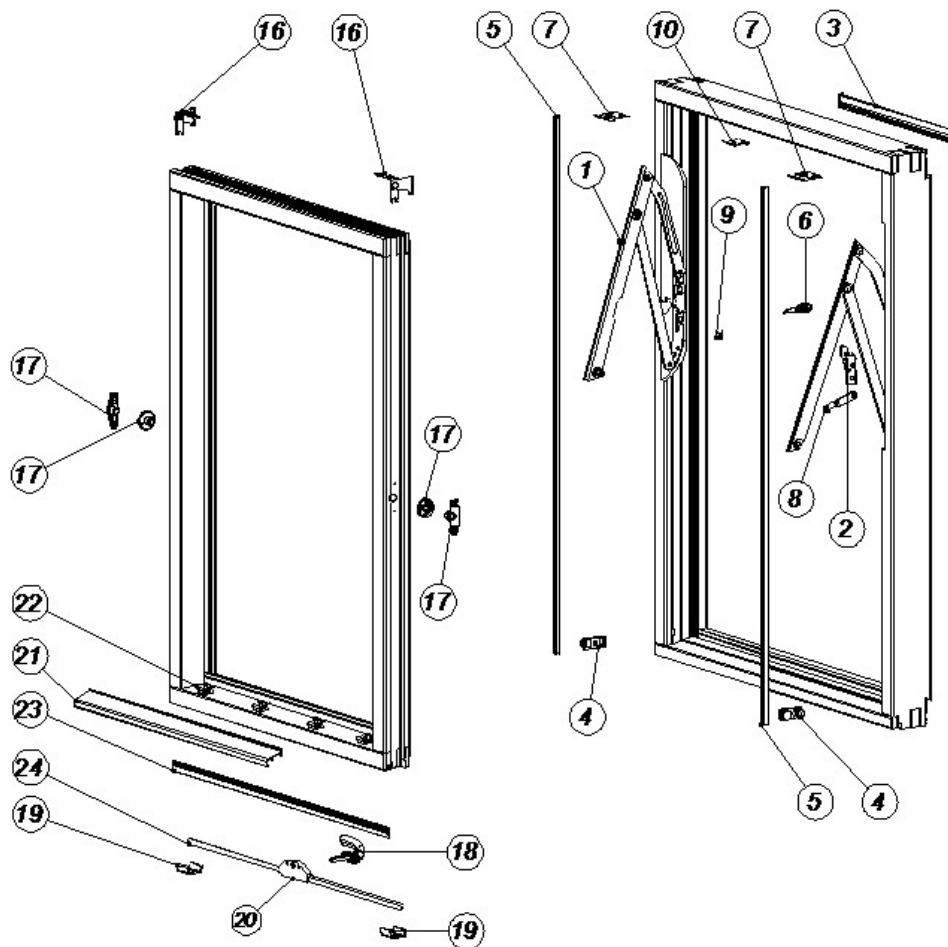


Updated: 07.07.2021



Item	Components, frame	Item	Components, sash
1	HINGE	16	HEAD SLIDE
2	OPENING RESTRICTOR	17	CENTRE SASH ASSEMBLY
3	SPIILVENT VENTILATOR	18	HANDLES AND ACCESORIES
4	END KEEPS	19	GUIDES
5	U-PROFILE	20	LOCKBOX
6	CATCH LIFTER	21	GLAZING BEAD
7	END KEEP HEAD	22	CLIPS FOR GLAZING BEAD
8	VENTILATION DEVICE	23	LIP GASKET
9	LOCK FOR CATCH	24	ESPAGNOLETTE RODS
10	CENTRE SASH KEEPS		CLIPS FOR BARS AND ACCESSORIES
	COMPONENTS FOR MULLION ACCESSORIES		

This installation guide is intended to be a guide and adjustments may be done by the window manufacturer.

# COMPONENTS

## DIMENSIONS AND WEIGHTS

Minimum frame depth ca 85 mm  
 Max window height 1600 mm  
 Max sash weight 80kg

## COMPONENTS

### Hinges①

There are 8 sizes, depending on the window height.

### Head slides②

Various types are available depending on the window profile.

### Centre sash assemblies③

These components attach the hinge to the sash. Spilka offers two types of centre sash assemblies - 1) with a securing slide 2) with a securing spring and stainless top cover (Rondo). When alternative 1 is used the sash may be detached by removing a fixing screw from the securing slide. With centre sash assembly alternative 2 the sash may be detached by simply releasing the spring.

### Profiles

Hinges are fixed in a routing in the frame, which requires a thickness of at least 39 mm and different profiles for the top, side and bottom. A groove is required in the sash to locate the head slide and can be adapted to include the centre sash assemblies. Please be aware that whilst using centre sash assembly alternative 2, which is round, a groove is not required.

