



Implio[®] P

TIGHT. CROSS-TRADE. CERTIFIED.

IMPLIO[®] P

SUNSHADE SYSTEM

The Complete Window Integration System

with Roller Shutters or Exterior Blinds



Trades



A complete system solution from

 **GUTEX[®]**
NATURALLY MADE FROM WOOD





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1. THE SYSTEM

GUTEX Implio® P Rollladen- und Raffstoresystem, a complete sunshade system for both exterior blinds and roller shutters, is the product of cooperation between GUTEX and LAKAL, both members of the iWDVS network. The system consists of a sunshade housing from GUTEX® and a sunshade unit, either roller shutter or exterior blinds, from Lakal®. Your benefits are:

Optimum ETICS integration

This wood fibre product allows you to install a homogeneous, continuous and uniform wall surface that is suitable for either render or rainscreens.

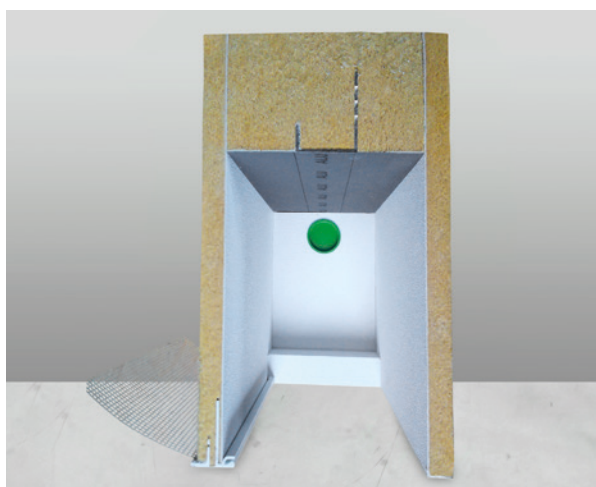
Roller shutters and exterior blinds now install easier

The sunshade unit installs when you have finished all render, sealing and caulking, sliding into the housing from below and mounting to the window frame.

Just one order form to fill out

To ensure your housing and sunshade unit fit perfectly, you fill out just one form, which you send to GUTEX. GUTEX fills the housing part of the order and sends the order request for the sunshade to Lakal. Lakal, in turn, sends you the sunshade unit and bills you directly, so you are doing business with Lakal for the sunshade and GUTEX for the sunshade housing.

1.1 Components and product range



GUTEX Implio® P Rollladenkasten (sunshade housing)



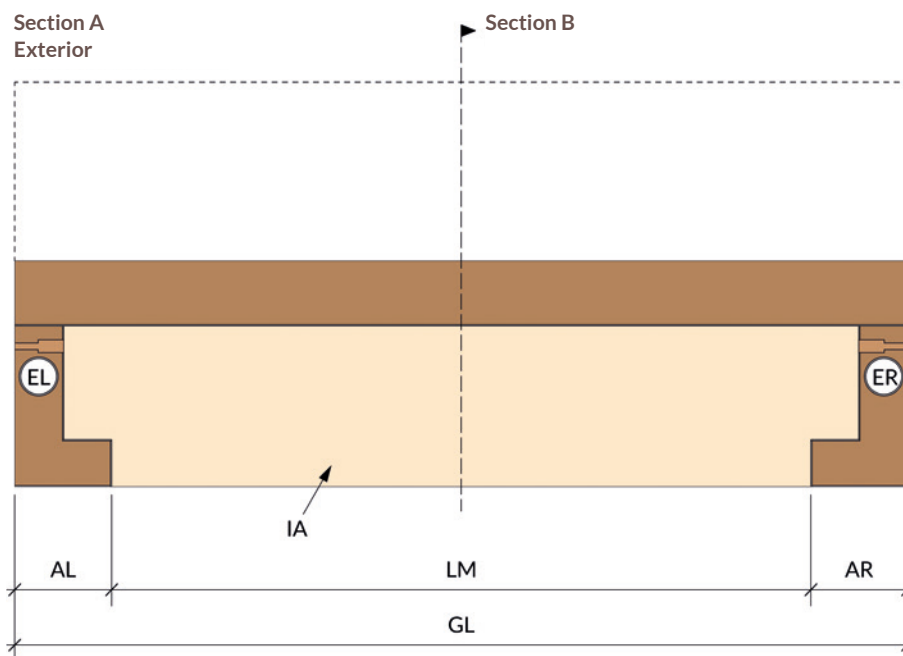
LAKAL Rollladenelement (roller shutter unit)



1.1.1 Sunshade housing

- › The sunshade housings come in widths to accommodate roller shutter or exterior blind widths of 60 to 310 mm.
- › This is the actual width of the sunshade unit. The dimensions of the housing and the window frame will deviate from this measurement.
- › For the proper, uniform fit of the housing and sunshade unit, the rough length of the housing is relevant.
- › The width of the sunshade unit is the rough opening minus 2 x 6 mm for the space on both ends for installation and the render. The order form allows for this.

➔ For further details, refer to the order form.



Cutaway drawing of GUTEX Implio® P Rollladenkasten (sunshade housing)

- › GUTEX Implio® P Rollladenkasten comes in lengths fitting sunshade unit widths up to 3.10 m, cut to size as per customer order. You may order longer sunshade housings for multiple sunshades, which then come in several segments that butt together and secure by means of GUTEX Implio® P Raffstorekastenverbinder (sunshade housing connectors).
- › The front insulation board is 20 mm thick and prepped on both sides.
- › The back board is also 20 mm thick.
- › If required, however, you may order both boards with greater thickness.



