

C O L D R O O M S



index

introduction universal cold room modular cold room industrial cold panel fireproof panel acoustic panel 22 polystyrene panel

kide cold rooms



keys for constant evolution in kide

- → HIGHEST QUALITY
- → CONTINUOUS SERVICE IMPROVEMENT
- → INNOVATION AND LATEST TECHNOLOGY
- → RESPECT FOR THE ENVIRONMENT

These are the factors that have allowed us to develop the concept of INTEGRAL QUALITY in all our products.



trusted for many years by our customers

































































more than cold rooms, we offer integral service

There are many cold room manufacturers in the market, but not all offer such comprehensive and efficient service as Kide. Apart from designing and manufacturing a wide range of products, we are specialists in developing integral solutions.

DOORS







REFRIGERATION EQUIPMENT







KIDEROOF: CEILING UNIT



SHELVING









- Made from anodized aluminium and polyethylene. Available in many sizes.
- Wheels are optional.

kide universal cold room



UNIVERSAL

KIDE'S UNIVERSAL MODULAR COLDROOM represents a new generation in modular coldrooms thanks to its many advantages.

- → FULLY INTERCHANGEABLE PANELS
- → MUCH SIMPLER ASSEMBLY
- → EASY TO EXTEND IN ANY DIRECTION
- → MORE PRACTICAL TO STORE AND TRANSPORT

express service obsessed with speed



Speed at KIDE is an ongoing commitment, speed of cold room assembly and, it goes without saying, speed of delivery.

Our Express Service guarantees your UNIVERSAL MODULAR COLD ROOM will be manufactured in just 48 hours*. But that's not all, as we can also provide the corresponding refrigeration equipment in the same timeframe.

* Leaves factory on the second working day after date of order

kide universal cold

even quicker and easier to assemble



Cold room assembly has been made simpler by unifying panel design, making them interchangeable.

Any panel can be used for a wall or the ceiling, as they all incorporate an exclusive system whereby then can be assembled in any position. Assembly is fast thanks to a simple hexagonal key supplied with the cold room.

A great feature that translates into important time and cost savings.

it's never been easier to expand a cold room

With the UNIVERSAL MODULAR COLD ROOM it's really easy to expand the size of a pre-installed cold room in both directions.

The UNIVERSAL series is versatility at its very best. A minimum amount of panel references provides for a maximum number of modular cold rooms.



more compact, even when stored



Another advantage of the UNIVERSAL MODULAR COLD ROOM is that because panel form has been unified it can be packaged more compactly, making it easier to transport and manipulate.

And because the number of references has been reduced you can optimize the stock available at your warehouse, resulting in important space savings.

kide universal cold room

technical specifications



The UNIVERSAL MODULAR COLD ROOM is comprised of prefabricated sandwich type high density injected polyurethane foam modular panels, with a range of thicknesses adaptable to different insulation requirements.

MODULE

400 mm.

THICKNESS

60, 80, 100 mm.

LENGTH

Maximum length is 3,200 mm

JOINT SYSTEM

Off-centre hook with hexagonal key.

FINISH

Galvanized steel sheet, white lacquer, with removable protection film. Slightly ribbed.

White colour. Food safe quality.

Lacquer: polyester paint, 25 micron. Including primer. According to standard EN 10169.

AVAILABLE TO ORDER: Flat form. Other finishes.

FLOORS

Pedestrian floor- S8

Exclusively for pedestrian use. Interior 1mm thick non-slip plastic laminated sheeting.

Reinforced floor- M9

Reinforced floor ideal for pedestrian and manual trolley use. Interior finish reinforced with non-slip birch plywood and phenolic resin.

Reinforced superimposed floor

Non-slip 2/4 aluminium steel Non-slip 3/5 galvanized steel

REFRIGERATOR DOOR

Hinged door 0.8m x 1.9m, coupled to a vertical panel.

INCLUDED ACCESSORIES ARE

Vertical interior, ceiling and floor **SANITARY TRIM** on all models.

BALANCE VALVE in freezer (100mm panel cold rooms).

"U" FLOOR PIECE in FLOORLESS cold rooms.

