

ProTeck



MAKES
CORNERS
STRONG!

PROTECT. COVER. DESIGN.

Schmitt
Formteilbau

From builder TO INVENTOR

Reiner Schmitt is a master plasterer. He is a doer, with years of experience and a deep knowledge of the building trade. In 1990, he started his first business in his home town in Bavaria, before qualifying as a master drywall specialist with flying colours in 1997.



Alongside dealing with ever more complex requests every day from his own customers, Reiner Schmitt is now also making a name for himself as a developer of practical innovations. His latest development is ProTeck: a series of gypsum board elements specially designed for drywall construction and interior design in timber frame buildings and prefabricated houses.

This globally unique product is already patented at the European Patent Office.

ProTeck is made by builders for builders, significantly increasing the level of quality in interior design. Together with his wife Bettina, Reiner Schmitt set up a separate company, Formteilbau Schmitt GmbH & Co. KG, to properly market his new invention. All ProTeck elements are made at a dedicated production facility in Bavaria. From builder to inventor.

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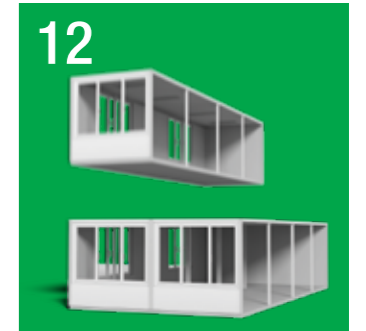
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ProTeck element

INTERIOR DESIGN MADE EASY



For outstanding innovation in construction.

We were awarded a special prize for our innovative ProTeck elements with integrated edge protection.



ProTeck – The solution for edges and corners

Creative interior design is all about achieving the right look, whether you are creating alcoves, wall corners or facings with straight edges.

We have a simple answer:

ProTeck elements are prefabricated gypsum boards that give you perfect edges that last. They are ideal for covering free-standing pillars and supports made from metal or wood, corners on window reveals and lintels, or visible pipes and cables.

This unique innovation makes interior design safer and faster for virtually all types of construction.

The perfect solution for those who value attention to detail.

ProTeck is a trademark of Formteilbau Schmitt GmbH & Co. KG.

ProTeck-element

THE GYPSUM BOARD WITH INTEGRATED EDGE GUARD



▶ Integrated edge guard



▶ Precise 90° corners



▶ Fire resistance class F 30 – F 90



▶ Excellent impact resistance

▶ The cost-effective solution

ProTeck coated elements are highly durable and offer excellent impact resistance. They remain untouched even when subjected to heavy mechanical stresses, such as everyday knocks from suitcases and shopping bags. The integrated edge protection offers maximum protection.

The Q3-quality coating can be painted immediately.



Side:

Gypsum element with Q3-quality coating, can be shortened to custom sizes

Integrated edge guard:

Highly durable and impact resistant

Angle:

