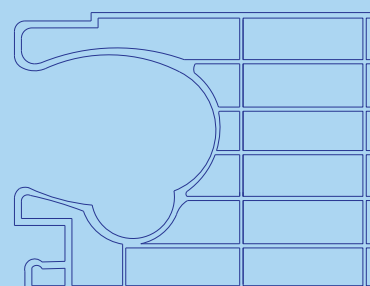


## Technical manual



40



## Translucent Building Elements 40 mm

### Made of Polycarbonate for seamless glazings

System PC 2540-10 | PC 2540-7 | PC 2540-6 | PC 2540-4 | PC 2540-4 MC |  
System AF 50 | System AF 100 and PC 2410-3 |

# General Terms and Conditions

Stand: 02/16

<b>§ 1 General</b>	
1.1 The present General Terms and Conditions exclusively apply to corporations, corporate bodies organized under public law or specialized agencies subject to public law in accordance with §310 section 1 BGB (German Civil Code).	7.9 remain untouched. Performances that are not part of the warranty shall be charged at the current hourly rates (at present € 100.00/ hour), as well as at € 0.55/kilometer plus legally valid Value Added Tax. This also applies to trips carried out in vain within the scope of supplementary performance measures, if the Customer is not present in spite of an appointment.
1.2 The following Terms and Conditions are exclusively decisive for the Supplier's quotations, deliveries and performances. In current business relationships, the present Terms and Conditions also apply for any contracts concluded in future, even if not expressly agreed upon again.	<b>§ 8 Liability, Limitation of Liability</b>
1.3 Opposite conditions or any conditions deviating from the present Terms and Conditions which are not expressly accepted by the Supplier in writing shall not be valid, even if not expressly objected by the Supplier.	8.1 Notwithstanding any previous regulations and the subsequent limitations of liability, the Supplier shall be liable without limitation for any damages of life, body and health resulting from a negligent or intended violation of the Supplier's obligations, as well as for damages, subject to liability in accordance with the Product Liability Act, and for all damages resulting from intended or gross negligent violations of the contract or the Supplier's malice. If the Supplier has given a guarantee of quality and/or durability for the goods or any parts thereof, the Supplier shall also be liable within the scope of this guarantee. For any damages due to a lack of the guaranteed quality or durability which however are not detected directly at the goods themselves, the Supplier shall only be liable if the risk of such a damage is evidently subject to the quality or durability guarantee. The liability is limited to foreseeable damages typical for the contract. The limitations of liability shall also apply if the liability for legal representatives, executive employees and other vicarious agents of the supplier is concerned.
<b>§ 2 Offer, Conclusion of Contract</b>	8.2 The Supplier shall also be liable for any damages resulting from simple negligence, if said negligence regards the violation of essential contract obligations. Essential contractual obligations are any obligations the fulfillment of which make the appropriate contract execution possible after all and the fulfillment of which can be regularly trusted by the contract partner. However, the Supplier shall only be liable if the damages are connected to the contract in a typical manner and if they are foreseeable. In case of simple negligent violation of obligations that are not essential, the Supplier shall not be liable. These limitations of liability shall also be valid, if the liability for legal representatives, executive employees and other vicarious agents of the Supplier is concerned.
2.1 The Supplier's quotations are subject to change and not binding. A contract between the Parties shall be concluded by the Supplier's written confirmation of the Customer's order or by sending the goods. Oral subsidiary agreements shall not exist.	<b>§ 9 Retention of Title</b>
2.2 The Supplier reserves the property and copyright of all illustrations, drawings, calculations and other documents transmitted to him within the scope of commencement of contract negotiations. The Customer must have obtained the Supplier's express written approval before passing any material to third parties.	9.1 The sold goods remain the Supplier's property until full payment of all the Supplier's claims resulting from the business relationship with the Customer. This also applies to any future deliveries, even if not always expressly mentioned by the Supplier.
<b>§ 3 Prices</b>	9.2 The Customer is obliged to treat the bought goods with utmost care as long as the transfer of ownership has not yet taken place. As long as the ownership has not yet been transferred onto him, the Customer has to inform the Supplier immediately if the supplied object is seized or otherwise exposed to third party's actions.
3.1 All prices are net prices ex Supplier's warehouse without packaging, plus fees for delivery and shipment and plus the legally valid Value Added Tax as amended from time to time.	9.3 If the Supplier's (co-) ownership seizes to exist due to connection, it is agreed upon already now that the Customer's (co-) ownership of the jointly owned property is passed proportionally to the value of the invoice onto the Supplier. The Customer keeps the jointly owned property for free. To protect the Supplier's claims towards the Customer, the Customer even assigns such claims to the Supplier resulting for him from the connection of the retained goods with a real estate property of a third party; the Supplier accepts such assignment of a claim already now.
3.2 The prices invoiced are the prices valid at the day of delivery. The Supplier reserves the right to adjust the prices accordingly, if the time between conclusion of the contract and delivery is at least four months and if after conclusion of the contract during the production processes the polymer price index of Kunststoff Information Verlagsgesellschaft mbH in Bad Homburg increases or decreases. The polymer price index is available at <a href="http://www.kiweb.de">www.kiweb.de</a> . The cost increases are proved to the customer upon request. If the adjusted price is 10 % higher than at the time of conclusion of the contract, the customer shall be entitled to withdraw from the contract within 14 days after notice of the price increase with regard to the products not yet received. If several partial deliveries are agreed upon, the Customer shall be entitled to withdraw if the prices for partial deliveries are increased by more than 10 % within one year, starting at the conclusion of the contract. Any taxes, custom fees, fees or other expenses created or increased due to legal or authority measures which directly or indirectly affect his deliveries or performances are on the Customer's account.	9.4 The Customer shall be entitled to further sell goods subject to retention of title within normal business transactions. The claims against third parties resulting from selling the goods – in case of a current account agreed with them, it is the relevant balance claims – are assigned by the Customer already now in the total amount and/or the amount of a possible co-ownership share (see section 9.3) to the Supplier for safety purposes. The Customer is entitled to collect them until cancellation or discontinuation of the payments to the Supplier. The Customer is entitled to assign such claims – even for the purpose of collecting the outstanding payments within the scope of factoring – only in case of the Supplier's written consent.
<b>§ 4 Times of Delivery, Force Majeure</b>	9.5 If the realizable value of all security interests the Supplier is entitled to exceeds the amount of all secured claims by more than 20%, the Supplier shall be obliged to release securities upon the Customer's request. The Supplier is entitled to select the security interests to be released.
4.1 Times or periods of delivery that may be agreed upon bindingly or non-bindingly have to be made in writing. The time of delivery starts with the conclusion of the contract, however, not before the Customer provided any documents, approvals and securities to be provided by him and not before any down-payments previously agreed upon were made. If a time of delivery has been agreed upon, it shall be delayed by an appropriate period, if the Customer does not provide the documents, approvals and securities to be provided by him in due time and if he does not make any stipulated down-payments in due time.	9.6 Due to the reservation of title, the Supplier is entitled to take back goods even if he did not cancel the contract. Taking back the goods while exerting the reservation of title is not considered as cancellation of the contract. The Customer grants the Supplier and/or any persons authorized by the latter access to the location of the goods.
4.2 According to legal provisions, the Supplier is liable for damage due to delays in performance by the Supplier or his representative or vicarious agents. However, the Supplier's liability for delay is limited to foreseeable losses that are typical for this type of contract.	9.7 If the legislation the sold goods are subject to does not permit any reservation of title, but allows the Supplier to reserve similar rights at the object delivered, the Customer is obliged to make available to the Supplier a different, adequate security. The Customer is obliged to cooperate with regard to meeting any formal requirements that might be involved in this matter.
4.3 Correct and punctual delivery of required materials reserved. The Supplier obliges to immediately inform the Customer about the non-availability of the object to be delivered and in case of withdrawal to immediately refund the relevant consideration to the customer.	<b>§ 10 Payment</b>
4.4 Inevitable, unforeseeable, exceptional events which the Supplier is not responsible for, such as war, official directions, strike, lockouts, holdups, transport problems or other cases of Force Majeure, even of subcontractors, coming into existence after conclusion of contract only or which the Supplier is informed about after conclusion of contract only, suspend the Supplier's contractual obligations for the duration of the problem and with regard to the extension of their effect. If any delays resulting thereof exceed a six week period, both contract partners shall be entitled to withdraw from the contract. The Supplier shall immediately inform the Customer about the nonavailability of the performance and reimburse any payments which may already have been made by the Customer. Other requirements do not exist.	10.1 Unless otherwise agreed upon, the purchase price is due immediately at receipt of goods and invoice without any deduction. The date of payment is the day the money is available to the Supplier.
4.5 The Supplier shall be entitled to effect partial deliveries provided that they are reasonable with regard to the circumstances of the individual cases. Independent of the overall delivery, invoices for partial deliveries have to be paid.	10.2 The Supplier accepts any orders under the explicit restriction that the extent of the order does not exceed the credit limit granted to the Buyer by the Supplier's credit insurer, taking into consideration any unsettled amounts of invoices in favor of the Supplier.
4.6 If the delivery of a contractual product ready for dispatch is postponed upon the Customer's request by more than one month, or if shipment or acceptance is delayed for reasons which the Customer is responsible for, the Supplier shall be entitled to invoice to the Customer an all in storage fee in the amount of 2 % of the price of the object to be supplied for every month started. The Customer is entitled to prove that the Supplier does not have any loss or a much lower loss. An extended liability in accordance with § 287 BGB (German Civil Code) shall be excluded.	10.3 Drafts and checks are accepted as payment only and exclusively if explicitly agreed upon. The Buyer shall pay any extra costs accruing in this connection.
<b>§ 5 Transport</b>	10.4 In spite of the Customer's different regulations on repayment, any payments made by the Customer are first deducted from the Customer's oldest debt. If costs and interests have already accrued, the payments received will first be deducted from the costs, then from the interests and finally from the key debts.
Unless otherwise agreed upon, transport has to be paid by the Customer. Upon the Supplier's request, the Customer shall directly pay or refund the transport costs. The Customer's conditions of shipment are binding for the Supplier only, if the latter confirms them in writing. The Supplier shall conclude any transport insurances on the Customer's account and upon the Customer's explicit request.	10.5 In case of a delay in payment by the Customer, the Supplier shall be entitled to invoice default interests in the amount of eight percentage points above the basic interest rate (§ 247 BGB (German Civil Code)). Subject to reserve to enforcement of a higher damage for delay. If the Supplier claims a higher damage for delay, the Customer has the right to prove that the damage for delay claimed did not accrue as such or at a lesser amount.
<b>§ 6 Passing of Risk</b>	10.6 In case of a delay of a Customer's payment to the Supplier or any company associated with it and of well-founded doubts with regard to the Customer's ability to pay and/or creditworthiness, the Supplier shall be entitled to demand securities or down-payments for outstanding deliveries and to immediately make payable any claims from the business relationship.
The risk of accidental perishing or of accidental deterioration of the goods passes to the Customer as soon as the goods were transferred to the person carrying out the transport or as soon as the goods left the Supplier's distributing warehouse. If shipment becomes impossible without the Supplier's fault, the risk passes to the Customer as soon as the information is given that the goods are ready for dispatch.	10.7 The Customer shall be entitled to count up and exert any rights of reserve if his counterclaim is based on the same contractual relationship. As far as counterclaims from other contractual relationships are concerned, the Customer shall be entitled to count up only if his counterclaims are undisputed and established as final and absolute.
<b>§ 7 Warranty and Liability</b>	<b>§ 11 Miscellaneous Provisions</b>
7.1 The Customer's warranty rights imply that the Customer meets his obligations to examine and to complain in accordance with § 377 HGB (German Commercial Code). The Customer has to check the goods delivered immediately for defects with regard to quality, quantity, completeness and purpose of use and he has to complain immediately about any defects detected. Otherwise, the goods are considered as being approved. Any complaints are taken into consideration only, if they are made in writing immediately after receipt of the goods or – in case of hidden defects, as soon as these are detected. The notice period shall be deemed observed if the letter of cancellation is sent in due time.	11.1 The legislation of the Federal Republic of Germany shall be valid exclusively. The United Nations Convention on Contracts for the International Sale of Goods as of 11.04.1980 shall be excluded.
7.2 The Customer's warranty rights shall become time-barred within one year from date of shipment of the goods, unless longer delays are bindingly prescribed by the law, in particular in case of goods which were used in accordance with their usual application for any kind of construction work having thus caused their defectiveness. As far as the goods' quality is concerned, the Supplier's product description is basically considered as agreed upon. The product description which is currently valid in accordance with continuous technical further development and improvement of the products as well as the product quality are indicated at <a href="http://www.rodeca.de">www.rodeca.de</a> . The valid version of such product descriptions and product qualities at the time of the conclusion of the contract shall become an integral part of the contract. Public statements of the Supplier's assistant or third parties (such as public explanations of product properties) do not include any descriptions supplementing or amending such product descriptions.	11.2 Place of fulfillment is the relevant point of departure of the goods; for payment, it is Muelheim an der Ruhr.
7.4 If the product supplied does not have the quality defined by and between the Customer and the Supplier in the confirmation of order, the supplier is obliged to supplementary performances. This does not apply, if the Supplier is entitled to refuse supplementary performances according to legal regulations.	11.3 If the Customer is a merchant, a corporate party organized under public law or a specialized agency subject to public law or if he does not have a general place of jurisdiction in Germany, the place of jurisdiction is Muelheim an der Ruhr. However, the Supplier shall be entitled to file suit at the Customer's general place of jurisdiction.
7.5 In any case, the Supplier is entitled to select between the elimination of the defects and the delivery of new products. If the supplementary performance fails, the Customer shall be entitled to minimize the loss or to cancel the contract at his own option. The application of § 478 section 1 BGB (German Civil Code) (Right of Recourse) remains untouched. The Customer's right to claim damages instead of supplementary performance in accordance with legal regulations and the present conditions remains untouched.	11.4 The Supplier reserves the right to amend these General Terms and Conditions at any time. The amended General Terms and Conditions are then considered as being agreed upon between the two Parties, if the Customer does not object to these amended General Terms and Conditions within six weeks after their receipt. However, this shall apply only if the Supplier was informed about the consequences of a failure to protest.
7.6 If the Customer wants to claim damage instead of performances or if he wants to remedy the defects himself, a failure of the remedy is given only after the second try without success, unless something else results from the type of the matter or the defect or other circumstances. For the rest, the legal cases of dispensability of setting a deadline remain untouched.	11.5 If any provision of the present General Terms and Conditions or any provision within the scope of other agreements should be or become ineffective or impracticable, the effectiveness of any other provisions or agreements shall not be touched by this. Any inefficient or impracticable provision or agreement shall be replaced by an effective and/or practicable provision or agreement corresponding as closely as possible to the first economic purpose of this Agreement.
7.7 In case of justified claims, the goods can only be returned to the Supplier on the Supplier's account, if after information of the defect the Supplier does not offer to pick up or to dispose of the goods. If higher expenses accrue because the customer had the goods transported after delivery to a location different than that of his business premises, the Supplier shall charge the increased expenses for supplementary performance to the Customer, unless the transport is in accordance with the intended use of the matter.	Rodeca GmbH (Version: 03.2014)
7.8 Any Customer claims against the Supplier resulting from one of the manufacturer guarantees granted to him	



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Technical information frame systems **1.2.3.0**

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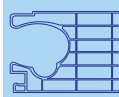
Technical information thermally broken frame system series **4540**  
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# Product Range

## Translucent Building Elements

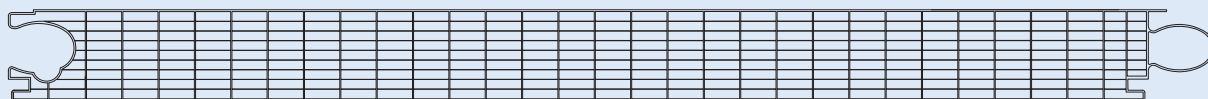
Design Series

Stand: 02/16

### Standard - crystal and opal antiblind

PC 2540-10

Up-Value 0.99 - 1.00 W/m<sup>2</sup>K\*\*



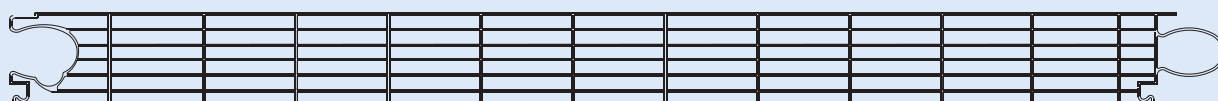
Color: minimum quantity of 300 m<sup>2</sup>

Building width 500 mm\*

### Standard - crystal and opal antiblind

PC 2540-7

Up-Value 1.00 - 1.20 W/m<sup>2</sup>K\*\*



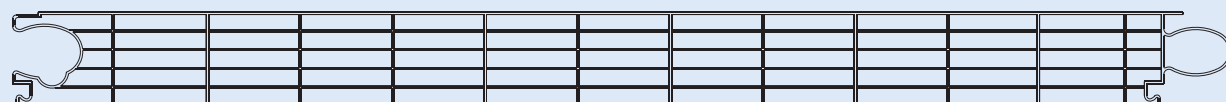
General German Building Approval Z-10.1-327

Building width 500 mm\*

### Standard - crystal and opal antiblind

PC 2540-6

Up-Value 1.10 - 1.20 W/m<sup>2</sup>K\*\*



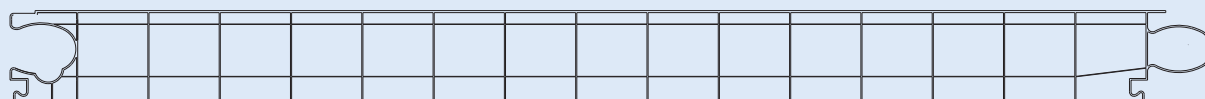
General German Building Approval Z-10.1-327

Building width 500 mm\*

### Standard - crystal and opal antiblind

PC 2540-4 MC

Up-Value 1.30 - 1.60 W/m<sup>2</sup>K\*\*



General German Building Approval Z-10.1-327

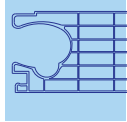
Building width 500 mm\*

Next to the fire certification according to EN 13501, our products are certified according to other national norms. Additionally to the demands of building approvals and fire certificates our products fulfill the demands of joint tightness and are resistently tested for ball throwing, for hail and pucks according to RODECA warranty statements and supplementary certification reports. We give a ten year product warranty.

\* Please note general information regarding tolerances

\*\* The Up-values depend on the installation situation, for further details please check our technical manuals and the structural-physical values.

The aforesaid information and our application technological advice in words, written and through tries, are carried out to best of one's knowledge. Technical changes reserved.



# Product Range

## Translucent Building Elements

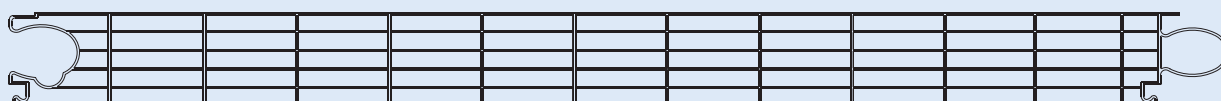
### Color Series

Stand: 02/16

### Color

PC 2540-6

Up-Value 1.1 - 1.2 W/m<sup>2</sup>K\*\*



General German Building Approval Z-10.1-327

Building width 500 mm\*

#### Colours:

Pacific blue and petrol deliverable without minimum quantity.

For all other colours a minimum quantity of 300 m<sup>2</sup> is applied.

For quantities < 300 m<sup>2</sup> please ask for the minimum quantity surcharges.

For colour preferences out of our colour range (30 colours according to colour sample box)

We kindly ask you to inquire if your preferred colour is already available from stock.

If it is necessary we can develop the desired colour.



The costs for a colour development are 500 € for colour stripes.

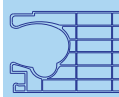
For approval of the developed colour you will receive three colour stripes in different colour concentration.

In case that for the sampling additionally panels in desired colour will be needed we are able to help you in decision taking by producing 2m<sup>2</sup> of panels for 1,000 € only.

\* Please note general information regarding tolerances

\*\* The Up-values depend on the installation situation, for further details please check our technical manuals and the structural-physical values.

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# Product Range

## Translucent Building Elements

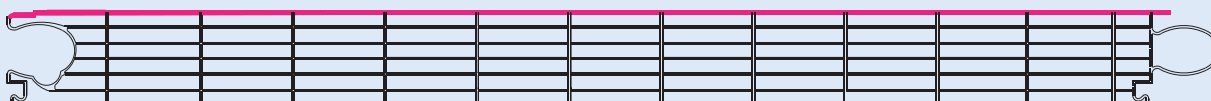
Design Series

Stand: 02/16

### Decocolor

PC 2540-7

Up-Value 1.0 - 1.2 W/m<sup>2</sup>K<sup>\*\*</sup>



General German Building Approval Z-10.1-327

Building width 500 mm\*

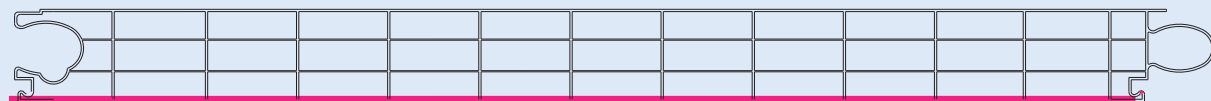
Standard colour combination is Heatbloc S/opal 067

For all other effect- and colour combinations a minimum quantity of 150 m<sup>2</sup> is necessary.

### Bicolor 3D

PC 2540-4

Up-Value 1.3 - 1.5 W/m<sup>2</sup>K<sup>\*\*</sup>



General German Building Approval Z-10.1-327

Building width 500 mm\*

**Standard colour combinations are:**

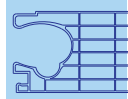
crystal/RAL 5015, crystal/RAL6029, crystal/RAL5002, crystal/RAL 4006, crystal/RAL3020, crystal/RAL1023, crystal/RAL2009, crystal/RAL 6027 and crystal/opal antiblind.

For all other effect- or colour combinations a minimum quantity of 150 m<sup>2</sup> is necessary.

\* Please note general information regarding tolerances

\*\* The Up-values depend on the installation situation, for further details please check our technical manuals and the structural-physical values.

The aforesaid information and our application technological advice in words, written and through tries, are carried out to best of one's knowledge. Technical changes reserved.



# Product Range

## Translucent Building Elements

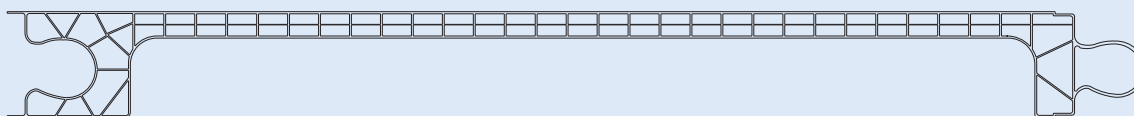
Greenline

Stand: 02/16

### Standard – crystal and opal antiblind

PC 2410-3

Up-Value approx. 3.00 W/m<sup>2</sup>K\*\*

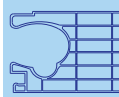


Building width 400 mm\*

\* Please note general information regarding tolerances

\*\* The Up-values depend on the installation situation, for further details please check our technical manuals and the structural-physical values.

The aforesaid information and our application technological advice in words, written and through tries, are carried out to best of one's knowledge. Technical changes reserved.



# General information

## on translucent building elements of Polycarbonate

Stand: 02/16

### The raw material

Polycarbonate (PC) is a crystal clear, high impact thermoplastic.

### Advantages

- Temperature resistance between -40 to +115°C, temporarily up to +130 °C
- High impact resistance nearly unchanging within these temperatures
- Good long term performance through UV protection

### UV co-extrusion

With this technique a high concentrated UV protection film is homogeneously melted onto the basis material while production process.

### This offers the following advantages:

- No adhesion problems of UV protection film
- Same temperature behaviour of base and UV material
- No impairment of high impact (like e.g. with coated or painted surfaces)
- Makes small cold bending radiuses possible.
- Better resistance against environmental influences and ageing.
- The thickness of the Coextrusion layer may influence the colouring.

### Outside Performance

Through the coextruded UV-protection film – which is always applied on the outer wall and if desired (surcharge) for some of the products is also available both-sided – our products offer best weather resistance and very good long term performance.

### Warranty

Rodeca offers 10 years warranty (according to written warranty) to its uv-coextruded products regarding to **yellowing index – ageing – hail**

### Light transmission

Customized on project demand RODECA can produce products with light transmission from almost 0% up to 80% light transmission (depending on material thickness and number of layers). Due to in-house compounding and raw material refinement special requests and colours can be realized. Please inquire the project demands which vary from our standards.

### G-Value (Solar gain value)

The G-values are related to light transmission and U-value. G-values can differ from product specification to product specification from 0.68 down to 0.25!

### Up-values and Uf-values (heat transmission coefficient - $U_p$ =U-value panel; $U_f$ =U-value frame)

Throughout the multi-walled design of our translucent building elements translucent facades with thermally broken aluminium profiles can be designed according to the requirements on Heat Insulation Ordinance according to EnEV 2009.

### UV transmission

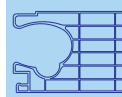
UV-radiation is stopped almost to 100% up to 380 Nm because of high UV-stabilization with coextruded UV-protection. The remaining transmission in the area of UV radiation is less than 1%. This property can be very important for UV sensitive goods.

### IR-radiation transmission

Our panels with HEATBLOC-surface let through day light and reflect and stop at the same time selectively the heating radiation. The effect is cooler rooms through lower solar gain values.

### Reflection of radar radiation

In the near of radar-units (e.g. at airports) it is important to have none or minimized influence through building elements. RODECA products do not have influence on reflection and do not affect radar-units.





# General information

## on translucent building elements of Polycarbonate

Stand: 02/16

### Service temperature

Service temperature is between minus 40 °C up to plus 115 °C (temporarily up to 130 °C). Please take into consideration service temperature especially with rain screen claddings respectively the use of dark foils for deposition of translucent building elements. Adequate distances and sufficient ventilation need to be considered in planning. That way danger of heat accumulation and associated deformations can be avoided.

### Thermal properties

The high deformation resistance from shortly up to 130 °C is one of the advantages which RODECA products with coextruded surface offer. RODECA products can be used in spaces where other thermoplastics cannot be used anymore. Interesting to know is that white surfaces on roof applications already can heat up to +100°C. (It is essential to respect thermal expansion/shrinking of polycarbonate and to avoid heat accumulation.)

### Colouring

The usual colours are:

- **CLEAR** with structure for panels for higher light transmission, light refraction. Additionally the surface is less sensitive to scratches.
- **OPAL-ANTIBLEND** with light refractive and light transmitting pigments for an optimized diffused and antiglare light.
- **COLOR** Series - transparent or semitransparent COLOURS, similar to RAL from approx. 300 m<sup>2</sup> on request
- **BICOLOR** Series - two coloured finish, inner wall coloured, similar to RAL from approx. 150 m<sup>2</sup> on request
- **DUOCOLOR** - two coloured finish of translucent building elements custom made in transparent or semitransparent COLOURS similar to RAL from approx. 300 m<sup>2</sup> on request
- **DECOCOLOR** - two coloured finish, outer wall coloured, similar to RAL from approx. 150 m<sup>2</sup> on request

### Qualities

Depending on application area and demand RODECA produces different qualities.

- **LONGLIFE** quality for one sided UV protection. The terms can be extracted from our 10 years warranty declaration for LBE, MFP and U-Panels "longlife"
- **LONGLIFE PLUS** quality for one sided UV protection quality for special requirements. The terms can be extracted from our 10 years warranty declaration for LBE, MFP and U-Panels "longlife plus".

### Impact resistance/fracture behaviour

RODECA products made of PC are due to the raw material practically indestructible through beat, impact, stone throwing etc. Polycarbonate is 200 times more impact resistant than glass.

Polycarbonate building elements do not splinter and comply with German regulations on workplaces (Arbeitsstättenverordnung).

### Hail storm

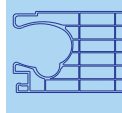
Currently doesn't exist a DIN standard, so our RODECA elements were tested at EMPA (Swiss testing laboratory) with a simulated hail test with a shot radius of 20 mm and no holes occurred. According to the current testing results we achieve the highest class (class 5) of the Swiss hail test with factory-new goods.

### Ball rebound safety

Even an ice hockey puck hurled against the element at 130 km/h could not cause damage. Unlimited ball rebound safety thus applies according to DIN 18032 T 3.

### Fire resistance

PC has a very high ignition temperature of approx. 450 °C and in case of fire the smoke development is very little. Depending on panels thickness and material composition RODECA products are according to DIN 4102 B 1 of low inflammability or B2 normally inflammable. Additionally the products are classified according to European fire test DIN EN 13501 and classified according to different national tests. Please inquire the test certificates in case when needed.



# General information

## on translucent building elements of Polycarbonate

Stand: 02/16

### Melttable area according to DIN 18234

In many cases RODECA panels are used as melt-surface because their softening point is below 300°C.

### Sound insulation

Polycarbonate panels have despite their light weight a good sound insulation value up to 27 dB according to DIN EN ISO 140-3 in testing facility. With a double wall construction a value of up to 43 dB is achievable. This value refers to the value that the panel achieves on its own, due to constructive conditions this value may differ.

### Chemical resistance

PC elements possess a very high resistance to chemicals but can be affected through some chemical bounds. Chemical resistance of polycarbonate against other used chemicals has to be checked by customer on site. This is especially important for cooling substances lubricants, surfactants, sealants, ammonia, etc. A policy on the compatibility of polycarbonate with chemicals can be found i.a. at <http://www.buerkle.de/en/knowhow/information/chemical-resistance.html>.

