

ALU[®]PRO

ROLL[®]TECH

ROLLTECH A/S - an Alu-Pro Group Company

The worlds
leading producer
of warm edge spacers
for the insulating
glass industry



More than 3 decades in the business

Alu-Pro S.r.l and ROLLTECH A/S have been suppliers to the insulating glass industry for more than 3 decades, and have built up great experience and expertise in the field of warm edge spacers. This means that we are now world leader(s) in the sector.

We create value for our customers through:

- Customer service and short delivery times
- Spacer solutions of a consistently high quality
- The widest product range on the market
- Modern production plants
- Standard services as well as specialist skills

Modern buildings require spacers that actively contribute to minimising heat loss through low U-values whilst also ensuring a long lifetime for the windows. This is why our spacers are created with a design and a quality that assists everyone, from architects and contractors to end users, towards getting a perfect result, from the planning phase to day-to-day use.

We believe in the value of genuine partnerships and are constantly striving to live up to the trust shown to us by our large customer base.

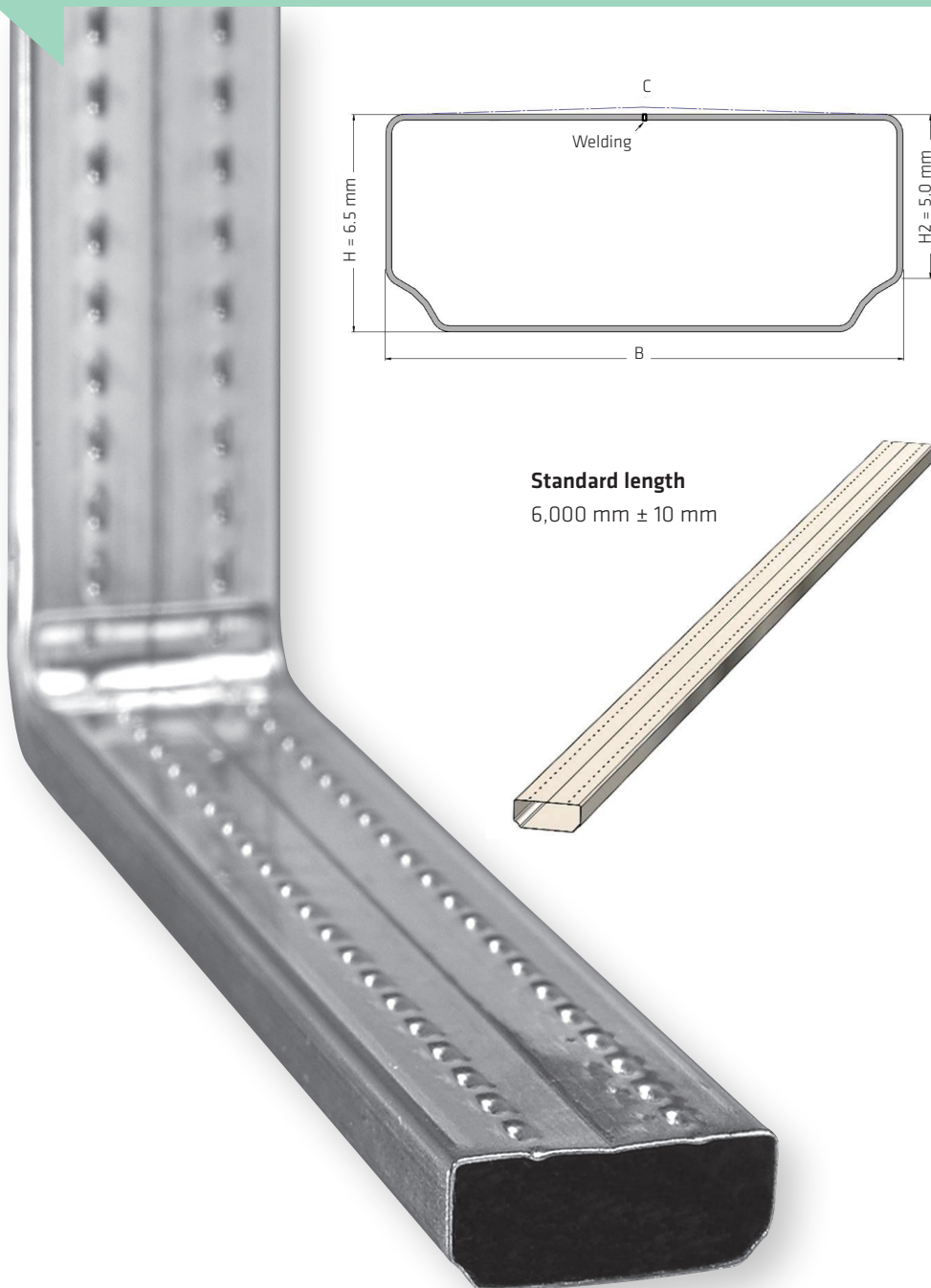
Our warm edge spacers reduce the energy bill and improve indoor climate for the benefit of you and your loved ones.

FACTS ABOUT OUR SPACERS

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DIMENSIONS

Sizes	B (mm) +/- 0.10
CHROMATECH 8	7.5 mm
CHROMATECH 10	9.5 mm
CHROMATECH 11	10.5 mm
CHROMATECH 12	11.5 mm
CHROMATECH 13	12.5 mm
CHROMATECH 14	13.5 mm
CHROMATECH 15	14.5 mm
CHROMATECH 16	15.5 mm
CHROMATECH 18	17.5 mm
CHROMATECH 20	19.5 mm
CHROMATECH 24	23.5 mm

H = 6.50 +/- 0.10 mm. H2 = 5.00 +/- 0.10 mm.

C = Centre height measured at the welding is H + 0.05 – 0.15 mm. Due to better bending quality.

MATERIALS

Stainless Steel The wall thickness is standard 0.18 mm

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon



Steel

Other accessories as flexible corners etc. are also available

COLORS

Can be supplied in almost all RAL and NCS colors.