INSULATION

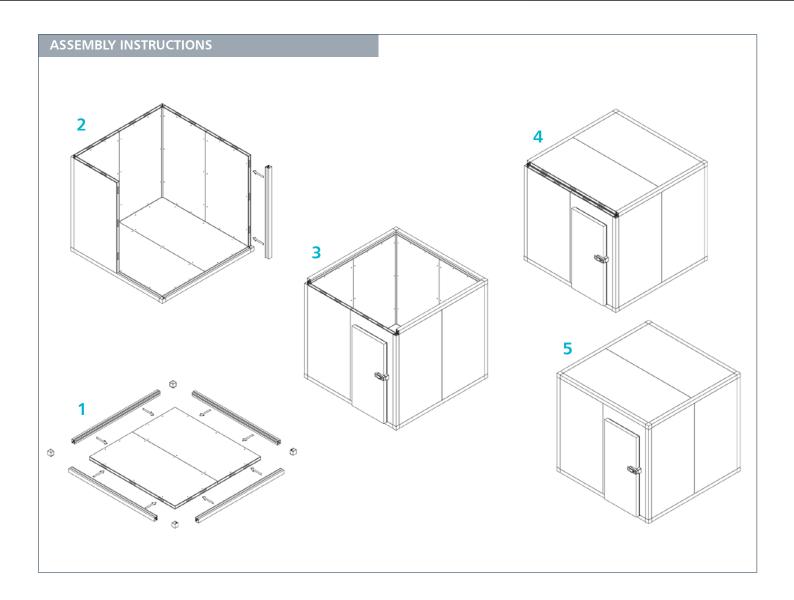
Rigid polyurethane foam with no CFC or HCFC.

Density: 40 kg/m3 (+3-0kg/m3)

U-Value:

Panel $60 = 0.38 \text{W/m}^2 \, ^{\circ}\text{C}$ Panel $80 = 0.28 \text{W/m}^2 \, ^{\circ}\text{C}$ Panel $100 = 0.23 \text{W/m}^2 \, ^{\circ}\text{C}$

kide universal cold ro



Universat

kide modular cold room



In the KIDE MODULAR COLD ROOM the union goes in the vertical sense, enabling the assembly of the vertical panels before assembling the ceiling. Therefore, less people are needed for assembly. Moreover, with this system it is possible to dismantle any part of the ceiling without unfastening the vertical panels.

by its quick and secure system of joining

The fastening system which KIDE has developed, besides being quick and simple, guarantees perfect adjustment between vertical panels, as well as between vertical and ceiling panels. Due to that, the insulation which the cold room offers is complete, complying with its function with the best results. The KIDE joint system is as simple to loosen as to adjust, which facilitates dismantling the panel quickly in case of need.



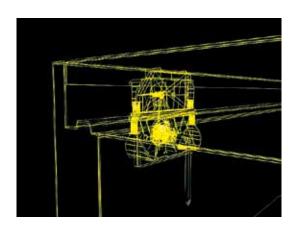








design at the service of the installer



The KIDE MODULAR COLD ROOM, not only facilitates the assembly and dismantling of the cold room and guarantees total insulation, but it also gives an aesthetic sense by hiding the joints.





how is it possible to save up to 20% of the time in the assembly of the panel?

WITH THE NEW CEILING-WALL SUPPORT



KIDE has developed an exclusive system for joining vertical panels with ceiling panels. This system results in important advantages:

1. Ease of assembly and dismantling: The union system with the joints between the

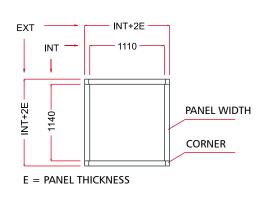
panels goes in vertical sense, allowing the ceiling to be assembled after assembling the vertical panels and to be dismantled without unfastening the joints.

- 2. A perfect aesthetic sense thanks to the invisible joints: The vertical panel goes from the floor up to the ceiling in one piece. Its union with the ceiling panel is made through a single joint which, thanks to our exclusive joint system becomes invisible, giving perfect aesthetics.
- **3. Great ceiling stability:** The horizontal panel is supported 55 mm on the vertical panel, giving total stability to the ceiling.
- **4. Total Insulation:** All joints, instead of being plane, are in male-female format, which guarantees a perfect adjustment between the panels, obtaining a complete insulation.