### Painting

In case that the polycarbonate panels for advertising reasons or similar will be painted or screen printed the compatibility of the painting system needs necessarily be tested from customer before use. The aluminium frame profiles can be powder coated according to the project needs. Additionally RODECA offers the possibility to deliver TPE gaskets in custom made colours.

### Vinyl wrap

For advertising purposes large scale letters can be glued onto the panels' surface. It is important that the foil and the glue doesn't contain substances which harm and affect polycarbonate. Please clarify before usage with the vinyl wrap supplier or the advertising company if the ingredients/glues of the foil intended to use are compatible with polycarbonate.

### Cleaning/Maintenance

For durable maintenance of technical and visual properties a regular care, maintenance and cleaning of the translucent building elements is mandatory.

The cycle of care, maintenance and cleaning depends on the particular building site and the usage conditions.

Cleaning of translucent building elements:

Water with a small percentage of neutral cleaning agents. No use of glass cleaner, rubbing agents or sharp edged subjects. No alkaline or tensile agents to be used.

### Storage/Transport

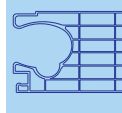
RODECA panels made of polycarbonate have to be protected before sun and wet conditions before installation and must be stored on a plain and even underground. In case of non-observance stock damages may occur. The stacking height of translucent building elements shouldn't exceed 200 cm.

### Packaging

The translucent building elements are delivered – depending on the finish – with one-sided or both-sided protective foil. The delivery is carried out – depending on length – from one to four pieces for hand unloading in a recyclable plastic wrapping or on pallet (for forklift unloading). Please unpack briefly before installation to avoid contamination in the hollow chambers. The protective film must be removed after processing and installation. If the Translucent Building Elements are provided with both-side protective film, the protective film on the interior side is applied as transport protection.

### Processing

The Polycarbonate Elements can be smoothly cut with common tools, e.g. pad saw (saw blade with fine indentation) Incidental shavings are to be removed with oil free and water free compressed air. Drill holes (preferably steel-, twist drill or wedge angle drill) need to be at least 40 mm away from elements side and always minimum 50% larger than the screw radius (because of expansion and shrinking due to temperature).



# General information

## on translucent building elements of Polycarbonate

Stand: 02/16

### Expansion/Shrinking

The expansion coefficient of polycarbonate is 0,065 mm per °C and per m and hence three times as high as the expansion coefficient of aluminium.

Rule of thumb: 3mm per m for 50 °C difference in temperature. Due to temperature differences the length and width of the panel change. The changes in length of the panel need to be considered constructional. RODECA has considered the length expansion in its system accessories.

### Sealing

Sealings and sealing tapes need to be polycarbonate compatible and approved for usage from respective producer otherwise damages on the panels are possible.

Silicone: Must be absolutely neutral and solvent free, e. g. RODECA PC-Silicone 2001. The aluminium profiles need to be protected (according to state of the art technique) against galvanic corrosion and an adequate sealing of building has to be done.

### Condensation

Polycarbonate is a material that is permeable for vapour diffusion so that condensation may occur. This is not a quality defect. Depending from weather/climate this appearance is of temporary nature which is directly linked to temperature and humidity. Condensation doesn't effect the quality of the panels.

### Formation of algae

Algae can just occur in connection of dirt and humidity. Taping of the polycarbonate panels prevents appearance of dirt while stocking and transport.

### Sealing of panel ends

The ends of the panels must be closed before installation - directly after unpacking - with suitable sealing to avoid dust and dirt in the chambers.

With a sealing that is permeable for vapour diffusion (or permeable to water) you run risk that dust, diesel exhaust particulates, gases or other fine particles can diffuse into the panel chambers. For projects with increased particulate matter emission respectively environmental pollution are additionally precautions to be taken. With a joint sealing and additional sealing methods the optical properties of the translucent building materials can be maintained. Every element needs to be sealed singularly. A general recommendation for sealing of panel ends can't be given due to the different installation situations. The complete lack of panel ends sealing cannot be recommended from our experience.

### Safety

The regional building regulations as well as the general safety regulations for non supporting wall and roof coverings are effective. For a perpetration (according to workplace ordinance (German „Arbeitsstättenrichtlinie“) it is mandatory to use a board of 50 cm width.

### Tolerances

Panels

Length + 12 mm (up to 3 m) / +0,40% of panel length (above panel length of 3 m)

Thickness ± 0,5 mm

Width -2 mm / +6 mm

Weight - 5 %

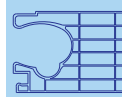
Concavity length ± 0.5 mm per linear meter of panel length

Concavity width ± 0,5 mm per linear meter of panel width

Rectangularity < 5 mm per linear meter of panel length

All tolerances are based on room temperature of approx. 20 °C

Variations in colour saturation and shade between several production batches cannot be precluded (production-related). Variations are always possible and will not be accepted as reason for complaint.



# General information

## on translucent building elements of Polycarbonate

Stand: 02/16

### Disposal of waste/Environmental protection

RODECA takes leftovers from off-cuts etc. back.  
Packaging is fully recyclable.

### Joint permeability

Especially for large facades it is important not only to achieve a good U-value but also a product which is tested on joint permeability and complies with the required DIN values. RODECA panels fulfil this demand and passed project wise blower door tests for the whole construction.

### System accessories

For almost all installation situations RODECA supplies appropriate and well engineered accessories as well as ventilation flaps and windows in many different versions.

### Certification/Quality standard

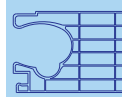
RODECA products are tested according to different criteria and are both external controlled (inspection mark) and internally controlled through laboratory and quality controls. Please note that translucent building elements are presumed to be unregulated building materials and are subject to the regulation of the rules of Building Elements A part 2. The outcome of the requirement to the usability proof in combination with local regulation needs to be considered by designer/installer. Harmonized standards which lead to a CE marking obligation currently do not (yet) exist.

If RODECA forwards building certification for translucent building elements these regulations must be complied with. Due to the not finalized harmonization of National and European norms please check whether the certifications are suitable for the particular application purpose.

### Miscellaneous

Data subject to technical change.

The aforesaid information and our application technological advice in words, written and through tries, are carried out to best of one's knowledge. This information is non-binding advice even in regards to property rights of third parties. Our advice does not release you from your responsibility to proof self dependently our current advices - especially our safety data sheets and technical information - and to test if our products in regards to applicability for the intended system and use. Application, use and handling of our products - produced from you based on our application technological advice - take place out of our control and therefore you are solely responsible. The sale of our products is carried out according to our current general terms and conditions. Please check before handling if our products are applicable for the intended purpose.



## 1.2.1.1

### Translucent Building Elements

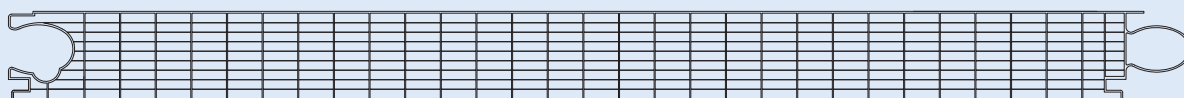
Product properties - Physical properties

Stand: 02/16

PC 2540-10

### Up-Value from 0.99 W/m<sup>2</sup>K to 1.00 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation as interior or exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 2540-10

fire class B 2 according to DIN 4102

PC 3540-10

fire class B,s2-d0 according to EN 13501

Building width:

500 mm -2/+6 mm

Thickness:

40 mm +/- 0.5 mm

Weight:

approx. 4.20 kg/m<sup>2</sup>

Number of layers:

10 layers / 9 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0.065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

#### Versions:

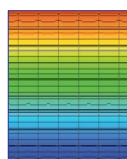
Standard:



Colours: crystal and opal antiblind

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly



#### Isotherm:

Red: 13 °C

Blue: 10 °C

Black: 0 °C

#### Installation situation exterior:

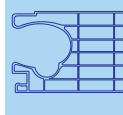
Up-value 0.99 W/m<sup>2</sup>K vertical

Up-value 1.00 W/m<sup>2</sup>K horizontal

The German building approval foresees the calculation of facade and roof areas according to the requirements of DIN 10077-2 (U<sub>cw</sub>). If additional or divergent national requirements be asked to calculate the thermal protection, these must be respected.

Sound insulation:

approx. 24 dB Rw



# 1.2.1.2

## Translucent Building Elements

### Physical properties

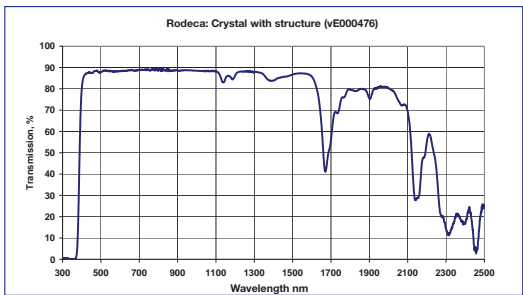
Stand: 02/16

**Transmission:**

Standard:

Colour: crystal  
Colour: opal antiblind

approx. 46%  
approx. 33%



The Measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.





## 1.2.1.3

### Translucent Building Elements

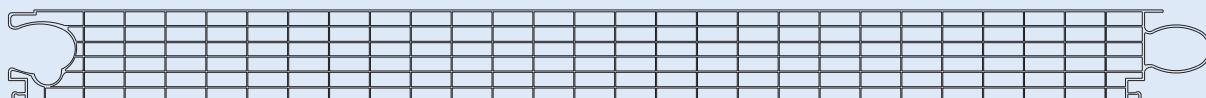
Product properties - Physical properties

Stand: 02/16

PC 2540-7

### Up-Value from 1.00 W/m<sup>2</sup>K to 1.20 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation as interior or exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 2540-7

PC 3540-7

fire class B 2 according to DIN 4102

fire class B-s2, d0 according to DIN EN 13501

Building width:

500 mm -2/+6 mm

Thickness:

40 mm +/- 0.5 mm

Weight:

approx. 4.30 kg/m<sup>2</sup>

Number of layers:

7 layers / 6 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0.065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

#### Versions:

Standard:

Colours: crystal and opal antiblind

Decocolor:



#### Two coloured version of the translucent building elements

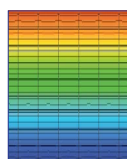
For example colour combination:

HEATBLOC S/opal 067

The Decocolor version can be delivered with a minimum quantity of 150 m<sup>2</sup> without separate surcharges for colour change.

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly



**Isotherm:**

Red: 13 °C

Blue: 10 °C

Black: 0 °C

#### Installation situation interior:

Up-value 1.00 W/m<sup>2</sup>K vertical

Up-value 1.10 W/m<sup>2</sup>K horizontal

#### Installation situation exterior:

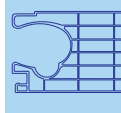
Up-value 1.10 W/m<sup>2</sup>K vertical

Up-value 1.20 W/m<sup>2</sup>K horizontal

The German building approval foresees the calculation of facade and roof areas according to the requirements of DIN 10077-2 (U<sub>cw</sub>). If additional or divergent national requirements be asked to calculate the thermal protection, these must be respected.

Sound insulation:

approx. 24 dB Rw



# 1.2.1.4

## Translucent Building Elements

### Physical properties

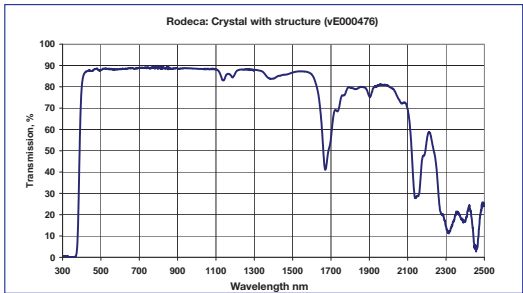
Stand: 02/16

**Transmission:**

Standard:	Colour: crystal	approx. 53 %
	Colour: opal antiblind	approx. 41 %

**Decocolor:**

Depending on colour combinations and Level of opalization For example colour combination	
Heatbloc S / opal 067	approx. 24 %
Heatbloc S / crystal	approx. 48 %



The Measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.

**Solar gain values g**

Standard:	Colour: crystal	approx. 56 %
	Colour: opal antiblind	approx. 47 %

**Decocolor:**

Depending on colour combinations and level of opalization For example colour combination	
Decocolor Heatbloc S / opal 067	approx. 34 %

## 1.2.1.5

### Translucent Building Elements

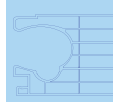
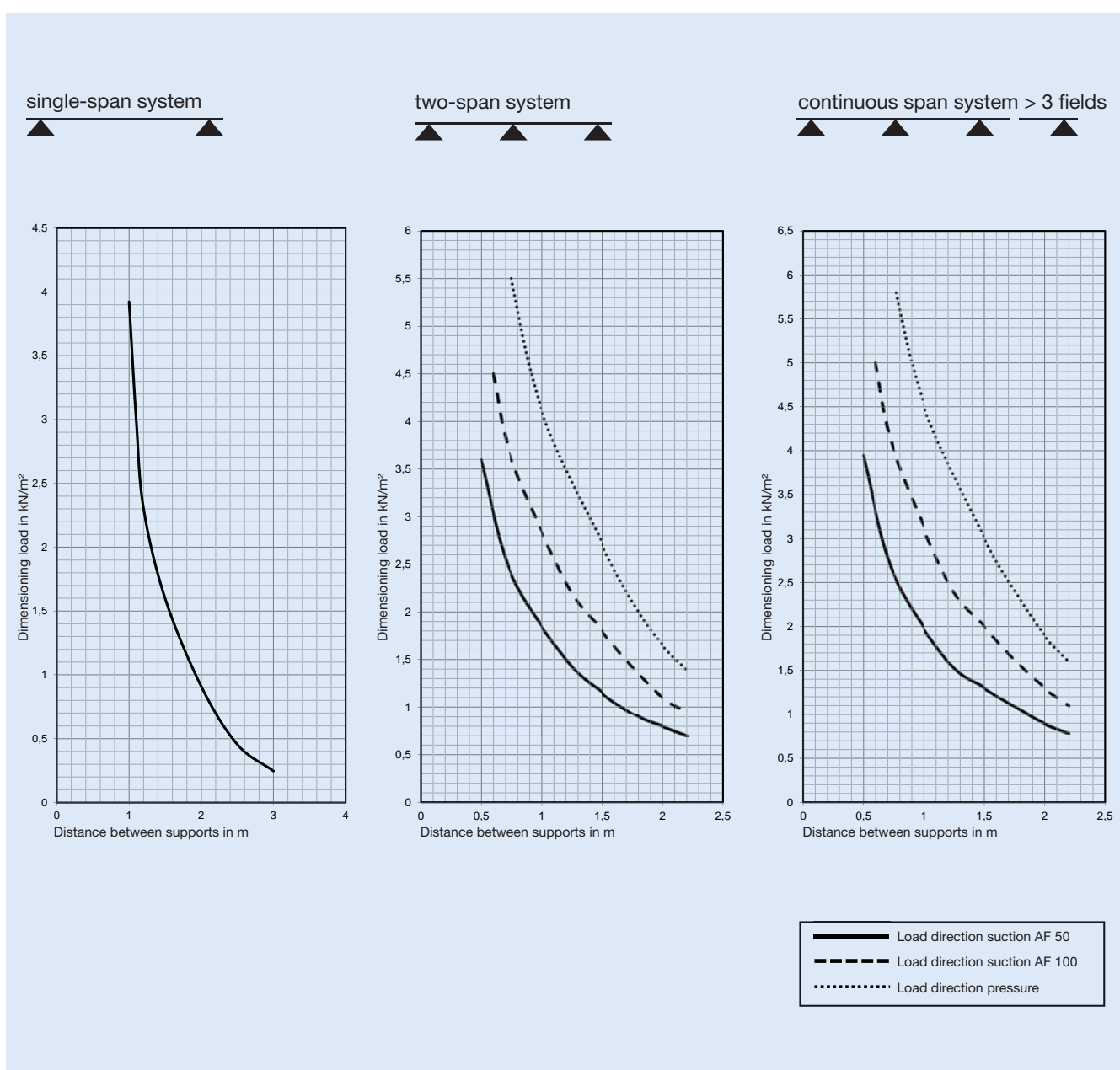
#### Span width | System 2540-7

Stand: 02/16

The below diagrams reflect the valid span width referring to the dimensioning loads for the versions PC 2540-7, PC 1540-7 and PC 3540-7 and only in conjunction with the RODECA system accessories.

Please note that for the structural design of the valid spans additionally to the influencing loads the correspondent national partial safety factors must be added.

Additionally it is mandatory to consider the content of the General German Building Approval Z-10.1-327 respectively the valid component tests.



## 1.2.1.6

### Translucent Building Elements

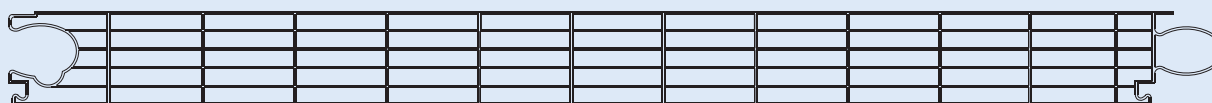
Product properties - Physical properties

Stand: 02/16

System PC 2540-6

### Up-Value from 1.10 W/m<sup>2</sup>K to 1.20 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation in interior or exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 1540-6  
PC 2540-6  
PC 3540-6

fire class B 1 according to DIN 4102  
fire class B 2 according to DIN 4102  
fire class B-s2, d0 according to DIN EN 13501

Building width:

500 mm -2/+6 mm

Thickness:

40 mm +/- 0.5 mm

Weight:

approx. 4.20 kg/m<sup>2</sup>

Number of layers:

6 layers / 5 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0.065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

#### Versions:

Standard:

Color:



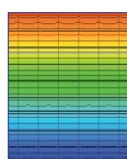
Colours: crystal, opal antiblind, crystal clear (without refracting structure), petrol, pacific blue

Available in any solid colour similar to RAL.

The Color version can be delivered with a minimum quantity of 300 m<sup>2</sup> without separate surcharges for colour change.

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly



#### Isotherm:

Red: 13 °C  
Blue: 10 °C  
Black: 0 °C

Sound insulation:

#### Installation situation interior:

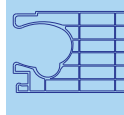
Up-value 1.10 W/m<sup>2</sup>K vertical  
Up-value 1.10 W/m<sup>2</sup>K horizontal

#### Installation situation exterior:

Up-value 1.20 W/m<sup>2</sup>K vertical  
Up-value 1.20 W/m<sup>2</sup>K horizontal

The German building approval foresees the calculation of facade and roof areas according to the requirements of DIN 10077-2 (U<sub>cw</sub>). If additional or divergent national requirements be asked to calculate the thermal protection, these must be respected.

Rw 24 dB according to DIN EN ISO 140-3 in testing facility



# 1.2.1.7

## Translucent Building Elements

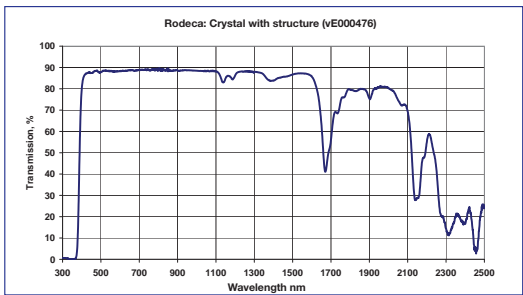
### Physical properties

Stand: 02/16

**Transmission:**

Standard:

Colour: crystal	approx. 55 %
Colour: crystal clear	approx. 59 %
Colour: opal antiblind	approx. 39 %
Colour: opal 067	approx. 28 %
Colour: pacific blue	approx. 34 %



The measurement of the transmission values was carried out with application of a natural day light lamp of 20.000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50.000 LUX) exemplarily on a 1 mm thick PC.

**Solar gain values g**

Standard:

Colour: crystal	approx. 60 %
Colour: crystal clear	approx. 61 %
Colour: opal antiblind	approx. 47 %

Color:

Depending on colour, for example:	
Petrol ( ≈ RAL 6027)	approx. 45 %

## 1.2.1.8

### Translucent Building Elements

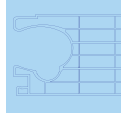
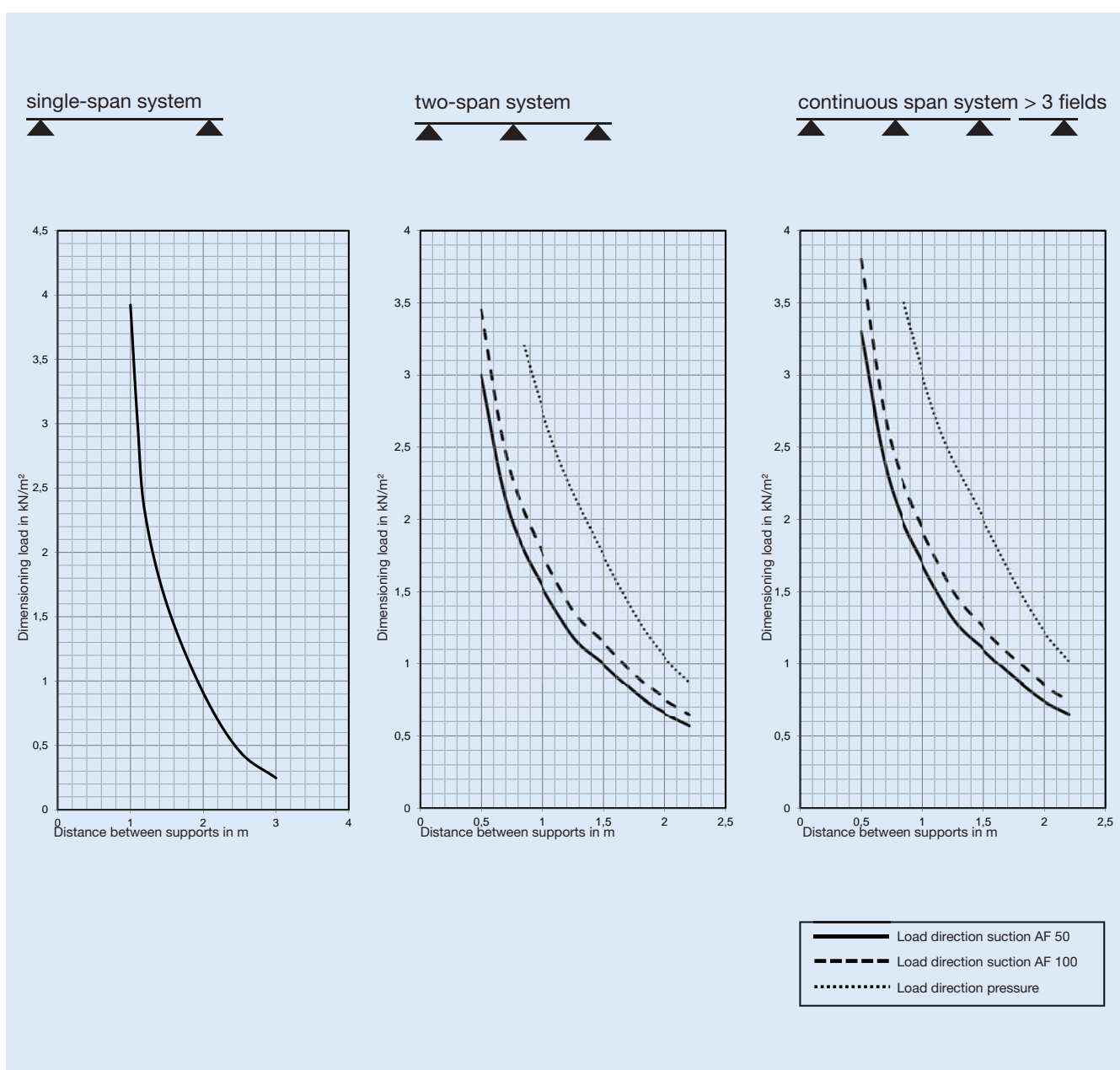
#### Span width | System 2540-6

Stand: 02/16

The below diagrams reflect the valid span width referring to the dimensioning loads for the versions PC 2540-6, PC 1540-6 and PC 3540-6 and only in conjunction with the RODECA system accessories.

Please note that for the structural design of the valid spans additionally to the influencing loads the correspondent national partial safety factors must be added.

Additionally it is mandatory to consider the content of the General German Building Approval Z-10.1-327 respectively the valid component tests.





## 1.2.1.9

### Translucent Building Elements

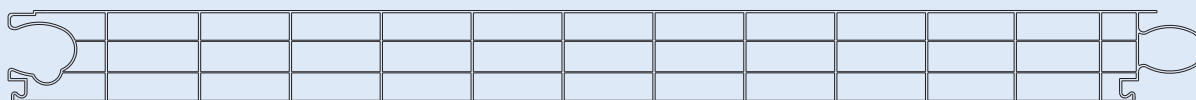
Product properties - Physical properties

Stand: 02/16

System PC 2540-4

### Up-Value from 1.30 W/m<sup>2</sup>K to 1.50 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation as interior and exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 1540-4  
PC 2540-4  
PC 3540-4

fire class B 1 according to DIN 4102  
fire class B 2 according to DIN 4102  
fire class B-s2, d0 according to DIN EN 13501

Building width:

500 mm -2/+6mm

Thickness:

40 mm +/- 0.5mm

Weight:

approx. 4.00 kg/m<sup>2</sup>

Number of layers:

4 layers / 3 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0,065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

#### Versions:

Standard:

Bicolor:



Colours: crystal and opal antiblind

#### Two coloured versions of the translucent building elements.

The Bicolor version can be delivered with a minimum quantity of 150 m<sup>2</sup> without separate surcharges for the standard colour combinations - Nonstandard combinations beginning from 300 m<sup>2</sup>.

#### Standard colours:

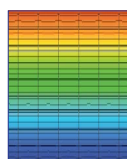
crystal/RAL 1023 - yellow  
crystal/RAL 2009 - orange  
crystal/RAL 3020 - red  
crystal/RAL 4006 - viola  
crystal/RAL 5002 - ultramarine blue

crystal/RAL 5015 - pazific blue  
crystal/RAL 6027 - petrol  
crystal/RAL 6029 - verde  
crystal/opal

Please consider that the specification of RAL colour tones for transparent building materials is only on the basis on the RAL card usable. Please request samples when needed.

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly



#### Isotherm:

Red: 13 °C  
Blue: 10 °C  
Black: 0 °C

#### Installation situation interior:

Up-value 1.30 W/m<sup>2</sup>K vertical  
Up-value 1.40 W/m<sup>2</sup>K horizontal

#### Installation situation exterior:

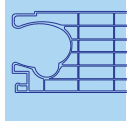
Up-value 1.40 W/m<sup>2</sup>K vertical  
Up-value 1.50 W/m<sup>2</sup>K horizontal

The German building approval foresees the calculation of facade and roof areas according to the requirements of DIN 10077-2 (U<sub>cw</sub>). If additional or divergent national requirements be asked to calculate the thermal protection, these must be respected.

Sound insulation:

Rw 25 dB according to DIN EN ISO 140-3 in testing facility

The aforesaid information and our application technological advice in words, written and through tries, are carried out to best of one's knowledge. Technical changes reserved.



# 1.2.1.10

## Translucent Building Elements

### Physical properties

Stand: 02/16

**Transmission:**

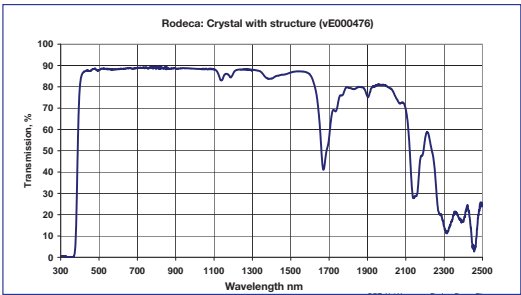
Standard:

Colour: crystal	approx. 66 %
Colour: opal antiblind	approx. 48 %

Bicolor:

Depending on colour combinations  
and level of opalization  
For example colour combination

Crystal / opal antiblind	approx. 66 %
Heatbloc S / petrol	approx. 45 %
Crystal / pacific blue	approx. 51 %



The measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.

