VISS Ixtra

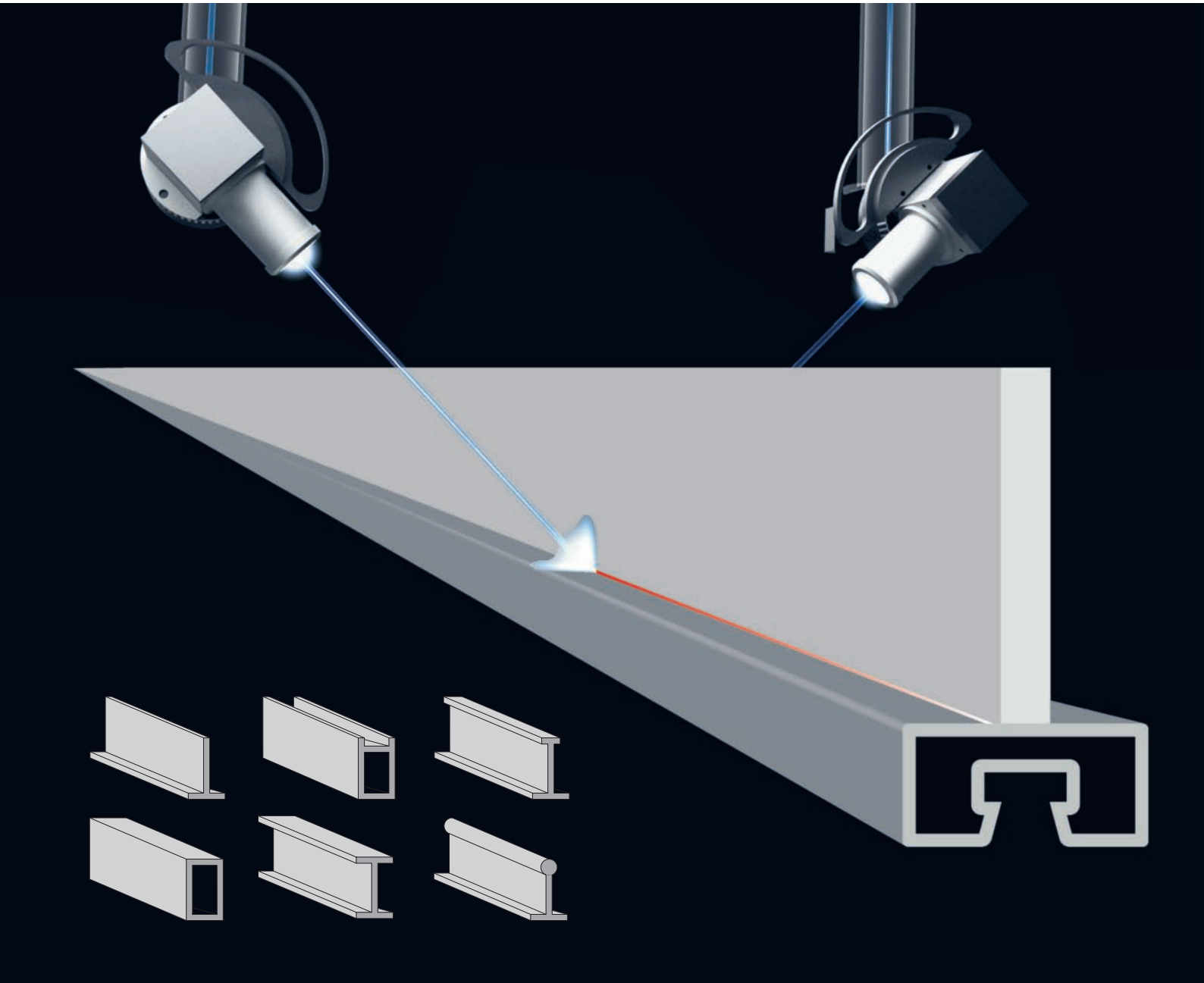
Fasady w extra wymiarze

JANSEN

VISS $I_x$tra

Profile wykonane w technologii spawania laserowego lub zagniatania

Wyjątkowe rozwiązania architektoniczne dzięki zastosowaniu innowacyjnych technologii łączenia stali.
Sprawdzone i zaakceptowane przez odpowiednie instytuty badawcze, profile VISS $I_x$tra, umożliwiają nowatorskie rozwiązania struktur nośnych dla słupowo-ryglowych systemów Jansen VISS.
Geometria przekroju może być odpowiednio dopasowana do wymagań statycznych poprzez duże możliwości doboru grubości ścianek dla profilu głównego oraz dospawanych laserowo profili uzupełniających.
Kolejne zalety to szerokie możliwości kształtowania konturu profili, doboru przekroju profila podstawowego oraz "łamane" krawędzie zewnętrzne ostatecznego przekroju.
Oprócz laserowej technologii łączenia składowych elementów profilu, możliwe jest łączenie poprzez zagniatanie wzdłużne.

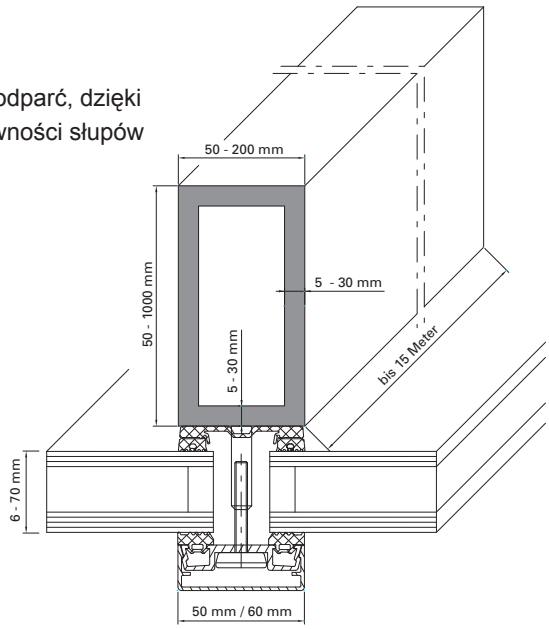


Profile laserowo optymalizowane

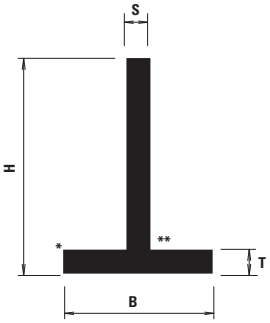
Profile laserowo cięte i spawane. Stalowe profile nośne produkowane z użyciem technologii laserowej zapewniają najwyższą precyzję wymiarów oraz spawanych połączeń elementów składowych. Technologia spawania laserowego pozwala na osiągnięcie jakości i dokładności wykonania nieporównywalnej do spawania tradycyjnego, także przy grubych ściankach profili.
Oznacza to najwyższą precyzję i perfekcyjny wygląd profili nośnych. Zaawansowana technologia oferuje dalsze możliwości racjonalnego i ekonomicznego wykonania różnego rodzaju otworów lub podfrezowań w profilu, poprzez zastosowanie obróbki dwuwymiarowej przed ostatecznym zespawaniem elementów składowych w jedną całość. Obróbka laserowa oferuje dotychczas nieosiągalne możliwości uzyskania wyszukanych kształtów profili, łacząc wymogi funkcjonalne z oczekiwanym efektem architektonicznym. Profile VISS Ixtra mogą być projektowane w kombinacjach ze wszystkimi dotychczas oferowanymi profilami systemu VISS.

Ixtra zalety:

- I xtra Wielkie:
  Wielokondygnacyjne fasady bez pośrednich podparć, dzięki możliwej do osiągnięcia wyjątkowo dużej sztywności słupów
- Ixtra Smukłe:
  Szerokość widoczna profili
  50 lub 60 mm
- Ixtra Mocne:
  Dowolność doboru odpowiednich elementów wzmacniających profil
- Ixtra Ciekawe:
  Nieograniczone możliwości projektowania atrakcyjnego kształtu profili
- Ixtra Dokładne:
  "Ostrokątne" kanty profili (minimalizacja promienia zaokrąglenia narożników przekroju) - doskonała precyzja wymiarów



Asortyment profili



Możliwe rodzaje wykończenia powierzchni:

- piaskowanie
- wytrawianie
- szlifowanie
- polerowanie
- lakierowanie

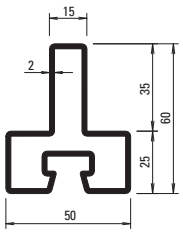
Typ	B min.	B max.	H min.	H max.	S min.	S max.	T min.	T max.	Länge max.
Kastenprofil	50 mm	200 mm	50 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm
T-Profil	50 mm	400 mm	30 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm
H-Profil	50 mm	400 mm	50 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm
TR-Profil	50 mm	400 mm	60 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm
L-Profil	50 mm	200 mm	40 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm
U-Profil	50 mm	200 mm	40 mm	1000 mm	5 mm	30 mm	5 mm	30 mm	15'000 mm

* Promień zaokrąglenia narożnika 0,5 mm
** Spoina 2 mm

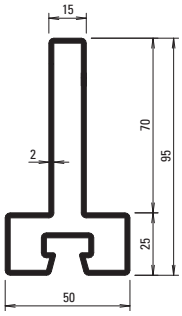
Gatunki stali			
Baustahl:	*S235 JR*	*S275 J2*	*S355 J2*
Edelstahl:	*1.4016*	*1.4539*	*1.4301*
	1.4828	*1.4307*	*1.4845*
	1.4401		
	1.4404	*304/304L*	
	1.4571	*316/316L*	
Duplex:	*LDX 2101*		
	1.4162	*1.4362*	*1.4462*