BY JOINING THE VERTICAL PANELS

Another advantage in the assembly of the KIDE MODULAR COLD ROOM is the incorporation of vertical corner pieces. Thanks to these panels, situated in each corner of the cold room, all vertical panels have the same design, resulting in a more simple and flexible assembly system. Besides, the positioning of the door is more flexible than in the cold rooms with different types of panels, allowing to place it wherever you want. Unlike other companies, the KIDE corner pieces are made of the same material as the panels, with the same joint system, making assembly equally easy. Due to that, the exterior part of the cold room remains totally homogeneous.





kide modular cold room



The KIDE modular cold room, is made up of prefabricated modular SANDWICH panels of polyurethane. They have the **€** marking according to the European standard EN 14509.



INSULATION

Rigid polyurethane foam, neither CFC nor HCFC Density 40 Kg/m³ (tolerance +3 -0 Kg/m³) Average COEFFICIENT OF THERMAL TRANSMISSION "U"

Panel thickness in mm					
U (W/m² °C)	0,38	0,31	0,23	0,19	0,15

REACTION TO FIRE

- Panel Cs3dO (according to EN 13501-1)
- Temperature Range: between 40°C and +75°C according to thickness.

COATING

STANDARD:

Slightly ribbed sheet steel, galvanized and pre-lacquered with polyester (25 μ) with a peelable protective film. White colour. Food safe quality.

THROUGH ORDER:

Stainless Steel sheet AISI 304 SCOTCH

Plastified steel sheet with food safe PVC of 120μ .

TYPE OF JOINT

Joint in male-female format made of polyurethane with inserted boxes. The assembly of the panels is carried out through an eccentric hook (stainless steel AISI 430), which is turned by a square key and hooks onto a metalic axle.

The above-mentioned hooks guarantee a perfect joint and insulation, with a tensile strength of more than 200 Kg.

VERTICAL PANELS

MODULE: 190 mm.

THICKNESS: 60, 75, 100, 120, 150 mm. **WIDTH**: 380, 570, 950 and 1.140 mm.

The maximum inner height of COLD ROOM is

3.700 mm.

The maximum length is 4.000 mm.

FLOOR AND CEILING PANELS

They have the same characteristics as the vertical panels.

The interior face of the floor panel in the STANDARD version is a galvanized steel sheet, plastified with a PVC film and anti-slip grey colour of 1mm thick.

This floor is only for people use. When trolleys are used inside the cold room, reinforced floor is needed.

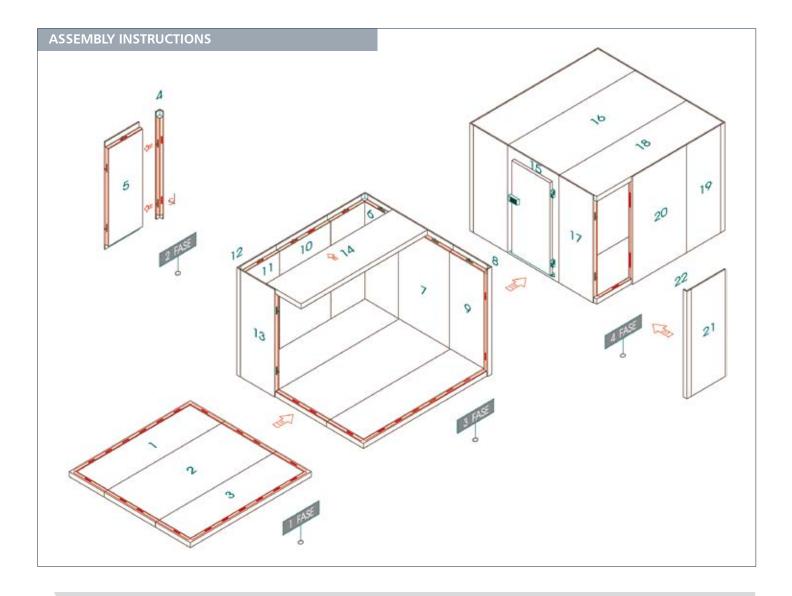
REINFORCED INJECTED FLOOR

BIRCH plywood + PHENOLIC RESIN (9 mm)

REINFORCED SUPERIMPOSED FLOOR

Galvanized Steel anti-slip 2/4 mm.(L3) Galvanized Steel anti-slip 3/5 mm. (FLUTED) Aluminium "DAMERO" anti-slip 2/4 mm.

