



# blaugelb Trio**therm**<sup>+</sup> system

How to achieve perfect insulation.



Components in the window fitting system range **now certified for passive houses.**

Whether system tests,  
fall arrest protection or  
burglary resistance –  
we're prepared for everything.





blaugelb

## Trio**therm**<sup>+</sup> pre-wall installation system



Looking for a pre-wall installation system that has been extensively tested and gives you the confidence of knowing it will deliver on its promises? Then you're in the right place with us and our blaugelb Trio**therm**<sup>+</sup> pre-wall installation system. And for fall arrest protection, too.

For added **reliability**.



About to embark on a major construction project that will require verifiable statics? Then you can sit back and rely on the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system, because we provide support for all your needs.

For added **service**.



A pre-wall installation system should not lead to any deterioration in the sound insulation values of the fitted window element. Even if they have a high degree of sound insulation, your window elements can be fitted without acoustic effects using the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system.

For added **sound insulation**.

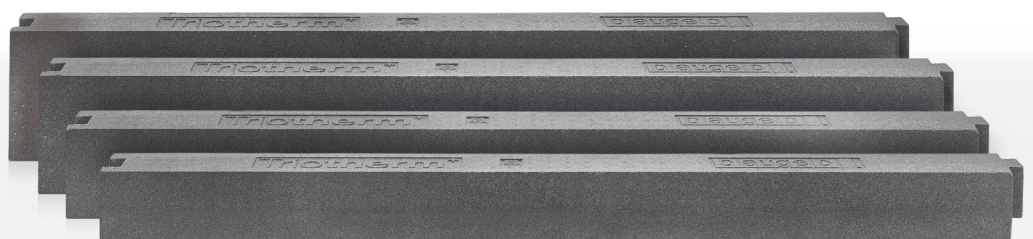


Want to fit your burglary-resistant RC 2 and RC 3-classified window elements securely in the pre-wall installation system? We've got the solution. Our blaugelb Trio**therm**<sup>+</sup> pre-wall installation system has been tested and approved for the fitting of RC 2 and RC 3 elements.

For added **security**.

Available in **eight different cantilevers**.

For even more flexibility in the installation situation.



## Clever all round – pre-wall installation systems today

The individual profiles have an innovative dovetail joint, which means that transporting them to the construction site is no longer a major exercise in logistics. The compact profiles can be extended effortlessly at any time, even with larger windows.

Not only does the blaugelb Hybrid Polymer Power Fix keep blaugelb Trio**therm**<sup>+</sup> profiles in place until they are bolted to the wall, it also provides an increased measure of security and sealing

quality between the wall and blaugelb Trio**therm**<sup>+</sup> profiles. The blaugelb Frame screw Fix FK-T30 anchors the blaugelb Trio**therm**<sup>+</sup> profiles securely in the bearing structure, ensuring a safe, mechanical attachment.

The window can now be secured directly in the blaugelb Trio**therm**<sup>+</sup> profile without needing to pre-drill holes. The sealant is then applied as normal.

m<sup>+</sup>



blaugelb<sup>®</sup>



Trio**therm**<sup>+</sup>

We give your elements a stable framework for safe and **effective pre-wall installation** while also thinking one step ahead.

Direct insulation right up to the element – **optimised for thermal bridges.**



Interested in  
our system?

[vorteil@blaugelb.de](mailto:vorteil@blaugelb.de)

Trio**therm**<sup>+</sup>



blaugelb<sup>®</sup>



Trio**therm**<sup>+</sup>



## Our system tests

A system is only as good as the entirety of its properties and the evidence of its values under testing.

We attach great importance to this documentation for blaugelb and give our customers the confidence they need that our system ensures safe, expert and compliant pre-wall installation in every situation.

Whether large cantilevers up to 230 mm, creep behaviour, shear strength, sound insulation, burglary resistance, fall arrest protection or complete component testing pursuant to MO-01/02 – our system delivers on its promises.

A thoroughly tried and tested system which is easy to fit and creates added value in all aspects of windows.

You can see an overview of the **tests** on **page 6**.



## Burglary resistance for RC 2 / RC 3

The blaugelb Trio**therm**<sup>+</sup> pre-wall installation system plays a critical role when it comes to security, too, because the system has been tested and is suitable for the fitting of RC 2 and RC 3 elements.

