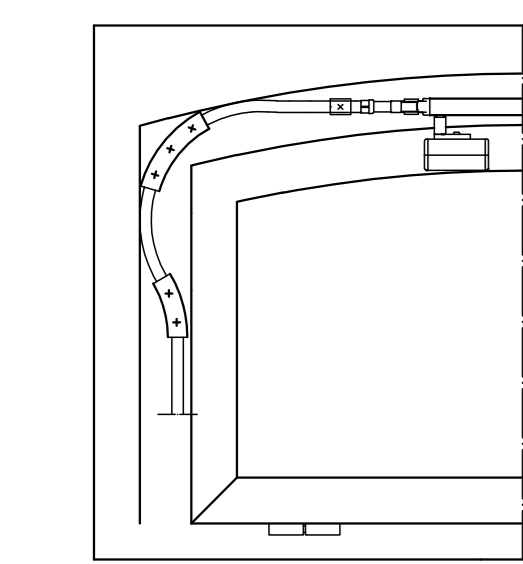
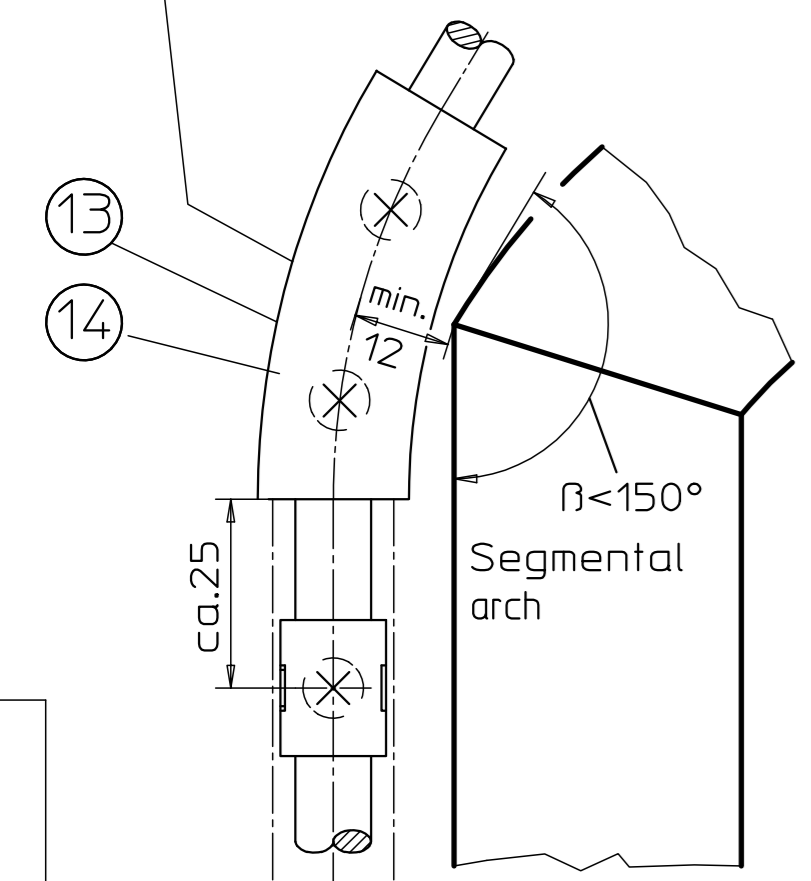


Fastening means		
Type of window	Fastening screws	drillingØ
Wood	Flat head screw 4x35 DIN 97 or DIN 7997	2,5mm
Aluminium	Tapping screw with countersunk head 4,2xL DIN 7972 or DIN 7982, screw must penetrate through a profile wall of at least 10mm thickness	3,5mm
Plastic	Tapping screw with countersunk head 4,2xL DIN 7972 or DIN 7982, screw must penetrate through 2 profile walls	3,5mm