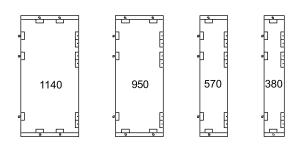
kide modular cold roo



when placing an order it is very important to remember the new module system of the cold rooms



Due to the design of the MODULAR COLD ROOMS, with vertical corner pieces, we have changed the modulation system, going from 300 mm to 190 mm. This new modulation has unified the design of the panels, facilitating the assembly and allowing us to pack and delivery the panels in horizontal plane. In the same way, with this new modulation system, we have increased the number of standardised dimensions of the cold rooms.



kide industrial cold panel



The KIDE INDUSTRIAL REFRIGERATION PANEL guarantees the maximum insulation in all kind of industrial cold rooms. It can be manufactured up to a length of 12m and 200mm thick, which reduces the number of joints in the walls and ensures a high insulation for any cold room size.

union is strength and so is the insulation



A SYSTEM THAT ATTRACTS



KIDE DOUBLE MALE-FEMALE FORMAT: A PERFECT JOINT FOR A TOTAL INSULATION

KIDE has developed a double male female system which is reinforced by stainless steel cam locks. Kide cam locks have AISI 430 hook unlike polyamide hooks used commonly, the AISI 430 hook does not elongate and hence pulls the panels together ensuring a perfect seal.

The cam lock housing is made from high quality rigid PVC. The loops in the housing ensure a firm anchor in the foam, increasing considerably the pull out strength. Kide panel joints are better by design, providing total insulation and impermeable joint, which results in important energy savings day after day.





easy to assemble and dismantle

The integrity of the joint between insulated panels determines the insulation properties of the cold room as a whole.

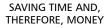
KIDE panels are joined using cam locks with stainless steel AISI430 hooks, which not only provide structural strength, but also pull and retain the panels together ensuring an excellent insulation as well as a perfect aesthetic.

This fastening system requires only 3/4th of a turn for a quick and perfectly aligned joint.

Thanks to its easy assembly, a substantial reduction in site activities results in saving both, time and money.



REALLY EASY AND QUICK JOINING SYSTEM



manufacturing in discontinuous form brings continuous advantages



KIDE uses a discontinuous process to manufacture insulated panels. This process gives us a number of advantages:

On one hand, flexibility in production allows to manufacture panels to size, thickness and other specific requirements of the customers.

This flexibility also brings an optimization of the production planning and machine utilization, enabling to commit prompt answer and short delivery times.

On the other hand, manufacturing in discontinuous form allows us to supply a totally finished panel, ready to be assembled at site.

The KIDE panel with cam locks requires minimum work and panels are easy to replace in case of needed.

kide industrial cold panel



The KIDE SANDWICH panel has the **C** € marking according to the European standard EN14509.

INSULATION

Rigid polyurethane foam, neither CFC nor HCFC Density 40 Kg/m³ (tolerance +3 -0 Kg/m³) Average COEFFICIENT OF THERMAL TRANSMISSION "U"

Panel Thickness in mm.	60	75	100	120	150	180	200
U (W/m2 °C)	0,38	0,31	0,23	0,19	0,15	0,19	0,15
PANEL WEIGHT Kg/m ² COATING, 2 FACES, SHEET 0,5 mm.	11	12	13	14	15	17	18

REACTION TO FIRE

- Panel Bs2d0 (according to EN13501-1)
- Working Range: Between -40 °C and +75 °C according to thickness.

COATING

STANDARD:

Steel Sheet slightly ribbed, galvanized and pre-lacquered polyester (25 μ) with a peelable protective film. White colour. Food safe quality.

THROUGH ORDER:

Steel sheet pre-lacquered plastisol 100 μ

Stainless Steel sheet AISI 304 SCOTCH.

Steel sheet plastified with food quality PVC, 120 μ .