Correct positioning of the hinges and components is important, to allow the sash to reverse without "over swing" of the sash over the frame head and to ensure the head slides are clear of the espag. end keeps when the sash is reversed.

The inside edge of the sash head is chamfered to ensure it slides past the weather-strip.

The gap between the sash and frame is 3 mm at the sides.

In the frame jambs a groove (K) allows clearance for the pivot point on the head slide.

Head-slide pivot arm lengths (L): 31,3 mm 34,8 mm, 40 mm and 45mm.

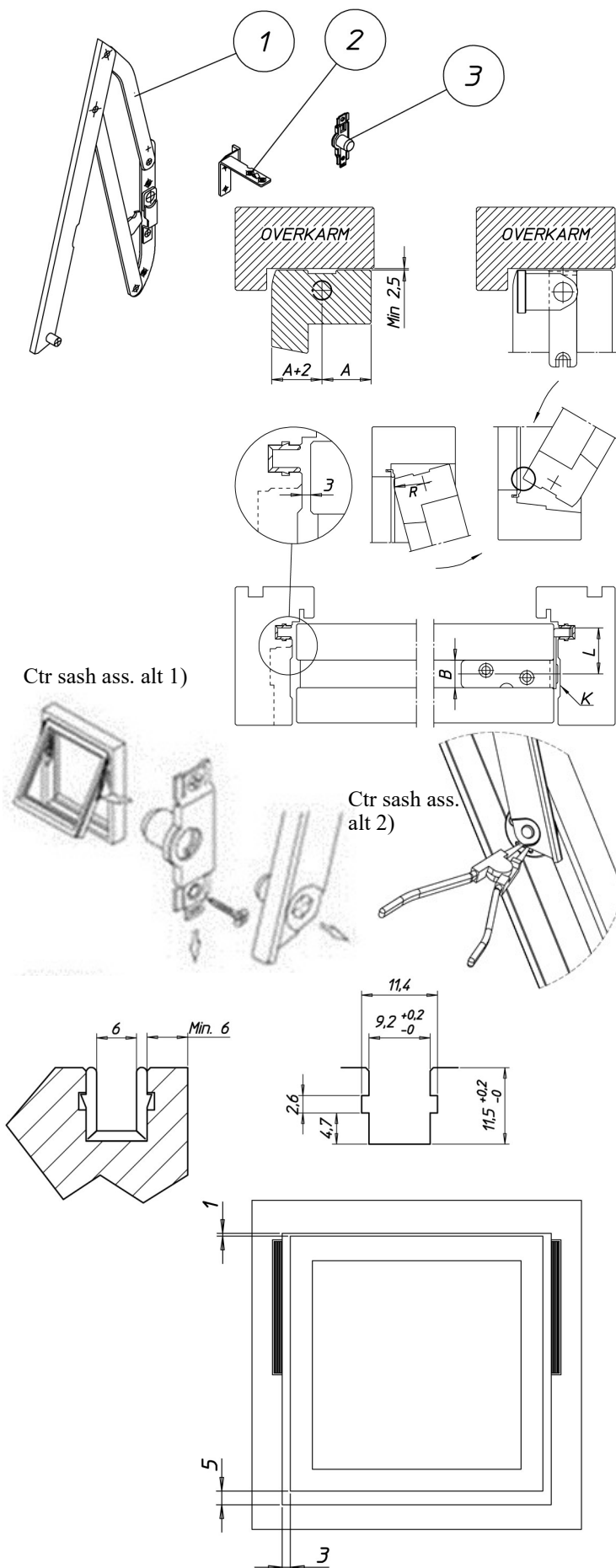
Head slide corner bracket widths (B): 16 mm and 19 mm.