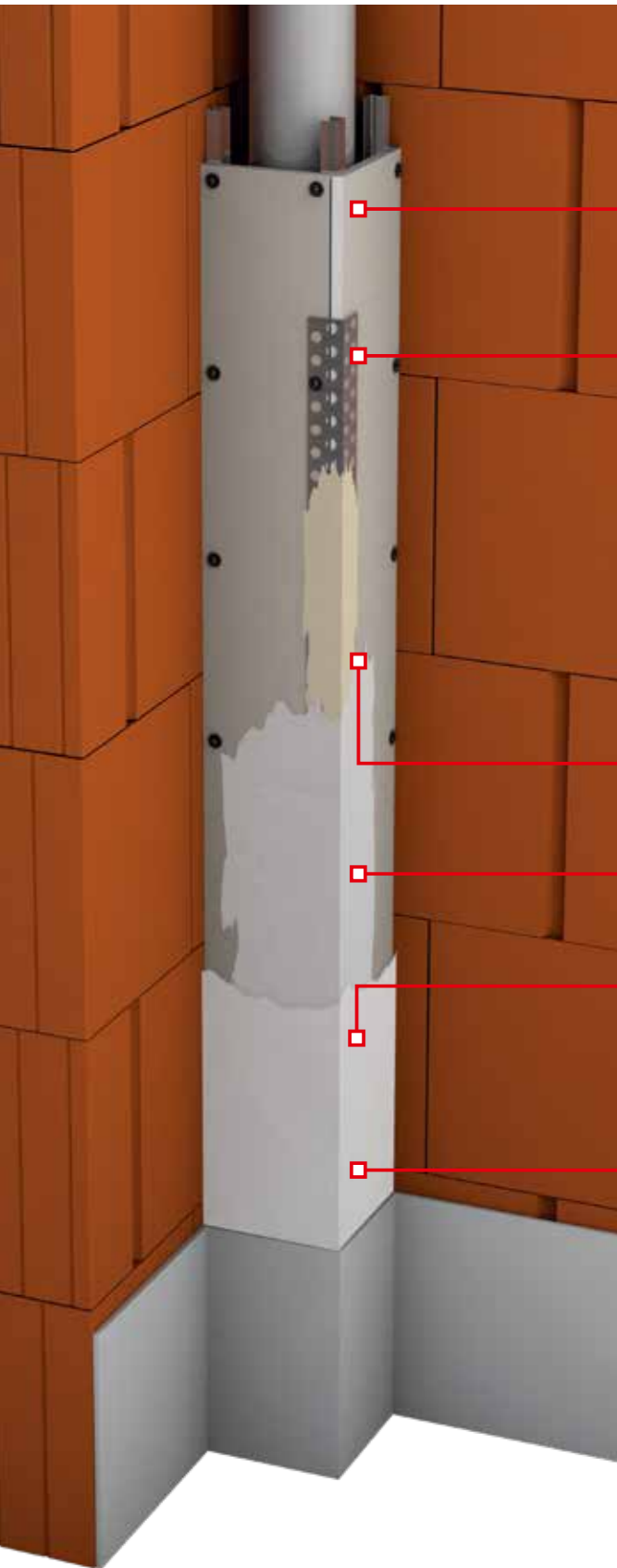
Create perfect 90° angles automatically

BENEFITS

- ▶ **Fast assembly:** Quick, easy and with no filling
- ▶ **Q3 quality:** Ready to paint right away
- ▶ **Full impact protection:** Highly durable with excellent impact resistance
- ▶ **All components:** In a single product
- ▶ **Complete:** No need for separate corner beads
- ▶ **No joints:** Perfectly straight edges free of cracks

Standard process

TIRING AND TIME CONSUMING



Board strips:
Cut and secure

Corner angle:
Corner bead attached separately

Filling:
Multiple layers plus long drying time

Q1: Basic filling

Q2: Standard filling

Q3: Filling for final coating

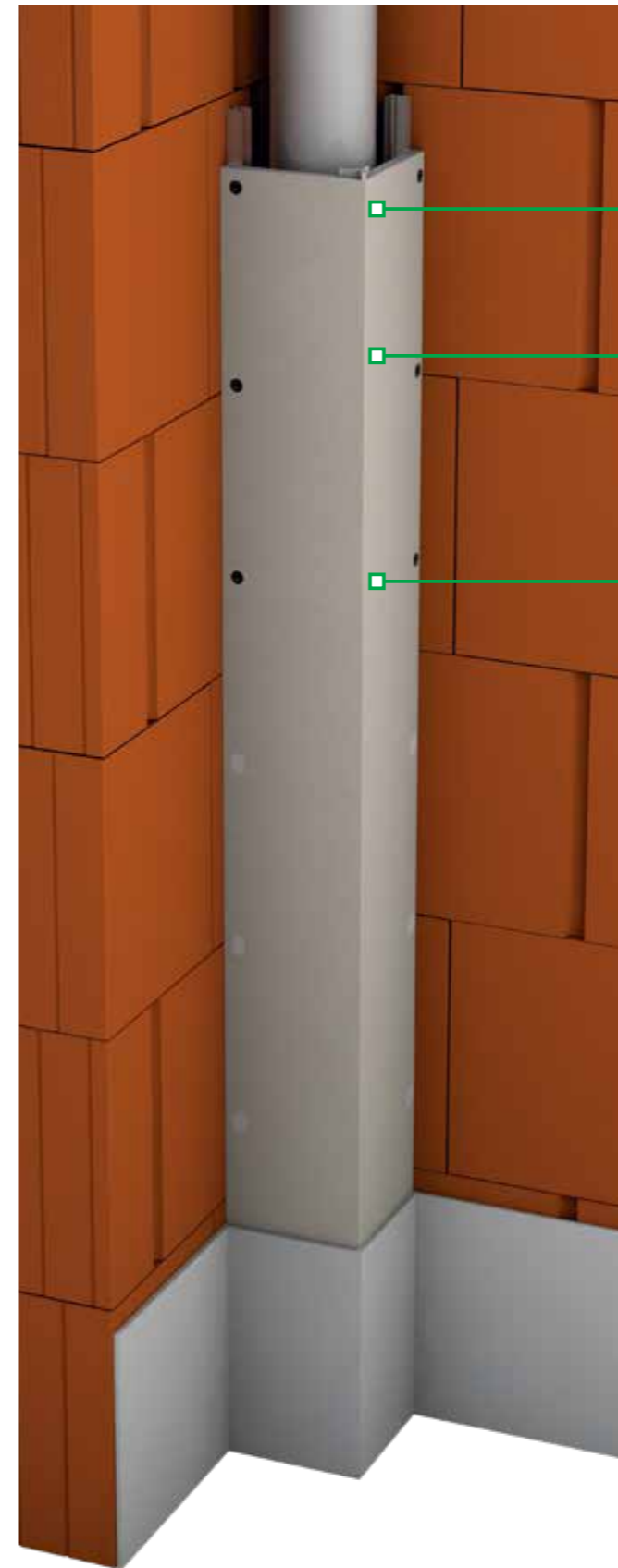
Sanding:
Sanding for surface coating



MULTIPLE WORK STEPS

ProTeck

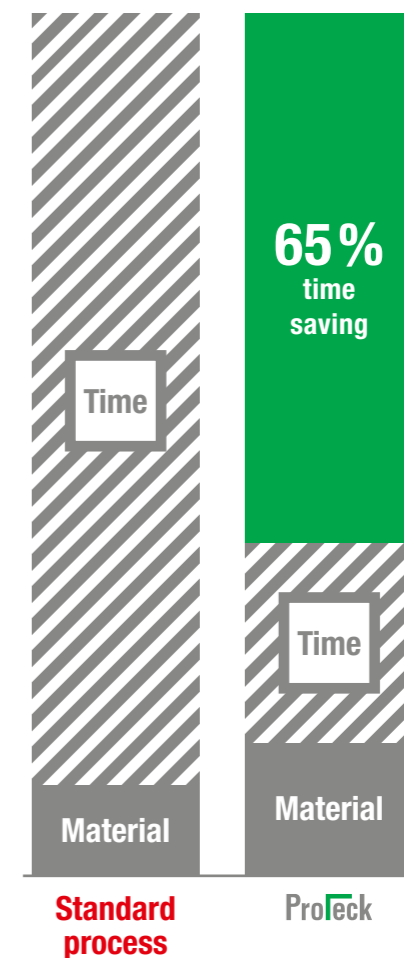
QUICK AND EASY



Edge protection:
Integrated as standard

Reduced workload:
No filling necessary

Clean:
Precise edges



Permanent impact resistance in less time:

Precise and robust external corners on walls and ceilings without the need for corner beads and painstaking filling work.

