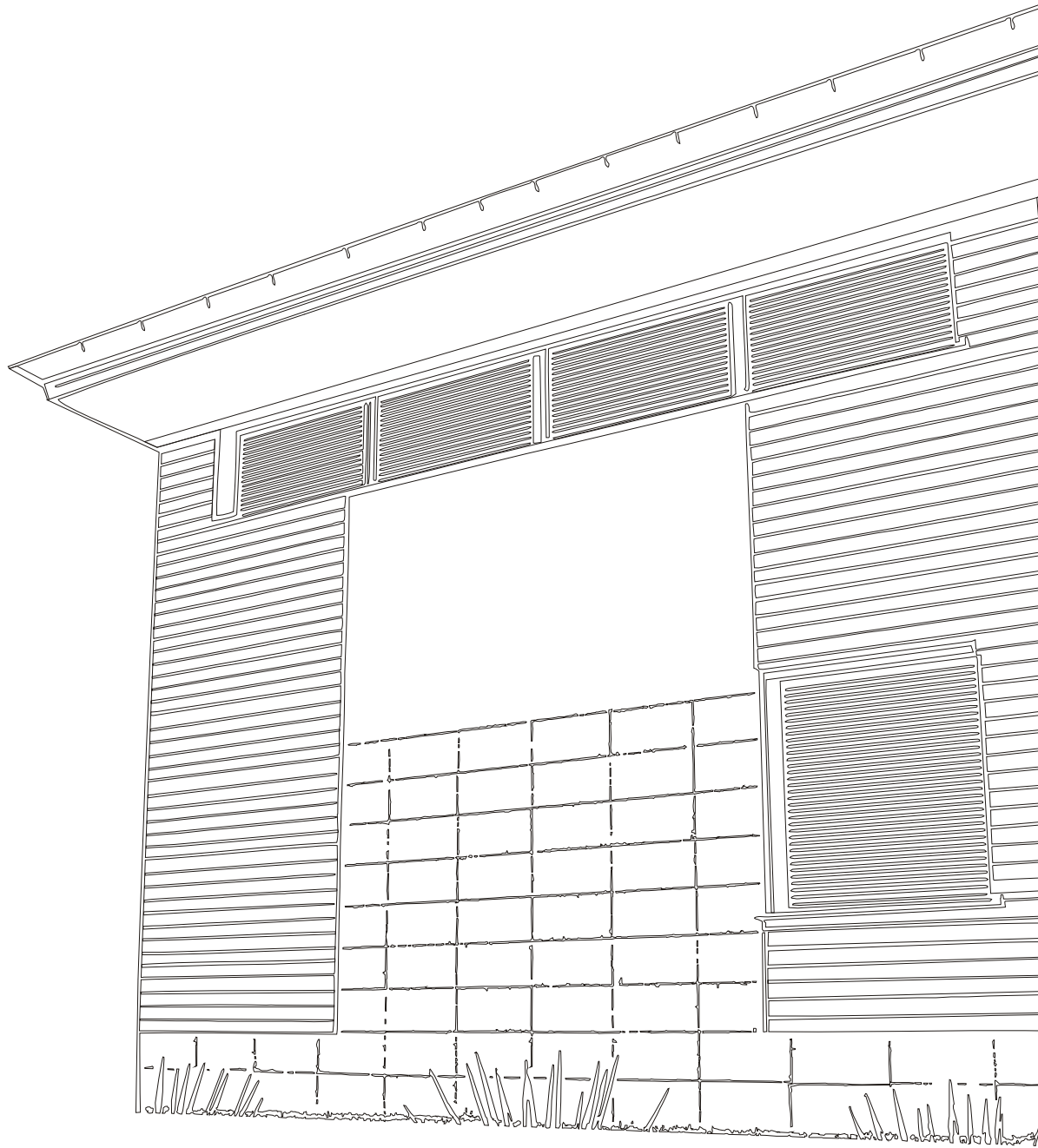




EN

folder



CleverBox
designed by BeClever

why roller shutters?