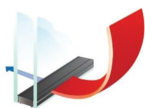
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 10 mm/m



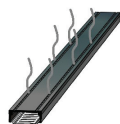
Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.81 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



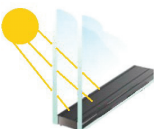
Compression data (16 mm spacer)
Max. 30 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.05% / No fogging



Thermal linear expansion
 $T\alpha$, metal 16 mm spacer = $1.5 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

Packaging	Quantity meter		Quantity pcs. /box			
Sizes	Box	Container bundled	Steel (DP*)	Plastic/Nylon (DP*)	Steel corner	Plastic/Nylon corner
8	1.260	14.004	2.500	5.000	5.000	5.000
10	960	12.672	2.500	5.000	5.000	5.000
11	768	10.368	2.500	-	-	-
12	672	10.368	2.500	5.000	2.500	5.000
13	672	9.216	2.500	-	-	-
14	576	9.216	2.500	5.000	2,500	4.000
15	576	8.448	2.500	5.000	2,500	4.000
16	480	8.064	2.000	5.000	2,500	3.500
18	480	7.296	1.500	4.000	2,500	4.000
20	384	6.144	1.500	4.000	2.500	3.000
24	384	5.376	1.500	3.000	2.000	-

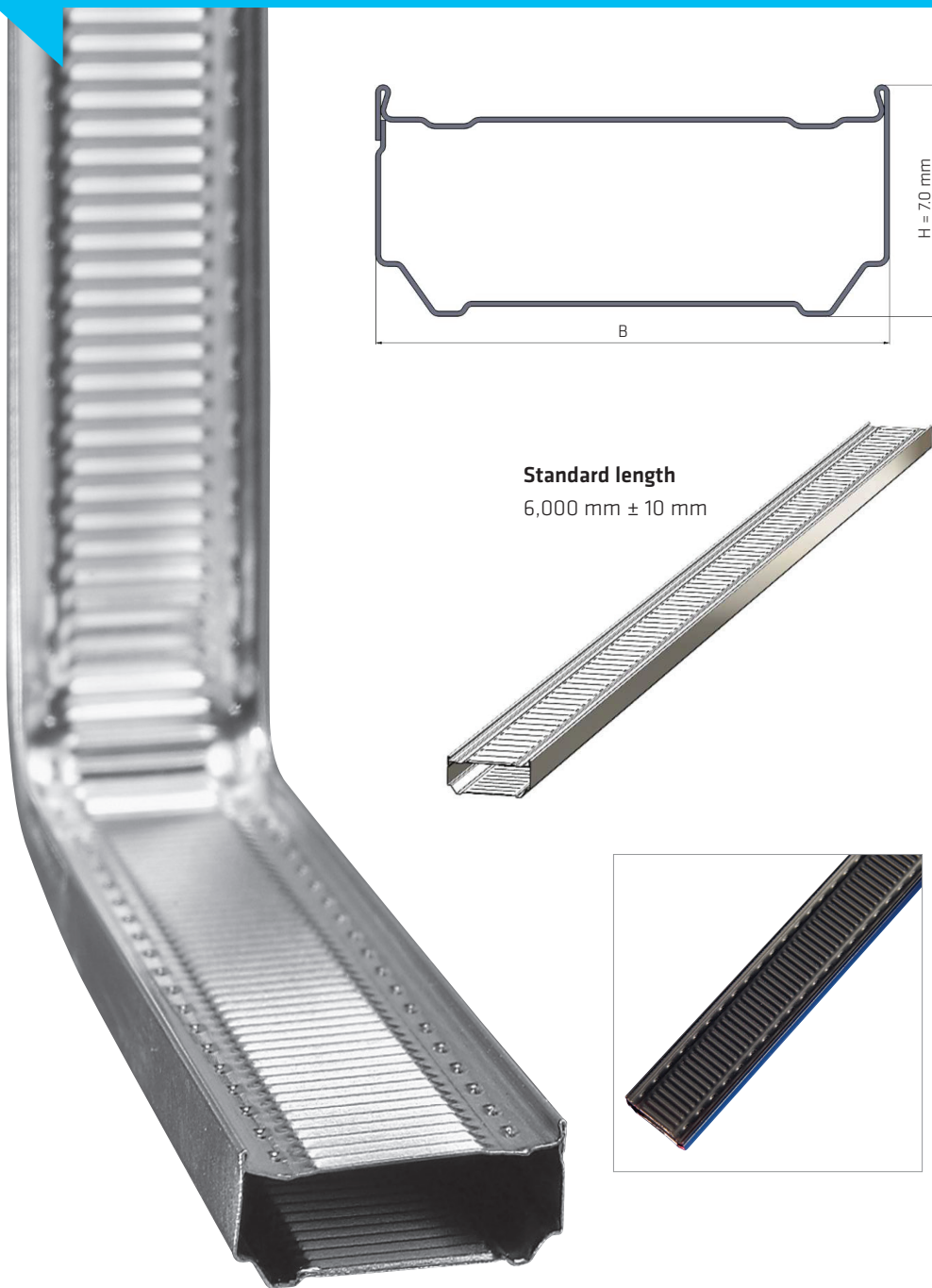
Sizes	Content Desiccant 0.5-0.9 mm grain	Connector		Corner	
		Steel (DP*)	Plastic/Nylon (DP*)	Steel corner	Plastic/Nylon
8	31	✓	✓	✓	✓
10	40	✓	✓	✓	✓
11	44	✓			
12	49	✓	✓	✓	✓
13	53	✓			
14	58	✓	✓	✓	✓
15	63	✓	✓	✓	✓
16	68	✓	✓	✓	✓
18	77	✓	✓	✓	✓
20	86	✓	✓	✓	✓
24	104	✓	✓	✓	✓

DP* = Desiccant passage.

All connectors are basically U-shaped and with passage for flow of desiccant during after filling.
Notice that preinserted connectors will lose some of its force.