This means there is no reason not to install any elements that meet RC 2 or RC 3 requirements. Heavy or floor-level window elements can also be easily fitted into the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system.

In addition, the system has been both dynamically and statically tested in accordance with the ETB guideline "Components providing fall arrest protection".

That's how we ensure safety – no ifs or buts.



## Static evidence & calculations

Need verifiable statics for your construction project?

Verifiable statics can only be produced if rated resistances have been calculated through a series of tests.

We provide the static engineers with rated resistances obtained from comprehensive testing covering a range of situations, allowing the static calculations for the anchoring of windows in the construction project to be produced.

The composition of the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system makes it the ideal basis for your window fitting – even with large cantilevers and element weights.



## Sound insulation is taken seriously

That's why we have taken a broad-based approach to the issue.

We have, for instance, carried out 32 sound insulation tests with a 60 dB element for all relevant cantilevers, including all associated sealing options.

The result both speaks for itself and is persuasive.

Even elements with a high degree of sound insulation can be fitted without acoustic effects using the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system.

Thanks to the material used in our system, it filters out the ambient noise and ensures that your window element can present itself in the best light.

## Components in the window fitting system range **now certified for passive houses.**

At a time when awareness of our environment and how we manage it is increasingly becoming a central issue and when directives are becoming increasingly complex, in every building project energy-efficient construction needs to be examined with the utmost scrutiny to obtain a convincing final outcome.

Placing windows into the insulation base and therefore integrating them directly into the cladding system represents a major step towards energy efficiency in window design.

With the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system, this can be achieved without much cost or effort and without restricting the planning or further execution – now also as components in the window fitting system range certified for passive houses.



\* For more information, scan the code



Excerpt from our system tests\*:

<b>Component test</b> (attachment)	ift guideline MO-02/1	✓
<b>Component test</b> (sealing)	ift guideline MO-01/1	✓
<b>ETB dynamic</b> (connection of a fall-arresting system to the structure, pendulum impact)	requirement from the ETB guideline "Components providing fall arrest protection"	✓
<b>ETB static</b> (connection of a fall-arresting system to the structure, compression test)	requirement from the ETB guideline "Components providing fall arrest protection"	✓
<b>Concentrated load tests</b> (static rated values for resistance, rated vertical/horizontal values)	ift guideline MO-02/1	✓
<b>Burglary resistance</b> for RC 2 and RC 3	pursuant to DIN EN 1627 to EN 1630 requirements	✓
<b>Sound insulation</b>	DIN EN ISO 10140-1 and EN ISO 717-1	✓
<b>Passive house certified</b>	Passive House Institute, window fitting system	✓
<b>Fire protection</b>	GAS MPA Braunschweig	✓

\*Tests are available to download from [www.blaugelb.de](http://www.blaugelb.de) or on enquiry



## Passive house study: Pre-wall installation EPS vs. classic steel angle installation

Want it in black and white that properly completed pre-wall installation using our proven blaugelb Trio**therm**<sup>+</sup> pre-wall installation system also has its nose in front of classic angle installation when it comes to lower **CO<sub>2</sub> emissions**?

No problem – the independent study produced by the respected Passive House Institute confirms exactly that.



Why not see for yourself? Read the study on pre-wall installation and take advantage of all the benefits that our blaugelb Trio**therm**<sup>+</sup> pre-wall installation system offers.

You can call up the study **directly** here.

Alternatively, the study is also available in the download area of the Passive House Institute under [www.passiv.de](http://www.passiv.de)



## Your verifiable statics.

We will help you compile the documents required to produce verifiable statics.

01

### Preparation of **drawings**

Where necessary, we will help you create drawing packages for factory and installation planning.

As well as elevation drawings incl. attachment points, we also produce the detail drawings for the upper, side and lower window connections.

02

### Inspection of your **documents**

On request, we will inspect the documents you need to submit for the statics evidence for completeness and plausibility.

This is where our many years of experience will help us optimise the process so it runs smoothly.

03

### Provision of **values**

The rated resistances form the basis for preparation of the statics.

We will provide your structural engineer with all the relevant rated resistances for our systems.

04

### Contact with the **structural engineer**

We will be happy to put you in touch with an expert structural engineer.

If you want, we will also act as your point of contact with the structural engineer.