FASTENING SYSTEM

Double male-female format with stainless steel AISI430 cam locks. A square key is used to turn the hook on a metal axle. The eccentric cam movement of the hook pulls the two panels together ensuring a perfect joint. Highest insulation of the joint:

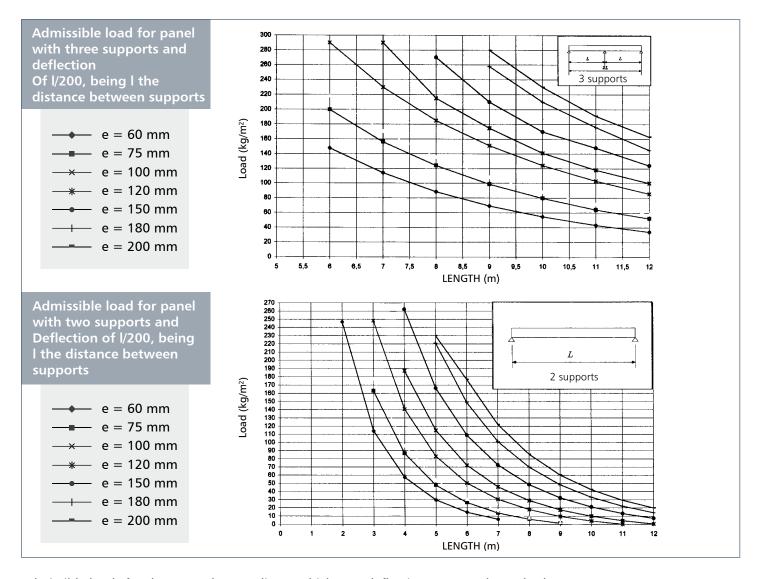
- AIRTIGHTNESS = "O" at 50 Pa (EN-12114)
- WATERPROOFNESS = "A" at 1200 Pa (EN-12865)

PANELS

Length: Maximum length of 12.000 mm.

Width: Usable 1.180 mm. Total width 1.195 mm. Thickness: 60, 75, 100, 120, 150, 180, 200 mm. Tolerances: According to standard EN 14509.

kide industrial cold pa



Admissible loads for these panels according to thickness, deflection L/200 and standard NBE 95. The safety coefficient is 1,7. So, according to this standard, the load combinations SHOULD NOT be exceeded.

industrial

kide fireproof panel

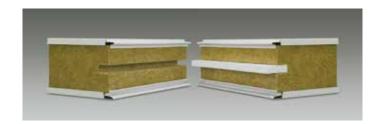




The fire protection sandwich panel consists of a high density rock wool insulating core and metal coatings in flat or profiled steel plate. Its fire reaction classification is A2s1d0.

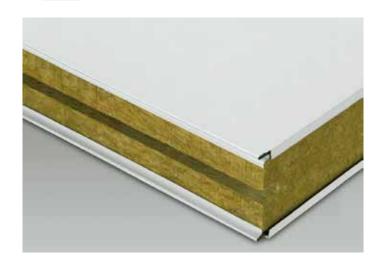
The KIDE panel has the **(€** marking according to the European standard EN 14509.

utilities



Its fireproof nature means that it can be used for many different applications: to build interior dividing walls, technical premises, self-supporting ceilings, etc., in premises classified as having a high fire risk.

main components



INSULATION:

135 Kg/m³ density rock wool, with A1 fire reaction classification.

COATING:

Steel Sheet slightly ribbed, galvanized and pre-lacquered polyester (25 μ) with a peelable protective film. White colour. Food safe quality.

OTHER FINISHINGS MADE TO ORDER:

Plastisol 100μ , Skimplate 120μ , AISI 304 stainless steel, other thicknesses, other colours, etc.

kide fireproof panel



fire concepts

In construction, there are two basic concepts regarding fire performance:

FIRE RESISTANCE:

The capacity of a structural element to comply for a certain length of time with fire stability, impermeability or fire integrity, thermal insulation and/or other required functions, specified in the testing regulations.

