english

TREBA FREWA

innovative · modern design · compatible

Balustrading systems

for in- and outside · in stainless steel, aluminium, galvanised steel and wood.
for stairs, balconies etc. railing fill-ins · handrail systems · LED illumination systems

The flexible Do-it-yourself-system for all applications

MegaTec *Stainless steel AISI 304*

AluTec *Aluminium*

XtraTec *Stainless steel AISI 316*

WoodTec *Wood*

FerroTec *Galvanised steel*

Summary

Compatibility - All materials can be combined to each other

Please orientate yourselves on our new Color control system

All article numbers of our delivery program are marked by one of the 5 following material colors: ● ● ● ● ●

Balustrading systems for in and outside use — *Page*

MegaTec *stainless steel balustrading AISI 304* **4-5**

AluTec *aluminium balustrading* **6-7**

XtraTec *stainless steel balustrading AISI 316* **8-9**

Balustrading systems for inside use — *Page*

WoodTec *wood balustrading* **10-11**

FerroTec *galvanised steel balustrading* **12-13**

▶ ***Do-it-yourself***
for the inside and outside use

▶ ***Wide range of products***
For all kinds of applications

🔵 ***=Stainless steel AISI 304***
🟡 ***= Aluminium+other***
🟣 ***= Stainless steel AISI 316***
🟤 ***= Wood***
🔴 ***= Galvanised steel***

Balustrading systems for in and outside use — *Page*

Balustrading in-fills **14-15**
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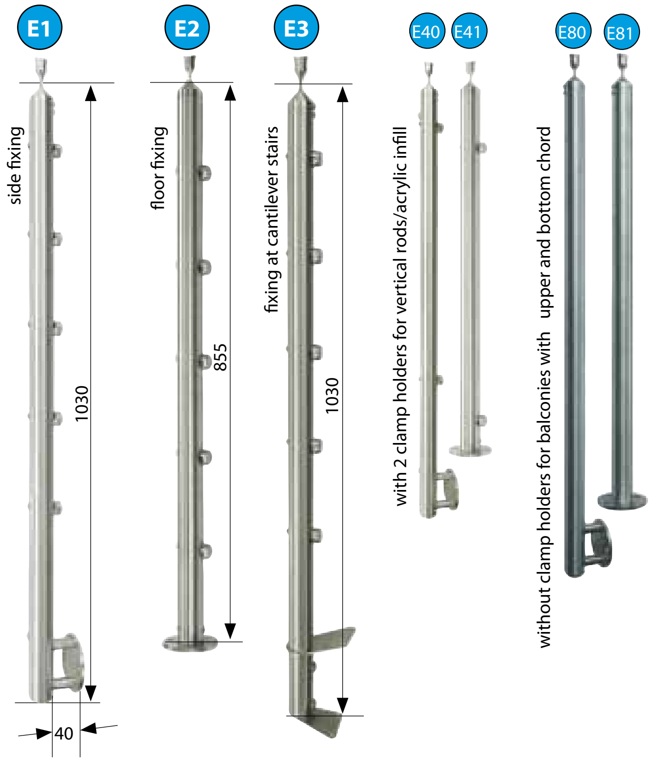
MegaTec - stainless steel balustrading

Upright variants

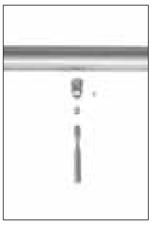

E1
E2
E3
E40
E41
E80
E81
side fixing
floor fixing
fixing at cantilever stairs
with 2 clamp holders for vertical rods/acrylic infill
without clamp holders for balconies with upper and bottom chord
1030
855
1030
40

Assembly-hint

1a Upright handrail-connection with boring (tool set B36)

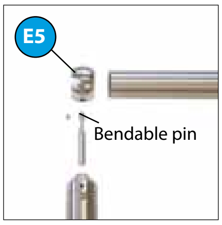
1. Mark out fastening spot, align drill-gauge to this point, clamp and bore hole ø5mm

2. Cut threads M6

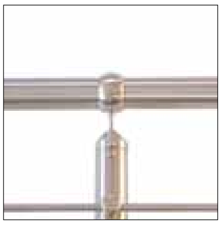


3. Srew pin holders at handrail

1b Upright handrail-connection without boring with ring E5


E5
Bendable pin

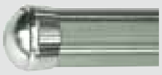
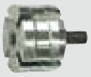
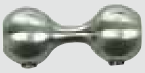
1.Put ball ring over handrail and then clamp it.



2. Fasten bend pin with ball ring and banister upright

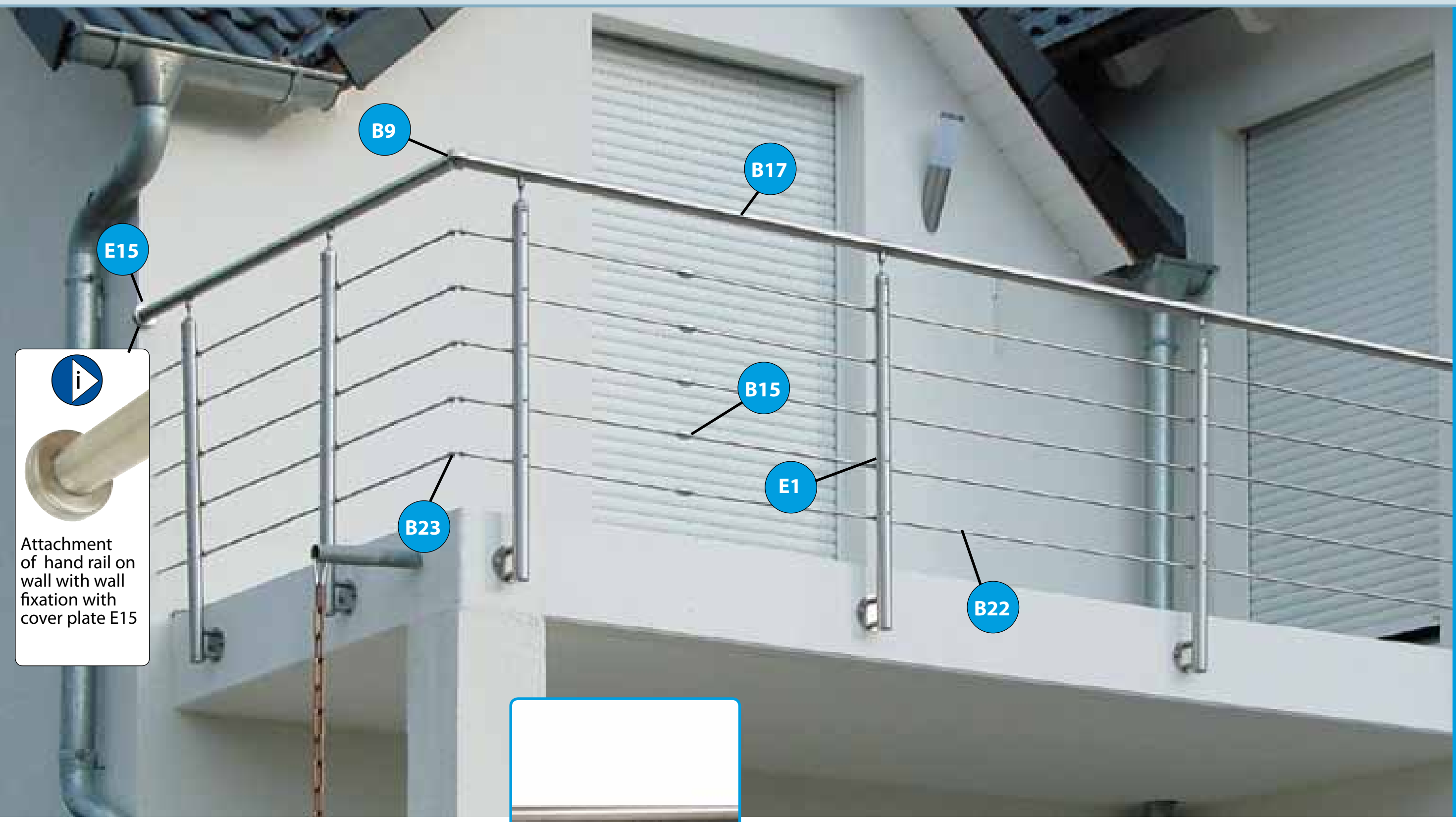
3. Bend bendpin on appropriate stair inclination!

● =Stainless steel AISI 304

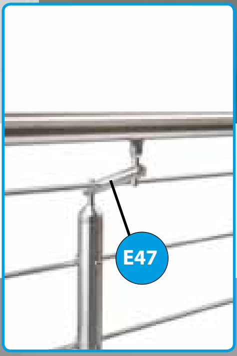
Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B7	End cap stainless steel AISI 304 60ø	1			**E1**	MegaTec upright 42ø 1030mm, stainless steel 5 clamp holder (for side fixing, 40mm projection)	1		
B9	Corner connectionball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1			**E2**	MegaTec upright 42ø 855mm, stainless steel AISI 304, 5 clamp holder (for floor fixing)	1		
B15	Connector for rod 10ø Stainless steel AISI 304	2			**E4**	UniTec ball 60ø Stainless steel AISI 304 with thread connection M8 (for metal handrail order add. 2x E13)	1		
B16	Handrail 42,4ø x 2 1500mm stainless steel 304 satin finish	1			**E5**	Ring with bendable pin M8 Stainless steel AISI 304 (for handrail without drilling)	1		
B17	Handrail 42,4ø x 2 2250mm stainless steel 304 satin finish	1			**E8**	End cap Stainless steel AISI 304 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		
B21	Stainless steel rod AISI 304 10ø 1500mm				**E10**	Ring adapter stainless steel AISI 304 (for metal or wooden handrail 42ø with threaded insert M8)	1		
B22	Stainless steel rod AISI 304 10ø 2250mm	1			**E13**	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		
B23	Bendable joint (ball shaped) stainless steel AISI 304 for rod 10ø	6			**E15**	Wall fixing with cover plate (for metal handrail 42øx2)	1		
B33	Handrail 42,4ø x 2 3000mm stainless steel AISI 304 satin finish	1			**E20**	End ball 20ø stainless steel AISI 304 for rod 10ø	2		
B34	Stainless steel rod AISI 304 10ø 3000mm	1			**E50**	Flat end cap stainless steel 304 (to hit in metal handrail 42øx2)	1		

Balustrading systems for in- and outside use

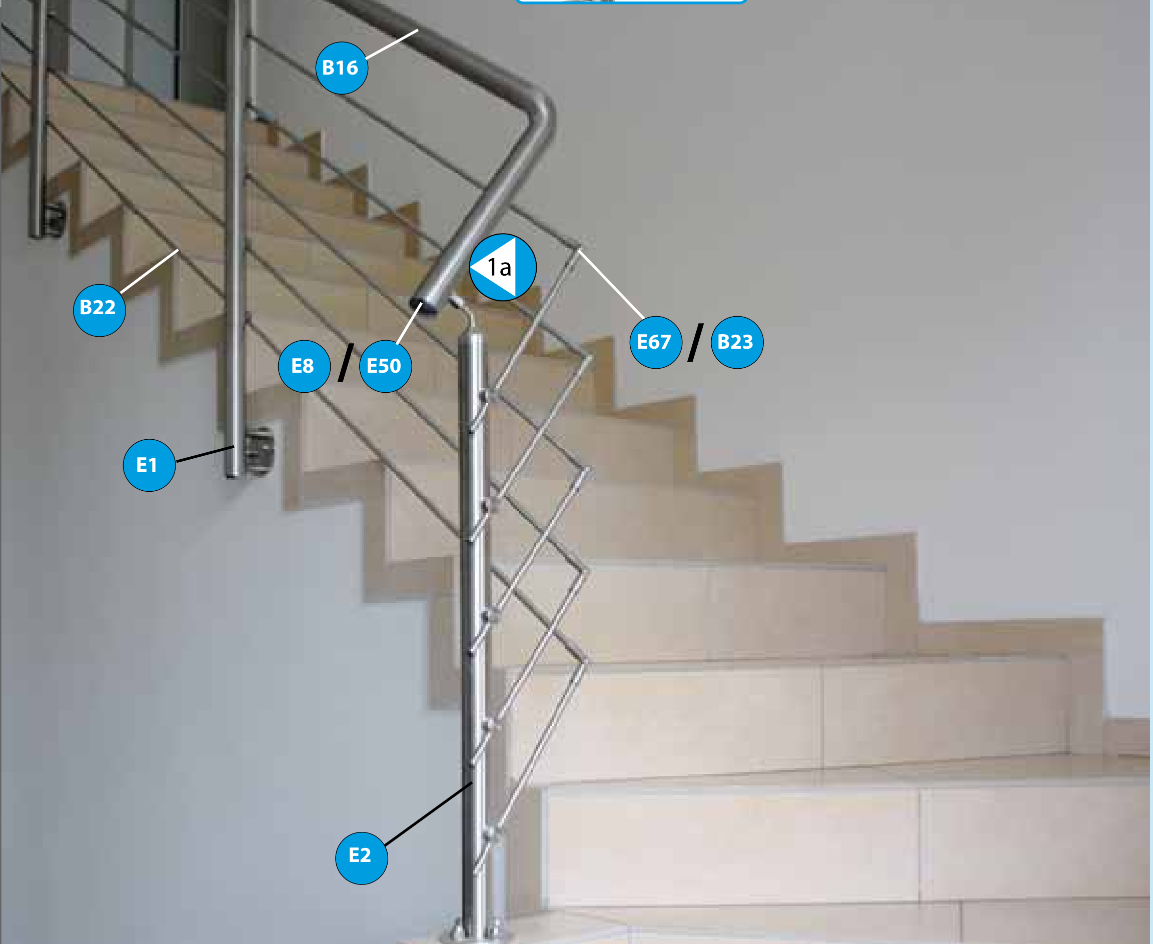
High-quality and nobly for highest requirements at long-life cycle and design



Attachment of hand rail on wall with wall fixation with cover plate E15



Get more safety for children:
Use overclimb protection E47 to beware children of the dangerous „climbing effect" on horizontal rods



MegaTec banister system is especially appropriate for balcony, terrace and entrance. For outside use we recommend to have side assembly instead of floor assembly in view of ground insolation.

Side distance can be enlarged with part E73 on 75 respectively 100mm!

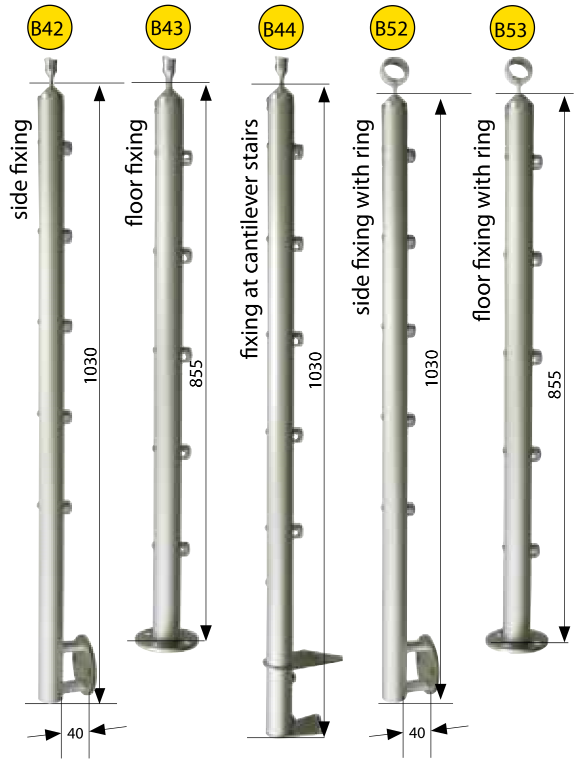
There are no fixation screws contained in scope of delivery of banister posts. For fixation on concrete floor we recommend screws B37 or E21.

By fixation on different materials please get suitable fixation material on site.

Variants of top- bottom chord or vertical bars are specially invented for terrace- and balustrade banisters.

AluTec - *aluminium balustrading*

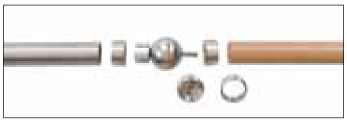
Upright variants



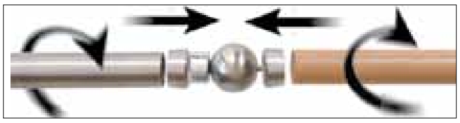
Assembly-hint

1 Ball-handrail-connection with UniTec-ball for continuous connections from 180° to 90°

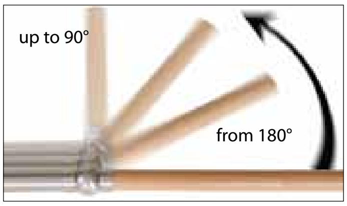
1. Pre-assemble handrails



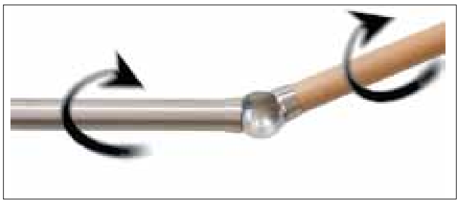
2. Stick together and turn in



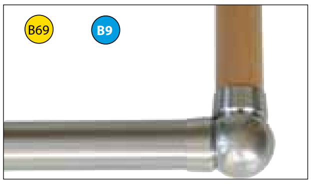
3. Adjust exact angle



4. Adapt handrail and seize



2 90°-connection of handrail with connection-ball B69 or B9.

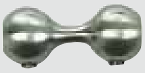
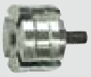


3 Corner connections of rods with bend coupling B23.

Bend coupling can be bended up to 90°.
Use rods to bend it.

● **= *Aluminium***

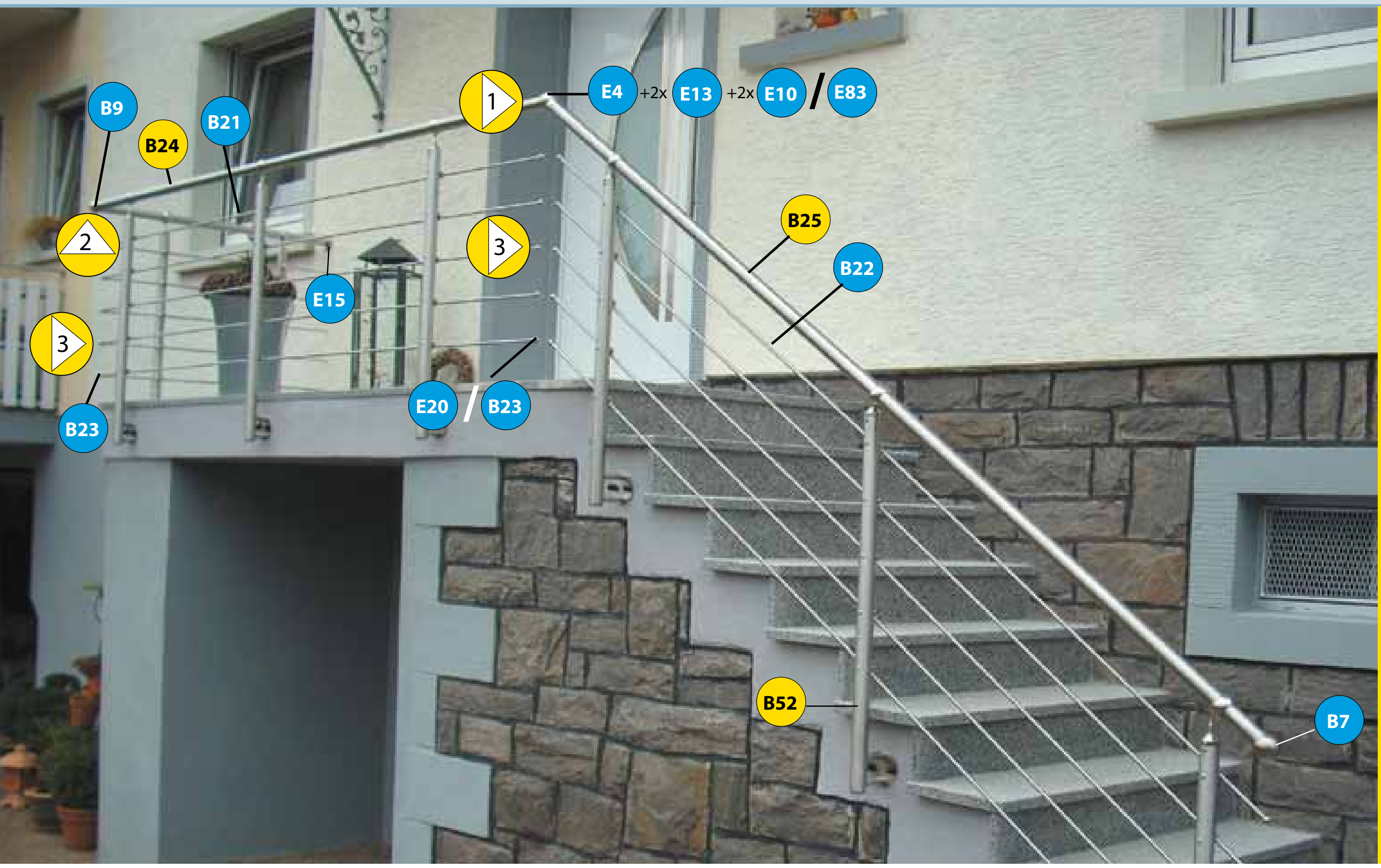
● **=*Stainless steel AISI 304***

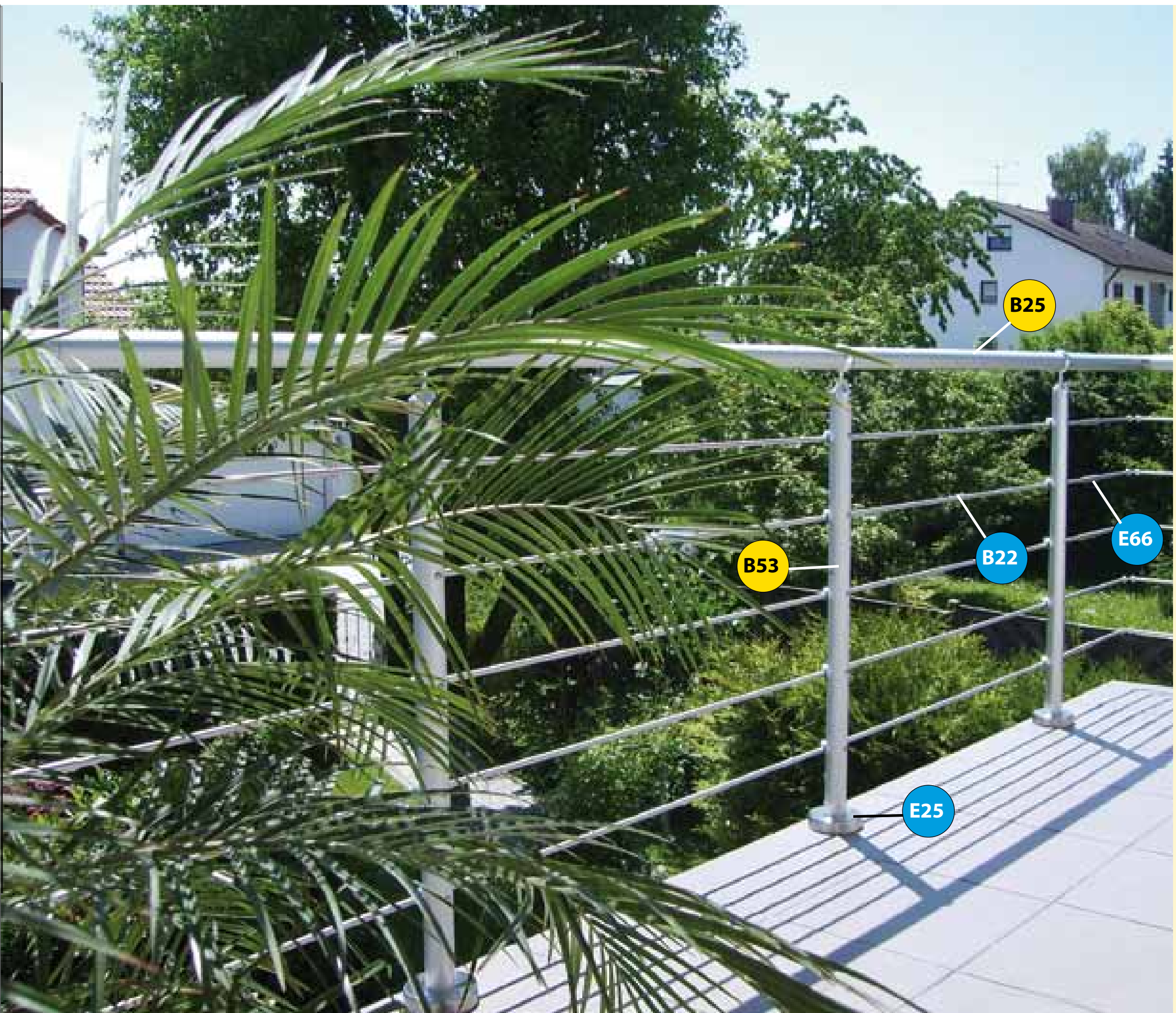
Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B7	End cap stainless steel AISI 304 60ø	1			**B44**	AluTec upright 42ø 1030mm, anodised aluminium, 5 clamp holder (for open treads)	1		
B9	Corner connectionball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1			**B52**	AluTec upright 42ø 1030mm, anodised aluminium, with ring and 5 clamp holder (for side fixing)	1		
B21	Stainless steel rod AISI 304 10ø 1500mm	2			**B53**	AluTec upright 42ø 855mm, anodised aluminium, with ring and 5 clamp holder (for floor fixing)	1		
B22	Stainless steel rod AISI 304 10ø 2250mm	1			**E4**	UniTec ball 60ø Stainless steel AISI 304 (for metal handrail please order add. 2x E13)	1		
B23	Bend coupling (ball shaped) stainless steel AISI 304 for rod 10ø	6			**E5**	Ring with bendable pin M8 Stainless steel AISI 304 (for handrail without drilling)	1		
B24	Handrail 42,4ø x 2 1500mm anodised aluminium	1			**E10**	Ring adapter Stainless steel AISI 304 (for metal or wooden handrail 42ø with threaded insert M8)	1		
B25	Handrail 42,4ø x 2 2250mm anodised aluminium	1			**E13**	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		
B42	AluTec upright 42ø 1030mm, anodised aluminium, 5 clamp holder (for side fixing)	1			**E15**	Wall fixing with cover plate (for metal handrail 42øx2)	1		
B43	AluTec upright 42ø 855mm, anodised aluminium, 5 clamp holder (for floor fixing)	1			**E83**	Ring adopter with 2 pin holders straight stainless steel AISI 304 (for metal handrail 42,4ø x 2)	1		

Supplementary construction units are contained in attachment of our delivery programm.