Produkcja wg norm DIN18800-7 oraz DIN EN ISO13919-1	
L-Profil:	*DIN EN 10056-1 & 2*
U-Profil:	*DIN EN 10279*
Kastenprofil:	*DIN EN 10219*
H-Profil:	*DIN EN 1025*
TR-Profil:	*DIN EN 10055*
T-Profil:	*DIN EN 10055*

Asortyment profili



76.114



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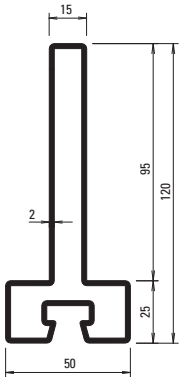

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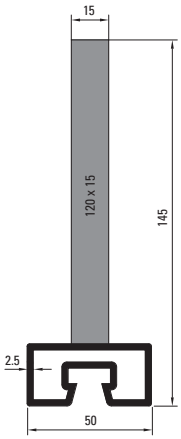
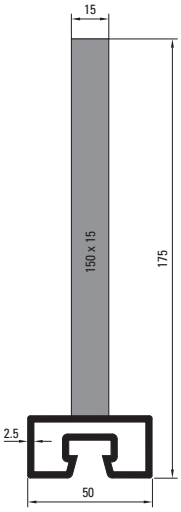
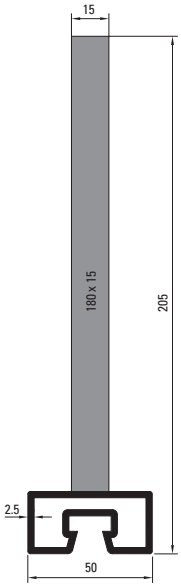


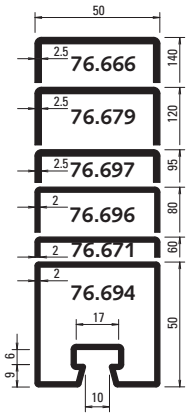
76.131
I_x = 398.46 cm^4
W_x = 53.92 cm^3

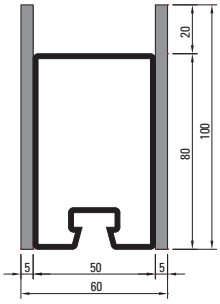


76.132
I_x = 697.73 cm^4
W_x = 78.41 cm^3

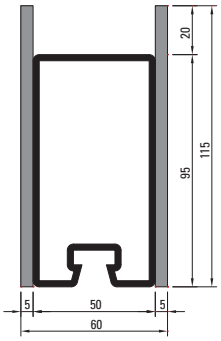


76.133
I_x = 1117.70 cm^4
W_x = 107.42 cm^3

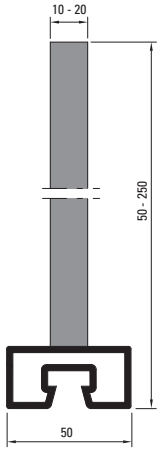




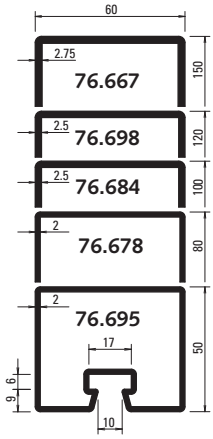
Na zapytanie
I_x = 137.86 cm^4
W_x = 25.16 cm^3

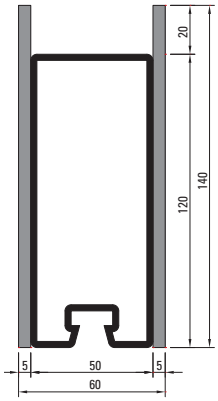


Na zapytanie
I_x = 225.85 cm^4
W_x = 35.83 cm^3

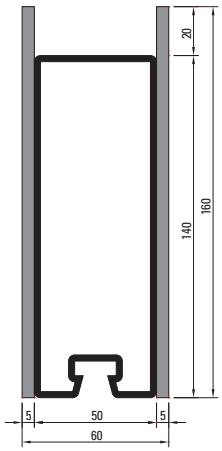


Na zapytanie

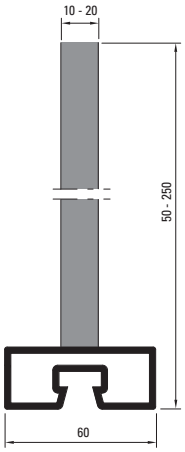




Na zapytanie
I_x = 403.51 cm^4
W_x = 53.32 cm^3



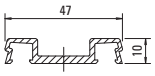
Na zapytanie
I_x = 597.05 cm^4
W_x = 69.62 cm^3



Na zapytanie

Profile osłonowe

Profile aluminiowe - 50 mm



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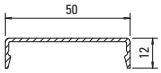

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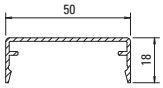

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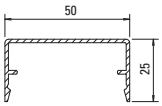

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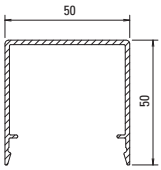

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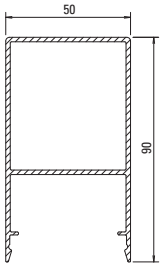

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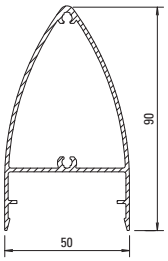

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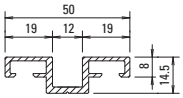

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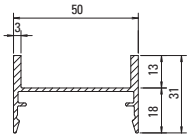

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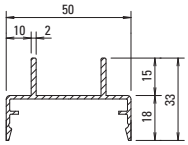

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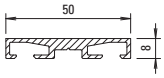

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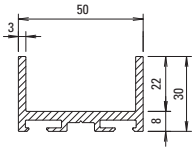
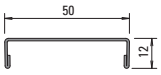


407.817

Profile ze stali szlachetnej - 50 mm



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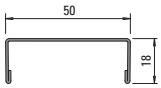

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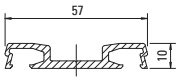
Profile aluminiowe - 60 mm



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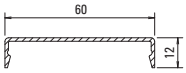

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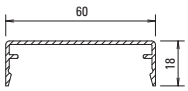

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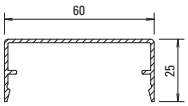

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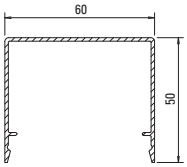

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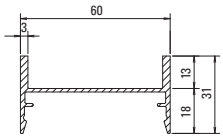

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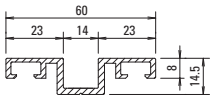

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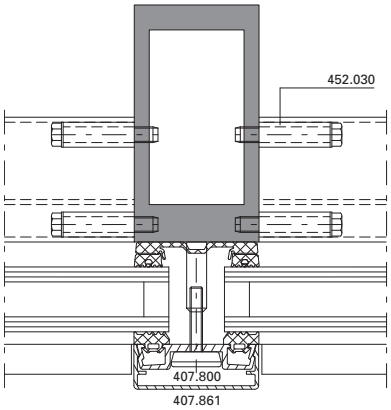
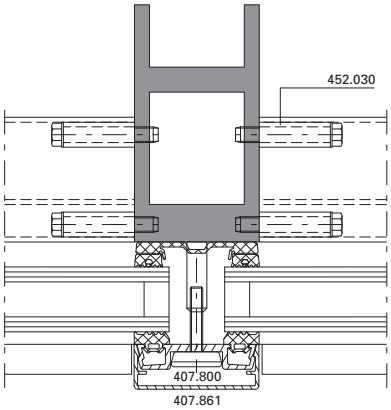
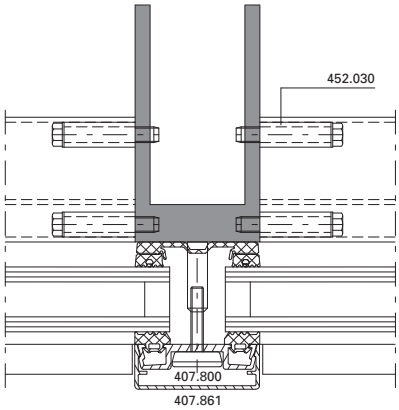
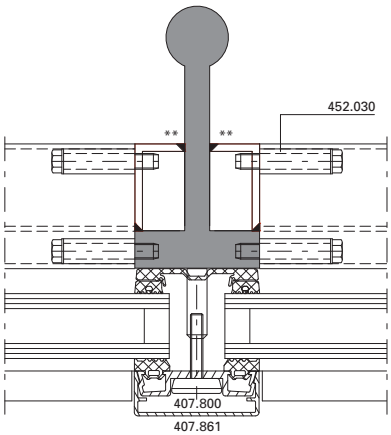
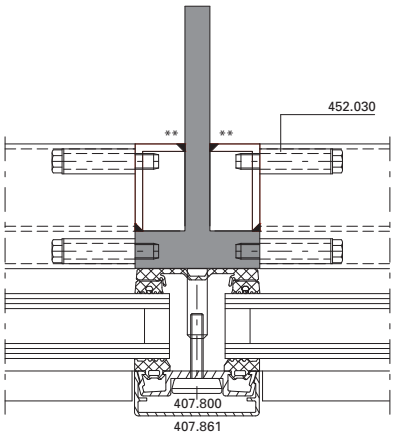
Przekroje poziome