The smart new ProTeck element helps you create precise edges in much less time and much greater quality.

Timber frame construction

THE RIGHT FRAMEWORK FOR SUCCESS



With its integrated edge protection, the element is perfectly designed for creating simple and precise corners on window and door reveals. In the prefabricated version, the ProTeck element can significantly boost the flexibility and cost-effectiveness that make timber frame construction so popular.

Renovation and modernisation specialists

But it is not just new buildings where ProTeck can make a difference. This clever innovation also makes modernisation measures in drywall construction simpler and cleaner than ever before. Simply attach the ProTeck element to the existing OSB boards or at installation level with square timbers.

LINTEL ELEMENT



Make a notch on the underside of the lintel element at both ends. Adjust the ProTeck element to the window frame and attach. The lintel elements can be configured ex-works to make life even easier on the construction site.

SIDE ELEMENT ON WINDOW OR DOOR REVEAL



Fit the left and right side sections after the lintel element. Secure the side element in the existing structure between the lintel element and the window ledge.

Working together with the prefabricated housing industry.

The ProTeck element is perfect for timber frame constructions in new residential buildings, such as single and multi-family houses, terraced housing or multi-storey apartment blocks. It is flexible and suitable for use in prefabrication or on the construction site. With its safe yet incredibly simple and time-saving installation method, the clever edge guard element increases the value offered by this method of construction.

Available with gypsum panel thicknesses of 12.5 to 25 mm, this innovative product is a simple solution that reliably protects edges and corners against impacts on both interior walls and the internal panelling of exterior walls.

Fire protection

THE PERFECT CORNER FOR FIRE PROTECTION STRUCTURES



Complete planning and execution security in several fire resistance classes:

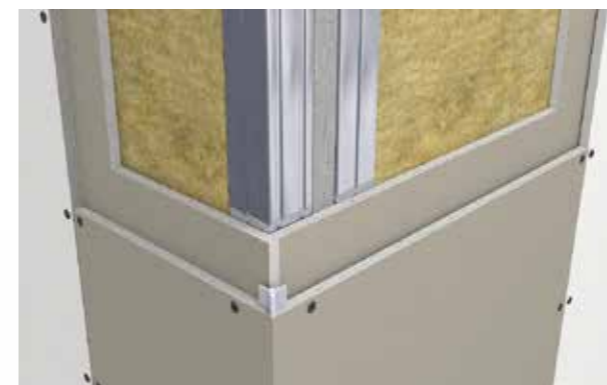
Together with the appropriate construction, the Pro-Teck element can help you create fire-retardant (F 30), extremely fire-retardant (F 60) and fire-resistant (F 90) edges for fire protection structures in drywall construction. The ProTeck element can deliver 30 – 90 minutes of fire resistance, depending on the design and area of application.

Areas of application:

When it comes to fire protection, the ProTeck element with fire-resistant gypsum panels is ideal for strengthening the following:

- ▶ Single and double steel stud wall systems
- ▶ Installation shafts and facing shells in frame constructions
- ▶ Steel supports and steel girder cladding
- ▶ Hollow steel profiles