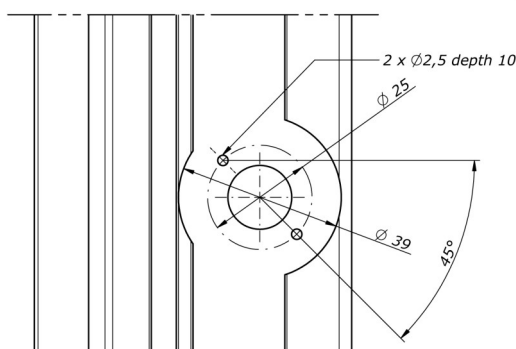
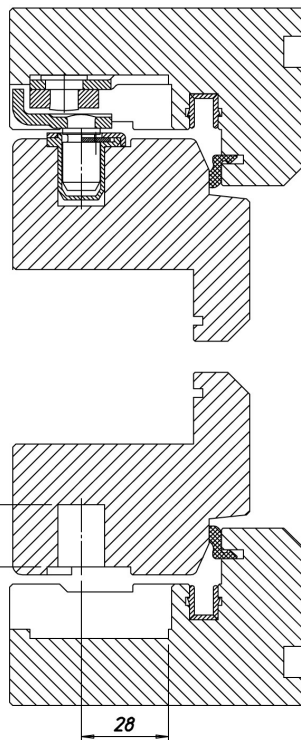
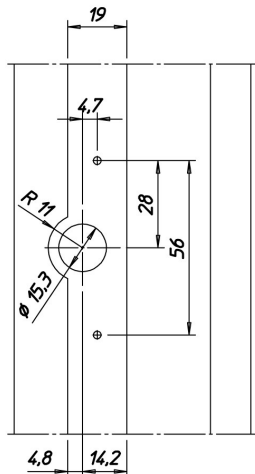
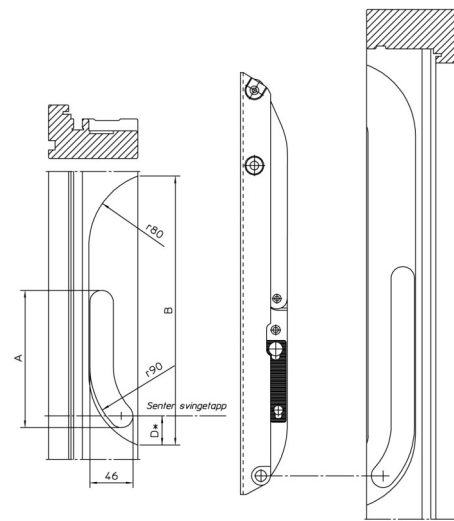
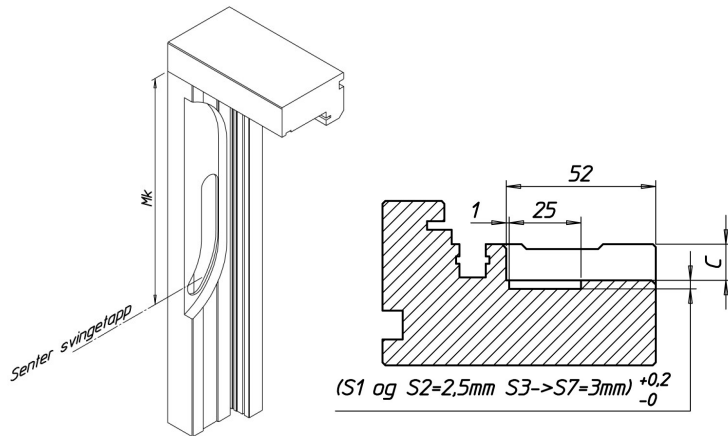
### Groove for U-channel

For polypropylene u-channel a minimum of 6 mm of timber is required between the channel and the hinge routing. If possible we recommend extra thickness of wood between the u-channel and the hinge routing. Alu. channel requires at least 5 mm.

### Sash/frame gaps

We recommend 1 mm at the top, 5 mm at the bottom and 3 mm at the sides (4 mm if the timber is likely to swell).





**Routing**

The starting point for positioning the hinges is to ensure the pivot point is in the centre of the sash.

When the sash is reversed, it will be within the frame. To ensure the head slides, do not hit the espag. end keeps when the sash is reversed, the centre sash assemblies should be moved 10 mm above the centre of the sash.

To position the hinges measure from under the top of the frame to the centre of the pivot point. This is "Frame mounting measure" Mk.

The hinge routing is in two steps. The primary rout is to accommodate the hinge arms and is 52 mm deep from the front of the frame. The depth and length of the routing varies on the size of the hinge. (See table) The position of the routing is measured from the centre line of the pivot point.

A "Banana" shaped rout is then made to accommodate the hinge frame plate. Again the dimensions vary according to the hinge size (See table)

**Hinge size/ Window height**

For optimal use the correct hinge should be used relative to the window height and these are shown in the table. AS Spilka Industri can design relevant tables for alternative designs with varying sash and frame dimensions, head slides and tolerances. .

	A	B	C	D*
<b>S1*</b>	106,5	215	12,5	66
<b>S2*</b>	106,5	215	12,5	26
<b>S3</b>	146	286	12,5	31
<b>S4</b>	180	361	12,5	31
<b>S5</b>	235	468	12,5	31
<b>S6</b>	307,7	574	14,5	31
<b>S7</b>	307,7	638	14,5	31
<b>S8</b>	410	761	14,5	31

\*Routing is the same for both S1 and S2 hinges but the pivot point is 40mm higher on the S1 hinge.

**Centre sash assembly**

The drawing shows the necessary drilling. Drills for pre-drilling of screws and the main hole of Ø 22/15,3 may be bought from AS Spilka Industri. A groove in the side of the sash is used to locate the head-slides and centre sash assemblies.

Our centre sash assembly with a round fixture is not depending on a groove.

## ASSEMBLY

1. U-channel and hinges are fitted to the frame jambs.
2. Head-slides and centre sash assemblies (with top screw only initially) are fitted to sash.