**Solar gain values g**

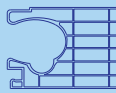
Standard:

Colour: crystal	approx. 68 %
Colour: opal antiblind	approx. 56 %

Bicolor:

Depending on colour combinations  
and level of opalization  
For example colour combination

Crystal / opal antiblind	approx. 69 %
Crystal / RAL 5015 (pacific blue)	approx. 67 %
Crystal / RAL 6029 (verde)	approx. 63 %



# 1.2.1.11

## Translucent Building Elements

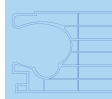
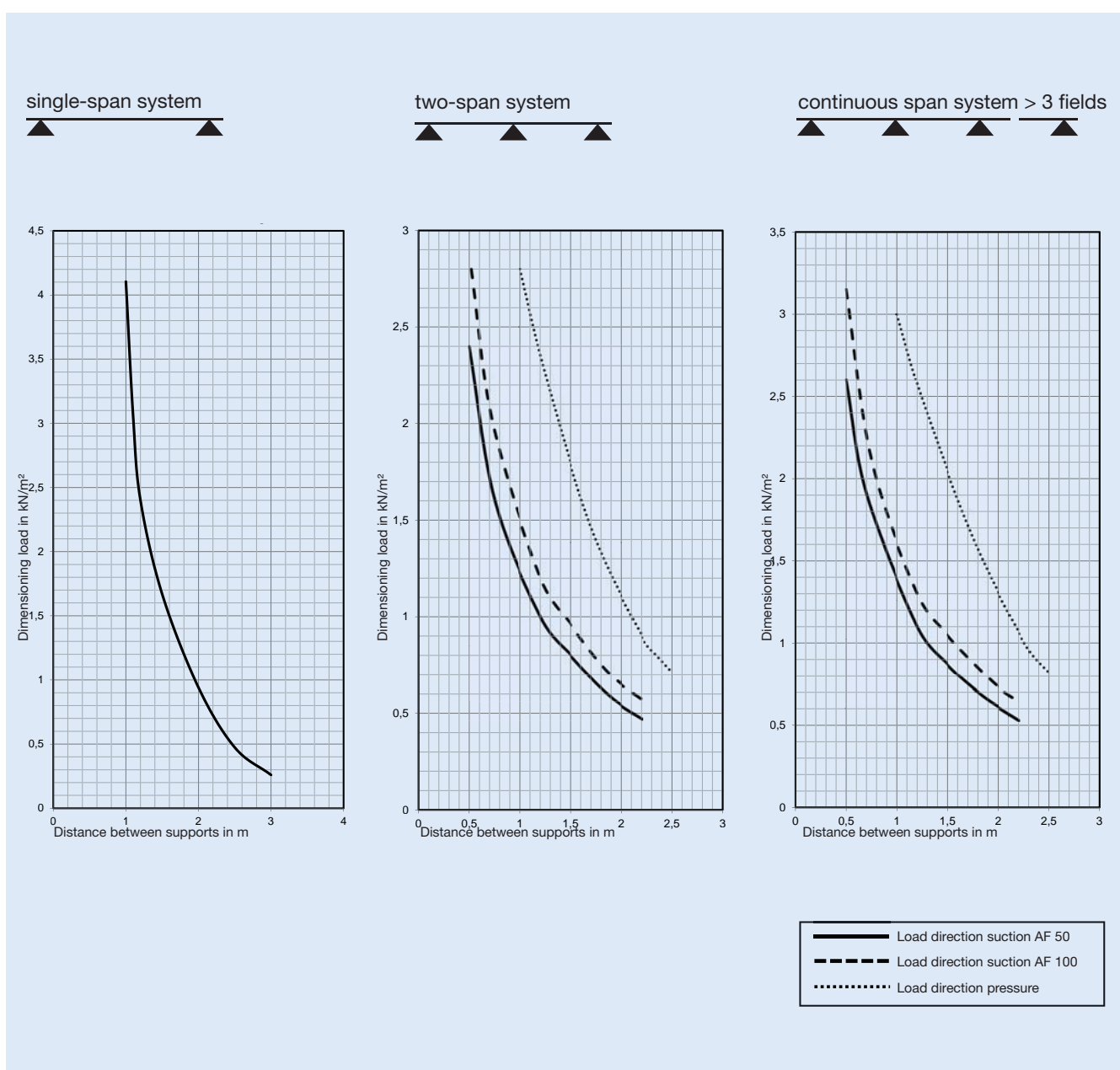
### Span width | System 2540-4

Stand: 02/16

The below diagrams reflect the valid span width referring to the dimensioning loads for the versions PC 2540-4, PC 1540-4 and PC 3540-4 and only in conjunction with the RODECA system accessories.

Please note that for the structural design of the valid spans additionally to the influencing loads the correspondent national partial safety factors must be added.

Additionally it is mandatory to consider the content of the General German Building Approval Z-10.1-327 respectively the valid component tests.



# 1.2.1.12

## Translucent Building Elements

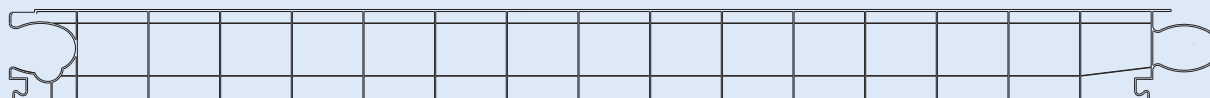
Product properties - Physical properties

Stand: 02/16

System PC 2540-4 MC

### Up-Value from 1.30 W/m<sup>2</sup>K to 1.60 W/m<sup>2</sup>K

Depending on horizontal or vertical installation situation as interior and exterior application according to DIN EN ISO 6946:2008 / DIN EN ISO 10077-2:2008



#### Flammability classifications:

PC 1540-4 MC

PC 2540-4 MC

PC 3540-4 MC

fire class B 1 according to DIN 4102

fire class B 2 according to DIN 4102

fire class B-s2, d0 according to DIN EN 13501

Building width:

500 mm -2/+6 mm

Thickness:

40 mm +/- 0.5 mm

Weight:

approx. 4.00 kg/m<sup>2</sup>

Number of layers:

4 layers / 3 chambers

Modulus of elasticity:

2,400 N/mm<sup>2</sup>

Coefficient of linear expansion:

0.065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

#### Versions:

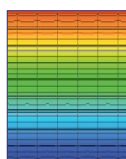
Standard:

Colours: crystal and opal antiblind

#### Up-values:

Isotherm- and temperature pattern from -10 °C outside and 20 °C inside at vertical assembly

Isotherm:



Red: 13 °C

Blue: 10 °C

Black: 0 °C

#### Installation situation interior:

Up-value 1.30 W/m<sup>2</sup>K vertical

Up-value 1.50 W/m<sup>2</sup>K horizontal

#### Installation situation exterior:

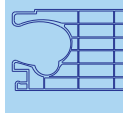
Up-value 1.50 W/m<sup>2</sup>K vertical

Up-value 1.60 W/m<sup>2</sup>K horizontal

The German building approval foresees the calculation of facade and roof areas according to the requirements of DIN 10077-2 (U<sub>cw</sub>). If additional or divergent national requirements be asked to calculate the thermal protection, these must be respected.

Sound insulation:

R<sub>w</sub> 25 dB according to DIN EN ISO 140-3 in testing facility



# 1.2.1.13

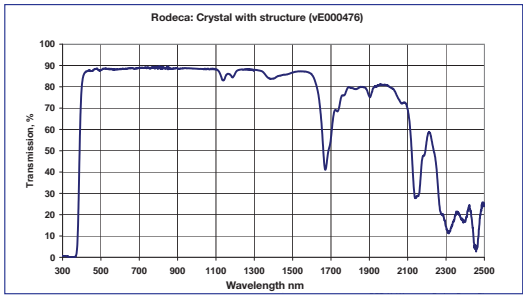
## Translucent Building Elements

### Physical properties

Stand: 02/16

**Transmission:**

Standard:	Colour: crystal	approx. 66 %
	Colour: opal antiblind	approx. 48 %



The measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.

**Solar gain values g**

Standard:	Colour: crystal	approx. 68 %
	Colour: opal antiblind	approx. 56 %

# 1.2.1.14

## Translucent Building Elements

### Span width | System 2540-4 MC

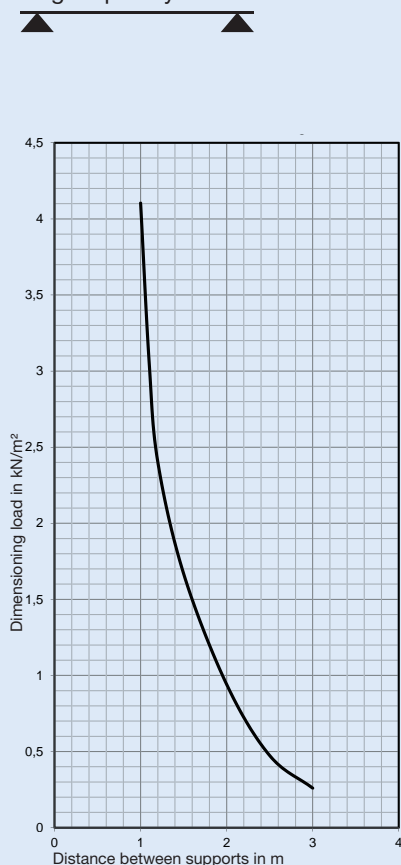
Stand: 02/16

The below diagrams reflect the valid span width referring to the dimensioning loads for the versions PC 2540-4, PC 1540-4 and PC 3540-4 and only in conjunction with the RODECA system accessories.

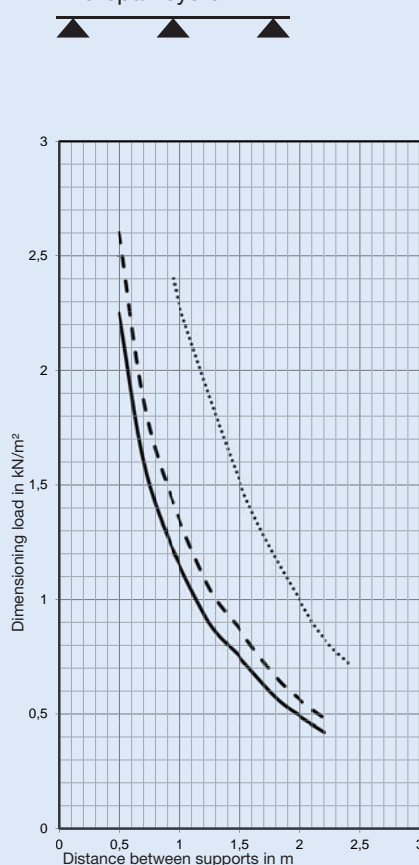
Please note that for the structural design of the valid spans additionally to the influencing loads the correspondent national partial safety factors must be added.

Additionally it is mandatory to consider the content of the General German Building Approval Z-10.1-327 respectively the valid component tests.

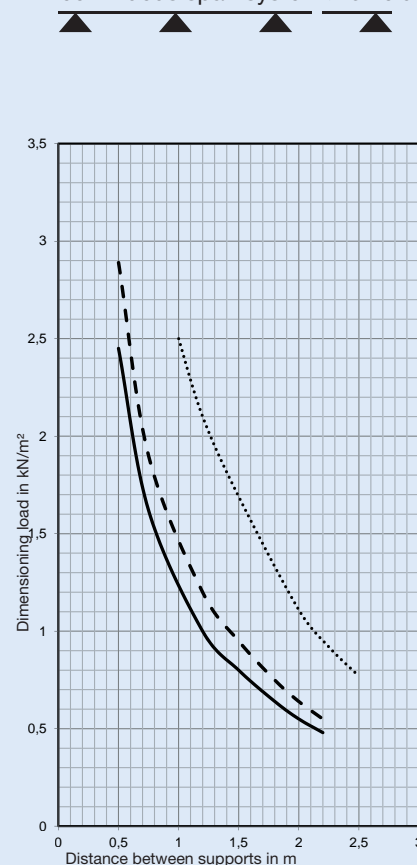
single-span system



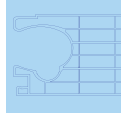
two-span system



continuous span system > 3 fields



— Load direction suction AF 50  
- - - Load direction suction AF 100  
... Load direction pressure





# 1.2.1.15

## Translucent Building Elements

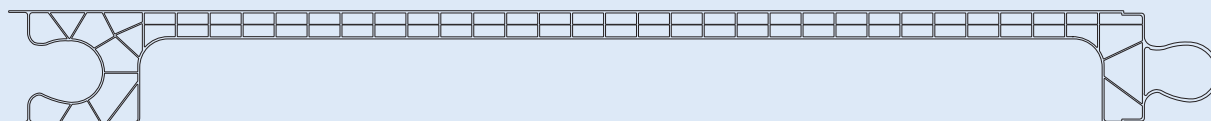
Product properties - Physical properties

Stand: 02/16

System PC 2410-3

### Up-Value from 3.00 W/m²K

(Average reference value)



#### Flammability classifications:

PC 2410-3

fire class B 2 according to DIN 4102

Building width:

400 mm -2/+6 mm

Thickness:

40/10 mm +/- 0.5 mm

Weight:

approx. 2.80 kg/m²

Number of layers:

3 layers / 2 chambers

Modulus of elasticity:

2,400 N/mm²

Coefficient of linear expansion:

0.065 mm/m/°C

UV admission:

< 1 %, wavelength until 380 nm stopped almost a 100 %

Production tolerances:

s. General information

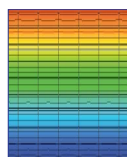
Versions:

Standard:

Colour: crystal

#### Up-values:

Isotherm- and temperature pattern  
from -10 °C outside and 20 °C inside  
at vertical assembly



Isotherm:

Red: 13 °C

Blue: 10 °C

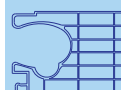
Black: 0 °C

#### Installation situation exterior:

Up-value approx. 3.00 W/m²K vertical

Sound insulation:

approx. Rw 20 dB



# 1.2.1.16

## Translucent Building Elements

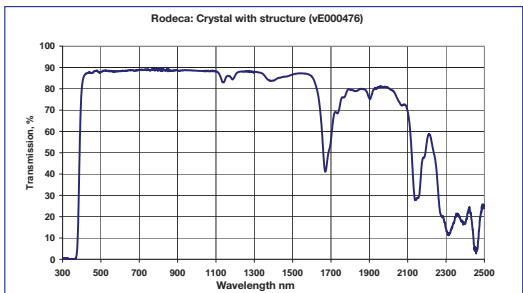
### Physical properties

Stand: 02/16

**Transmission:**

Standard:

Colour: crystal	approx. 76 %
Colour: opal antiblind	approx. 52 %



The measurement of the transmission values was carried out with application of a natural day light lamp of 20,000 Lux in connection with a lux meter Lightmeter MS 1000-300 – measuring range 200 to 50,000 LUX) exemplarily on a 1 mm thick PC.

# 1.2.1.17

## Translucent Building Elements

Product version Decocolor 2540-7

Stand: 02/16

### Design Series - Decocolor

#### Decocolor means:

Layer 1            from outside view in colour 1  
Layers 2-7        from outside view in colour 2

Internal production codification BI-A

For the indication of colours always the outside view is taken as basis!

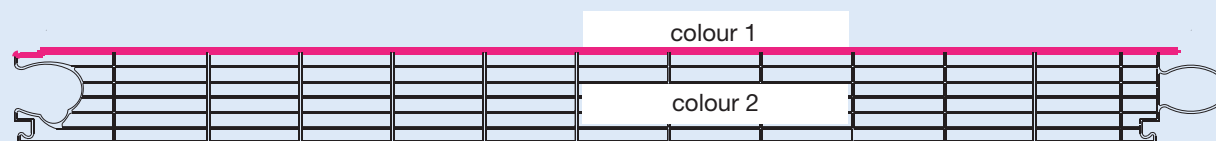
#### Decocolor RAL5002/crystal means:

Layer 1            in colour RAL 5002  
Layers 2-7        in colour crystal

### Decocolor

PC 2540-7

Outside view



Inside view

Please use this data sheet as well as basis for your project orders:

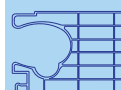
#### Ordering Information:

Layer 1            from outside view in colour 1 \_\_\_\_\_

Layers 2-7        from outside view in colour 2 \_\_\_\_\_

For the indication of colours always the outside view is taken as basis!

Decocolor colour 1 \_\_\_\_\_ /colour 2 \_\_\_\_\_



# 1.2.1.18

## Translucent Building Elements

Product version Bicolor 2540-4

Stand: 02/16

### Design Series - Bicolor

#### Bicolor means:

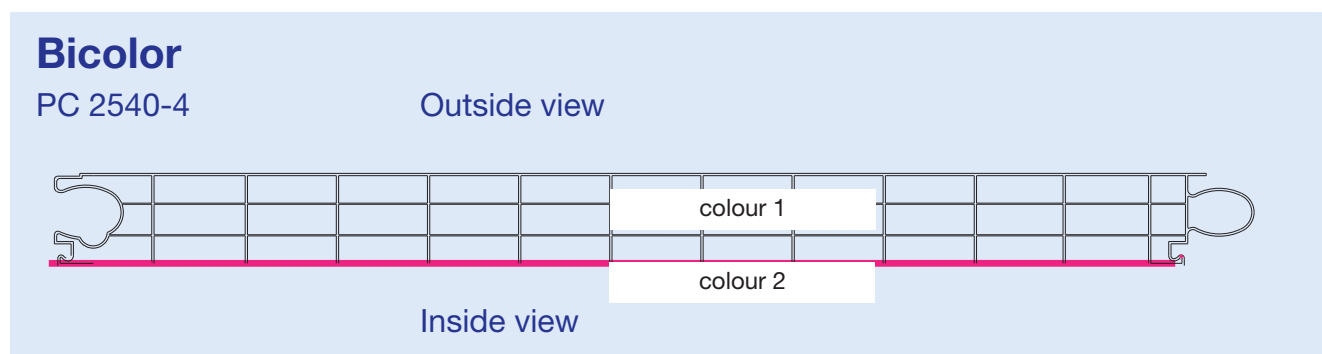
Layers 1-3 from outside view in colour 1  
Layer 4 from outside view in colour 2

Internal production codification BI-I

For the indication of colours always the outside view is taken as basis!

#### Bicolor crystal/RAL5002 means:

Layers 1-3 from outside view in crystal  
Layer 4 from outside view in RAL 5002



Please use this data sheet as well as basis for your project orders:

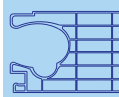
#### Ordering information:

Layers 1-3 from outside view in colour 1 \_\_\_\_\_

Layer 4 from outside view in colour 2 \_\_\_\_\_

For the indication of colours always the outside view is taken as basis.

Bicolor colour 1 \_\_\_\_\_ /colour 2 \_\_\_\_\_



## 1.2.2.1

### Translucent Building Elements

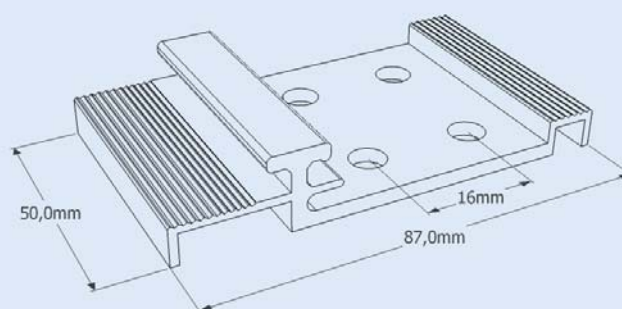
System PC 2540 AF 50 | System PC 2540 AF 100  
Fastener

Stand: 02/16

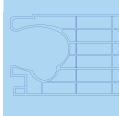
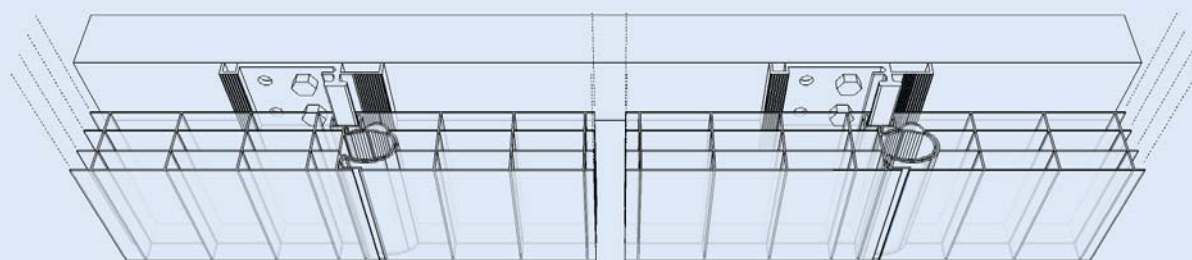
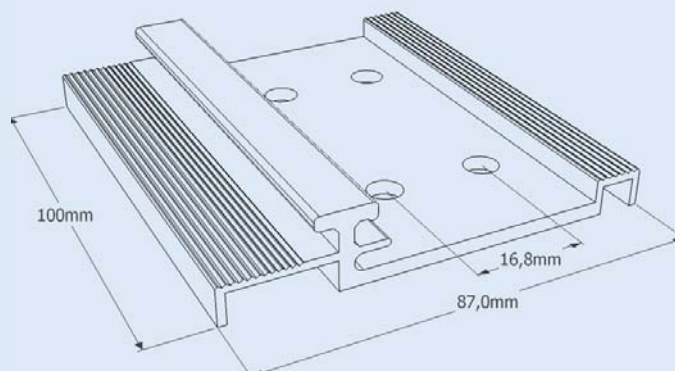
#### General

The RODECA flat fasteners are made of extruded aluminium profiles, afterwards cut, pierced and trovalised. The proof of applicability and the statical values are in the General German Building Approval Z-10.1-327 documented. We recommend to fix the flat aluminium fasteners with stainless steel screws without sealing discs. The fixing materials need to be chosen in type and finish adequately to substructure. The height of substructure should be not smaller than the height of the fastener.

Art.-No.: 49404050



Art.-No.: 494040100



## 1.2.2.2

### Translucent Building Elements

#### System PC 2410-3 | Fastener

Stand: 02/16

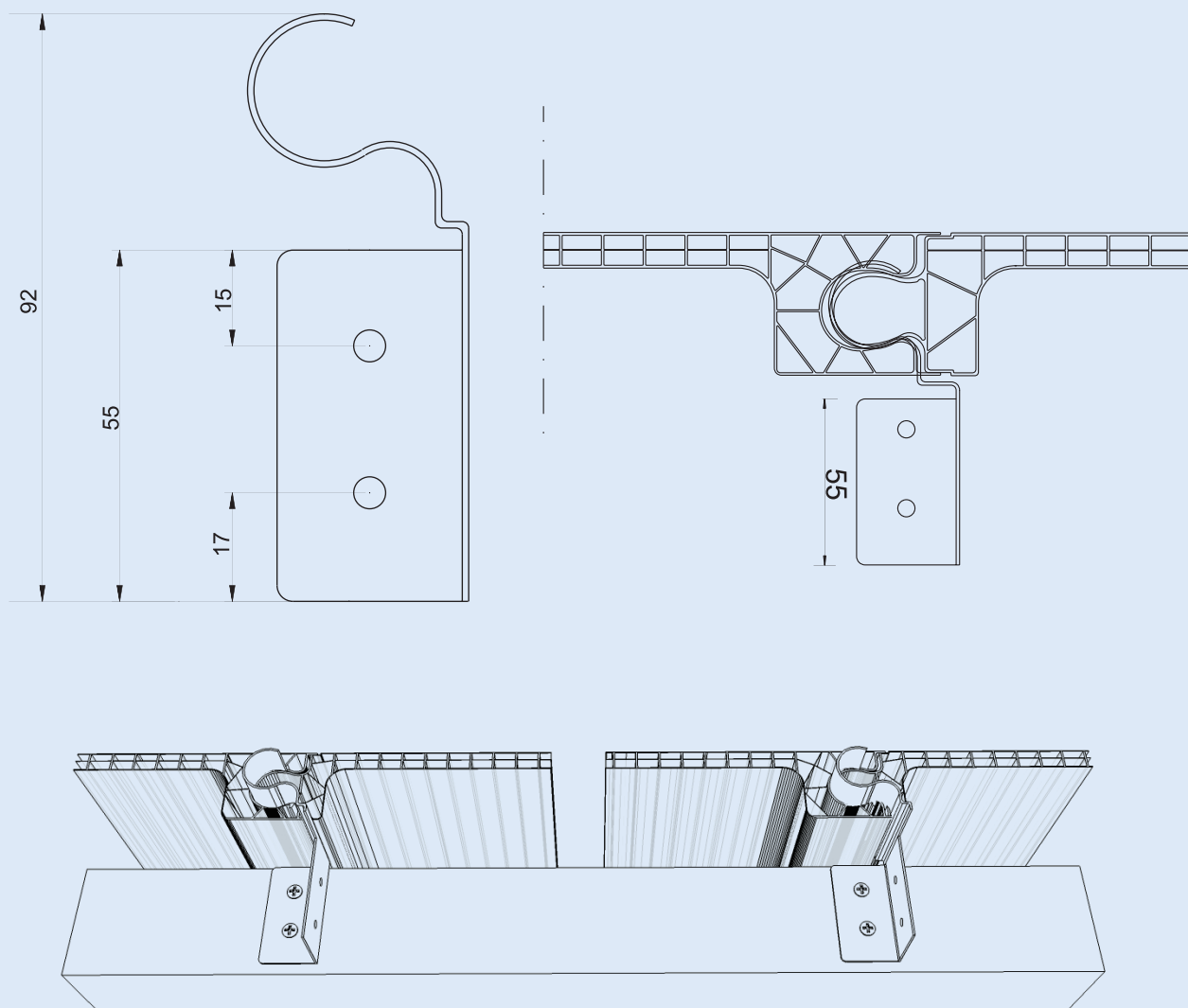
##### General

The frame fastener **49401001** fastens the PC panels 2410-3 onto supporting substructure.

##### Article number

**49401001** = Fastener for 2410-3

Article number: 49401001



## 1.2.3.0

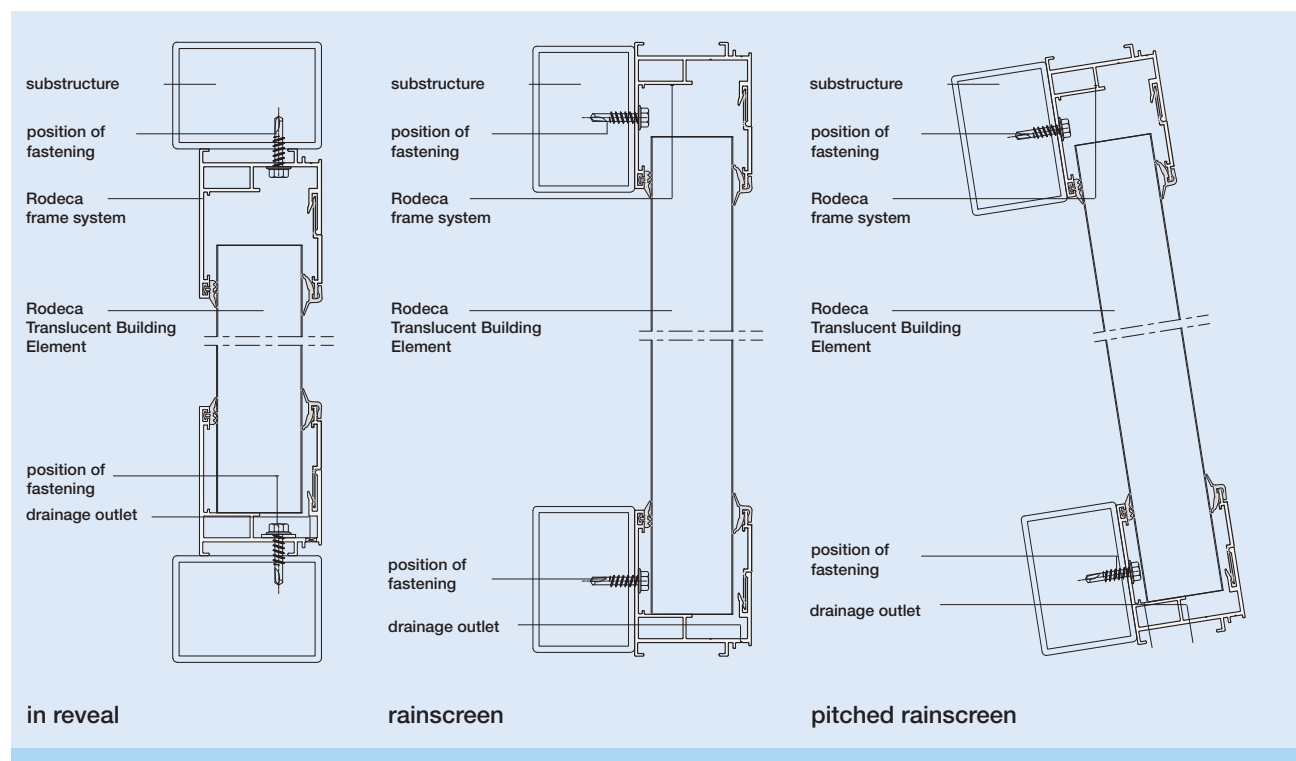
### Translucent Building Elements

Frame system thermally and non-thermally broken

General Information

Stand: 02/16

#### Mounting situation



#### General

The examples shown above illustrate the use of Rodeca frame profiles for mounting in reveal, as rainscreen or as a pitched rainscreen construction.

In all cases the sealing between frame sections, frame profile and substructure should be adapted to local conditions. The proof of aluminium profiles, their fixings and the fixing of Rodeca fasteners must be kept in an individual case. Installation of the aluminium profiles with **stainless steel** screws and sealing disc. Dimensions and size according to substructure and extract values of fixing materials. Rodeca assembly instructions must be observed.

Rodeca frame systems are made of extruded Aluminium profiles consisting of aluminium EN AW-6060, status T 66 according to DIN EN 755-2. The ribs are made of fiber glass reinforced polyamide PA 66 with fiber glass part of 25%. The gaskets are made of TPE.

#### Please note:

The coefficient of linear expansion for Aluminium profiles = 0.023 mm/m°C. Polycarbonate panels = 0.065 mm/m°C.

#### Initial lengths/-units

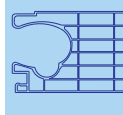
Aluminium profiles	6,00 m
Front plate	2,0 und 3,0 m
TPE gaskets, grey or black or special colour on request	50 m rolls
Profile connector	10 cm PU 4pcs.

#### Versions

Aluminium - mill finish
Aluminium - anodized E6/EV1
Aluminium - powder coated according to RAL

Installation manuals can be downloaded on our website [www.rodeca.de](http://www.rodeca.de).

If there are any further questions on the proper implementation of your Rodeca project, please contact us.