GUTEX Implio® P Raffstorekastenverbinder (housing connectors)

- › Usually, the opening for the housing in the wall is 160 mm deep and 250 mm high. The following minimum dimensions, based on track lengths, are available:

Required cavity dimensions - roller shutters

Cavity depth	Cavity height	Track length up to
120 mm	250 mm	880 mm
140 mm	250 mm	1590 mm
160 mm	250 mm	2200 mm

Required cavity dimensions - exterior blinds

Cavity depth	Cavity height	Track length up to
140 mm/160 mm	250 mm	2100 mm
140 mm/160 mm	300 mm	2700 mm

- › The right and left rests should be a minimum of 100 mm wide.
- › The height of the housings core (top) insulation is a minimum of 100 mm.
- › The housing's interior walls come in white, but are also available in dark grey (close to RAL 7015).
- › There is no need to paint the housing's interior walls.
- › White Implio® P treatments cover the front and undersides. Housings for rainscreens come clad with black Implio® P02 treatment.
- › The housings are available with factory-installed Kabeldurchführung, which is an air and water tight electrical cable inlet.

Required accessories

- › GUTEX Implio® Dichtkleber (caulking)
- › GUTEX Thermowall® Holzschrauben (wood screws) or GUTEX WDVS Thermoschraubdübel (thermally decoupled screw fasteners), depending on substrate
- › GUTEX Fugendichtband BG 1 (adhesive sealing strip)
- › If required, GUTEX Implio® P Raffstorekastenverbinder (housing connectors)
- › If required, additional counter-sink wood screws



1.1.2 Roller shutters and exterior blinds

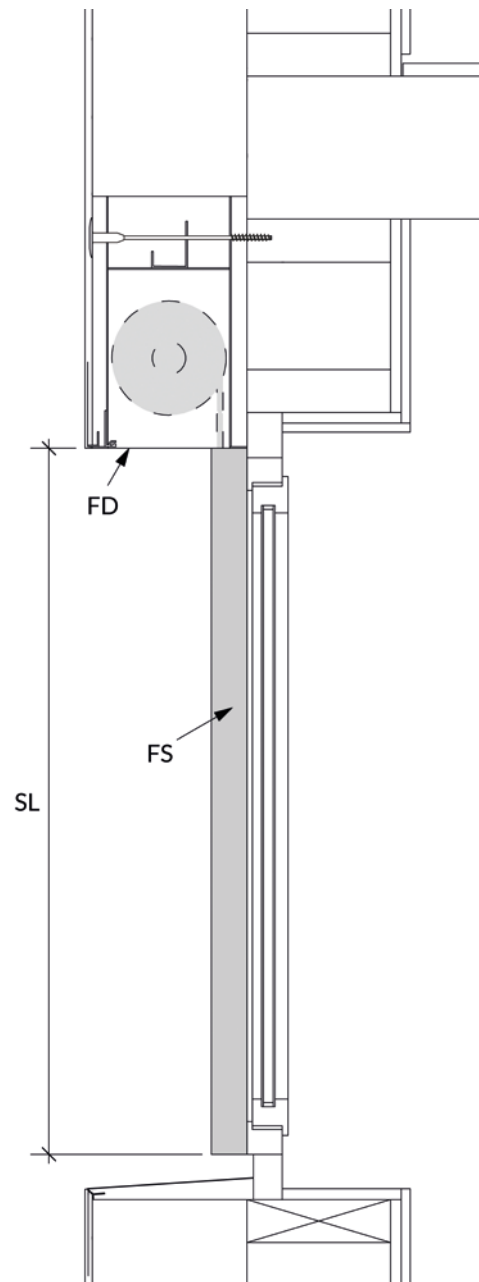
- › The Implio® P roller shutters or exterior blinds come as a complete system kit, with the electrical motor and remote control as well as the tracks.
- › Roller shutters and exterior blinds order with rounded slat edges and the exterior blinds are available with flat slats.
- › You have the choice from seven different standard colours for:
 - › Roller shutter and exterior blind slats
 - › Tracks
 - › Service hatch (only roller shutters)
 - › Bottom lath (only roller shutters)
- › Option: Guide tracks tilted 5° outwards at their bottoms

➔ The following dimensions are available P. 8

- › The track length (SL) is the measurement from the bottom of the sunshade housing to the window frame underside.

NOTE

Other colours are available for special order.



Measuring guide track length



Available Roller Shutters and Exterior Blinds Sizes

	Unit Widths (cm)																										
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	
60	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
70	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
110	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
120	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
130	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
140	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
150	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
170	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
180	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
190	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
210	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
220	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Track lengths (cm)

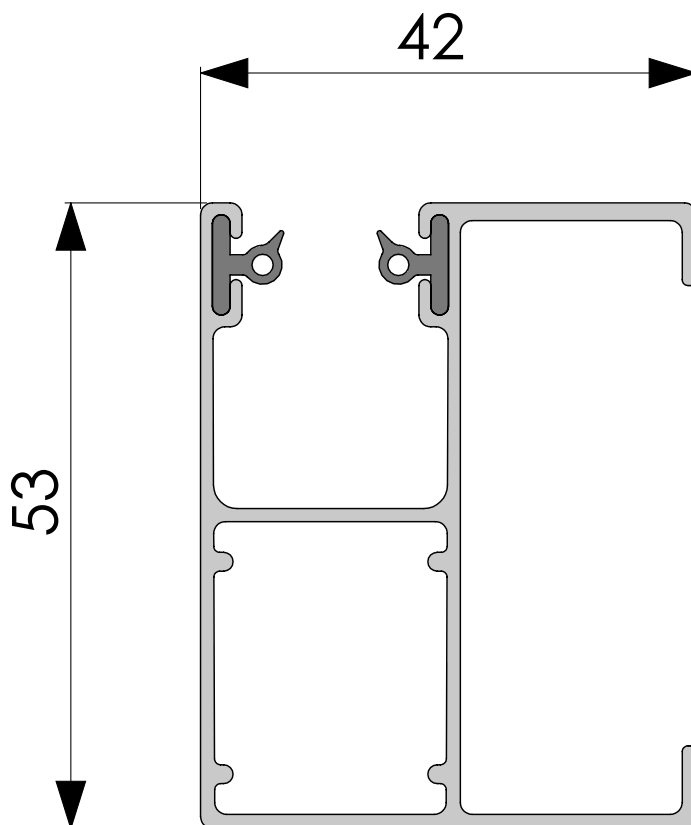
Exterior blinds are available with up to 270-cm track lengths



