



**COLD ROOM  
AIR CONDITIONING  
STORAGE AREAS  
WALL AND ROOF PANELS  
COOLING UNITS  
COLD ROOM PANELS AND DOORS  
FRIGORIFIC VEHICLES**



[www.cemsan.net](http://www.cemsan.net)  
T: +90 312 815 13 28



# 33 Years of Sector Experience

CEMSAN, as one of the leading companies that has been establishing slaughterhouses and integrated meat processing plants with 33 years of experience, has over 550 turnkey project references all over the world.

CEMSAN; with its knowledge, technology and experience aims to continue its sector leadership in cold chain services by including the Cooling Systems brand to its structure.

CEMSAN Cooling Systems ensures complete temperature control based on high efficiency, hygiene, and advanced energy principles in terms of cold storage, air conditioning, cooling devices, cold room panels and doors, wall and roof systems and frigorific vehicles; and meets your each demand by gathering them under a single roof with its wide sales and service network.





[www.cemsansogutma.com](http://www.cemsansogutma.com)



**AIR CONDITIONING  
COLD STORAGE  
COOLING UNITS  
COLD ROOM DOORS  
COLD ROOM SHELVES  
COLD ROOM PANELS  
FRIGORIFIC VEHICLES  
WALL AND ROOF PANELS**



# INTERNATIONAL REFERENCES

EGYPT-UGANDA FOOD SECURITY - UGANDA  
SULAYMANIYAH MEAT COMPLEX - SULAYMANIYAH / IRAQ  
ARMAR ELECTRONICS LTD. - CYPRUS  
CHOBO INVESTMENTS COMPANY LTD. - TANZANIA  
HILAL MEAT SLAUGHTERHOUSE - AZERBAIJAN  
DURA AL FAISAL CO. - KIRKUK / IRAQ  
SAMARQAND SIFAT GOSHT SAVDO - UZBEKISTAN  
YASCO - SUDAN  
YİMPAŞ - KYRGYZSTAN  
ABDELHALIM BOUTELDJA - ALGERIA  
SAIS ABATTOIR - MOROCCO  
RUWAIS SLAUGHTERHOUSE - QATAR  
HAMAD SLAUGHTERHOUSE - QATAR  
WIDAM FOOD SLAUGHTERHOUSE - QATAR

# DOMESTIC REFERENCES

İNET - BURSA  
DOĞAN ET - BURDUR  
HAS DÖNER - AKSARAY  
PAŞA DÖNER - ANKARA  
ER SARAY ET - AKSARAY  
MERA HAYVANCILIK - ARDAHAN  
ARTVİN DAMIZLIK KOYUN YETİŞTİRİCİLİĞİ BİRLİĞİ - ARTVİN  
BİGA BELEDİYESİ - ÇANAKKALE  
KIRIKHAN BELEDİYESİ - HATAY  
KAMBEROĞULLARI - KIRIKKALE  
HEM GRUP A.Ş. - ANKARA  
BURGER STATION - ANKARA



## AIR CONDITIONING

Air conditioned areas, designed in accordance with the product type and characteristics, provide the optimal environment for fruits, vegetables and plants.

Air conditioning systems remove the excess carbon dioxide, humidity and liquids from the storage environment. This operation principle is essential in storing and maturing vegetables and fruits.

- 1 Gives the producer the ability to continue agriculture 365 days.**
- 2 Provides healthy and environment friendly storage conditions.**
- 3 Decreases the risk factors during production.**
- 4 Enables high air circulation and homogenous product temperature within the environment.**
- 5 Minimizes dehydration within the product.-**
- 6 Ensures high profits and efficient production.**



**COLD STORAGE**

## **RED MEAT**

These cold rooms where carcass and deboned meat are stored can be designed in different temperatures and types in accordance with their purposes.

Meat, being a nutrient-rich source, is a very convenient environment for microorganisms. Since the growth and multiplication speed of these microorganisms depend highly on the temperature, cold store has great importance in this process. Preventing dehydration in order to preserve the taste and quality of the meat emphasizes the importance of cold storage and humidification processes. To increase the taste and color life time, sustaining the cold chain is absolutely essential.

- When stored in right conditions, the spoilage risk is eliminated.
- The color of the quality meat is aesthetically pleasing.
- Via gradual temperature decrease, the shelf life of the meat is increased.
- With cold storage, consumption planning becomes easier.
- Weight loss of the meat is eliminated with humidification.