Just ask us.

The bottom line? It's a great service\*.



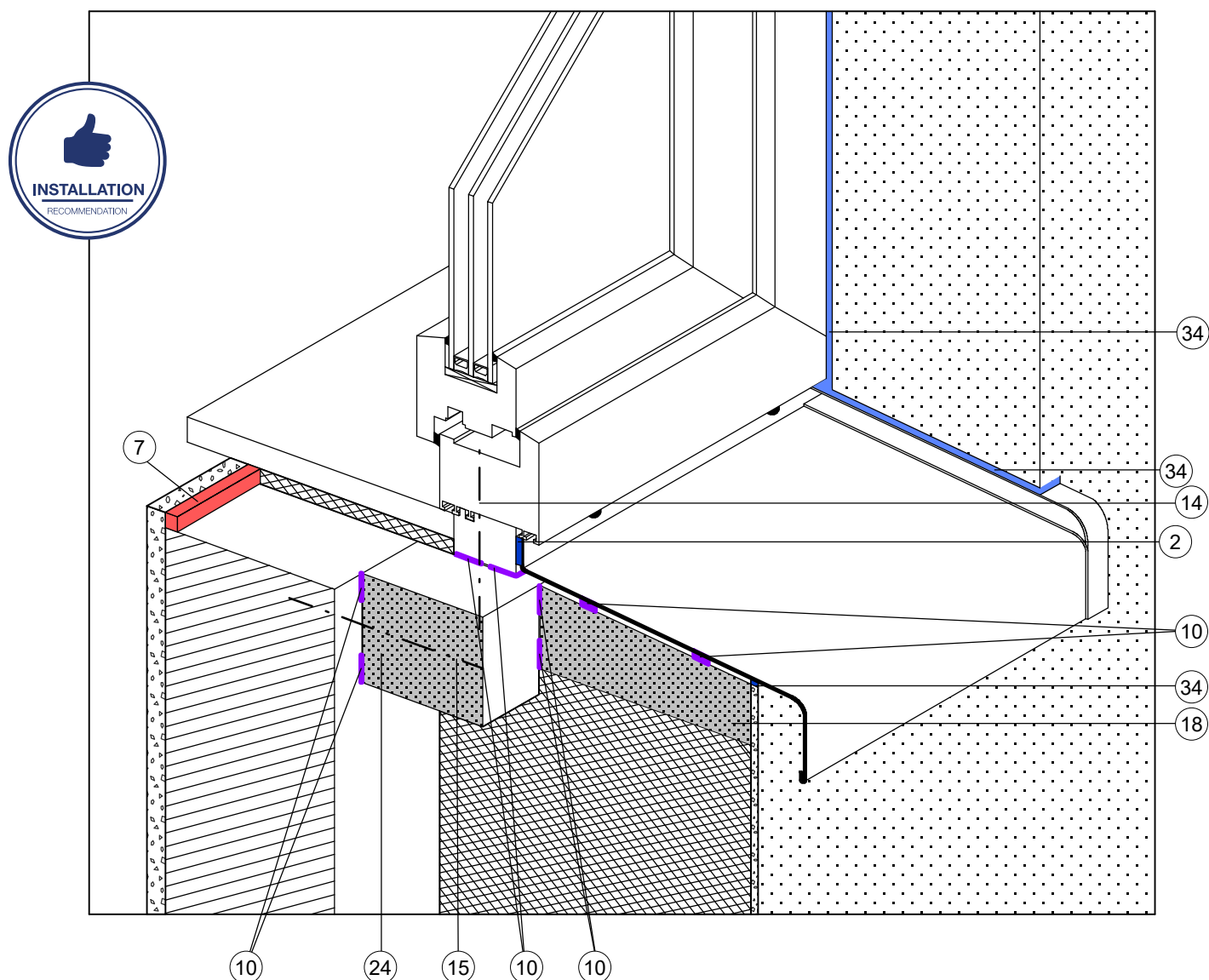
Interested in our services?

[serviceleistung@meesenburg.de](mailto:serviceleistung@meesenburg.de)



\* The services may be subject to a cost, depending on their extent. We would be happy to advise you in advance.