REACTION TO FIRE:

Products response contributing with its own decomposition to a fire it is exposed to, under specified conditions.



fire resistance

The fire resistance of a structural element is specified by the European Standard UNE-EN-13501-2, which defines the fire resistance on the basis of some criterions:

- → BEARING CAPACITY
- → INTEGRITY
- → INSULATION

The European Standards defining fire resistance testing for non-bearing walls are UNE-EN 1363, UNE-EN 1364-1 and UNE-EN 1364-2.

reaction to fire

Products reaction to fire is defined by the UNE-EN 13501-1 Standard. Materials are classified as follows:

- → BY THEIR COMBUSTION CAPACITY: A1, A2, B, C, D, ETC.
- → BY THEIR SMOKE PRODUCTION: S1, S2, S3.
- → BY THE INFLAMMABLE PARTICLES THEY RELEASE: D0, D1, D2.





technical specifications

PANEL CHARACTERISTICS

Width: 1180 mm.

Maximum length: 6 meters. Thicknesses: 60 and 100 mm.

Reaction to fire: A2s1d0 (Euroclasses classification UNE

- EN 13501-1).

Use in ceilings

Maximum self-supporting ceilings, non-transitable.

Thickness (mm)	60	100
Span (m)	3,5	5

Interior walls
Maximum working lengths
(without intermediate support)

Thickness (mm)	60	100
Span (m)	5	6

Exterior walls Maximum working lengths (without intermediate support)

Thickness (mm)	60	100
Span (m)	3	3,3

Deflection: L/200. Breaking coeff.: 2

PHYSICAL AND THERMAL CHARACTERISTICS

Thickness (mm)	60	100
Weight (kg/m²)	18	24
U (W/m² °C)	0,62	0,38

BUTYL JOINT SILICON JOINT BUTYL JOINT SILICON JOINT

IMPORTANT

The ceilings are self-supporting but they are not transitable and they can not be used for storage purposes or as support of other installations. Before the assembly, the panel must be completely dry. Joints must be perfectly sealed against water and steam by means of butyl and silicon seams.

kide fireproof panel

ROCK WOOL PANEL - PARTITION WALLS

APPLICATION

The KIDE rock wool sandwich panel can be used to make non-bearing vertical partition walls.

PANEL CHARACTERISTICS

Width: 1180 mm.

Maximum length: 6 metres. Thickness: 60 and 100 mm. Rock wool density: 135 kg/m³ Reaction to fire: A2s1d0.

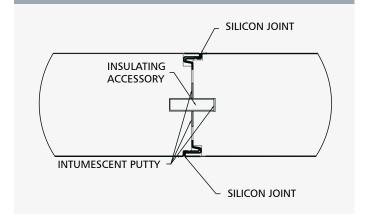
Fire resistance obtained in accordance with AFITI - LICOF AND CIDEMCO certificates:

- 23589-2 for the 100 mm panel (EI 120)
- RS-0151T04 for the 60 mm panel (EI 60).





DETAILS OF PANEL JOINTS



IMPORTANT

These panels must be assembled in accordance with the specifications and using the elements defined by KIDE for this purpose.

Otherwise, KIDE S. Coop. will not be liable for the fire resistance values indicated above.



fireproof

kide acoustic pane



The KIDE ACOUSTIC SANDWICH PANEL consists of a rock wool core, which provides an optimum acoustic insulation. The coatings are galvanised and lacquered sheet plates, whose inner face is perforated.

utilities

The rock wool acoustic panel is used in areas where acoustic insulation is required: to soundproof sources of noise, build acoustic barriers or acoustic absorption walls and ceilings, etc.

main components



INSULATION:

135 Kg/m³ density rock wool, with A1 reaction to fire classification.

COATING:

Steel Sheet slightly ribbed, galvanized and pre-lacquered polyester (25 μ) with a peelable protective film.

White colour. Food safe quality.

The inner face has a perforation rate of 35% in accordance with R5T8.

FINISHINGS MADE TO ORDER:

Plastisol 100μ , Skimplate 120μ , AISI 304 stainless steel, other thicknesses, other colours, etc.

kide acoustic panel



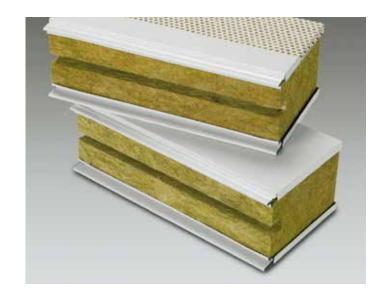
technical data

PANEL CHARACTERISTICS

Working width of the panel: 1180 mm.

Panel thickness: 60 mm.