CORNER CONNECTION



STEEL GIRDERS AND SUPPORTS

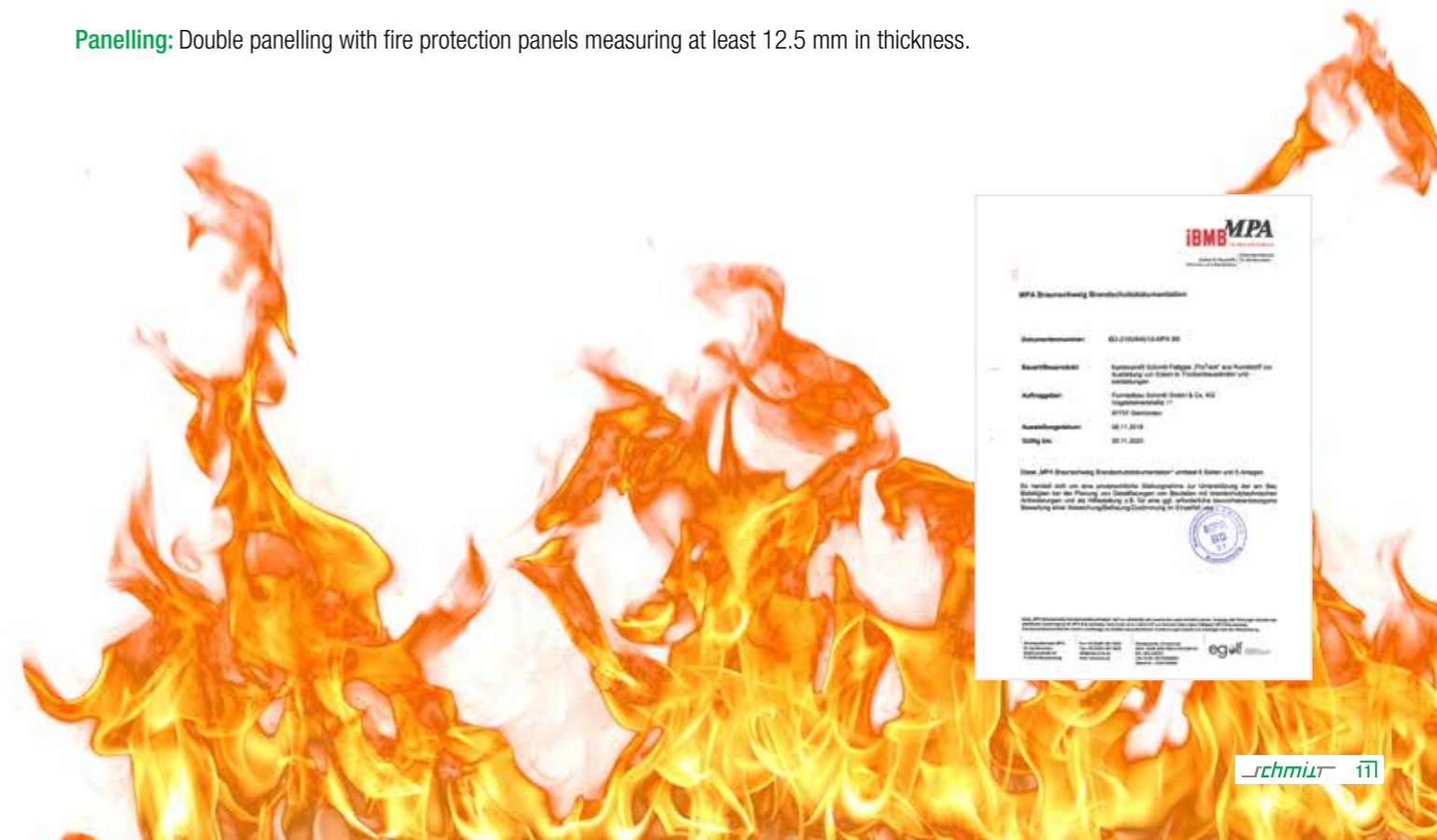


Panelling: Double panelling with fire protection panels measuring at least 12.5 mm in thickness.

Top quality, high performance, safety and cost-effectiveness: the innovative Pro-Teck element with integrated edge guard boasts unique properties that meet many structural requirements with a single product. This also applies to the special requirements of fire protection. The version with fire protection gypsum panels is tested and certified to DIN EN 1364-1 and DIN EN 1363-1.

The ProTeck element has been proven to maintain its function in tests carried out by the Materials Testing Institute in Braunschweig, Germany.

The impact-resistant edge guard element therefore ensures that fire protection structures meet building approvals and certifications down to the tiniest and most precise corner. This provides reliable protection for people and objects both before and during a fire.



Modular construction

THE SYSTEM FOR GREATER EFFICIENCY AND QUALITY



Buildings with high footfall, such as offices, administration buildings, schools and nurseries, are increasingly constructed in modules. This forward-thinking method offers a number of advantages. The modules offer a high level of prefabrication and are designed to be weather resistant. They save both time and materials, are cleaner to process, and offer greater quality and cost control compared to conventional methods of construction.



In interior design, the clever ProTeck element fits effortlessly into efficient modular construction processes. The patented product with integrated edge protection saves time by removing the need for painstaking filling work. The custom-made prefabricated version can be installed immediately to automatically create precise and highly durable corners that can be processed further right away.

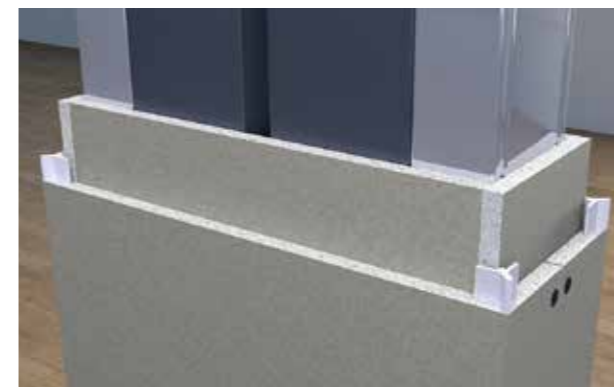
The ProTeck elements can be mounted quickly, easily and cost-effectively to supports and cladding as L-shaped and U-shaped sections. The integrated edge guard gives the corner high durability and impact resistance.

L-SHAPED WINDOW REVEAL



For parapets and lintels. Simply screw the ProTeck element with integrated edge guard directly to the substructure.