## 1.2.4.1

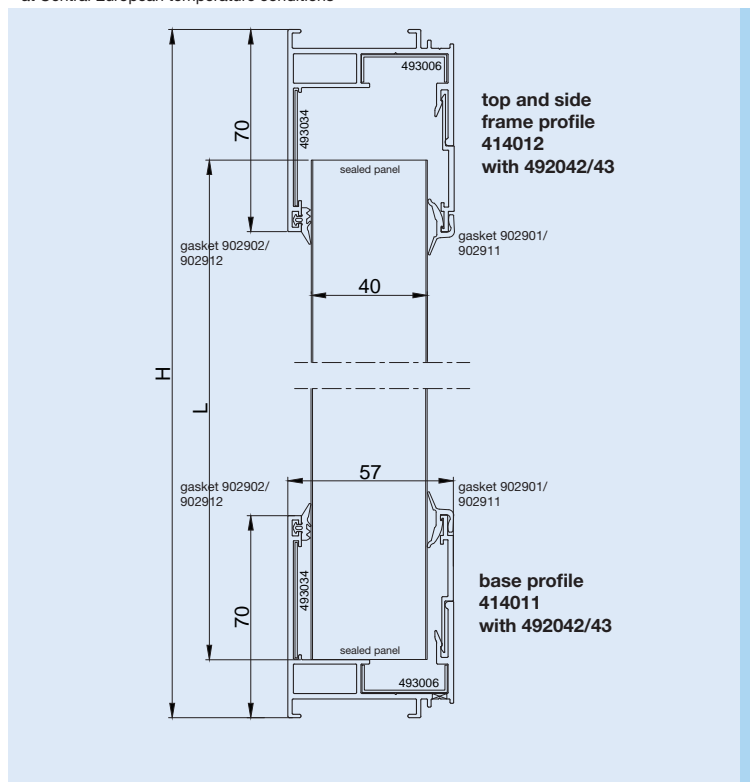
### Translucent Building Elements

Series **41 40** | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile 414012**  
**Base profile 414011**

#### Article numbers

**414012** = Top and side frame profile  
493034 = Profile connector for 414012  
493006 = Profile connector for 414012

**414011** = Base profile  
493034 = Profile connector for 414011  
493006 = Profile connector for 414011

**492042** = Front plate in L = 2.0 m

**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey

**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey

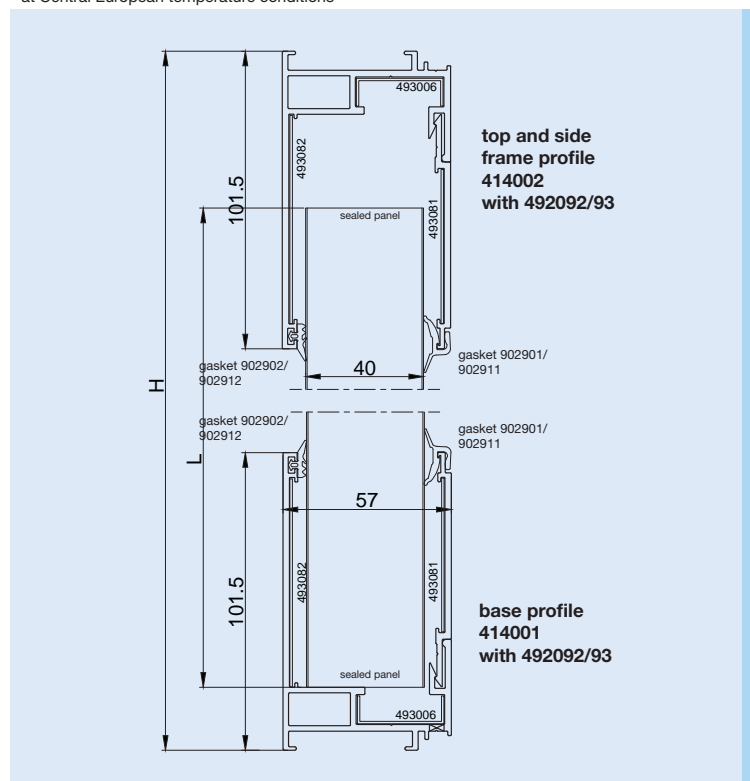
**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm  
less 65 mm at H > = 1500 mm  
less 70 mm at H < = 1500 mm

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile 414002**  
**Base profile 414001**

#### Article numbers

**414002** = Top and side frame profile  
493082 = Profile connector for 414002  
493006 = Profile connector for 414002

**414001** = Base profile  
493082 = Profile connector for 414001  
493006 = Profile connector for 414001

**492092** = Front plate in L = 2.0 m

**492093** = Front plate in L = 3.0 m

493081 = Profile connector for 492092/93

**902901** = Outer plug gasket TPE grey

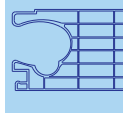
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey

**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm - 75 mm



## 1.2.4.2

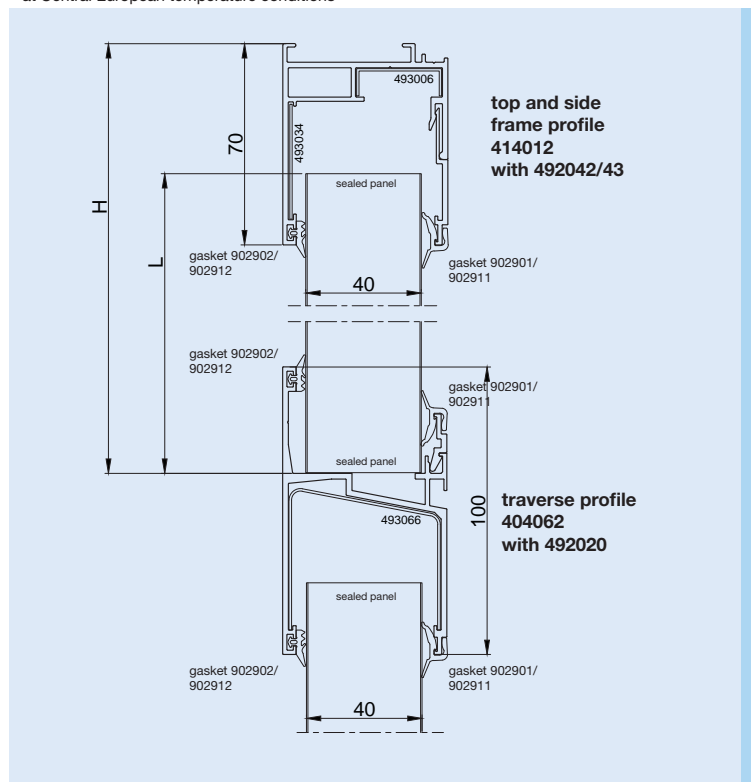
### Translucent Building Elements

Series **41 40** | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 414012  
**Traverse profile** 404062

#### Article numbers

414012 = Top and side frame profile  
493034 = Profile connector for 414012  
493006 = Profile connector for 414012

492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

404062 = Traverse profile  
493066 = Profile connector for 404062

492020 = Front plate in L = 2.0 m

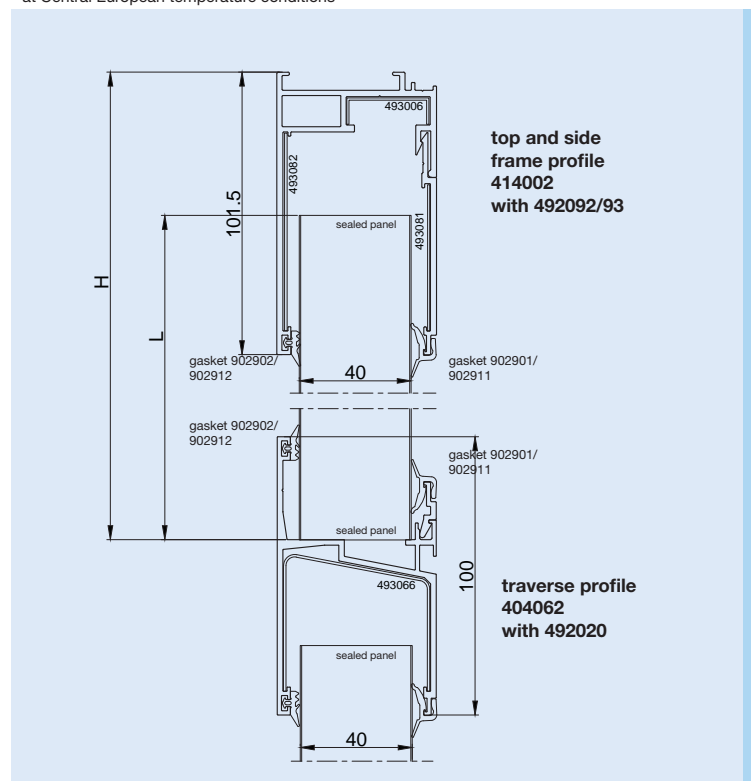
902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - 45 mm

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** 414002  
**Traverse profile** 404062

#### Article numbers

414002 = Top and side frame profile  
493082 = Profile connector for 414002  
493006 = Profile connector for 414002

492092 = Front plate in L = 2.0 m  
492093 = Front plate in L = 3.0 m  
493081 = Profile connector for 492092/93

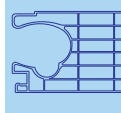
404062 = Traverse profile  
493066 = Profile connector for 404062

492020 = Front plate in L = 2.0 m

902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - 55 mm



## 1.2.4.3

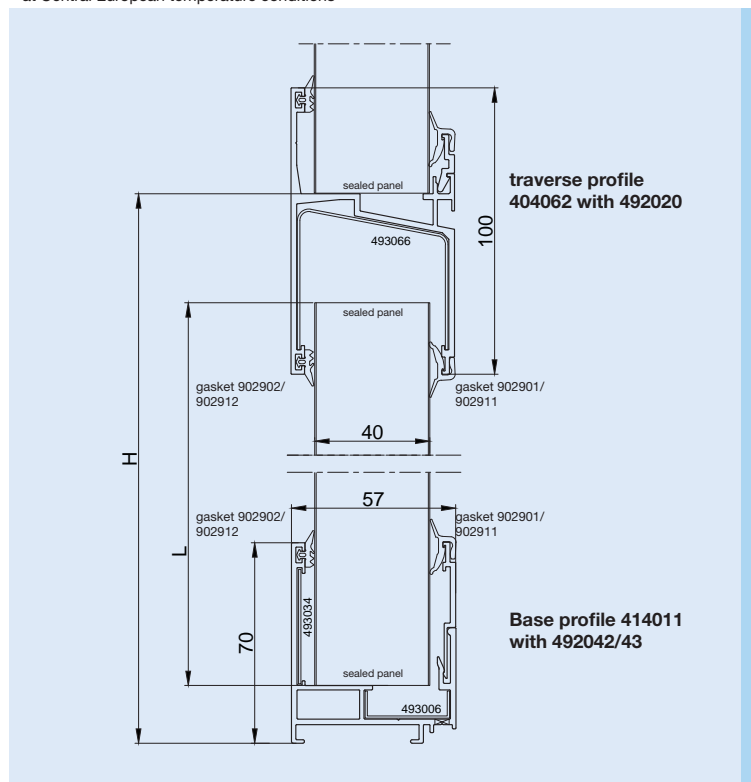
### Translucent Building Elements

Series 41 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Traverse profile** 404062  
**Base profile** 414011

#### Article numbers

**404062** = Traverse profile  
493066 = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

**414011** = Base profile  
493034 = Profile connector for 414011  
493006 = Profile connector for 414011

**492042** = Front plate in L = 2.0 m

**492043** = Front plate in L = 3.0 m

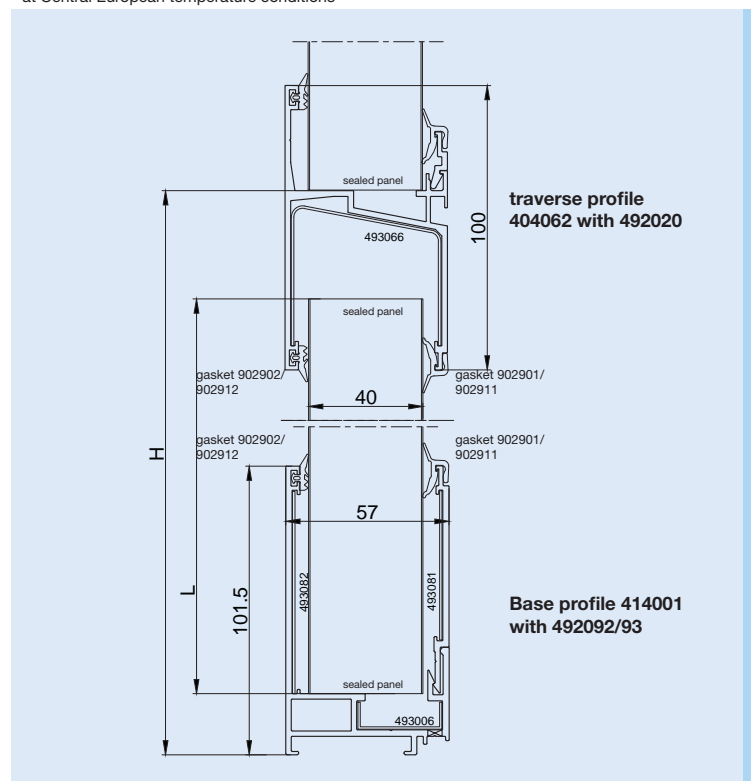
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 60 \text{ mm}$

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Traverse profile** 404062  
**Base profile** 414001

#### Article numbers

**404062** = Traverse profile  
493066 = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

**414001** = Base profile  
493082 = Profile connector for 414002  
493006 = Profile connector for 414002

**492092** = Front plate in L = 2.0 m

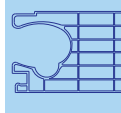
**492093** = Front plate in L = 3.0 m

493081 = Profile connector for 492092/93

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 60 \text{ mm}$



## 1.2.4.4

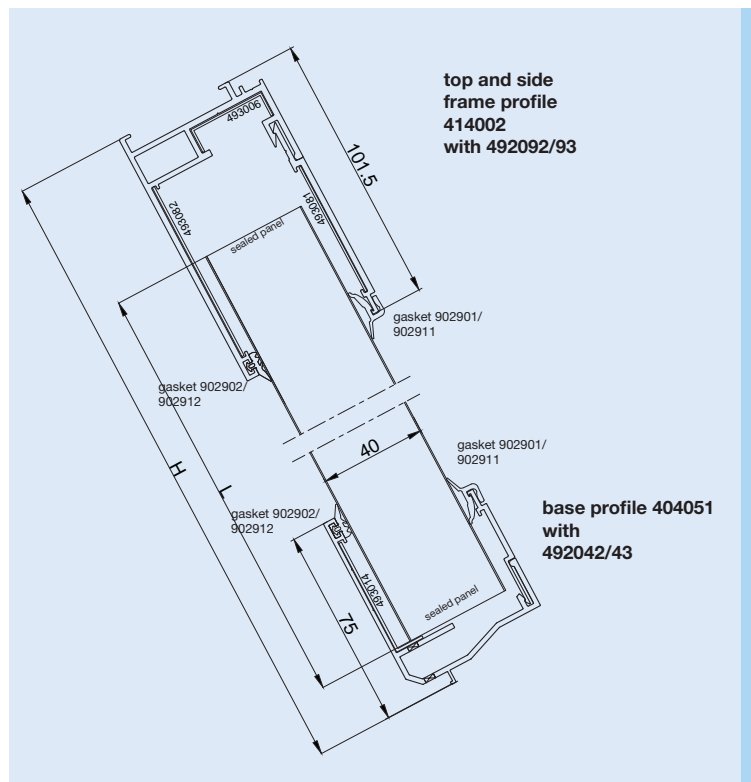
### Translucent Building Elements

Series **41 40** | Frame system non-thermally broken

Stand: 02/16

#### Pitched installation >15° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** **414002**  
**Base profile** **404051**

#### Article numbers

**414002** = Top and side frame profile  
**493082** = Profile connector for 414002  
**493006** = Profile connector for 414002

**492092** = Front plate in L = 2.0 m  
**492093** = Front plate in L = 3.0 m  
**493081** = Profile connector for 492092/93

**404051** = Base profile  
**493014** = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

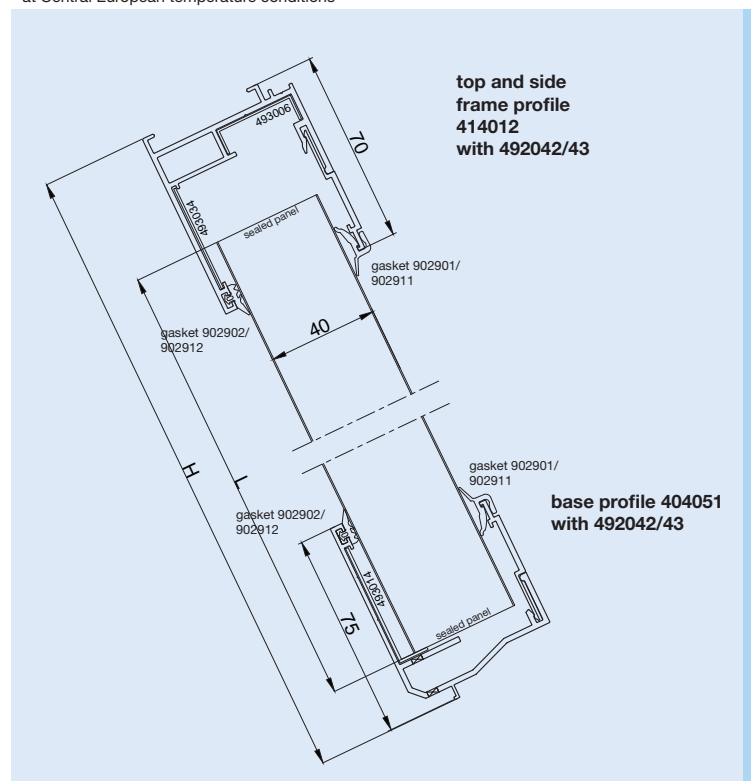
**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm - 75 mm

#### Pitched installation >15° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **414012**  
**Base profile** **404051**

#### Article numbers

**414012** = Top and side frame profile  
**493034** = Profile connector for 414012  
**493006** = Profile connector for 414012

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**404051** = Base profile  
**493014** = Profile connector for 404051

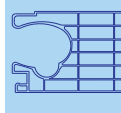
**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm - 65 mm



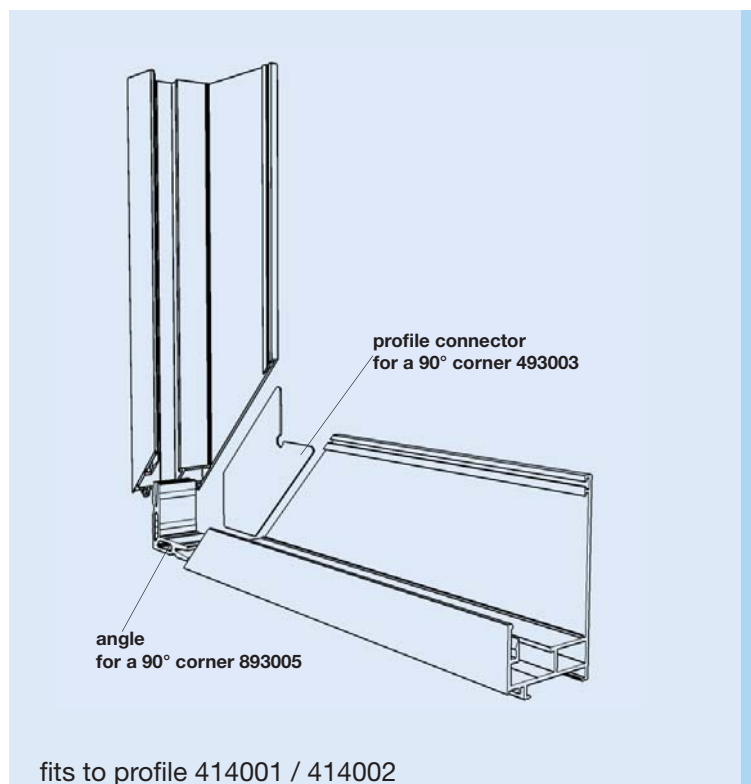
## 1.2.4.6

### Translucent Building Elements

Series **41 40** | Frame system non-thermally broken  
corner connection

Stand: 02/16

#### 90° corner connection 414005



#### General

90° corner connections of series 41 are available as prefabricated components.

The corner connections are made of 0.55m long frame profiles, incl. front plates. The connections are sealed with profile connectors and sealant and thus save installation time and effort.

#### Initial lengths/-units

Prefabricated corner profile incl. front plates and profile connectors	
Length 0.55 m	1 pc. PU
Profile connector 493003	4 pcs. PU
Angle for 90° corner 893005	4 pcs. PU
TPE gaskets, grey or black or special colour on request	50 m rolls

#### Article numbers

**414005** = 90° corner connection prefabricated  
incl. profile connectors and front plate,  
fits to profile 414001 & 414002

493003 = profile connector for a 90° corner  
of profile 414001/02

893005 = angle for a 90° corner of profile  
414001/02

**414015** = 90° corner connection prefabricated  
incl. profile connectors and front plate,  
fits to profile 414011 & 414012

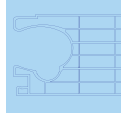
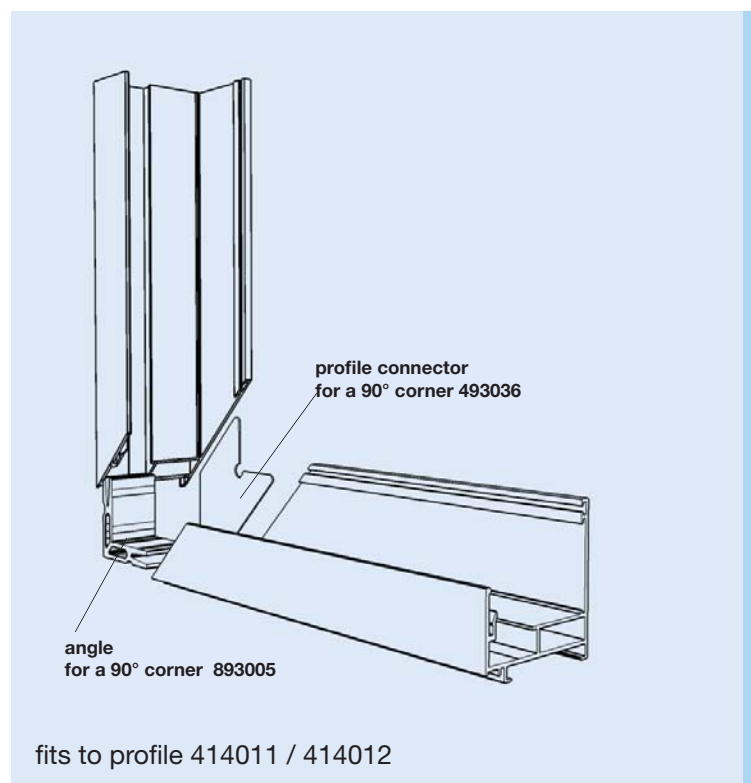
493036 = profile connector for a 90° corner  
of profile 414011/12

893005 = angle for a 90° corner of profile  
414001/02

#### Versions

Aluminium - mill finish  
Aluminium - anodized E6/EV1  
Aluminium - powder coated according to RAL

#### 90° corner connection 414015



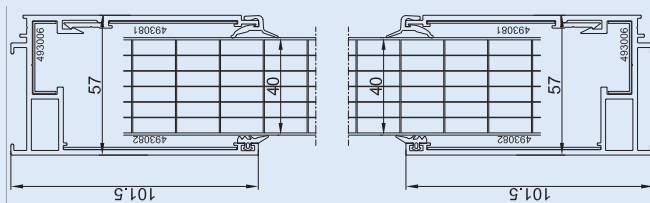
## 1.2.4.7

### Translucent Building Elements

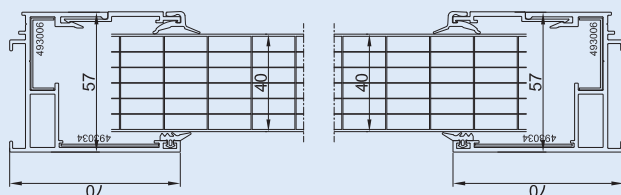
Series 41 40 | Frame system non-thermally broken

Stand: 02/16

#### Side connection



side and top profile 414002  
with  
492092/93



side and top profile 414012  
with  
492042/43

#### Side connection with frame profile series 41

##### Article numbers

**414002** = Top and side frame profile  
**493082** = Profile connector for 414002  
**493006** = Profile connector for 414002

**492092** = Front plate in L = 2.0 m  
**492093** = Front plate in L = 3.0 m  
**493081** = Profile connector for 492092/93

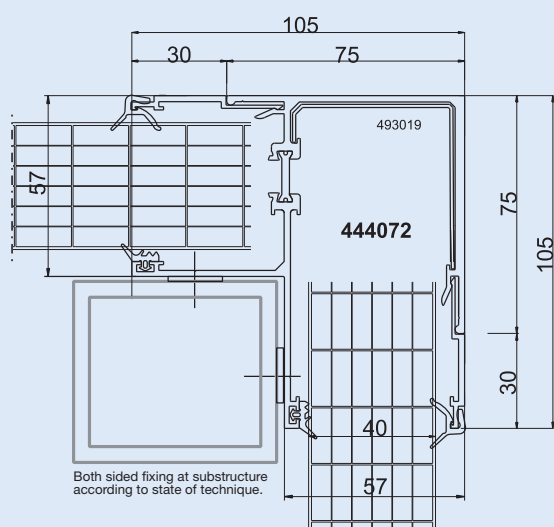
**414012** = Top and side frame profile  
**493034** = Profile connector for 414012  
**493006** = Profile connector for 414012

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

#### Side connection 90° corner



#### corner profile 444072

frame profiles of series 44 can be combined with frame profiles of series 41

#### Side connection 90° corner with profile 444072

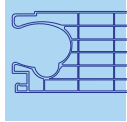
##### Article numbers

**444072** = Corner profile  
**493019** = Profile connector for 444072

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black



## 1.2.5.1

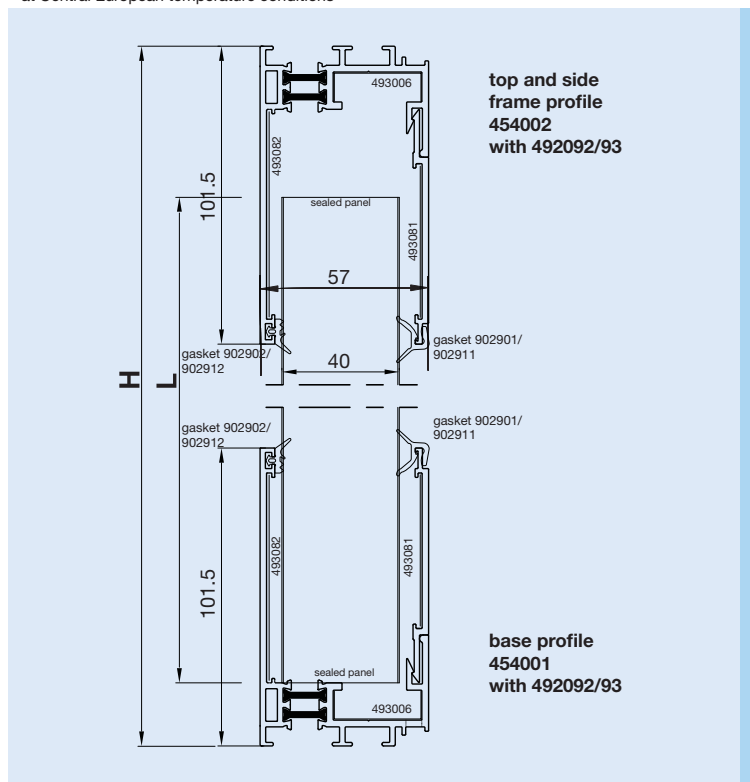
### Translucent Building Elements

Series 45 40 | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile 454002**  
**Base profile 454001**

#### Article numbers

454002 = Top and side frame profile  
493082 = Profile connector for 454002  
493006 = Profile connector for 454002

454001 = Base profile  
493082 = Profile connector for 454001  
493006 = Profile connector for 454001

492092 = Front plate in L = 2.0 m  
492093 = Front plate in L = 3.0 m  
493081 = Profile connector for 492092/93

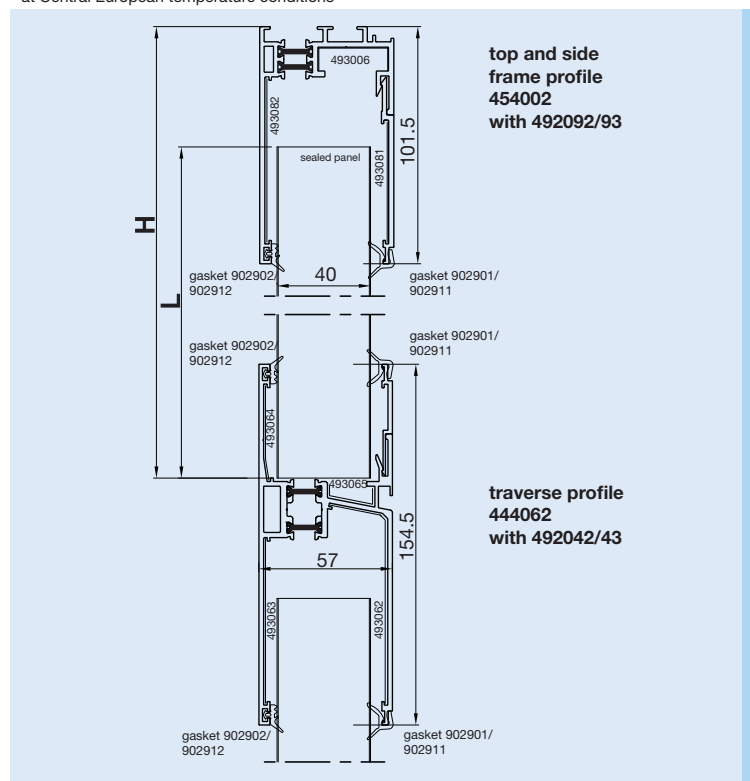
902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height H in mm} - 75 \text{ mm}$