In front of the supporting wall structure – ETICS



② | blaugelb Joint Sealing Tape 600 BG 1 15/2-6 mm

⑤ | blaugelb Multifunctional Tape Trio**SDL**<sup>900</sup>

⑦ | blaugelb Acrylic

⑨ | blaugelb Hybrid Polymer Crystal

⑩ | blaugelb Hybrid Polymer Power Fix

⑭ | blaugelb Frame screw Fix FK-T30 or ZK-T30

⑮ | blaugelb Frame screw Fix FK-T30

⑱ | blaugelb Insulation Sill Profile

⑳ | blaugelb Trio**therm**<sup>+</sup> profile 70x85x1175 or 100x85x1175 mm

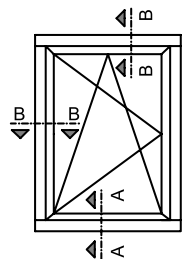
㉓ | Structure-facing sealing



## Recommended use:

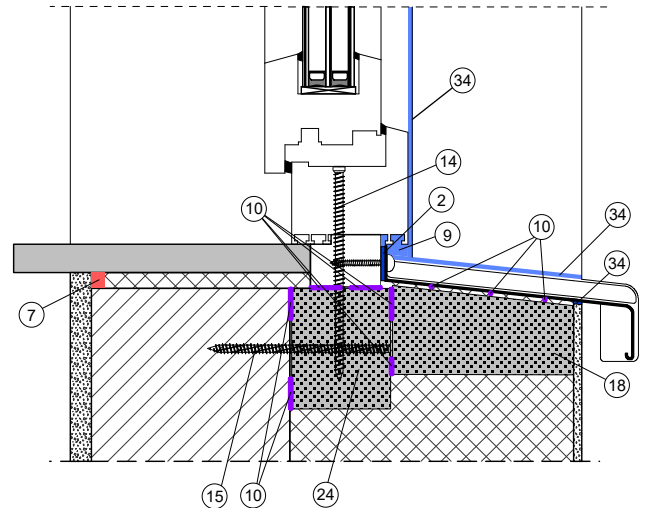
When the blaugelb Trio**therm**<sup>+</sup> pre-wall installation system is used, the fitter will always encounter absolutely flat joint flanks. The joint tolerances are extremely small. These are optimum conditions for sealing window connecting joints with the blaugelb Multifunctional Tape Trio**SDL**<sup>900</sup>.

The construction elements are installed as butt-joints between the blaugelb Trio**therm**<sup>+</sup> profiles, fastened to them and sealed. Installation is as simple as in a load-bearing soffit with smooth coating. All windows can be installed and sealed efficiently, professionally and expertly using this approach. Fitters, clients and experts have been familiar with pre-wall installation systems for many years. They are acknowledged as the state of the art.