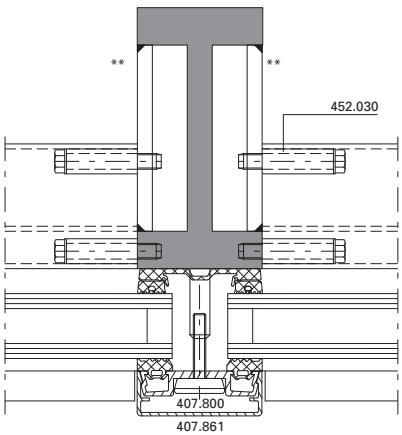






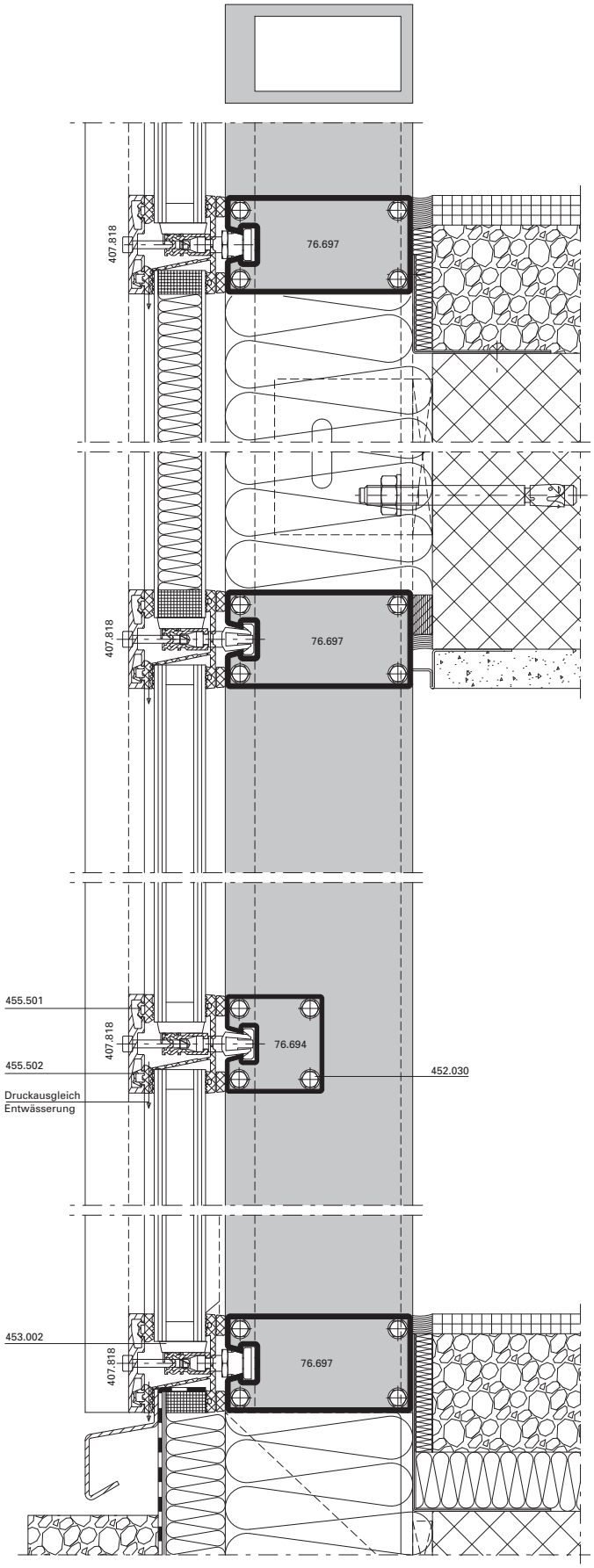


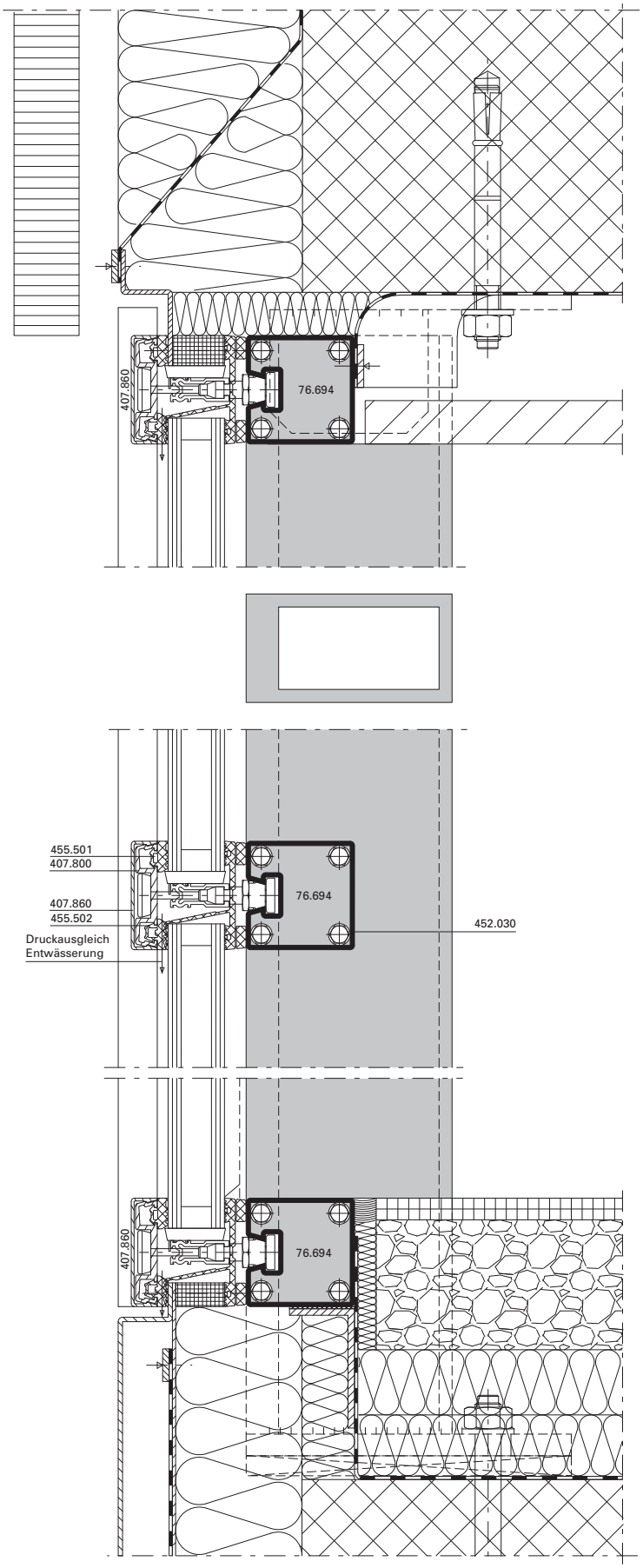




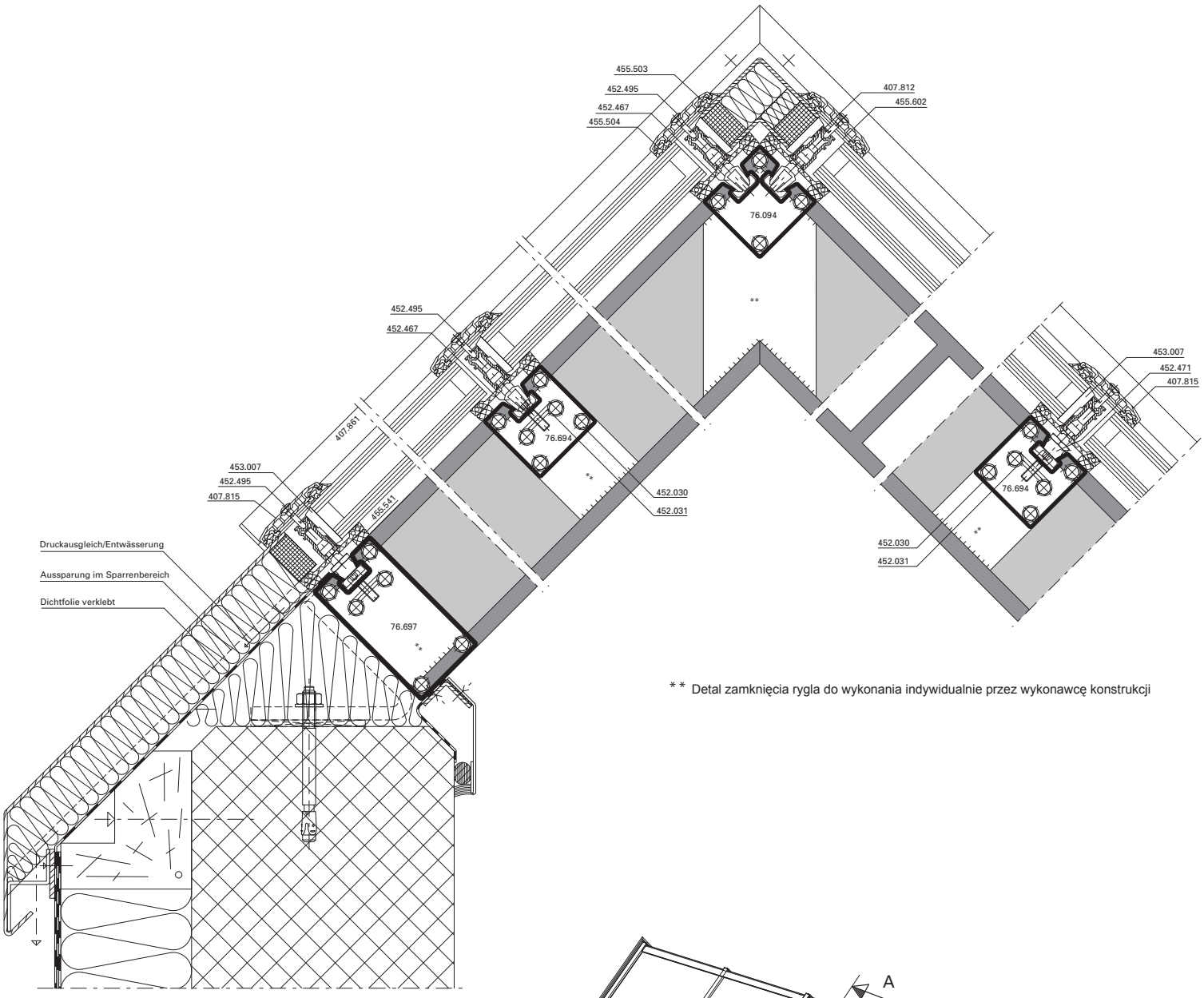
** Wspawany płaskownik gr. 6/8/10 mm lub kątownik gr. ≥ 3 mm
do wykonania indywidualnie przez wykonawcę konstrukcji