Thanks to their functionality, exterior roller shutters constitute an integral part of the modern construction technology. They offer excellent protection against the sun, wind, rain, snow and other atmospheric conditions. They improve significantly the thermal insulation of the building, providing significant advantages in the summer and in the winter. Exterior roller shutters also improve the level of acoustic insulation, reducing visibly the noise level inside. They provide a sense of privacy and they increase greatly the sense of security among the household members.

why CleverBox?

CleverBox is a product designed using innovative technical and technological solutions. CleverBox system was created for architects, manufacturers and in the first place end users. In line with the concept of system universality, each of its elements has many applications. Using the same elements, it is possible to configure the appropriate variant of the shutter, taking into account its technical parameters, functionality and visual appearance. Innovativeness, universality and quality are features, which allow CleverBox to meet the requirements defined for state-of-the-art roller shutters.

unlike in the case of traditional roller shutters, the building elevation is not influenced (architectural purity)

possibility of covering the roller shutter box from the inside

view from the outside



view from the inside



roller shutters in the summer

Up to 80% of sunlight gets through the windows, leading to excessive sun exposure inside the building in the summer. Thanks to exterior roller shutters, it is easy to eliminate this undesirable effect. Unlike the interior window blinds, the exterior roller shutters reflect the sunrays in front of the window pane, preventing heating of the interior. During the summer, the advantages of use of exterior roller shutters include the ability to create shadow and a pleasant sense of coolness inside the house.

roller shutters in the winter

Windows are among the main sources of heat loss in the building structure (from 15 to 25%). Thanks to application of exterior roller shutters, it is easy to reduce this undesirable phenomenon. A so-called air cushion is built up between the window and the shutter, which acts as an additional insulation layer. During the winter, exterior roller shutters decrease the energy demand of the building, which results in substantial savings on heating (even up to 30%).

IFT certificate

Nachweis
Wärmedurchgangskoeffizient und
Temperaturfaktor

Prüfbericht 428 31635/2

ift
ROSENHEIM

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Produkt
Rolladenkasten

Bezeichnung
BC 20

Außenmaß
E.N. 1 205 mm x 255 mm

Außen Contour
10 mm breit, raumseitig mit Bürstendichtung geschlossen

Material des Rolladenkastens
PVC-Hohlprofile

Einbauelement
Dämmstoff mit dem Bemessungswert der Wärmeleitfähigkeit ($\lambda = 0,032 \text{ W/(m} \cdot \text{K)}$)

Material des Rolladens

Innen

Wandaufbau

Besonderehinweise

Wärmedurchgangskoeffizient
 $U_{ib} = 0,83 \text{ W/(m}^2 \cdot \text{K)}$

Temperaturfaktor
 $f_{R_{ib}} = 0,70$

ift Rosenheim
St. Ann 2006

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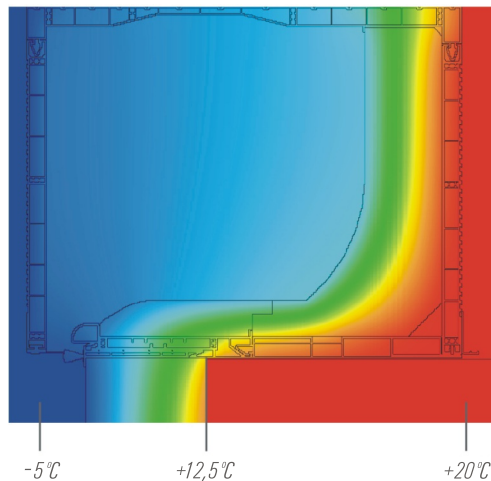
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thermal image



heat permeability research confirmed
by certificates of IFT Rosenheim
Institute in Germany