2. PREPPING FOR SUCCESSFUL INSTALLATION

2.1 Sunshade housing and window frame

- › Window/door jamb depth must be 160-200 mm deep, depending on track length.
- › Greater depths are possible on request, but the contractor must make suitable accommodations.
- › The opening in the exterior wall insulation must have rests to accommodate the sunshade housing and sufficient insulation covering the window frame/casing.
- › To determine the width of the window frame, consider the insulation that covers the frame, the track dimensions and 6 mm of space between the pre-rendered reveal/jamb insulation and the guide track.



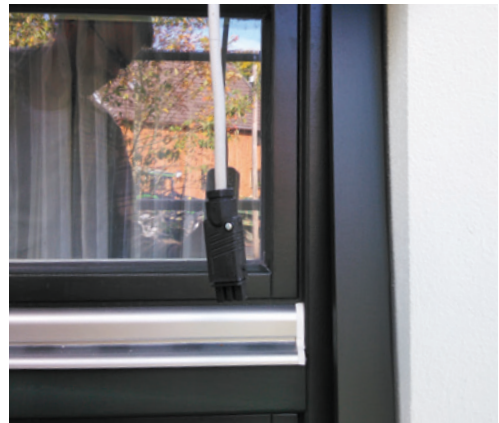
Cross-sectional of guide track

2.2 Electrical connection of roller shutters and exterior blinds

- › Electrical service and connection provided by others.
- › Run the power line into the GUTEX Implio® P Rollladenkasten. For greater convenience, you may order GUTEX Implio® P Kabeldurchführung, which is a housing with intricate cable inlet.
- › When ordering, specify the desired position of the cable inlet (right or left) in the housing and the position of the electrical lead for the sunshade unit.
- › To avoid bending the electrical cable too severely, it is best to insert the cable into the housing after you have installed the housing. For this reason, do not install the exterior wall insulation in this area, in order to have access to the cable inlet in the side of the housing.
- › If you choose to use the GUTEX Implio® P housing without the factory-ready cable inlet, you need to carefully seal the cable opening with a suitable sealant.
- › Installation of Hirschmann STAK 3 N socket connector on the supply lead by others. Besides earth, you need to use terminals 1 and 2 for phase and neutral. Fit the roller shutters or exterior blinds unit with the corresponding Hirschmann STAS 3 N plug connector.
- › The sunshade unit connecting lead with connector is 50 cm long. The length of the electrical service wire provided by others should be such that it allows connection to the sunshade unit before the unit installs in its cavity.



Cable inlet



Hirschmann STAK 3 N socket



3. INSTALLATION STEPS

3.1 Installing the sunshade housing

It is possible to install the GUTEX Implio® P Rollladenkasten (sunshade housing) in the cavity after you have installed the exterior insulation. For best results, however, install the housing with the exterior insulation, in order to avoid open joints between the housing and the adjacent GUTEX Thermowall®.



- › Apply a meandering bead of GUTEX Implio® Dichtkleber to the backside of the GUTEX Implio® P Rollladenkasten.



GUTEX Fugendichtband BG 1 (adhesive sealing strip)

- › For masonry substrates, we recommend coating the complete backside of the sunshade housing with GUTEX Klebe- und Spachtelputz (quantity approx. 6-7 kg/m²), or apply two large dabs in the middle of the board and a large bead of GUTEX Klebe- und Spachtelputz around the board's perimeter (min. 40% of the board's area).

- › Apply a bead of caulking along the bottom edge of the housing's interior-facing insulation or adhere a section of GUTEX Fugendichtband BG1 to form a seal. Be careful that this rear board edge doesn't bend towards the inside of the housing, as this will reduce the opening, potentially binding the sunshade's movement. If you suspect this might occur, you can screw the back wall of the housing to the substrate later.



- › Apply a bead of caulking on the housing rests as well.
- › Now install the housing in the cavity placing it on the rests.



Installing the housing during installation of the insulation boards



Installing the housing after installation of the insulation boards

- › Position the housing, so that it is flush with the exterior insulation.



Flush interior housing ends

- › Install the housing, positioning it so that the interior ends of the housing rests will be flush with the reveal/jamb liner insulation, which installs later.

NOTE



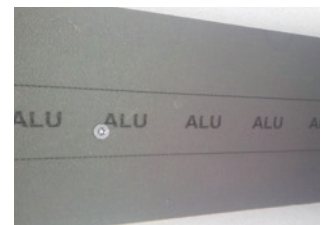
When you install the housing, make sure the distance between the back of the housing and window frame is consistently 20 mm. There will be no chance later to compensate for inconsistencies! To assist you here, you may use 20-mm wood strips to maintain the distance during installation.