# COLD STORAGE

## WHITE MEAT

These cold rooms where whole chicken, chicken parts or fish are stored can be designed in different temperatures and types in accordance with their purposes.

Apart from production, preservation of the produced meat also plays a big role in solving the globally increasing food shortage problem. It was found that the shelf life of the chickens can be increased by quick cooling methods. Healthy long term storage of seafood can also be ensured by cooling systems. Sea food, when compared to the meat of the land animals, is more prone to spoilage due to its characteristics. With the correct execution of cooling and ventilation processes, quality meat and long shelf life can be achieved.

- Shelf life of the chicken meat can be increased by quick cooling methods.
- In seafood, via quick cooling right after hunting, continuity of the fresh sales can be maintained.
- The growth and multiplication of microorganisms can be prevented.
- Dehydration of the meat can be minimized.
- The color of the quality meat is aesthetically pleasing.





## COLD STORAGE

### VEGETABLES & FRUITS

These cold rooms where fruits and vegetables are stored can be designed in different temperatures and types in accordance with their purposes.

Fresh vegetables and fruits take their place on the top within the perishable food category. In terms of product quality, temperature control and correct storage carry great importance. Each fruit and vegetable require different cooling and humidification methods in accordance with the different ecological conditions they were cultivated in. Sustaining the freshness of these fruits and vegetables can be ensured by qualified storage.

- The loss in the journey starting from the Harvest to the Kitchen is minimized.
- Nutritional values of fruits and vegetables are maintained.
- Dehydration, thus weight loss is prevented.
- With long term storage capabilities, fiscal balance can be sustained.





# PANEL

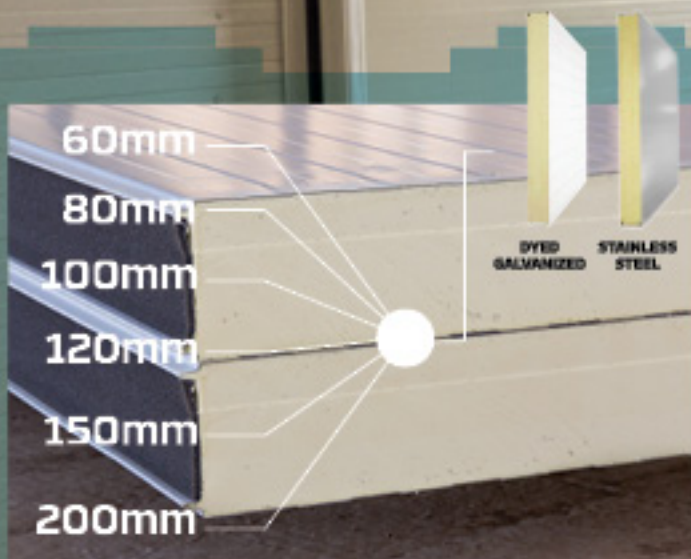


## WHY PANEL

The panels are manufactured in 60 mm, 80 mm, 100 mm, 120 mm, 150 mm and 200 mm thicknesses in accordance with their purposes.

Ceiling and wall panels can be manufactured with different surface materials such as painted and polyester coated galvanized sheet, PVC coated galvanized sheet or 304 quality stainless steel sheet.

Ceiling and wall panels are manufactured by injecting polyurethane with 40-45 kg/m<sup>3</sup> density between the sheets in locked system form.



- 1** anti-bacterial
- 2** durability
- 3** heat insulation
- 4** energy conservation
- 5** easy installation
- 6** easy cleaning
- 7** portability



## AMBIENT COOLING

Ambient cooling has great importance in terms of sustaining the cold chain during product processing, packaging and shipping phases. Ambient cooling is essential during the initial and final stages of the cold chain to prevent microorganism growth.

**RED MEAT PRODUCTION PLANTS**  
**CHICKEN PROCESSING PLANTS**  
**SEAFOOD PROCESSING PLANTS**  
**FRUIT & VEGETABLE PACKAGING PLANTS**

- Increases shelf life within the cold chain.
- Preserves the product characteristics during the preparation phase.
- Prevents spoilage thus providing a smooth transition between the cold rooms, shock freezing and shock preservation rooms.
- Processing, packaging and shipment in cold environments enhances the quality of the product.