CHROMATECH plus

Delivers an extremely high level of stability and flexible manufacturing options



DIMENSIONS

Sizes	B (mm) +/- 0.10
CHROMATECH 8	7.5 mm
CHROMATECH 10	9.5 mm
CHROMATECH 12	11.5 mm
CHROMATECH 14	13.5 mm
CHROMATECH 15	14.5 mm
CHROMATECH 16	15.5 mm
CHROMATECH 18	17.5 mm
CHROMATECH 20	19.5 mm

H = 7.0 +/- 0.1 mm.

MATERIALS

Stainless Steel The wall thickness is standard 0.15 mm

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon

Other accessories as flexible corners etc. are also available

COLORS

Can be supplied painted in almost all RAL and NCS colors.

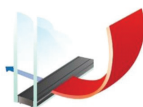
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 10 mm/m



Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.61 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



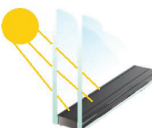
Compression data (16 mm spacer)
Max. 60 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.05% / No fogging



Thermal linear expansion
 $T\alpha$, metal 16 mm spacer = $1.5 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

Packaging	Quantity meter		Quantity pcs. /box		
Sizes	Box	Container bundled	Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon corner
8	1.296	-	2.500	-	-
10	1.080	14.256	2.500	5.000	5.000
12	864	11.664	2.500	5.000	5.000
14	756	10.368	2.500	5.000	5.000
15	648	9.504	2.500	5.000	5.000
16	648	9.072	2.500	5.000	5.000
18	540	7.776	1.500	5.000	4.000
20	540	6.912	1.500	4.000	4.000

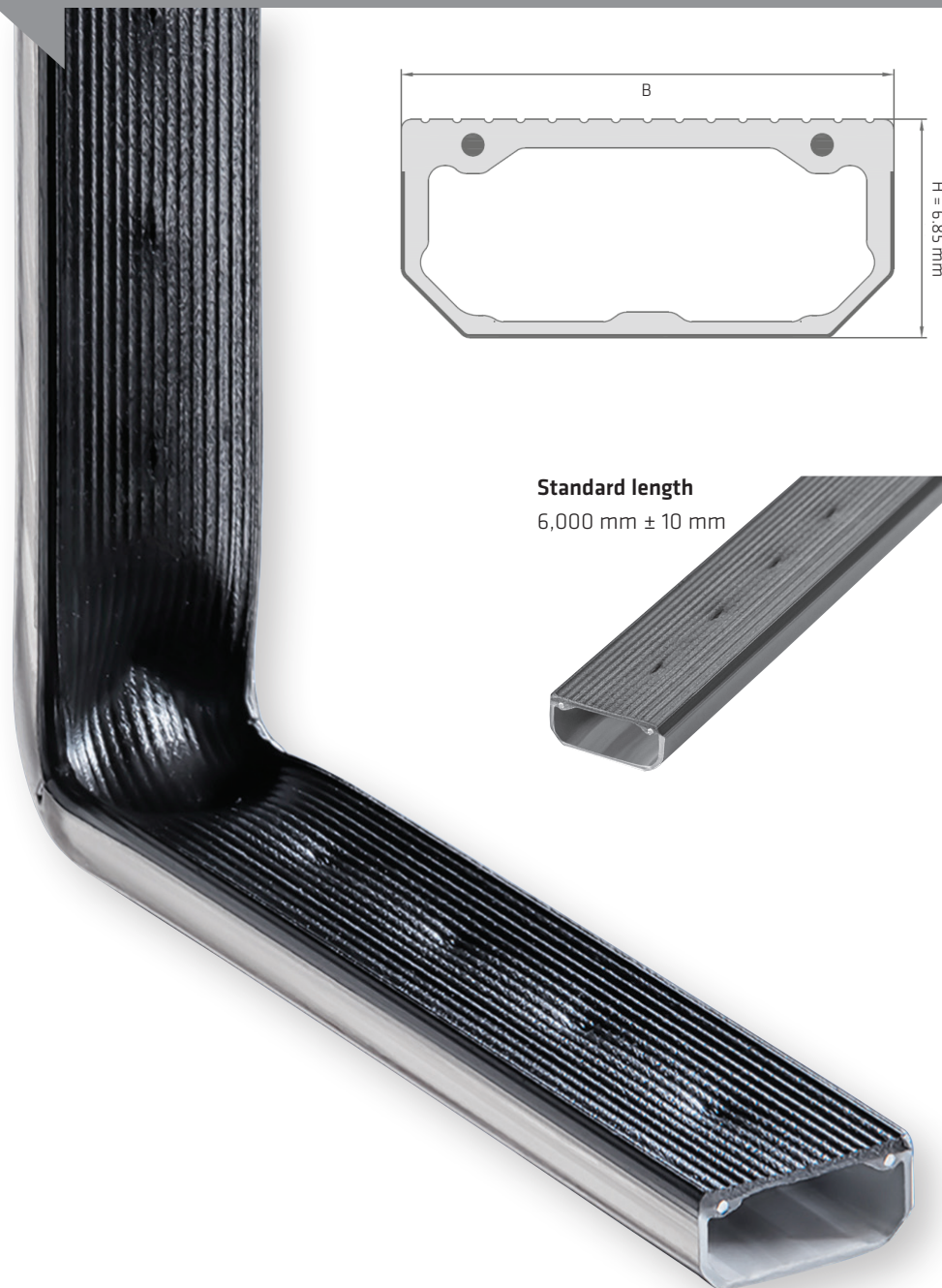
Sizes	Content Desiccant 0.5-0.9 mm grain	Connector		Corner
		Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon corner
8	31	✓	✓	✓
10	40	✓	✓	✓
12	49	✓	✓	✓
14	58	✓	✓	✓
15	63	✓	✓	✓
16	68	✓	✓	✓
18	77	✓	✓	✓
20	86	✓	✓	✓

DP* = Desiccant passage. (✓) = Frame closing

All connectors are basically U-shaped and with passage for flow of desiccant during after filling.
Notice that preinserted connectors will lose some of its force.