- › Seal all the joints between the sunshade housing and the surrounding insulation with Implio® Dichtkleber caulking.
- › Once the sealant has dried, screw the housing to the substrate, using the GUTEX Thermowall® Holzschrauben or GUTEX Thermoschraubdübel that were provided with your order. Install 3 per linear metre. It may also be good to secure the housing with fasteners through the back wall, sides or top.



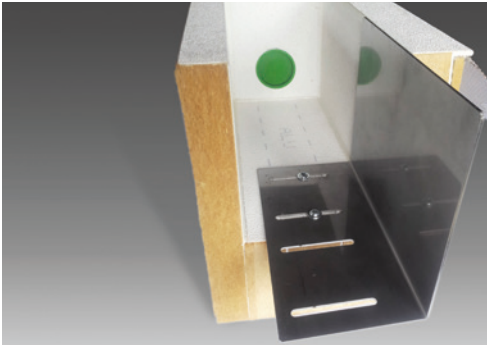
Fastening on the ends with GUTEX Thermowall® Holzschrauben (wood screws)



Fastening the top with counter-sink screws

NOTE

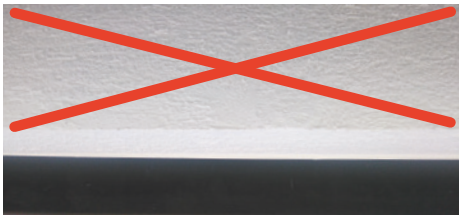
GUTEX Implio® Rollladenkasten (sunshade housing) comes with an aluminium fastening bracket that allows you to install commonly available exterior blinds in the future.



- › Sunshade housings for widths exceeding 3.10 m come in several sections. The segments butt together and secure with GUTEX Implio® Raffstorekastenverbinder connectors. First, apply GUTEX Implio® Dichtkleber adhesive to the end of one of the segments of the housing and join both segments, making sure they are flush on all their sides/edges. Then, apply a bead using a meandering pattern to the longest side of the angle bracket and position the bracket evenly in the middle between the two segments. Now, the longest side of the angle bracket is on the backside of the housing's front panel. The bracket's short side screws to the housing's integral aluminium rail. Use the screws provided to accomplish this, putting them through the elongated holes in the bracket.

- › Installation of the housing is now complete and you may proceed with render work, etc.

NOTE



Note that the interior backside of the housing does not receive render.

You may apply render to the underside of the housing's back panel.

NOTE

We manufacture GUTEX Implio® Rollladenkasten (sunshade housings) as per customer specified dimensions. Significantly different dimensions and designs are also possible.

We'd be glad to discuss your specific needs with you.

3.2 Installation and initial operation of roller shutter and exterior blinds

NOTE

It is advisable, particularly for wider (horizontal length) housings or longer track lengths, that two people install the sunshade systems.

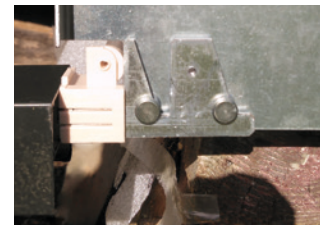


- › Place both mounts into their respective openings provided in the guide tracks. You may have to gently and carefully tap them with a hammer.

NOTE

Bear in mind the mounts have reversed profiles and there is a front and back to each track.

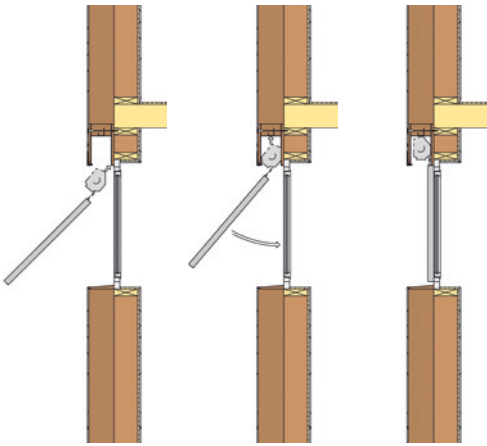
- › You'll know you assembled the parts properly if they easily connect with the drive unit.



- › Once you have connected both guide tracks with the drive unit, secure the assembly with the provided countersink screws.

- › Assembled sunshade assembly





- › Now, insert the entire assembly into the Implio® P Rollladenkasten from below.



- › There is limited space in the cavity. For this reason, it makes sense when installing sunshade systems with longer tracks to roll the sunshade out a bit, in order to minimise the diameter of the sunshade roll in the housing. Should you need to do this, proceed as follows:
 - › Place the assembled unit in front of the housing and make the electrical connection.
 - › If the power supply is energised, the electrical drive will operate.



- › Use the remote control to inch the sunshade down the tracks a bit.
- › You may need to assist the sunshade, threading it into the tracks. Use the down button and the stop button in the middle.

Feeding the sunshade into the tracks



Unit is ready to install in housing

- › Once you have inched the sunshade down the tracks, position the assembly so it is plumb and level.





- › Now, screw the unit into the window frame.

NOTE

If the windows are aluminium or vinyl, use the self-tapping screws provided with the unit. If the windows are wood, use suitable longer wood screws. The tracks come pre-tapped to accommodate the screws.



- › If you haven't already, now is the time to connect the electric motor and feed the sunshade into the tracks.



- › Accommodate any excess wire (power lead) in the space provided in the housing and if necessary bind the wire with cable ties.
- › The unit comes with a factory-programmed remote control and operates the sunshade up and down to its full down position.
- › The roller shutter senses torque, which enables it to travel downwards until it reaches the sill, where it stops. The exterior blind travels down to its programmed end position.
- › If required, you can also program other remotes to operate a specific sunshade or re-program other end positions.

