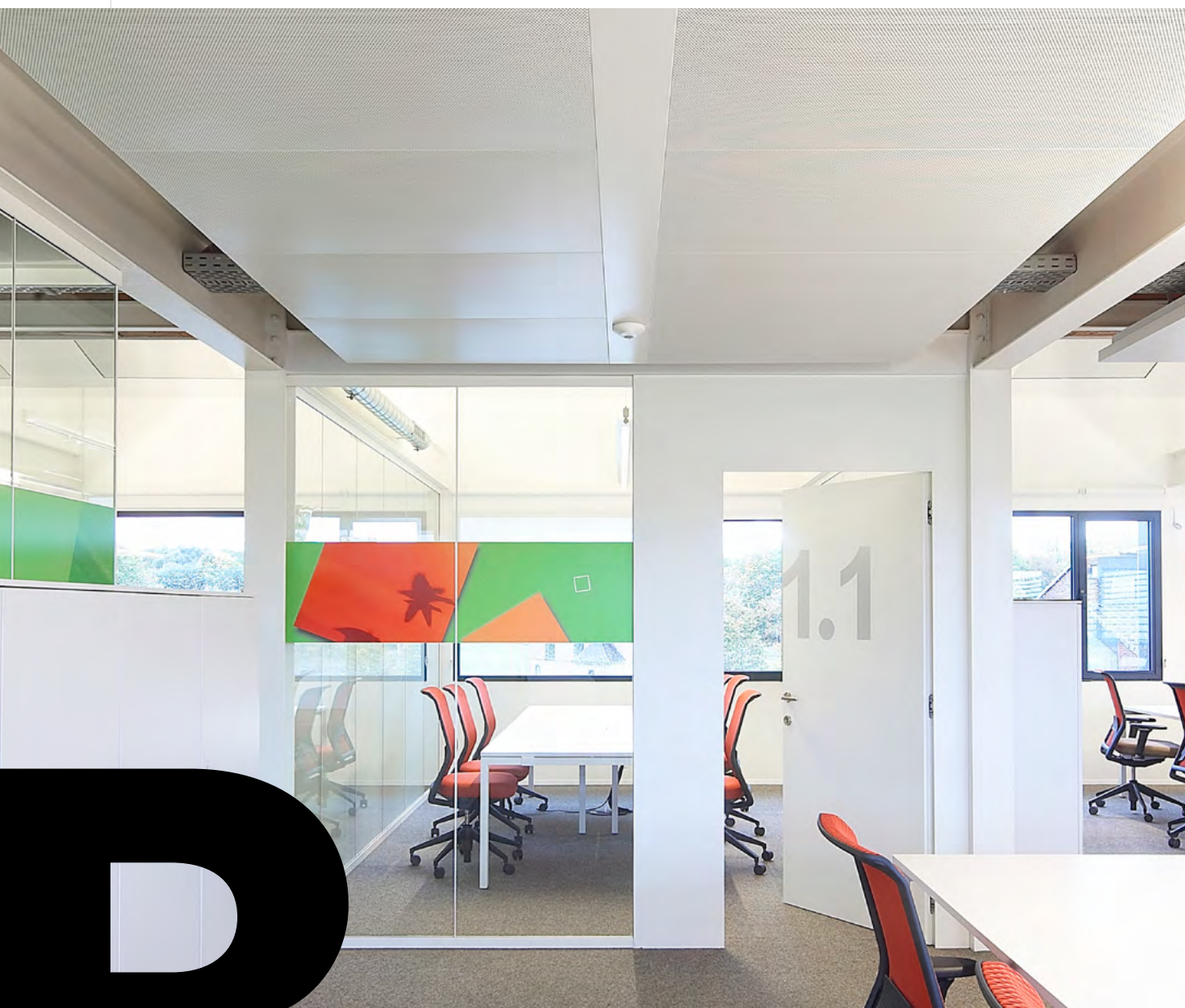


BEDDELEEM



— JB COOL®



The real role of leadership is climate control

Ken Robinson

— JB COOL®

Various factors are decisive for keeping people working in and using offices and public areas happy in an economical way. Air hygiene and climate play a very important role here. Companies have an interest in designing and equipping the work environment in an optimal way.