Balustrading systems for in- and outside use

The inexpensive alternative to high-grade steel in attractive silver matt optics


1
E4
+2x
E13
+2x
E10
E83
B9
B21
B24
2
3
E15
3
B23
E20
B23
B25
B22
B52
B7


B25
B53
B22
E66
E25

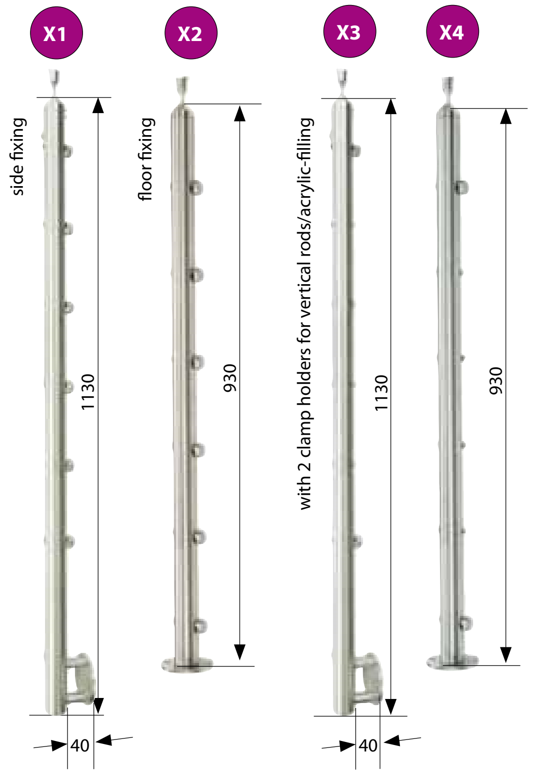
Aluminium balustrade posts with enodiced surface for side- or floor assembly. Due to corrosion resistance Aluminium can be used for in- and outside. For outside use we recommend to have side assembly instead of floor assembly in view of ground insolation.

Side distance can be enlarged with part E73 on 75 respectively 100mm!

There are no fixation screws contained in scope of delivery of banister posts. For fixation on concrete floor we recommend screws B37 or E21. By fixation on different materials please get suitable fixation material on site.

XtraTec - *stainless steel balustrading in AISI 316 quality*

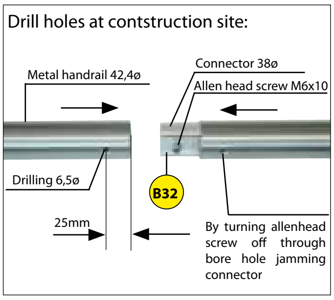
Upright variants


X1
X2
X3
X4
side fixing
floor fixing
with 2 clamp holders for vertical rods/acrylic-filling
1130
930
1130
930
40
40

● = *Stainless steel AISI 316*

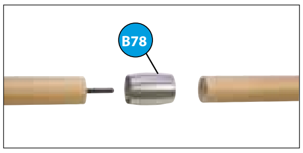
Assembly-hint

① How to extend a handrail with connector B32 to extend metal handrails.

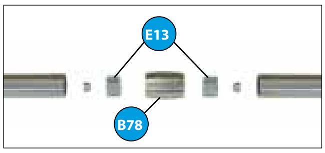

Drill holes at contstruction site:
Metal handrail 42,4ø
Connector 38ø
Allen head screw M6x10
Drilling 6,5ø
B32
25mm
By turning allenhead screw off through bore hole jamming connector

Pivot socket-head cap screws M6x10 completely into handrail-connector B32. Put connector into handrail until screw at borehole become visible. Then put allen key SW5 by borehole into the socket-head cap screw and reach the clamp-connection by turning out the screw. Repeat on other side.

② How to extend a handrail with handrail connector B78

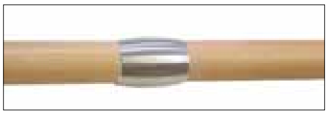


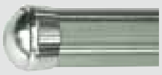
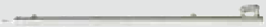
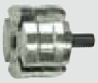
This two wooden hand rails can be interconnected with double thread bush M8



Stainless steel- or aluminium handrails are connected with two tube couplings E13

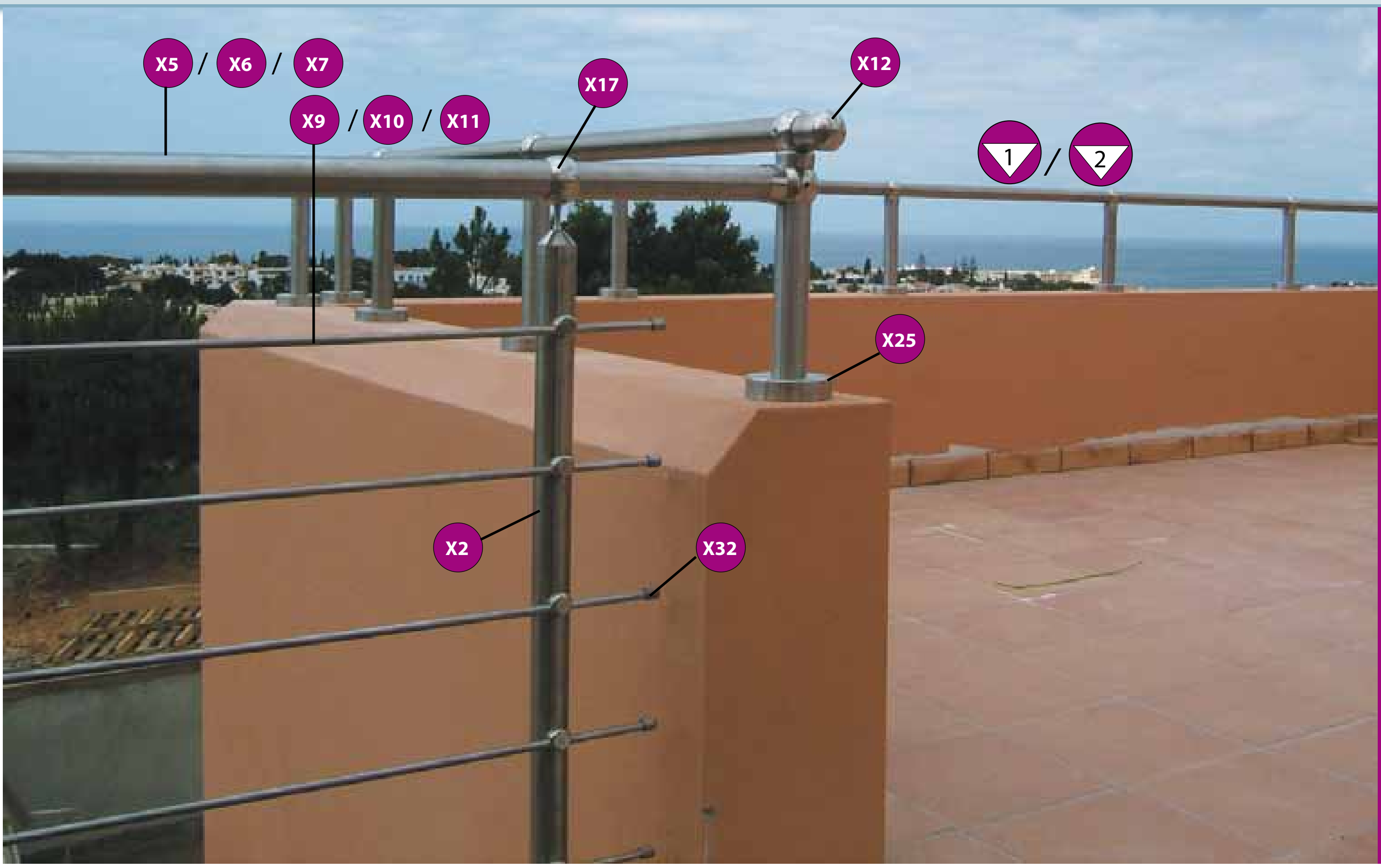
Finished

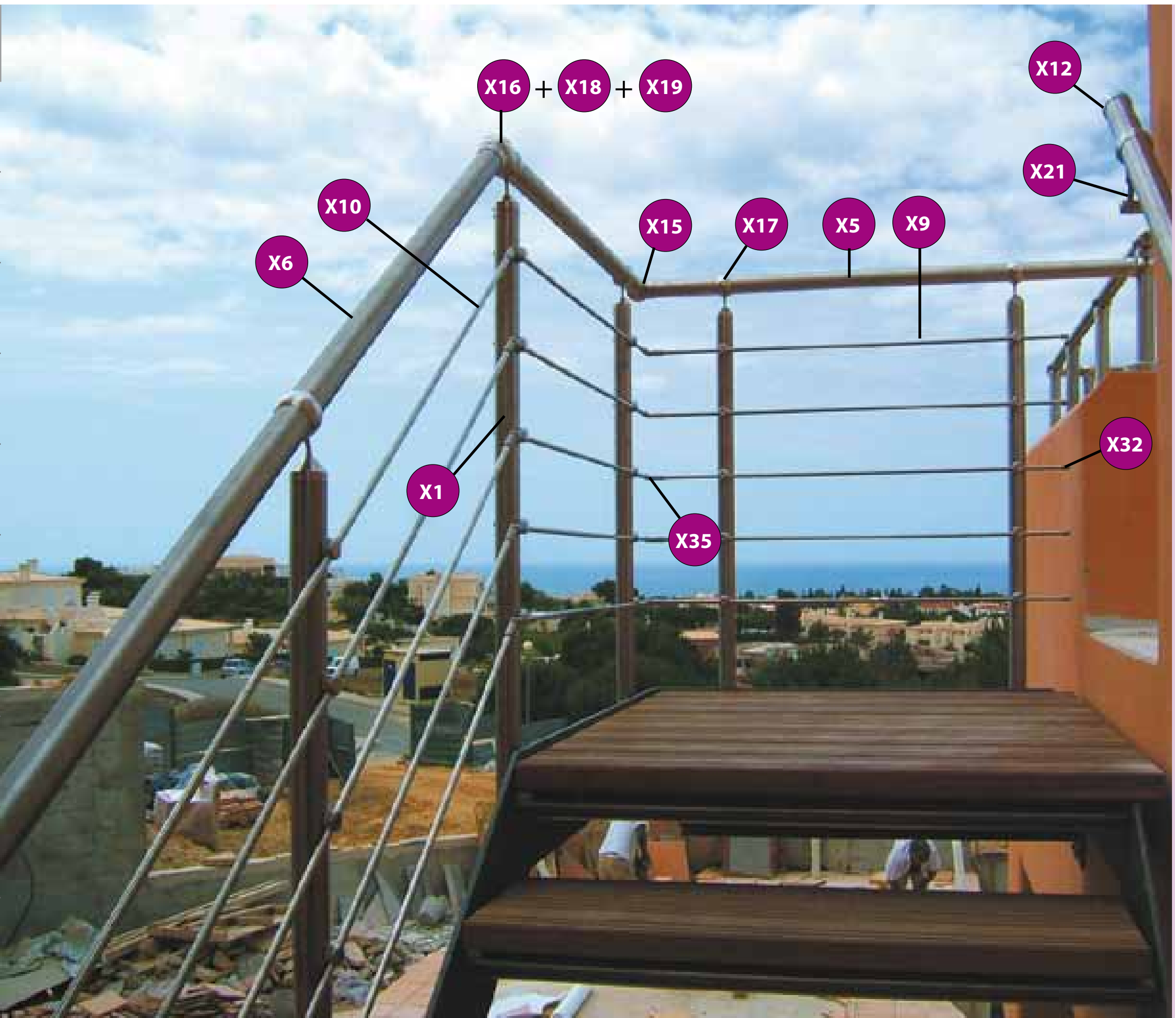


Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
X1	MegaTec upright 42ø 1130mm, Stainless steel AISI 316, 6 clamp holder (for side fixing, 40mm projection)	1			X12	End cap Stainless steel AISI 316 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		
X2	XtraTec upright 42ø 930mm, Stainless steel AISI 316, 6 clamp holder (for floor fixing)	1			X15	Corner connectionball 60ø Stainless steel AISI 316 (for metal handrail 42,4øx2)	1		
X3	XtraTec upright 42ø 1130mm, Stainless steel AISI 316, 2 clamp holder and 4 blind-screws (for side fixing, 40mm projection)	1			X16	UniTec ball 60ø Stainless steel AISI 316 with thread connection M8(for metal handrail please order add. 2x E13)	1		
X4	XtraTec upright 42ø 930mm, Stainless steel AISI 316, 2 clamp holder and 4 blind-screws (for floor fixing)	1			X17	Ring with bendable pin M8 Stainless steel AISI 316 (for handrail without drilling)	1		
X5	Handrail 42,4ø x 2 1500mm Stainless steel AISI 316 satin finish	1			X18	Ring adapter Stainless steel AISI 316 (for metal handrail 42,4ø x 2)	1		
X6	Handrail 42,4ø x 2 2250mm Stainless steel AISI 316 satin finish	1			X19	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		
X7	Handrail 42,4ø x 2 3000mm Stainless steel AISI 316 satin finish	1			X21	Wall bracket with ring fitting and cover plate Stainless steel AISI 316 (for handrail 42,4ø)	1		
X9	Stainless steel AISI 316 rod 10ø 1500mm	1			X25	Cover plate 105ø Stainless steel AISI 316 for base plate E2/S2	1		
X10	Stainless steel AISI 316 rod 10ø 2250mm	1			X32	End ball 20ø Stainless steel AISI 316 for rod 10ø	2		
X11	Stainless steel AISI 316 rod 10ø 3000mm	1			X35	Bendable joint (ball shaped) for rod 10ø Stainless steel AISI 316	6		

Balustrading systems for in- and outside use

Stainless steel with extra temper


X5 / X6 / X7
X9 / X10 / X11
X17
X12
1 / 2
X25
X2
X32


X16 + X18 + X19
X12
X21
X10
X6
X15
X17
X5
X9
X32
X1
X35

Stainless steel of steel material grade AISI 304 can corrode under certain circumstances.

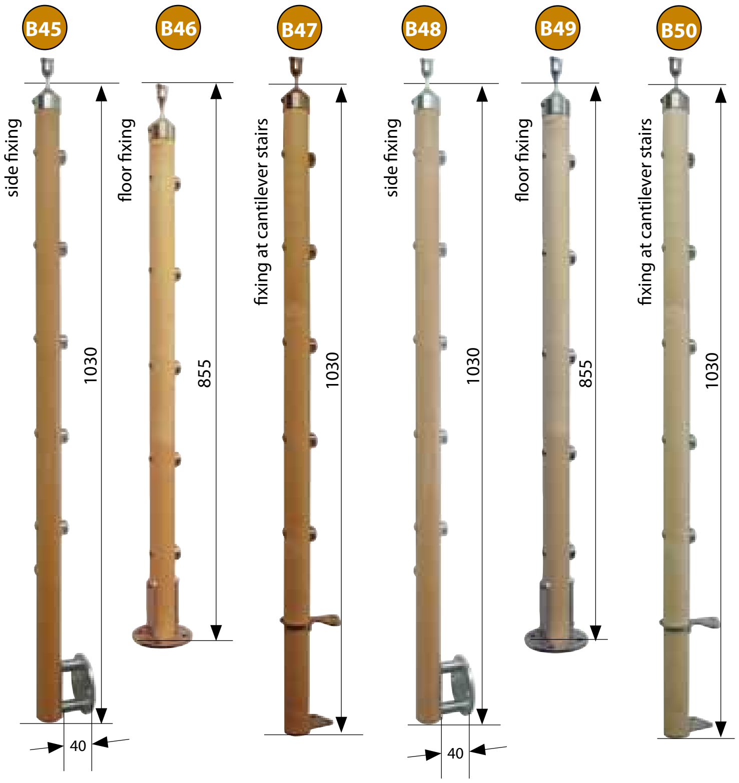
Stainless steel parts of AISI 304 can corrode f. i. in regions of high humidity in sea regions (air with salt content) as well as industry regions with aggressive air-pollution (acid rain), chlorine water and splash water.

We advice to take higher material grade escpecially by assembly of banisters in sea regions, i.e. stainless-steel parts made of AISI 316 (see our parts of X-class).

WoodTec - the wooden balustrading

Upright variants

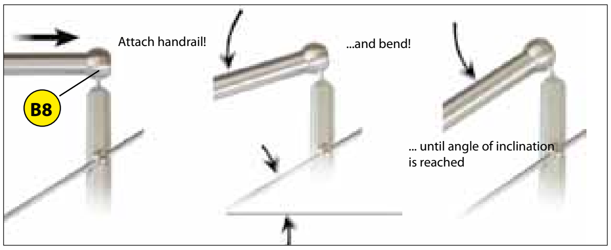
in beech **in maple**


B45
B46
B47
B48
B49
B50
side fixing
floor fixing
fixing at cantilever stairs
side fixing
floor fixing
fixing at cantilever stairs
1030
855
1030
1030
855
1030
40
40

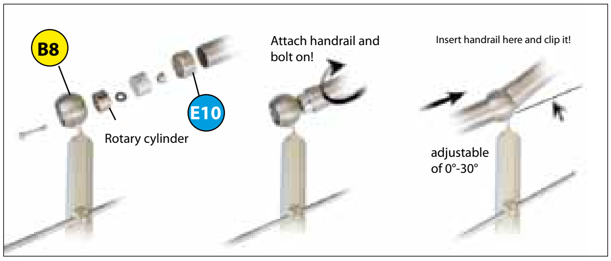
Assembly-hint

① Upright handrail-connection with the Vari-ball B8

1. Pre-assemble Vari ball on upright

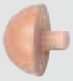

Attach handrail!
...and bend!
B8
... until angle of inclination is reached

Install handrail!


B8
Rotary cylinder
E10
Attach handrail and bolt on!
Insert handrail here and clip it!
adjustable of 0°-30°

🟠 ***= Wood***

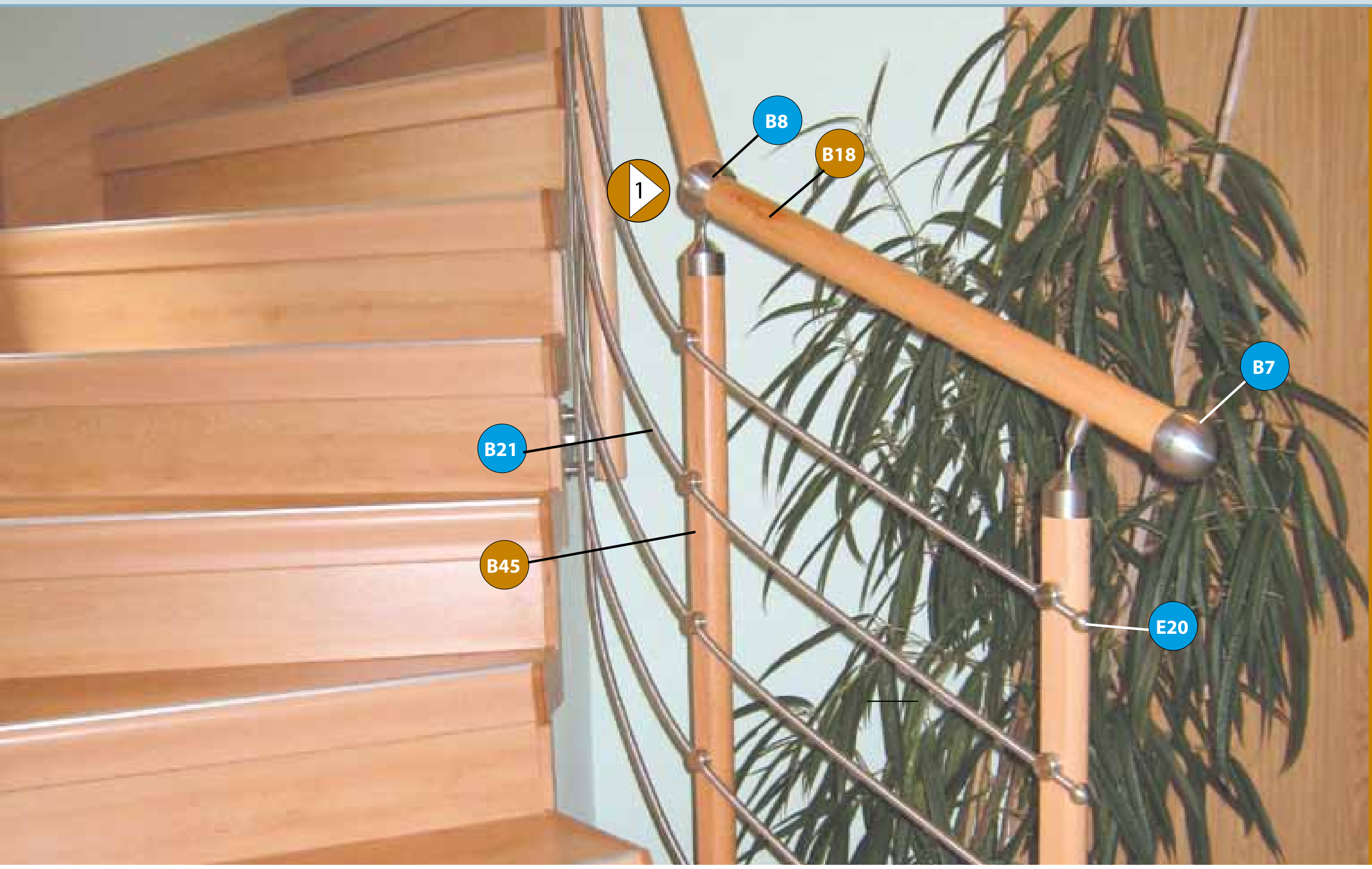
🔵 ***= Stainless steel AISI 304***

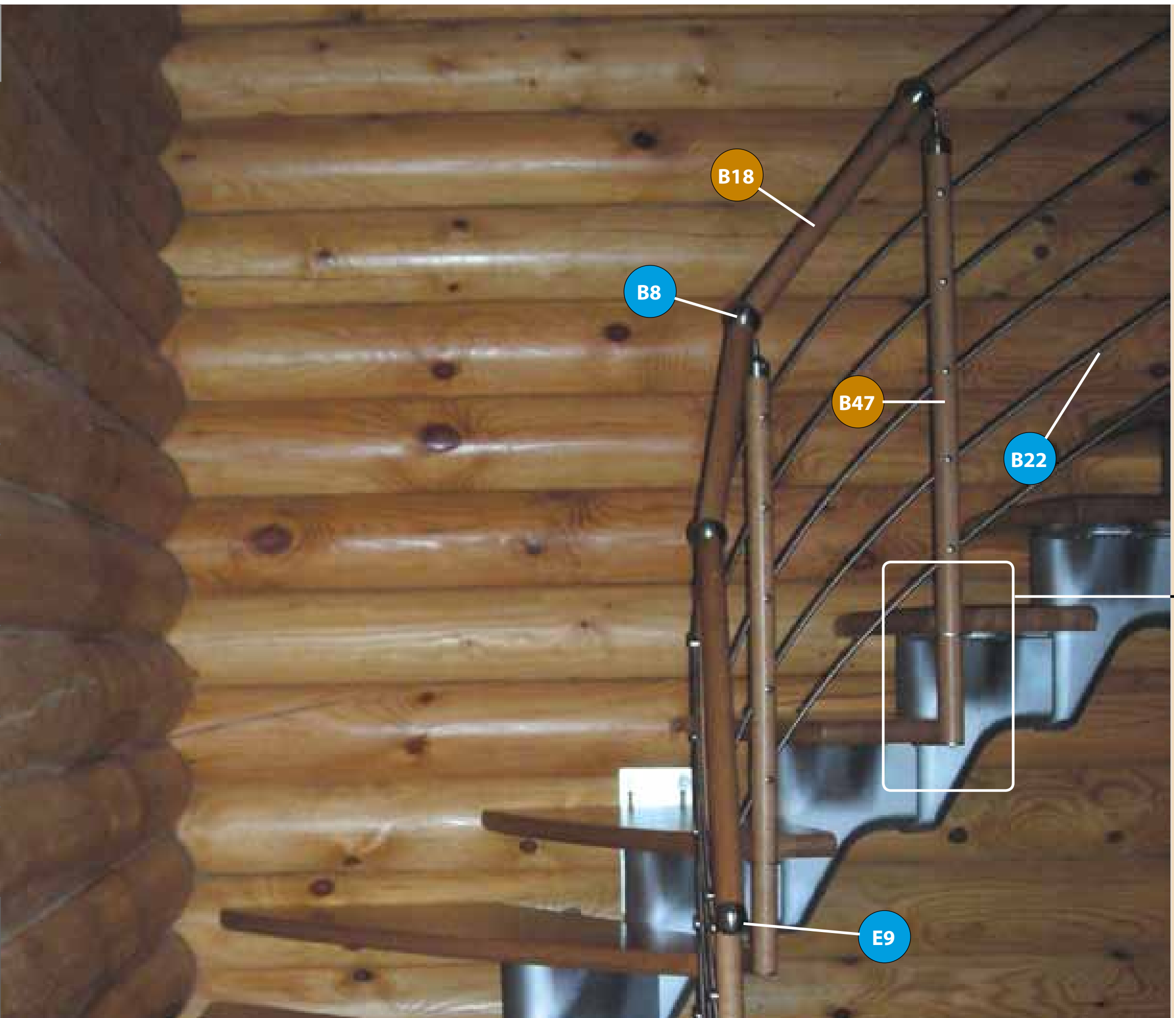
Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B7	End cap stainless steel AISI 304 60ø	1			B49	WoodTec upright 42ø 855mm, maple lacquered, 5 clamp holder (for floor fixing)	1		
B8	Vari ball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1			B50	WoodTec upright 42ø 1030mm, maple lacquered, 5 clamp holder (for open treads)	1		
B14	End ball 30ø Stainless steel AISI 304 for rod 10ø	2			B64	End cap 42ø unlacquered beech	2		
B21	Stainless steel rod AISI 304 10ø 1500mm	1			B66	End cap 42ø unlacquered maple	2		
B18	Handrail 42ø 1500mm lacquered beech	1			B67	Handrail 42ø 1500mm maple lacquered	1		
B19	Handrail 42ø 2250mm lacquered beech	1			B68	Handrail 42ø 2250mm maple lacquered	1		
B45	WoodTec upright 42ø 1030mm, lacquered beech, 5 clamp holder (for side fixing)	1			E5	Ball with bendable pin M8 Stainless steel AISI 304 (for handrail without drilling)	1		
B46	WoodTec upright 42ø 855mm, lacquered beech, 5 clamp holder (for floor fixing)	1			E9	End cap Stainless steel AISI 304 (for wooden handrail 42ø)	1		
B47	WoodTec upright 42ø 1030mm, lacquered beech, 5 clamp holder (for open treads)	1			E20	End ball 20ø Stainless steel AISI 304 for rod 10ø	2		
B48	WoodTec upright 42ø 1030mm, maple lacquered, 5 clamp holder (for side fixing)	1							

Supplementary construction units are contained in attachment of our delivery programm.

