PLUS** **TECTOCELL COMPACT**



Requirements for cold storage within the food service, retail and food industry are both unique and diverse. With our modularly expandable cold and freezer room solutions, we can always offer you the perfect fit.



# Ideal for your customised requirements



Are you looking for a cold room with a long life-time, continuous operational reliability and high energy efficiency? Viessmann offers proven, high-quality solutions that suit your needs with TectoCell Standard Plus and TectoCell Compact ranges.

## **TectoCell Standard Plus**

Offering you a higher level of convenience and flexibility, the cold and freezer rooms in the TectoCell Standard Plus range are available in four different wall thicknesses allowing them to meet different cold storage temperature requirements. Designed to be easily configured with excellent hygiene and safety features, this cold room is the perfect choice for any refrigerated

storage needs. Great design combined with hygienic benefits ensure a safe and hygienic storage of your goods. TectoCell Standard Plus offers a lot of options and world-class features with a multitude of benefits.

## **TectoCell Compact**

For the most common and standard cold storage requirements, TectoCell Compact cold rooms are the most cost-efficient solution. Based on the renown Viessmann quality with its quick and easy-to-install system, the cold rooms will be up and running in a short time.

With TectoCell Compact you get a good basic hygienic storage solution,

whilst TectoCell Standard Plus cold rooms offer you excellent hygienic standards.

Regardless of the cold room version you choose, Viessmann offers state-of-the-art technology with high energy efficiency. Furthermore, you will always profit from the excellent hygiene standards and first-class user comfort.

## **CHOOSE VISSMANN COLD ROOMS FOR:**

- + Restaurants, cafeterias
- + Canteens and catering companies
- + Hotels
- + Food retail
- + Food industry and processing
- + Health care and life science

# TectoCell Compact: Choose both efficiency and quality

## Energy efficiency with great insulation

TectoCell Compact cold and freezer rooms provide you with efficiency and high standards for a safe storage of your refrigerated goods.

The cold room walls are directly connected to the heat-insulated, joint-free and continuously underlapping stainless steel floor. The cold and freezer rooms operate energy-efficient due to their good insulation system.

## Cost efficient standard range

For good flexibility, we offer numerous standard sizes in grids of 300 mm. This makes the cold rooms suitable for a wide range of applications in food service, professional kitchens and trading. Even the smallest versions offer sufficient space to store goods efficiently and in an organized manner.

TectoCell Compact cold and freezer rooms are available in the following wall thicknesses: 80 mm, 100 mm.

## Powder coated and protected surfaces

The top layers of the Viessmann TectoCell Compact models feature hot-dip galvanised sheet steel, treated with a high-quality Viessmann standard



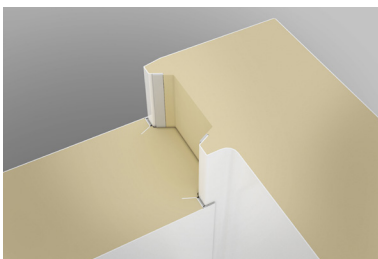
powder coating in white (similar to RAL 9016) for ease of cleaning.

TectoCell Compact cold and freezer rooms are ideal for the storage of packaged food and beverages.

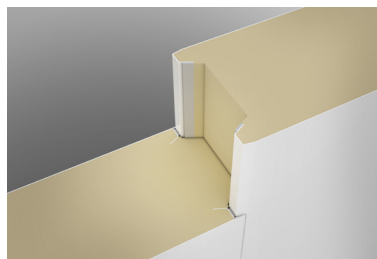
For more flexibility you can choose up to three separation walls, which enable different cold storage needs in one combined cold room.

## KEY BENEFITS:

- + Standard sizes allow shorter delivery times for your project
- + Available in 80 and 100 mm wall thickness for different fields of application
- + Optional conversion kit for columns guarantees additional flexibility
- + Optional installation kit: equips cold and freezer rooms with a pressure compensation valve, a LED light, a thermometer and a light switch including an indicator light



TectoCell Compact corner connection for energy efficiency



Perfect fitting tongue and groove system in order to avoid thermal bridges



TectoCell Compact anti-slip profile for a safe working environment

# TectoCell Standard Plus: Individuality and excellent hygiene

Cold and freezer rooms from the TectoCell Standard Plus range are designed to meet the highest demands in professional kitchens and applications in trading. This series is distinguished by excellent hygienic properties and high user comfort.