The JB COOL® climate system from Beddeleem makes an active contribution to creating the ideal space with the highest level of comfort. It also plays a significant role in cutting energy costs.

This brochure clearly sets out all the objective advantages of JB COOL® in climate returns, acoustics and fire stability. We attempt to sketch an outline of the almost unlimited possibilities with regard to architectural applications and finishings.

BEDDELEEM

— JB COOL®



Climate system

The quest for alternatives to classical air-conditioning in offices and public buildings has led to a concept combining several aspects that has put paid to a number of unpleasant side-effects, that can be integrated easily and everywhere and that guarantees reduced energy consumption.

Virtually unlimited architectural freedom in design: options on finishing of ceiling style, panel dimensions, colours, perforations, monolithic ceiling appearance as desired.

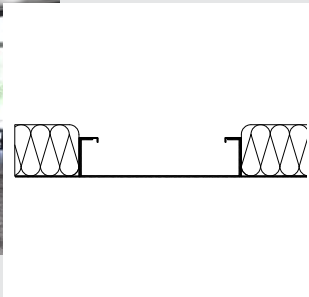
The climate system JB COOL® is combinable with the JB 2000 partition system.



Choose your ceiling—



01 —



C ceiling system

Entirely flat ceilings consisting of steel ceiling panels and a visible support structure.

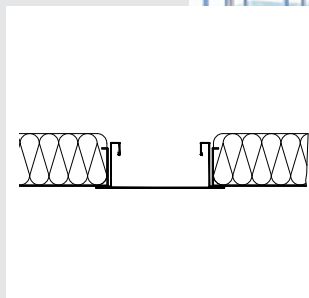
The supporting structure, consisting of C Bandrasters, will be laid out in line with the modulation of the building or the desired position of walls. The C Bandraster is a flat section, usually 100 mm, that lends itself pre-eminently to the installation of movable walls and/or acoustic screens.

The panels are simply cut in behind the vertical sides of the Bandraster and are fitted flush with it. They can be removed individually and easily.

O ceiling system

Flat ceiling systems made up of steel ceiling panels and a visible underlying support structure.

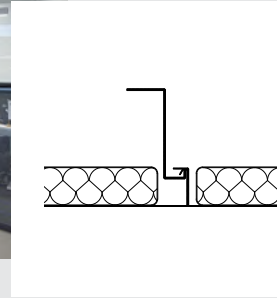
The omega Bandrasters are to be installed parallel or in a grid pattern. The self-supporting ceiling panels are to be laid on them. The omega Bandraster is a flat section, usually 100 mm wide. It provides an anchor when installing movable walls and/or an acoustic screen.



02 —



03 —



J ceiling system office ceiling

Steel ceiling panels specially designed to create a flat monolithic ceiling.

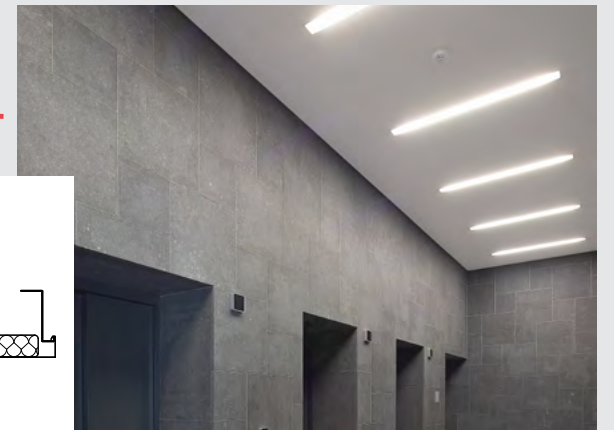
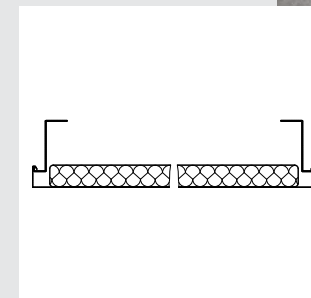
The self-supporting panels are fitted on concealed J sections. The panels are available in various sizes, shapes, perforations and colours. Like the other systems, the J panels can be removed individually and easily without using tools.