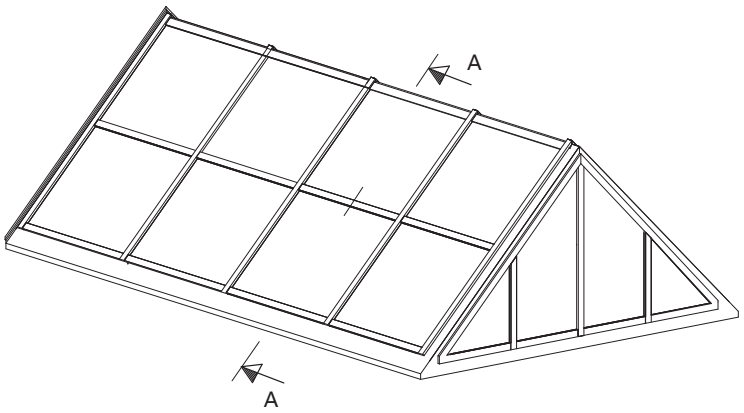
Przekroje pionowe



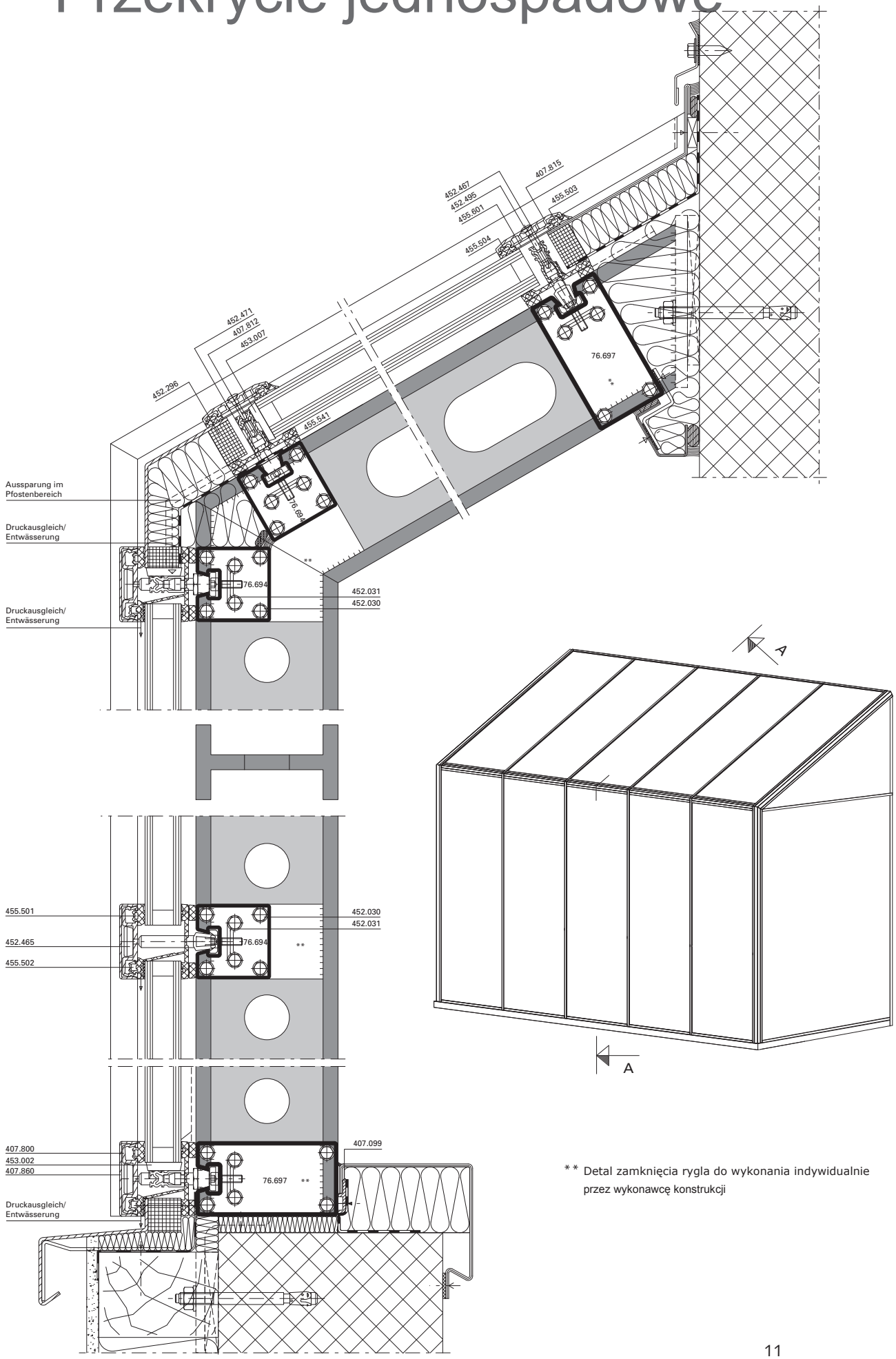


Przekrycie dwuspadowe



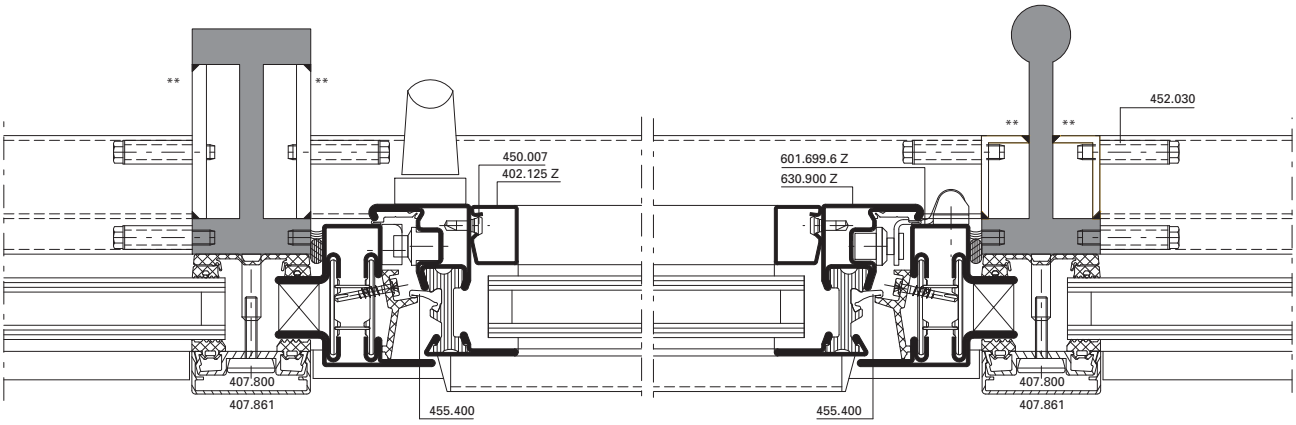


Przekrycie jednospadowe

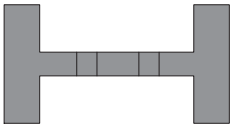


** Detal zamknięcia rygla do wykonania indywidualnie przez wykonawcę