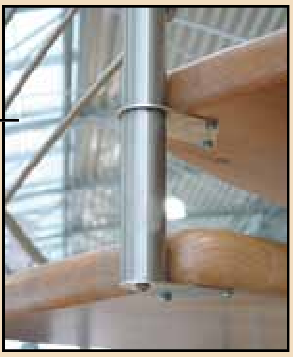
Balustrading systems for in- and outside use

For modern railing combinations with an natural material





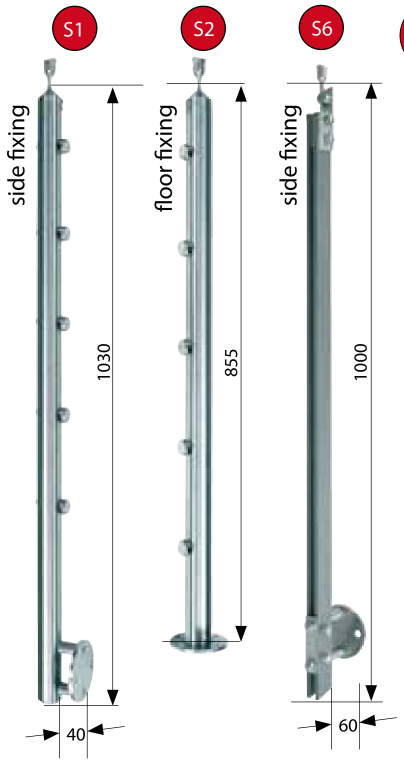
Railing system with upright in wood 42ø in beech or maple lacquered. Available for side or surface assembly. Fittings and screw connections in high-grade steel AISI 304. The uprights are ideally combinable with wooden or stainless steel hand rail.



Baseplates for attachment at cantilever stairs

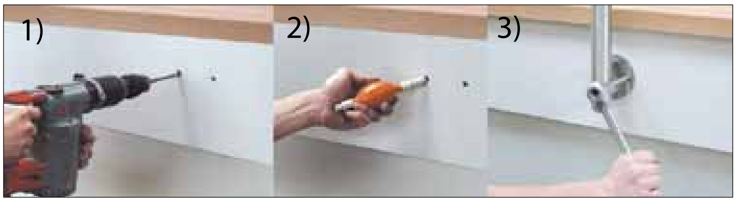
FerroTec - *galvanised steel balustrading*

Upright variants



Assembly-hint

1 Side fixing of uprights



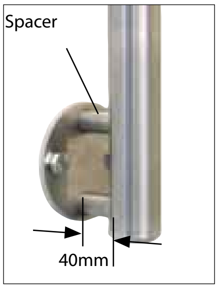
1) boring 10ø

2) blowing out

3) Bolt (without dowels)
with concrete screws B37

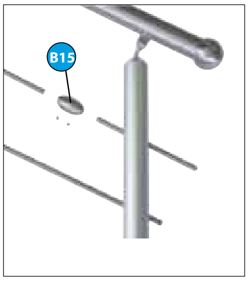
Alternatively use bolt anchors E21 or S4 (only for inside use)

2 Change the distance of the uprights



By exchange of spacers and screws E73 the distance of the uprights can be changed up to max. 100mm.

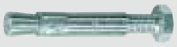
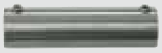
3 Connection of rods



Connect rods with connector B15. Just insert from both sides and tighten with hexagon socket head screw.

🔴 ***= Galvanised steel*** 🟠 ***= Wood*** 🔵 ***=Stainless steel AISI 304***

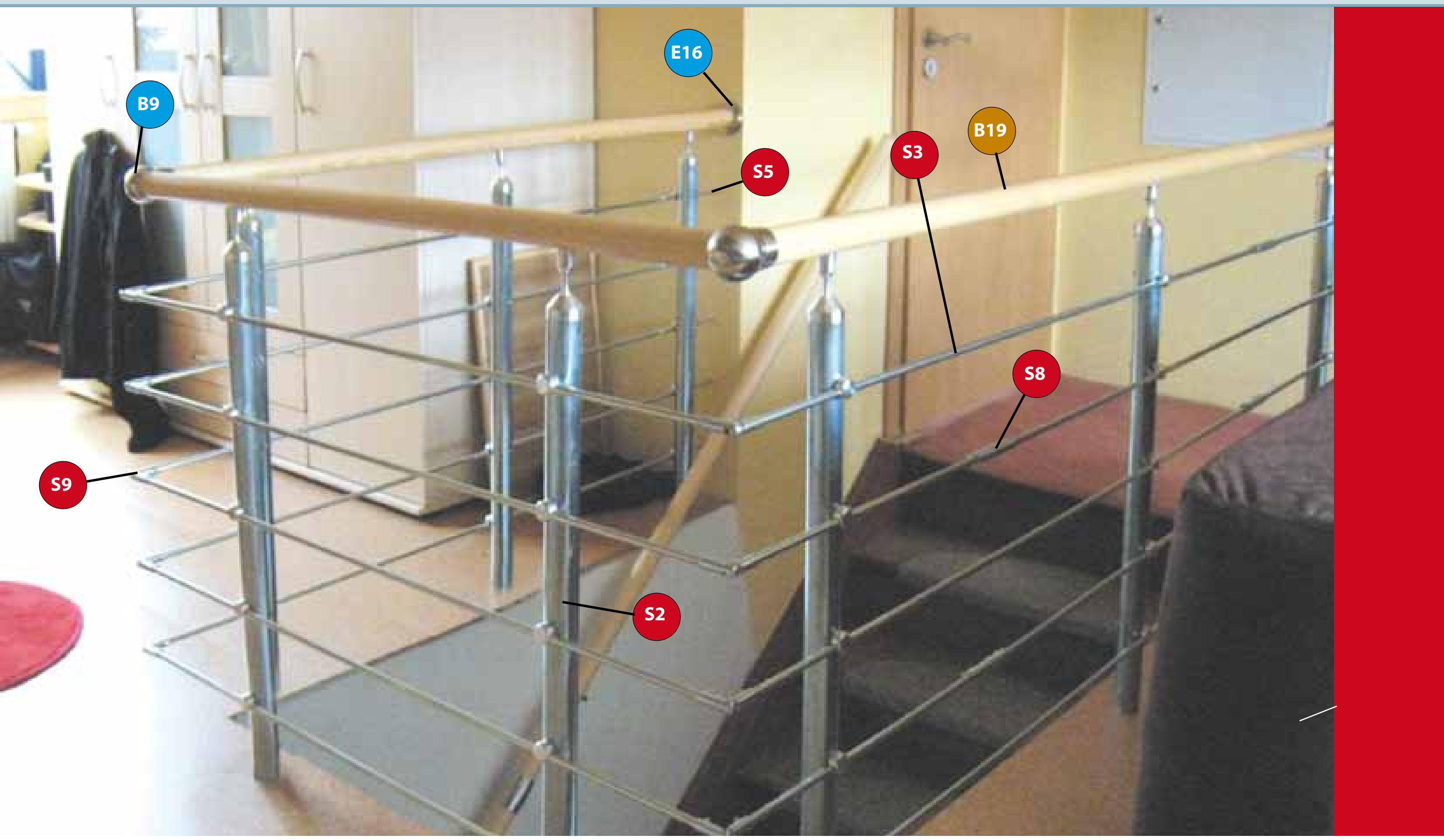
Part-no.	Specification	PU	Illustration	pcs
B7	End cap stainless steel AISI 304 60ø	1		
B8	Vari ball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		
B9	Corner connectionball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		
B14	End ball 30ø Stainless steel AISI 304 for rod 10ø	1		
B15	Connector for rod 10ø stainless steel AISI 304	2		
B18	Handrail 42ø 1500mm lacquered beech	1		
B19	Handrail 42ø 2250mm lacquered beech	1		
E16	Wall fixing with cover plate (for wooden handrail 42ø	1		
S1	FerroTec upright 42ø 1030mm, electro-galvanised steel, 5 clamp holder (for side fixing, 40mm projection)	1		

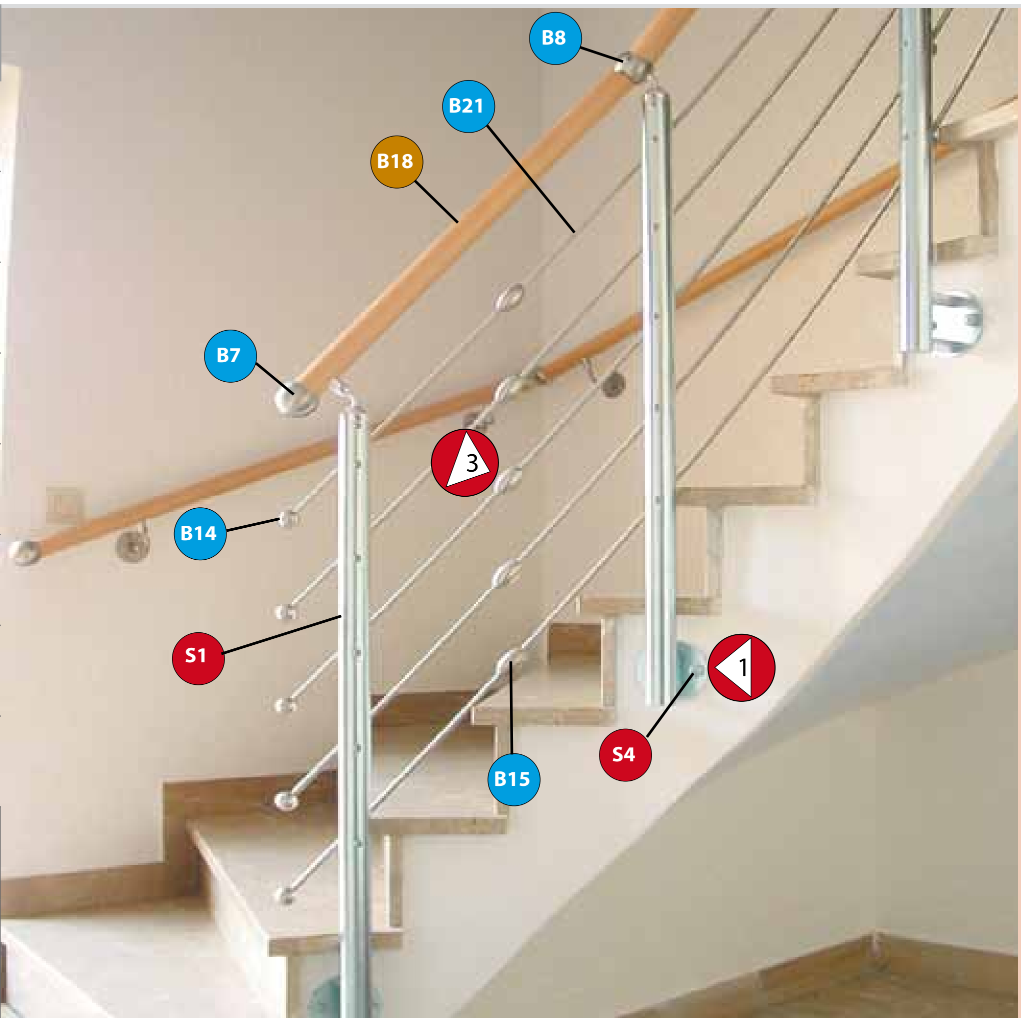
Part-no.	Specification	PU	Illustration	pcs
S2	FerroTec upright 42ø 855mm, electro-galvanised steel, 5 clamp holder (for floor fixing)	1		
S3	Bars 10ø 2000mm, steel galvanically zinced	5		
S4	Bolt anchor M10x60 with steel screw galvanically zinced	2		
S5	Plastic caps for rods 10ø	1		
S6	FerroTwin upright 1000mm, flat steel 45x8mm, antrazith priming (for side fixing, 60mm projection)	1		
S7	End cap 14ø galvanised steel for rod 10ø	5		
S8	Connector 14ø x 50 for rod 10ø galvanised steel	5		
S9	Joint link14øx80 galvanised steel for rod 10ø	5		

Supplementary construction units are contained in attachment of our delivery programm.

Balustrading systems for in- and outside use

The inexpensive railing variant with continuous flexibility





Steel railing with galvanically zinced uprights 42ø for side or floor assembly. Suitable rods with galvanized surface are available. Handrails in wood, stainless steel or aluminum can be combined with it.

This favorable system suits for stairs- and balustrade solutions for inside use.

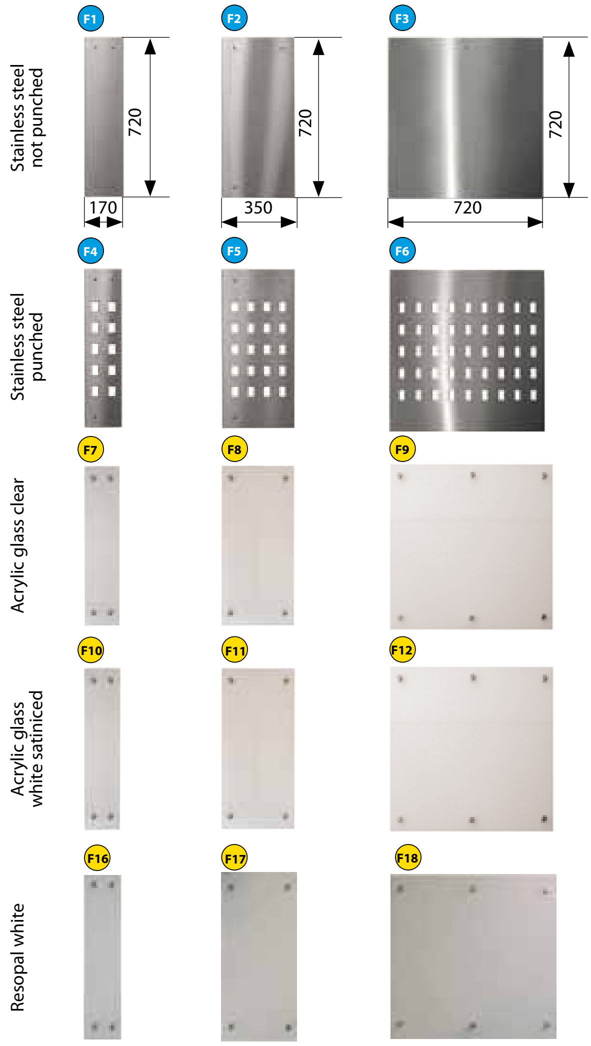
Increasing of lateral projection with E73 on 75 or 100mm possible.

In scope of supply of uprights there are no fixing bolts included.

For fxation or concrete floor we recommened using E21 or B37. Get suitable fxation material with other backgrounds at construction site.

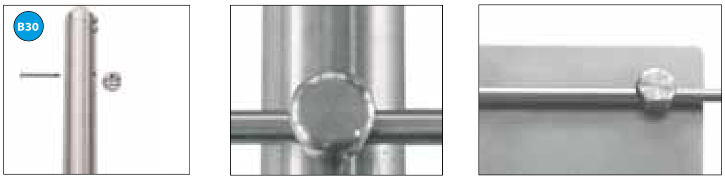
Balustrading fillings

Variants balustrading insertions in stainless steel, acrylic glass, resopal



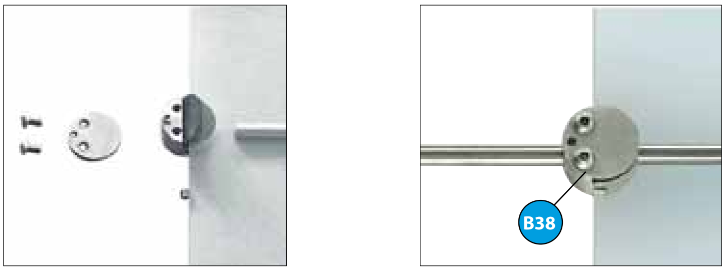
Assembly-hint

1 Patented clamp holder B30



Fillings are jammed with clamp holder B30 on horizontal rods with just one screw.
It's the same way for jamming of bars and upright.

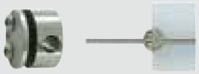
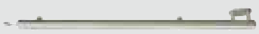
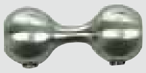
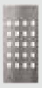
2 Fastening of glass holders



Screw in thread pin M6x10 before assembly of jaw plate in glass holder B38 (use longer screws with thicker glass). For adjusting of glass thickness screw in or out. Jamming plate has to lay on smooth on glass edge. Screw out adldjusting screw M6x10 up jaw plate outer side is placed slightley higher as inner side (not canting otherwise risk of breakage)

🟡 ***= Various materials***

🔵 ***=Stainless steel AISI 304***

Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B7	End cap stainless steel AISI 304 60ø	1			B38	Clamp holder AISI 304 to be fitted on 10ø rods to hold glass panels 6-8mm	4		
B9	Corner connectionball 60ø Stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1			E5	Ring with bendable pin M8 Stainless steel AISI 304 (for handrail without drilling)	1		
B17	Handrail 42,4ø x 2 2250mm Stainless steel AISI 304 satin finish	1			E25	Cover plate 105ø Stainless steel AISI 304 for base plate E2/S2	1		
B22	Stainless steel rod AISI 304 10ø 3000mm	1			E40	MegaTec upright 42ø 1030mm, Stainless steel AISI 304, 2 clamp holder (for side fixing, 40mm projection)	1		
B23	Bendable joint (ball shaped) stainless steel AISI 304 for rod 10ø	6			E41	MegaTec upright 42ø 855mm, Stainless steel AISI 304, 2 clamp holder (for floor fixing)	1		
B33	Handrail 42,4ø x 2 2250mm Stainless steel AISI 304 satin finish	1			F5	Filling 720x350x1mm Stainless steel AISI 304 with punching	1		
B34	Stainless steel rod AISI 304 10ø 3000mm	1			F12	Filling 720x720x6mm acrylic white glossy finishes	1		

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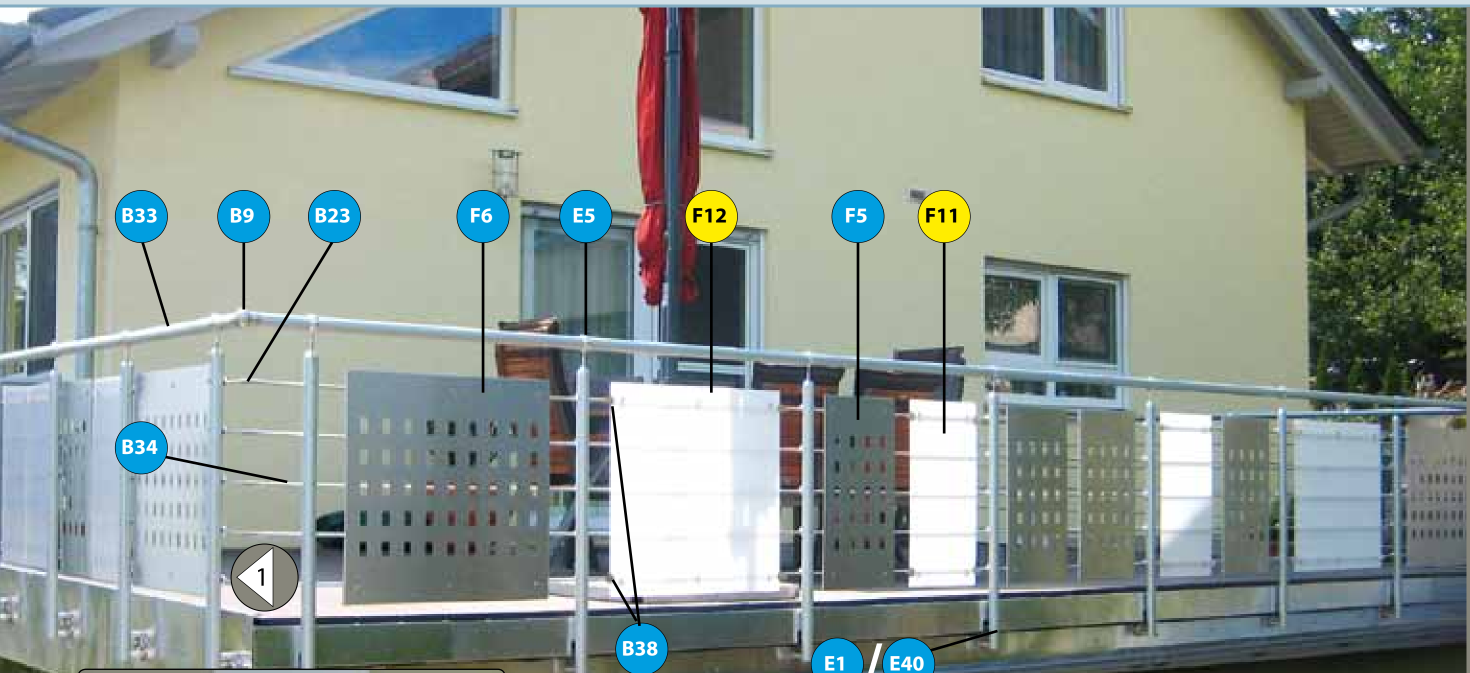
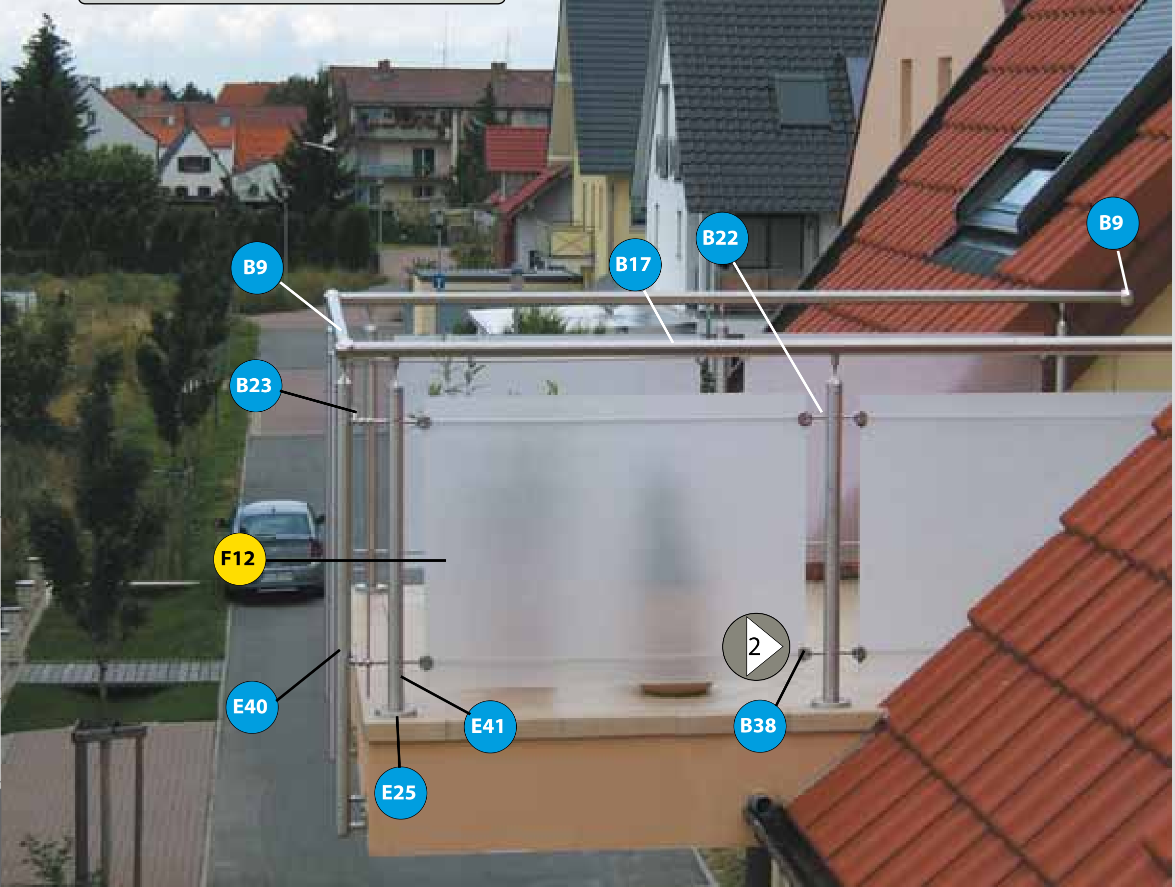

B33
B9
B23
F6
E5
F12
F5
F11
B34
1
B38
E1
E40

Stainless steel filling at french balcony


B9
B22
B17
B9
B23
F12
2
E40
E41
B38
E25

For assembly of balcony- or balustrade s with fillings use upright E40 (side assembly) resp. E41 (floor assembly).