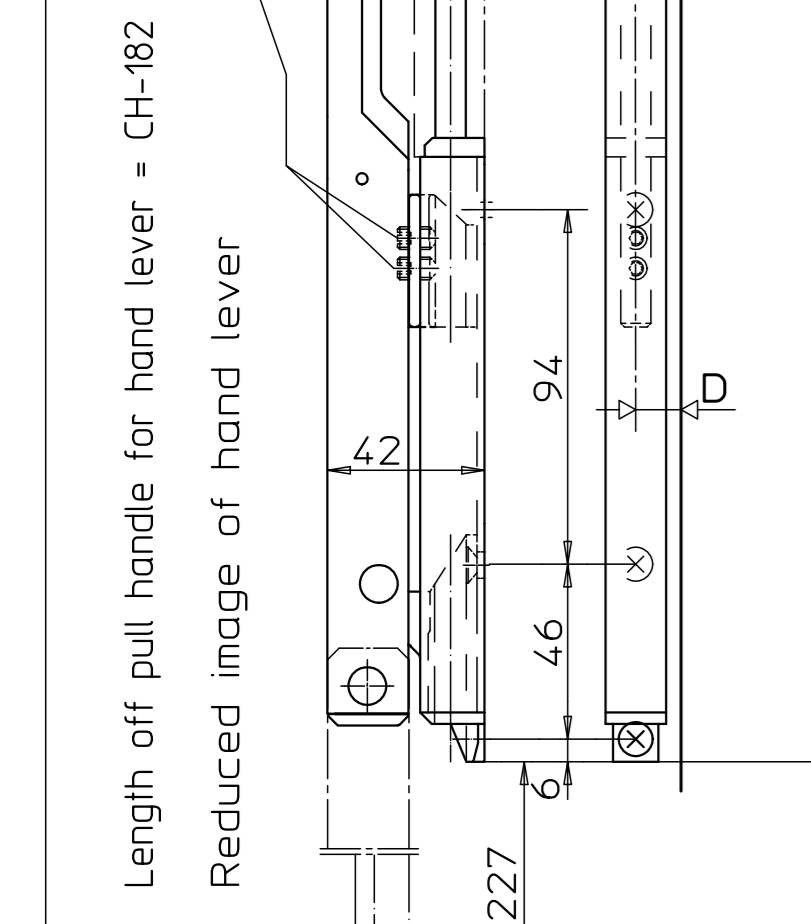
Fastening screws are not included.



Corner guide must only be mounted for segmental arch window  $\beta < 150^\circ$  (length to be adapted by)