konstrukcji

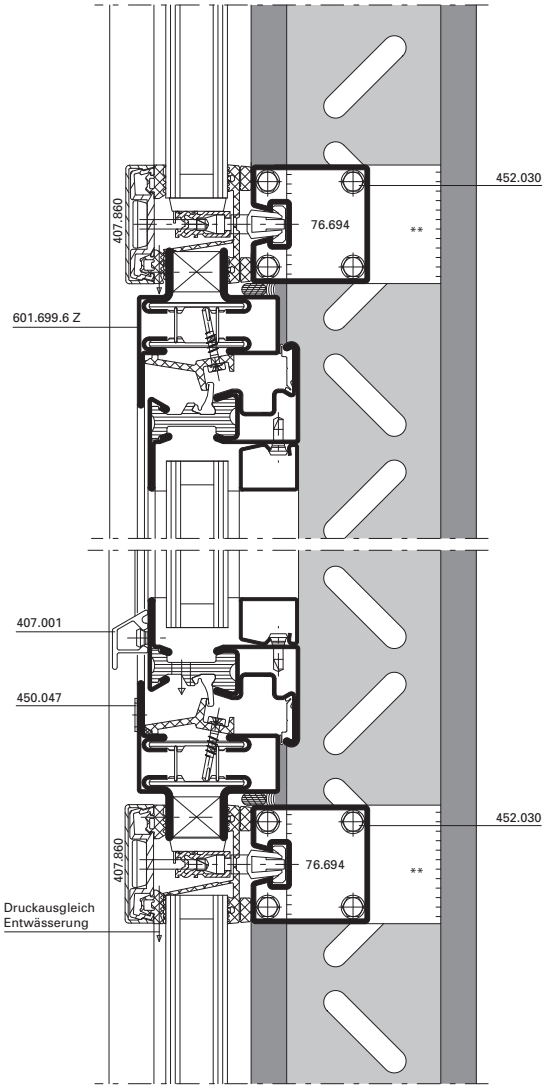
Okno wbudowane w fasadę

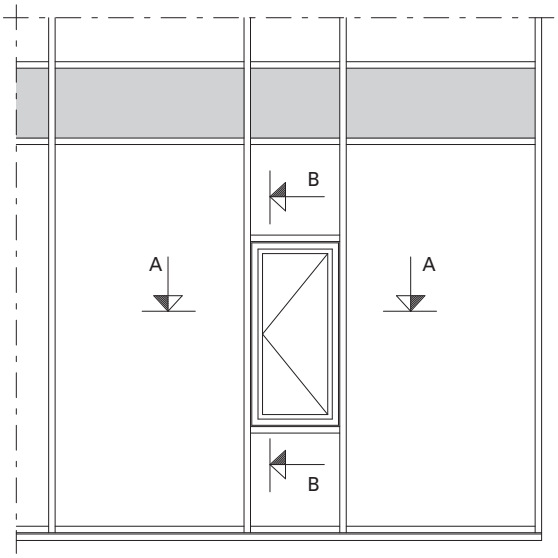


B - B

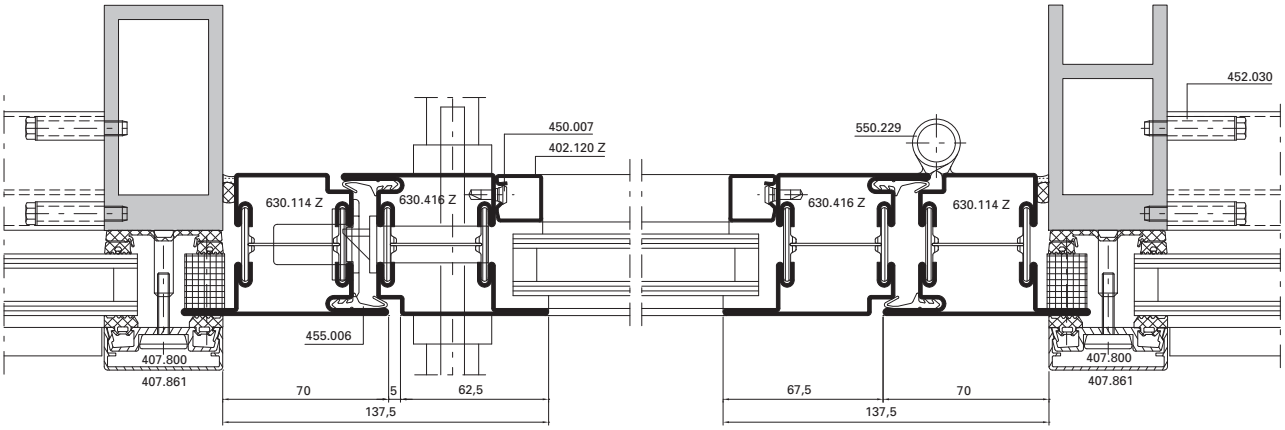


** Detal zamknięcia rygla (z płaskownika gr. 6/8/10 mm lub kątownika gr. ≥ 3 mm) do wykonania indywidualnie przez wykonawcę konstrukcji