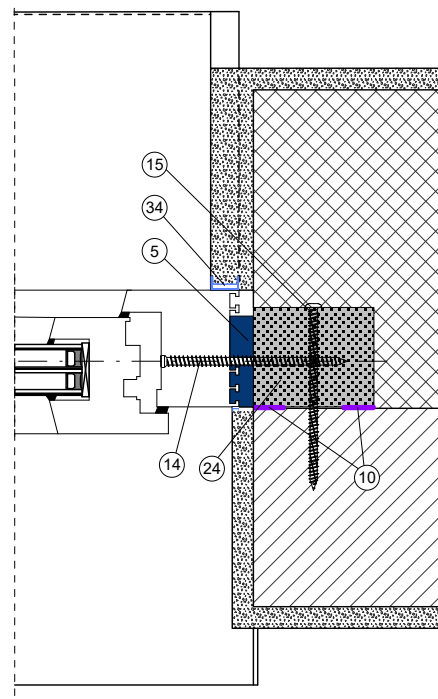
### A-A

Lower connection

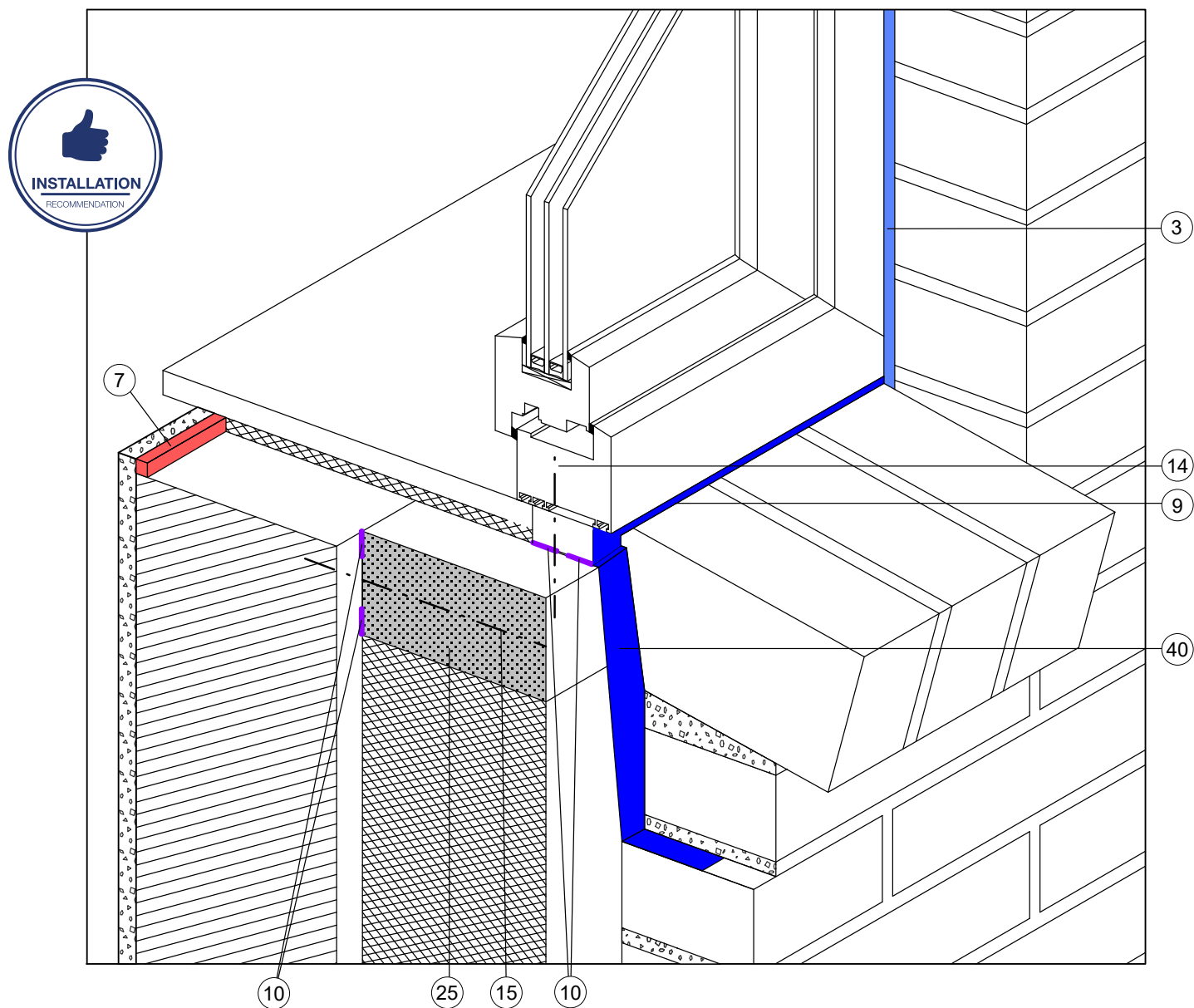


### B-B

Side / upper connection



In front of the supporting wall structure – Faced masonry



③ | blaugelb Joint Sealing Tape 600 BG 1 15/5-12 mm

⑤ | blaugelb Multifunctional Tape Trio**SDL**<sup>500</sup>

⑦ | blaugelb Acrylic

⑨ | blaugelb Hybrid Polymer Crystal

⑩ | blaugelb Hybrid Polymer Power Fix

⑭ | blaugelb Frame screw Fix FK-T30 or ZK-T30

⑮ | blaugelb Frame screw Fix FK-T30

②⑤ | blaugelb Trio**therm**<sup>+</sup> profile 120x85x1175 or 160x85x1175 mm

②⑤\* | blaugelb Trio**therm**<sup>+</sup> profile 120x85x150 or 160x85x150 mm (cut to size)