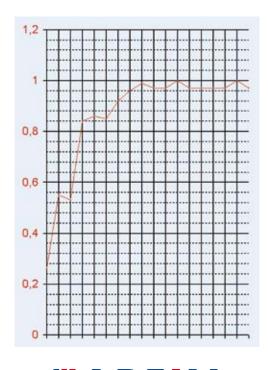
Standard length: up to 6 metres.



Thickness (mm)	Weight (kg/m²)	U (W/m² °C)	Ceiling span (m)	Wall span (m)
60	22	0,62	2,00	3,50

acoustic absorption

Coefficient $\alpha = 1$ Acoustic absorption: A UNE-EN 20354:1994 Standard

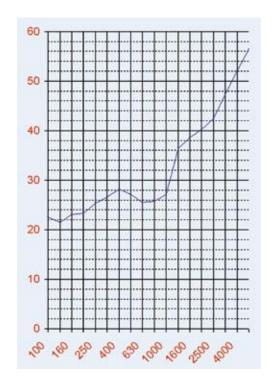


LABEIN CENTRO DE INVESTIGACION TECNOLOGICA

acoustic insulation

Rw Coefficient = 31 (-1; -3) dB UNE-EN ISO 140-3:1995 Standard R(A) NBE-CA (88) = 31.1 dB(A)

Test N°: B0051 - 03.01 - M92 by LABEIN.





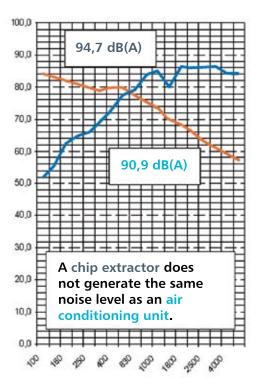


a basic guide to acoustics - what is sound?

The sound is a physical alteration in a liquid, solid or gas. This alteration is produced by the vibration of an object, and is transmitted by an elastic element until it comes into contact with the eardrum and is transmitted to the



parameters to define a sound



INTENSITY

This is the energy that crosses the surface unit perpendicular to the wave travel direction, during a time unit.

FREQUENCY (OR TONE)

The frequencies used are between 100 Hz and 5000 Hz, divided in octaves, basing on the UNE 74.002-78 Standard.

If this frequency range does not provide enough information, frequencies are distributed in thirds of an octave, in accordance with the following scale: 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000 and 5000 Hz.

how to measure the noise



Sound levels are measured using electronic instruments that respond to pressure variations. This acoustic pressure level is expressed in decibels (dB), as follows:

$$SPL = 20log_{10} \frac{p}{p_{10}}$$

P = Pressure in Pascals (Pa). P0 = Reference pressure = 2.10-5 Pa.

To compensate the different sensitivities of the human ear to different frequencies, it is used the weighted level scale A. In these cases, the unit is indicated as dBA.

kide acoustic panel



main concepts about acoustics

ACOUSTIC INSULATION

The laboratory-standardised acoustic insulation of a structural element is determined by the difference between the noise level originated in an enclosure and the noise level transmitted to the adjoining enclosure.



ACOUSTIC ABSORPTION VS. REVERBERATION

The acoustic absorption is the quantified amount of energy extracted from the acoustic field when the sound wave crosses a certain environment.

The absorption coefficient is defined as the relationship between the acoustic energy absorbed by a particular material and the total acoustic energy reaching this material, per surface unit.

The opposite phenomenon to absorption is the reverberation, which is the persistence of a sound at a certain point within an space, due to successive reflections on the building enclosure.

SOUND POWER AND PRESSURE

Sound power is defined as being the energy emitted during a time unit by a source. This power is an intrinsic characteristic of the source and does not depend on the medium or the conditions it is located in.

There is also the acoustic pressure, which is the difference between the total instantaneous pressure on a determined point in presence of a sound wave and the static pressure at the same point. This pressure depends on the environment where the measuring device is located, the distance from the sound source, the surrounding conditions, etc.



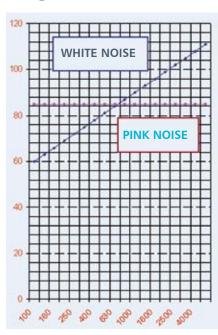
interpretation of the testing data

Standardised Rw rates (C; Ctr) - R(A)

In order to make easier the interpretation of a chart of insulation values, a calculation to obtain an overall rate is made.