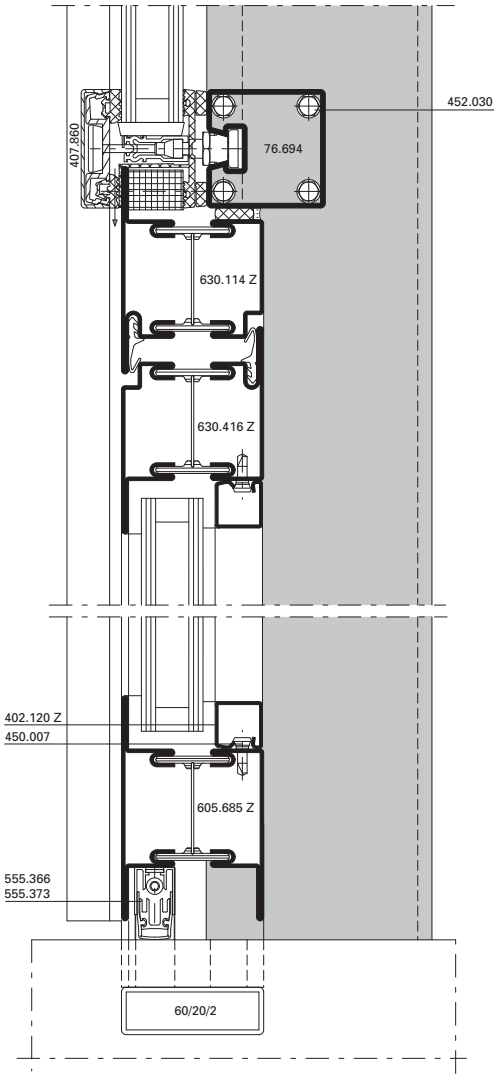




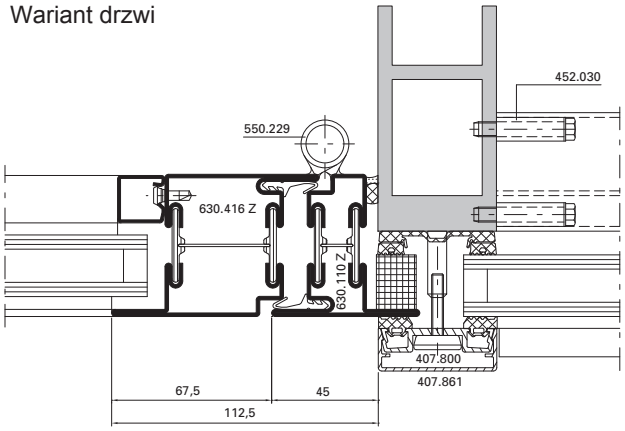
Drzwi wbudowane w fasadę

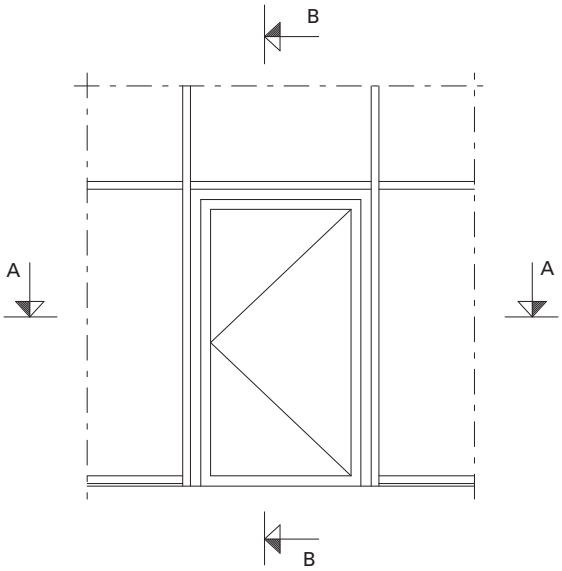


B - B



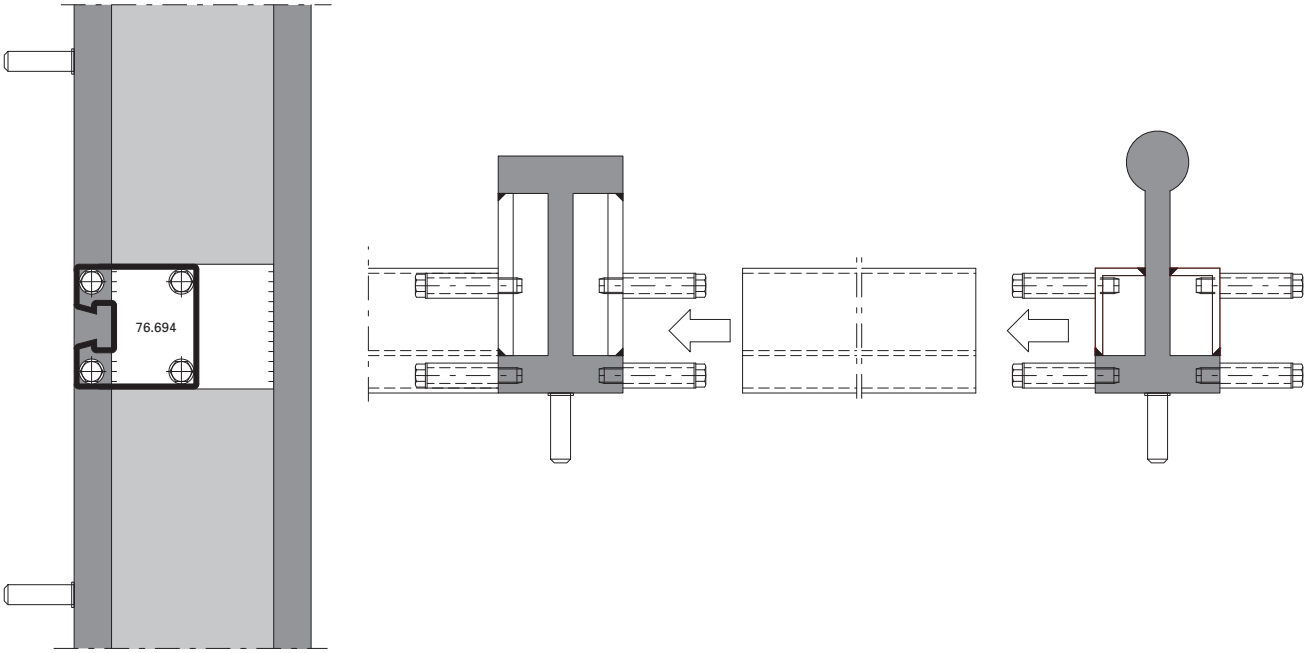
Wariant drzwi



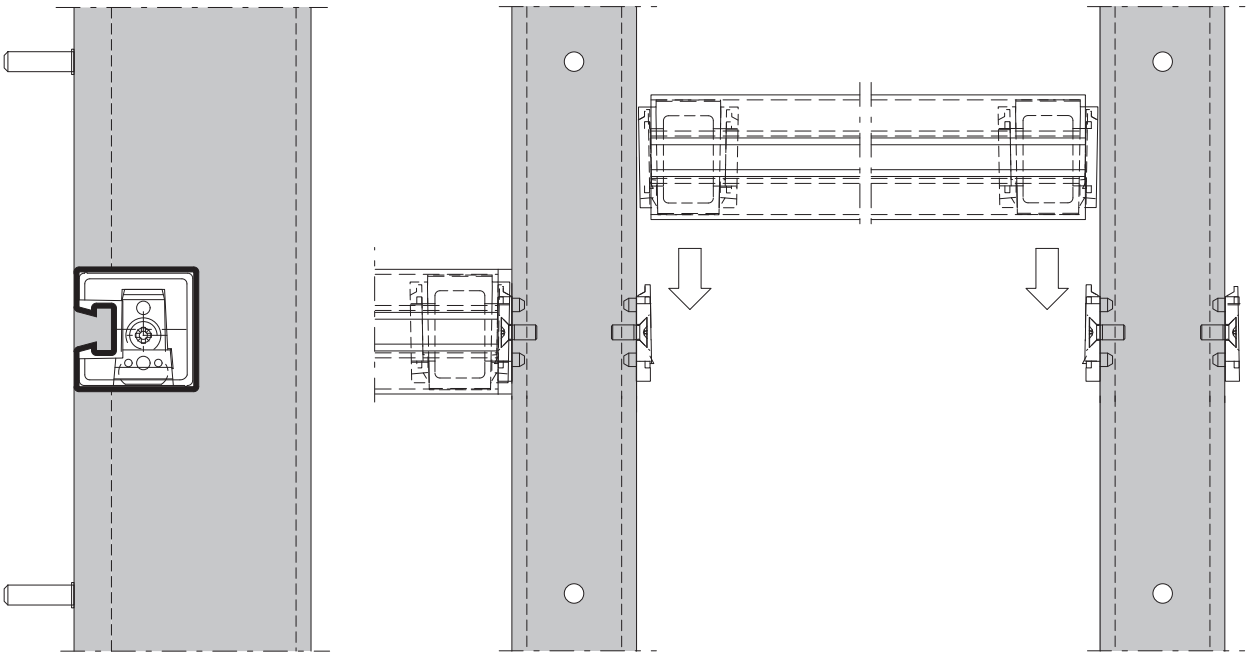


Połączenia typu "T"

Kolejność montażu "słup-rygiel-słup"

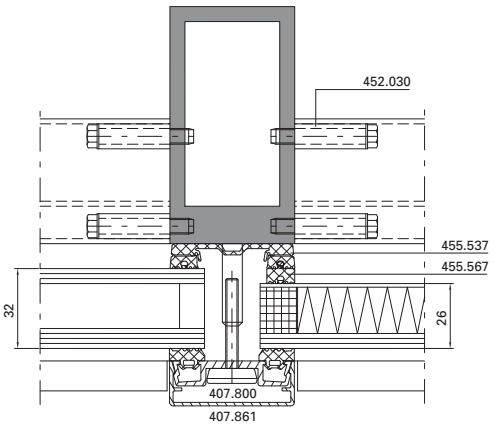


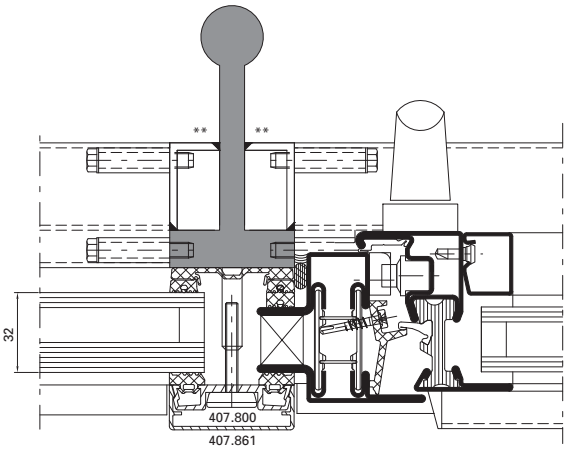
Kolejność montażu "słup-słup-rygiel"