THERMIX TX PRO

Unique wiring technology combined with high-quality plastic and stainless steel.



DIMENSIONS

Sizes	B (mm) +/- 0.15	H (mm) +/- 0.15
Thermix TX PRO 8	7.50 mm	6.85 mm
Thermix TX PRO 9	8.50 mm	6.85 mm
Thermix TX PRO 10	9.50 mm	6.85 mm
Thermix TX PRO 12	11.50 mm	6.85 mm
Thermix TX PRO 13	12.50 mm	6.85 mm
Thermix TX PRO 14	13.50 mm	6.85 mm
Thermix TX PRO 15	14.50 mm	6.85 mm
Thermix TX PRO 16	15.50 mm	6.85 mm
Thermix TX PRO 18	17.50 mm	6.85 mm
Thermix TX PRO 20	19.50 mm	6.85 mm
Thermix TX PRO 22	21.50 mm	6.85 mm
Thermix TX PRO 24	23.50 mm	6.85 mm

MATERIALS

TECATHERM PP, stainless steel

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon

COLORS



WHITE
RAL 9016



LIGHT GREY
RAL 7035



WINDOW GREY
RAL 7040



BLACK
RAL 9005



CLAY BROWN
RAL 8003



MAHOGANY
RAL 8016

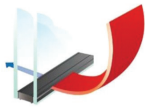
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 10 mm/m



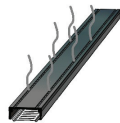
Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.31 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



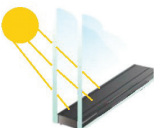
Compression data (16 mm spacer)
Max. 60 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.05% / No fogging



Thermal linear expansion
 α , metal 16 mm spacer = $2.08 \times 10^{-5} \text{ 1/K}$
 α , polymer 16 mm spacer = $4.44 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

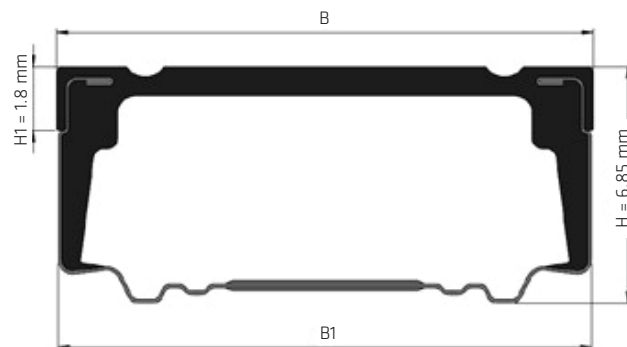
PROFILES by 5 and 6 meters												
Product	Width in mm	Distance between glasses in mm	Bars' length in meters and filling quantity for packaging unit									
			Cardboard boxes		Stillages		Partition of stillages					
							1/3	2/3	1/2	1/3	2/3	1/2
			5 m	6 m	5 m	6 m	5 m			6 m		
Tecnopolymer spacer profile with two stain- less wires, partially covered by a very thin stainless steel foil. The spacers are tied in bundles of 11 bars each. Cardboard boxes of 5 and 6 meters are loose sold or in wooden crates containing 28 or/and 35 boxes each, which must have the same length but can be of different thick- nesses and colours.	7.5	8	990	1.188	24.200	29.040	7.920	16.500	12.540	9.504	19.800	15.048
	8.5	9	990	1.188	22.880	27.456	7.260	14.850	11.550	8.712	17.820	13.860
	9.5	10	880	1.056	22.000	26.400	6.270	13.200	9.900	7.524	15.840	11.880
	11.5	12	660	792	18.480	22.176	5.390	11.000	8.250	6.468	13.200	9.900
	12.5	13	660	792	15.400	18.48	4.510	9.625	7.425	5.412	11.550	8.910
	13.5	14	550	660	15.400	18.480	4.510	9.625	7.425	5.412	11.550	8.910
	14.5	15	550	660	13.200	15.840	4.180	8.800	6.600	5.016	10.560	7.920
	15.5	16	550	660	13.200	15.840	4.070	8.525	6.435	4.884	10.230	7.722
	17.5	18	440	528	12.320	14.784	3.630	7.425	5.445	4.356	8.910	6.534
	19.5	20	440	528	11.440	13.728	2.970	6.600	4.950	3.564	7.920	5.940
21.5	22	330	396	10.560	12.672	2.970	6.600	4.620	3.564	7.920	5.544	
23.5	24	330	396	9.680	11.616	2.970	6.050	4.290	3.564	7.260	5.148	

The cardboard boxes for 5 m profiles measure: 510 x 17 x 10 (H) cm. - Thermix TX Pro profiles in 5 m length are not available from stock but have to be produced by order. The cardboard boxes for 6 m profiles measure: 610 x 17 x 10 (H) cm. The stillages for 5 m profiles measure: 515 x 79 x 72 (H) cm. - The stillages for 6 m profiles measure: 615 x 79 x 72 (H) cm. The stillages can be supplied with mixed profiles of different thicknesses and colours. Possible partitions: **1)** 1/3 + 1/3 + 1/3. **2)** 1/3 + 2/3. **3)** 1/2 + 1/2.

ACCESSORIES								
Product	Width in mm	Distance between glasses in mm	For closing the frames				For the insertion of gas into the cavities	
			Connectors		Corner keys		Linears	
			Steel	Plastic	Plastic	Flexibles	Support	Stoppers
Accessories for Thermix Tx Pro (Pieces for box) Standard connectors in steel and plastic. Standard and flexible corner keys in plastic. For gas filling: Supports and stoppers.	7.5	8	2.500		2.500	1,000	5.000	5.000
	8.5	9	2.500		2.500			
	9.5	10	2.500		2.500	1.000		
	11.5	12	2.500	5.000	2.500	1.000		
	12.5	13	2.500	5.000	2.500			
	13.5	14	2.500	5.000	2.500	1.000		
	14.5	15	2.500	5.000	2.500	1.000		
	15.5	16	2.500	5.000	2.500	1.000		
	17.5	18	2.500	5.000	2.500	1.000		
	19.5	20	2.500	5.000	2.500	1.000		
	21.5	22	2.500	5.000	2.500	1.000		
	23.5	24	2.500	5.000	2.500	1.000		

CHROMATECH ultra S

The ultimate spacer designed for easy bending, large frames and 2-side desiccant filling.