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile 454002**  
**Traverse profile 444062**

#### Article numbers

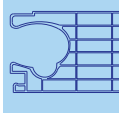
454002 = Top and side frame profile  
493082 = Profile connector for 454002  
493006 = Profile connector for 454002  
492092 = Front plate in L = 2.0 m  
492093 = Front plate in L = 3.0 m  
493081 = Profile connector for 492092/93

444062 = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062  
492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height H in mm} - 55 \text{ mm}$





## 1.2.5.2

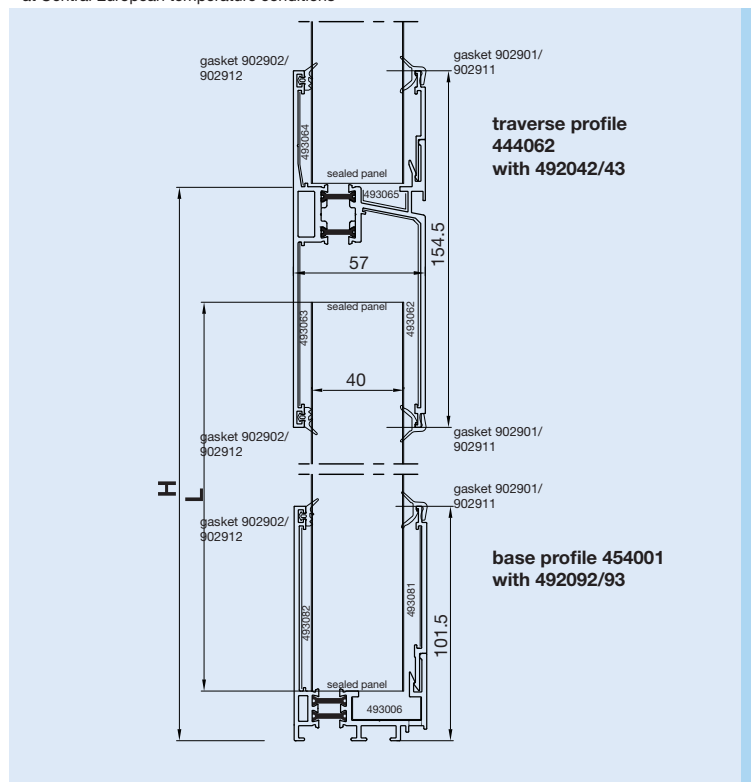
### Translucent Building Elements

Series **45 40** | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Traverse profile** 444062  
**Base profile** 454001

#### Article numbers

**444062** = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062  
**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m  
**454001** = Base profile  
493082 = Profile connector for 454001  
493006 = Profile connector for 454001  
**492092** = Front plate in L = 2.0 m  
**492093** = Front plate in L = 3.0 m  
493081 = Profile connector for 492092/93

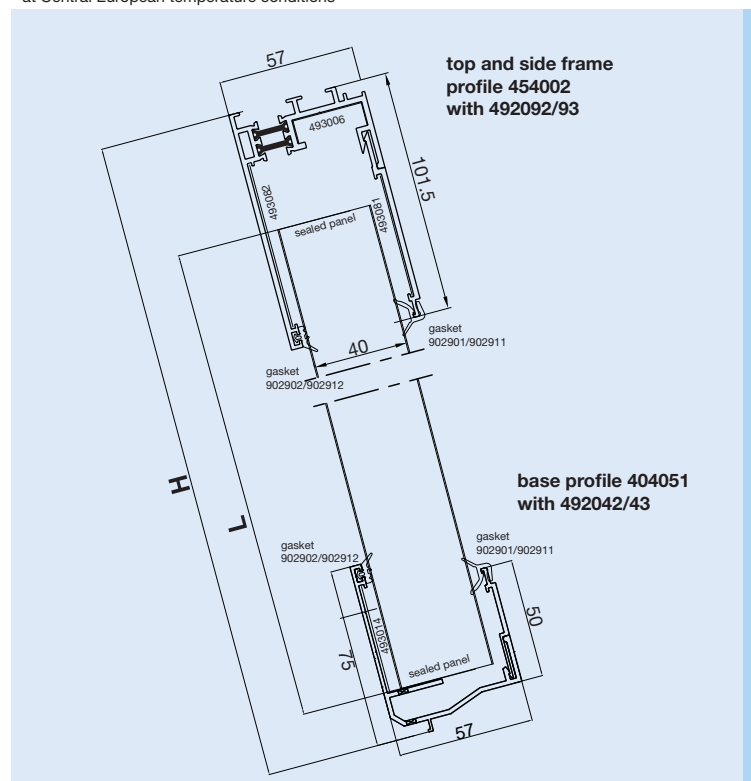
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - 80 mm

#### Pitched installation >15° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** 454002  
**Base profile** 404051

#### Article numbers

**454002** = Top and side frame profile  
493082 = Profile connector for 454002  
493006 = Profile connector for 454002  
**492092** = Front plate in L = 2.0 m  
**492093** = Front plate in L = 3.0 m  
493081 = Profile connector for 492092/93

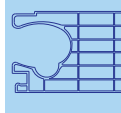
**404051** = Base profile  
493014 = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - 75 mm



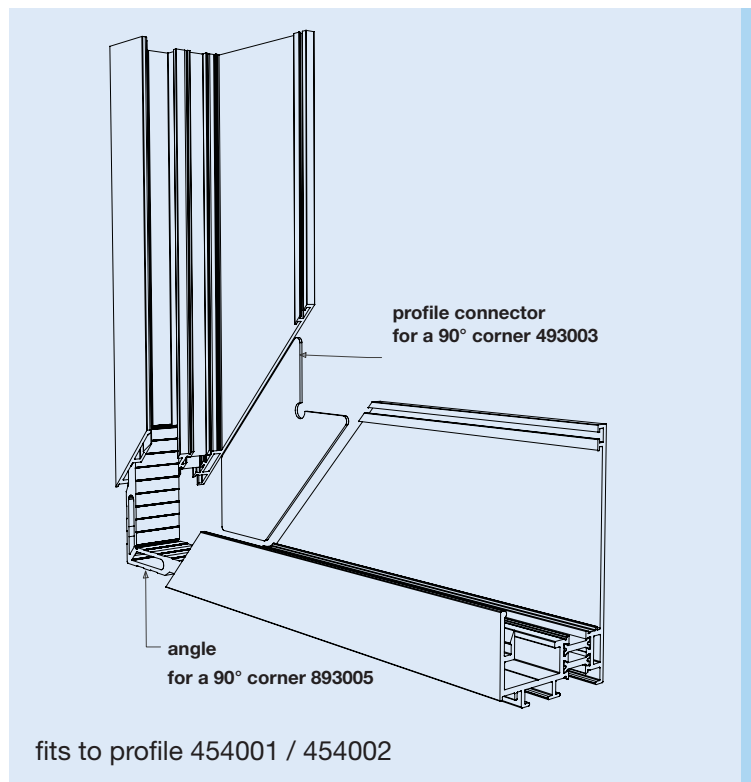
## 1.2.5.3

### Translucent Building Elements

Series **45 40** | Frame system thermally broken  
corner connection

Stand: 02/16

#### 90° corner connection 454005



#### General

90° corner connections of series 41 are available as prefabricated components.

The corner connections are made of 0.55m long frame profiles, incl. front plates. The connections are sealed with profile connectors and sealant and thus save installation time and effort.

#### Initial lengths/-units

Prefabricated corner profile incl. front plates and profile connectors

Length 0.55 m	1 pc. PU
Profile connector 493003	4 pcs. PU
Angle for 90° corner 893005	4 pcs. PU
TPE gaskets, grey or black	50 m rolls
or special colour on request	

#### Article numbers

**454005** = 90° corner connection prefabricated incl. profile connectors and front plate, fits to profile 454001 & 454002

493003 = profile connector for a 90° corner of profile 454001/02

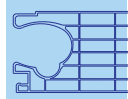
893005 = angle for a 90° corner of profile 454001/02

#### Versions

Aluminium - mill finish

Aluminium - anodized E6/EV1

Aluminium - powder coated according to RAL



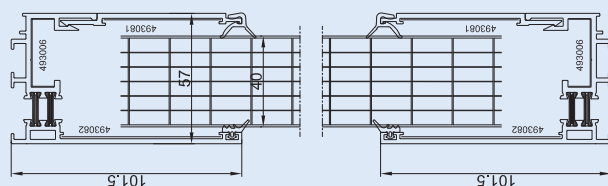
## 1.2.5.4

## Translucent Building Elements

Series 41 40 | Frame system thermally broken

- Stand: 02/16

## Side connection

Side frame profile 454002  
with 492092/93

## Side connection with frame profile series 45

## Article numbers

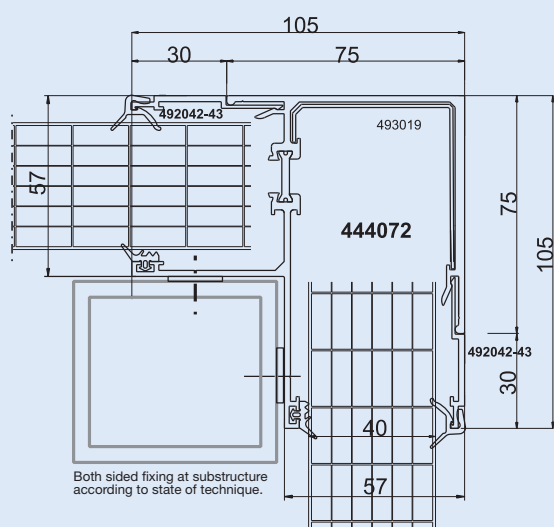
**454002** = Top and side frame profile  
**493082** = Profile connector for 414002  
**493006** = Profile connector for 414002

**492092** = Front plate in L = 2.0 m  
**492093** = Front plate in L = 3.0 m  
**493081** = Profile connector for 492092/93

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

### Side connection 90° corner



corner profile 444072

frame profiles of series 44 can be combined with frame profiles of series 45

### Side connection 90° corner with profile 444072

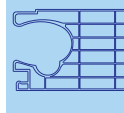
## Article numbers

444072 = Corner profile  
493019 = Profile connector for 444072

492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black



## 1.2.6.1

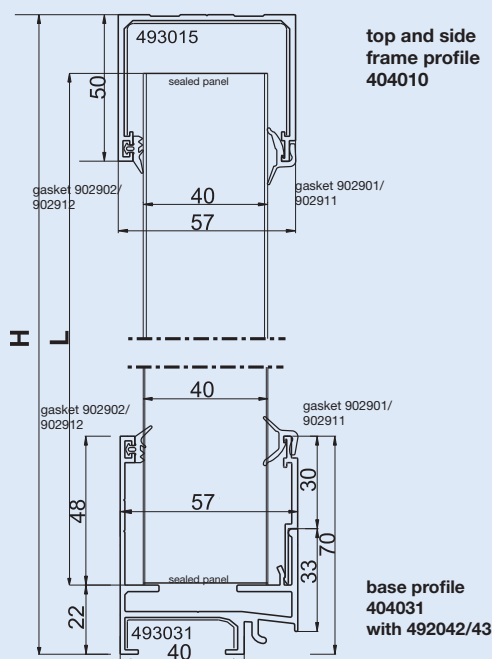
### Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404010  
**Base profile** 404031

#### Article numbers

404010 = Top and side frame profile  
493015 = Profile connector for 404010

404031 = Base profile  
493031 = Profile connector for 404031

492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

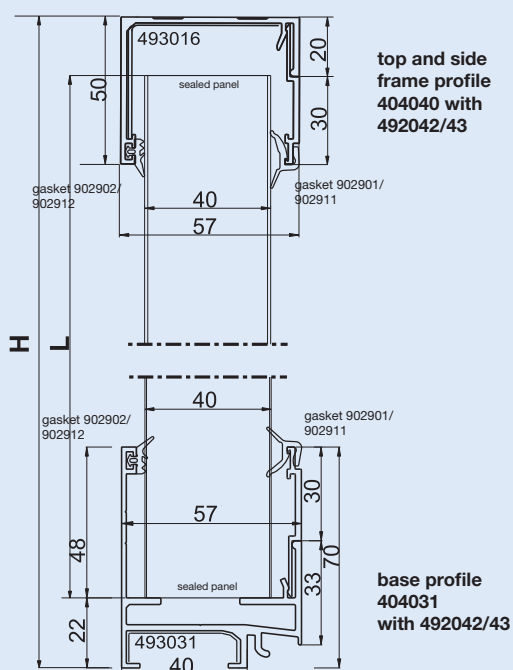
902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm  
less 50 mm at H > = 1,500 mm  
less 55 mm at H < = 1,500 mm

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404040  
**Base profile** 404031

#### Article numbers

404040 = Top and side frame profile  
493016 = Profile connector for 404040

492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

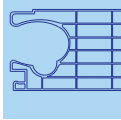
404031 = Base profile  
493031 = Profile connector for 404031

492042 = Front plate in L = 2.0 m  
492043 = Front plate in L = 3.0 m

902901 = Outer plug gasket TPE grey  
902911 = Outer plug gasket TPE black

902902 = Inner lip gasket TPE grey  
902912 = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm  
less 50 mm at H > = 1,500 mm  
less 55 mm at H < = 1,500 mm



## 1.2.6.2

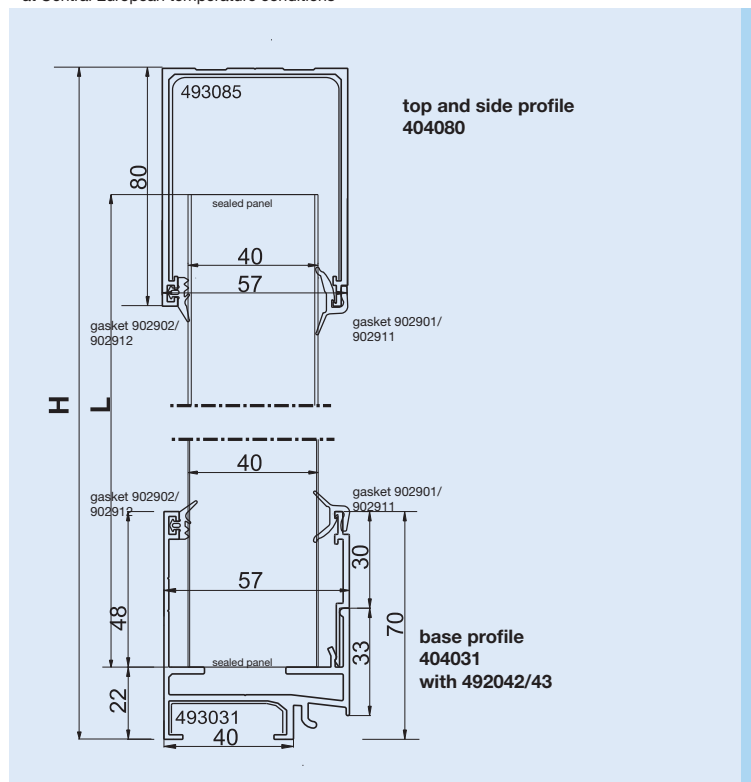
### Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** 404080  
**Base profile** 404031

#### Article numbers

**404080** = Top and side frame profile  
**493085** = Profile connector for 404080

**404031** = Base profile  
**493031** = Profile connector for 404031

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

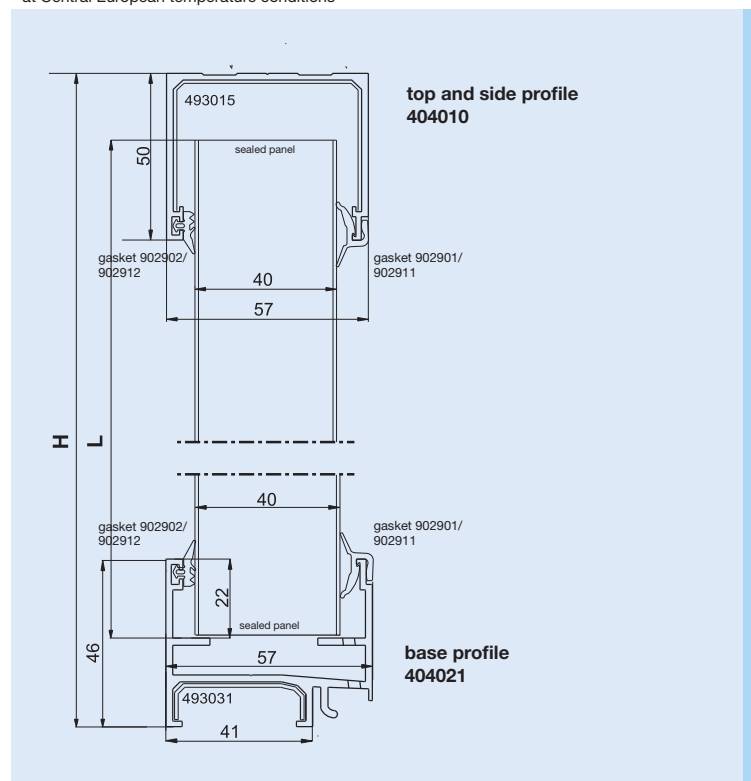
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 60 \text{ mm}$

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404010  
**Base profile** 404021

#### Article numbers

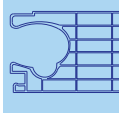
**404010** = Top and side profile  
**493015** = Profile connector for 404010

**404021** = Base profile  
**493031** = Profile connector for 404021

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm}$   
less 55 mm bei  $H > 1,500 \text{ mm}$   
less 60 mm bei  $H \leq 1,500 \text{ mm}$



### 1.2.6.3

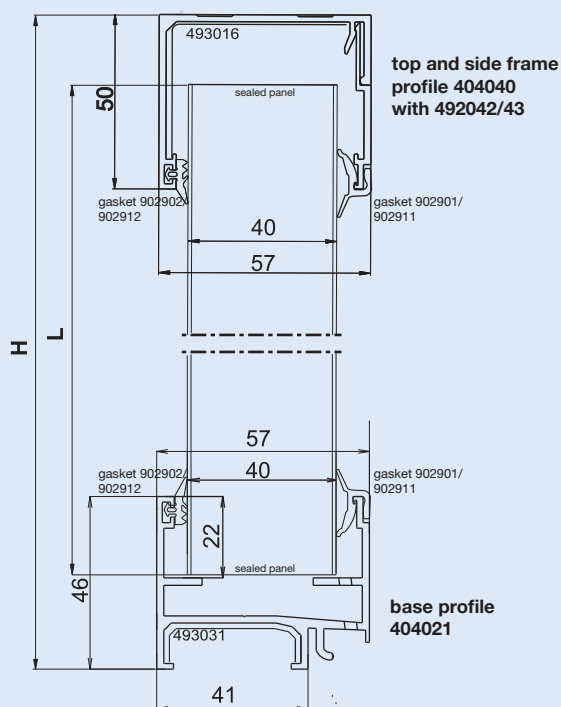
## Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

- Stand: 02/16

Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



Top profile	404040
Base profile	404021

## Article numbers

**404040** = Top and side frame profile  
**493016** = Profile connector for 404040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

404021 = Base profile  
493031 = Profile connector for 404021

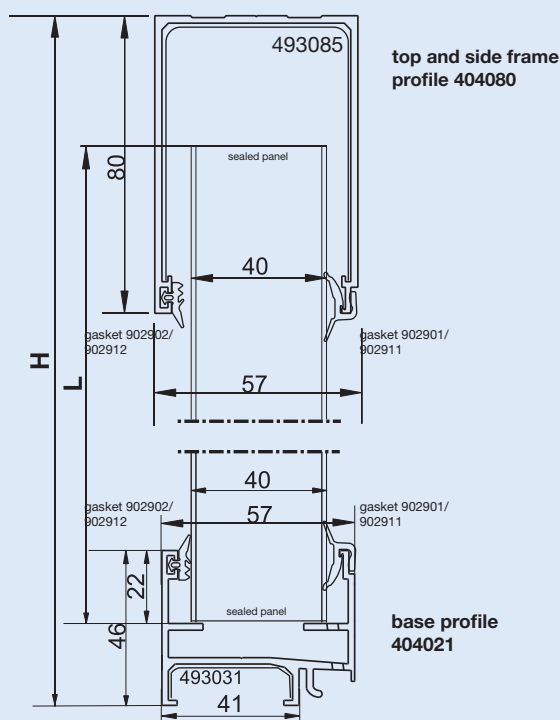
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 50 \text{ mm}$

Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



Top profile	404080
Base profile	404021

## Article numbers

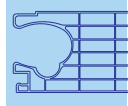
**404080** = Top and side frame profile  
**493085** = Profile connector for 404080

404021 = Base profile  
493031 = Profile connector for 404021

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L$  in mm = Height  $H$  in mm  
 less 75 mm at  $H \geq 1,500$  mm  
 less 85 mm at  $H \leq 1,500$  mm



## 1.2.6.4

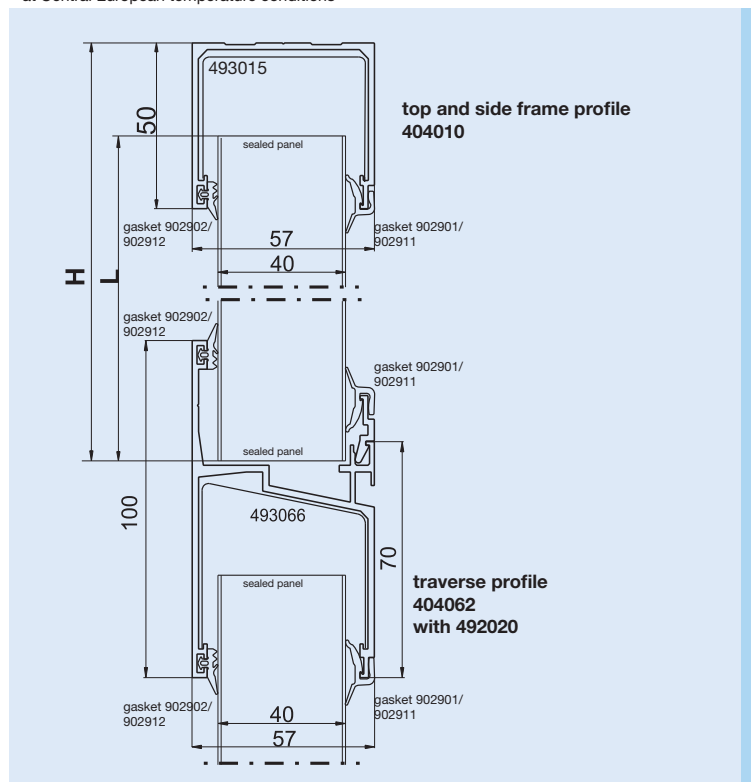
### Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404010  
**Traverse profile** 404062

#### Article numbers

**404010** = Top and side frame profile  
**493015** = Profile connector for 404010

**404062** = Traverse profile  
**493066** = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

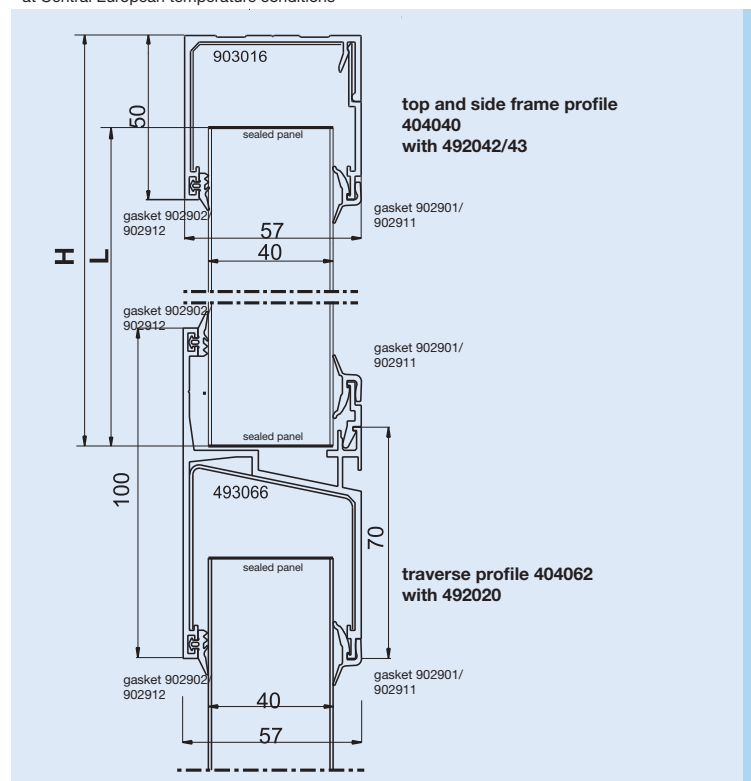
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm  
less 25 mm at H > = 1,500 mm  
less 30 mm at H < = 1,500 mm

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404040  
**Traverse profile** 404062

#### Article numbers

**404040** = Top and side frame profile  
**903016** = Profile connector for 404040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

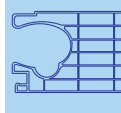
**404062** = Traverse profile  
**493066** = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm  
less 25 mm at H > = 1,500 mm  
less 30 mm at H < = 1,500 mm





## 1.2.6.5

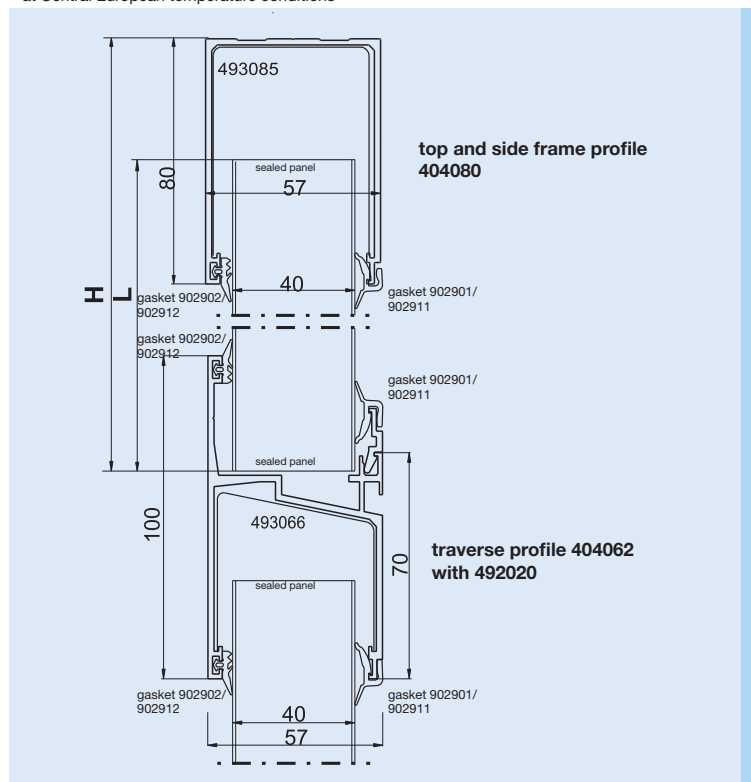
### Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** 404080  
**Traverse profile** 404062

#### Article numbers

**404080** = Top and side frame profile  
**493085** = Profile connector for 404080

**404062** = Traverse profile  
**493066** = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

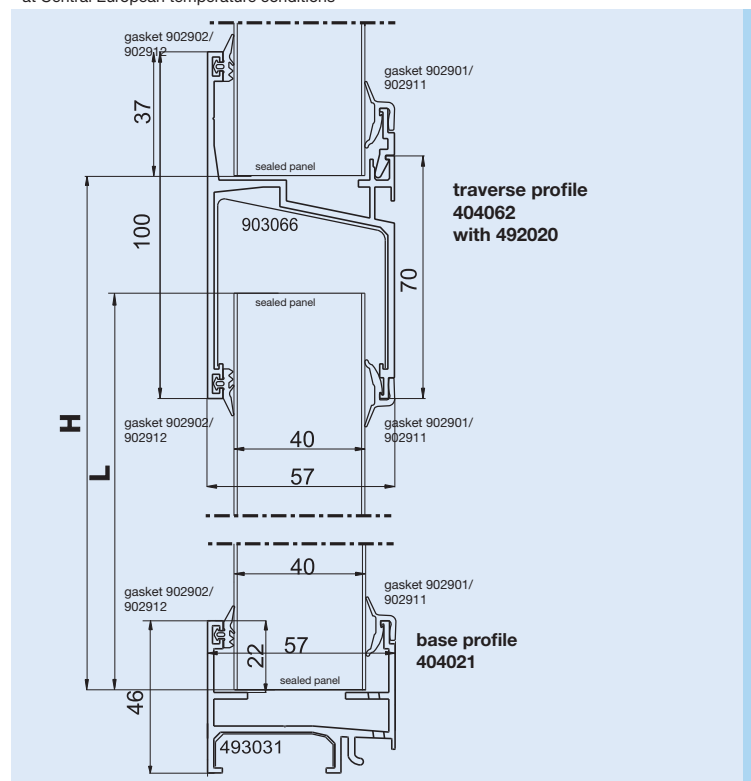
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - 45 mm

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Traverse profile** 404062  
**Base profile** 404021

#### Article numbers

**404062** = Traverse profile  
**493066** = Profile connector for 404062

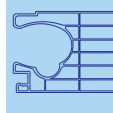
**492020** = Front plate in L = 2.0 m

**404021** = Base profile  
**493031** = Profile connector for 404021

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm  
less 60 mm at H > = 1,500 mm  
less 70 mm at H < = 1,500 mm