④① | Sealing foil



## Recommended use:

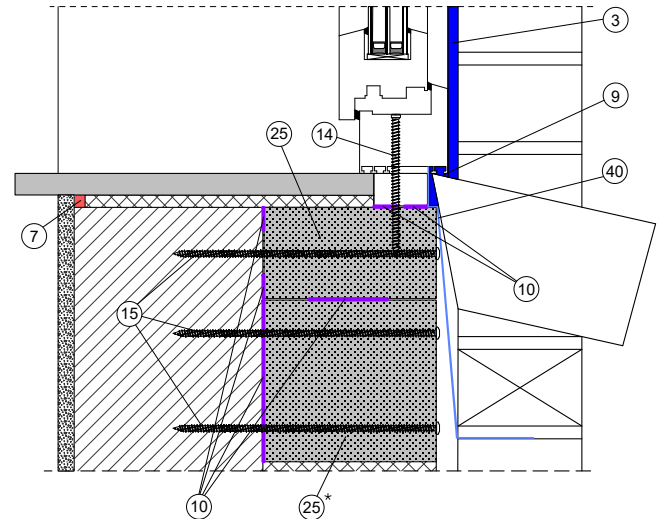
The same requirements for the connecting joint in terms of sealing apply in this installation situation as in any other wall structure, except that the positions of the individual sealing layers change. The overlap of the outer wall shell affords additional protection for the window connections against external effects.

The blaugelb Multifunctional Tape Trio**SDL**<sup>600</sup> can replace the sealing combination of foil and foam. Up to a driving rain load of 600 Pa (equivalent to the highest driving rain tightness class for windows according to DIN 12208) this multifunctional tape can be fully exposed to the weather.

Sealing against the outer wall shell ("facing") is absolutely essential – we recommend the blaugelb Joint Sealing Tape 600 BG 1 for this. The outer, pre-compressed blaugelb Joint Sealing Tape 600 BG 1 can equally be fully exposed to the weather up to a driving rain load of 600 Pa.

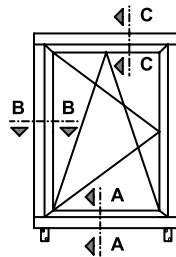
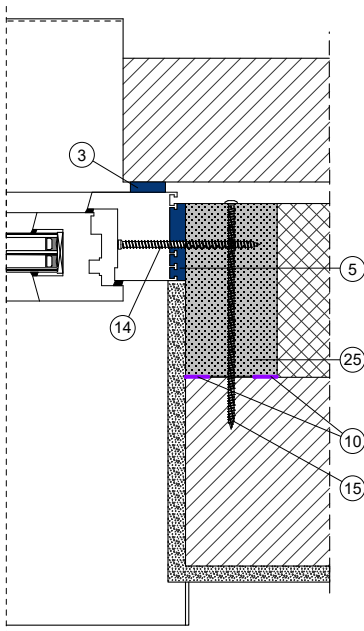
### A-A