Standard length
6,000 mm $\pm$ 10 mm



DIMENSIONS

Sizes	B (mm) +/- 0.15	B1 (mm) +/- 0.25/-0.95
CHROMATECH ultra S 8	7.6 mm	7.5 mm
CHROMATECH ultra S 10	9.6 mm	9.5 mm
CHROMATECH ultra S 12	11.6 mm	11.5 mm
CHROMATECH ultra S 13	12.6 mm	12.5 mm
CHROMATECH ultra S 14	13.6 mm	13.5 mm
CHROMATECH ultra S 15	14.6 mm	14.5 mm
CHROMATECH ultra S 16	15.6 mm	15.5 mm
CHROMATECH ultra S 18	17.6 mm	17.5 mm
CHROMATECH ultra S 20	19.6 mm	19.5 mm
CHROMATECH ultra S 22	21.6 mm	21.5 mm
CHROMATECH ultra S 24	23.6 mm	23.5 mm
CHROMATECH ultra S 26	25.6 mm	25.5 mm

H = 6.85 +0.15/-0.05 mm. H1 = 1.80 +0.50/0.10 mm

MATERIALS

Stainless Steel The wall thickness is standard 0.10 mm

Engineered PP Thickness of top 0.85 mm

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon

Other accessories as flexible corners etc. are also available

COLORS



WHITE
RAL 9016



LIGHT GREY
RAL 7035



WINDOW GREY
RAL 7040



BLACK
RAL 9004



CLAY BROWN
RAL 8003



MAHOGANY
RAL 8016

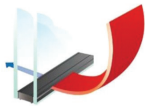
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



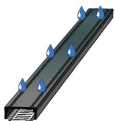
Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 5 mm/m



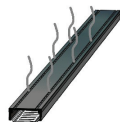
Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.32 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



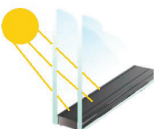
Compression data (16 mm spacer)
Max. 50 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.2% / No fogging 60°C and 80°C



Thermal linear expansion
 α , metal 16 mm spacer = $1.56 \times 10^{-5} \text{ 1/K}$
 α , plastic 16 mm spacer = $2.16 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

Packaging	Quantity meter		Quantity pcs. /box		
Sizes	Box	Container bundled	Steel (DP*)	Plastic/Nylon P (DP*)	Plastic/Nylon corner
8	1.152	15.744	2.500	-	2.000
10	960	12.672	2.500	-	2.000
12	768	10.368	2.500	2.000	2.000
13	672	9.216	2.500	-	2.000
14	672	9.216	2.500	2.000	2.000
15	576	8.448	2.500	2.000	2.000
16	76	8.064	2.000	2.000	2.000
18	480	7.296	1.500	2.000	2.000
20	480	6.144	1.500	2.000	2.000
22	384	5.376	1.500	-	2.000
24	384	5.376	1.500	-	2.000
26	384	5.376	1.500	-	-

Sizes	Content Desiccant 0.5-0.9 mm grain	Connector			Corner
		Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon P (DP*)	Plastic/Nylon
8	22-25	✓	(✓)		✓
10	29-33	✓	(✓)		✓
12	36-41	✓	(✓)	✓	✓
13	40-46	✓	(✓)		
14	44-50	✓	(✓)	✓	✓
15	47-54	✓	(✓)	✓	✓
16	51-58	✓	(✓)	✓	✓
18	58-66	✓	(✓)	✓	✓
20	65-75	✓	(✓)	✓	✓
22	73-83	✓	(✓)		✓
24	80-91	✓	(✓)		✓
26	87-100	✓			

DP* = Desiccant passage. (✓) = Frame closing

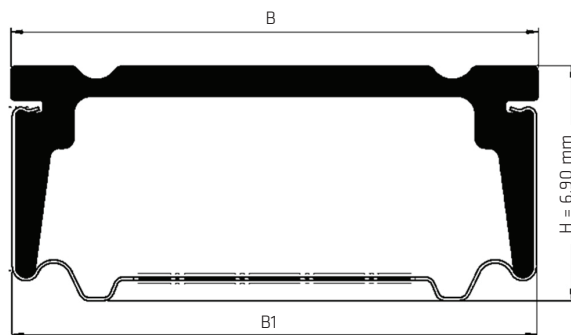
All connectors are basically U-shaped and with passage for flow of desiccant during after filling.

The P-connector has a closed backside part (bridge) to prevent dust leak.

Note that there will be a difference in pull force between preinserted- and direct inserted connectors.

CHROMATECH ultra F / F1

The hybrid spacer with the best lambda value on the market and designed for easy bending.



Standard length
6,000 mm $\pm$ 10 mm



DIMENSIONS

Sizes	B (mm) +/- 0.15	B1 (mm) +/- 0.25/-0.95
CHROMATECH ultra F 8	7.6 mm	7.5 mm
CHROMATECH ultra F 10	9.6 mm	9.5 mm
CHROMATECH ultra F 12	11.6 mm	11.5 mm
CHROMATECH ultra F 13	12.6 mm	12.5 mm
CHROMATECH ultra F 14	13.6 mm	13.5 mm
CHROMATECH ultra F 15	14.6 mm	14.5 mm
CHROMATECH ultra F 16	15.6 mm	15.5 mm
CHROMATECH ultra F 18	17.6 mm	17.5 mm
CHROMATECH ultra F 20	19.6 mm	19.5 mm
CHROMATECH ultra F 22	21.6 mm	21.5 mm
CHROMATECH ultra F 24	23.6 mm	23.5 mm