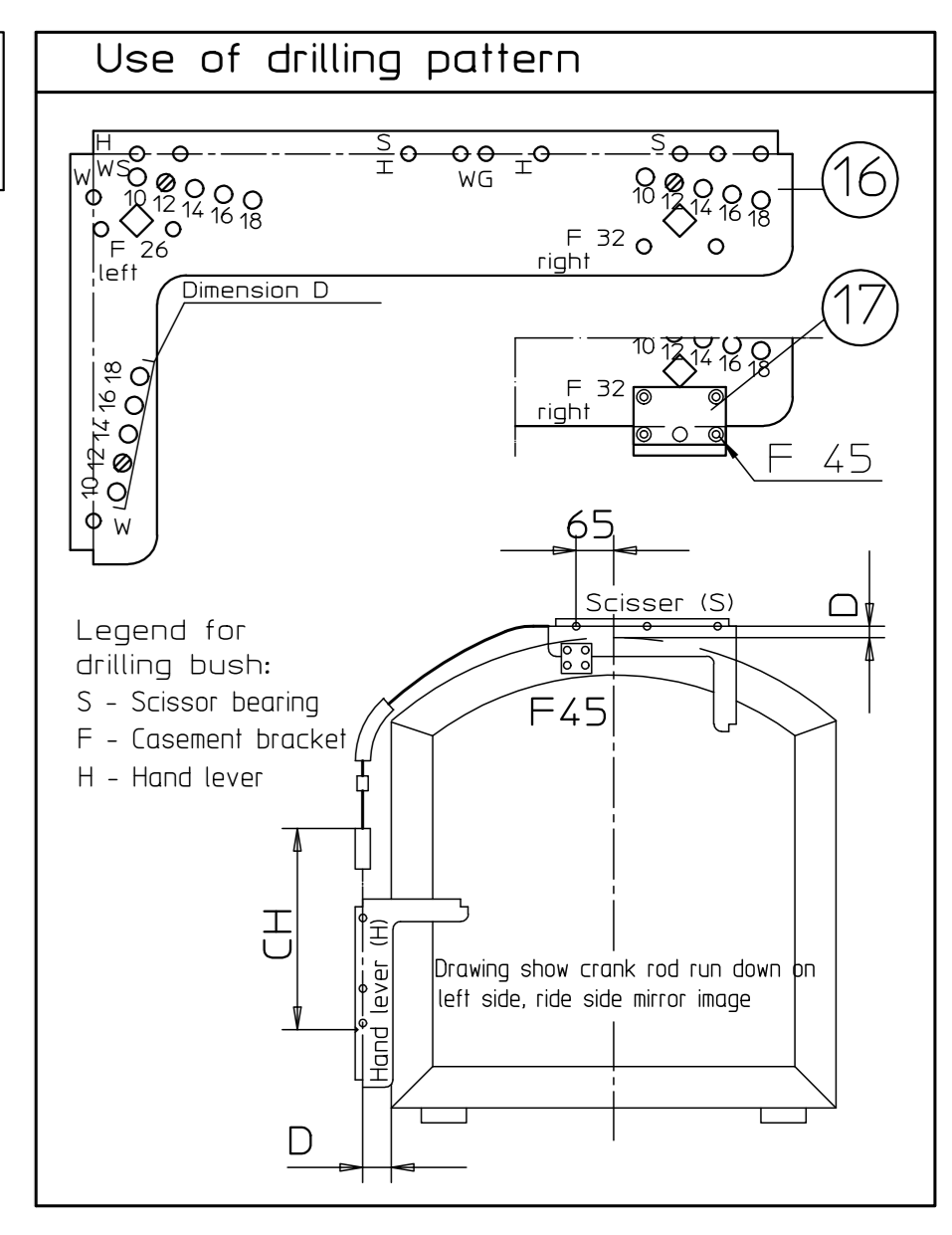
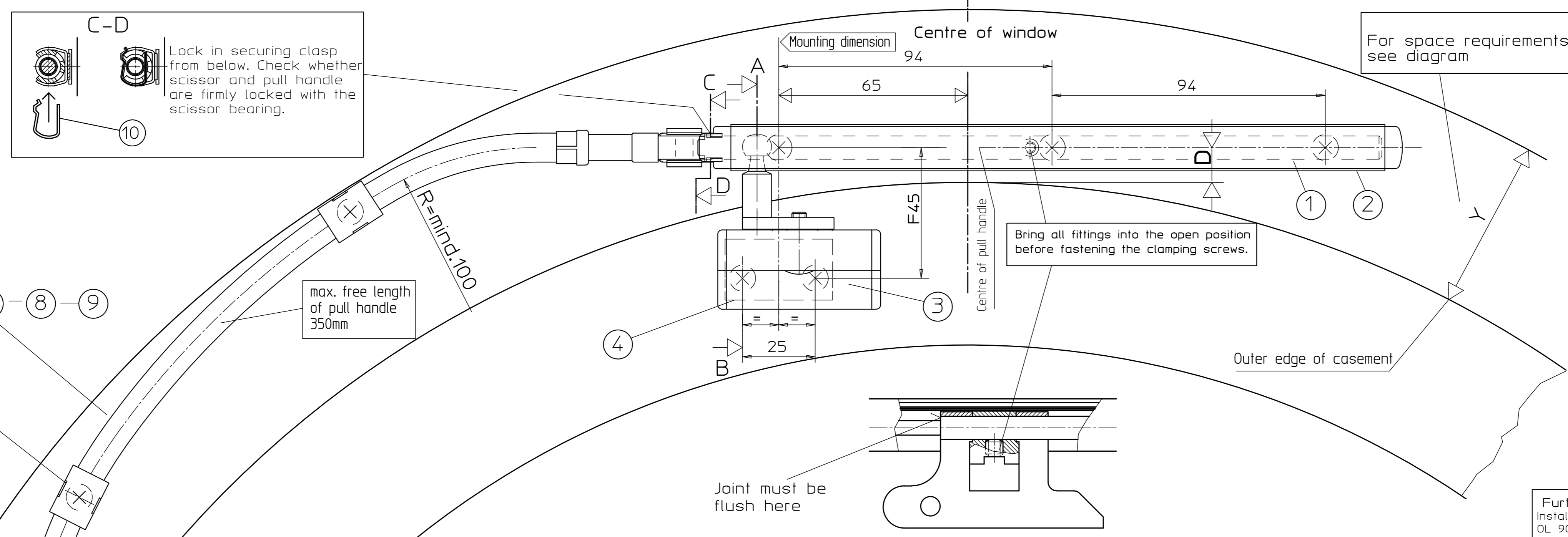