Lower connection



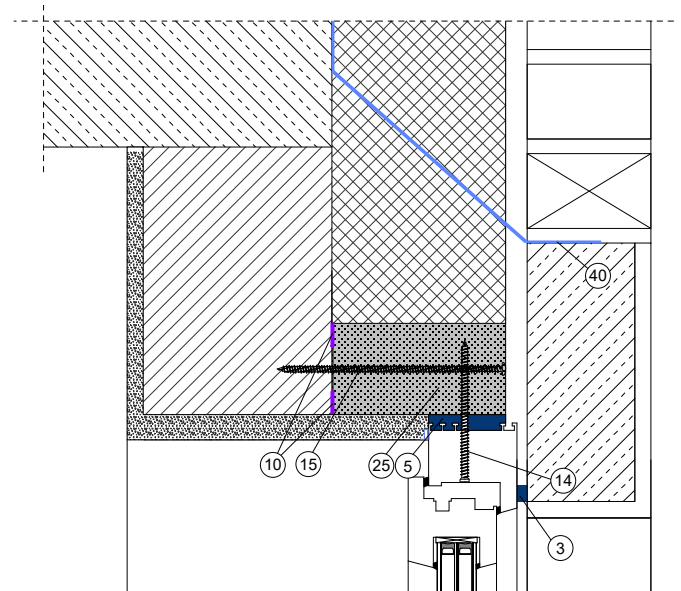
### B-B

Side connection

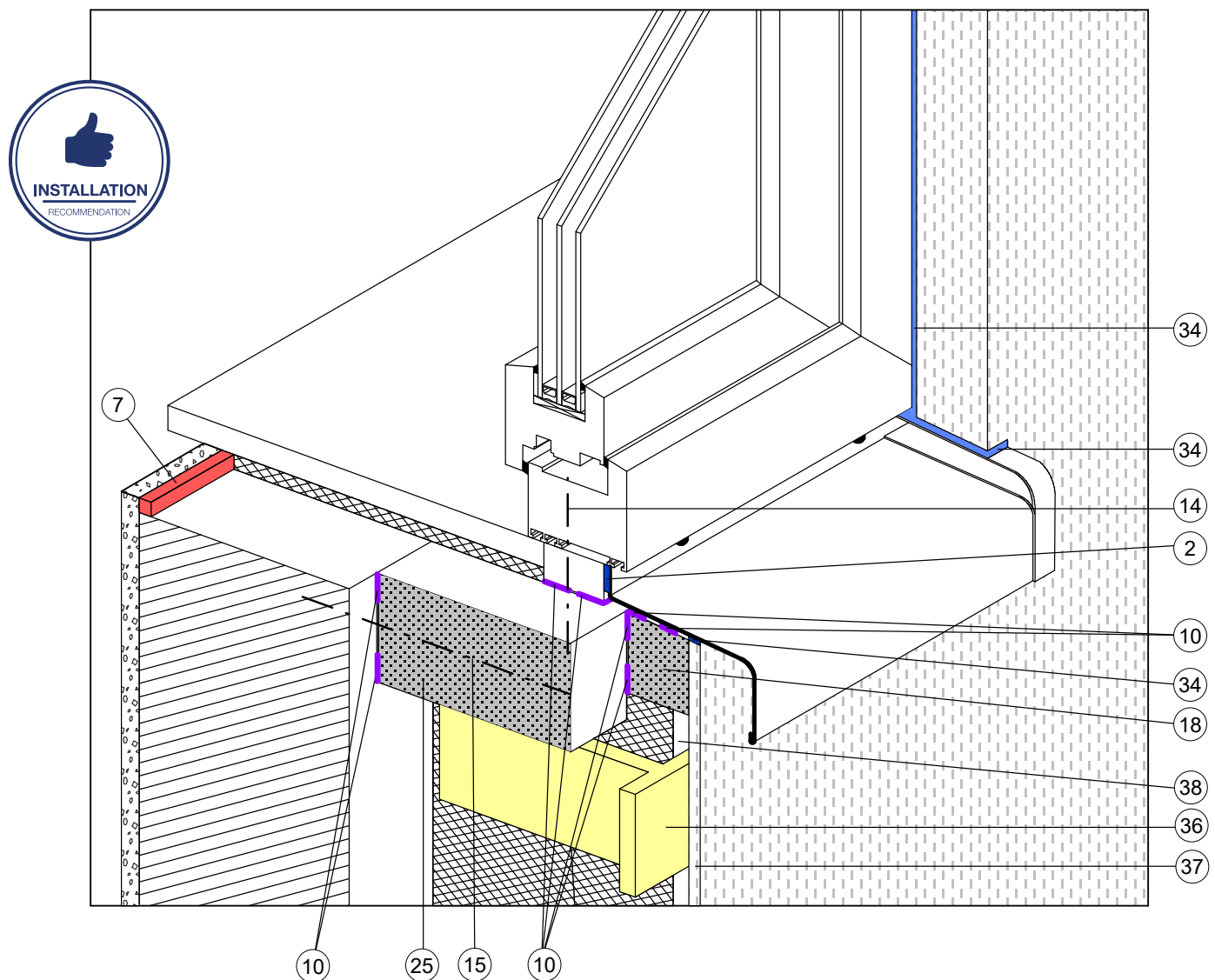


### C-C

Upper connection



In front of the supporting wall structure – Back-ventilated façade



- |    |  |                 |   |
|----|--|-----------------|---|
| 2  | blaugelb Joint Sealing Tape 600 BG 1 15/2-6 mm               | 20              | blaugelb Insulation Wedge   |
| 5  | blaugelb Multifunctional Tape Trio <b>SDL</b> <sup>600</sup> | 25              | blaugelb Trio <b>therm</b> <sup>+</sup> profile 120x85x1175 or 160x85x1175 mm             |
| 7  | blaugelb Acrylic   | 25 <sup>*</sup> | blaugelb Trio <b>therm</b> <sup>+</sup> profile 120x85x150 or 160x85x150 mm (cut to size) |
| 9  | blaugelb Hybrid Polymer Crystal                              | 34              | Structure-facing sealing  |
| 10 | blaugelb Hybrid Polymer Power Fix                            | 36              | Façade substructure   |
| 14 | blaugelb Frame screw Fix FK-T30 or ZK-T30                    | 37              | Façade cladding   |
| 15 | blaugelb Frame screw Fix FK-T30                              | 38              | Air gap   |