## 1.2.6.6

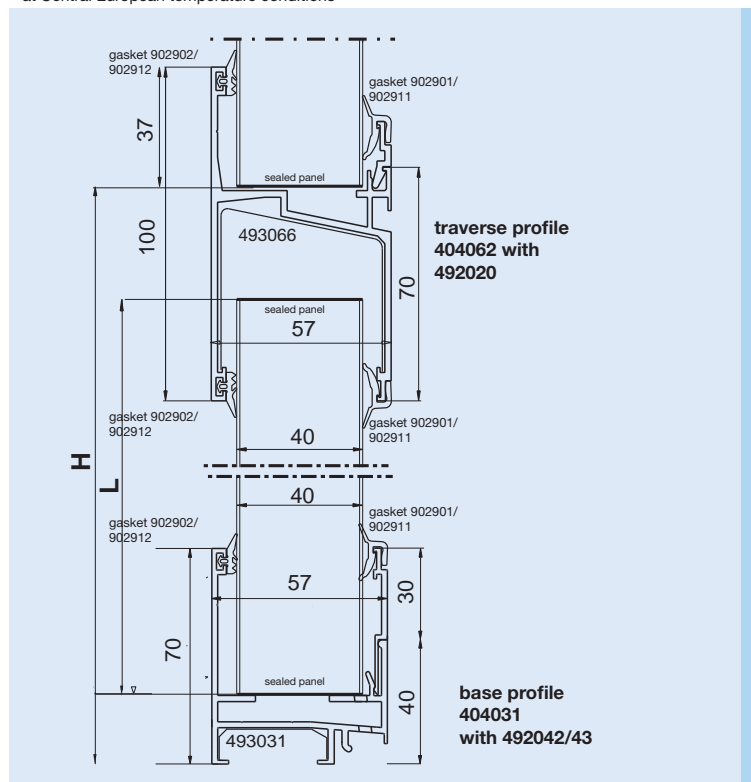
### Translucent Building Elements

Series **40** 40 | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Traversal profile** 404062  
**Base profile** 404031

#### Article numbers

**404062** = Traversal profile  
**493066** = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

**404031** = Base profile  
**493031** = Profile connector for 404031

**492042** = Front plate in L = 2.0 m

**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey

**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey

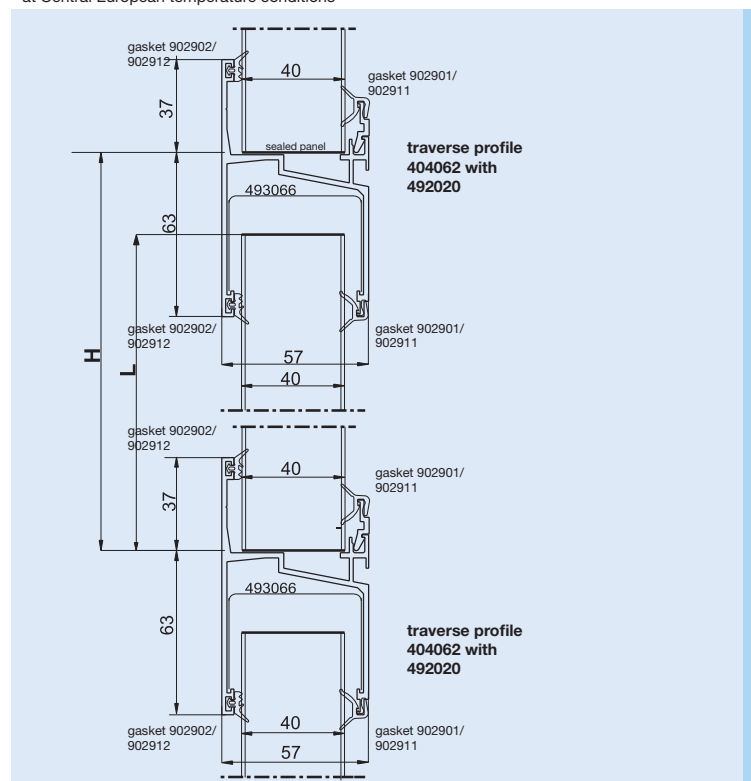
**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm  
less 60 mm at H > = 1,500 mm  
less 70 mm at H < = 1,500 mm

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Traversal profile** 404062  
**Traversal profile** 404062

#### Article numbers

**404062** = Traversal profile  
**493066** = Profile connector for 404062

**492020** = Front plate in L = 2.0 m

**902901** = Outer plug gasket TPE grey

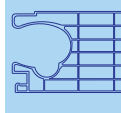
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey

**902912** = Inner lip gasket TPE black

Calculation of panel length:

L in mm = Height H in mm - 30 mm



## 1.2.6.7

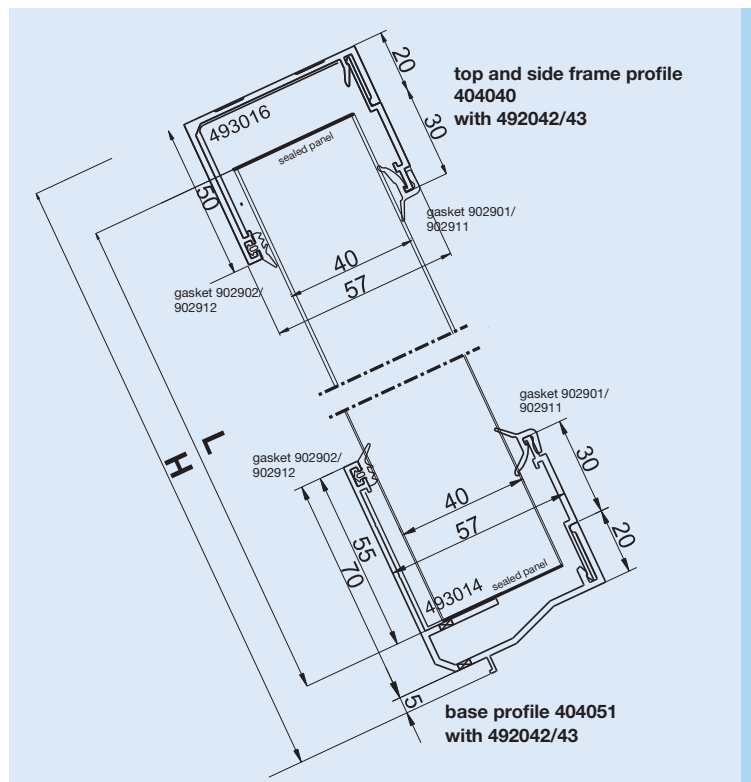
### Translucent Building Elements

Series **40** 40 | Frame system non-thermally broken

Stand: 02/16

Pitched installation  $>15^\circ$  up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404040  
**Base profile** 404051

#### Article numbers

**404040** = Top and side frame profile  
**493016** = Profile connector for 404040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**404051** = Base profile  
**493014** = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

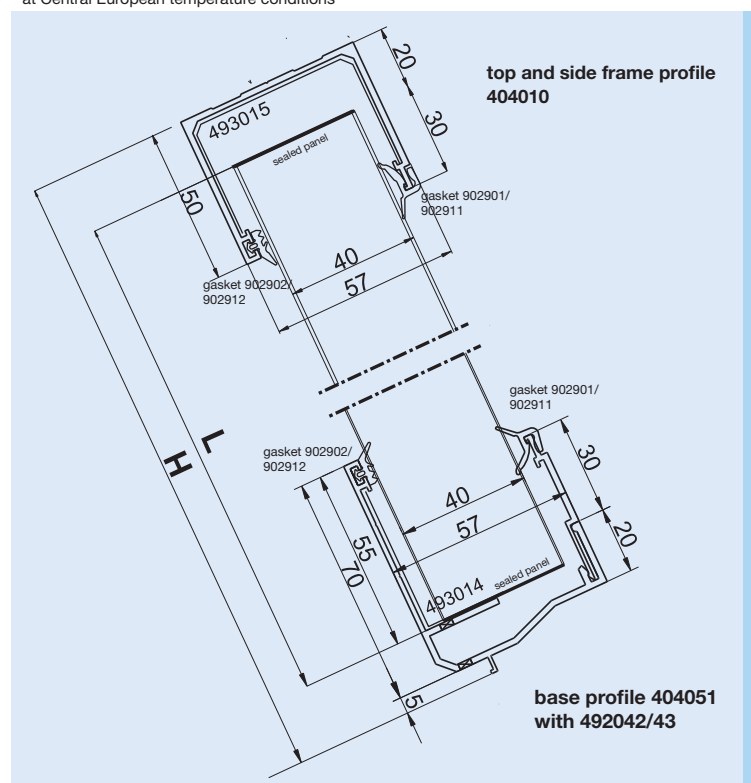
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 45 \text{ mm}$

Pitched installation  $>15^\circ$  up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 404010  
**Base profile** 404051

#### Article numbers

**404010** = Top and side frame profile  
**493015** = Profile connector for 404010

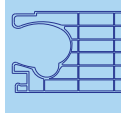
**404051** = Base profile  
**493014** = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 45 \text{ mm}$



## 1.2.6.8

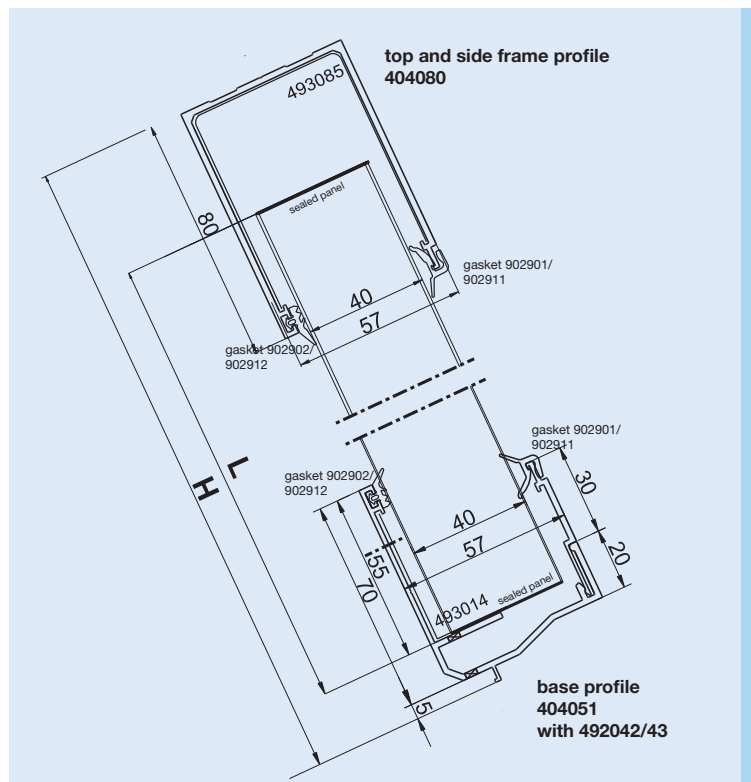
### Translucent Building Elements

Series **40** 40 | Frame system non-thermally broken

Stand: 02/16

Pitched installation >15° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** **404080**  
**Base profile** **404051**

#### Article numbers

**404080** = Top and side frame profile  
**493085** = Profile connector for 404080

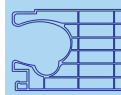
**404051** = Base profile  
**493014** = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **75 mm**



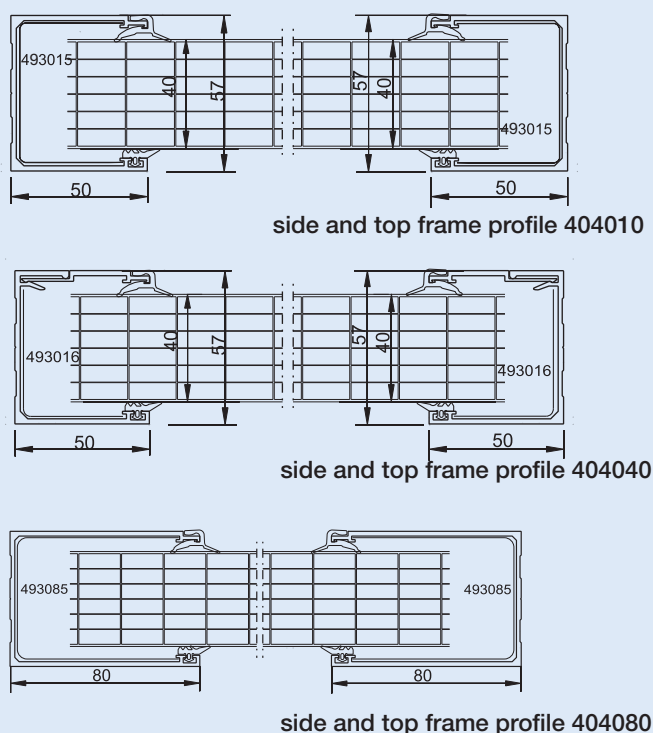
## 1.2.6.9

### Translucent Building Elements

Series 40 40 | Frame system non-thermally broken

Stand: 02/16

#### Side connection



#### Side connection with frame profile series 40

##### Article numbers

**404010** = Top and side frame profile  
**493015** = Profile connector for 404010

**404040** = Top and side frame profile  
**493016** = Profile connector for 404040

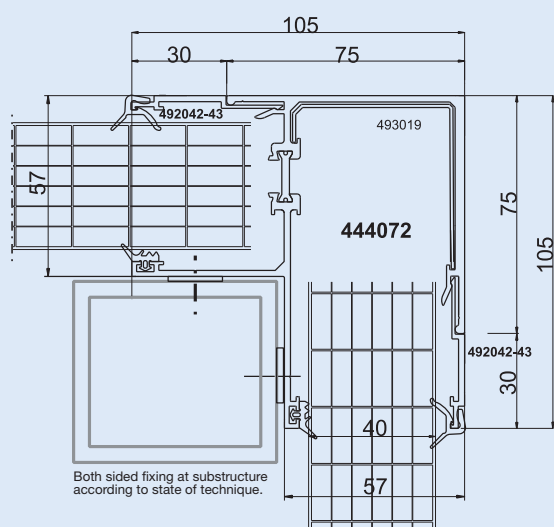
**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**404080** = Top and side frame profile  
**493085** = Profile connector for 404080

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

#### Side connection 90° corner



#### corner profile 444072

frame profiles of series 40 can be combined with frame profiles of series 45

#### Side connection 90° corner with profile 444072

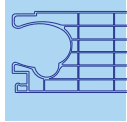
##### Article numbers

**444072** = Corner profile  
**493019** = Profile connector for 444072

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black



## 1.2.7.1

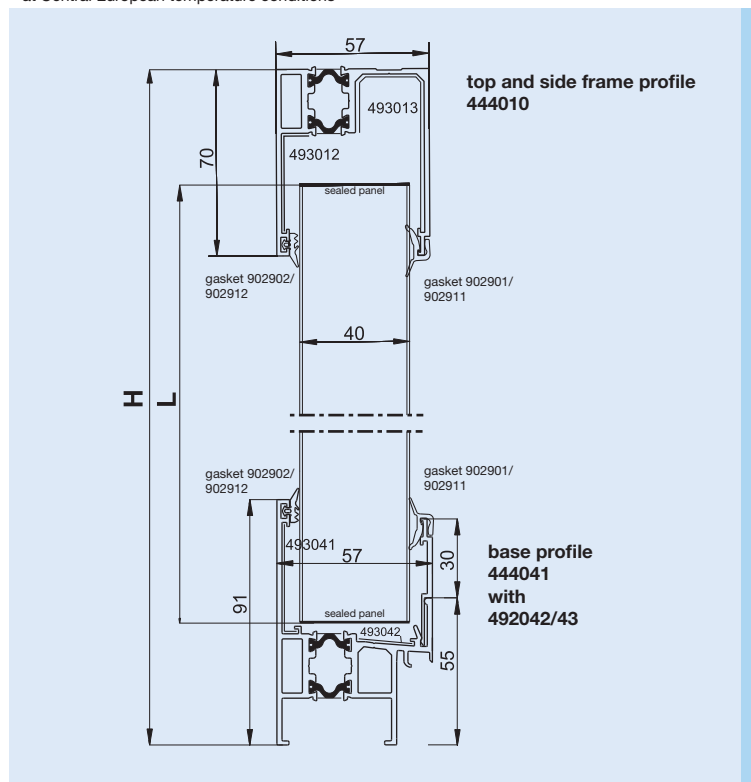
### Translucent Building Elements

Series **44 40** | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **444010**  
**Base profile** **444041**

#### Article numbers

**444010** = Top and side frame profile  
**493012** = Profile connector for 444010  
**493013** = Profile connector for 444010

**444041** = Base profile  
**493041** = Profile connector for 444041  
**493042** = Profile connector for 444041

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

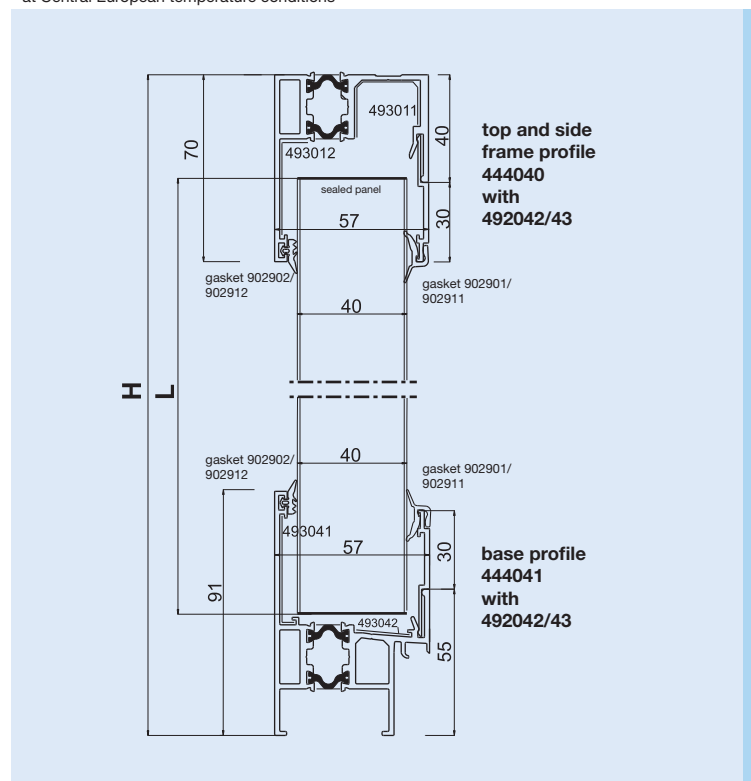
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **90 mm**

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **444040**  
**Base profile** **444041**

#### Article numbers

**444040** = Top and side frame profile  
**493011** = Profile connector for 444040  
**493012** = Profile connector for 444040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

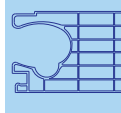
**444041** = Base profile  
**493041** = Profile connector for 444041  
**493042** = Profile connector for 444041

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **90 mm**



## 1.2.7.2

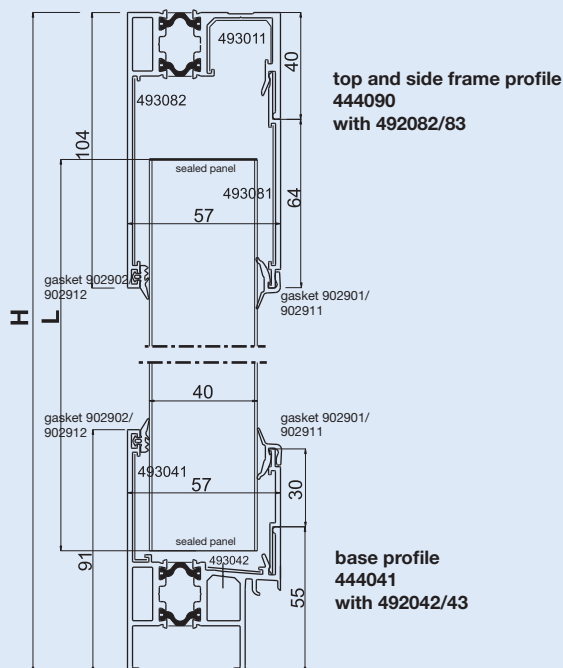
## Translucent Building Elements

Series 44 40 | Frame system thermally broken

- Stand: 02/16

Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



Top profile	444090
Base profile	444041

## Article numbers

**444090** = Top and side frame profile  
**493011** = Profile connector for 444090  
**493082** = Profile connector for 444090

**492082** = Front plate in L = 2.0 m  
**492083** = Front plate in L = 3.0 m  
**493081** = Profile connector for 492082/83

**444041** = Base profile  
493041 = Profile connector for 444041  
493042 = Profile connector for 444041

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

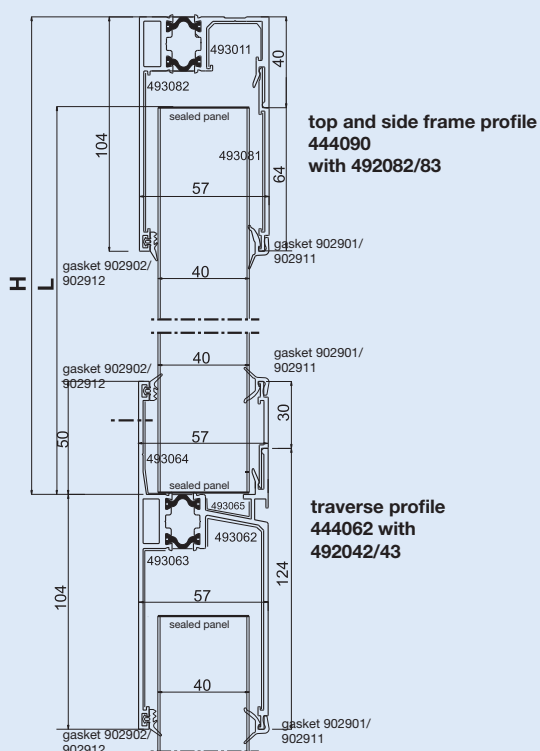
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 100 \text{ mm}$

Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



Top profile	444090
Traverse profile	444062

## Article numbers

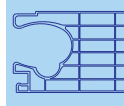
**444090** = Top and side frame profile  
 493011 = Profile connector for 444090  
 493082 = Profile connector for 444090  
**492082** = Front plate in L = 2.0 m  
**492083** = Front plate in L = 3.0 m  
 493081 = Profile connector for 492082/83

**444062** = Traverse profile  
**493062** = Profile connector for 444062  
**493063** = Profile connector for 444062  
**493064** = Profile connector for 444062  
**493065** = Profile connector for 444062  
**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 65 \text{ mm}$





## 1.2.7.3

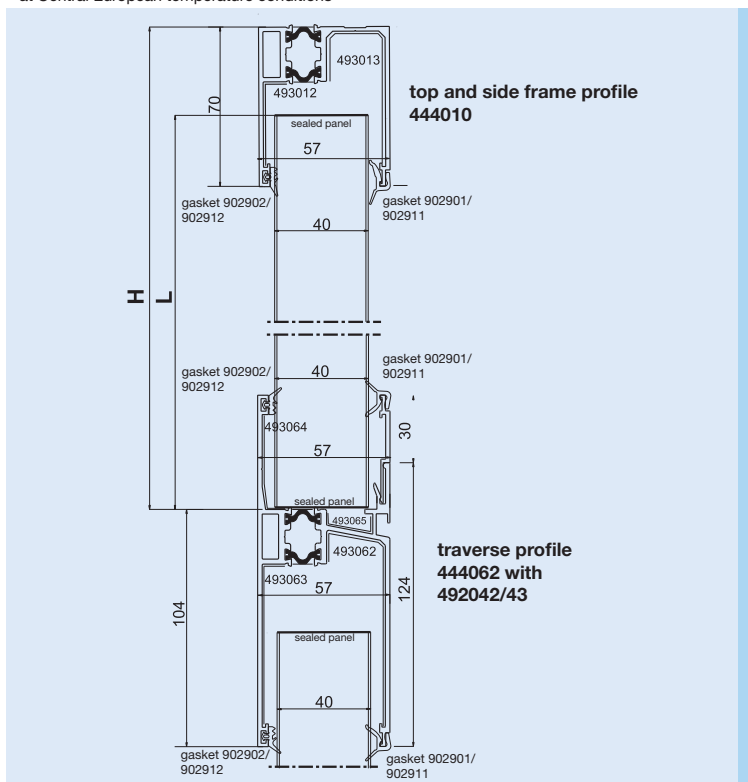
### Translucent Building Elements

Series **44** 40 | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 444010  
**Traverse profile** 444062

#### Article numbers

**444010** = Top and side frame profile  
493012 = Profile connector for 444010  
493013 = Profile connector for 444010

**444062** = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

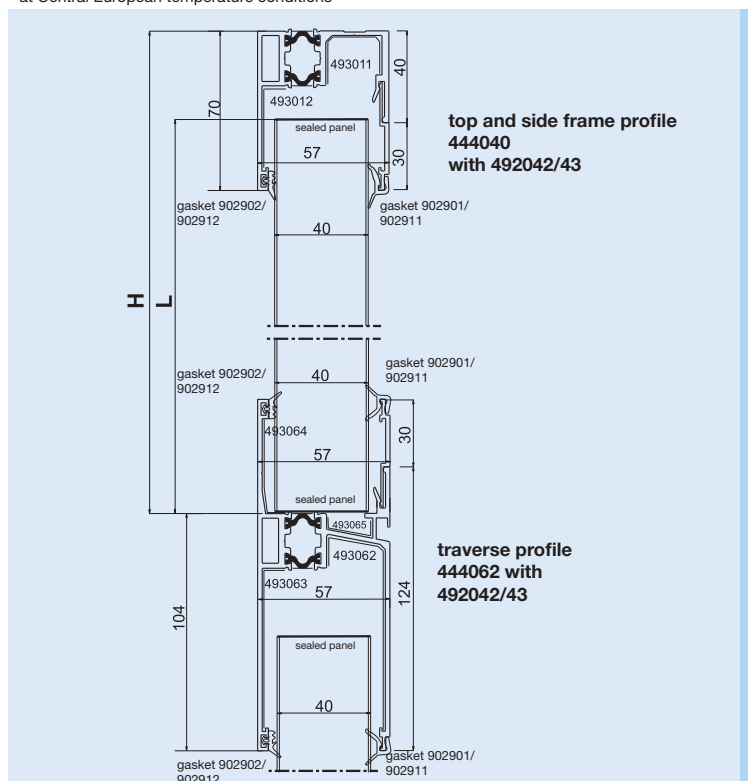
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **50 mm**

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 444040  
**Traverse profile** 444062

#### Article numbers

**444040** = Top and side frame profile  
493011 = Profile connector for 444040  
493012 = Profile connector for 444040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

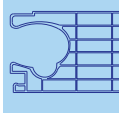
**444062** = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **50 mm**



## 1.2.7.4

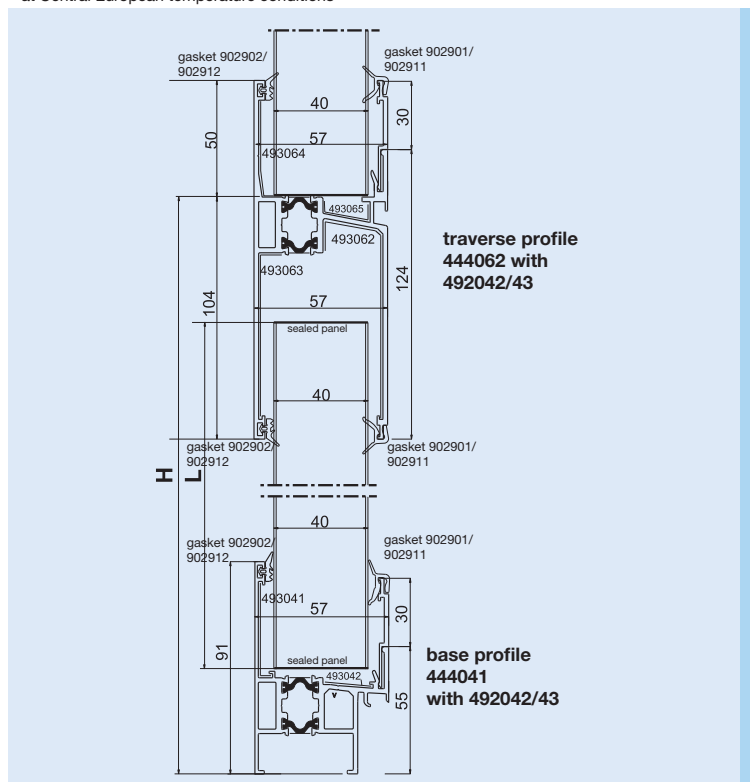
### Translucent Building Elements

Series 44 40 | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Traverse profile 444062**  
**Base profile 444041**

#### Article numbers

**444062** = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062

**444041** = Base profile  
493041 = Profile connector for 444041  
493042 = Profile connector for 444041

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

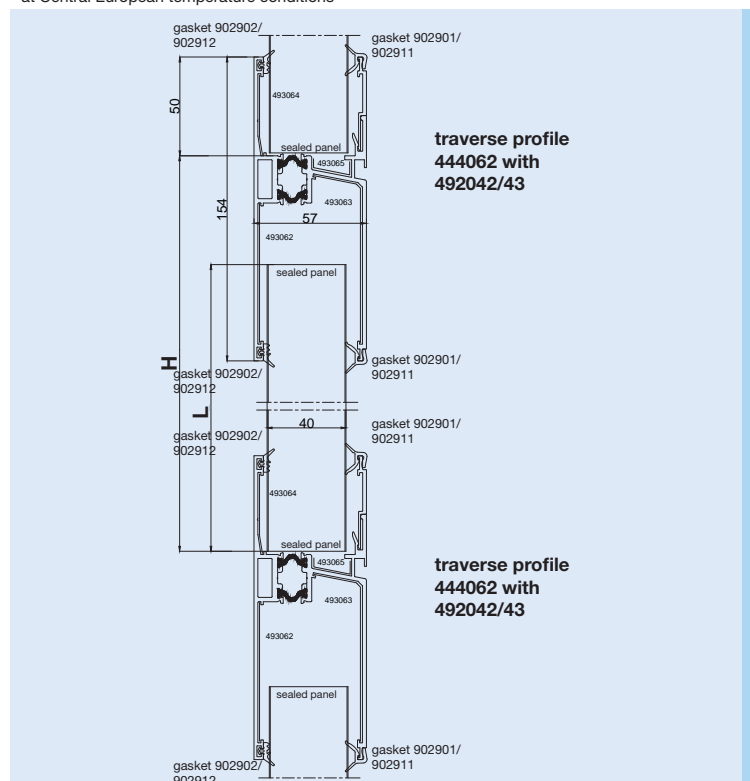
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **100 mm**