For fixation of stainless steel or acrylic glass fillings, jaw holders are contained in scope of delivery.
Fixation holes have to be drilled just for acrylique glass- or resopal fillings on site.

In illustration on left hand side acrylique glass was fixed with B38 glass holder. In this case fixation holes aren't necessary.

Vertical rods/French balconies

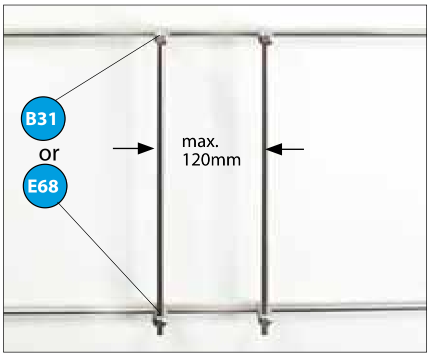
There are different solutions for french balconies

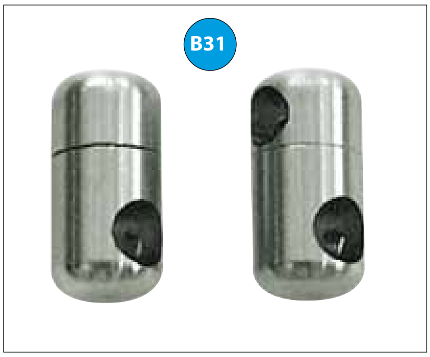
● ***=Stainless steel AISI 304***

Assembly-hint

1

Attaching of vertical rods with joint holder B31

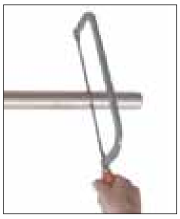




Joint holders must be attached before assembly; determine number. We recommend an max clearance of 120mm. For balustrade s with vertical rods use E68 angle holder.

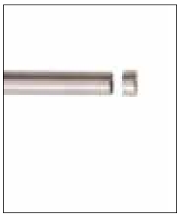
2

Cut and treatment of high-grade steel and aluminum tubes



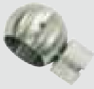
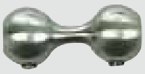
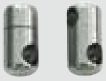
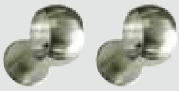
1. Cut metal tube on length by Flex or hack saw

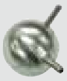
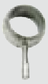
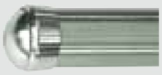
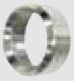
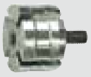
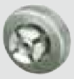
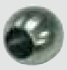
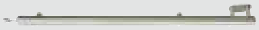
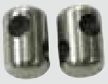
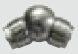
2. Flanges must be well burred outside and inside



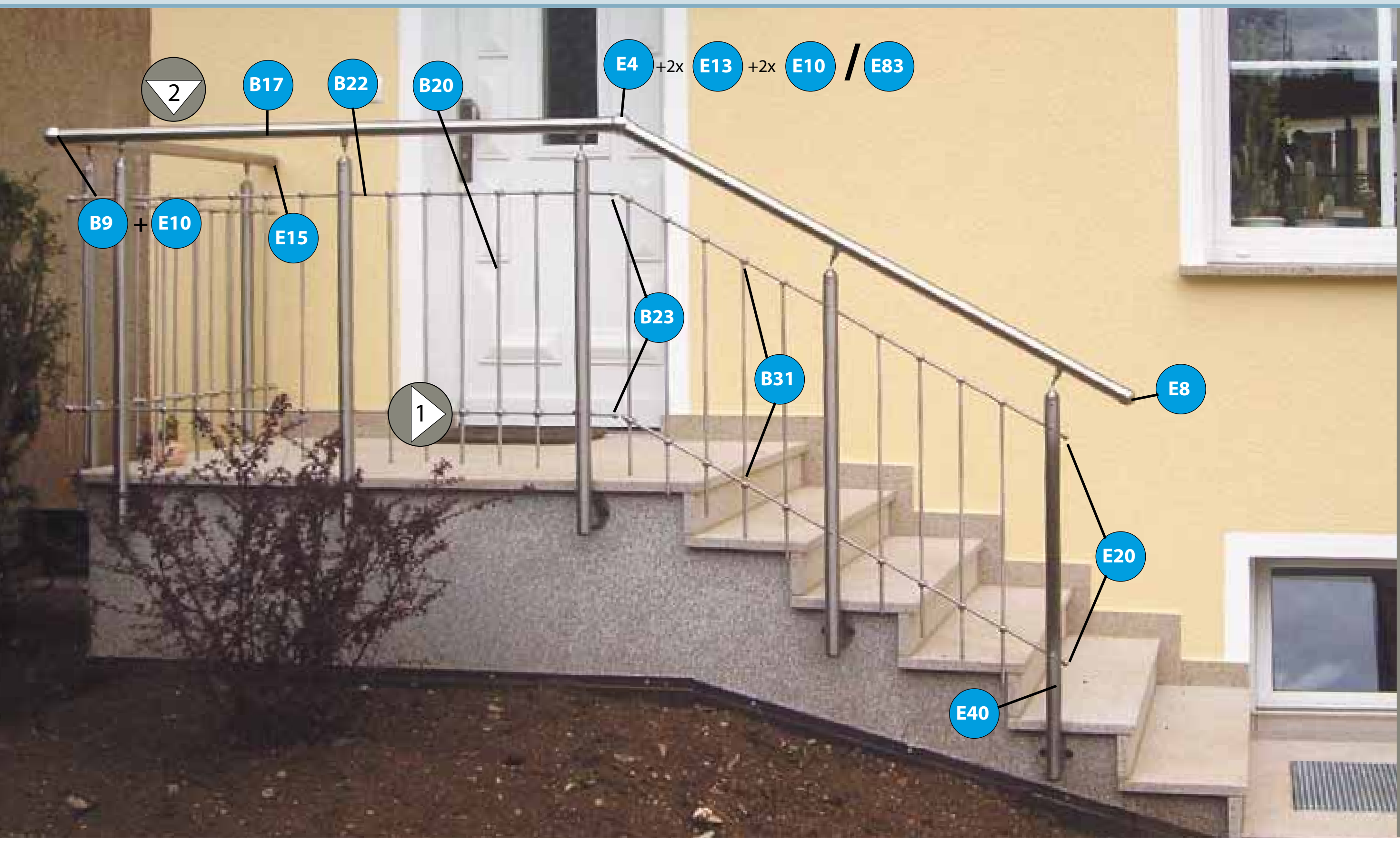
3. Tubes is ready for assembly e.g. for ring adapters

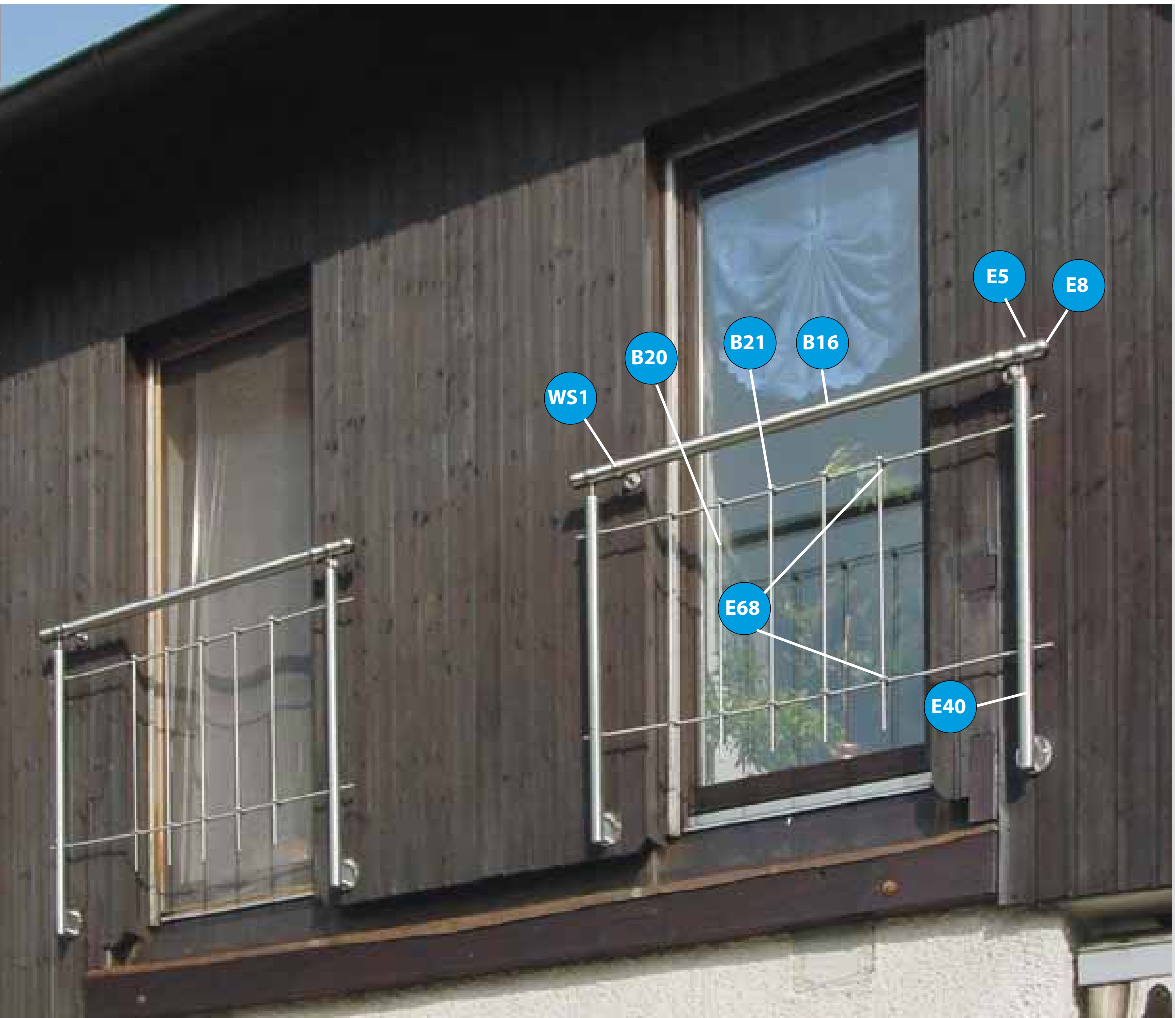
4. ready...

Part-no.	Specification	PU	Illustration	pcs
B9	Corner connectionball 60ø Stainless steel AISI 304 (for metal handrail 42,4aøx2 or wooden handrail 42ø)	1		
B16	Handrail 42,4ø x 2 1500mm Stainless steel AISI 304 satin finish	1		
B17	Handrail 42,4ø x 2 2250mm Stainless steel AISI 304 satin finish	1		
B20	Stainless steel rod AISI 304 10ø 750mm	1		
B21	Stainless steel rod AISI 304 10ø 1500mm	1		
B22	Stainless steel rod AISI 304 10ø 2250mm	1		
B23	Bendable joint (ball shaped) for rod 10ø Stainless steel AISI 304	6		
B31	Joint holder for vertical rods 10ø Stainless steel AISI 304	2		
WS1	Wall-set WS1 holders AISI 304 for French balcony 1x UniTec-ball 60ø (ajustable angle 90-180°) 2x Ring adopter and 2x tube coupling for metal handrail 5x Joint link for rods 10ø	1		

Part-no.	Specification	PU	Illustration	pcs
E4	UniTec ball 60ø Stainless steel AISI 304 with threaded connection M8 (for metal handrail order add. 2x E13)	1		
E5	Ring with bendable pin M8 Stainless steel AISI 304 (for handrail without drilling)	1		
E8	End cap Stainless steel AISI 304 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		
E10	Ring adapter Stainless steel AISI 304 (for metal or wooden handrail 42ø with threaded insert M8)	1		
E13	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		
E15	Wall fixing with cover plate (for metal handrail 42øx2)	1		
E20	End ball 20ø Stainless steel AISI 304 for rod 10ø	2		
E40	MegaTec upright 42ø 1030mm, Stainless steel AISI 304, 2 clamp holder (for side fixing, 40mm projection)	1		
E68	Angle holder for vertical rods 10ø Stainless steel AISI 304	2		
E83	Ring adapter with 2 pin holders straight stainless steel 304 (for metal handrail 42,4ø x 2)	1		

Balustrading systems for in- and outside use


2
B17
B22
B20
E4
+2x
E13
+2x
E10
/
E83
B9
+
E10
E15
B23
B31
1
E8
E20
E40


E5
E8
B20
B21
B16
WS1
E68
E40

Most railing systems are panned with horizontal rods.
If however safety aspects have to be considered (e.g. prevention of ladder effect by presence of infants) corresponding arrangements have to be done according to building regulations. Remedy is created by using vertical rods as well as fillings with stainless steel punched plates and acrylic glass.
French balconies resp. banisters can also be planned with sets EB1 and AB1 and/or EB3 plan (see page 22-25).

Wall handrails

There are a multiplicity of wall brackets available

Wall bracket stainless steel optics

Handrail joiner with pin holder

Wall bracket stainless steel optics

Handrail joiner with cover plate

Wall bracket with ring

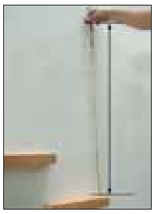
Handrail joiner with wall bracket

Wall bracket with pin holder

Construction hint

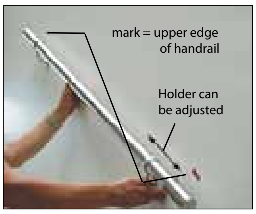
1 Assembly wall bracket

Determine height of handrail

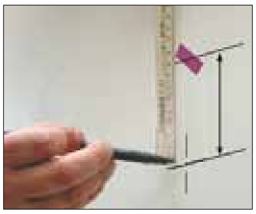


Height of the handrail installation: 800-1150mm above the stairs edge

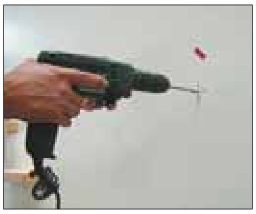
Mark wall bracket


mark = upper edge of handrail
Holder can be adjusted

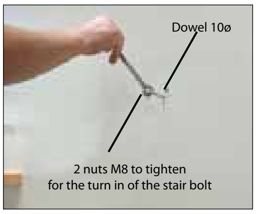
Mark fastening point



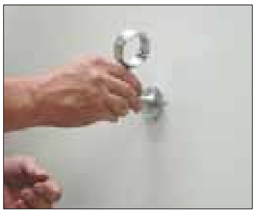
Drilling wall with 10ø



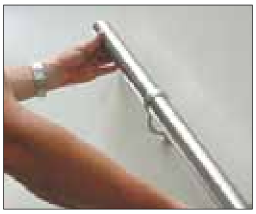
Fasten stair bolt


Dowel 10ø
2 nuts M8 to tighten for the turn in of the stair bolt

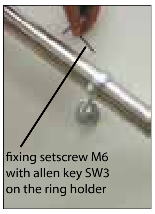
Install bracket with ring



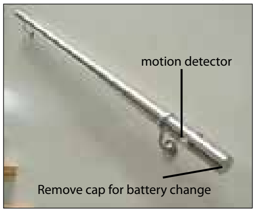
Put handrail in bracket



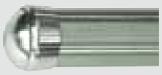
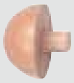
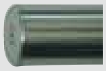
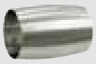
Clamp handrail at bracket


fixing setscrew M6 with allen key SW3 on the ring holder

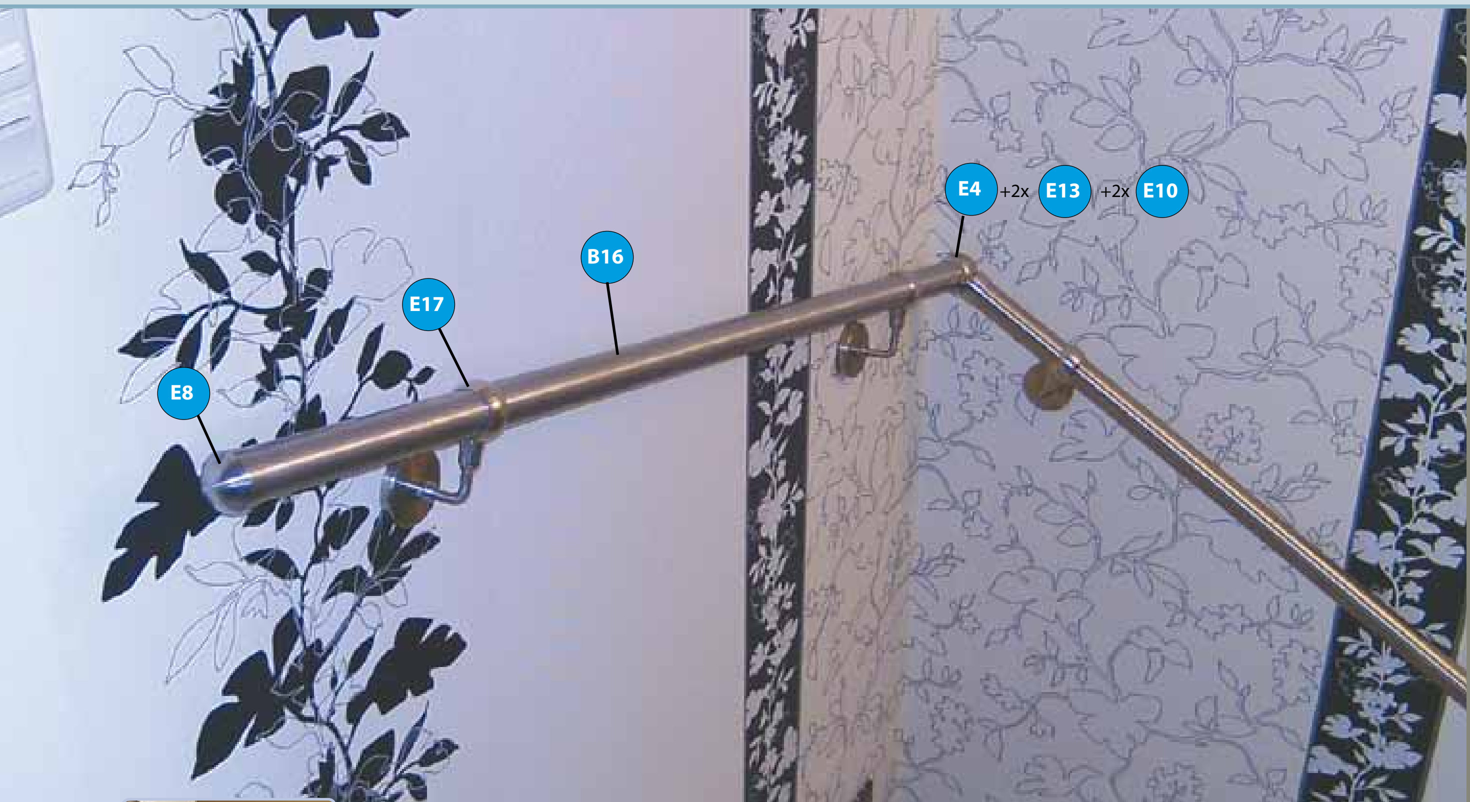
Handrail installed completely


motion detector
Remove cap for battery change

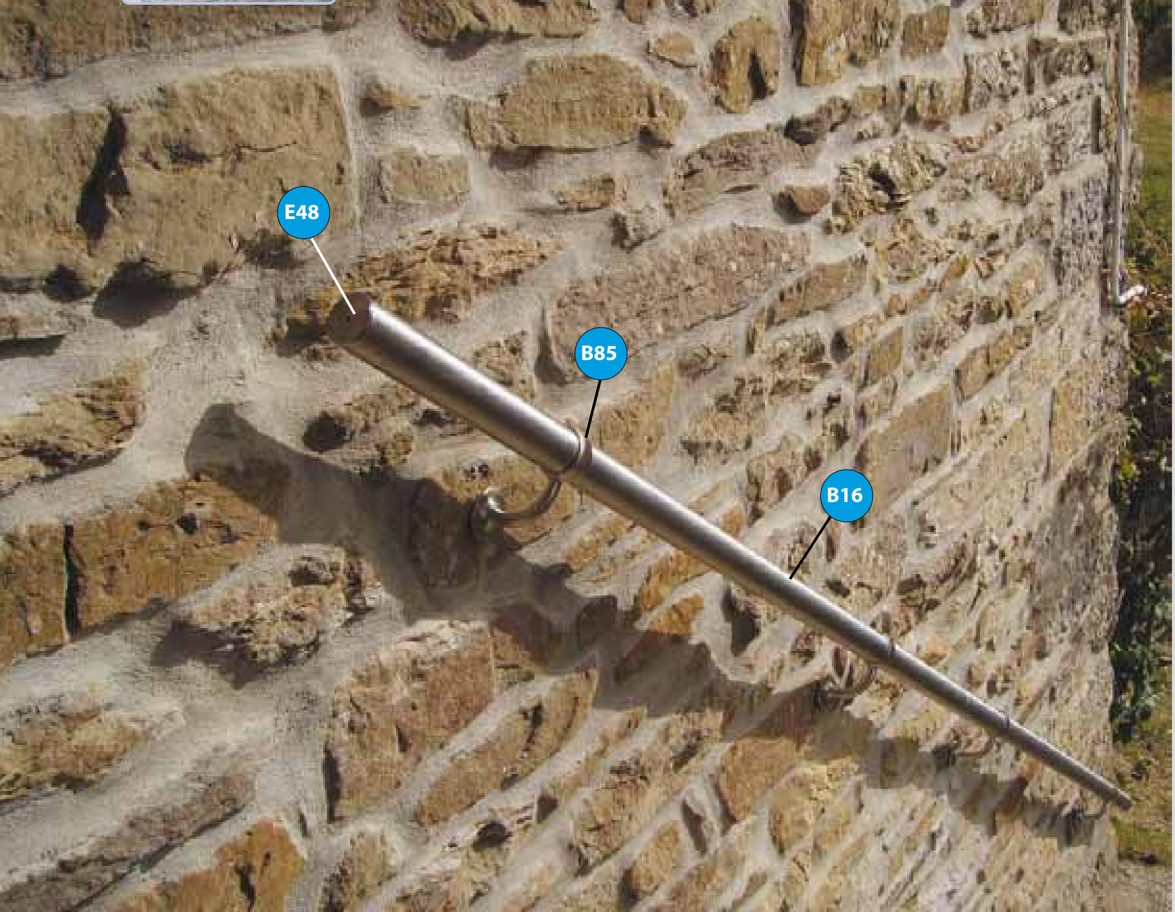
🟡 = Aluminium + other 🟤 = Wood 🔵 =Stainless steel AISI 304

Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B7	Stainless steel end cap 60ø 304	1			B73	Wall bracket stainless steel optic (for all handrails)	2		
B11	Wall bracket with pin holder Stainless steel AISI 304 (for handrail 40-50ø)	1			B74	Wall bracket white (for all handrails)	2		
B12	Cover plate Stainless steel AISI 304 for base plate B11	1			B85	Wall bracket with ring stainless steel optic (for all handrails 42ø)	2		
B16	Handrail 42,4ø x 2 1500mm stainless steel 304 satin finish	1			E8	End cap Stainless steel AISI 304 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		
B18	Handrail 42ø 1500mm beech lacquered	1			E9	End cap Stainless steel AISI 304 (for wooden handrail 42ø)	1		
B24	Handrail 42,4ø x 2 1500mm aluminium anodised	1			E17	Wall bracket with ring fitting and cover plate Stainless steel AISI 304 (for handrail 42,4ø)	1		
B64	End cap 42ø natural beech	2			E34	Wall bracket with cover plate and pin holder Stainless steel AISI 304 (for handrail 40-50ø)	1		
B66	End cap 42ø natural maple	2			E48	Flat end cap Stainless steel AISI 304 (for hit in metal handrail42øx2)	1		
B67	Handrail 42ø 1500mm maple lacquered	1			E49	Flat end cap Stainless steel AISI 304 (for wooden handrail 42ø)	1		
B72	Wall bracket brass finish (for all handrails)	2			B78	Connector Stainless steel AISI 304 (for handrail 42ø)	1		

Balustrading systems for in- and outside use



Provide security in the stairway!



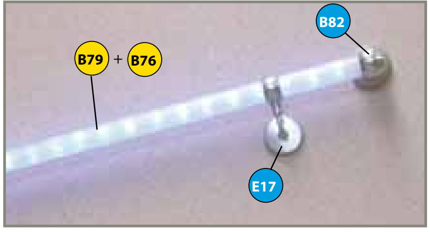
Treba handrail system offers an great variety of using possibilities. Combinations of different wall holders and handrails in wood, stainless steel or aluminium are possible.
Wall fixations with ball ring ease assembly of handrails without groove, especially for metal and Plexiglas.

Use E4 UniTec ball for connection of 2 handrails in the corner.