| 18 | blaugelb Insulation Sill Profile                             | 40              | Sealing foil  |



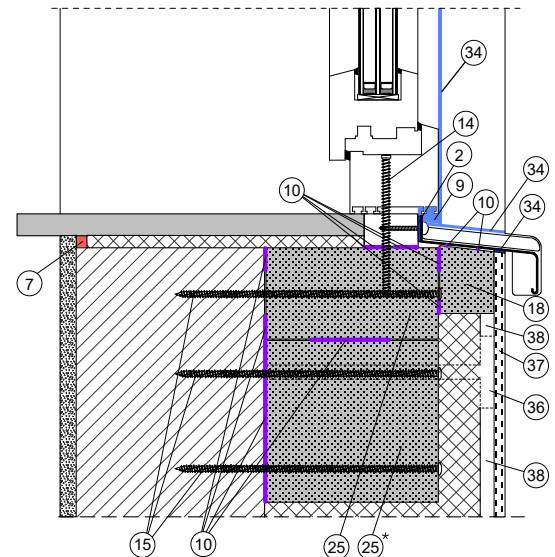
## Recommended use:

Using the blaugelb Multifunctional Tape Trio**SDL**<sup>600</sup> enables sealing and insulating to be performed with a single product. Up to a driving rain load of 600 Pa (which is equivalent to the highest driving rain tightness class for windows according to DIN 12208) the tape can be fully exposed to the weather.

It satisfies the toughest requirements of stress group BG1 of the current DIN 18542 "Sealing tapes" and is suitable for building constructions with higher requirements; with the rating of building material class B1 (difficult to ignite), the blaugelb Multifunctional Tape Trio**SDL**<sup>600</sup> exhibits improved fire safety properties.

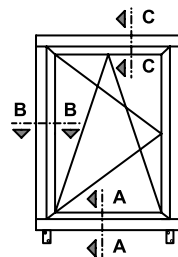
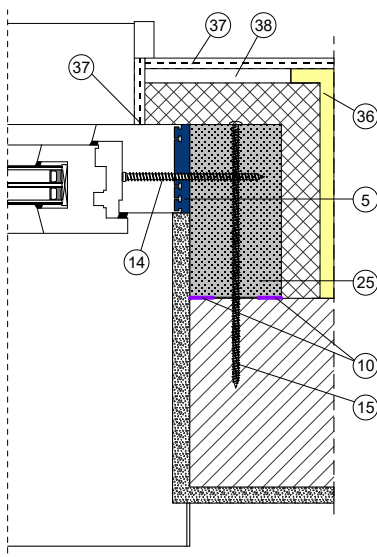
### A-A

Lower connection



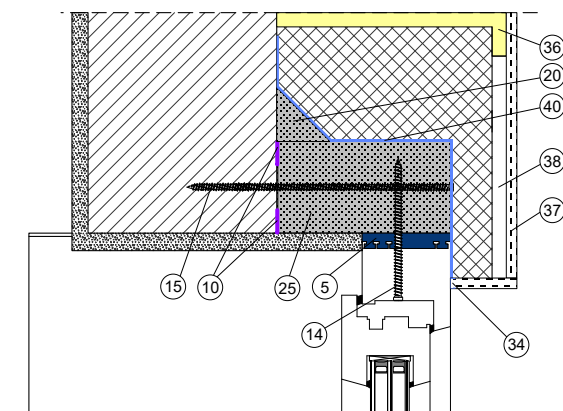
### B-B

Side connection



### C-C

Upper connection



## OUR LOCATIONS – MEESENBERG NEAR YOU



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