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Traverse profile 444062**  
**Traverse profile 444062**

#### Article numbers

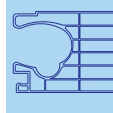
**444062** = Traverse profile  
493062 = Profile connector for 444062  
493063 = Profile connector for 444062  
493064 = Profile connector for 444062  
493065 = Profile connector for 444062

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **65 mm**



## 1.2.7.5

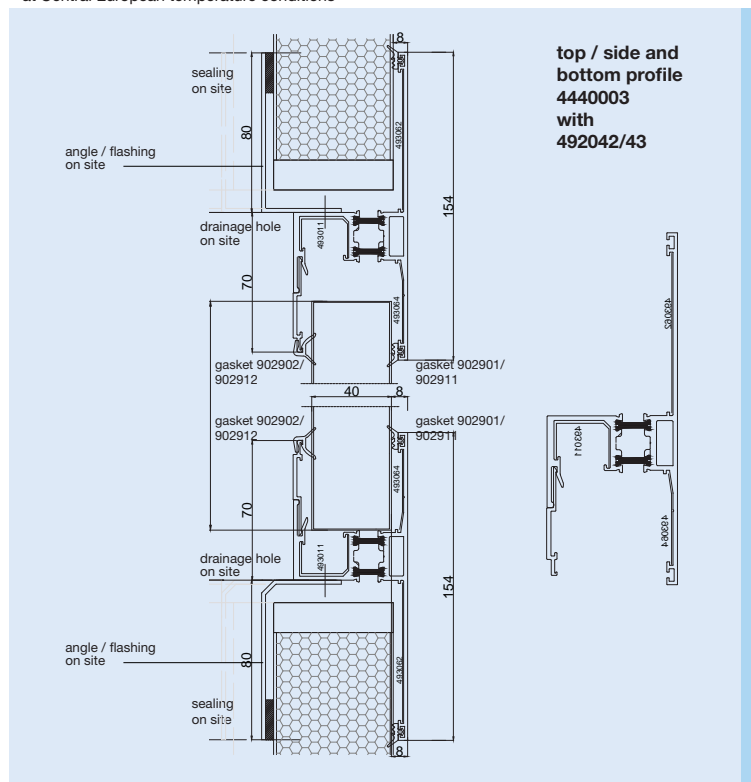
### Translucent Building Elements

Series **44 40** | Frame system thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



#### Connection profile 4440003 (for e.g. sandwich panel)

##### Article numbers

**4440003** = Connection profile

**492042** = Front plate in L = 2.0 m

**492043** = Front plate in L = 3.0 m

**493063** = Profile connector for 4440003

**493064** = Profile connector for 4440003

**493011** = Profile connector for 4440003

**902901** = Outer plug gasket TPE grey

**902911** = Outer plug gasket TPE black

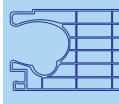
**902902** = Inner lip gasket TPE grey

**902912** = Inner lip gasket TPE black

Angle or flashings as frame for e.g. sandwich panel on site

Calculation of panel length:

$L \text{ in mm} = \text{Height } H \text{ in mm} - 75 \text{ mm}$



## 1.2.7.6

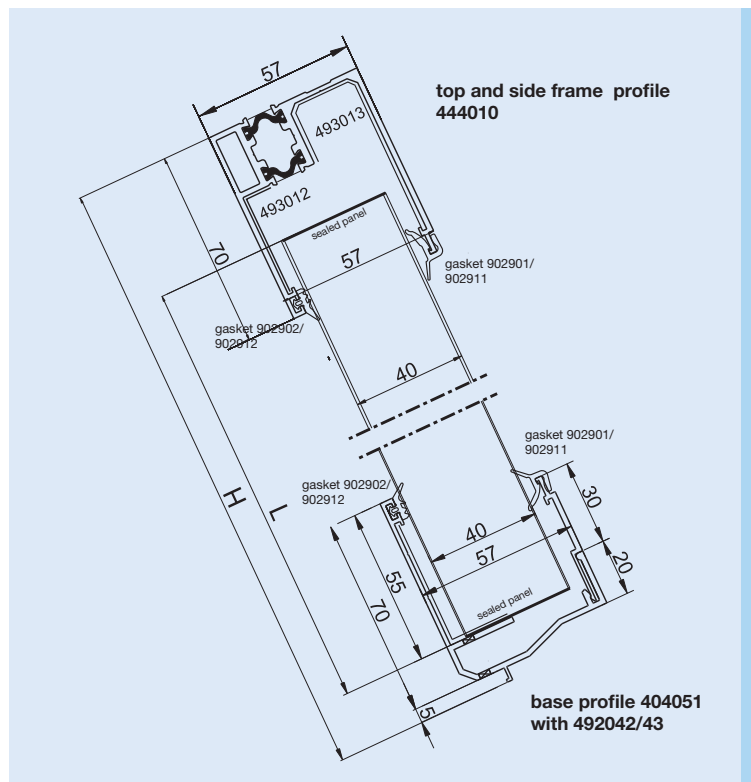
### Translucent Building Elements

Series **44 40** | Frame system thermally broken

Stand: 02/16

Pitched installation  $>15^\circ$  up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **444010**  
**Base profile** **404051**

#### Article numbers

**444010** = Top and side frame profile  
493012 = Profile connector for 444010  
493013 = Profile connector for 444010

**404051** = Base profile  
493014 = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

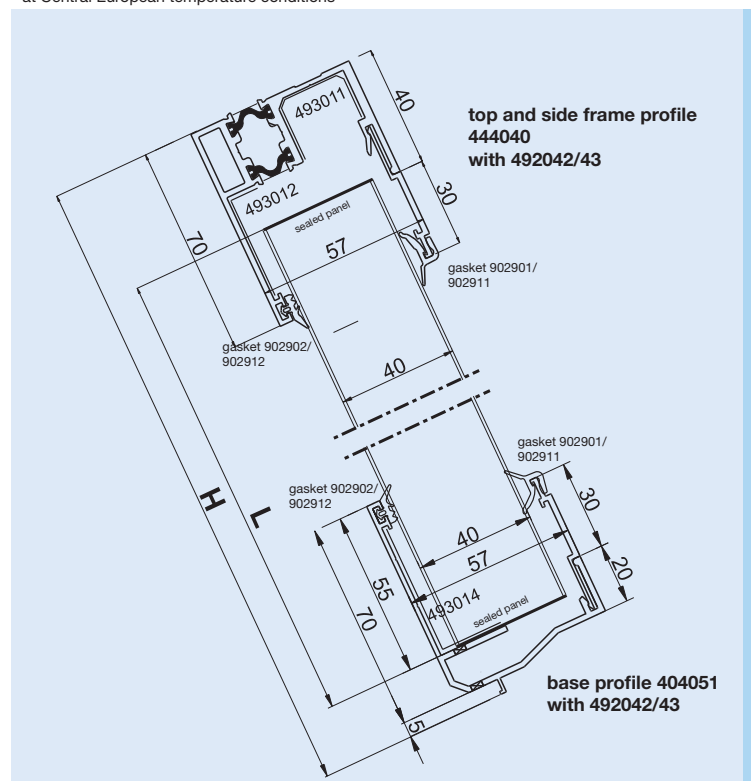
**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **55 mm**

Pitched installation  $>15^\circ$  up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **444040**  
**Base profile** **404051**

#### Article numbers

**444040** = Top and side frame profile  
493011 = Profile connector for 444040  
493012 = Profile connector for 444040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

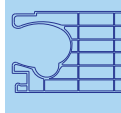
**404051** = Base profile  
493014 = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
L in mm = Height H in mm - **55 mm**



### 1.2.7.7

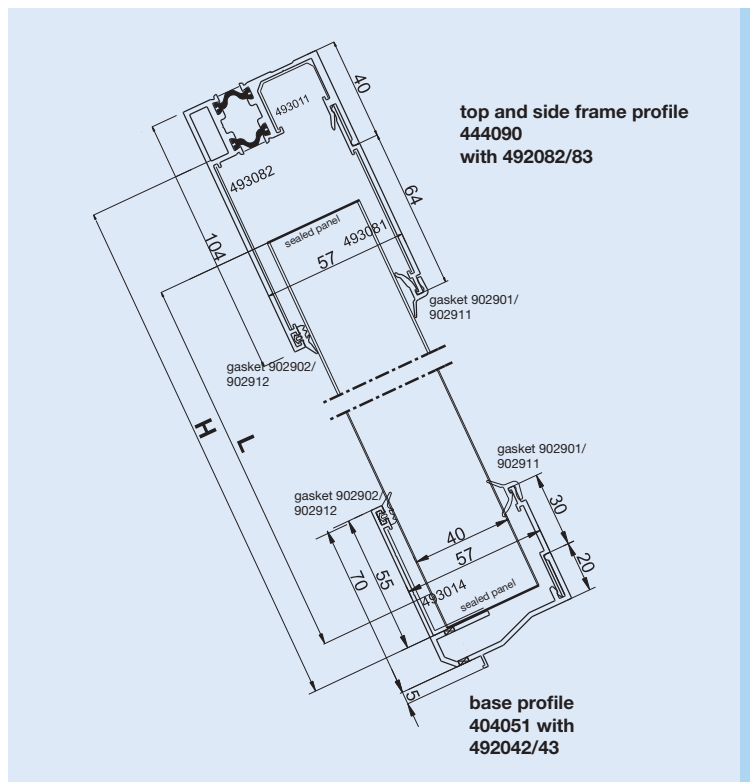
## Translucent Building Elements

Series 44 40 | Frame system thermally broken

- Stand: 02/16

Pitched installation  $>15^\circ$  up to 6m panel length\*

\* at Central European temperature conditions



Top profile	444090
Base profile	404051

## Article numbers

444090 = Top and side frame profile  
493011 = Profile connector for 444090  
493082 = Profile connector for 444090

**492082** = Front plate in L = 2.0 m  
**492083** = Front plate in L = 3.0 m  
 493081 = Profile connector for 492082/83

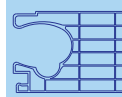
404051 = Base profile  
493014 = Profile connector for 404051

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 75 \text{ mm}$



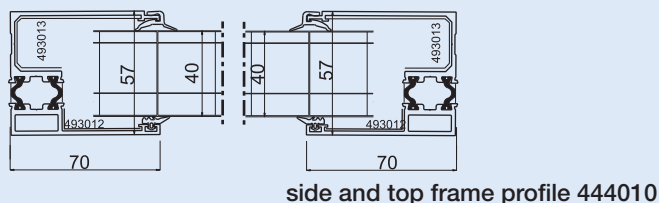
## 1.2.7.8

### Translucent Building Elements

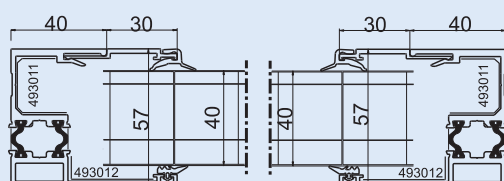
Series **44** 40 | Frame system thermally broken

Stand: 02/16

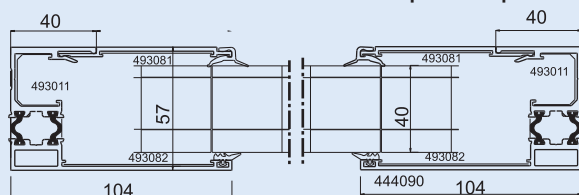
#### Side connection



side and top frame profile 444010



side and top frame profile 444040



side and top frame profile 444090

#### Side connection with frame profile series 44

##### Article numbers

**444010** = Top and side frame profile  
**493012** = Profile connector for 444010  
**493013** = Profile connector for 444010

**444040** = Top and side frame profile  
**493011** = Profile connector for 444040  
**493012** = Profile connector for 444040

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

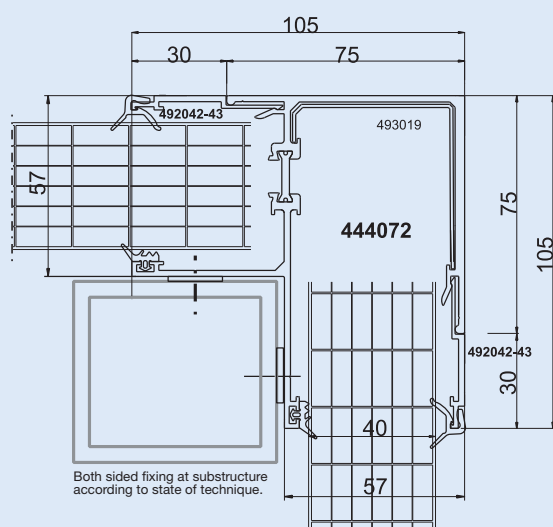
**444090** = Top and side frame profile  
**493011** = Profile connector for 444090  
**493082** = Profile connector for 444090

**492082** = Front plate in L = 2.0 m  
**492083** = Front plate in L = 3.0 m  
**493081** = Profile connector for 492082/83

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

#### Side connection 90° corner



corner profile 444072

#### Side connection 90° corner with profile 444072

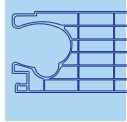
##### Article numbers

**444072** = Corner profile  
**493019** = Profile connector for 444072

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black



## 1.2.8.1

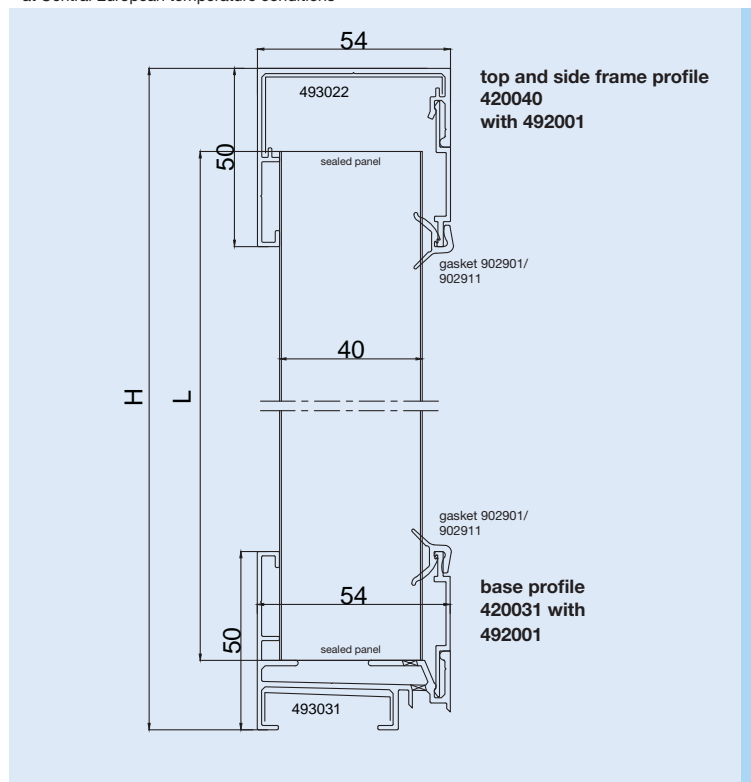
### Translucent Building Elements

Series **42 00** | Frame system non-thermally broken

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** **420040**  
**Base profile** **420031**

#### Article numbers

**420040** = Top and side frame profile  
**493022** = Profile connector for 420040

**492001** = Front plate in L = 3.0 m

**420031** = Base profile  
**493031** = Profile connector for 420031

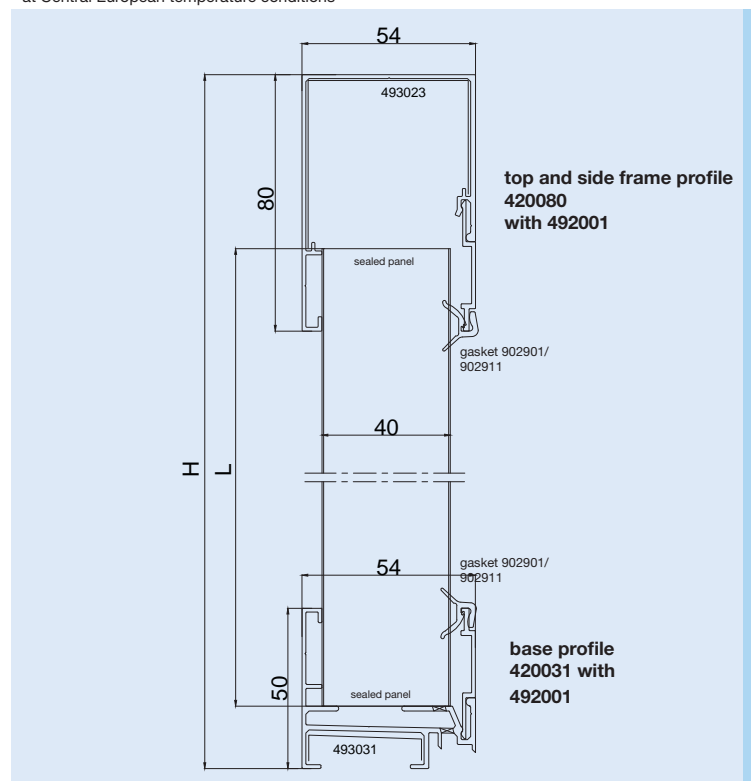
**492001** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 40 \text{ mm}$

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** **420080**  
**Base profile** **420031**

#### Article numbers

**420080** = Top and side profile  
**493023** = Profile connector for 420080

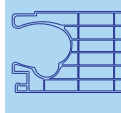
**492001** = Front plate in L = 3.0 m

**420031** = Base profile  
**493031** = Profile connector for 420031

**492001** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 60 \text{ mm}$



## 1.2.8.2

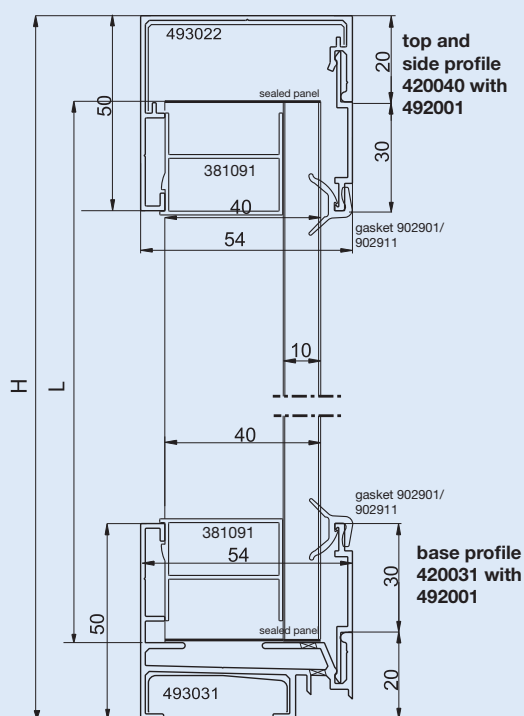
### Translucent Building Elements

Series **42 00** | Frame system non-thermally broken  
Frame system for panel 2410-3

Stand: 02/16

#### Facade 90° up to 6m panel length\*

\* at Central European temperature conditions



**Top profile** 420040  
**Base profile** 420031

#### Article numbers

**420040** = Top and side profile  
**493022** = Profile connector for 420040

**492001** = Front plate in L = 3.0 m

**420031** = Base profile  
**493031** = Profile connector for 420031

**492001** = Front plate in L = 3.0 m

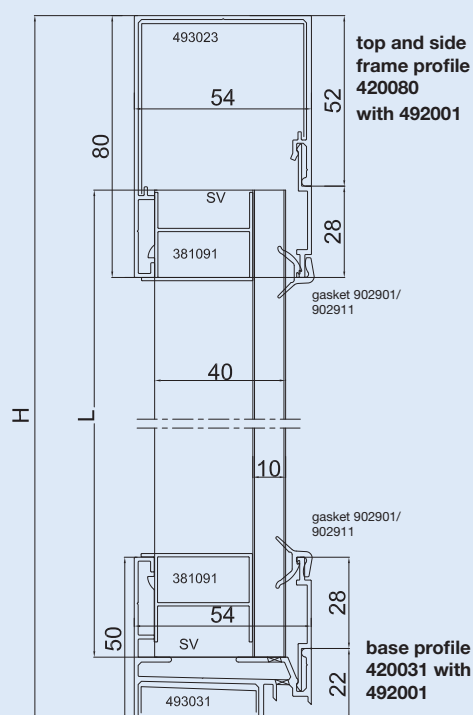
**381091** = Polycarbonate filler in L = 34 cm

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 40 \text{ mm}$

#### Facade 90° up to 12m panel length\*

\* at Central European temperature conditions



**Top profile** 420080  
**Base profile** 420031

#### Article numbers

**420080** = Top and side profile  
**493023** = Profile connector for 420080

**492001** = Front plate in L = 3.0 m

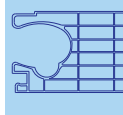
**420031** = Base profile  
**493031** = Profile connector for 420031

**492001** = Front plate in L = 3.0 m

**381091** = Polycarbonate filler in L = 34 cm

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

Calculation of panel length:  
 $L \text{ in mm} = \text{Height } H \text{ in mm} - 60 \text{ mm}$





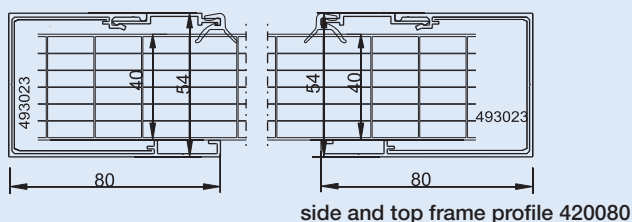
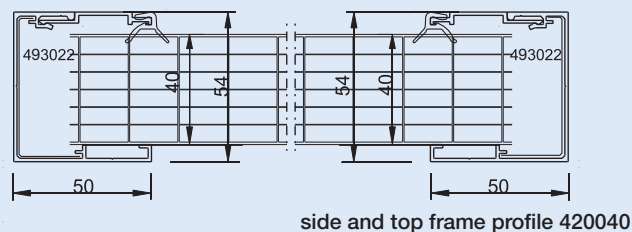
## 1.2.8.3

### Translucent Building Elements

Series 42 00 | Frame system non-thermally broken

Stand: 02/16

#### Side connection



#### Side connection with frame profile series 42

##### Article numbers

**420040** = Top and side profile  
**493022** = Profile connector for 420040

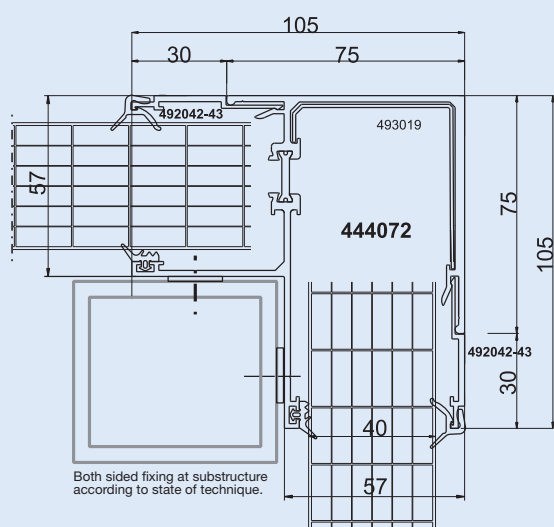
**420080** = Top and side profile  
**493023** = Profile connector for 420080

**492001** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

#### Side connection 90° corner



##### corner profile 444072

frame profiles of series 44 can be combined with frame profiles of series 42

#### Side connection 90° corner with profile 444072

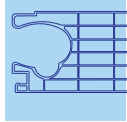
##### Article numbers

**444072** = Corner profile  
**493019** = Profile connector for 444072

**492042** = Front plate in L = 2.0 m  
**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black



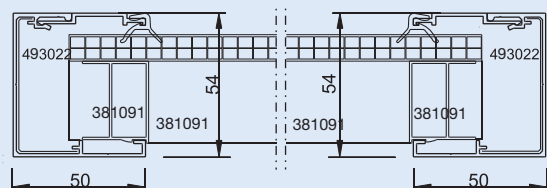
## 1.2.8.4

### Translucent Building Elements

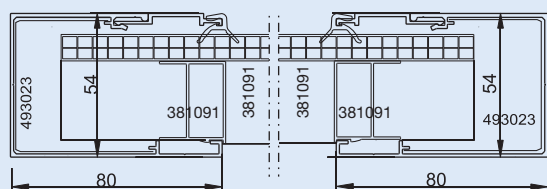
Series **42 00** | Frame system non-thermally broken  
Frame system for panel 2410-3

Stand: 02/16

#### Side connection



side and top frame profile 420040



side and top frame profile 420080

#### Side connection with frame profile series 42

##### Article numbers

**420040** = Top and side frame profile  
**493022** = Profile connector for 420040

**420080** = Top and side profile  
**493023** = Profile connector for 420080

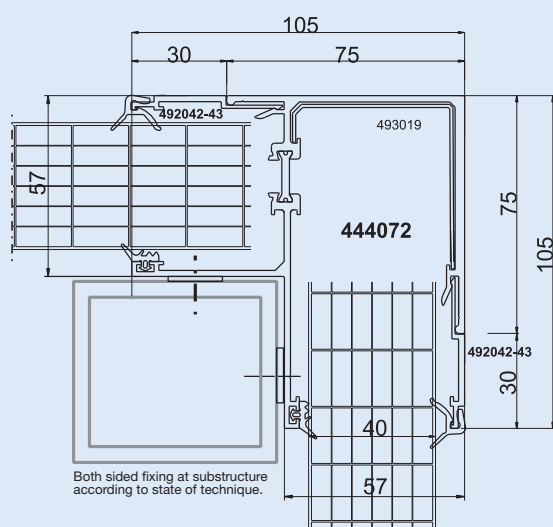
**492001** = Front plate in L = 3.0 m

**381091** = Polycarbonat filler in L = 34 cm

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

#### Side connection 90° corner



##### corner profile 444072

frame profiles of series 44 can be combined with frame profiles of series 42

#### Side connection 90° corner with profile 444072

##### Article numbers

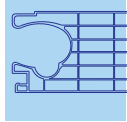
**444072** = Corner profile  
**493019** = Profile connector for 444072

**492042** = Front plate in L = 2.0 m

**492043** = Front plate in L = 3.0 m

**902901** = Outer plug gasket TPE grey  
**902911** = Outer plug gasket TPE black

**902902** = Inner lip gasket TPE grey  
**902912** = Inner lip gasket TPE black

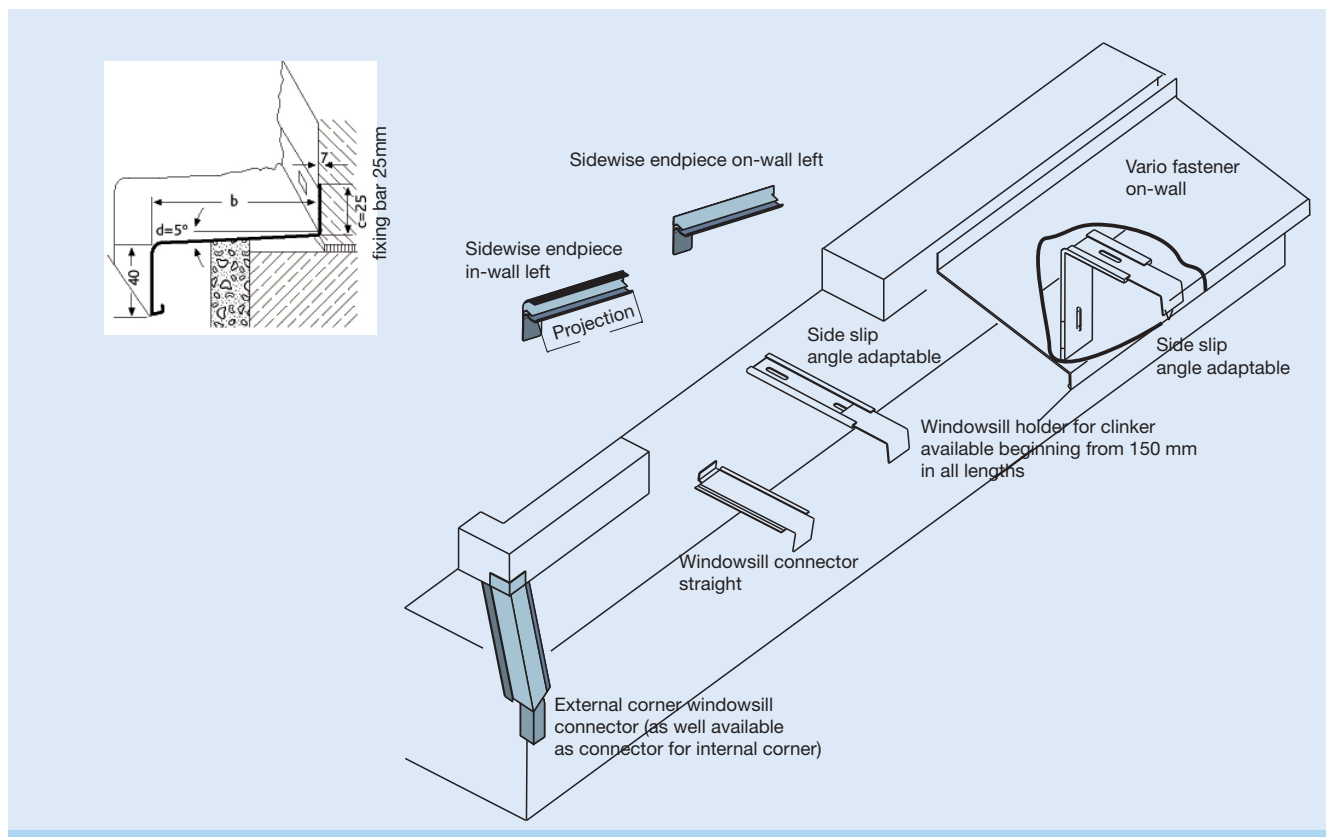


## 1.2.9.1

### Translucent Building Elements

#### Series 4975 | Windowsills and Accessories

Stand: 02/16



#### Installation manual - Windowsill products

##### Please note before installing:

- Thermal expansion of the profiles:  
Windowsills over 3,000 mm long must be divided in the middle and extended through a connection joint. The windowsills must be sufficiently fastened to the frame and be tight against rain water. The possibility for the windowsill to expand must be made sure depending on length.
- For sound insulation during heavy rains we recommend to provide windowsills with a sound absorptive stripe. The sound absorptive area should be around 1/3 of the windowsill area.
- For on-site fixing of windowsill on the profile (non-RODECA profile) of the windows the self-sealing gasket (black or white) is to be used.
- Aluminium windowsills should project about 40 mm over the finished facade. The profile width should be measured accordingly. This applies only for installations with side endings. Without side endings the projection of windowsills should not be lower than 20mm.
- From a projection/profile depth of 150 mm holders (Vario fastener or clinker fastener) are necessarily to be used on the structure (every 800 to 1,000 mm).