## Multiple features for improved hygiene

The signature TectoCell overlap ensures a seamless transition of wall elements and prevents build-up of dirt and water. Germs that develop primarily in joints and corners are efficiently fended off by rounded corner wall elements inside the coldroom.

The high-quality and extremely resilient stainless steel floor surface is joint-free and continuously underlapped - further improving the hygiene conditions and providing a plus in safety.

The optional special version is available with a large floor radius in which the corners of the thermally insulated stainless steel base are rounded. This facilitates easy and hygienic cleaning.

A magnetic door with a foamed finger groove is optionally available. It impresses with its smooth surfaces without unnecessary dirty corners in the form of joints or gaps. For this reason, the



door is particularly easy to clean and offers no chance for bacteria and dirt to accumulate.

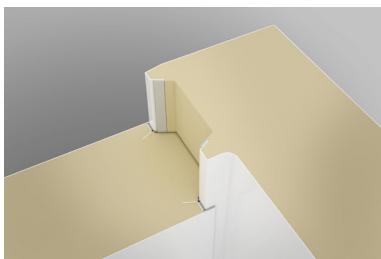
## Combination cold rooms

TectoCell Standard Plus allows you to build combination rooms for cooling and deep-freeze applications if needed.

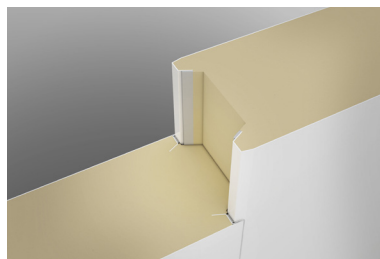
TectoCell Standard Plus models come with the sustainable antimicrobial powder coating SmartProtect® as standard. The specialised coating prevents the transmission and spread of potentially harmful bacteria.

## KEY BENEFITS:

- + Higher hygiene standards ensured by SmartProtect® antimicrobial surfaces
- + Hygienic, joint-free overlapping of the walls which prevents build-up of dirt and water
- + Fully hygienic wall radii
- + Anti-slip stainless-steel floors in a variety of designs
- + Optionally available with radius floor design which facilitates easy and hygienic cleaning
- + Available in 80, 100, 120 and 150 mm wall thickness for different fields of application



TectoCell Standard Plus with wall radius for easy cleaning and improved hygiene



TectoCell Standard Plus overlapping wall design to avoid joints

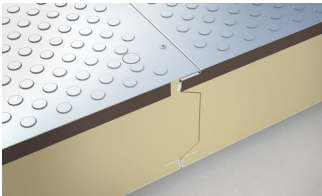


Floor with hygienic radius for easy cleaning and better hygiene (optional version)

## STAINLESS STEEL FLOORS



Unpressed stainless steel floor R10 (G36) for usage with bakery trolleys



Circle pressed stainless steel floor, anti-slip profile for a safe work environment

### Safety with comfort

Our cold and freezer rooms feature floors made of rustproof and acid-resistant stainless steel (AISI 304 / 1.4301). Due to its resistance to water, vapour, humidity, food acids as well as weak organic and inorganic acids, they are perfectly suited for the use in the food industry, mechanical engineering or in the pharmaceutical sector. The joint-free and continuously overlapped design makes Viessmann stainless steel floors a quality product which meets the highest hygiene requirements.

### Slip resistance for improved safety

A significant plus in safety: Viessmann stainless steel floors are designed to be slip-resistant in several directions due to our specific pressing process. Various profile designs enable use in a wide range of applications.

### Floors with high load-bearing capacity

Viessmann exclusively uses high-quality stainless steel. As a result, the floors of our refrigeration and freezer rooms are extremely resilient and can even be comfortably driven on

with small wheels (depending on the permissible wheel load). The robust stainless steel floors of TectoCell Compact models allow good accessibility. Depending on the wheel load, some of our floors even allow a pallet truck to be used inside the cold room.

### Cold rooms without floor elements

In cold and freezer rooms without stainless steel floors, the wall elements are secured to the surrounding floor of the installation site using plastic or stainless steel U-profiles.