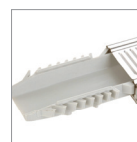
H = 6.90 +/- 0.15 mm

MATERIALS

Stainless Steel The wall thickness is standard 0.10 mm
PVC Thickness of top 0.90 mm

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon

Other accessories as flexible corners etc. are also available

COLORS



LIGHT GREY
RAL 7035 (F)



WINDOW GREY
RAL 7040 (F)



BLACK
RAL 9004 (F1)



WHITE
RAL 9016 (F1)

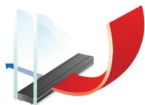
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 10 mm/m



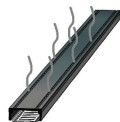
Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.28 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



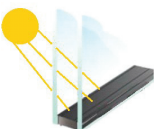
Compression data (16 mm spacer)
Max. 50 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.2% / No fogging 60°C and 80°C



Thermal linear expansion
 α , metal 16 mm spacer = $1.49 \times 10^{-5} \text{ 1/K}$
 α , plastic 16 mm spacer = $3.75 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

Packaging	Quantity meter stillages			Quantity pcs. /box			
	Sizes	Box	Container bundled (RT)	Container bundled (AP)	Steel (DP*) (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon P corner
	8	1.152	15.744	19.584	2.500	5.000	-
	10	960	12.672	19.584	2.500	5.000	-
	12	768	10.368	16.128	2.500	5.000	2.000
	13	672	9.216	14.976	2.500	-	-
	14	672	9.216	14.976	2.500	5.000	2.000
	15	576	8.448	13.248	2.500	5.000	2.000
	16	576	8.064	13.248	2.000	5.000	2.000
	18	480	7.296	12.096	1.500	4.000	2.000
	20	480	6.144	10.944	1.500	4.000	2.000
	22	384	5.376	8.640	1.500	3.500	-
	24	384	5.376	7.488	1.500	3.000	-

RT = Roltech. AP = Alu-Pro

Sizes	Content Desiccant 0.5-0.9 mm grain	Connector			Corner
		Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon P (DP*)	Plastic/Nylon
8	20	✓	✓		✓
10	29	✓	✓		✓
12	36	✓	✓	✓	✓
13	41	✓			
14	45	✓	✓	✓	✓
15	49	✓	✓	✓	✓
16	52	✓	✓	✓	✓
18	60	✓	✓	✓	✓
20	68	✓	✓	✓	✓
22	76	✓	✓		✓
24	84	✓	✓		✓

DP* = Desiccant passage.

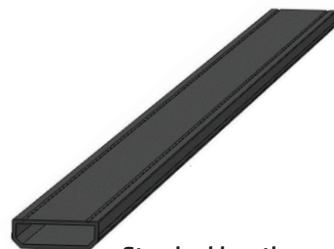
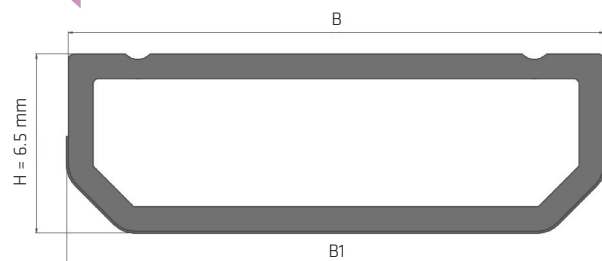
All connectors are basically U-shaped and with passage for flow of desiccant during after filling.

The P-connector has a closed backside part (bridge) to prevent dust leak.

Note that there will be a difference in pull force between preinserted- and direct inserted connectors.

MULTITECH G

Thermally better than any other known spacer bar. This will provide you with the highest internal surface temperature on the glass inside



Standard length
5,000 mm & 6,000 mm
± 10 mm

DIMENSIONS

Sizes	B (mm) +/- 0.10	B1 (mm) +/- 0.15
MULTITECH G 8	7.5 mm	7.6 mm
MULTITECH G 10	9.5 mm	9.6 mm
MULTITECH G 12	11.5 mm	11.6 mm
MULTITECH G 13	12.5 mm	12.6 mm
MULTITECH G 14	13.5 mm	13.6 mm
MULTITECH G 15	14.5 mm	14.6 mm
MULTITECH G 16	15.5 mm	15.6 mm
MULTITECH G 18	17.5 mm	17.6 mm
MULTITECH G 20	19.5 mm	19.6 mm
MULTITECH G 22	21.5 mm	21.6 mm
MULTITECH G 24	23.5 mm	23.6 mm
MULTITECH G 27	26.5 mm	26.6 mm

H = 6.5 +/- 0.1 mm

MATERIALS

San Plast

The wall thickness is standard 0.90 mm + 0.25/-0.05 mm

Foil

The thickness is standard 40 my

ACCESSORIES

Connectors



Plastic/Nylon



Steel

Corners



Plastic/Nylon



Butyle

Other accessories as flexible corners etc. are also available

COLORS



WHITE
RAL 9016



LIGHT GREY
RAL 7035



TITANIUM GREY
RAL 9023



BLACK
RAL 9004



CLAY BROWN
RAL 8003



MAHOGANY
RAL 8016

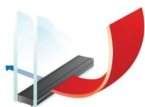
EN1279 NORMATIVE TEST REFERENCES AND OTHER METHODS



Pull force
Depends on chosen connector



Rectitude from production
Sideways max. 5 mm/m
Up/down max. 10 mm/m



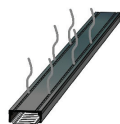
Two box model characteristic value
IFT WA-17/1
 $\lambda_{eq,2B} = 0.125 \text{ W/mK}$



Perforation holes size
Checked with airflow
Allowed humidity uptake 1-5wt% pr. 24 hours



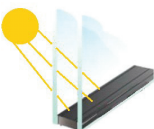
Compression data (16 mm spacer)
Max. 40 N/cm static pressure