##### Note for installation:

Before installation of the side elements stick the sound absorptive stripes approx. 50 mm behind the beginning of the drip edge on the bottom side of the windowsill profile.

Please don't forget to leave free approx. 30 mm on the front sides of the windowsill in order to be able to install the side elements.

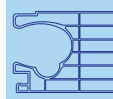
On the predrilled (perforated) side of the windowsill insert the gasket, check the straight and precise seating of the rubber profile and remove the cover strip from the adhesive surface. (This does not apply to assemblies with RODECA profiles)

Before screwing the windowsills, if using Rodeca profiles, the base profile and chosen adapter (depending on the projection from zero up to two adapters can be used under the profiles) are installed to the supporting substructure. The side elements are to be clipped on in advance. After clipping on the side elements and fastening the windowsill, seal the connection points all around. Please leave at least 5 mm on each side of the windowsill for the thermal expansion.

If implementing full thermal protection it is important to make sure that the vario fastener is fixed before placing the insulation to the masonry. This also applies if using the holder for clinker installation.

The windowsill with the protective foil side at the top is to be fixed at the edge of the window using windowsill screws\*. The foil may not be covered while assembling the connector elements. Make sure to provide the final windowsill slope of at least 5° after the assembly. When plastering the side elements please check the presence of expansion joint and keep in mind the thermal expansion of aluminium. Coarse mortar and plaster remnants must be removed immediately from the protective foil. After completion of the facade work in the windowsill area, the protective foil has to be removed as quickly as possible.

\* Size of the screw head – 3.9 mm



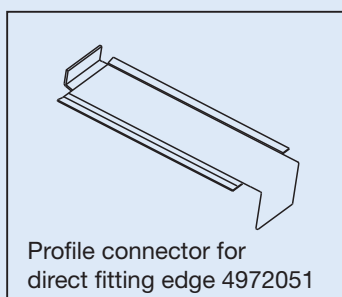
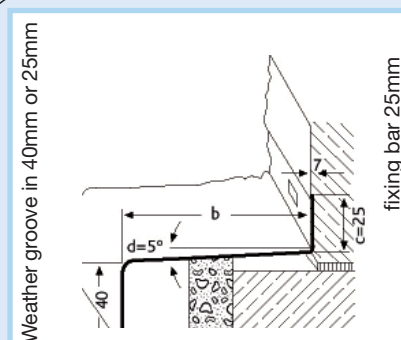
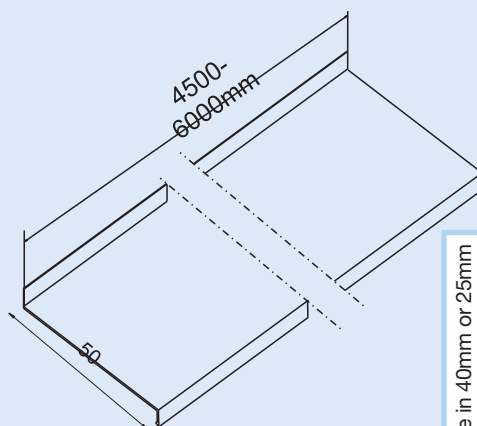
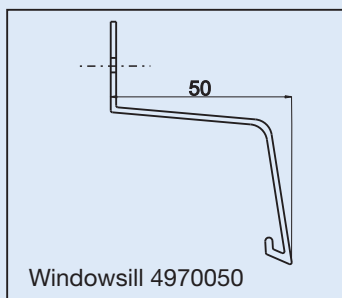
## 1.2.9.2

### Translucent Building Elements

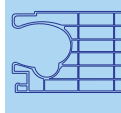
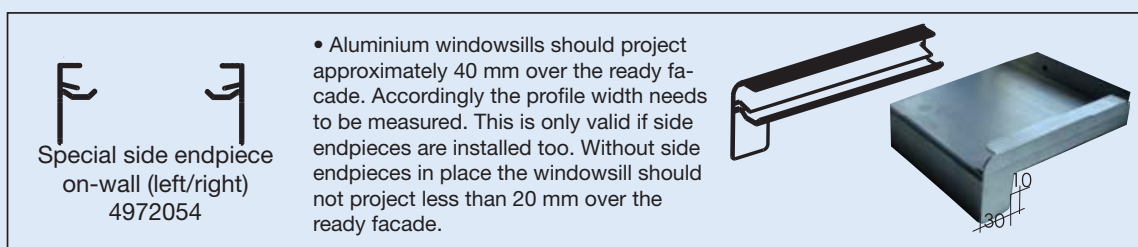
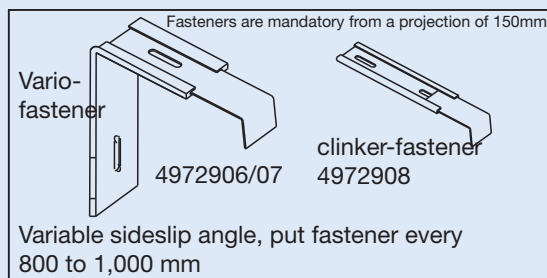
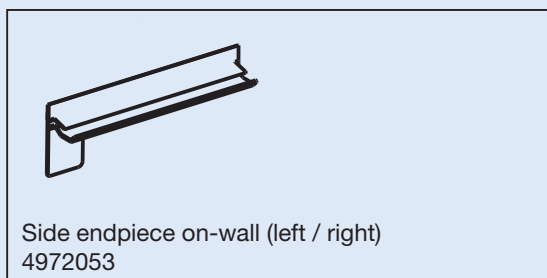
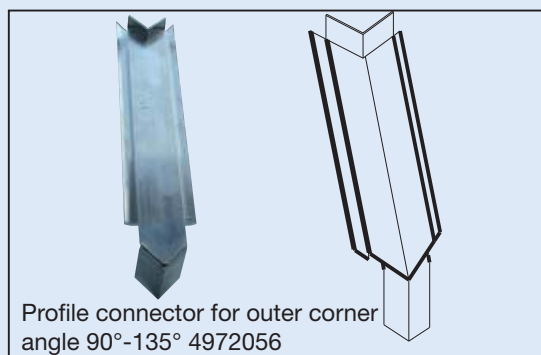
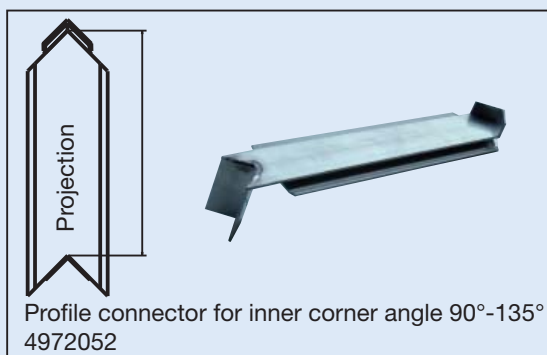
#### Series 4975 | Windowsills and Accessories

Stand: 02/16

Example for construction group:



Example: article numbers for a 50 mm windowsill projection:



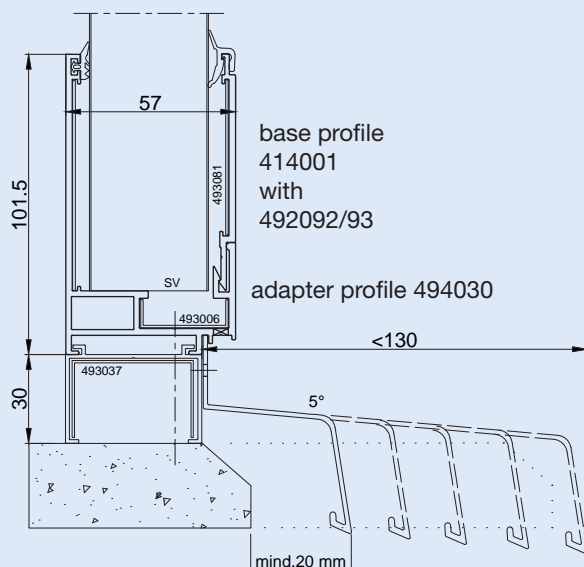
## 1.2.9.3

### Translucent Building Elements

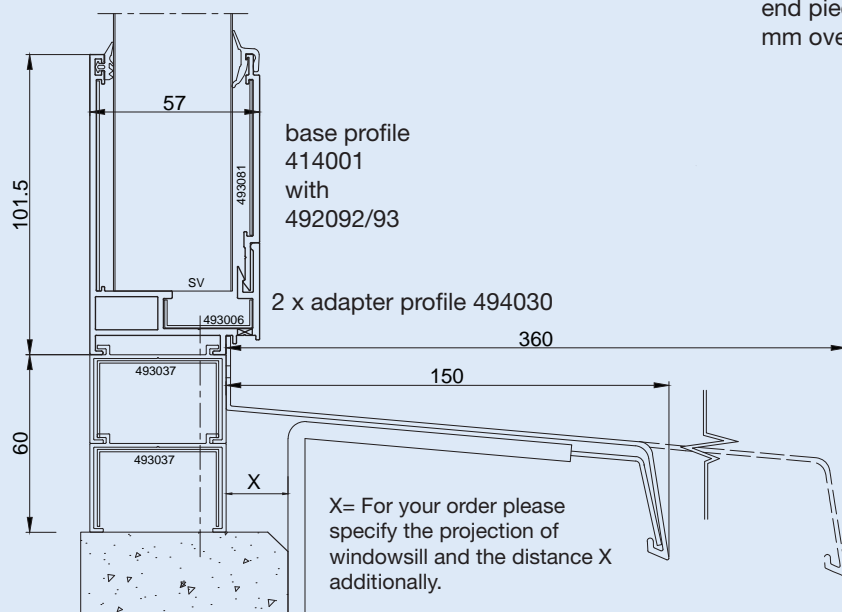
#### Series 41 40 | Windowsills and Accessories

Stand: 02/16

Aluminium windowsills for Rodeca base profiles of series 41.  
Application with non-thermally broken adapter profiles.



Base profile 414001 with adapter 494030  
for windowsill projections from 50 to 130 mm.



Base profile 414001 with 2 x adapter 494030  
for windowsill projections from 150 to 360 mm.

#### General

For profiles of series 41 we offer an adapter profile for the connection of windowsills with varying projections.

#### Initial lengths/-units

Aluminium profile	6.00 m
Profile connector	10 cm

#### Article numbers

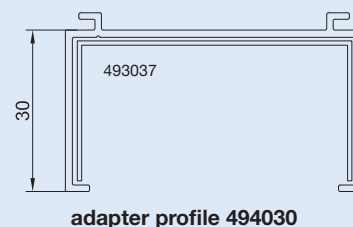
**4971070** = windowsill 70mm projection  
**4971110** = windowsill 110mm projection  
**4971150** = windowsill 150mm projection

windowsill with 70mm / 110 mm / 150 mm  
available from stock

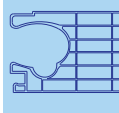
**494030** = Adapter profile for profiles  
414011 and 414001  
**493037** = Profile connector for 494030

For use with adapter profile 494030 the allowance for calculation of panel length must be increased by 30 mm per adapter profile.

Aluminium windowsills should project approx. 40 mm over facade. This applies only if side end pieces are installed. Without side end pieces the windowsill must project 20 mm over facade.



adapter profile 494030



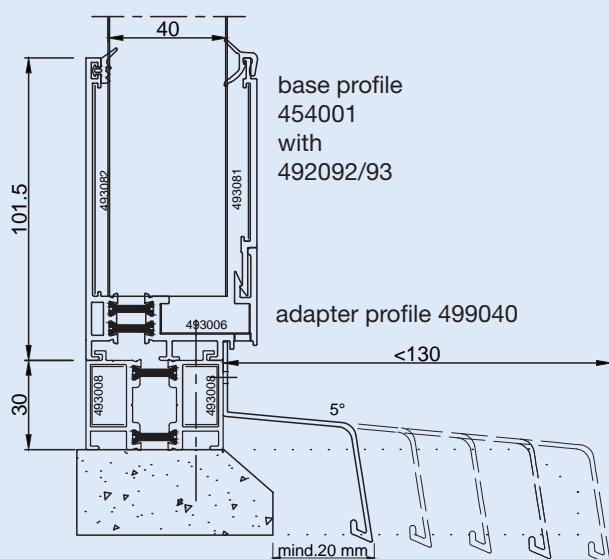
## 1.2.9.4

### Translucent Building Elements

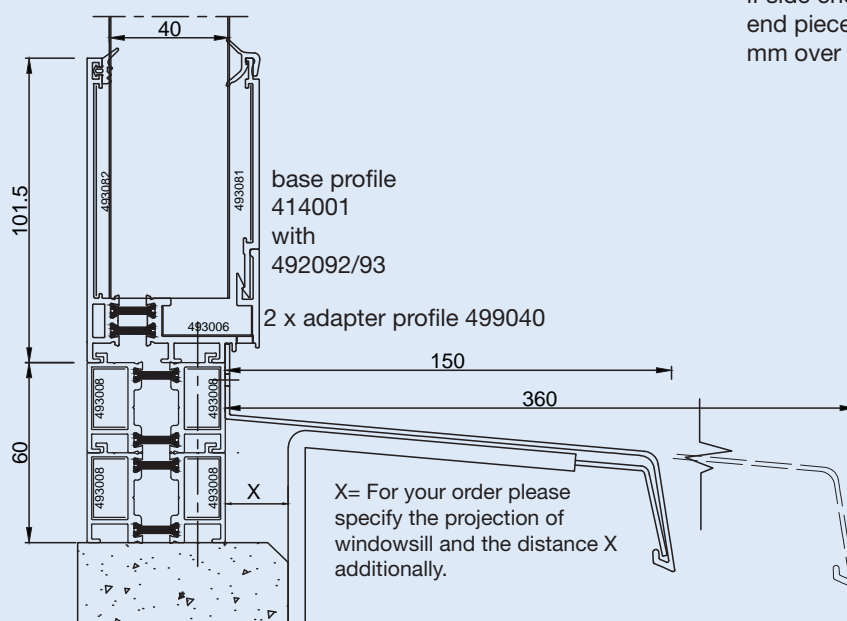
Series 45 40 | Windowsills and Accessories

Stand: 02/16

Aluminium windowsills for Rodeca base profiles of series 45.  
Application with thermally broken adapter profiles.



Base profile 454001 with adapter 499040  
for windowsill projections from 50 to 130 mm.



Base profile 414001 with 2 x adapter 499040 for windowsill  
projections from 150 to 360 mm.

#### General

For profiles of series 45 we offer an adapter profile for the connection of windowsills with varying projections.

#### Initial lengths/-units

Aluminium profile	6.00 m
Profile connector	10 cm

#### Article numbers

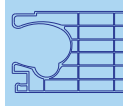
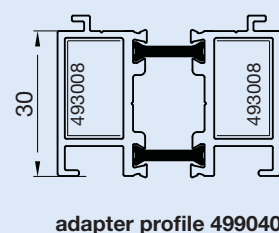
**4971070** = windowsill 70mm projection  
**4971110** = windowsill 110mm projection  
**4971150** = windowsill 150mm projection

windowsill with 70mm / 110 mm / 150 mm  
available from stock

**499040** = Adapter profile for profiles  
454011 and 454001  
**493008** = Profile connector for 499040

For use with adapter profile 499040 the allowance for calculation of panel length must be increased by 30 mm per adapter profile.

Aluminium windowsills should project approx. 40 mm over facade. This applies only if side end pieces are installed. Without side end pieces the windowsill must project 20 mm over facade.



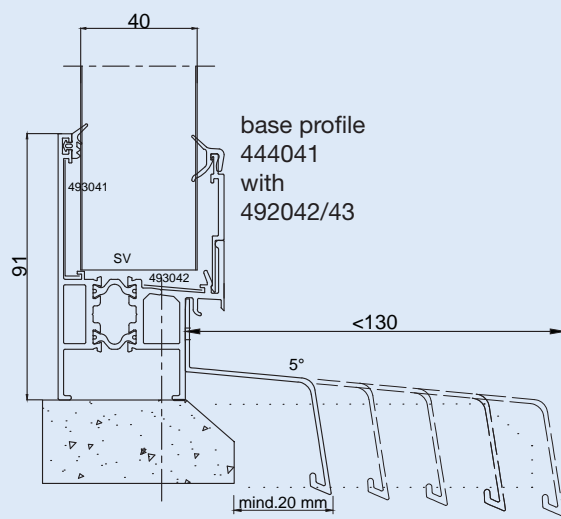
## 1.2.9.5

### Translucent Building Elements

Series 44 40 | Windowsills and Accessories

Stand: 02/16

Aluminium windowsills for Rodeca base profiles of series 44.



#### General

For profiles of series 44 we offer windowsills with varying projections.

#### Initial lengths/-units

Aluminium profile 6.00 m

#### Article numbers

**4971070** = windowsill 70mm projection

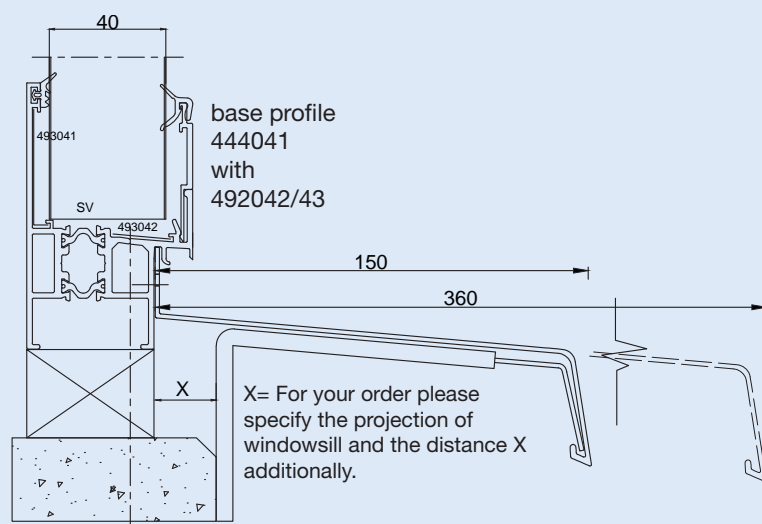
**4971110** = windowsill 110mm projection

**4971150** = windowsill 150mm projection

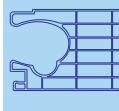
windowsill with 70mm / 110 mm / 150 mm available from stock

Aluminium windowsills should project approx. 40 mm over facade. This applies only if side end pieces are installed. Without side end pieces the windowsill must project 20 mm over facade.

Base profile 444041 for windowsill projections from 50 to 130 mm.



If windowsills with a projection of over 150mm are used the base profile must be elevated.



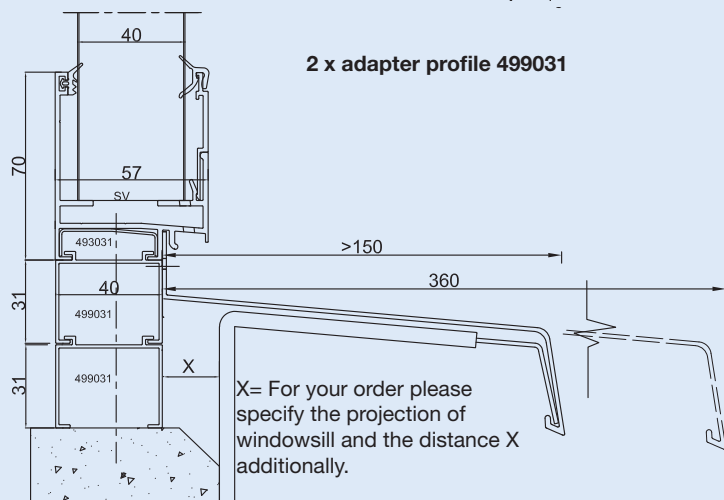
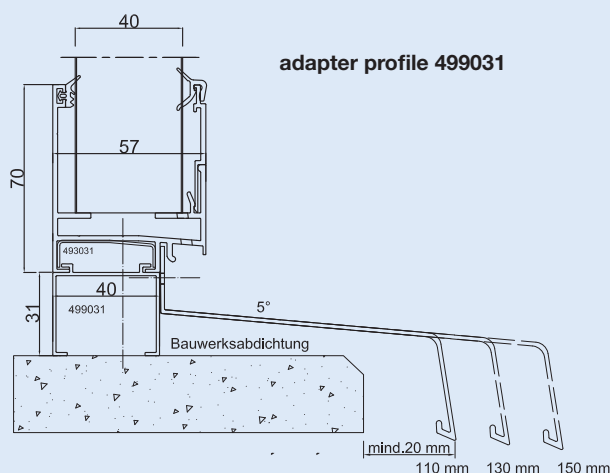
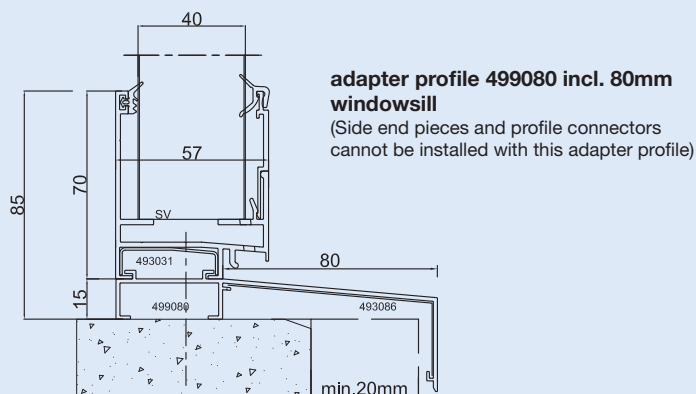
## 1.2.9.6

### Translucent Building Elements

#### Series 40 40 | Windowsills and Accessories

Stand: 02/16

Aluminium windowsills for Rodeca base profiles of series 40.  
Application with non-thermally broken adapter profiles.



#### General

For profiles of series 40 we offer an adapter profile for the connection of windowsills with varying projections.

#### Initial lengths/-units

Aluminium profile	6.00 m
Profile connector	10 cm

#### Article numbers

**4971070** = windowsill 70mm projection  
**4971110** = windowsill 110mm projection  
**4971150** = windowsill 150mm projection

windowsill with 70mm / 110 mm / 150 mm available from stock

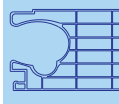
**499080** = Adapter profile for profile 404031 incl. windowsill with 80mm projection  
**493086** = Profile connector for 499080

**499031** = Adapter profile for profile 404031

For use with adapter profile 499080 the allowance for calculation of panel length must be increased by 15 mm per adapter profile.

For use with adapter profile 499031 the allowance for calculation of panel length must be increased by 31 mm per adapter profile.

Aluminium windowsills should project approx. 40 mm over facade. This applies only if side end pieces are installed. Without side end pieces the windowsill must project 20 mm over facade.





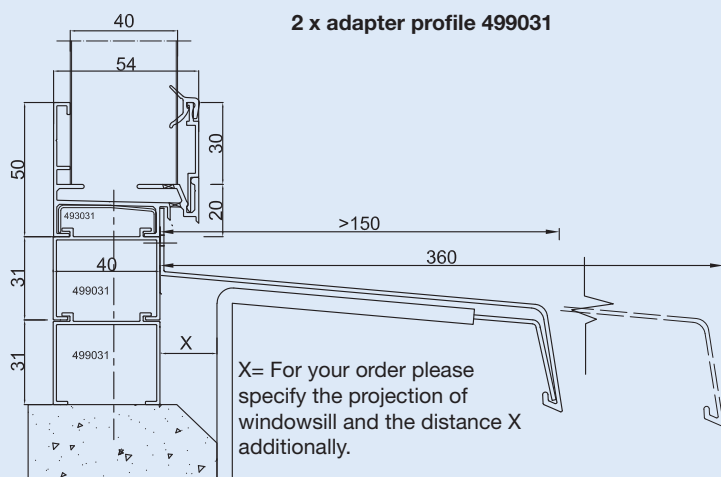
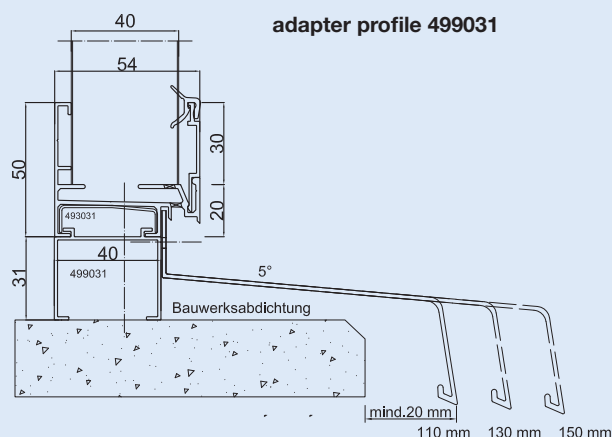
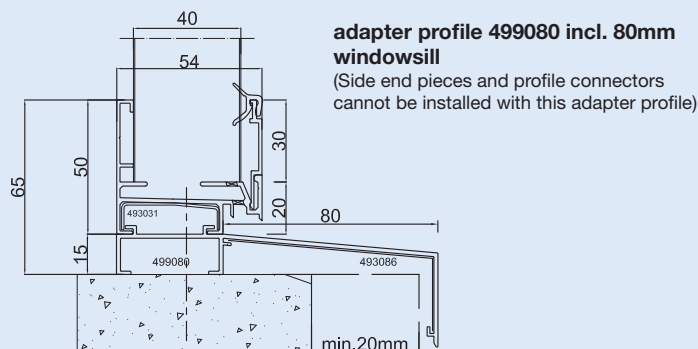
## 1.2.9.7

### Translucent Building Elements

Series 42 00 | Windowsills and Accessories

Stand: 02/16

Aluminium windowsills for Rodeca base profiles of series 42.  
Application with non-thermally broken adapter profiles.



#### General

For profiles of series 42 we offer a adapter-profile for the connection of windowsills with varying projections.

#### Initial lengths/-units

Aluminium profile	6.00 m
Profile connector	10 cm

#### Article numbers

**4971070** = windowsill 70mm projection  
**4971110** = windowsill 110mm projection  
**4971150** = windowsill 150mm projection

windowsill with 70mm / 110 mm / 150 mm available from stock

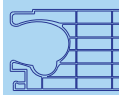
**499080** = Adapter profile for profile 404031 incl. windowsill with 80mm projection  
**493086** = Profile connector for 499080

**499031** = Adapter profile for profile 404031

For use with adapter profile 499080 the allowance for calculation of panel length must be increased by 15 mm per adapter profile.

For use with adapter profile 499031 the allowance for calculation of panel length must be increased by 31 mm per adapter profile.

Aluminium windowsills should project approx. 40 mm over facade. This applies only if side end pieces are installed. Without side end pieces the windowsill must project 20 mm over facade.



# Unfold your creativity plan with us!

## The new generation of multi layered polycarbonate panels



### The RODECA principle

#### Simpler design

The proven geometry of the translucent building elements and optimized fasteners essentially increase the load capacities of panels. Furthermore premium quality frame and window systems for facade and roof applications have been developed to make the system universally applicable.

#### Translucent heat insulation

ISOCLEAR Series with a U-Value of 0.77 W/m<sup>2</sup>K - 3.0 W/m<sup>2</sup>K (depending on the type of installation) defines new standards in thermal insulation for the facades and roof glazing. The new heat insulation values established by the Thermal Regulation are achieved and even exceeded by the products of ISOCLEAR Series. In view of rising energy costs this is a decisive criterion in selecting appropriate glazing materials for energy-efficient buildings.



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### Other RODECA products:

- RODECA Translucent Building Elements  
30mm, 50mm and 60mm
- RODECA Multi Wall Sheets from 4mm up to 50mm
- RODECA Multi Function Panels
- RODECA U-Panels from Polycarbonate
- RODECA RT-SYSTEMS - Curved and flat roof light systems
- RODECA RT-THERMOLIGHT - Roof light systems  
for ISO-Panel for roof and facade applications
- RODECA Windows for Roof and Façade
- RODECA Do It Yourself product range

**So when do you start  
planning with us?**