NOTE

Make sure, only one unit is in program mode when you are programming it, otherwise your actions may change the programmes of other units. To accomplish this, only turn on the unit that you wish to program.



- › Test the unit by operating it to both end positions (up and down).



- › Close the inspection hatch, by sliding it into the slot in the front of the housing and securing it with the provided sheet metal screws.



- › Then, insert the provided plugs into the holes in the tracks.
- › Installation is now complete.

If you require further information, refer to the documents provided with the unit, or speak to LAKAL's technical department.

➔ www.lakal.de

➔ [iWDVS-Hotline +49 6831 8948 670](tel:+4968318948670)

➔ iwdvs@lakal.de

4. SYSTEM PARTNER



LAKAL – Vision and expertise



LAKAL GmbH is a company with a long tradition – close to 100 years of experience, which our highly qualified personnel have assimilated and continue in the company's pursuit to satisfy the market needs with ongoing product development, delivering on our promise to provide the best product with the best quality.

True to our long tradition, our market orientation is toward Germany, France, and our roots, new plant and offices are in Saarlouis-Lisdorf, Germany. Our name stands for innovative, effective roller shutters, blinds and doors, and insect protection solutions. Since all production lines are under one management and operate on one site, you can enjoy the benefits of greater efficiency and versatility. State-of-the-art machinery and equipment combined with LAKAL's dedicated international workforce give us the versatility and capacity necessary to provide the ideal products for our customers' applications.

We design and build LAKAL's products to install and fit their specific applications perfectly. The products feature:

- › CONVENIENCE: Ease of use and state-of-the-art motorised operation
- › DESIGN: Appealing diversity of form and colour
- › SECURITY AND DEPENDABILITY: Durable and strong enough to resist break-ins and last a lifetime

Our in-house engineering department designs new products and product improvements, anticipating market trends and demands, such as carbon footprint mitigation and energy-saving. This is why we support Smart Home Technology, offering our user-friendly Smart Home System, as well as simple solutions that allow you to find ideal, individual solutions to protect your home with LAKAL products.

Having our own fleet, allows us to deliver every day to meet the demands of architects, trades and homeowners with flexibility, timeliness and reliability.

LAKAL GmbH, www.lakal.de



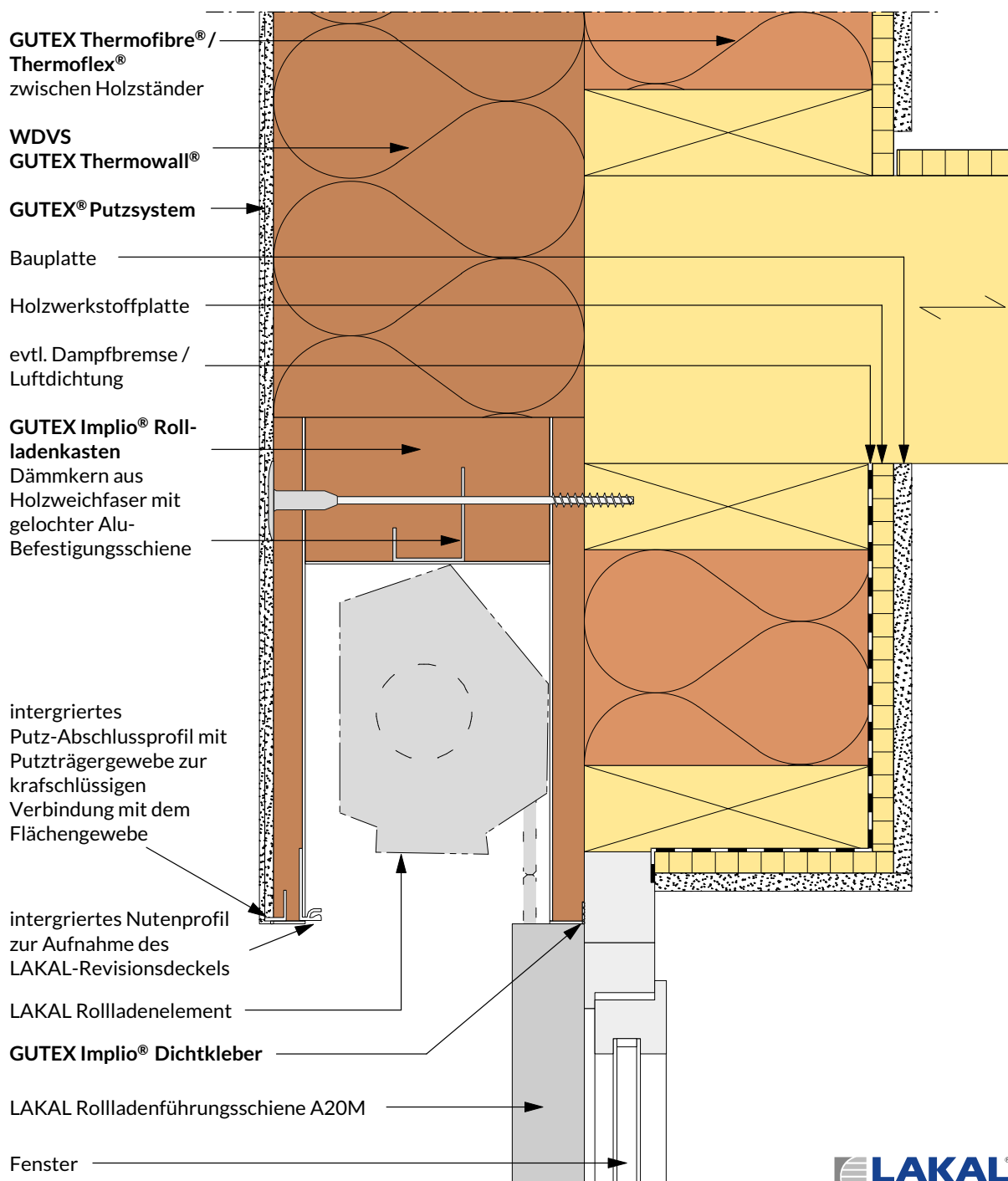
5. DESIGN DETAILS

In the following, you will find several important design details.