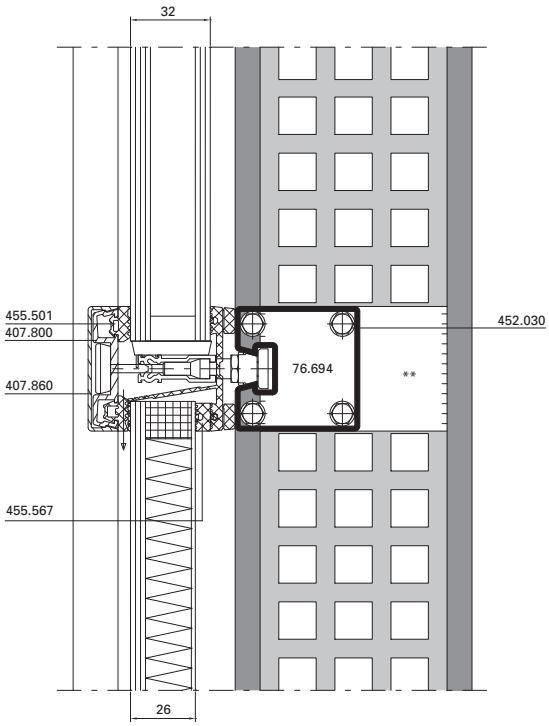
Uszczelnienia fasady

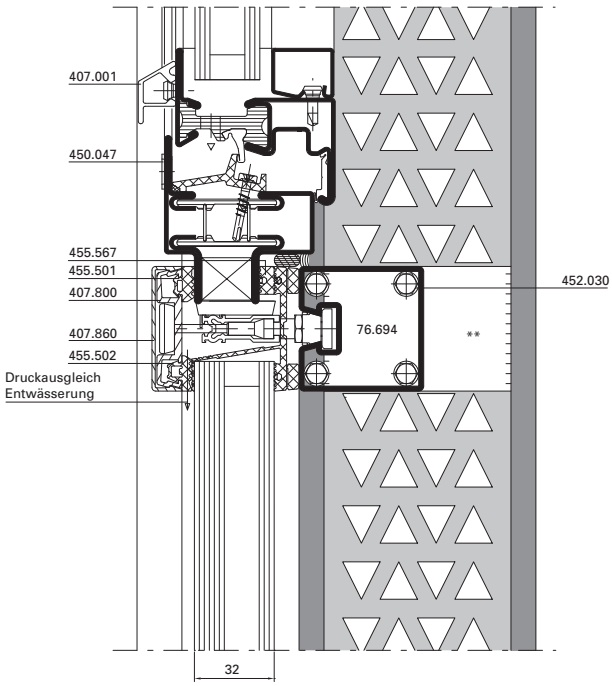
Uszczelki słupa





Uszczelki rygla

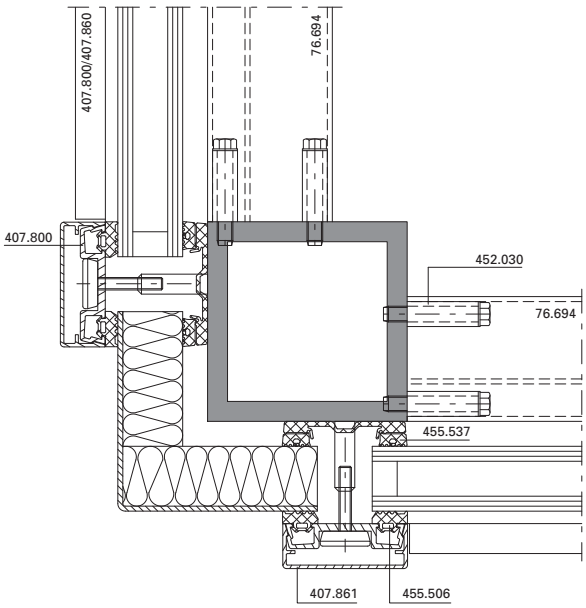




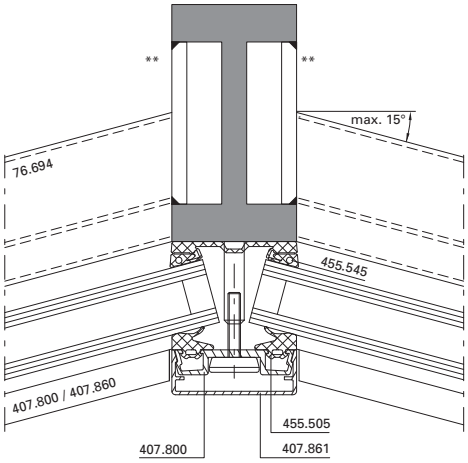
** Płaskownik gr. 6/8/10 mm lub kątownik gr. ≥ 3 mm
do wykonania indywidualnie przez wykonawcę konstrukcji

Detale konstrukcyjne

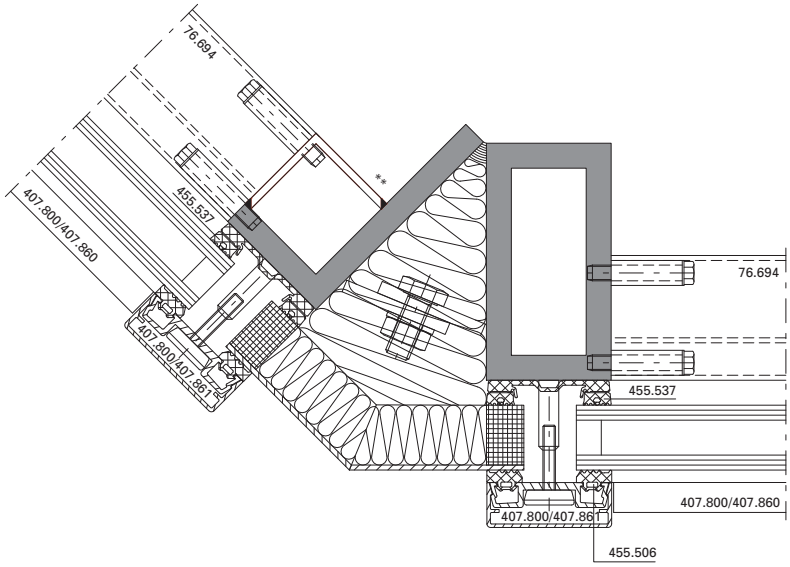
Narożnik zewnętrzny - kąt 90°



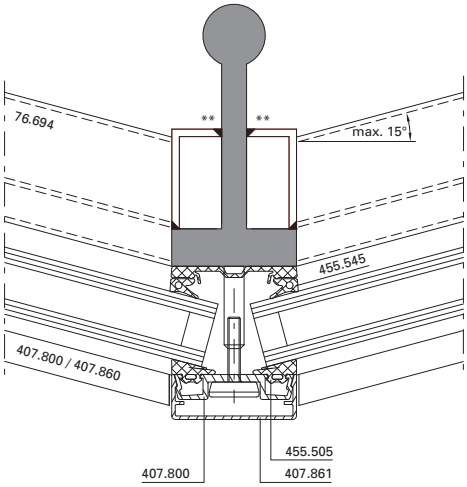
Szklenie kątowe



Narożnik zewnętrzny - kąt 135°



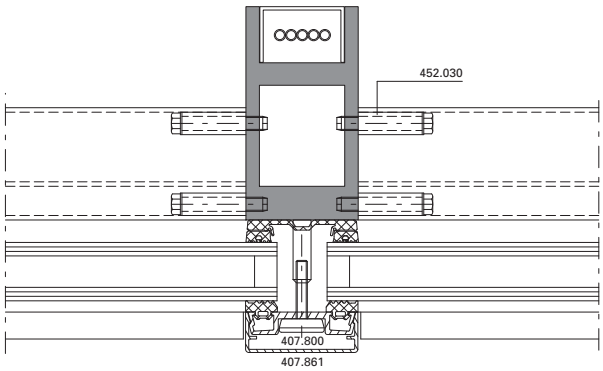
Szklenie kątowe



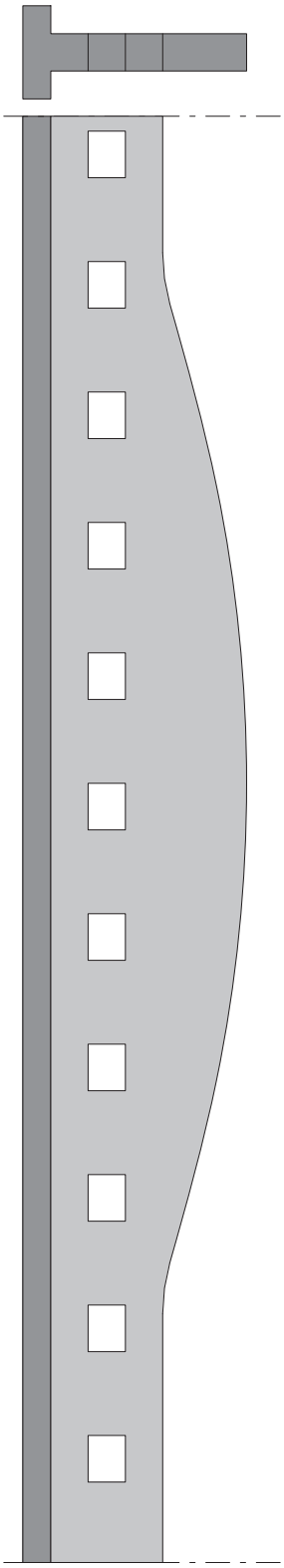
** Płaskownik gr. 6/8/10 mm lub kątownik gr. ≥ 3 mm
do wykonania indywidualnie przez wykonawcę konstrukcji

Detale konstrukcyjne

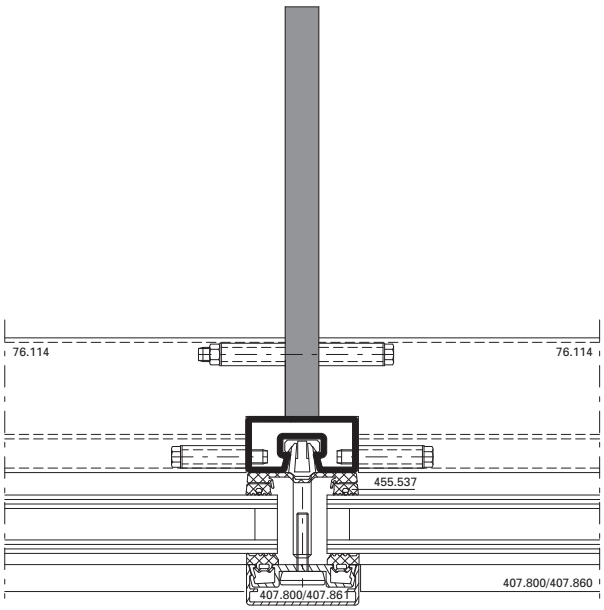
Prowadzenie okablowania w słupie



Wariant:
Środnik o zmiennej głębokości, z otworami



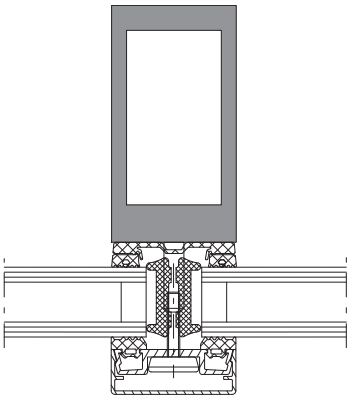
Detal łączenia rygla do słupa teownikowego