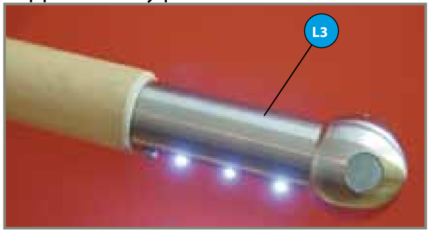
LED-illuminated-systems

Further lighting variants

Acrylic handrail with LED lighting

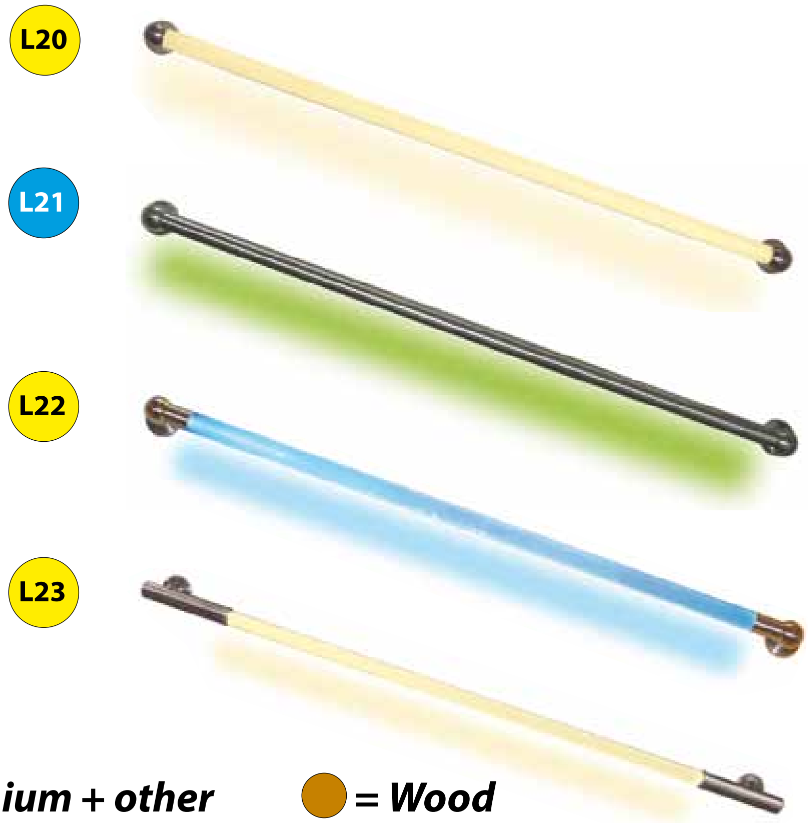


Supplementary part with movement detector

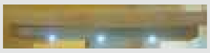
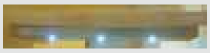
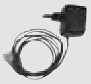
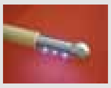
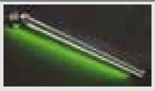
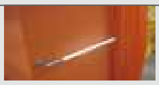


Stage lighting with movement detector

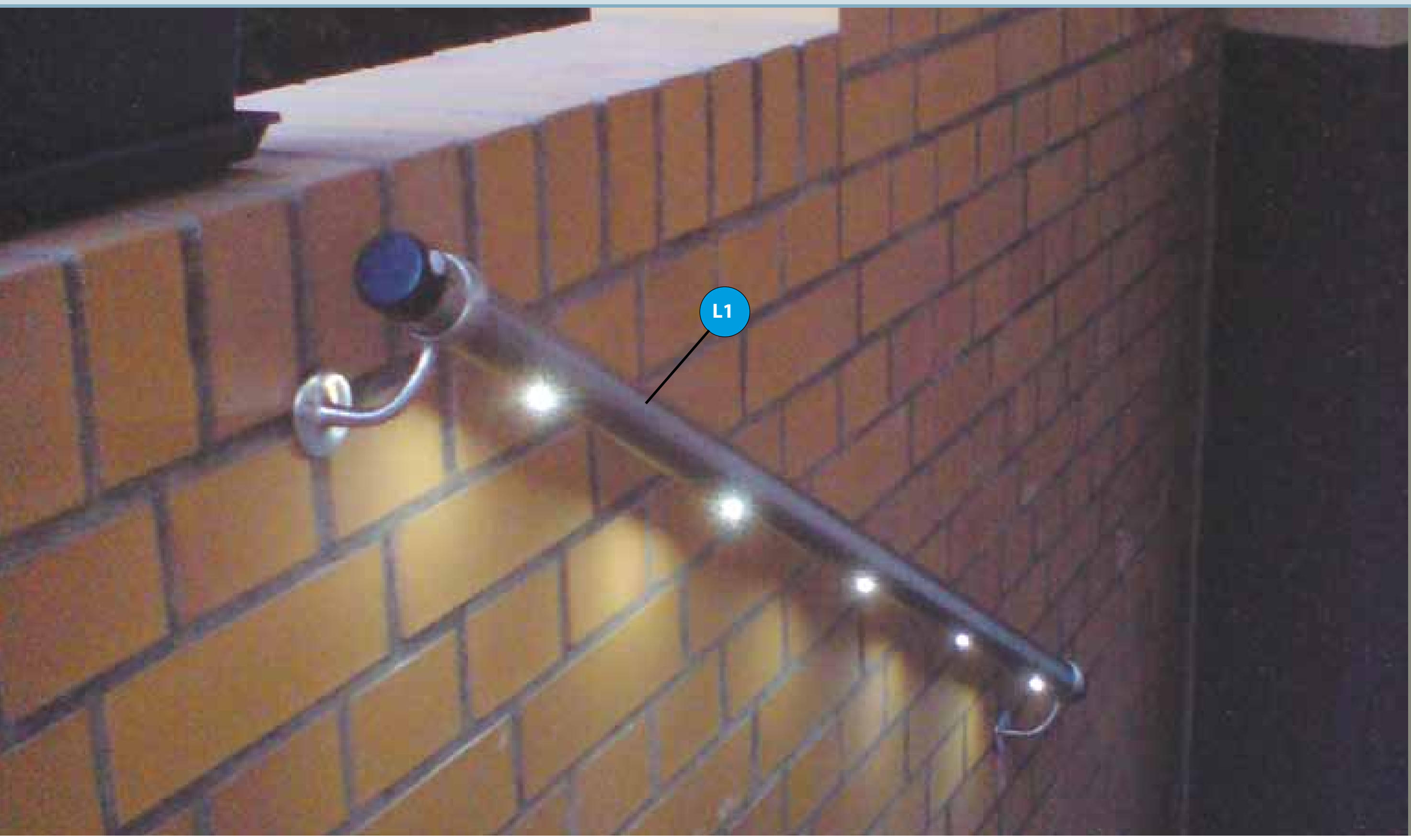
Shining hand rails with power pack, without movement detector



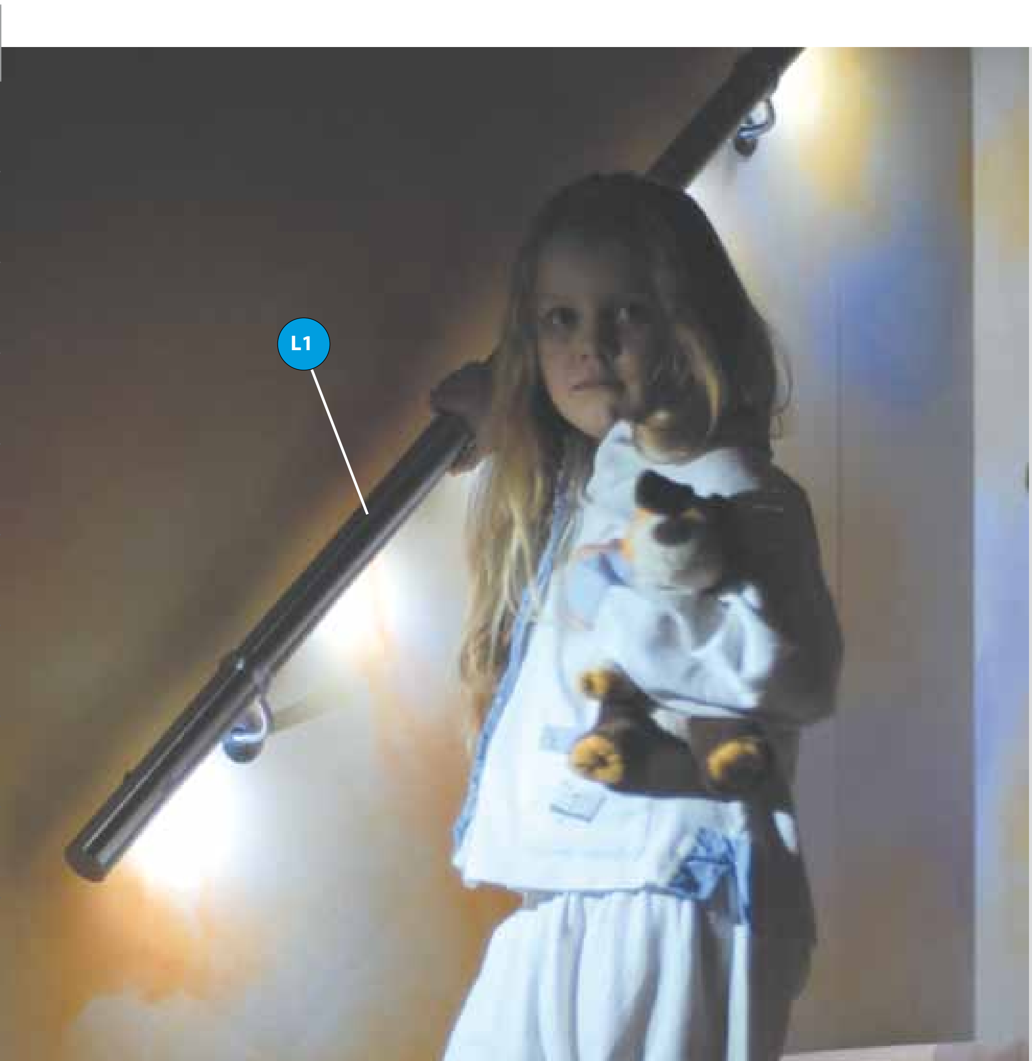
● =Stainless steel **● = Aluminium + other** **● = Wood**

Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
B76	LED handrail lighting 24V 2000mm in white, blue, yellow or red incl. center tube, distance rings, transformator 220V/24V (for acrylic handrail B75/B79)	1			**L6**	PiccoRail handrail set 42,4ø 1500mm lacquered beech with 2 ring holders stainless steel optics and 2 end caps, 5 LED´s and movement detector unit pre-mountsed (without batteries)	1		
B79	Acrylic handrail 42ø 2000mm white satiniced	1			**L7**	PiccoRail handrail set 42,4ø 1500mm lacquered maple with 2 ring holders stainless steel optics and 2 end caps, 5 LED´s and movement detector unit pre-mounted (without batteries	1		
B82	End ball 60ø 304 with distance holder and wall plate (for handrail lighting B76)	1			**L8**	PiccoStep stage lighting wooden strip 560x50x40mm beech lacquered with stainless steel angle, 3 LED´s and movement detector unit pre-mounted (without batteries)	1		
B84	UniTec ball 60ø 304 with hole for cable entry (for handrail lighting B76)	1			**L9**	PiccoStep stage lighting wooden strip 560x50x40mm lacquered maple with stainless steel angle, 3 LED´s and movement detector unit pre-mounted (without batteries)	1		
E17	Wall bracket with ring fitting and cover plate Stainless steel AISI 304 (for handrail 42,4ø)	1			**L10**	Power pack 220V/5V PiccoRail with cables 1,8m and plug (for PiccoRail L1, L2, L5, L6 + L7 as well as PiccoStep L8 + L9)	1		
L1	PiccoRail handrail set 42,4ø 1500mm stainless steel with 2 ring holders stainless steel optics and 2 end caps plastic black, 5 LED´s and 1 movement detector unit pre-mounted (without batteries)	1			**L11**	End caps stainless steel PiccoRail ever 1 piece with and/or without slot (for putting and sticking on plastic caps hand rail L1)	1		
L2	PiccoRail handrail set 42,4ø 1500mm stainless steel with 2 ring holders stainless steel optics and 2 end caps plastic black, 5 LED´s and 2 movement detectors unit pre-mounted (without batteries)	1			**L20**	Shining handrail ø42,4x1500mm tube acrylic satiniced, final ball with distance and wall slab in stainless steel, power LED in white, blue, yellow, red and green incl. power pack 220V/5V	1		
L3	PiccoFit supplementary part hand rail 42,4ø 155mm and final ball in stainless steel, 3 LED´s and movement detector unit pre-mounted (without batteries)	1			**L21**	Shining handrail ø42,4x1500mm groove tube, final ball with tubing distance and wall disc in stainless steel, LED volume in white, blue, yellow, red and green incl. power pack 220V/24V	1		
L4	Lighting 1200mm for canope 42,4ø with lateral holders in stainless steel, 5 LED´s and movement motion pre-mounted (without batteries)	1			**L22**	Shining handrail ø40x1500mm acrylic disc clear, final ball with distance and wall slab in stainless steel, power LED in white, blue, yellow, red and green incl. power pack 220V/5V	1		
L5	PiccoRail handrail set 42,4ø 1500mm acrylic satiniced with 2 ring holders stainless steel optics and 2 end caps, 5 LED´s and movement detector unit pre-mounted (without batteries)	1			**L23**	Shining bar ø20x1000mm acrylic disc clearly, final ball with distance and wall slab in stainless steel, power LED in white, blue, yellow, red and green incl. power pack 220V/5V	1		

Balustrading systems for in- and outside use



Stainless steel hand rail with LED lighting, battery-operated with movement detector



The LED lighting-system **PiccoFlash** with **integrated movement detector** unit, gets along without power connection. Only 4 batteries 1.5 V are needed.

The system represents a successful symbiosis from security and functionality.

PiccoFlash is the optimal lighting solution for situations with difficulty capable of being developed, i.e. where moving of lines is difficult and light is only temporarily needed.

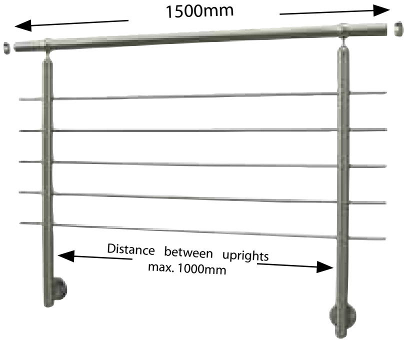
The ranges of application such as emergency lighting, escape route identification, entrance lighting or cellar outlets are various.

Create the correct conditions for safe and accident-free running (special for infants and seniors).

The sainless steel hand rail with LED lighting is fast installed and can be started up immediately.

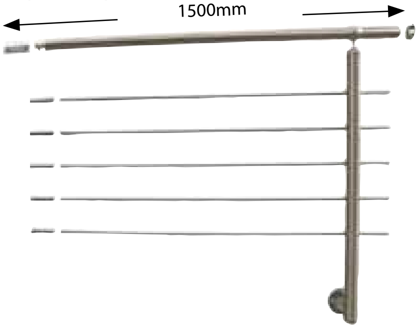
Railing-sets variants

EB1 / AB1 Basic set



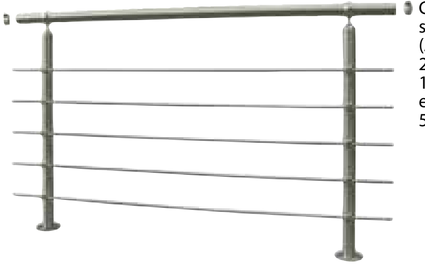
Completely railing-system in stainless steel (EB1) or aluminium (AB1)
2x upright 42ø 1030mm with ring
1x handrail 42ø 1500mm with 2 end caps
5x intermediate rods 10ø 1500mm

EZ1 / AZ1 Additional-set



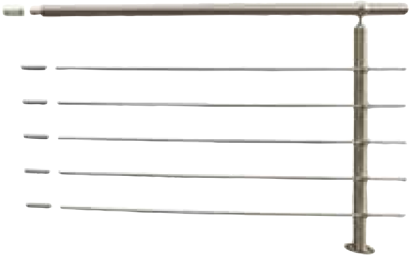
Additional railing-system in stainless steel (EZ1) or aluminium (AZ1)
1x upright 42ø 1030mm with ring
1x handrail 42ø 1500mm with 1 connector
5x intermediate rods 10ø 1500mm with 5 connectors

EB2 / AB2 Basic set



Completely railing-system in stainless steel (EB2) or aluminium (AB2)
2x upright 42ø 855mm with ring
1x handrail 42ø 1500mm with 2 end caps
5x intermediate rods 10ø 1500mm

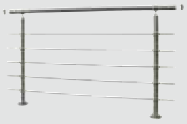
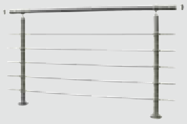
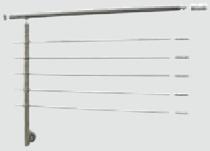
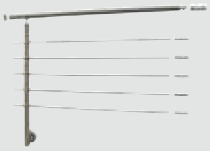
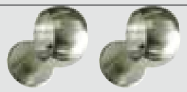
EZ2 / AZ2 Additional-set



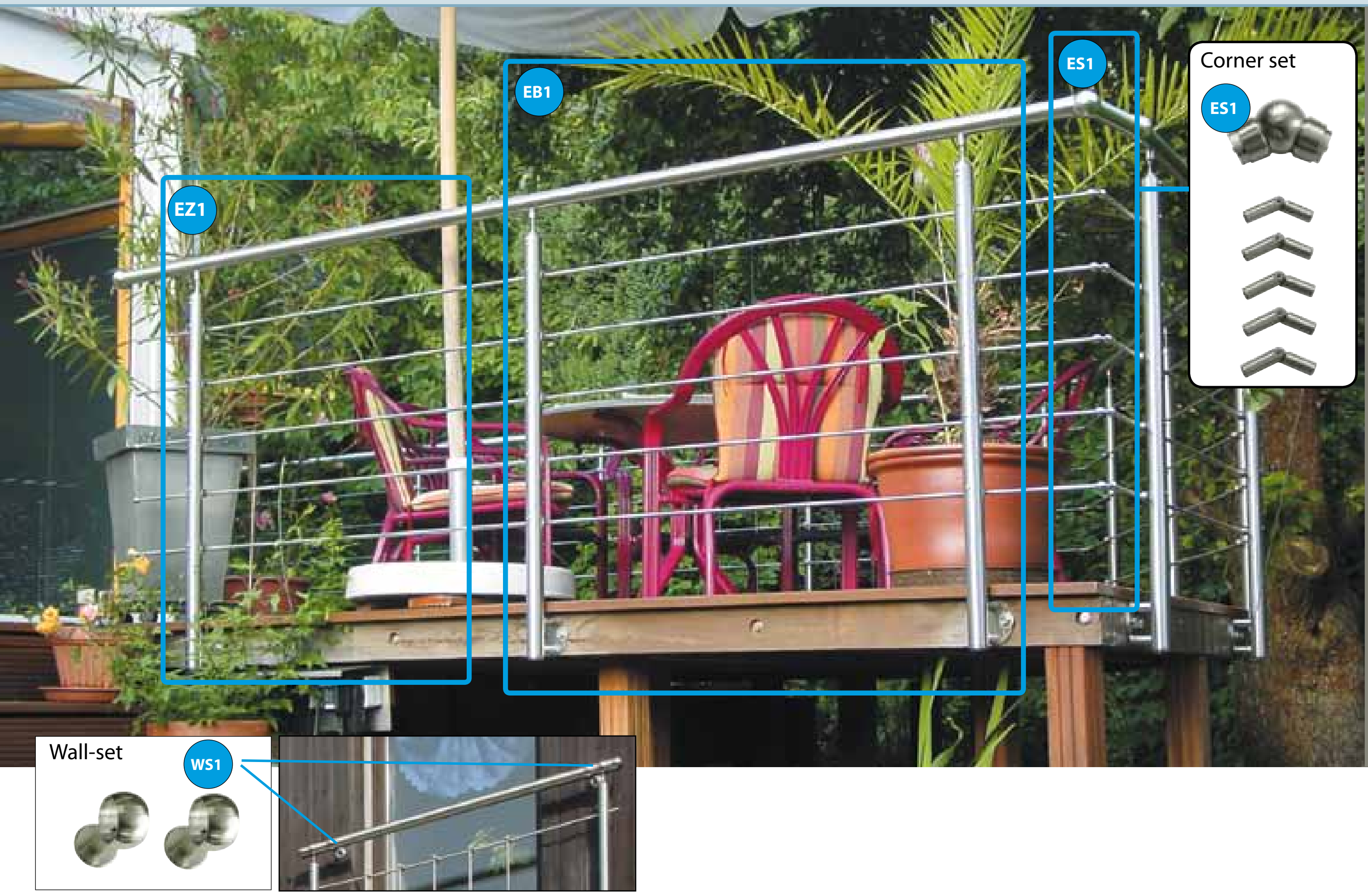
Additional railing-system in stainless steel (EZ2) or aluminium (AZ2)
1x upright 42ø 855mm with ring
1x handrail 42ø 1500mm with 1 connector
5x intermediate rods 10ø 1500mm with 5 connectors

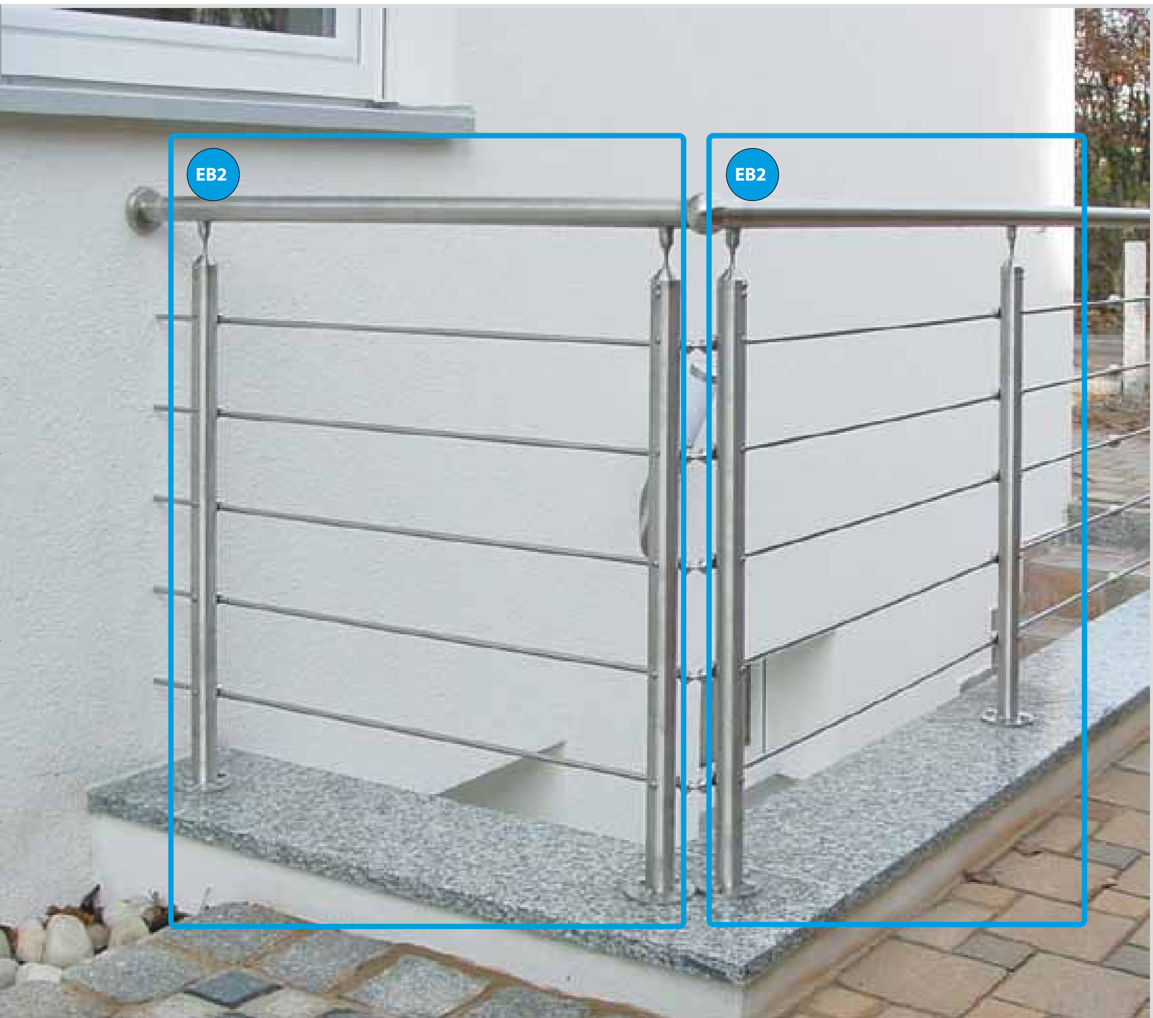
Please consider the possibility for the railing extension with hitting the corner-set ES1.
for corner connections as well as for French of balconies with wall-set WS1.

🔵 = Stainless steel AISI 304 ***🟡 = Aluminium + other***

Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
AB1	Complete railing-system AB1 in aluminium (side fixing) 2x upright 42ø 1030mm in aluminium with ring 1x handrail 42ø 1500mm and 2 end caps in aluminium 5x intermediate rods stainless steel 10ø 1500mm	1			**EB1**	Complete railing-system EB1 stainless steel AISI 304 (side fixing) 2x upright 42ø 1030mm in stainless steel with ring 1x handrail 42ø 1500mm stainless steel with 2 end caps 5x intermediate rods stainless steel 10ø 1500mm	1		
AB2	Complete railing-system AB2 in aluminium (floor fixing) 2x upright 42ø 855mm in aluminium with ring 1x handrail 42ø 1500mm and 2 end caps in aluminium 5x intermediate rods stainless steel 10ø 1500mm	1			**EB2**	Complete railing-system EB2 stainless steel AISI 304 (floor fixing) 2x upright 42ø 855mm stainless steel with ring 1x handrail 42ø 1500mm stainless steel with 2 end caps 5x intermediate rods stainless steel 10ø 1500mm	1		
AZ1	Additional railing-system AZ1 in aluminium (side fixing) 1x upright 42ø 1030mm in aluminium with ring 1x handrail 42ø 1500mm in aluminium with 1 connector 5x intermediate rods stainless steel 10ø 1500mm with 5 connectors	1			**EZ1**	Additional railing-system EZ1 stainless steel AISI 304 (side fixing) 1x upright 42ø 1030mm stainless steel with ring 1x handrail 42ø 1500mm stainless steel + 1 connector 5x intermediate rods stainless steel 10ø 1500mm with 5 connectors	1		
AZ2	Additional railing-system AZ2 in aluminium (floor fixing) 1x upright 42ø 855mm in aluminium with ring 1x handrail 42ø 1500mm in aluminium with 1 connector 5x intermediate rods stainless steel 10ø 1500mm with 5 connectors	1			**EZ2**	Additional railing-system EZ2 stainless steel AISI 304 (floor fixing) 1x upright 42ø 855mm stainless steel with ring 1x handrail 42ø 1500mm stainless steel + 1 connector 5x intermediate rods stainless steel 10ø 1500mm with 5 connectors	1		
ES1	Corner-set ES1 stainless steel for corner connection 90-180° 1x UniTec-ball 60ø Stainless steel AISI 304 (ajustable angle 90-180°) 2x Ring adapter and 2x tube coupling for metal handrail 5x Joint link for rods 10ø	1			**WS1**	Wall-set WS1 holders stainless steel AISI 304 for French balcony 1x UniTec-ball 60ø (adjustable angle 90-180°) 2x Ring adapter and 2x tube coupling for metal handrail 5x Joint for rods 10ø	1		

Balustrading systems for in- and outside use





Treba banister parts offering an variety of banister parts to erect balustrades and balcony banisters in an fast and favourable manner.