heat transfer coefficient
 $U_{ib} \leq 0,85 \text{ W/m}^2 \cdot \text{K}$

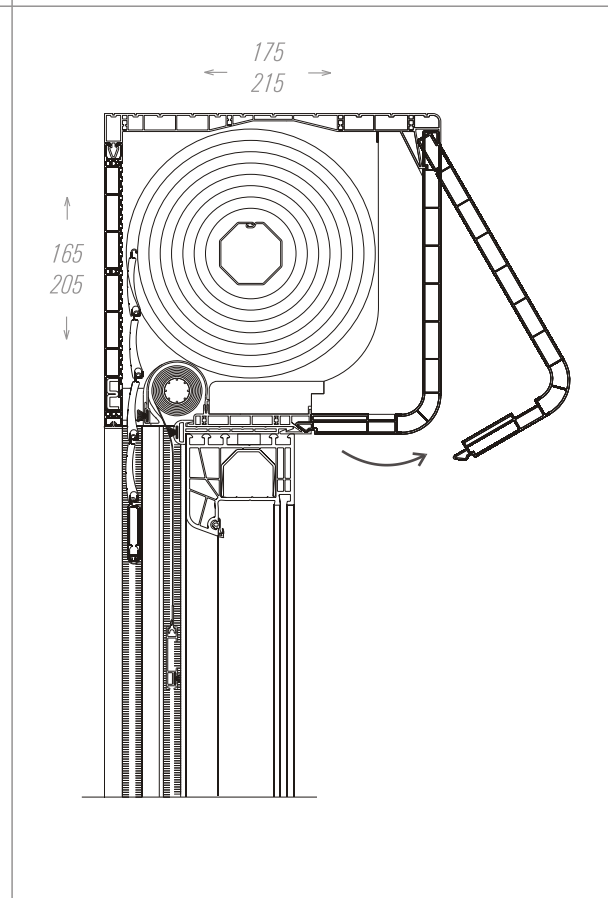
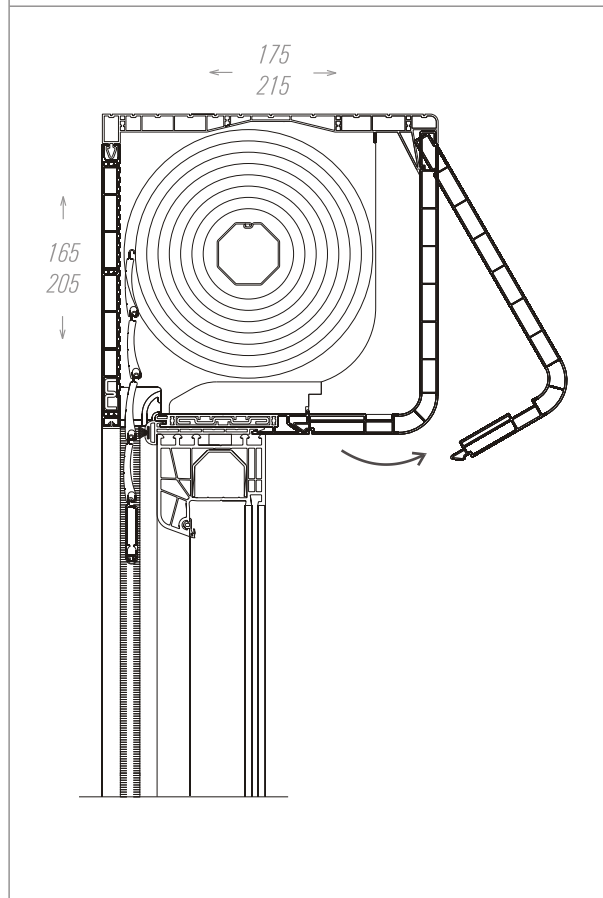
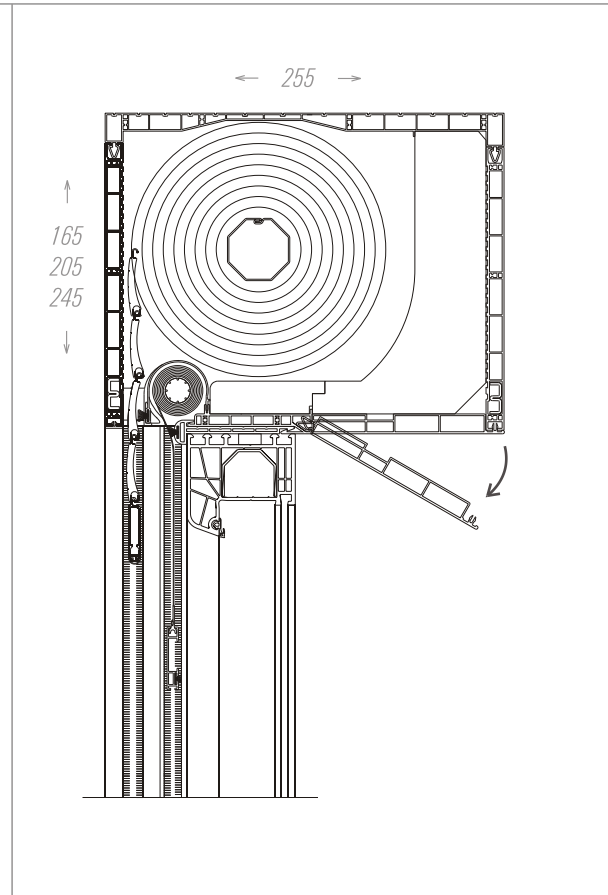
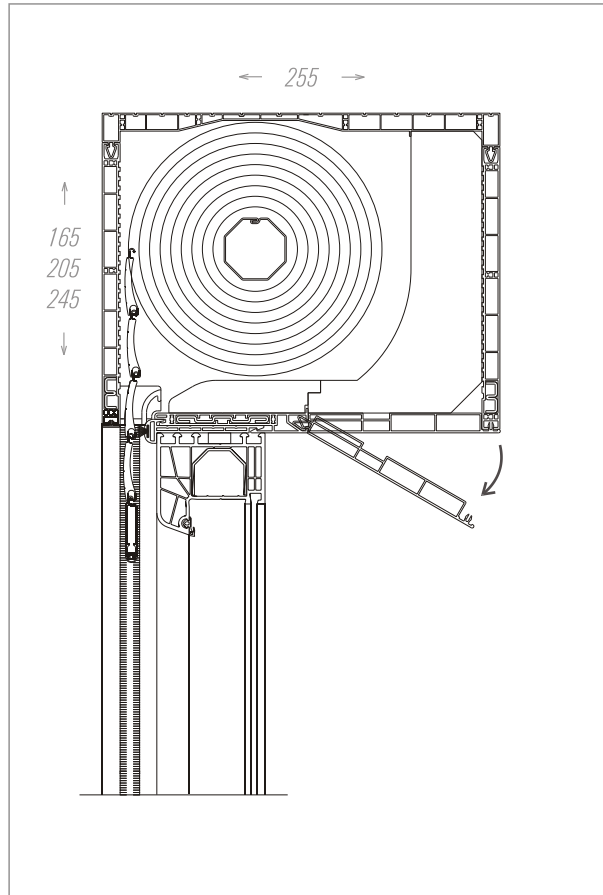
temperature coefficient
 $f_{R_{ib}} \geq 0,70$