## SHOCK PRESERVATION

These shock preservation rooms are used for long term product storage and they are the last stage throughout the shock freezing process.

Based on their types, storage periods of each product differ. The main objective of the shock preservation rooms is to decrease and preserve the core temperature of the products.



**INTEGRATED MEAT FACILITIES**  
**BUTCHER SHOPS**  
**FISHMONGER SHOPS**  
**VEGETABLES & FRUIT STORAGE**  
**BAKERY PRODUCT STORAGE**  
**DAIRY PRODUCT STORAGE**  
**MEDICAL PRODUCT STORAGE**

- Shock preserved products have the longest shelf lives.
- Maintains the product's appearance and quality.
- Enables long term taste and freshness preservation.
- Creates the concept of SAFE FOOD within the Producer-Seller supply chain.
- Prevents losses among stocked products.

**-35**



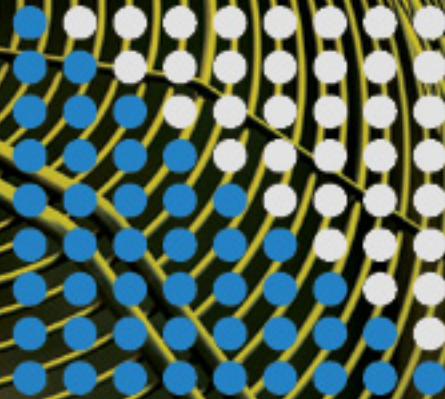
**-40**



## **SHOCK FREEZING**

These rooms are used as a transition to the shock preservation rooms in order to decrease the core temperature. Also known as the preparation phase of the shock preservation rooms, these rooms are used for decreasing the inner and outer temperature of the product quickly and simultaneously.

**0<sup>c</sup>**



**-18<sup>c</sup>**

- SLAUGHTERHOUSES**
- MEAT PRODUCTION PLANTS**
- CHICKEN SLAUGHTERING AND PROCESSING PLANTS**
- FISH PRODUCTION PLANTS**
- DAIRY PROCESSING PLANTS**
- PHARMACEUTICAL INDUSTRY**
- FRUIT AND VEGETABLE PRODUCTION PLANTS**
- BAKERY PRODUCTS**

- Saves energy as it enables quick transition to shock preservation areas.
- Prevents microorganism growth.
- Increases shelf life via gradual temperature decrease.
- Preserves the product's appearance, freshness and quality.
- Eliminates dehydration thus maintaining the taste.



## **COLD ROOM SHELVES**

**AISI 304 QUALITY  
STAINLESS STEEL**

**ALUMINIUM  
GALVANIZED  
ELECTROSTATIC PAINT**



**FLEXIBLE STOCKING CONDITIONS  
HOMOGENEOUS AIR DISTRIBUTION**

**EASY ASSEMBLY & DISASSEMBLY**

**WIDE PRODUCT RANGE WITH DIFFERENT SIZES**

**HIGHLY DURABLE**



## FRIGORIFIC

These vehicles are used for long distance transportation of frozen and cold stored products. It is the most important link within the cold chain. These insulated vehicles serve as the mobile cold rooms for food and provides healthy and safe transportation.



## FOOD PRODUCTS

PHARMACEUTICAL INDUSTRY



**NOT AFFECTED BY THE OUTSIDE ENVIRONMENT**

**PREVENTS HEAT OR HUMIDITY LOSS**

**FRESHNESS MAINTAINED UNTIL DESTINATION**

**ENABLES SHELF LIFE PRESERVATION**

**SPECIAL PRODUCTION IN ACCORDANCE  
WITH LONG & SHORT DISTANCES**



## **WALL AND ROOF PANELS**

**ALL TYPES OF INDUSTRIAL COMPLEXES**

**COMPATIBLE WITH DIFFERENT DESIGNS**

**QUICK INSTALLATION AND EASY ASSEMBLY**

**HUMIDITY, HEAT AND SOUND INSULATION**





Saray Mah. Keresteciler San. Sit. 4.Cad.No:49  
Kahramankazan-Ankara/TURKEY

T: +90 312 801 02 22

[www.cemsansogutma.com](http://www.cemsansogutma.com)  
[cemsan@cemsansogutma.com](mailto:cemsan@cemsansogutma.com)