The distance inbetween uprights should not exceed 1200 mm. Handrails and rods are delivered in excess length and have to be shorten on site.

For corner connections you have to take the corner set ES1 .

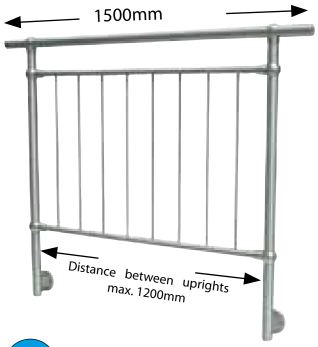
The base set EB1 or AB1 can also be used as French balcony with the wall set WS1.

Additional banister parts of our product range can be reordered.

Railing-sets variants

for balcony with vertical rods

EB3 **Basis-set in stainless steel** (side fixing)



Completely railing-system
in stainless steel AISI 304

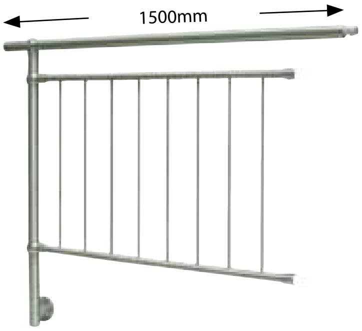
2x upright 42ø 1160mm with ring

1x handrail 42ø 1500mm
with 2 end caps

Upper and bottom-chord 27ø
1130mm with holder and 4 rings

8x vertical rods 10ø 750mm

EZ3 **Additional-set in stainless steel** (side fixing)



Additional railing-system
in stainless steel AISI 304

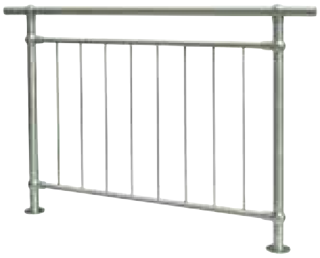
1x upright 42ø 1160mm with ring

1x handrail 42ø 1500mm
with 1 connector

upper-chord 27ø 1130mm
with holder and 2 rings

8x vertical rods 10ø 750mm

EB4 **Basis-set in stainless steel** (floor fixing)



Completely railing-system
in stainless steel AISI 304

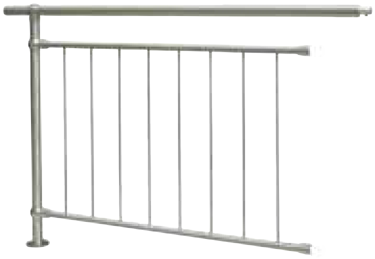
2x upright 42ø 960mm with ring

1x handrail 42ø 1500mm
with 2 end caps

Upper- and bottom-chord 27ø
1130mm with holder and 4 rings

8x vertical rods 10ø 750mm

EZ4 **Additional-set in stainless steel** (floor fixing)



Additional railing-system
in stainless steel AISI 304

1x upright 42ø 960mm with ring

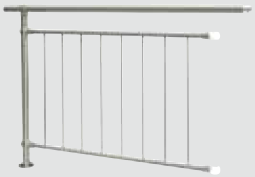
1x handrail 42ø 1500mm
with 1 connector

Upper- and bottom-chord
27ø 1130mm with holder and 2 rings

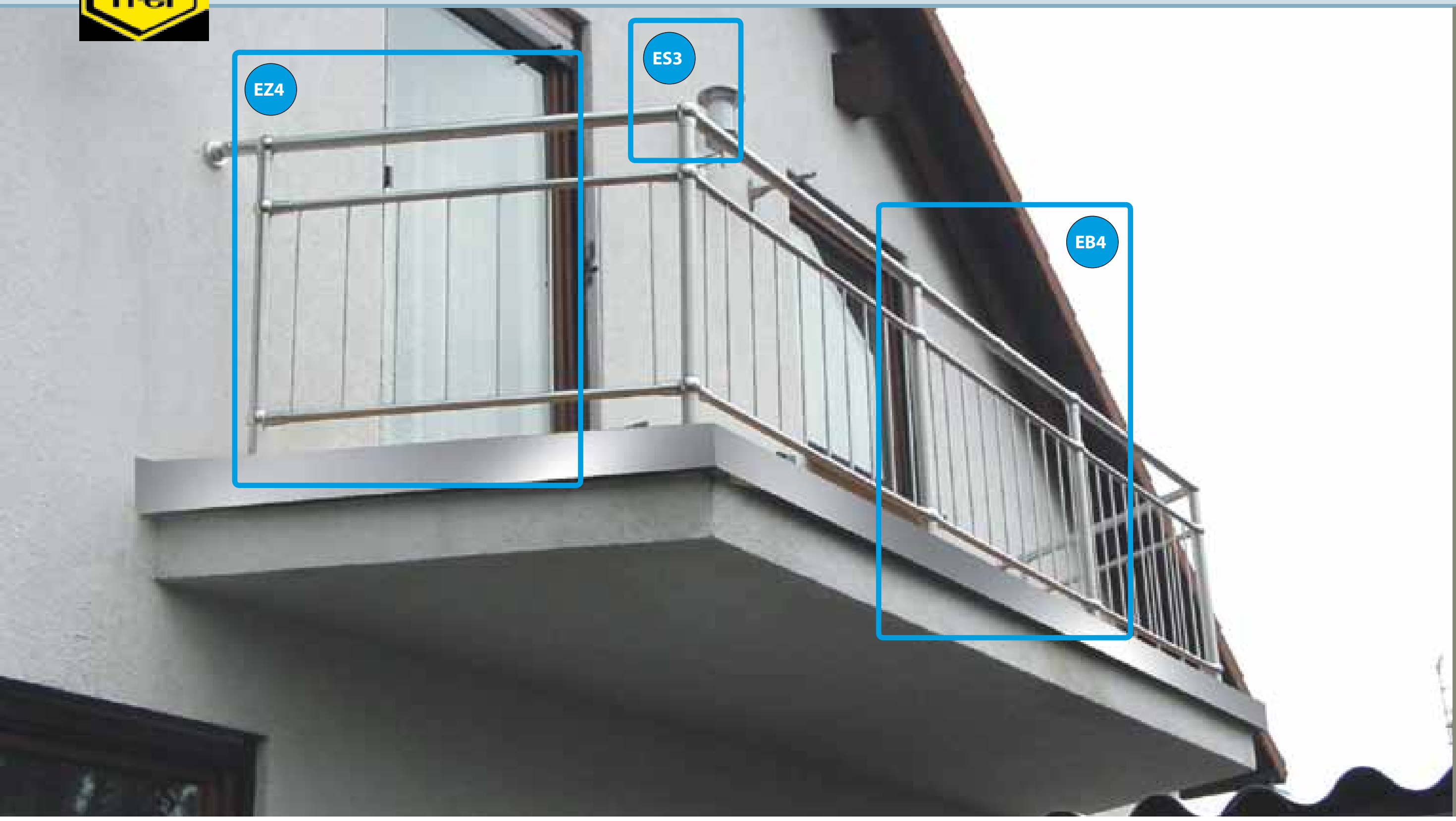
8x vertical rods 10ø 750mm

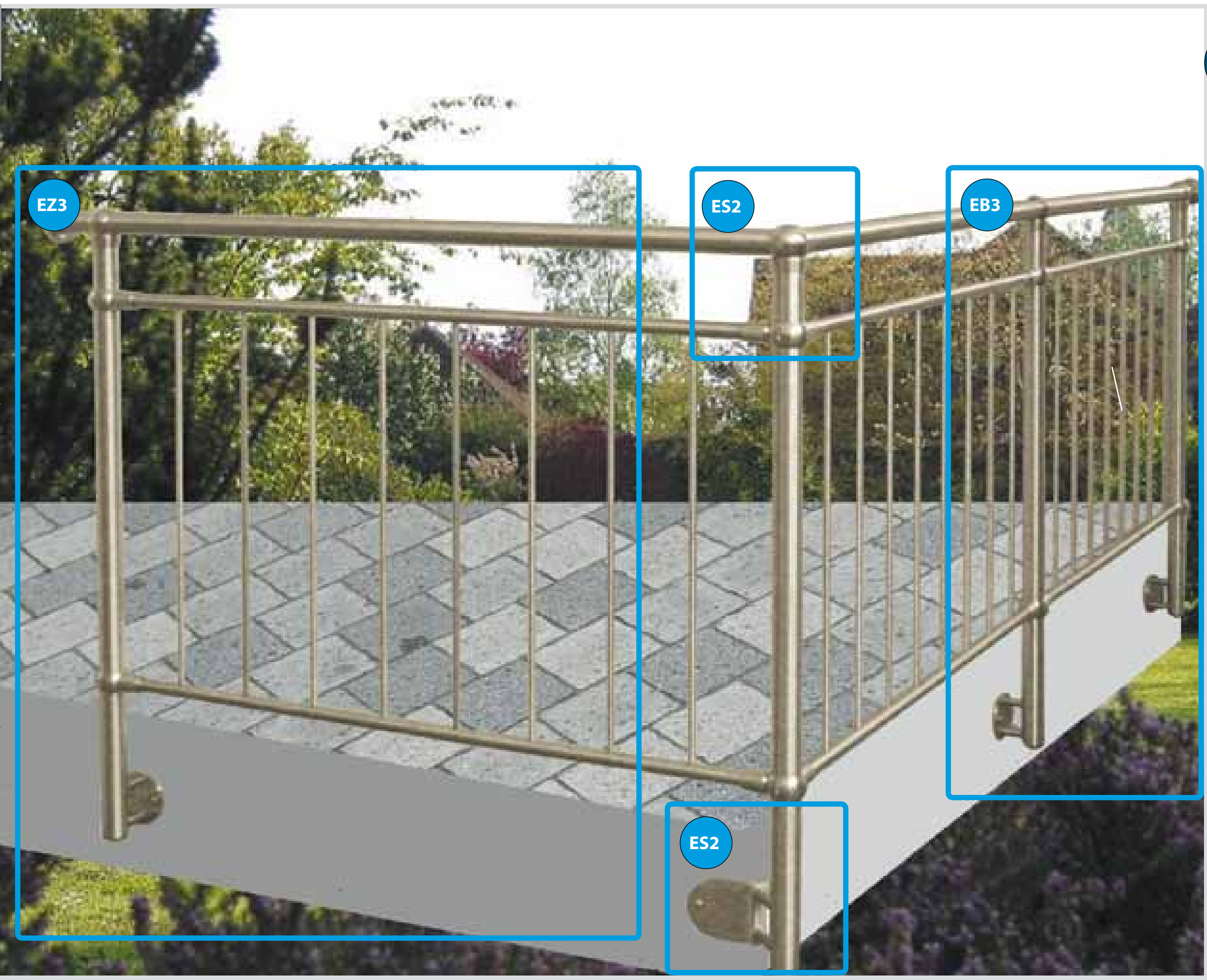
For corner extension use corner set ES1

● ***=Stainless steel AISI 304***

Part-no.	Specification	PU	Illustration	pcs	Part-no.	Specification	PU	Illustration	pcs
EB3	Completely railing-system EB3 stainless steel (side fixing) 2x upright 42ø 1160mm with ring 1x handrail 42ø 1500mm with 2 end caps Upper- and bottom-chord 27ø 1130mm with holder and 4 rings 8x vertical rods 10ø 750mm	1			EZ3	Additional railing-system EZ3 stainless steel (sidefixing) 1x upright 42ø 1160mm with ring 1x handrail 42ø 1500mm with 1 connector Upper- and bottom-chord 27ø 1130mm with holder and 2 rings 8x vertical rods 10ø 750mm	1		
EB4	Completely railing-system EB4 stainless steel (floor fixing) 2x upright 42ø 960mm with ring 1x handrail 42ø 1500mm with 2 end caps Upper- and bottom-chord 27ø 1130mm with holder and 4 rings 8x vertical rods 10ø 750mm	1			EZ4	Additional railing-system EZ4 stainless steel (floor fixing) 1x upright 42ø 960mm with ring 1x handrail 42ø 1500mm with 1 connector Upper- and bottom-chord 27ø 1130mm with holder and 2 rings 8x vertical rods 10ø 750mm	1		
ES2	Corner-set ES2 stainless steel (for corner connection 90°, side fixing) 1x corner plate 120x100x8mm with distances and screws 1x corner-connection-ball 60ø 1x ring adapter and 1x tube coupling for metal handrail 42ø (staff EB3/EZ3 must be converted by others)	1			ES3	Corner-set ES3 stainless steel (for corner connection 90°, floor fixing) 1x corner-connection-ball 60ø 1x ring adapter and 1x tube coupling for metal handrail 42ø (staff EB4/EZ4 must be converted by others)	1		

Balustrading systems for in- and outside use





Treba banister parts offering an variety of banister parts to erect balustrades and balcony banisters in an fast and favourable manner.

The distance inbetween uprights should not exceed 1200 mm. Handrails and rods are delivered in excess length and have to be shorten on site.

For corner connections of 90° you have to take ES2 for side assembly and ES3 for assembly on the floor.

Additional banister parts of our product range can be reordered.

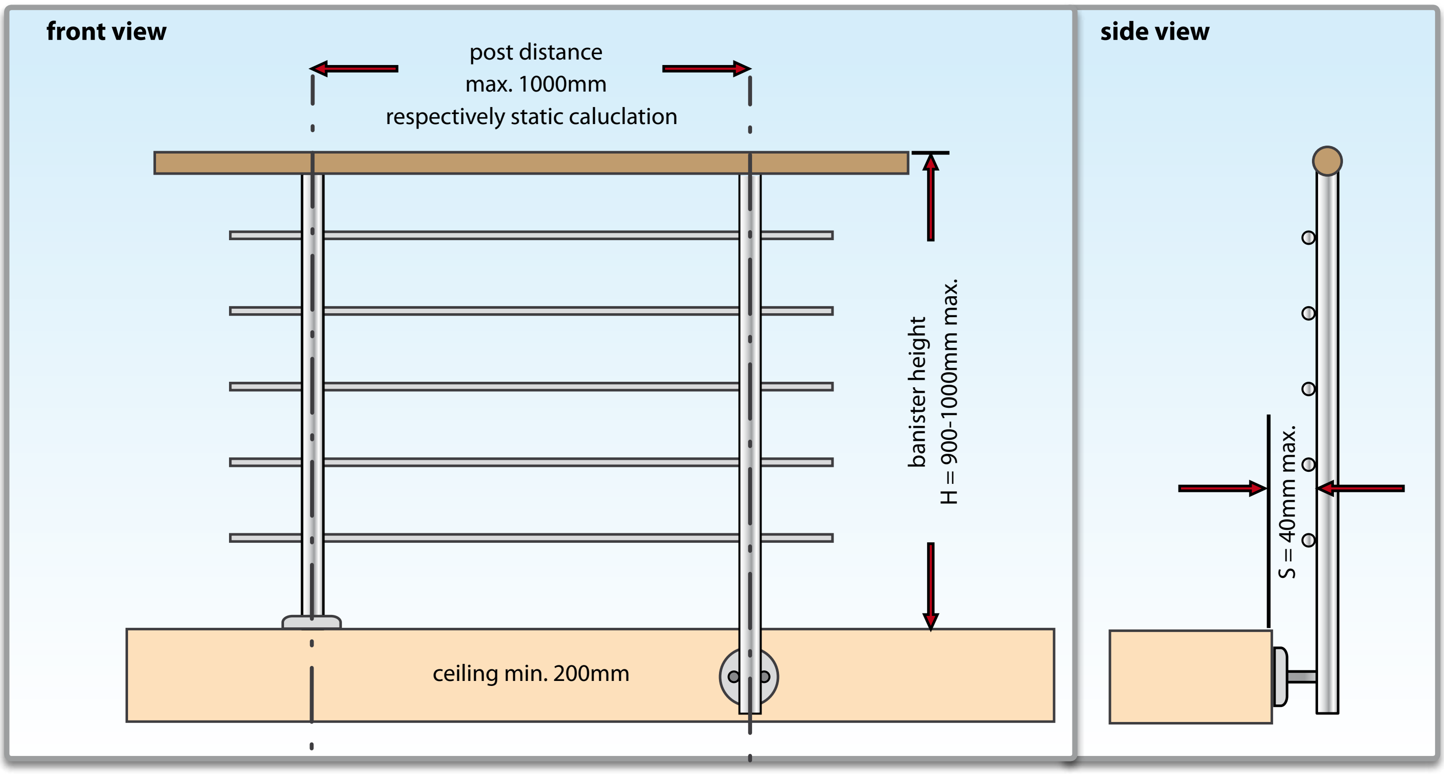
Safety - and assembly advices

- For balcony respectively external banisters only licensed stainless steel dowels are allowed to be used. Consider edge distances! (minimum edge distance 80mm depending on dowel manufacturer and certification).
- We recommend not to exceed the distance of 1000mm between posts. By using of concrete screw B37 in private houses, we offer an structural analysis for side assembly of these types: MegaTec, FerroTec and Balcony banisters with more than 20mm concrete thickness (B250).
- Height of banister is 900mm for one family houses, depending on federal state (construction regulations provides further information).
- Distance between filling rods is max. 120mm, in case of higher distance reinforce with acrylique glass and jaw holder B30 or insert intermediate rods or cords.
- To avoid ladder effect with horizontal rods see to reinforce with acrylique glass or place handrail at least 150mm inside. Therefore use climb protection E38. Railing height can be prolonged this way. Use bend pin just for staircase railings, otherwise use stainless steel pins ø10. Build them your own by using stainless steel rods ø10 or order them. (With balcony balustrading, MegaTwin, Ferro Twin and Steel balustrading, bendable pins are not necessary).

Materials

- **Stainless steel:** All stainless steel parts in this technical documentation are made of stainless steel, AISI 304, German material grade 1.4301. Surface is polished smoothly. Despite specified as corrode free, these stainless steel parts can corrode under certain conditions for instance high humidity in sea regions (air with salt content), in industrial regions with aggressive air pollution (acid rain), chlorine water, splash water close to the street and so on.

  Remedy: Products made of stainless steel (AISI 316), sea water resistant stainless steel or maintenance spray B35 or stain cleaner B39. We recommend basically to clean and maintain stainless steel for outside use on an regular basis.
- **Galvanically zinced steel parts:** These products are sensitive against humidity (shell construction), sweaty hands and aggressive environmental influences. That is why they should be used indoor or have to be treated with an additional coating.
- **Wooden handrail parts:** Application just for indoor use. Wooden parts (spruce/ pine) are conditionally suitable for outdoor use. An proper impregnation is necessary. Handrail bows and end caps can be bond together. Please see our delivery program for handrail brackets B11, with rosette B12, or B72, B73, B74, E17, E34, E35 and E36. We just have lacquered as well as raw wooden handrails in our delivery programm.



Attention construction regulation: Respect building codes!

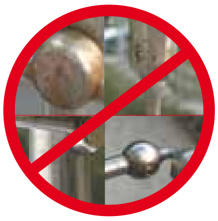
These balustradings are bound for residential buildings with max. 2 flats (private domain). Please inform yourself about licensed heights and distances, ask your public building authorities or your architect. (Constructor is responsible for compliance of regulations!)

Details for maintenance and cleaning of stainless steel AISI 304

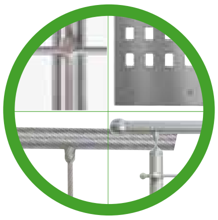
All banister parts of TREBA banister program is made of stainless steel –AISI 304- material grade 1.4301. Surface is polished smoothly.

Despite corrode free specification stainless steel parts can corrode.

Material stainless steel stands for guarantor of long-life cycle and classiness. To sustain first-class condition of surface for an long period of time you have to maintain and protect the top-class material on an regular basis. Find information how to protect your banister against corrosion in this brochure.



Flash rust can occur through environmental influences or incorrect treatment.



Constant maintenance bewares an clean surface of stainless steel parts.

How flash rust occurs?

Environmental influeces:
- high air humidity with salinity in sea regions
- industrial areas especially with specially aggressive air-pollution (acid-rain)
- by touching of surface with salty splash water in street areas
- by touching of chlorine water (for application in swimming pools stainless steel is not suitable)

Influences through assembly:
- by treatment with tools, which have been in contact with normal iron before
- by flying sparks, covering the surface for example during grinding processes
- by touching the surface with chemical substances during the building process (for example lime and cement dust

What is recommened for the preservation of steel?

First cleaning has to follow with suitable household based stainless steel caring product after assembly in any case. We recommend using caring spray B35.

Removing of iron particles, grinding dusts, swarfs and welding splatter immediately after assembly is absolutely necessary. These contaminants can accelerate corrosion if they settle on stainless steel surface. The passive layer of non-rusting steel will burst there and lead to punctual corrosion.

For an long term and correct look of stainless steel surface, we basically recommend to clean and care it approx. every 6 months. Already existing contaminants and deposits can be removed by using of (non-ferrite) cleaning sponge. For removal of corrosion and to lighten up surface we recommend our mordant cleaner B39. If an massive corrosion already exists, surface has to be treated mechanically. Small scratches and damages can be removed with stainless steel polish B39.

If stainless steel parts should be installed close to the sea, see to use sea-water-resistant products in quality AISI 316
(X-parts in our product range). Please visit the web: www.edelstahl.de to get detailed information.