## TECTOCELL STANDARD PLUS FLOOR OPTIONS

| Group**                 | R 10              | R 11              | R 12           |
|-------------------------|-------------------|-------------------|----------------|
| Version                 | without embossing | with embossing    | with embossing |
| Max.*wheel load N/wheel | 1600              | 1600***           | 1600           |
|                         | 3000              | 3000              | 3000           |
|                         | 4000              | 4000              | 4000           |
|                         | 5000              | 5000              | 5000           |
| Surface                 | sanded lengthwise | sanded lengthwise | circle sanded  |

\* Load surface > 4cm<sup>2</sup>/wheel

\*\* Slip resistance assessment group (German Trade Association). Other floor types on request. Floor variants from 3000 N on can also be welded.

\*\*\* Standard floor in Viessmann cold rooms and freezer rooms.

TectoCell Compact floors are always delivered in R11 with a max. wheel load of 1000 N.



### Stainless steel versions

In addition to the standard quality 1.4301 (AISI 304), floors are also available in other stainless steel grades upon request. Type 1.4404 (AISI 316L) stainless steel is renowned for its increased resistance to corrosion and pitting.

### Antimicrobial powder coating recommended by BVLK\*

The BVLK (German Association of Food Inspectors) specifically recommends our antimicrobial powder coating SmartProtec®.

All of our powder coated surfaces guarantee food safety: the contact

between your stored goods and our cold and freezer rooms is harmless for the safety of products (Regulation EG Nr.1935/2004).

### Color and surface design options

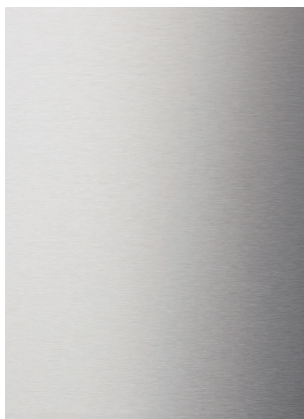
Besides our standard portfolio we offer a wide range of additional design options for our cold and freezer rooms:

- Nearly every color from the RAL spectrum
- Stainless steel surfaces for products with a high salt content (e.g. unpackaged meat, fish)



All surfaces from our portfolio combine both hygienic and safe storage conditions.

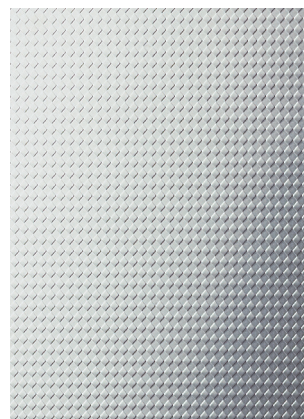
## OPTICAL STRUCTURE POSSIBILITIES



Grain grinding



Leather grain



Diamond grain

\* German Association of food inspectors

## TECHNICAL SPECIFICATIONS



### SIZES OVERVIEW

| Type                              |    | TECTOCELL<br>COMPACT<br>80 | TECTOCELL<br>COMPACT<br>100 | TECTOCELL<br>STANDARD<br>PLUS 80 | TECTOCELL<br>STANDARD<br>PLUS<br>100 | TECTOCELL<br>STANDARD<br>PLUS<br>120 | TECTOCELL<br>STANDARD<br>PLUS<br>150 |
|-----------------------------------|----|----------------------------|-----------------------------|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <b>Standard cold room sizes*</b>  |    |                            |                             |                                  |                                      |                                      |                                      |
| Width                             | mm | 1800 - 3600                | 1800 - 3600                 | 1500 - 6000                      | 1500 - 6000                          | 1500 - 6000                          | 1500 - 6000                          |
| Depth                             | mm | 1200 - 12000               | 1200 - 12000                | 1200 - 12000                     | 1200 - 12000                         | 1200 - 12000                         | 1200 - 12000                         |
| <b>External height with floor</b> |    |                            |                             |                                  |                                      |                                      |                                      |
| <b>Standard door dimensions</b>   |    |                            |                             |                                  |                                      |                                      |                                      |
| Width x Height                    | mm | 2110                       | 2150                        | 2110                             | 2150                                 | 2190                                 | 2250                                 |
|                                   | mm | 900 x 1800                 | 900 x 1800                  | 800 x 1800                       | 800 x 1800                           | 800 x 1800                           | 800 x 1800                           |
|                                   | mm | 2410                       | 2450                        | 2410                             | 2450                                 | 2490                                 | 2550                                 |
|                                   | mm | 900 x 2000                 | 900 x 2000                  | 800 x 2000                       | 800 x 2000                           | 800 x 2000                           | 800 x 2000                           |
|                                   | mm | 2710                       | 2750                        | 2710                             | 2750                                 | 2790                                 | 2850                                 |
|                                   | mm | 900 x 2200                 | 900 x 2200                  | 800 x 2000                       | 800 x 2000                           | 800 x 2000                           | 800 x 2000                           |