Volatile elements / Fogging
EN 1279
MV < 0.3% / No fogging 60°C and 80°C



Thermal linear expansion
 α , metal 16 mm spacer = $1.83 \times 10^{-5} \text{ 1/K}$
 α , plastic 16 mm spacer = $2.01 \times 10^{-5} \text{ 1/K}$



UV stability
EN ISO 4892-2 / A
3,000 hours of radiation with no significant color change

ADDITIONAL SPECIFICATIONS AND INSTRUCTIONS

Packaging, volumes and options

Packaging	Quantity meter cardboard boxes		Quantity meter stillages		
Sizes	5 meters	6 meters	NM Type (5 meters)	NM Type (6 meters)	ZM type (6 meters)
8	960	1.152			19.584
10	800	960	10.240	12.288	19.584
12	640	768	8.640	10.368	16.128
13	560	672	7.680	9.216	14.976
14	560	672	7.680	9.216	14.976
15	480	576	7.040	8.448	13.248
16	480	576	6.720	8.064	13.248
18	400	480	6.080	7.296	12.096
20	400	480	5.440	6.528	10.944
22	320	384	4.480	5.376	8.640
24	320	384	4.480	5.376	7.488
27	240		3.840		

Packaging	Quantity pcs./box			Sizes	Content [g/m] Desiccant 0.5-0.9 mm grain	Connector		Corner
	Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon corner			Steel (DP*)	Plastic/Nylon (DP*)	Plastic/Nylon corner
8	2.500	2.000	2.000	8	18	✓	✓	✓
10	2.500	2.000	2.000	10	25	✓	✓	✓
12	2.500	2.000	2.000	12	31	✓	✓	✓
13		2.000	5.000	13	34		✓	✓
14	2.500	2.000	2.000	14	38	✓	✓	✓
15	2.500	2.000	2.000	15	42	✓	✓	✓
16	2.500	2.000	2.000	16	45	✓	✓	✓
18	2.500	2.000	2.000	18	52	✓	✓	✓
20	2.500	2.000	2.000	20	58	✓	✓	✓
22	2.500		2.000	22	65	✓		✓
24	2.500		2.000	24	72	✓		✓
27			1.400	27	82			✓

DP* = Desiccant passage.

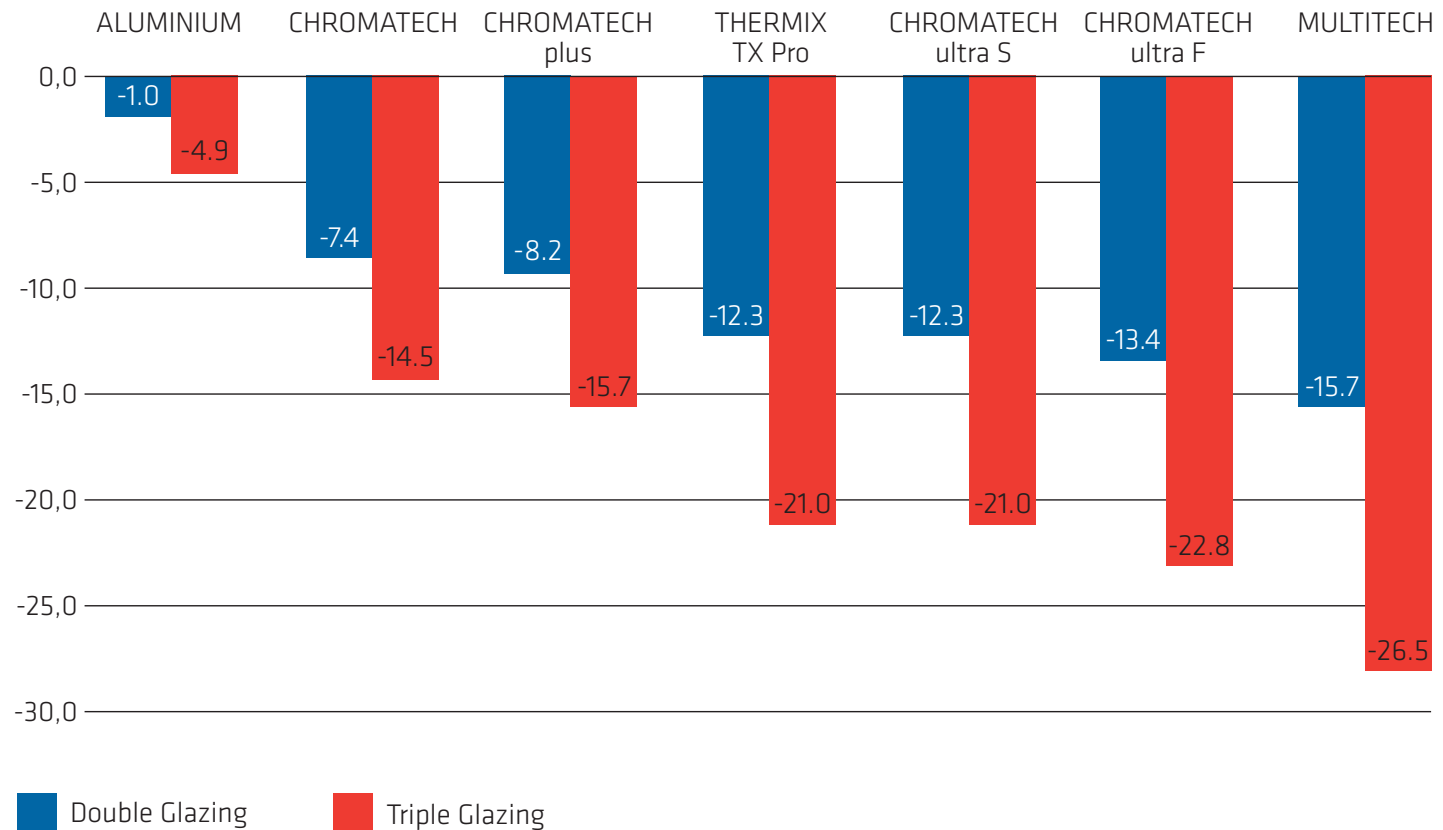
All connectors are basically U-shaped and with passage for flow of desiccant during after filling.