Products for treatment and care of stainless-steel

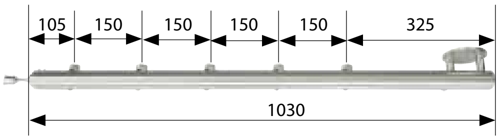
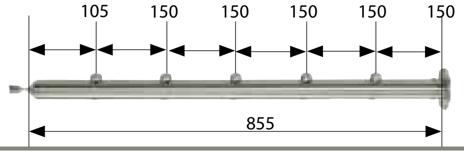
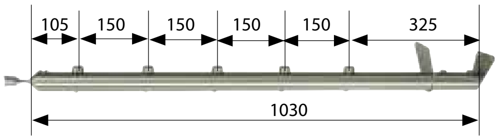
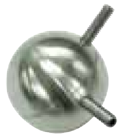
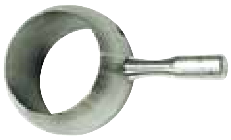
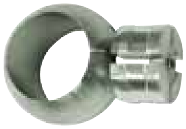
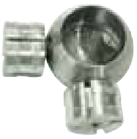
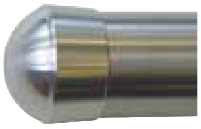
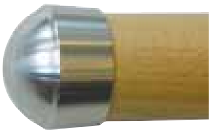
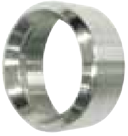
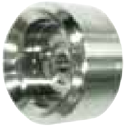
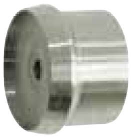
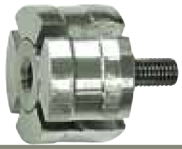
B35
Protection spray
for protection and preservation of the surface

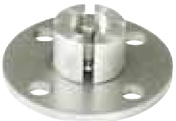
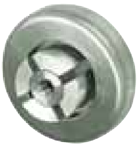
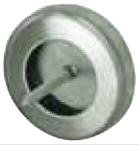
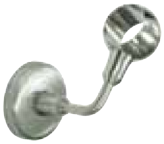
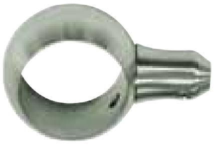
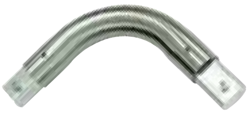
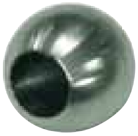
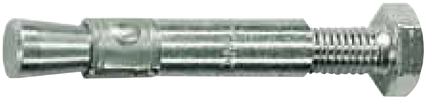
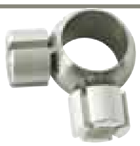
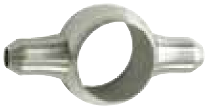
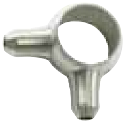
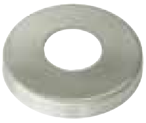
B39
Mordant cleaner
for removal of external oxides and lightening up of surface

B89
Stainless steel polish
for removal of scratches and damages

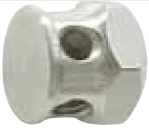
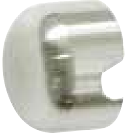
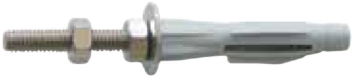
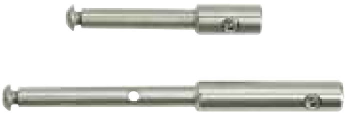
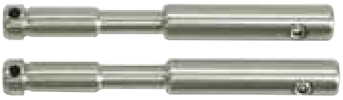
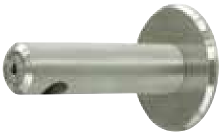
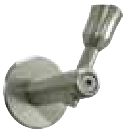
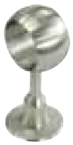
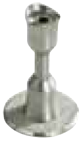
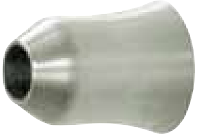
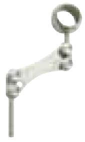
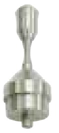
B36
Tool set
with screw tap, turn-over tool, cut-off wheel, drilling jig and bevelling pad

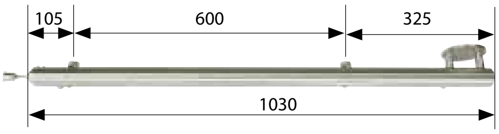
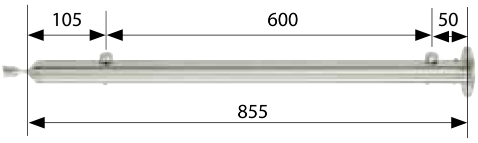
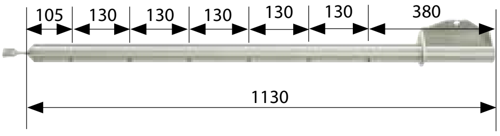
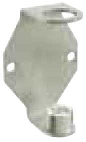
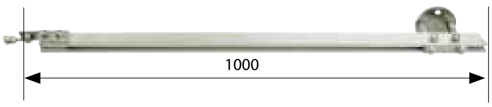
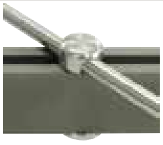
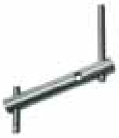
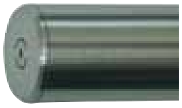
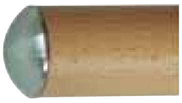
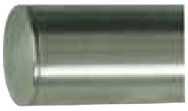
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
E1	MegaTec upright 42ø 1030mm, stainless steel AISI 304, 5 clamp holder (for side fixing, 40mm projection)	1		130.01.0001 4 015510 002013
E2	MegaTec upright 42ø 855mm, stainless steel AISI 304, 5 clamp holder (for floor fixing)	1		130.01.0002 4 015510 002020
E3	MegaTec upright 42ø 1030mm, stainless steel AISI 304, 5 clamp holder (for open treads)	1		130.01.0003 4 015510 002037
E4	UniTec ball 60ø stainless steel AISI 304 with threaded connection M8 (for metal handrail please order add. 2x E10 + 2x E13)	1		130.01.0004 4 015510 002044
E5	Ball with bendable pin M8 stainless steel AISI 304 (for handrail without drilling)	1		130.01.0005 4 015510 002051
E6	Ring for T-connection (for metal handrail 42,4ø x 2 tube coupling)	1		130.01.0006 4 015510 002068
E7	Ball 3D-connection (for metal handrail 42,4ø x 2)	1		130.01.0007 4 015510 002075
E8	End cap stainless steel AISI 304 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		130.01.0008 4 015510 002082
E9	End cap stainless steel AISI 304 (for wooden handrail 42ø)	1		130.01.0009 4 015510 002099
E10	Ring adapter stainless steel AISI 304 (for metal or wooden handrail 42ø with threaded insert M8)	1		130.01.0010 4 015510 002105
E11	Ball adapter stainless steel AISI 304 (for wooden handrail 42ø without threaded insert)	1		130.01.0011 4 015510 002112
E12	Metal adapter stainless steel AISI 304 (for wooden handrail 42ø with B7, B8 and B9)	1		130.01.0012 4 015510 002129
E13	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		130.01.0013 4 015510 002136

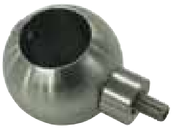
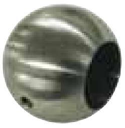
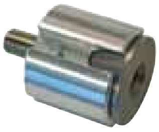
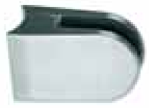
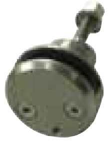
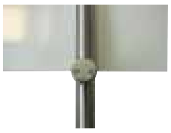
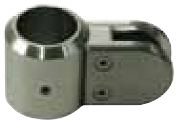
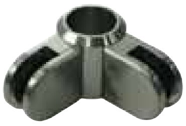
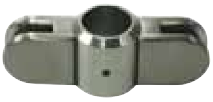
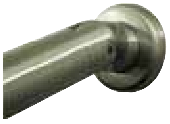
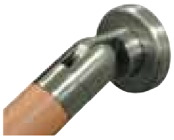
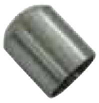
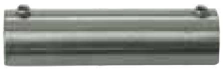
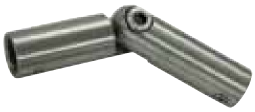
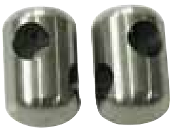
Part-no.	Specification	pack. unit	Illustration	Art.-No.
E14	Base plate (for upright or metal handrail 42,4ø) without fixing screws	1		130.01.0014 4 015510 002143
E15	Wall fixing with cover plate (for metal handrail 42øx2)	1		130.01.0015 4 015510 002150
E16	Wall fixing with cover plate (for wooden handrail 42ø)	1		130.01.0016 4 015510 002167
E17	Wall bracket with ring fitting and cover plate stainless steel AISI 304 (for handrail 42,4ø)	1		130.01.0017 4 015510 002174
E18	Ring with pin holder stainless steel AISI 304 (for tube 42ø)	1		130.01.0018 4 015510 002181
E19	90° corner for metal handrail with connection 42,4ø x 2	1		130.01.0019 4 015510 002198
E20	End ball 20ø stainless steel AISI 304 for rod 10ø	2		130.01.0020 4 015510 002204
E21	Bolt anchor M10x60 with stainless steel screw AISI 304	2		130.01.0021 4 015510 002211
E22	Ring adapter 3D-connection (for metal handrail 42,4ø x 2)	1		130.01.0022 4 015510 002228
E23	Ring adapter with 2 pin holders straight stainless steel AISI 304 (for metal handrail 42,4ø x 2)	1		130.01.0023 4 015510 002235
E24	Ring adapter with 2 pin holders 90° stainless steel AISI 304 (for metal handrail 42,4ø x 2)	1		130.01.0024 4 015510 002242
E25	Cover plate 105ø stainless steel AISI 304 for base plate E2/S2	1		130.01.0025 4 015510 002259
E26	Stainless steel cable 4ø 10m	1		130.01.0026 4 015510 002266

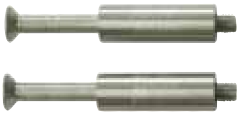
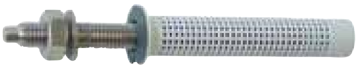
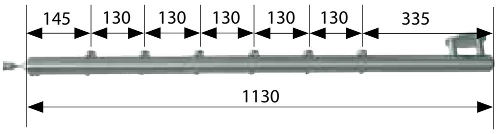
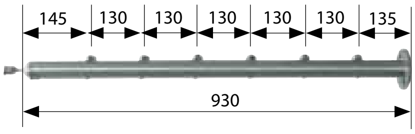
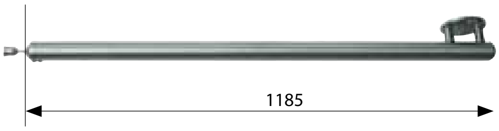
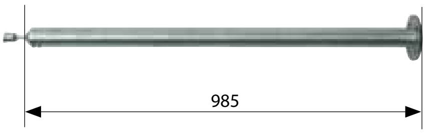
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
E27	Cable tension stainless steel AISI 304 (for cable 4ø)	5		130.01.0027 4 015510 002273
E28	Cable clamps stainless steel AISI 304 (for cable 4ø)	5		130.01.0028 4 015510 002280
E29	Cable adapter plastic (for clamp holder M6 10ø)	5		130.01.0029 4 015510 002297
E30	Screw set 6x80 for wall fixing of cable tension E27	5		130.01.0030 4 015510 002303
E31	Cable tension set stainless steel AISI 304 for central fixing to uprights E43	1 Set		130.01.0031 4 015510 002310
E32	Cable tension set stainless steel AISI 304 for wall fixing to wall bracket E33	1 Set		130.01.0032 4 015510 002327
E33	Wall bracket with cover plate stainless steel AISI 304 (for rod 10ø or cable tension set E32)	1		130.01.0033 4 015510 002334
E34	Wall bracket with cover plate and pin holder stainless steel AISI 304 (for handrail 40-50ø)	1		130.01.0034 4 015510 002341
E35	Wall bracket with cover plate and ring holder stainless steel AISI 304 (for handrail 42ø)	1		130.01.0035 4 015510 002358
E36	Wall bracket with cover plate and pin holder stainless steel AISI 304 (for handrail 40-50ø)	1		130.01.0036 4 015510 002365
E37	Pin holder for wall rod 10ø stainless steel AISI 304	2		130.01.0037 4 015510 002372
E38	Climb protection stainless steel AISI 304 (for handrail 42ø)	1		130.01.0038 4 015510 002389
E39	Upright head with pin holder stainless steel AISI 304 (for tube 42ø)	1		130.01.0039 4 015510 002396

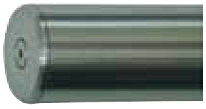
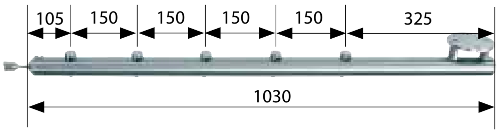
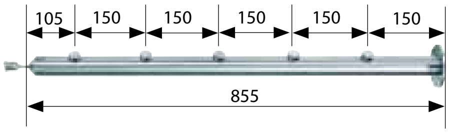
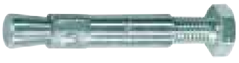
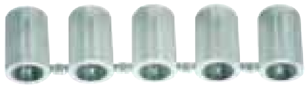
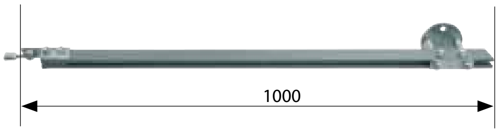
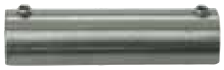
Part-no.	Specification	pack. unit	Illustration	Art.-No.
E40	MegaTec upright 42ø 1030mm, stainless steel AISI 304, 2 clamp holder (for side fixing, 40mm projection)	1		130.01.0040 4 015510 002402
E41	MegaTec upright 42ø 855mm, stainless steel AISI 304, 2 clamp holder (for floor fixing)	1		130.01.0041 4 015510 002419
E43	MegaTec upright 42ø 1130mm, stainless steel AISI 304, 6 drill holes for cable tension E31 (for side fixing, 30mm projection)	1		130.01.0043 4 015510 002433
E44	Side fixing (for tube 42ø) without fixing screws	1		130.01.0044 4 015510 002440
E45	MegaTwin upright 1000mm, stainless-flat steel 45x8mm, AISI 304 (for side fixing, 60mm projection)	1		130.01.0045 4 015510 002457
E46	Clamp holder for fixing rods 10ø at Mega-/FerroTwin uprights	6		130.01.0046 4 015510 002464
E47	Overclimb protection in stainless steel AISI 304 Ü=150mm (for modification of MegaTec, AluTec and WoodTec uprights)	1		130.01.0047 4 015510 002471
E48	Flat end cap stainless steel AISI 304 (for hit in metal handrail 42øx2)	1		130.01.0048 4 015510 002488
E49	Flat end cap stainless steel AISI 304 (for wooden handrail 42ø)	1		130.01.0049 4 015510 002495
E50	Flat end cap stainless steel AISI 304 (for hit in metal handrail 42øx2)	1		130.01.0050 4 015510 002501
E51	Top- and bottom chord 27ø x 1450 x 2mm stainless steel AISI 304 (for 10 vertical rods 10ø)	1		130.01.0051 4 015510 002518
E52	Tube holder 27ø 304 (for top- and bottom chord)	1		130.01.0052 4 015510 002525
E53	Ring 60ø stainless steel AISI 304 with 3x M8 (for Tube connector 27ø straight + 90°)	1		130.01.0053 4 015510 002532

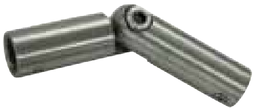
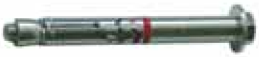
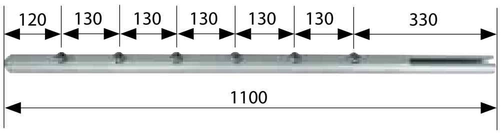
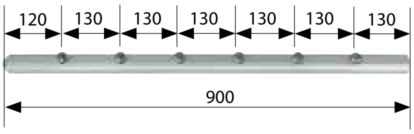
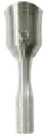
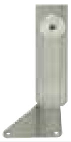
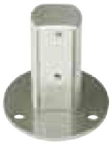
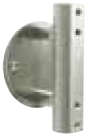
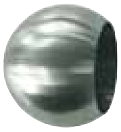
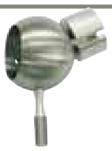
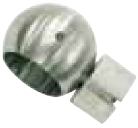
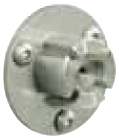
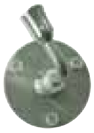
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
E54	Ring 50ø stainless steel AISI 304 with distance-ring (for metal pipe 27ø)	1		130.01.0054 4 015510 002549
E55	End-/corner-ball 50ø stainless steel AISI 304 (for metal pipe 27ø)	1		130.01.0055 4 015510 002556
E56	Tube coupling 23ø M8 (for metal handrail 27ø x 2)	1		130.01.0056 4 015510 002563
E57	Glass holder in stainless steel optic (for tube assembling 42ø and glass thickness of 8mm)	2		130.01.0057 4 015510 002570
E58	Clamp holder stainless steel optic to be fitted on pipes 42ø to hold glass panels 8-10mm	2	 	130.01.0058 4 015510 002587
E59	Tube sleeve 60ø 304 with 1 clamp holder stainless steel optic to be fitted on pipes 42ø to hold glass panels 8mm	1		130.01.0059 4 015510 002594
E60	Tube sleeve 60ø 304 with 2 clamp holder stainless steel optic to be fitted on pipes 42ø to hold glass panels 8mm	1	 	130.01.0060 4 015510 002600
E61	Wall fixing 304 with adjustable angle (for metal handrail 42øx2)	1		130.01.0061 4 015510 002617
E62	Wall fixing 304 with adjustable angle (for wooden handrail 42ø)	1		130.01.0062 4 015510 002624
E65	End cap 14ø stainless steel AISI 304 for rod 10ø	5		130.01.0065 4 015510 002655
E66	Connector 14ø x50 stainless steel AISI 304 for rod 10ø	5		130.01.0066 4 015510 002662
E67	Joint link14øx80 stainless steel AISI 304 for rod 10ø	5		130.01.0067 4 015510 002679
E68	Angle holder stainless steel AISI 304 for vertical rods 10ø	1 Set		130.01.0068 4 015510 002686

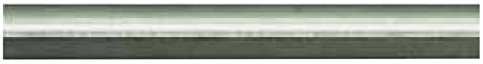
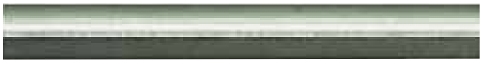
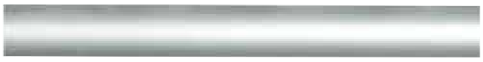
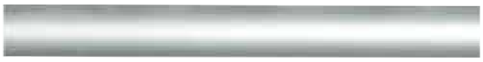
Part-no.	Specification	pack. unit	Illustration	Art.-No.
E69	Clamp holder M6 stainless steel AISI 304 for rod 10ø	2		130.01.0069 4 015510 002693
E70	Cable tension set stainless steel AISI 304 (for stainless steel cable 4mm and tube assembly 42,4ø	2		130.01.0070 4 015510 002709
E71	Stainless steel cable 4ø 5m	1		130.01.0071 4 015510 002716
E72	Side holder for handrail with protection cap in stainless steel AISI 304 (for tube 42,4ø x 2mm)	1		130.01.0072 4 015510 002723
E73	Distance collars 60mm+screws 304 to extend the side fixing E1 + E40 (75/100mm)	2		130.01.0073 4 015510 002730
E74	Composite mortar 150ml (to cement threated bars in the bricking)	1		130.01.0074 4 015510 002747
E75	Shear connector bars M10x115 AISI 316 with nut M10 and sieve shell	2		130.01.0075 4 015510 002754
E76	Screws 10ø x 110, stainless steel 316 and frame peg 14ø x 100	2		130.01.0076 4 015510 002761
E77	Screws 10ø x 230, stainless steel 316 and frame peg 14ø x 220	2		130.01.0077 4 015510 002778
E78	MegaTec upright 42ø 1130mm, stainless steel AISI 304, 6 clamp holder (for side fixing, 40mm projection)	1		130.01.0078 4 015510 002785
E79	MegaTec upright 42ø 930mm, stainless steel AISI 304, 6 clamp holder (for floor fixing)	1		130.01.0079 4 015510 002792
E80	MegaTec upright 42ø 1185mm, stainless steel AISI 304, without drill holes for glass holders E59/60 and upper box cap E51(for side fixing, 40mm projection)	1		130.01.0080 4 015510 002808
E81	MegaTec upright 42ø 985mm, stainless steel AISI 304, without drill holes for glass holders E59/60 + upper chord E51 (for floor fixing)	1		130.01.0081 4 015510 002815

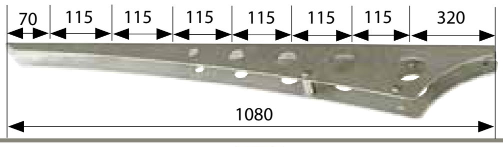
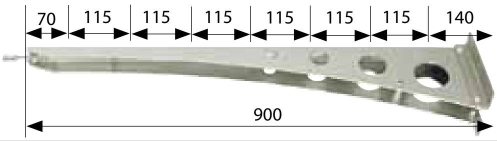
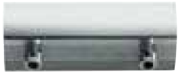
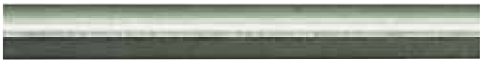
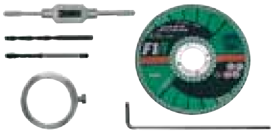
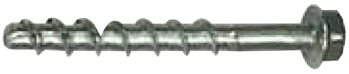
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
E82	Stud bolt anchor 12ø x 100 Stainless steel AISI 316	4		130.01.0082 4 015510 002822
E83	Ring adapter with 2 pin holders straight stainless steel AISI 304 (for metal handrail 42,4ø x 2)	1		130.01.0083 4 015510 002839
E84	Ring adapter with 2 pin holders 90° stainless steel AISI 304 (for metal handrail 42,4ø x 2)	1		130.01.0084 4 015510 002846
E85	Flat end cap aluminium (for hit in metal handrail 42øx2)	2		130.01.0085 4 015510 002853
E86	Side holder stainless steel AISI 304 (for tube 42,4ø x 2), without screws for fixing	1		130.01.0086 4 015510 002860
S1	FerroTec upright 42ø 1030mm, electro-galvanised steel, 5 clamp holder (for side fixing, 40mm projection)	1		130.02.0001 4 015510 001818
S2	FerroTec upright 42ø 855mm, electro-galvanised steel, 5 clamp holder (for floor fixing)	1		130.02.0002 4 015510 001825
S3	Bars 10ø 2000mm, steel galvanically zinced	5		130.02.0003 4 015510 001832
S4	Bolt anchor M10x60 with steel screw galvanically zinced	2		130.02.0004 4 015510 001849
S5	Plastic caps for rods 10ø	5		130.02.0005 4 015510 001856
S6	FerroTwin upright 1000mm, flat steel 45x8mm, antrazith priming (for side fixing, 60mm projection)	1		130.02.0006 4 015510 001863
S7	End cap 14ø galvanised steel for rod 10ø	5		130.02.0007 4 015510 001870
S8	Connector 14ø x 50 for rod 10ø galvanised steel	5		130.02.0008 4 015510 001887

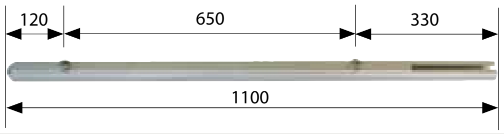
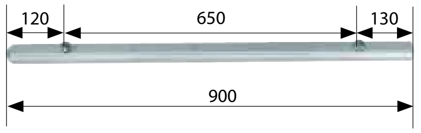
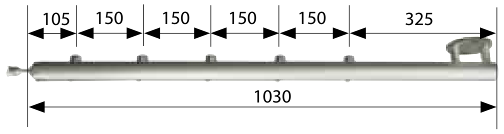
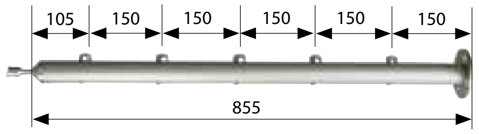
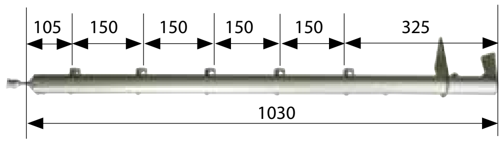
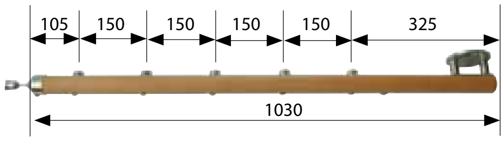
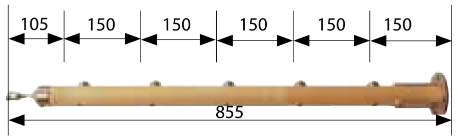
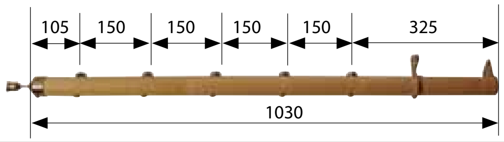
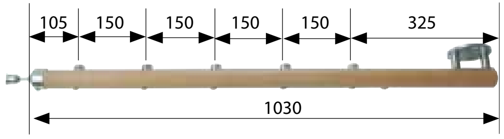
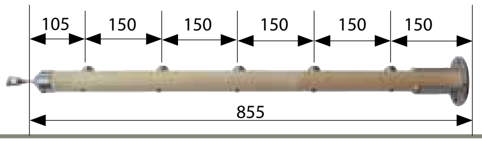
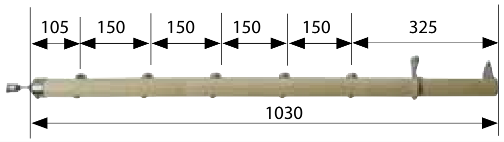
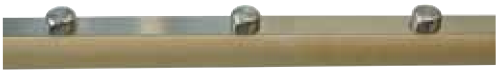
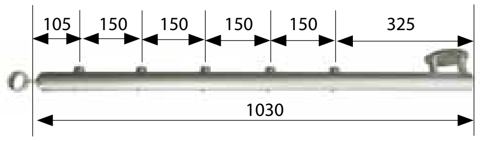
Part-no.	Specification	pack. unit	Illustration	Art.-No.
S9	Joint link14øx80 for rod 10ø galvanised steel	5		130.02.0009 4 015510 001894
S10	Heavy duty anchor 12ø x 100 galvanized steel	4		130.02.0010 4 015510 001894
B1	AluTop upright 44ø 1100mm, anodised aluminium, 6 clamp holder (for side fixing + B6 for treads + B4)	1		130.00.0001 4 015510 001016
B2	AluTop upright 44ø 900mm, anodised aluminium, 6 clamp holder (for floor fixing + B5)	1		130.00.0002 4 015510 001023
B3	Handrail fixing (for B1 and B2)	1		130.00.0003 4 015510 001030
B4	Step fixing for upright B1 (for suspended open stairs B1 and B2)	1		130.00.0004 4 015510 001047
B5	Floor fixing for upright B2	1		130.00.0005 4 015510 001054
B6	Side fixing for upright B1	1		130.00.0006 4 015510 001061
B7	End cap in stainless steel 60ø AISI 304	1		130.00.0007 4 015510 001078
B8	Vari ball 60ø stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		130.00.0008 4 015510 001085
B9	Corner connectionball 60ø stainless steel AISI 304 (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		130.00.0009 4 015510 001092
B10	Wall bracket handrail (for metal handrail 42øx2 or wooden handrail 42ø)	1		130.00.0010 4 015510 001108
B11	Wall bracket with pin holder stainless steel AISI 304 (for handrail 40-50ø)	1		130.00.0011 4 015510 001115

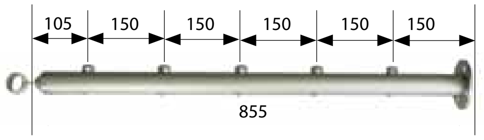
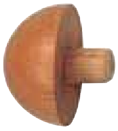
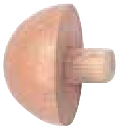
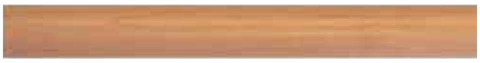
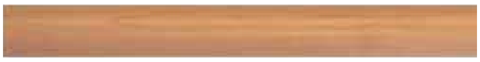
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
B12	Cover plate stainless steel AISI 304 for base plate B11	1		130.00.0012 4 015510 001122
B14	End ball 30ø stainless steel AISI 304 for rod 10ø	2		130.00.0014 4 015510 001146
B15	Connector for rod 10ø stainless steel AISI 304	2		130.00.0015 4 015510 001153
B16	Handrail 42,4ø x 2 1500mm stainless steel AISI 304 satin finish	1		130.00.0016 4 015510 001160
B17	Handrail 42,4ø x 2 2250mm stainless steel AISI 304 satin finish	1		130.00.0017 4 015510 001177
B18	Handrail 42ø 1500mm lacquered beech	1		130.00.0018 4 015510 001184
B19	Handrail 42ø 2250mm lacquered beech	1		130.00.0019 4 015510 001191
B20	Stainless steel rod AISI 304 10ø 750mm	1		130.00.0020 4 015510 001207
B21	Stainless steel rod AISI 304 10ø 1500mm	1		130.00.0021 4 015510 001214
B22	Stainless steel rod AISI 304 10ø 2250mm	1		130.00.0022 4 015510 001221
B23	Bendable joint (ball shaped) for rod 10ø stainless steel AISI 304	6		130.00.0023 4 015510 001238
B24	Handrail 42,4ø x 2 1500mm anodised aluminium	1		130.00.0024 4 015510 001245
B25	Handrail 42,4ø x 2 2250mm anodised aluminium	1		130.00.0025 4 015510 001252