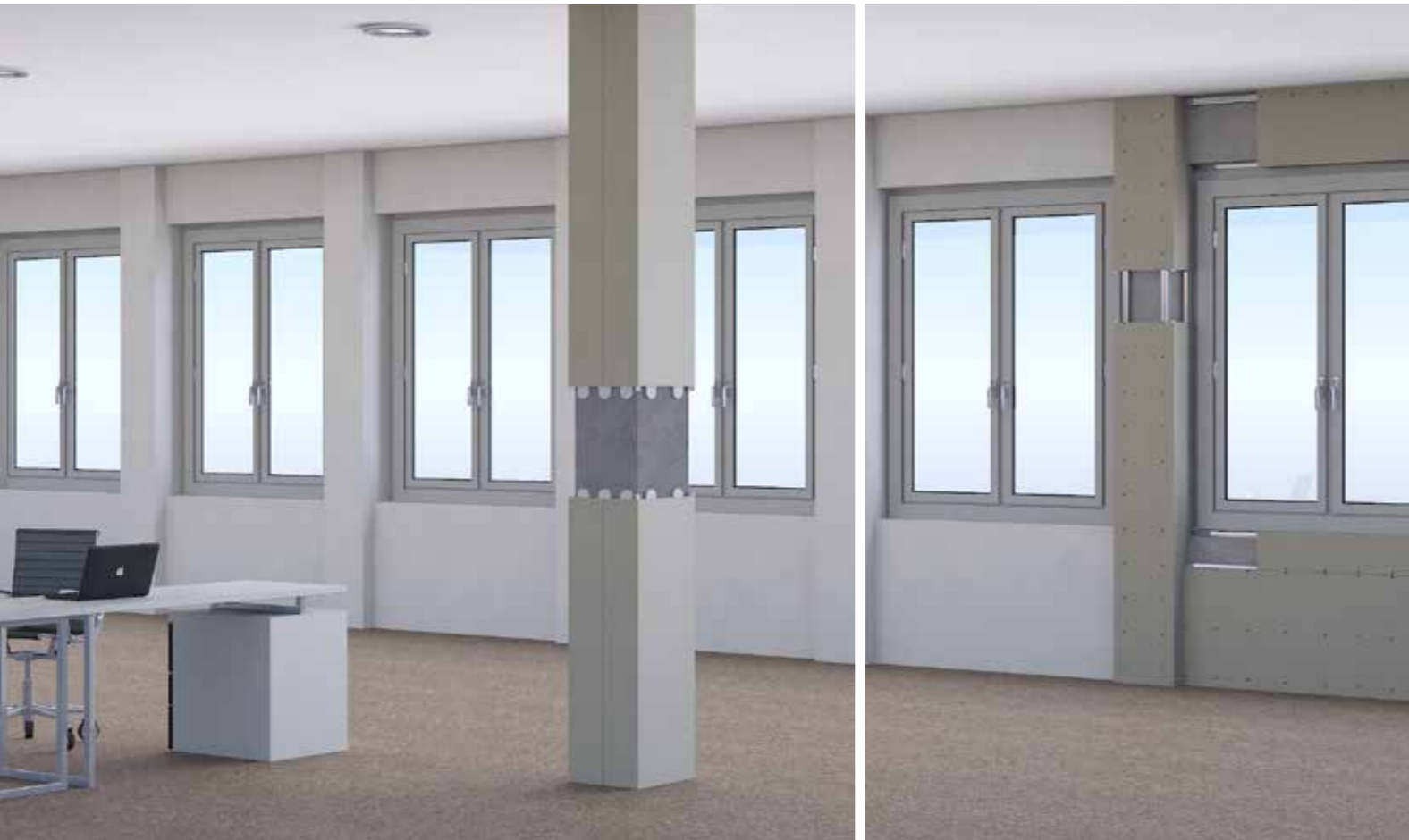
CLADDING FOR SUPPORTS



Single or double supports with the ProTeck element with integrated edge protection as U-shaped half shells. The prefabricated ProTeck elements are screwed to the existing substructure of the longitudinal joints.

Commercial construction

STANDING UP TO WEAR AND TEAR



Different construction projects place different demands on edges and corners. Areas that are subject to high mechanical impact stresses on a daily basis need to be particularly tough. The ProTeck element with integrated edge guard is the perfect solution here.

Thanks to its outstanding resistance to knocks and impacts, the edge guard element is ideal for highly frequented areas like offices and administration buildings, schools and nurseries, doctors' practices, hospitals, care homes, hotels and restaurants. It is precise and incredibly easy to process, allowing you to quickly create perfect edges that are permanently protected against high mechanical stresses and meet the highest aesthetic standards.

DRY-PLASTERED COLUMN



COLUMN WITH SUBSTRUCTURE



DRY-PLASTERED LINTEL CLADDING



LINTEL CLADDING WITH SUBSTRUCTURE



SUPPORT COVER ON WINDOW WITH REVEAL CLADDING



SUPPORT CLADDING ON WINDOW WITH SUBSTRUCTURE



Bonded assembly – Substrate: steel-reinforced concrete and walling supports:

- ▶ In bonded assembly, the gypsum adhesive is applied to the supports.
- ▶ The bonding area must be dry, clean and free of frost, dust and grease, with a sufficient load-bearing capacity. Press the ProTeck element (L or U-shaped shell) onto the substrate vertically and perpendicular before aligning.
- ▶ For free-standing columns, attach two half shells made from ProTeck elements and bond at the longitudinal joints.

Screwed assembly – Substructure made from metal profiles:

- ▶ The ProTeck elements are attached directly to the substructure. Mount the metal substructure on the support. Screw the prefabricated ProTeck half shells to the substructure of the longitudinal joints.

Loft conversions

THE QUICK AND EASY SOLUTION FOR HARD-WEARING EDGES



Loft conversions in single and multi-family houses are a classic example of modern drywall construction. The valuable spare space is turned into additional living or working areas. In new and old buildings alike, reliable protection for outer corners is an important factor.

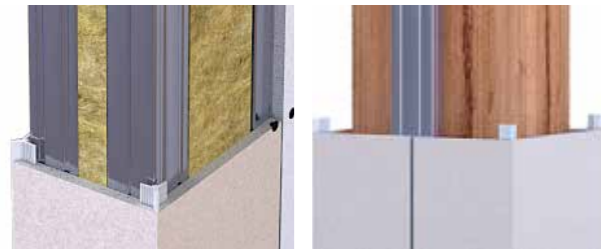
BENEFITS

- ▶ **Impact resistance and precise angles:**
The ProTeck element with integrated edge protection can be fitted directly to structures and claddings on outer corners. Simply attach the ProTeck as an L or U-shaped element to fit.

Loft conversions are complex projects. But modern drywall construction systems mean you can create your perfect space in next to no time. The patented ProTeck element with integrated edge guard can help here. Loft conversions often require 90° angles in difficult areas, such as around cladding supports, ceiling window reveals, free wall ends, etc. The innovative edge protection element provides both precise corners and highly effective protection in a single product, alongside other clear benefits, and in much less time than conventional methods.