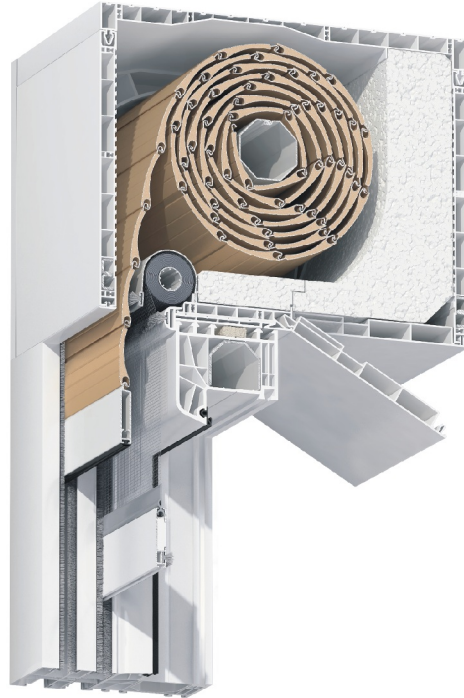
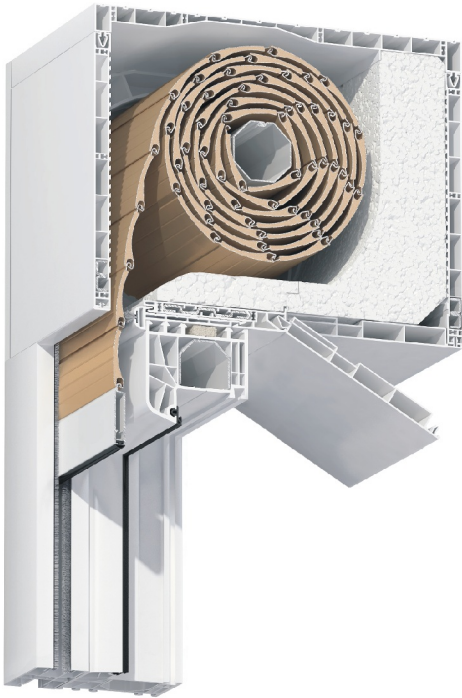
CleverBox system features