Bring all fittings into the open position before fastening the clamping screws: Fasten headless pins last.

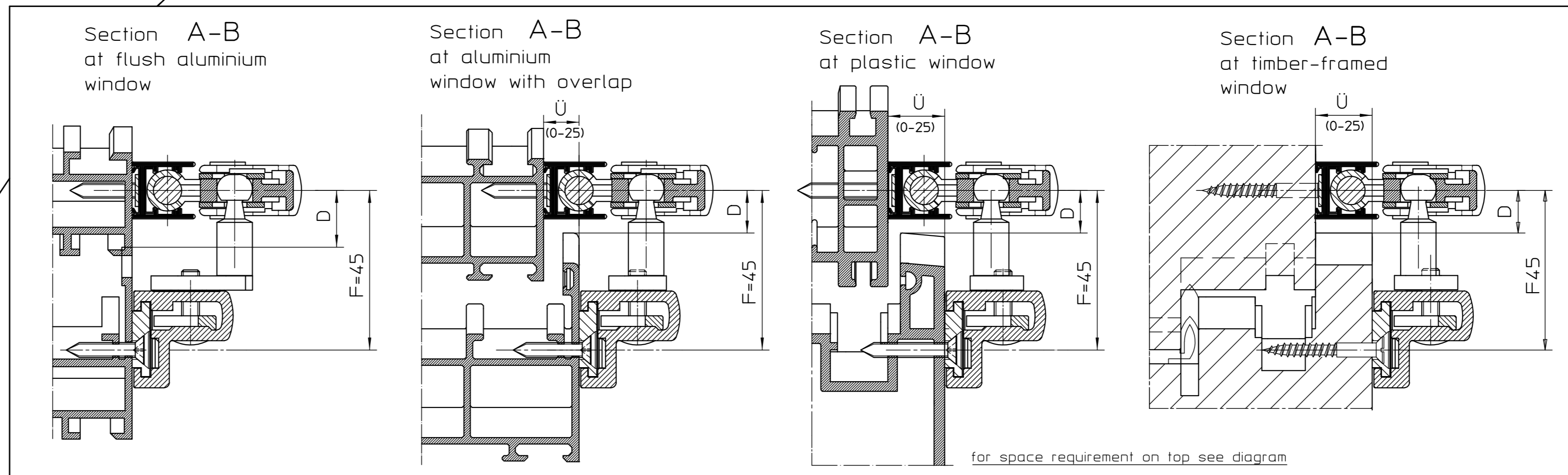


Length off pull handle for hand lever = CH-182  
Reduced image of hand lever

Diese Zeichnung entspricht dem Entwicklungsstand des Zeichnungsdatums bzw. der letzten Änderungsangabe. Änderungen der Zeichnung können keine Ansprüche, gleich welcher Art, einschließlich Schadensersatzansprüche, abdecken und gelten GEZE geteilt gemacht werden. Die Zeichnung bleibt unsere Eigentumsangelegenheit. Nur für die Vertragspartner zur Benutzung. Überlassen/Schleichen aus der Zeichnung ergebenden Ansprüche stehen ausschließlich GEZE zuzurechnen. Vervielfältigung von GEZE darf diese Zeichnung weder vervielfältigt noch Dritten zugänglich gemacht werden.