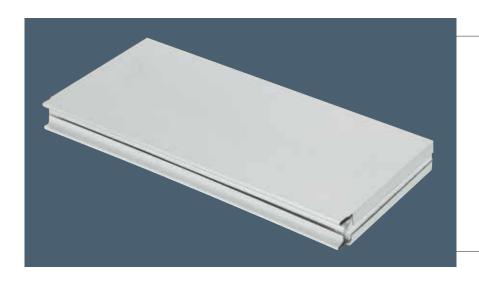
If the UNE-EN ISO 717-1 Standard is used to calculate it, the obtained coefficient is Rw and it is called white noise insulation. Two corrector coefficients are also calculated, C and Ctr, used to adapt to the pink noise spectrum and to the traffic noise respectively.

Another method to calculate the overall rate is the NBE-CA 88 Standard, whereby R(A) - overall pink noise insulation - is obtained.



Standardised laboratory noise

kide polystyrene pane



The KIDE POLYSTYRENE PANEL is composed of an insulating 30 mm expanded polystyrene core with a density of 20 kg/m³ and metal coatings in flat or profiled steel plate.

The KIDE panel has the **(** marking according to the European standard EN 14509.



field of application

Polystyrene panels provide an excellent solution for refurbishing and adapting existing premises, and for reinforcing walls and suspended ceilings, complying with all hygiene and heat insulation standards.





main components



INSULATION:

20 kg/m³ density expanded polystyrene.

COATING:

Steel Sheet slightly ribbed, galvanized and pre-lacquered polyester (25 μ) with a peelable protective film. White colour. Food safe quality.

FINISHINGS MADE TO ORDER:

Plastisol 100 μ , Skimplate 120 μ , stainless steel AISI 304, other thicknesses, other colours, etc.

kide polystyrene pane



technical data

PANEL CHARACTERISTICS

Width: 1180 mm.

Maximum length: 6 metres.

Thickness: 30 mm.

Reaction to fire: BS2d0 (according to Euroclasses, UNE-

EN 13501-1)

Thermal transmission: U = 1.05 W/m2 K (UNE-EN

14509)

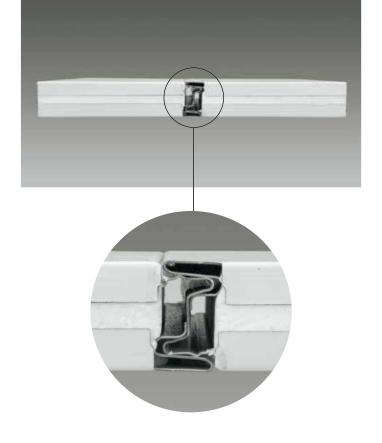
Weight: 8.8 kg/m²

Maximum lengths for use on interior walls (without

intermediate support)

Thickness (mm)	30
Span (m)	3,5

From this height upwards, fastening to the supporting wall is required.





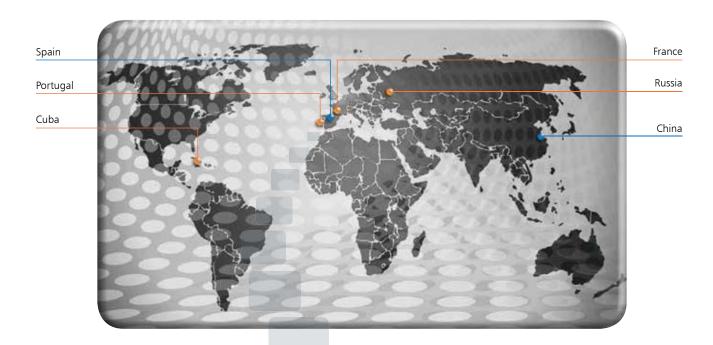




IMPORTANT

This panel must be used only to cover existing walls.

The polystyrene panel can not support direct loads or be used as a support for doors and windows.







Whose scope is, the design, development and production of commercial and industrial refrigeration equipment and insulating sandwich panels of polyurethane, polystyrene and mineral wool, and doors for cold and air-conditioned rooms and other enclosed facilities.



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