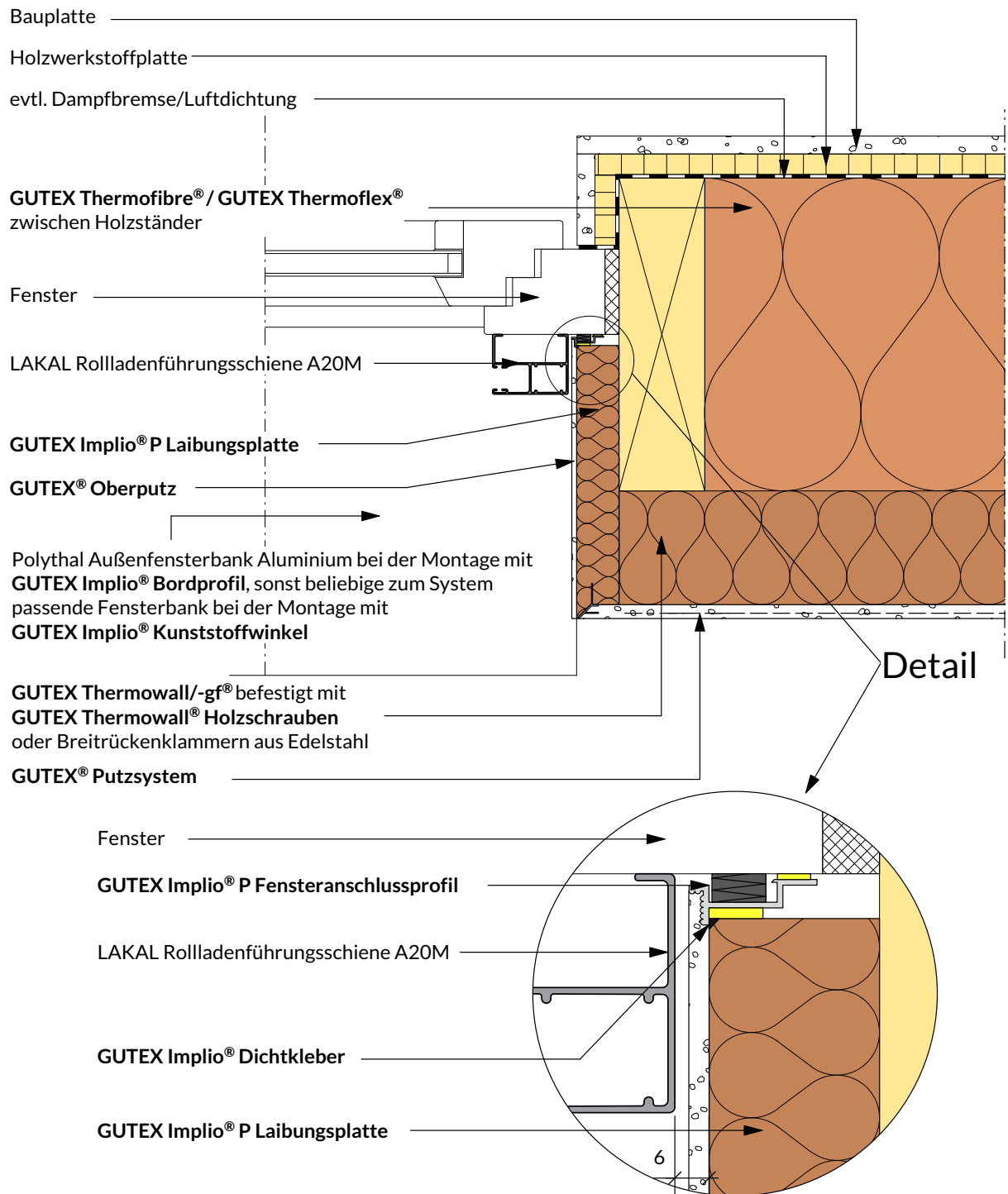
NOTE

You will find many design details at www.GUTEX.de or you may request them from GUTEX' technical assistance department.