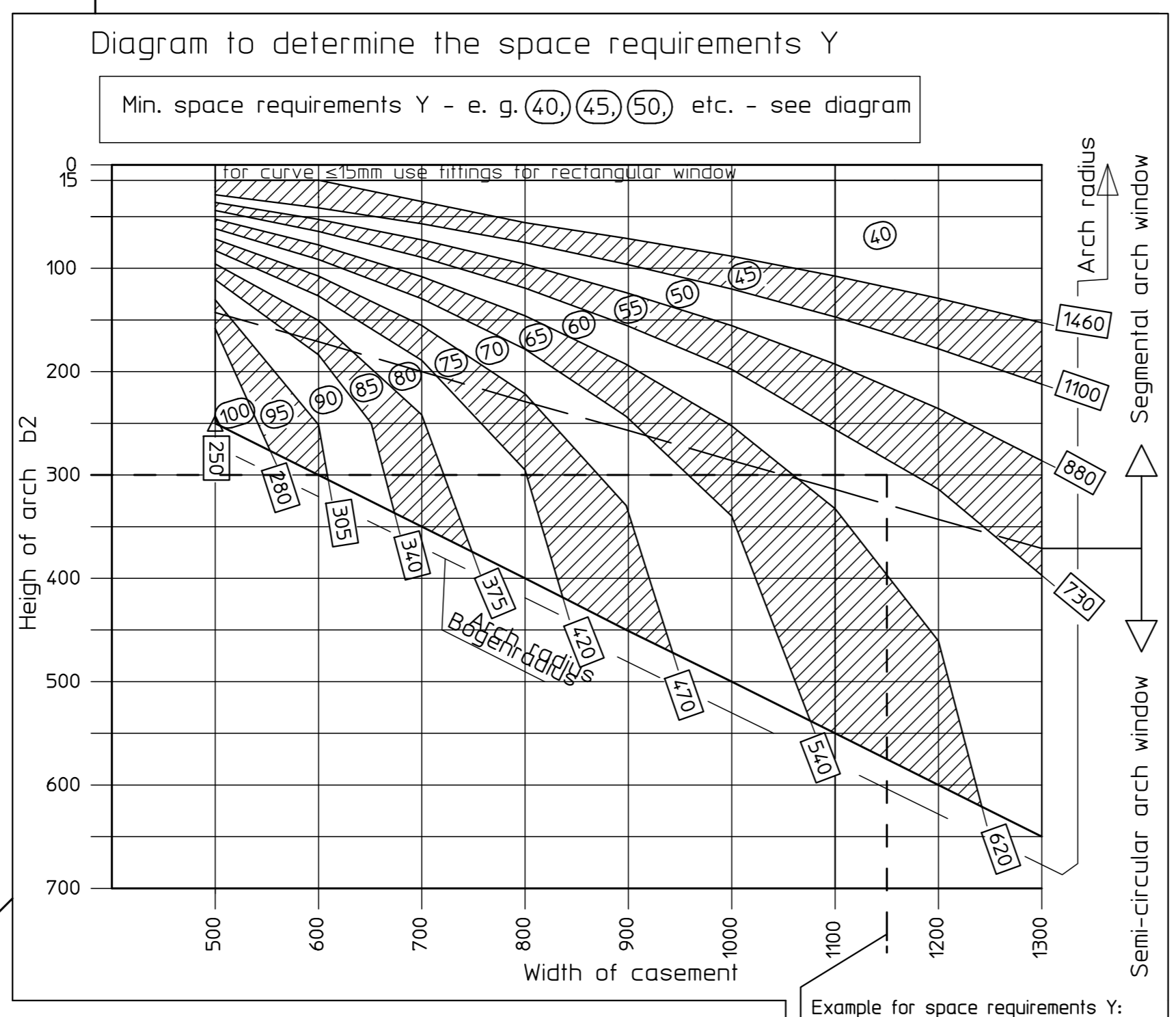
Further installation drawings for GEZE OL 90 N:  
Installation of swivelling hand lever 40444-9-952  
OL 90 N on bar with flexible pull handle 40444-EP-016  
Semi-circular and segmental arch window with 2 scissors 40444-EP-017  
Supplementary sheet for flexible operation - running down of crank rod for gear Fz 91 and electric drive E 212 40444-EP-031