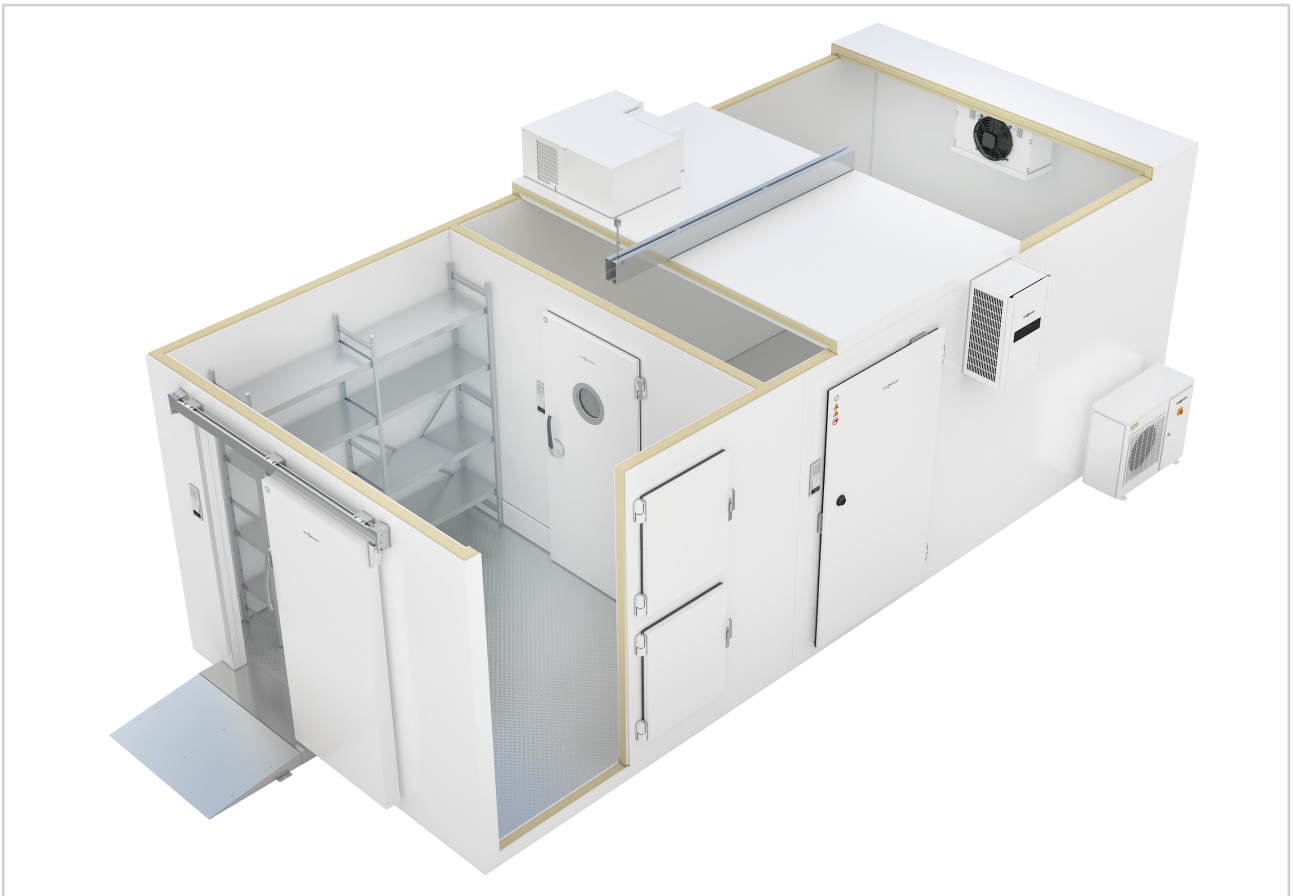
\*TectoCell Standard Plus range: 300 mm and 100 mm intervals (Customisation and larger cold room sizes on request)

TectoCell Compact range: 300 mm (1800 – 3600 mm wide) and 100 mm (1200 – 12000 mm long) intervals