Note that there will be a difference in pull force between preinserted- and direct inserted connectors.

Warm edge spacers reduce the energy bill and improve indoor climate

Critical outdoor temperature in °C, at which condensation begins on the inside.

Example:
Alu-Frame Uf 1.6
Inside 20° C, 50% RH,
Dew Point 9.3° C
Double Glazing = 1.1 W
Triple Glazing = 0.7 W



An overview of thermal data with different constructions

These data are calculated by Bauwerk according to IFT guideline WA-08/3

Frame: **Aluminum profile** – $U_f = 1.6 \text{ W/m}^2\text{K}$

Glass	Double IG - $U_g = 1.1 \text{ W/m}^2\text{K}$ (4-16-4)			Tripple IG - $U_g = 0.7 \text{ W/m}^2\text{K}$ (4-12-4-12-4)		
Parameters	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$
ALUMINIUM	0.110	4.7 / 7.3	1.539	0.110	7.1 / 9.2	1.279
CHROMATECH	0.068	8.4 / 10.3	1.439	0.066	10.6 / 12.2	1.174
CHROMATECH plus	0.064	8.7 / 10.3	1.429	0.060	10.9 / 12.4	1.159
THERMIX TX Pro	0.049	9.8 / 11.5	1.393	0.044	12.0 / 13.3	1.121
CHROMATECH ultra S	0.050	9.8 / 11.5	1.395	0.046	12.0 / 13.3	1.126
CHROMATECH ultra F	0.048	9.9 / 11.6	1.390	0.043	12.1 / 13.4	1.118
MULTITECH G	0.035	10.9 / 12.4	1.359	0.030	13.0 / 14.2	1.087

Frame: **PVC profile** – $U_f = 1.2 \text{ W/m}^2\text{K}$

Glass	Double IG - $U_g = 1.1 \text{ W/m}^2\text{K}$ (4-16-4)			Tripple IG - $U_g = 0.7 \text{ W/m}^2\text{K}$ (4-12-4-12-4)		
Parameters	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$
ALUMINIUM	0.077	5.3 / 7.8	1.321	0.075	6.8 / 9.0	1.043
CHROMATECH	0.051	8.3 / 10.3	1.257	0.050	9.9 / 11.6	0.982
CHROMATECH plus	0.049	8.5 / 10.3	1.253	0.048	10.1 / 11.8	0.977
THERMIX TX Pro	0.040	9.5 / 11.3	1.230	0.038	11.1 / 12.6	0.953
CHROMATECH ultra S	0.040	9.5 / 11.3	1.230	0.038	11.1 / 12.6	0.953
CHROMATECH ultra F	0.039	9.6 / 11.3	1.228	0.037	11.2 / 12.7	0.950
MULTITECH G	0.031	10.5 / 12.1	1.218	0.029	12.1 / 13.4	0.931

To calculate with other U-values for glass please refer to our homepage where a calculator can be found (<https://www.winuw.de/rolltech/>).
Is also possible as an app "WinUw ROLLTECH" - Access it on Apple store or on Google play.

An overview of thermal data with different constructions

These data are calculated by Bauwerk according to IFT guideline WA-08/3

Frame: **Wood profile** – $U_f = 1.4 \text{ W/m}^2\text{K}$

Glass	Double IG - $U_g = 1.1 \text{ W/m}^2\text{K}$ (4-16-4)			Tripple IG - $U_g = 0.7 \text{ W/m}^2\text{K}$ (4-12-4-12-4)		
Parameters	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$
ALUMINIUM	0.081	4.1 / 6.7	1.392	0.086	6.2 / 8.5	1.125
CHROMATECH	0.053	7.3 / 9.4	1.322	0.054	9.6 / 11.3	1.045
CHROMATECH plus	0.051	7.6 / 9.7	1.317	0.051	9.9 / 11.6	1.038
THERMIX TX Pro	0.040	8.7 / 10.6	1.290	0.039	11.0 / 12.5	1.008
CHROMATECH ultra S	0.041	8.6 / 10.5	1.293	0.040	11.0 / 12.5	1.010
CHROMATECH ultra F	0.039	8.8 / 10.7	1.288	0.038	11.2 / 12.7	1.005
MULTITECH G	0.030	9.8 / 11.5	1.265	0.028	12.2 / 13.5	0.980

Frame: **Wood aluminum profile** – $U_f = 1.4 \text{ W/m}^2\text{K}$

Glass	Double IG - $U_g = 1.1 \text{ W/m}^2\text{K}$ (4-16-4)			Tripple IG - $U_g = 0.7 \text{ W/m}^2\text{K}$ (4-12-4-12-4)		
Parameters	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$	$\Psi_g \text{ [W/mK]}$	$\Theta_{si} \text{ (-10/-5 } ^\circ\text{C)}$	$U_w \text{ [W/m}^2\text{K]}$
ALUMINIUM	0.092	2.3 / 5.3	1.423	0.097	4.7 / 7.3	1.165
CHROMATECH	0.059	6.1 / 8.4	1.342	0.060	8.7 / 10.6	1.075
CHROMATECH plus	0.056	6.4 / 8.7	1.335	0.056	9.0 / 10.8	1.065
THERMIX TX Pro	0.043	7.6 / 9.7	1.303	0.042	10.3 / 11.9	1.031
CHROMATECH ultra S	0.045	7.6 / 9.7	1.308	0.043	10.2 / 11.8	1.033
CHROMATECH ultra F	0.043	7.8 / 9.8	1.303	0.041	10.4 / 12.0	1.028
MULTITECH G	0.031	8.9 / 10.8	1.274	0.029	11.5 / 12.9	0.999

To calculate with other U-values for glass please refer to our homepage where a calculator can be found (<https://www.winuw.de/rolltech/>).
Is also possible as an app "WinUw ROLLTECH" - Access it on Apple store or on Google play.

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