three heights of the roller shutter box:
165mm, 205mm, 245mm

three depths of the roller shutter box:
175mm, 215mm, 255mm

two versions of the roller shutter box:
with no insect screen, with insect screen





a universal connection profile, allowing for easy assembly of the roller shutter on any window (PVC, aluminum and wooden)

a front profile with a symmetric lock allowing for its double-sided use; possibility of providing smooth external surface (uncovered variant) or corrugated surface (covered variant)

an access plate with a functional lock located in the bottom or rear part of the roller shutter box

a chamber structure of the roller shutter box elements, ensuring the appropriate thermal insulation

an innovative system of connecting individual elements of the shutter box and its reinforcements, ensuring stability regardless of the size

possibility of use of electric and manual motor systems

possibility of use mini and maxi roller shutter curtains

production of elements based on lead-free stabilizers, which are environment-friendly



covering possibilities

four methods of covering of the roller shutter box: completely covered, covered from the inside, covered from the outside, uncovered

adaptability for use both in new buildings and upon modernization of existing ones

possibility of placing roller shutter sets in a single box

completely covered



covered from the inside



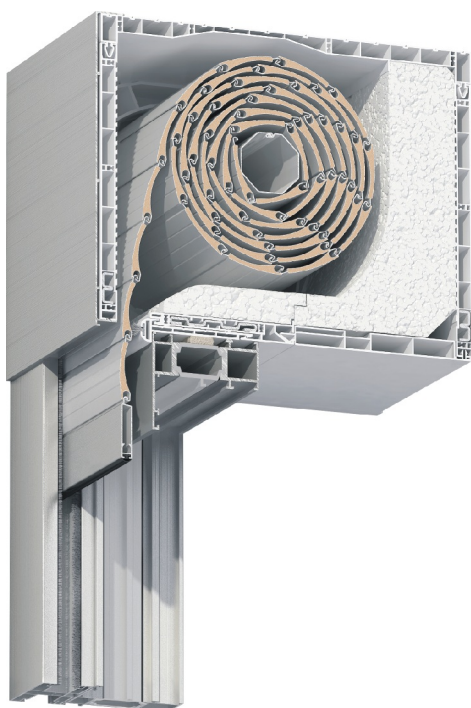
covered from the outside



uncovered



AluLine



varnish color palette



possibility of providing aluminum finishing or varnishing in any color for the external part of the shutter

possibility of finishing the selected elements of the roller shutter using any foil

DecorLine



foil color palette