### PERFORMANCE OVERVIEW

| Type   |    | TECTOCELL<br>COMPACT<br>80 | TECTOCELL<br>COMPACT<br>100 | TECTOCELL<br>STANDARD<br>PLUS 80 | TECTOCELL<br>STANDARD<br>PLUS<br>100 | TECTOCELL<br>STANDARD<br>PLUS<br>120 | TECTOCELL<br>STANDARD<br>PLUS<br>150 |
|--|----|----------------------------|-----------------------------|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Wall thickness   | mm | 80                         | 100                         | 80                               | 100                                  | 120                                  | 150                                  |
| Recommended temperature difference in accordance with VDI 2055 ( $\Delta T$ in Kelvin) | K  | 38                         | 45                          | 38                               | 45                                   | 56                                   | 70                                   |
| Temperature range  | °C | +2 to +60                  | -25 to +60                  | -20 to +60                       | -25 to +60                           | -30 to +60                           | -50 to +60                           |
| U-values (W/m <sup>2</sup> K) in accordance with DIN EN 13165                          |    | 0.25                       | 0.20                        | 0.25                             | 0.20                                 | 0.17                                 | 0.14                                 |





Need a cold storage with the highest standards?  
We have the solution for you.

Viessmann offers you peace of mind. With our cold rooms we do not compromise on quality. Due to our craftsmanship we produce and offer cold rooms of the highest quality.

Our TectoCell cold and freezer rooms are extremely robust and offer excellent energy efficiency and high user comfort.

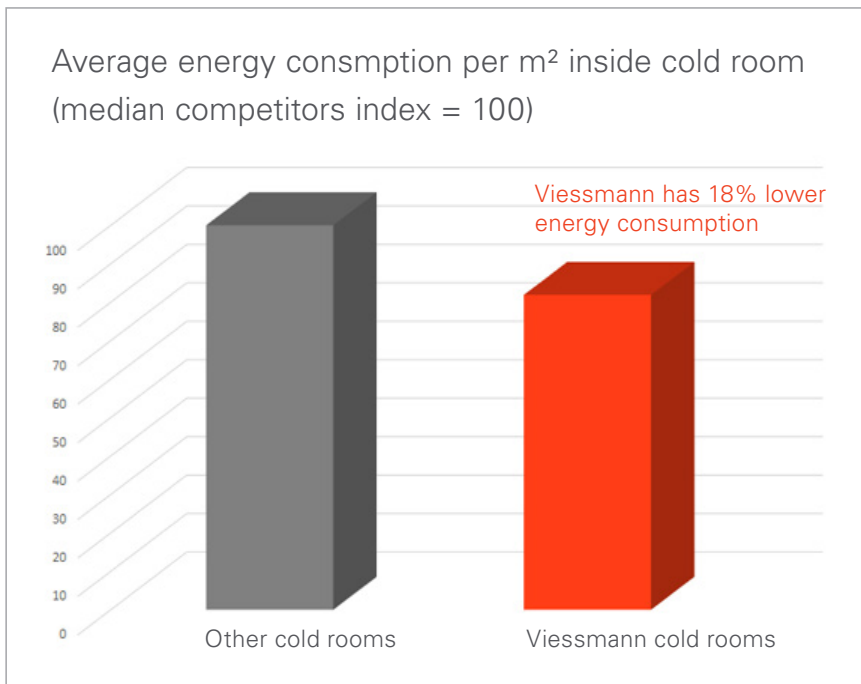
## KEY BENEFITS

- + Quick and easy installation via tongue and groove system with self-centering eccentric cams
- + Easy expansion and simple reassembly without use of adhesives or silicone
- + Viessmann joint-free and continuously underlapping stainless steel floors
- + Anti-slip stainless steel floors
- + Extensive range of accessories
- + Available with optional refrigeration units and shelving systems thanks to perfectly matched system technology
- + High standards of packaging for the safety of goods and transportation