In modern architecture, wooden supports allow for greater design freedom and let you divide the space as you see fit. When converting loft areas into living space, load-bearing supports are unavoidable. Clad supports in the middle of the space with half shells made from the prefabricated ProTeck element.

FREE WALL END – CORNERED SUPPORT CLADDING



Attach the element directly or on a wooden or metal substructure. Next, screw the longitudinal joints of the ProTeck. Cladding the elements improves the look of the supports and provides both precise angles and protection against impacts.

FREE WALL END – DOOR REVEAL PASSAGE



On free-standing wall ends, the single or double-layered panelling of the mounting walls and facing shells can be attached to the substructure as a U-shaped element.

PIPE CLADDING



Screw L or U-shaped shells made from ProTeck gypsum elements with integrated edge protection to the substructure as vertical or horizontal cladding.

CEILING WINDOW



Insert the reveal side of the ProTeck element into the groove around the window as an L-shape. Then screw it to the substructure of the ceiling. The ProTeck element can be adjusted to the reveal side using standard sizes.

CORNER CONNECTIONS



Single and double stud walls with metal or wooden substructure. Single or double-layered panelling for mounting walls and facing shells in corner areas, as an L-shaped element attached directly to the substructure.

Dormers

THE EASY WAY TO GET PERFECT CORNERS ON ROOF PITCHES



SUBSTRUCTURE MADE FROM WOOD OR METAL CD PROFILES



Installing the ProTeck element in the corner connection of the dormer creates a straight, level and precise corner that can withstand impacts.

Dormers create extra space in the loft and allow for more light. But they can be a big challenge when it comes to the corners on ceilings and jamb walls. The ProTeck element can help here. This clever product is largely prefabricated, enabling precise and cost-effective corners on difficult transitions, roof pitches and jamb walls in dormers and side wall cladding.

Drywall construction

GET THE JOB DONE FASTER WITH PRECISE EDGES AND SMOOTH SURFACES



Drywall construction has become an established part of both new-build and renovation projects in residential and commercial buildings. This modern process can produce claddings with smooth, ready-to-paint surfaces for uneven walls with sufficient load-bearing capacity. It is fast, clean, flexible and can now even be applied in the tiniest corners.

When used in drywall construction, the ProTeck gypsum element with integrated edge guard creates a smooth and even reveal surface for windows and doors in Q3 quality with a perfect edge.

Unlike conventional methods, there is no need to add additional edge protection or wait a long time for the filler to dry.

The prefabricated L-shaped element provides a finished corner. Just like the rest of the drywall, it can be painted, plastered and papered over immediately.

CLADDING FOR LINTELS AND SIDE WALLS



Apply the gypsum adhesive to the reveal and wall surfaces for the L-shaped element. The bonding area must be dry, clean and free of frost, dust and grease, with a sufficient load-bearing capacity. Fold the side elements to create a 90° angle, press onto the surface and align. Then mount the lintel element.

CORNERS ON WALLS



For corner cladding, begin by applying the gypsum adhesive for the bonding process. Press the ProTeck element onto the adhesive on the corner and align.

Pipe cladding

THE EASY WAY TO COVER UP PIPING



Drywall construction techniques in interior design are not just practical, but can win points for aesthetics too. A good example of this is when installing or renovating heating and sanitary systems in residential buildings. Here, the pipes and cables need to be covered professionally and attractively. This is where the clever ProTeck element comes into its own.

Glue, fold, screw – done: The ProTeck element is perfect for pipe cladding

The ProTeck element is easy to process and features an integrated edge guard, helping it redefine corner construction on pipe cladding. Unlike conventional aluminium corner beads, the patented ProTeck element gives you precise and durable 90° corners quickly and reliably every time. Using it for cladding not only lets you hide ugly pipes behind a smooth, Q3-quality surface, but also saves you the dirty and painstaking filling and sanding work, making it a safe and cost-effective solution.

The ProTeck element with its integrated edge protection is available in an L or U shape and can be used in a variety of ways here. Once installed, the surface can be painted, plastered or papered over.

ProTeck is the solution for

- ▶ **new residential heating systems**
- ▶ **modernisation projects:**
The ProTeck element is also suitable for covering pilasters.

PIPE CLADDING



Create vertical or horizontal cladding by screwing L or U-shaped shells made from ProTeck gypsum elements to the substructure.



Impregnated ProTeck gypsum element

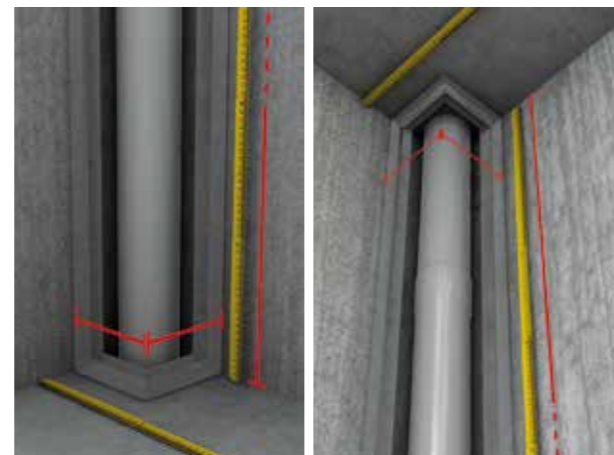
Installation

CREATE PRECISE EDGES QUICKLY AND EASILY



1. STORAGE AND TRANSPORT

Ensure a level and even surface during storage and transport. Always fold down the individual ProTeck elements when carrying (90° angle).