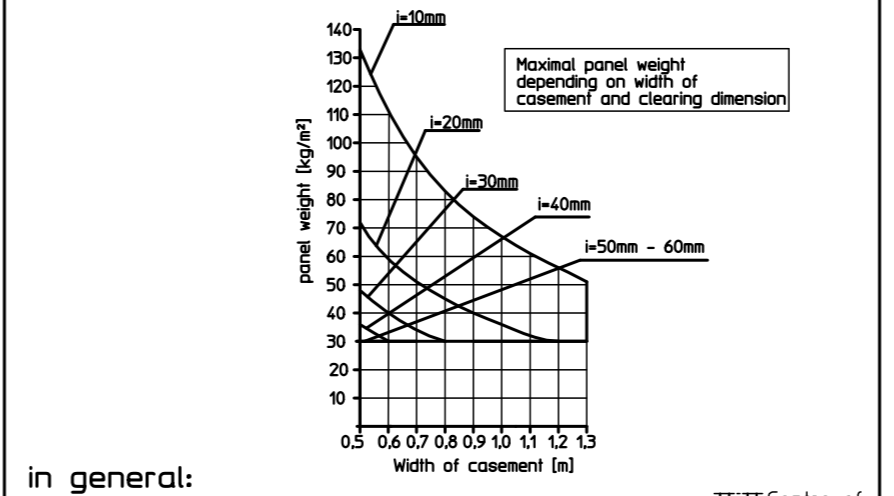
Order requirements for 1 window *	Fittings (see list of parts)					
	A+A1	B	C7	C8	C9	D E
Segmental arch window	a = 500 to 930mm	X	X	X	X	X
	a = 930 to 1180mm	X	X	X	X	X
	a = 1180 to 1300mm	X	X	X	X	X
Semi-circular arch window	a = 500 to 930mm	X	X	X	X	X
	a = 930 to 1180mm	X	X	X	X	X
	a = 1180 to 1300mm	X	X	X	X	X

\* Rod and Cover profile must be ordered separately

Item	Designation	Id.-No. for colour					Psc.
		anod. alu.	white RAL9016	dark bronze	black	RAL...	
A	Scissor OL 90 N without casement bracket	1203	71207	71204	99477	71206	4
1	1 Slimline scissors OL 90 N						
2	1 Scissor bearing						
3	1 Joint						
5	1 Rod guide						
A1	Casement bracket for timber-framed window with euro nut**	30886	30890	30887	99475	30889	2
3	1 Casement bracket for timber-framed window						
4	1 Back plate						
B	6 Hand lever OL 90 N	26882	26887	26884	79113	26886	3
C	Flexible pull handle Length for a (width of casement)						
7	1 L=700 for a=500 to 930	22718	22718	08481			
8	1 L=1000 for a=930 to 1180	22720	22720	08483			
9	1 L=1250 for a=1180 to 1300	22721	22721	08485			
D	Accessories for flexible rod assembly Contents: 11 Safety clasp 11 Clamping fixture for flexible pull handle 12 Guide for flexible pull handle	30862	30862	30861			6
E	Corner guide flexible rod assembly Contents: 13 Corner guide 14 Cover for corner guide	30764	30764	30763			x