## EQUIPMENT AND ACCESSORIES

| Model   | TECTO<br>CELL<br>COMPACT<br>80 | TECTO<br>CELL<br>COMPACT<br>100 | TECTO<br>CELL<br>STANDARD<br>PLUS 80 | TECTO<br>CELL<br>STANDARD<br>PLUS 100 | TECTO<br>CELL<br>STANDARD<br>PLUS 120 | TECTO<br>CELL<br>STANDARD<br>PLUS 150 |
|---|--------------------------------|---------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| TectoCell wall overlapping  |                                |                                 | ■                                    | ■                                     | ■                                     | ■                                     |
| TectoCell floor underlapping  | ■                              | ■                               | ■                                    | ■                                     | ■                                     | ■                                     |
| TectoCell corner radius   |                                |                                 | ■                                    | ■                                     | ■                                     | ■                                     |
| TectoCell floor radius  |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Light switch with control lamp  |                                | □                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Thermometer   | □                              | □                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Pressure compensation valve up to 5 kW refrigeration capacity                                 | □                              | □                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Door heater with thermal switch and heated pressure release valve up to 5 kW cooling capacity |                                | □                               | □                                    | ■                                     | ■                                     | ■                                     |
| Magnetic sealing frame  | ■                              | ■                               | ■                                    | ■                                     | ■                                     | ■                                     |
| LED light (door frame)  | □                              | □                               | ■                                    | ■                                     | ■                                     | ■                                     |
| LED refrigerator and freezer compartment light for ceiling mounting                           | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Floor 1000 N (KR11)   | ■                              | ■                               | □                                    | □                                     | □                                     | □                                     |
| Floor 1600 N (R11)  | □                              | □                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Other floor versions according to product overview  |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Threshold flush with the floor  | ■                              | ■                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Antimicrobial surface SmartProtec   |                                |                                 | ■                                    | ■                                     | ■                                     | ■                                     |
| Stainless steel surface   |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Building material classification B1 (DIN 4102)  |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Stainless steel back element for trimming the lower ventilation grates                        | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Meat and sausage hanging rails  | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Hinged door with ergonomic handle   | ■                              | ■                               | ■                                    | ■                                     | ■                                     | ■                                     |
| Magnetic door   | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Hatch   |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| PVC strip curtain for ceiling or wall mounting  | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| PVC swing door  |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Round inspection window   |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Temperature monitoring and recording device   | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Overflow protection   |                                |                                 | □                                    | □                                     | □                                     | □                                     |
| Ventilation grates  | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Emergency lighting  | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Emergency alarm   | □                              | □                               | □                                    | □                                     | □                                     | □                                     |
| Pillar surround / Encasing kit  | □                              | □                               |                                      |                                       |                                       |                                       |

■ Included    □ Optional    Other accessories on request



Average energy consumption of the refrigeration system per m<sup>2</sup> in the coldroom

**High energy and insulation efficiency – TÜV Süd Group certifies Viessmann cold rooms**

A market analysis of nine European cold room suppliers, realised by TÜV Süd, reveals Viessmann as a market leader not only in Germany but throughout Europe. The report highlights why Viessmann lives up to its claim for quality and its role in innovation and technology for the industry.

Various parameters were meticulously examined in the comparison: delivery, assembly, construction, doors, floor loading, energy efficiency and operating costs after ten years.

**Investment in longevity and energy efficiency**

The cold rooms were tested with clear specifications in terms of size, wall thickness and equipment to ensure meaningful and representative comparability between the various

manufacturers. In the process of being tested by the ATP (TÜV Süd Group) two tests under identical and controlled conditions were carried out: a total heat transfer coefficient (k-value) of the cells with a heat source and the energy efficiency using a cold source.

The thermal images taken by TÜV Süd Group during the operation of the cold rooms confirm the results of the test. These images clearly show that the outside temperature of the Viessmann coldroom is on average higher than that of its competitors. It proves that the insulation of Viessmann cold rooms allows less cold air to escape. Furthermore, some of the competitor coldroom images show clear thermal bridges in the joint areas.

With corner post systems, it became apparent that corner posts represent a particular thermal weak point in the system.

**KEY RESULTS:**

- + Cold rooms made by Viessmann offer outstanding insulation properties
- + Consequently high energy efficiency
- + Arguments supported by the results of the TÜV Süd Group test indicating the measured foam insulation values (U-values) as well as recorded thermal images
- + Viessmann's foam-enhanced cell even exceeded the excellent results of its predecessor technology



Austria  
[kuehlen.viessmann.at](http://kuehlen.viessmann.at)

Belgium  
[froid.viessmann.be](http://froid.viessmann.be)

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[chlazeni.viessmann.cz](http://chlazeni.viessmann.cz)

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