2. DETERMINE THE DIMENSIONS

Attach the substructure (metal/wood) vertically on walls and perpendicular on floors and ceilings. Measure the length between the floor and ceiling. Measure the sides of the substructure on the floor. Add the material thickness at both sides of the element.



5. ADHESION

Before fitting, apply a very small amount of assembly adhesive (PU adhesive/glue) to the upper end of the edge guard profile. The PU adhesive hardens over time, making assembly easier.



6. ALIGNMENT

Carry the ProTeck element folded (90°) to the point of installation. Press onto the substructure and align.



3. CUT TO SIZE

Prepare a level surface on which to process the ProTeck element. With the element lying flat, mark the dimensions (2.) on the element and score the cut line using a box cutter and a straightedge. Next, bend the element downwards along the cut line at one edge and separate using the box cutter (alternatively: use a jigsaw or circular saw).



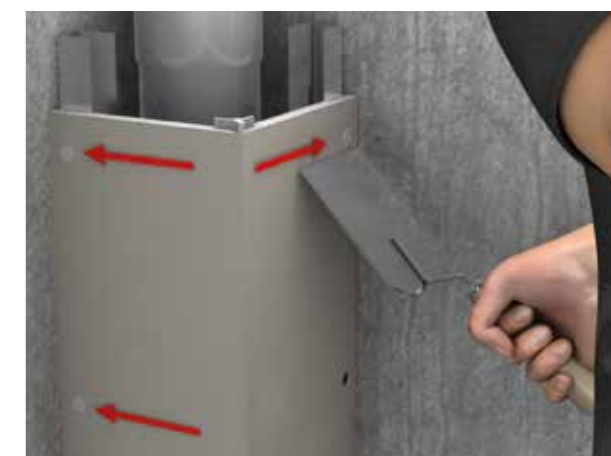
4. LONGITUDINAL CUT

Cut the edge guard profile longitudinally with a jigsaw or circular saw. If using a jigsaw, use a finetoothed blade (metal saw blade).



7. SCREWING

Secure the ProTeck to the substructure using drywall screws, making sure that the screw heads lie flush with the gypsum board. Chamfer the butt joint on elements joined along the long sides (> 3 m).



8. FILLING

Fill the screw heads using filler and a trowel. You may need to do this multiple times, as the filler dries out. When joining ProTeck elements on the long sides, applying joint tape from the butt joint to the corner can prevent cracks later on.

ProTeck element standard

1 x 90° CORNER

ProTeck gypsum element with integrated edge guard for creating 90° corners.
1 x 90° V-shaped groove cut from **12.5 mm gypsum board**.


PROTECK GYPSUM ELEMENT WITH EDGE GUARD	ITEM NO. EAN NO.	THICKNESS (mm)	LENGTH (mm)	BOARD WIDTHS (mm)	WEIGHT/ ITEM	ITEMS/ PALLET
	1111021 4260482420215	12,5	2000	75/125	4,06 kg	300 600 m
	1111024 4260482420246	12,5	2000	100/100	4,06 kg	300 600 m
	1111027 4260482420277	12,5	2000	100/140	4,80 kg	250 500 m
	1111030 4260482420307	12,5	2000	100/200	5,92 kg	200 400 m
	1111033 4260482420338	12,5	2000	150/150	5,92 kg	200 400 m

Standard board lengths: 2000/2500/2600/3000 mm

ProTeck element standard

1 x 90° CORNER

ProTeck gypsum element with integrated edge guard for creating 90° corners.
1 x 90° V-shaped groove cut from **12.5 mm gypsum board**.

PROTECK GYPSUM ELEMENT WITH EDGE GUARD	ITEM NO. EAN NO.	THICKNESS (mm)	LENGTH (mm)	BOARD WIDTHS (mm)	WEIGHT/ ITEM	ITEMS/ PALLET
	1111036 4260482420369	12,5	2000	200/200	7,78 kg	150 300 m
	1111039 4260482420390	12,5	2000	250/150	7,78 kg	150 300 m
	1111042 4260482420420	12,5	2000	250/250	9,64 kg	100 200 m
	1111045 4260482420451	12,5	2000	300/300	11,50 kg	100 200 m
	1111048 4260482420482	12,5	2000	400/200	11,50 kg	100 200 m

Standard board lengths: 2000/2500/2600/3000 mm

ProTeck element custom 1 x 90° CORNER

ProTeck gypsum element with integrated edge guard for creating 90° corners.
1 x 90° V-shaped groove cut from **12.5 mm gypsum board**.

PROTECK GYPSUM ELEMENT WITH EDGE GUARD	ITEM NO. EAN NO.	THICKNESS (mm)	LENGTH (mm)	BOARD WIDTHS (mm)
	1111001 4260482420017	12,5	2000	100 – 200
	1111006 4260482420062	12,5	2000	201 – 300
	1111011 4260482420116	12,5	2000	301 – 400
	1111016 4260482420161	12,5	2000	401 – 600

Standard board lengths: 2000/2500/2600/3000 mm
Minimum order quantity: 200 m

ProTeck element custom 2 x 90° CORNERS

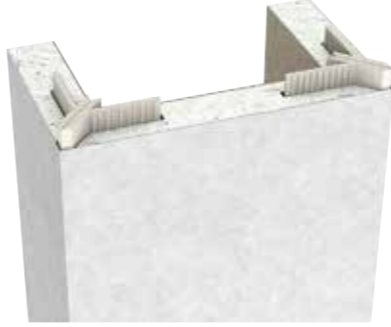
ProTeck gypsum element with integrated edge guard for creating 90° corners.
2 x 90° V-shaped grooves cut from **12.5 mm gypsum board**.