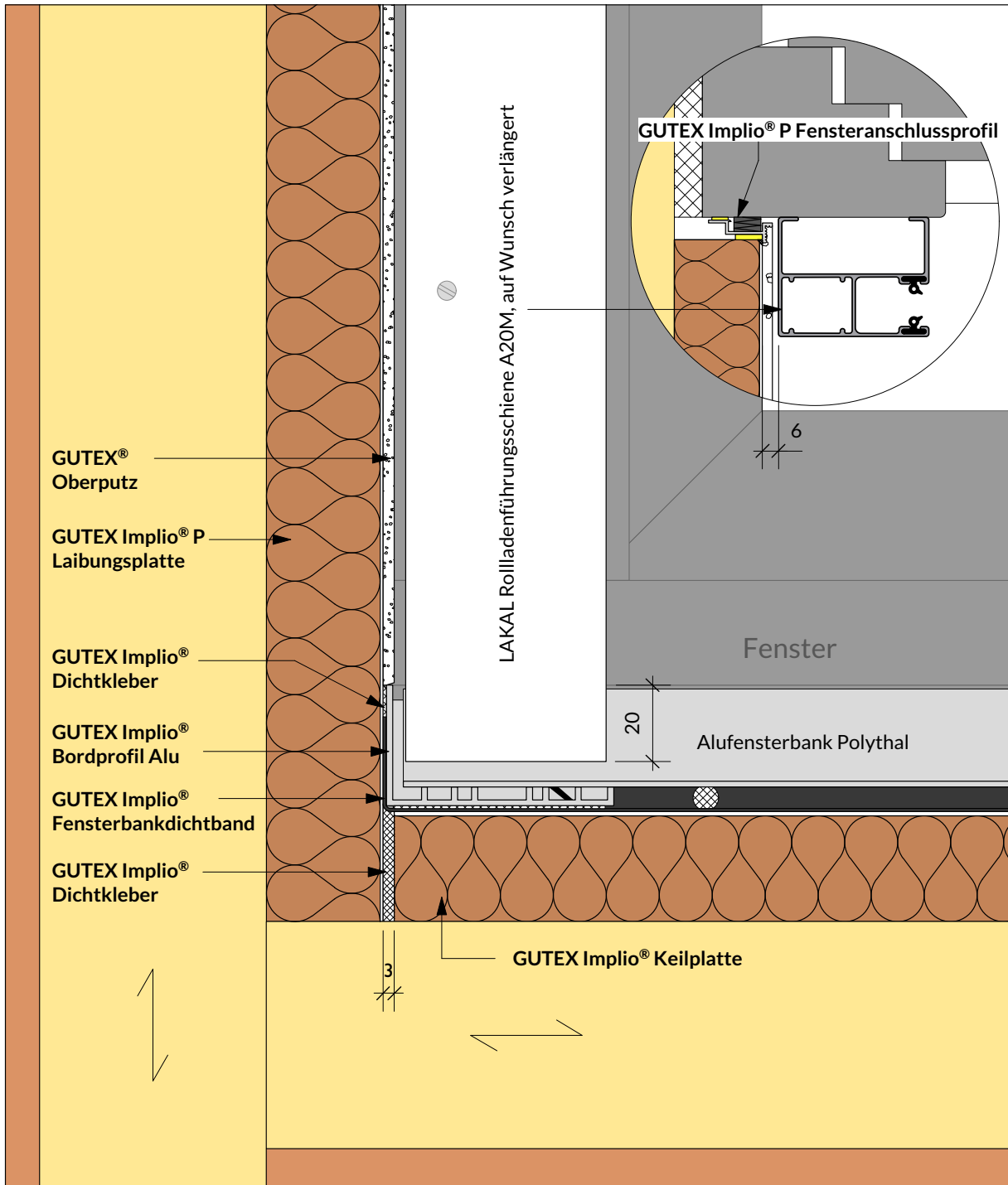
Top



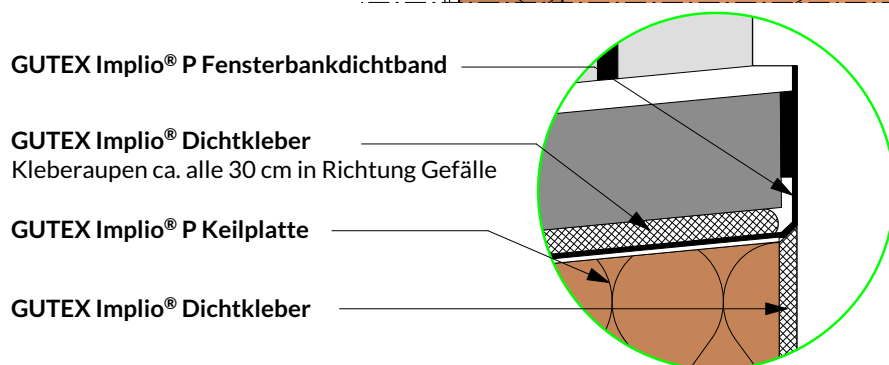
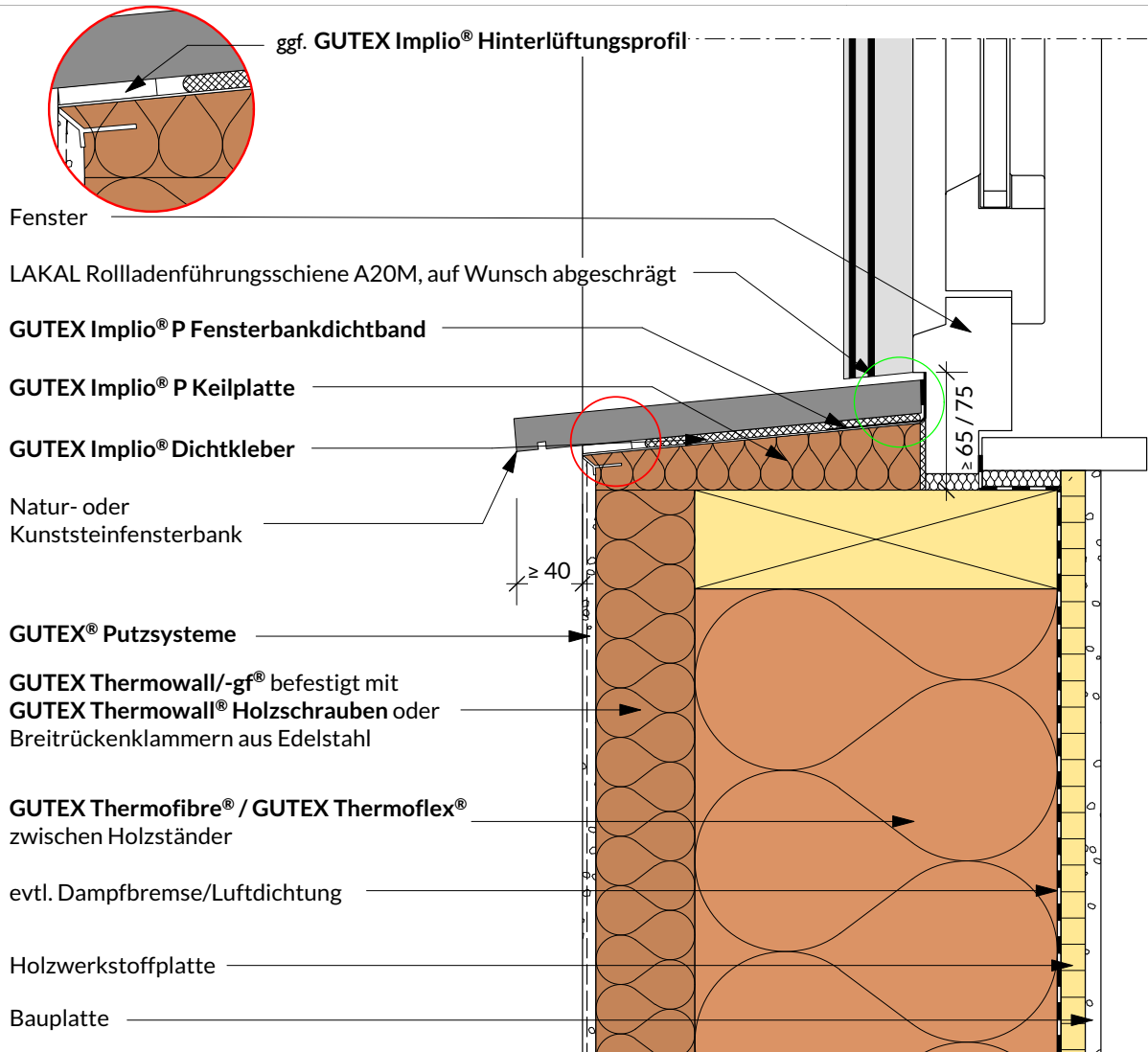
Reveal/jamb