Range of application



in general:  
a = for vertically installed windows only  
a = width of casement 500 - 1300mm  
Weight of casement max. 80 kg

i = Clearing dimension of centre of gravity of casement to pivot point of hinge = 10 to 60mm  
Ü = overlap height 0 - 25mm

Segmental arch window ( $\beta < 150^\circ$ ):  
b = Height of casement min. 250mm  
Y = top space requirements (see diagram)  
X = Space requirements at the sides = Y  
D = Outer edge of casement to centre of rod assembly (see table)

Height of casement b	Dimension D, top	Dimension D, side
250 to 300mm	16mm	
300 to 400mm	12 to 16mm	X-12mm
≥ 400mm	10 to 16mm	

Semi-circular arch window ( $\beta > 150^\circ$ ):  
b = Height of casement min. 300mm  
Y = top space requirements (see diagram)  
X = Space requirements at the sides = Y  
D = Outer edge of casement to centre of rod assembly (see table)

Height of casement b	Dimension D, top
300 to 400mm	12mm
≥ 400mm	10 to 12mm

Running down of crank rod	Dimension D, Space requirements sides, X, sides
Hand lever	min. 10mm D + 10mm
Vertical gear Fz 91 with * fixed crank rod	min. 10mm D + 9mm
detachable crank rod	min. 14mm D + 14mm

\* see "further installation drawings"

Types of windows

Semi-circular arch window:  
 $\beta > 150^\circ$  or  
 $\frac{a}{D_2} < 3,5$

Segmental arch window:  
 $\beta < 150^\circ$  or  
 $\frac{a}{D_2} > 3,5$

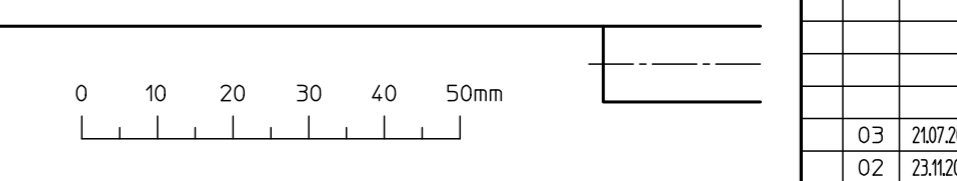
Differentiation:  
Semi-circular/segmental arch window see diagram

Important information:

- Mounting drawing, assembly instructions, requirements for maintenance and operation must be followed.
- The specified range of applications must be maintained.
- The required dimensions must be observed.
- The required fixtures must be used.
- To avoid injury, protective covers must be screwed on projecting threads of the fastening screws.
- Fittings have been drawn in the closed position, however, assembly must occur in open position.
- All attachment screws in open position must be tightened with an Allen key 3mm with 5Nm.
- After assembly and before operation check function and make sure all clamping screws are tightened.
- Linkage and sliding points must be lubricated with an acid-free grease according to DIN 51825.
- The free accessibility of the fittings for lubricating and maintenance must be guaranteed according to DIN 18357.
- If rods or cover profiles of other manufacturers are used, GEZE will neither assume any liability for material quality and sufficient corrosion protection in accordance with the RAL quality assurance nor for possibly occurring damages and consequential losses.
- As of a free rod length of 600mm, rod guides must be used.
- For bottom-hung windows, using a suitable catch guard is mandatory (see GEZE catch guard and cleaning safety).
- The use of a suitable collecting safety device is prescribed.

Technical data

- Opening width approx. 170mm
- Stroke of fitting 54mm



Rods and cover profiles	30401	30405	30402	74537	30404
Cover profile L=2m *	30396	30400	30397	74539	30399
Cover profile L=3m *	27558	27561	27559	74540	28342
Rod Ø8 galvanised L=2m				16555	
Rod Ø8 galvanised L=3m				16591	
Rod Ø8 galvanised L=6m				16592	

\* Both ends of cover profile mitred  
\*\* can also be used for aluminium and plastic windows

GEZE GmbH  
P.O. Box 19 63  
7230 Leutberg  
Germany

OL 90 N flexible rod  
semi and segmental arch window

Scale: 1:1

40444-EP-010