PROTECK GYPSUM ELEMENT WITH EDGE GUARD	ITEM NO. EAN NO.	THICKNESS (mm)	LENGTH (mm)	BOARD WIDTHS (mm)
	1112001 4260482420512	12,5	2000	100 – 200
	1112006 4260482420567	12,5	2000	201 – 300
	1112011 4260482420611	12,5	2000	301 – 400
	1112016 4260482420666	12,5	2000	401 – 600

Standard board lengths: 2000/2500/2600/3000 mm
Minimum order quantity: 200 m

ProTeck element standard 2 x 90° CORNERS

ProTeck gypsum element with integrated edge guard for creating 90° corners.
2 x 90° V-shaped grooves cut from **12.5 mm gypsum board**.

PROTECK GYPSUM ELEMENT WITH EDGE GUARD	ITEM NO. EAN NO.	THICKNESS (mm)	LENGTH (mm)	BOARD WIDTHS (mm)	WEIGHT/ ITEM	ITEMS/ PALLET
	1112021 4260482420710	12,5	2000	150/150/150	9,05 kg	100 200 m
	1112026 4260482420765	12,5	2000	150/200/150	9,98 kg	100 200 m
	1112031 4260482420819	12,5	2000	150/250/150	10,91 kg	100 200 m
	1112036 4260482420864	12,5	2000	200/150/200	10,91 kg	100 200 m
	1112041 4260482420918	12,5	2000	200/200/200	11,84 kg	100 200 m

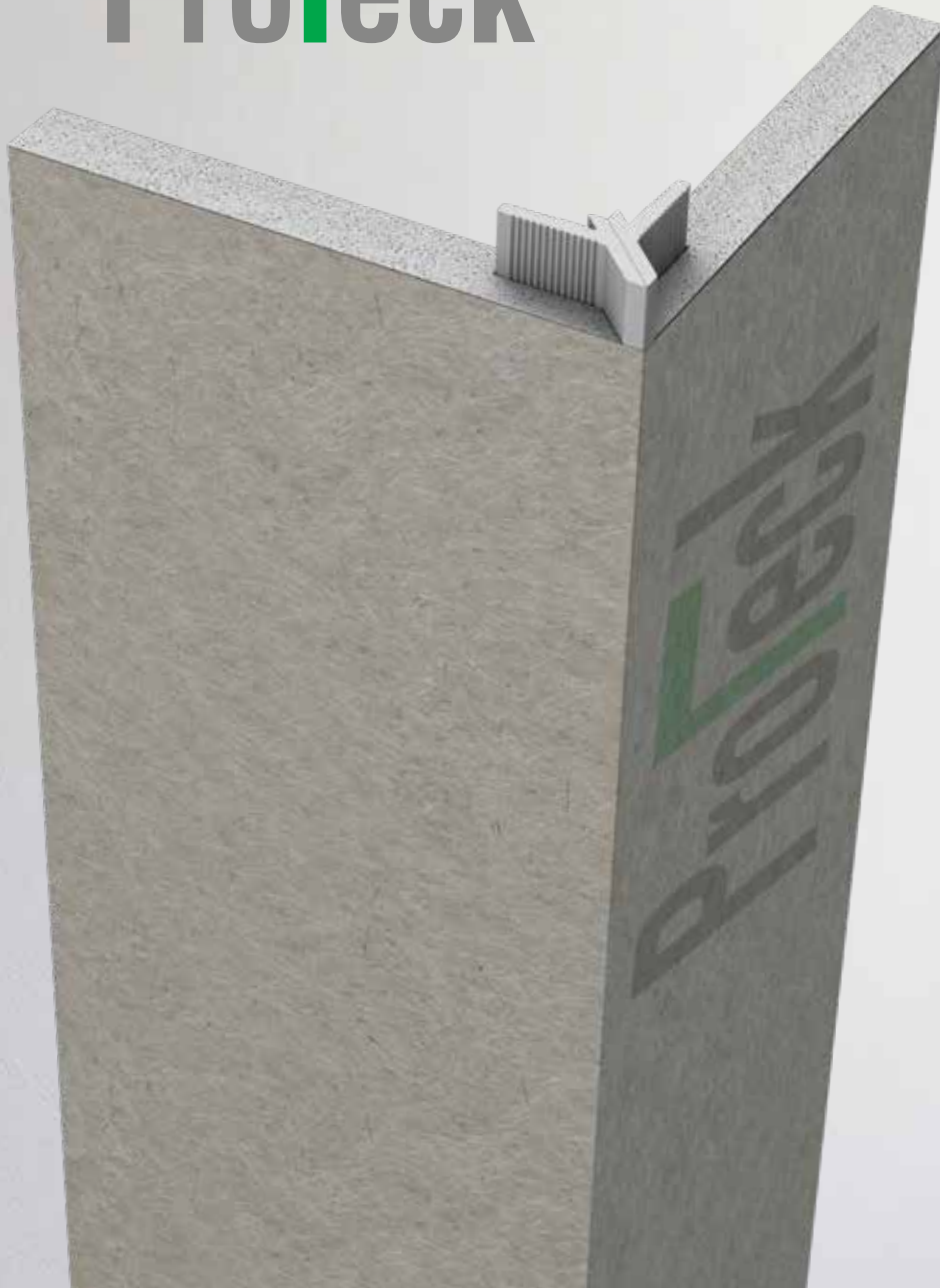
Standard board lengths: 2000/2500/2600/3000 mm



WWW.PROTECK-SYSTEM.DE

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ProTeck



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