Window Sill - Front

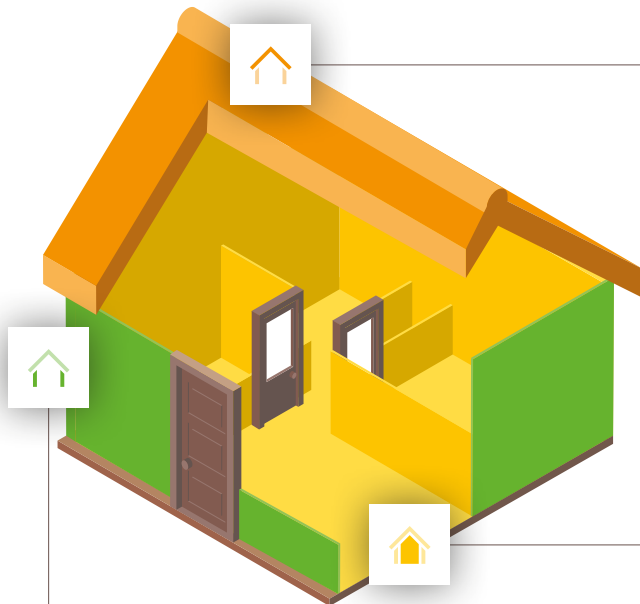


Window Sill - Side





APPLICATIONS AND SOLUTIONS



Roof

- › Tecadio® GUTEX roof refurbishment system
- › Above-rafter insulation
- › Sarking boards
- › Flat roof insulation
- › Cavity insulation (GUTEX Thermoflex®)
- › Cavity insulation (GUTEX Thermofibre® blow-in insulation)

Interior

- › Intevio® GUTEX interior insulation system
- › Vapour permeable underlay installed from interior between rafters
- › Rafter underside insulation boards
- › Insulation under screed (dry / wet)
- › Top storey ceiling
- › Suspended ceiling
- › Solid wood flooring / Solid wood plank flooring
- › Service cavity insulation course
- › Partition walls
- › Cavity insulation (GUTEX Thermoflex®)
- › Cavity insulation (GUTEX Thermofibre® blow-in insulation)

Wall

- › Thermowall® ETICS
External Thermal Insulation Composite System
- › Render
- › Rainscreen
- › Brick facing
- › Durio® GUTEX system for unique facade design
- › **Implio® GUTEX window integration system**
- › Cavity insulation (GUTEX Thermoflex®)
- › Cavity insulation (GUTEX Thermofibre® blow-in insulation)



IMPLIO® ADVANTAGES



Systems deliver greater dependability



Durable weather protection



Lasting value



Very economical



Certified quality



Sustainability



Service

GUTEX belongs to the iWDVS® engineering network



iWDVS® was conceived as a design network to facilitate cooperation between companies and across trades, with the purpose of improving performance via advanced system solutions.

iWDVS® solutions, such as Implio®, are subject to rigorous in-situ testing and, upon passing, receive a certificate by a qualified institute (e.g. ift-Rosenheim). Thus, homeowners, architects and tradespersons finally have assurance that not only components, but also complete system solutions will perform exactly as specified.

OUR PRODUCT AND SERVICE DESIGNATIONS


 Roof


 Wall


 Interior

Hotline

GUTEX technical assistance
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Knowing you've done the right thing. That's the GUTEX effect.



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