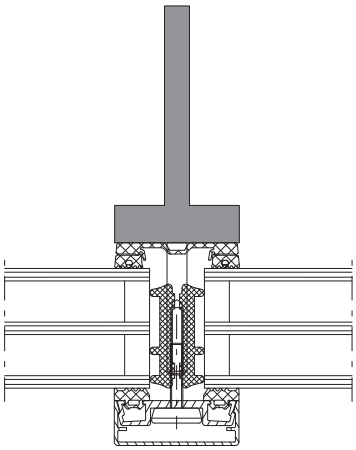
Fasada wysokoizolacyjna

Dom pasywny

Słup 50/60 mm



Słup 50/60 mm

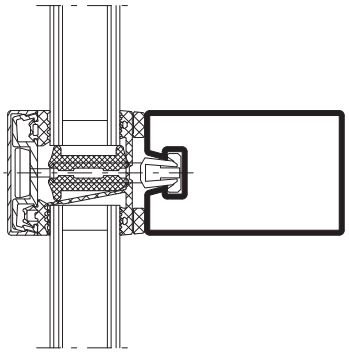


Szyba 28 - 38 mm
VISS $I_x$tra 50 mm: U_f = 1,21 – 1,05 W/m^{2}K
VISS $I_x$tra 60 mm: U_f = 1,20 – 1,04 W/m^{2}K

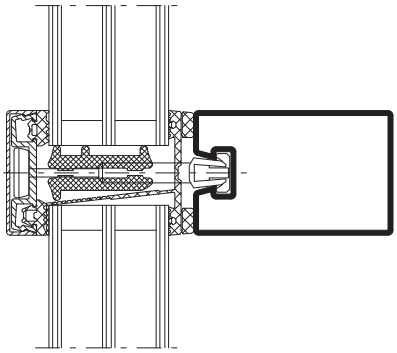
Szyba 43 - 70 mm
VISS $I_x$tra 50 mm: U_f = 1,01 – 0,86 W/m^{2}K
VISS $I_x$tra 60 mm: U_f = 1,00 – 0,85 W/m^{2}K

Wpływ śrub mocujących uwzględniono w obliczeniach (+0,30 W/m2K)

Rygiel 50/60 mm



Rygiel 50/60 mm



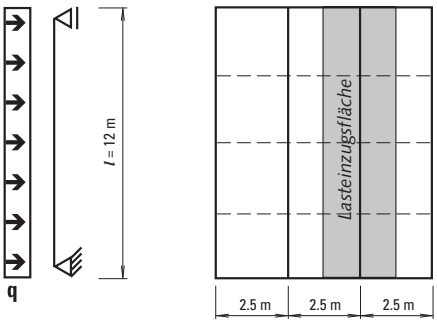
Szyba 28 - 38 mm
VISS 50 mm: U_f = 1,14 – 0,99 W/m^{2}K
VISS 60 mm: U_f = 1,11 – 0,97 W/m^{2}K

Szyba 43 - 70 mm
VISS 50 mm: U_f = 0,95 – 0,83 W/m^{2}K
VISS 60 mm: U_f = 0,93 – 0,77 W/m^{2}K

Wpływ śrub mocujących uwzględniono w obliczeniach (+0,14 W/m2K)

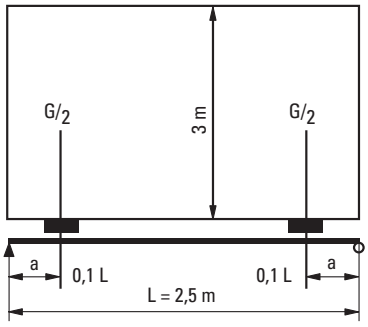
Przykład obliczeń statycznych

Schemat statyczny słupa:



$$I_x = \frac{\frac{5}{384} \cdot q \cdot l^4}{E \cdot f}$$

Schemat statyczny rygla:



$$I_y = \frac{G \cdot a}{48 \cdot E \cdot f_{max.}} \cdot (3L^2 - 4a^2)$$

Założenia:
Szyba: 10 / 16 / 6 mm
Parcie wiatru: w = 0,72 kN/m2

Ugięcie dopuszczalne słupa: f = 15 mm
Ugięcie dopuszczalne rygla: $f_{max.}$ = 3 mm

Słup:

$$I_x = \frac{\frac{5}{384} \cdot 2{,}5\ m \cdot 0{,}72\ kN/m^2 \cdot 12^4\ m^4}{210 \cdot 10^6\ kN/m^2 \cdot 0{,}015\ m}$$

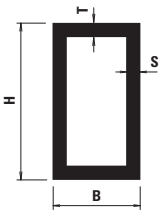
= 15'429 cm^4

Rygiel:

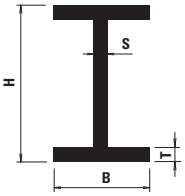
$$I_y = \frac{3\ kN \cdot 0{,}25\ m}{48 \cdot 210 \cdot 10^6\ kN/m^2 \cdot 0{,}003\ m}$$

$$\cdot (3 \cdot 2{,}5^2\ m^2 - 4 \cdot 0{,}25^2\ m^2)$$ **= 46 cm^4**

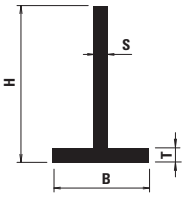
Możliwy wybór profili VISS Ixtra dla słupa:



H = 370 mm
B = 60 mm
T = 25 mm
S = 12 mm
I_x = 15'496 cm^4

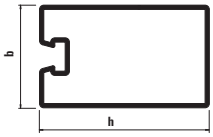


H = 370 mm
B = 60 mm
T = 25 mm
S = 25 mm
I_x = 15'769 cm^4



H = 400 mm
B = 60 mm
T = 25 mm
S = 25 mm
I_x = 15'545 cm^4

Dobór rygla:



76.684

h = 100 mm
b = 60 mm
I_y = 48,30 cm^4

König Stahl Sp. z o. o.
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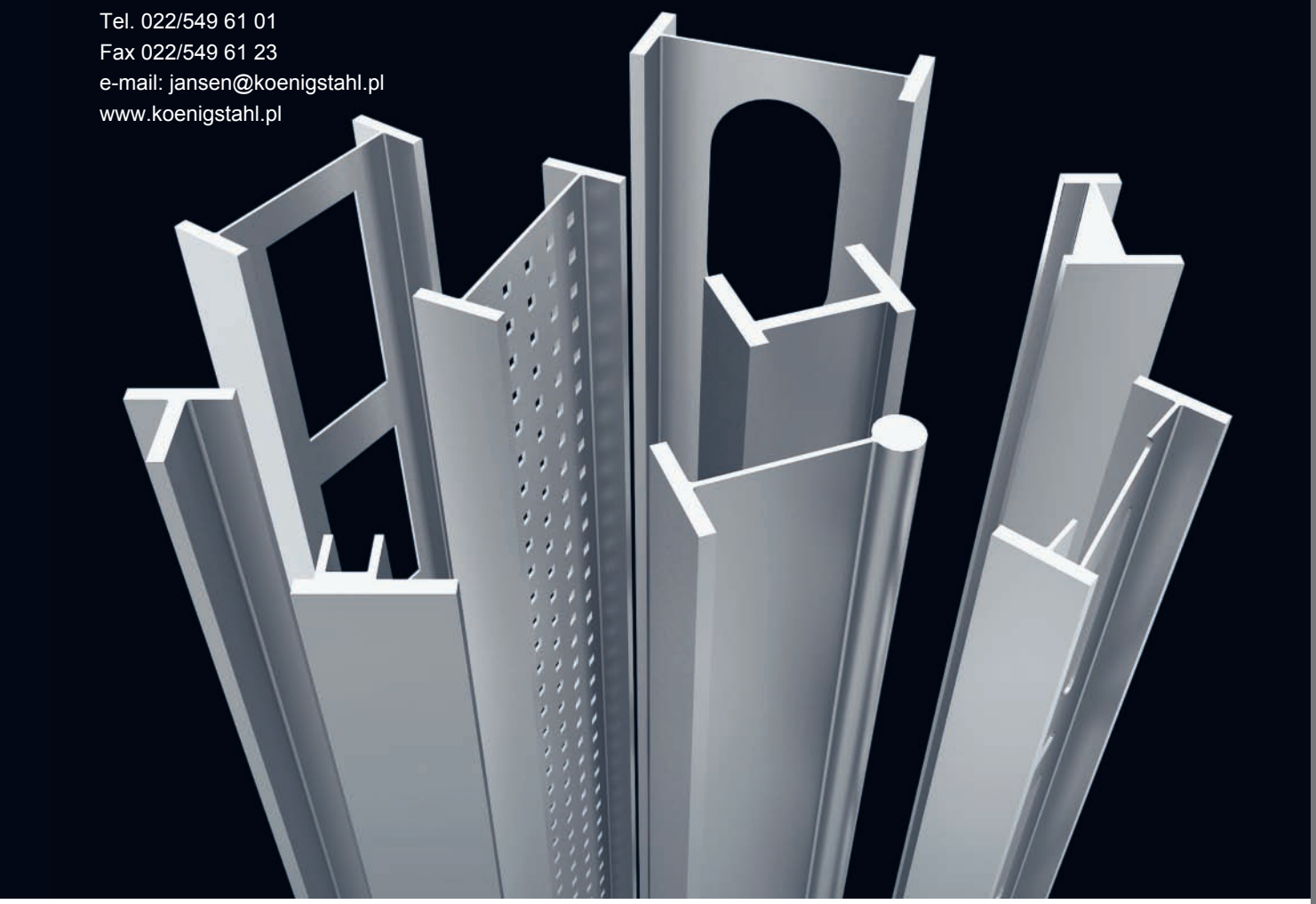
02-676 Warszawa
Tel. 022/549 61 01
Fax 022/549 61 23
e-mail: jansen@koenigstahl.pl
www.koenigstahl.pl



JANSEN

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