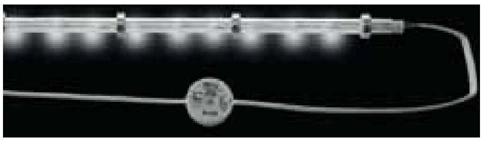
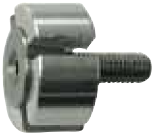
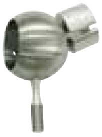
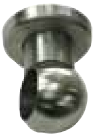
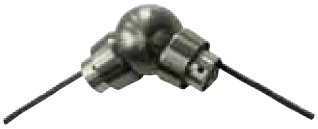
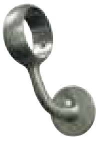
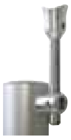
Part-no.	Specification	pack. unit	Illustration	Art.-No.
B26	Balcony uprights 1080mm stainless steel, 7 clamp holder, without angle (for side finish add B27 or B28)	1		4 015510 001269
B27	Side fixing set for concrete with angle and screws for concrete projection 35mm	1		130.00.0027 4 015510 001276
B29	Balcony uprights 1080mm stainless steel, 7 clamp holder, without angle (for side finish add B27 or B28)	1		130.00.0029 4 015510 001290
B30	Clamp holder M6 for rod 10ø stainless steel AISI 304	2		130.00.0030 4 015510 001306
B31	Joint holder for vertical rods 10ø stainless steel AISI 304	1 Set		130.00.0031 4 015510 001313
B32	Connector for metal handrail 42,4ø x 2	1		130.00.0032 4 015510 001320
B33	Handrail 42,4ø x 2 3000mm stainless steel AISI 304 satin finish	1		130.00.0033 4 015510 001337
B34	Stainless steel rod AISI 304 10ø 3000mm	1		130.00.0034 4 015510 001344
B35	Maintenance spray for stainless steel, 400ml (for the protection and maintenance of surface)	1		130.00.0035 4 015510 001351
B36	Tool set (drill bits, thread cutter, drill gauge , cutting disc, hex key)	1		130.00.0036 4 015510 001368
B37	Screws for concrete 10ø x 95mm, stainless steel AISI 316	2		130.00.0037 4 015510 001375
B38	Clamp holder AISI 304 -to be fitted on 10ø rods to hold glass panels 6-8mm	4		130.00.0038 4 015510 001382
B39	Mordant cleaner for stainless steel 200ml (removal of oxide particles and lighting of surface)	1		130.00.0039 4 015510 001399

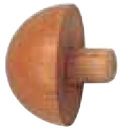
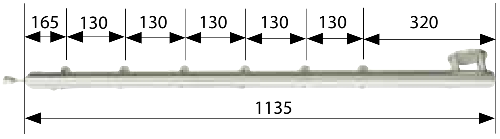
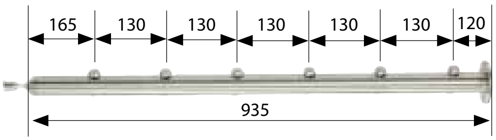
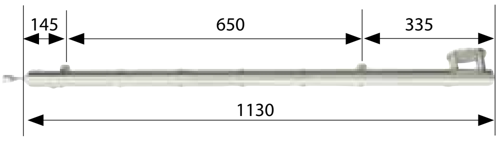
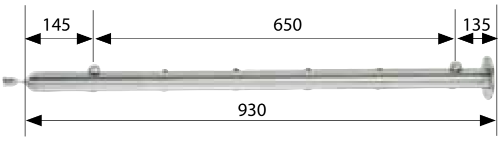
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
B40	AluTop upright 44ø 1100mm, anodised aluminium, 2 clamp holder (for side fixing + B6 for treads + B4)	1	 120 650 330 1100	130.00.0040 4 015510 001405
B41	AluTop upright 44ø 900mm, anodised aluminium, 2 clamp holder (for floor fixing + B5)	1	 120 650 130 900	130.00.0041 4 015510 001412
B42	AluTec upright 42ø 1030mm, anodised aluminium, 5 clamp holder (for side fixing)	1	 105 150 150 150 150 325 1030	130.00.0042 4 015510 001429
B43	AluTec upright 42ø 855mm, anodised aluminium, 5 clamp holder (for floor fixing)	1	 105 150 150 150 150 150 855	130.00.0043 4 015510 001436
B44	AluTec upright 42ø 1030mm, anodised aluminium, 5 clamp holder (for step fixation)	1	 105 150 150 150 150 325 1030	130.00.0044 4 015510 001443
B45	WoodTec upright 42ø 1030mm, lacquered beech, 5 clamp holder (for side fixing)	1	 105 150 150 150 150 325 1030	130.00.0045 4 015510 001450
B46	WoodTec upright 42ø 855mm, lacquered beech, 5 clamp holder (for floor fixing)	1	 105 150 150 150 150 150 855	130.00.0046 4 015510 001467
B47	WoodTec upright 42ø 1030mm, lacquered beech, 5 clamp holder (for open treads)	1	 105 150 150 150 150 325 1030	130.00.0047 4 015510 001474
B48	WoodTec upright 42ø 1030mm, maple lacquered, 5 clamp holder (for side fixing)	1	 105 150 150 150 150 325 1030	130.00.0048 4 015510 001481
B49	WoodTec upright 42ø 855mm, maple lacquered, 5 clamp holder (for floor fixing)	1	 105 150 150 150 150 150 855	130.00.0049 4 015510 001498
B50	WoodTec upright 42ø 1030mm, maple lacquered, 5 clamp holder (for open treads)	1	 105 150 150 150 150 325 1030	130.00.0050 4 015510 006721
B51	855x25mm, stainless steel (for WoodTec-upright B45-50)	1		130.00.0051 4 015510 006738
B52	AluTec upright 42ø 1030mm, anodised aluminium, with ring and 5 clamp holder (for side fixing)	1	 105 150 150 150 150 325 1030	130.00.0052 4 015510 006790

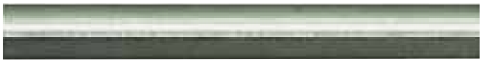
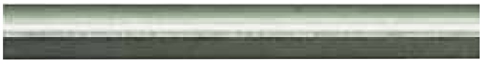
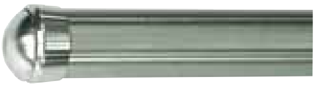
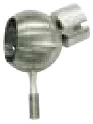
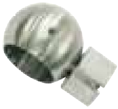
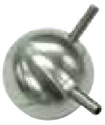
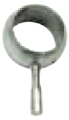
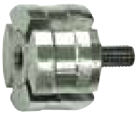
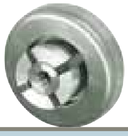
Part-no.	*Specification*	*pack. unit*	*Illustration*	*Art.-No.*
B53	AluTec upright 42ø 855mm, anodised aluminium, with ring and 5 clamp holder (for floor fixing)	1		130.00.0053 4 015510 006806
B54	Ball ring with bendable pin M8 in aluminium (for handrail without drilling)	1		130.00.0054 4 015510 006813
B62	Stainless steel rods AISI 304 10ø 2000mm	5		130.00.0062 4 015510 001627
B63	Wooden handrail bend 90° 42ø natural beech	1		130.00.0063 4 015510 001634
B64	End cap 42ø natural beech	2		130.00.0064 4 015510 001641
B65	Wooden handrail bend 90° 42ø natural maple	1		130.00.0065 4 015510 001658
B66	End cap 42ø natural maple	2		130.00.0066 4 015510 001665
B67	Handrail 42ø 1500mm maple lacquered	1		130.00.0067 4 015510 001672
B68	Handrail 42ø 2250mm maple lacquered	1		130.00.0068 4 015510 001689
B69	Corner connection ball 60ø in aluminium (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		130.00.0069 4 015510 001696
B72	Wall bracket brass finish (for all handrails)	2		130.00.0072 4 015510 001726
B73	Wall bracket stainless steel optic (for all handrails)	2		130.00.0073 4 015510 001733
B74	Wall bracket white (for all handrails)	2		130.00.0074 4 015510 001740

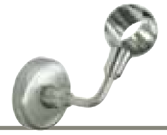
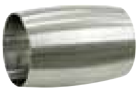
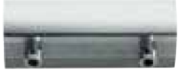
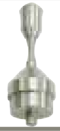
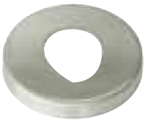
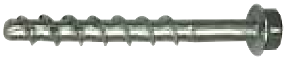
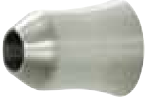
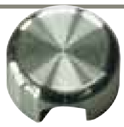
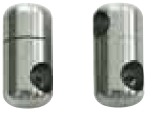
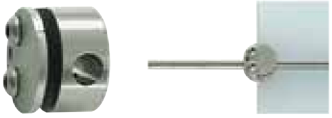
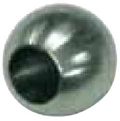
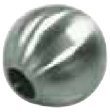
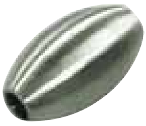
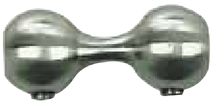
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
B75	Acrylic handrail clear 42ø 2000mm	1		130.00.0075 4 015510 001757
B76	LED handrail lighting 24V 2000mm in white, blue, yellow or red incl. cenering tube, distance rings, transformator 220V/24V and cable (for acrylic handrail B75/B79))	1		130.00.0076 4 015510 001764
B77	Tube coupling 32ø M8 (for acrylic handrail B75/B79)	1		130.00.0077 4 015510 001771
B78	Connector stainless steel AISI 304 (for handrail 42ø)	1		130.00.0078 4 015510 001788
B79	Acrylic handrail 42ø 2000mm white satiniced	1		130.00.0079 4 015510 001795
B80	End cap 60ø in aluminium	1		130.00.0080 4 015510 001801
B81	Vari ball 60ø in aluminium (for metal handrail 42,4øx2 or wooden handrail 42ø)	1		130.00.0081 4 015510 006615
B82	End ball 60ø AISI 304 with tube distance holder and wall plate (for handrail lighting B76)	1		130.00.0082 4 015510 001825
B84	UniTec ball 60ø AISI 304 with hole for cable entry (for handrail lighting B76)	1		130.00.0084 4 015510 001849
B85	Wall bracket with ring in stainless steel optic (for all handrails 42ø)	2		130.00.0085 4 015510 006653
B87	Stainless steel spray transparent 400ml (for sealing of stainless steel items against flight rust and oxidation)	1		130.00.0087 4 015510 001870
B88	sideholder for handrail in aluminium with end cap in grey (for tube 42,4øx2)	1		130.00.0088 4 015510 006684
B89	Stainless steel polishing paste 75ml (removes scratches and damages)	1		130.00.0089 4 015510 001894

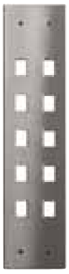
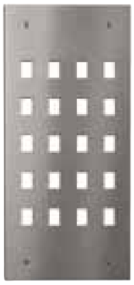
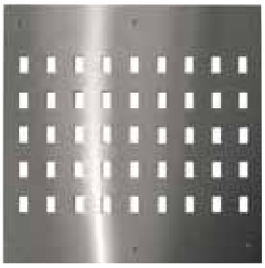
Part-no.	*Specification*	*pack. unit*	*Illustration*	*Art.-No.*
B90	End cap 42ø natural spruce	2		130.00.0090 4 015510 006707
B91	Handrail 42ø 1500mm natural spruce (drilling on both sides 12ø)	1		130.00.0091 4 015510 006714
B92	Stainless steel rods 304 10ø 2000mm	5		130.00.0092 4 015510 006745
B93	Handrail 42ø 1500mm natural spruce (drilling on both sides 12ø)	1		130.00.0093 4 015510 006752
B94	Handrail 42ø 1500mm natural beech (drilling on both sides 12ø)	1		130.00.0094 4 015510 006769
B95	Handrail 42ø 1500mm oak lacquered (one side sleeve M8)	1		130.00.0095 4 015510 006776
B96	Handrail 42ø 2250mm oak lacquered (one side sleeve M8)	1		130.00.0096 4 015510 006783
B97	UnitTec wooden ball 60ø Beech untreated (for Handrail connection 90-180°)	1		130.00.0097 4 015510 006820
X1	MegaTec upright 42ø 1130mm, Stainless steel AISI 316, 6 clamp holder (for side fixing, 40mm projection)	1		130.05.0001 4 015510 006011
X2	XtraTec upright 42ø 930mm, Stainless steel AISI 316, 6 clamp holder (for floor fixing)	1		130.05.0002 4 015510 006028
X3	XtraTec upright 42ø 1130mm, Stainless steel AISI 316, 2 clamp holder and 4 blind-screws (for side fixing, 40mm projection)	1		130.05.0003 4 015510 006035
X4	XtraTec upright 42ø 930mm, Stainless steel AISI 316, 2 clamp holder and 4 blind-screws (for floor fixing)	1		130.05.0004 4 015510 006042
X5	Handrail 42,4ø x 2 1500mm Stainless steel AISI 316 satin finish	1		130.05.0005 4 015510 006059

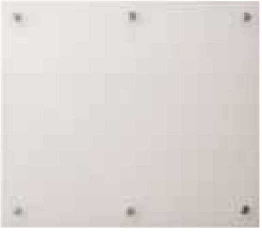
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
X6	Handrail 42,4ø x 2 2250mm Stainless steel AISI 316 satin finish	1		130.05.0006 4 015510 006066
X7	Handrail 42,4ø x 2 3000mm Stainless steel AISI 316 satin finish	1		130.05.0007 4 015510 006073
X8	Stainless steel rod AISI 316 10ø 750mm	1		130.05.0008 4 015510 006080
X9	Stainless steel AISI 316 rod 10ø 1500mm	1		130.05.0009 4 015510 006097
X10	Stainless steel AISI 316 rod 10ø 2250mm	1		130.05.0010 4 015510 006103
X11	Stainless steel AISI 316 rod 10ø 3000mm	1		130.05.0011 4 015510 006110
X12	End cap Stainless steel AISI 316 (for metal handrails 42,4øx2) for acrylic handrail order add. tube coupling B77	1		130.05.0012 4 015510 006127
X13	Stainless steel end cap 60ø AISI 316	1		130.05.0013 4 015510 006134
X14	Vari ball 60ø Stainless steel AISI 316 (for metal handrail 42,4øx2)	1		130.05.0014 4 015510 006141
X15	Corner connectionball 60ø stainless steel AISI 316 (for metal handrail 42,4øx2)	1		130.05.0015 4 015510 006158
X16	UniTec ball 60ø Stainless steel AISI 316 with threaded connection M8 (for metal handrail please order add. 2x E13)	1		130.05.0016 4 015510 006165
X17	Ring with bendable pin M8 Stainless steel AISI 316 (for handrail without drilling)	1		130.05.0017 4 015510 006172
X18	Ring adapter Stainless steel AISI 316 (for metal handrail 42,4ø x 2)	1		130.05.0018 4 015510 006189
X19	Tube coupling 38ø M8 (for metal handrail 42,4ø x 2)	1		130.05.0019 4 015510 006196
X20	Wall fixing with cover plate Stainless steel AISI 316 (for metal handrail 42øx2)	1		130.05.0020 4 015510 006202

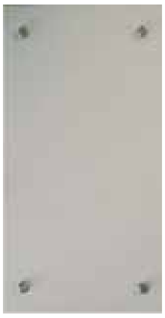
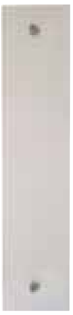
Part-no.	*Specification*	*pack. unit*	*Illustration*	*Art.-No.*
X21	Wall bracket with ring fitting and cover plate Stainless steel AISI 316 (for handrail 42,4ø)	1		130.05.0021 4 015510 006219
X22	Connector Stainless steel AISI 316 (for handrail 42ø)	1		130.05.0022 4 015510 006226
X23	Connector for metal handrail 42,4ø x 2	1		130.05.0023 4 015510 006233
X24	Upright head with pin holder Stainless steel AISI 316 (for tube 42ø)	1		130.05.0024 4 015510 006240
X25	Cover plate 105ø Stainless steel AISI 316 for base plate E2/S2	1		130.05.0025 4 015510 006257
X26	Bolt anchor M10x60 with stainless steel screw AISI 316	2		130.05.0026 4 015510 006264
X27	Screws for concrete 10ø x 95mm, Stainless steel AISI 316	2		130.05.0027 4 015510 006271
X28	Pin holder for wall rods 10ø Stainless steel AISI 316	2		130.05.0028 4 015510 006288
X29	Clamp holder M6 for rod 10ø Stainless steel AISI 316	2		130.05.0029 4 015510 006295
X30	Joint holder for vertical rods 10ø Stainless steel AISI 316	1 Set		130.05.0030 4 015510 006301
X31	Clamp holder AISI 316 to be fitted on 10ø rods to hold glass panels 6-8mm	4		130.05.0031 4 015510 006318
X32	End ball 20ø Stainless steel AISI 316 for rod 10ø	2		130.05.0032 4 015510 006325
X33	End ball 30ø Stainless steel AISI 316 for rod 10ø	2		130.05.0033 4 015510 006332
X34	Connector for rod 10ø Stainless steel AISI 316	2		130.05.0034 4 015510 006349
X35	Bendable joint (ball shaped) for rod 10ø Stainless steel AISI 316	6		130.05.0035 4 015510 006356

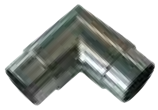
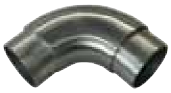
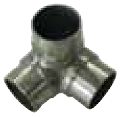
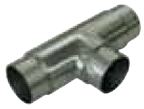
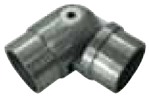
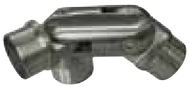
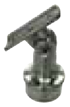
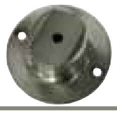
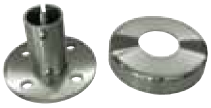
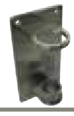
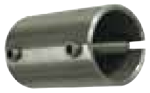
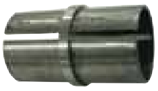
Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
F1	Filling 720x170x1mm stainless steel AISI 304 without punching with 4 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0001 4 015510 004017
F2	Filling 720x350x1mm stainless steel AISI 304 without punching with 4 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0002 4 015510 004024
F3	Filling 720x720x1mm stainless steel AISI 304 without punching with 6 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0003 4 015510 004031
F4	Filling 720x170x1mm stainless steel AISI 304 with punching with 4 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0004 4 015510 004048
F5	Filling 720x350x1mm stainless steel AISI 304 with punching with 4 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0005 4 015510 004055
F6	Filling 720x720x1mm stainless steel AISI 304 with punching with 6 clamp holders for rods 10ø (mounting holes for rod distance 600/650 available)	1		130.09.0006 4 015510 004062

Part-no.	Specification	pack. unit	Illustration	Art.-No.
F7	Filling 720x170x6mm acrylic clear with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0007 4 015510 004079
F8	Filling 720x350x6mm acrylic clear with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0008 4 015510 004086
F9	Filling 720x720x6mm acrylic clear with 6 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0009 4 015510 004093
F10	Filling 720x170x6mm acrylic white satinised with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0010 4 015510 004109
F11	Filling 720x350x6mm acrylic white satinised with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0011 4 015510 004116
F12	Filling 720x720x6mm acrylic white satinised with 6 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0012 4 015510 004123

Delivery program

Part-no.	Specification	pack. unit	Illustration	Art.-No.
F16	Filling 720x170x1mm resopal silver gray with 4 clamp holders for rods 10ø (mounting holes for rod distance have to be bored on job site)	1		130.09.0016 4 015510 004161
F17	Filling 720x350x6mm resopal silver gray with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0017 4 015510 004178
F18	Filling 720x720x6mm resopal silver gray with 6 clamp holders for rods 10ø (mounting holes have to be bored on job site)	1		130.09.0018 4 015510 004185
F19	Filling 720x170x6mm acrylic white satinised finishes with 2 clamp holders for rods 10ø (mounting holes have to be bored on job site)			130.09.0019 4 015510 004192
F20	Filling 580x170x6mm acrylic white satinised with 4 clamp holders for rods 10ø (mounting holes have to be bored on job site)			130.09.0020 4 015510 004208

Part-no.	*Specification*	*pack. unit*	*Illustration*	*Art.-No.*
G20	Corner bend 90° stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0020 4 015510 005601
G21	Corner bend round 90° stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0021 4 015510 005618
G22	Corner bend stainless steel AISI 304 with 3 connections (for sticking in metal pipe 42,4øx2)	1		130.06.0022 4 015510 005625
G23	T-connection stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0023 4 015510 005632
G24	Handrail joint with 3 connections stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0024 4 015510 005649
G25	Handrail joint with 3 connections stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0025 4 015510 005656
G26	Upright head stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0026 4 015510 005663
G30	Tube saddle with wall slab stainless steel AISI 304 (for screwing in metal pipe 42,4øx2)	1		130.06.0030 4 015510 005700
G31	Wall- and ground slab stainless steel AISI 304 with rosette (for sticking in metal pipe 42,4øx2)	1		130.06.0031 4 015510 005717
G32	Sidefixing 180x90 stainless steel AISI 304 (for screwing and sticking in metal pipe 42,4øx2)	1		130.06.0032 4 015510 005724
G33	Tube connection stainless steel AISI 304 (for screwing and sticking in metal pipe 42,4øx2)	1		130.06.0033 4 015510 005731
G34	Tube connection with ring stainless steel AISI 304 (for sticking in metal pipe 42,4øx2)	1		130.06.0034 4 015510 005748
G35	Grinding cylinder for deflashing of stainless steel tubes	1		130.06.0035 4 015510 005755
G36	Metal adhesive 24ml for sticking of tube connections	1		130.06.0036 4 015510 005762

Bill of quantities

Please fill in!
Specifications for:
☐ Inquiry
☐ Order

1. General specifications

a) Railing models (* for interior use only)
- ☐ AluTec - aluminium railing E1 E2 E3 E40 E41 E80 E81
- ☐ MegaTec - stainless steel AISI 304 railing B42 B43 B44 B52 B53
- ☐ *FerroTec - galvanised steel railing S1 S2 S2
- ☐ *WoodTec - wooden railing B45 B46 B47 B48 B49 B50

MegaTec

AluTec

FerroTec

WoodTec

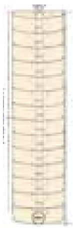
b) In-fill materials
- ☐ intermediate st. steel rods
- ☐ vertical st. steel rods with B31

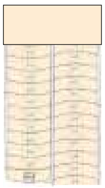
c) Handrail
- ☐ Stainless steel
- ☐ Aluminium anodised
- ☐ Wood beech
- ☐ Wood maple
- ☐ Acrylic glas clear
- ☐ Acrylic glas satinised

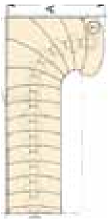
d) Handrail end fittings
- ☐ Ball end B7
- ☐ End cap E8 - E9 or E48 - E49 - E50

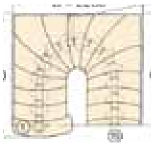
2. Interior and exterior stair railings

a) Stair type

☐

straight

☐

2-straight nuns

☐

1/4 winding

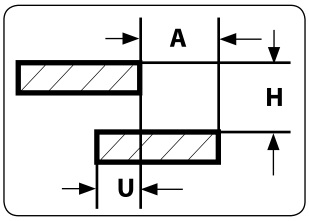
☐

1/2 winding

b) Turning direction
- ☐ left
- ☐ right

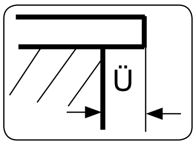
c) number of rises = ☐

d) Wall opening dimension length = ☐ width = ☐

e) Step dimension and going
- length L = ☐
- going A = ☐
- height H = ☐
- projection U = ☐



f) Stair construction
- ☐ projection treads in wood
- ☐ projection treads in marble/stone
- ☐ concrete stair, lateral covering projection Ü



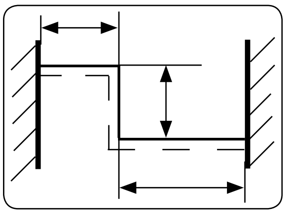
g) Rail anchorage
- ☐ lateral
- ☐ on top of steps

Ü= ☐
Please fill in!

3. Balustrade and balcony railings

a) length = ☐ meter

please indicate run of railing with drawing or add construction plans (for each floor separately)



b) Attachment
- ☐ side
- ☐ on floor
- ☐ with ladder effect protection E38 E38

c) Covering projection Ü = ☐

d) In-fills (only for balustrade railings)
- ☐ intermediate stainless steel rails
- ☐ vertical st. steel rods with B31 or E68 B31 E68
- ☐ vertical stainless rods with top and bottom chord E51 E51
- ☐ acrylic glass
- ☐ AISI 304 perforated stainless steel plate

4. Wall handrail

a) length 1 ☐ length 2 ☐ length 3 ☐
(measured in slant)

b) Wall support
☐ B11 ☐ E17 ☐ E34
☐ B72 ☐ B73 ☐ B74 ☐ B85

c) Corner joint
- ☐ with UniTec-ball E4 E4
- ☐ without connection

d) Beleuchtung
- ☐ Acrylic glass handrail with lightning B76 B76
- ☐ Stainless steel handrail with LED-lightning L1 L1

Attention:
For fixing of balcony and exterior balustrading use only approved stainless steel screws or bolts (all uprights are supplied without mounting material, select the mounting material „screws and dowels“ suitable to static requirements). To avoid ladder effect on horizontal intermediate rails use the ladder effect protection E38 or cover them with acrylic glass panels (see also safety and assembling instructions on page 24). Despite rust free specification stainless steel AISI 304 can rust under certain environmental influences.

Adresse: Name: ....
Street: ....
City: ....
Phone/Fax: ....

TREBA FREWA

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