J ceiling system corridor ceiling

Steel ceiling panels that can be suspended invisibly and clear of the walls on a concealed support structure.

The same J section as that used for office ceilings is used when fitting this ceiling to size. The panels are fitted independently of the walls so they are easily removable at any time, allowing rapid access to services in the void. The length of the panels will be matched to the space such that no panel will need cutting down to size.

The two systems are compatible. This enables ceiling islands to be created within the space available.



04 —



05 —

Plasterboard ceiling

This is made up of a lightweight – timber or metal – substructure to which one or more layers of plasterboard panels are fastened.

A judicious selection of constituent sections results in a ceiling that will fulfil the client's wishes in terms of shape, appearance as well as performance.



Characteristics

01 —

Capacity

Cooling capacity metal 80 tot 95 W/m² cfr. EN 14240
Test reports available.

Coolin capacity plaster 70 tot 75 W/m² cfr. EN 14240
Test reports available.

Heating capacity metal and plaster 90 to 104 W/m² cfr. EN 14037
Test reports available.

02 —

Acoustics

Absorption JB COOL® $\alpha_w = 0,85$ -
Absorption class B
Panels with perforation pattern:
2 mm / 23% passage
Insulation mat:
Sealed rockwool 30 mm
Test reports available.

Absorption JB COOL® $\alpha_w = 0,90$ -
Absorption class A
Panels with perforation pattern:
2 mm / 23% passage
Insulation mat:
Sealed rockwool 40 mm
Test reports available.

03 —

Oxygen diffusion-tight

The JB COOL® climate system is oxygen diffusion-tight according to DIN 4726

04 —

Fire stability

Orientation test on resistance to fire of a suspended ceiling with C bandrasters and integrated panels provided with a JB COOL climate system.
Test report No 13769.

Orientation test on resistance to fire of a suspended ceiling with J-profiles and integrated panels provided with a JB COOL climate system.
Classification rapport No 2013-A-073.

Orientation test on resistance to fire of a suspended plasterboard ceiling and integrated panels provided with a JB COOL climate system.
Classification rapport Nr. 2012-A-072.

Test under bearing structure > 30 minutes fire stability in accordance with NBN 713.020.

05 —

Fire reaction

Suspended ceiling with integrated panels provided with a JB COOL climate system.
Classification C-s2,d0 in accordance with EN13501-1
Classification rapport No. 18439

06 —

Technical systems

Simple regulation
100% safe connections by means of poly-fusion or plug-in connection.
Oxygen diffusion-tight.
Reduced installation depth - suitable for both newbuild and renovation.
Space-saving at floor level.
No condensation.
Easily accessible plenum chamber and optional flip-up mechanism for ceiling panels.
Integration of technical systems: lighting, loudspeakers, sprinklers etc.
Specific incorporation of light fittings into the ceiling panel.

Characteristics

07 —

Energy

Energy-efficient, extremely low consumption as a result of low water temperature difference between supply and return.

Cooling water t°: min. 15°C.
Heating water t°: max. tot 40°C

Reduced system capacity for the same level of comfort. (lower cooling group)

10 —

Economical

Low installation cost. Changes to the ceiling can be carried out easily and thus inexpensively.

08 —

Hygiene

No risk of developing or spreading bacteria (legionnaires' disease).
Reduced risk of Sick Building Syndrome.
Draught-free, no dust disturbance.
Equitable and healthy humidity.

11 —

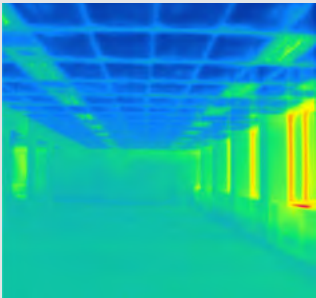
Ecology

100% recyclable steel/rockwool insulation/PP-R.
Extremely low energy consumption.
Natural medium used: water.

09 —

Comfort

Natural, unnoticeable air displacement.
No noise nuisance - silent.
Thermic transmission by radiation 60% and convection 40%.
Superb homogeneous vertical and horizontal temperature diffusion.



In the interests of quality, we reserve the right to adapt technical elements and characteristics of the products, without further commitment on our part.
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