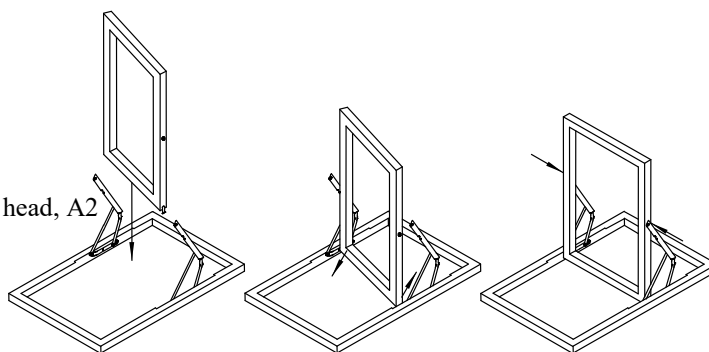
Fitting sash to frame:

1. Frame is laid flat with the inside down.
2. Hinges are opened out.
3. Sash is held vertically over frame with head-slides down. Tilt the sash diagonally to allow the head-slides to be fitted into the u-channel and fit the hinge pivot points into the centre sash assemblies. Slide home the metal slider to lock in the pivot point and secure with a screw in the hole revealed. Tug the pivot point to ensure it is secured.

(Head-slides are treated with a dab of glue to prevent them turning whilst the sash is being fitted into the frame, the bond is broken the first time the sash is rotated.)

### Relevant screws

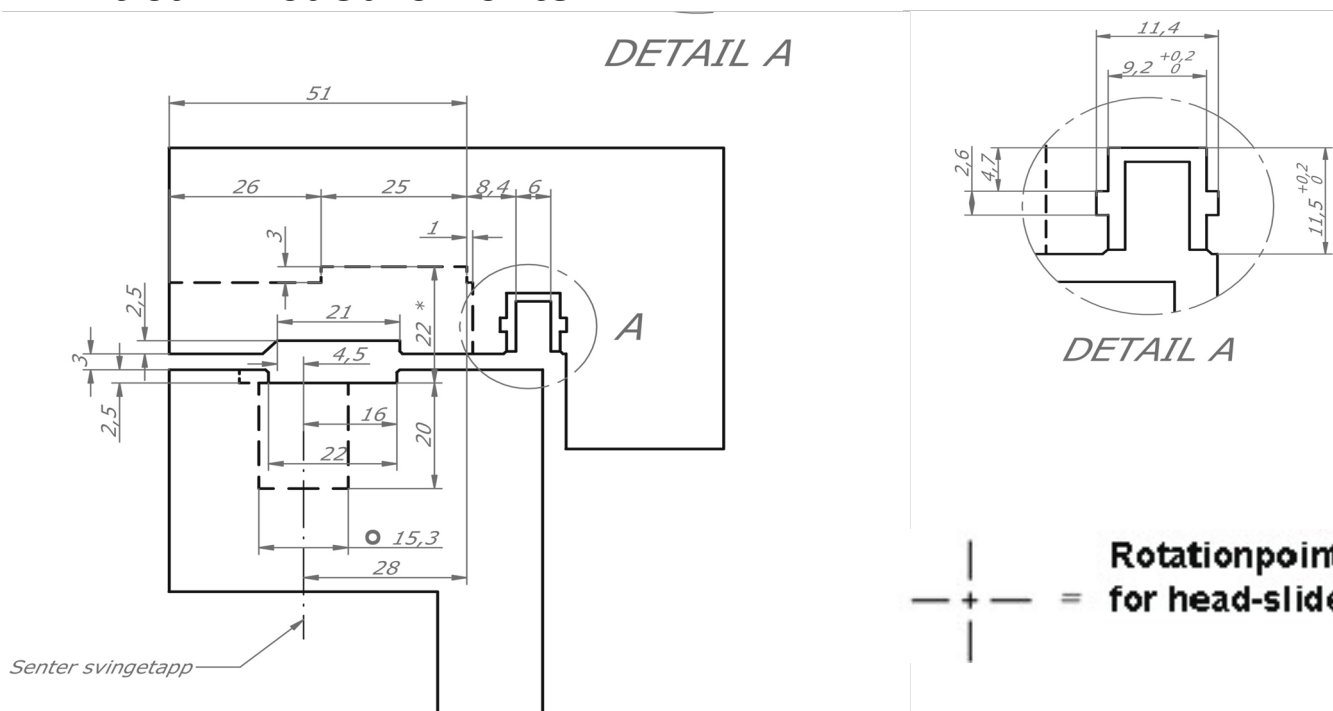
Hinges	Ø4,5 x 25 mm
Head-slides	Ø4,5 x 25 mm
Centre sash assem.	Ø3,5 x 25 mm
Centre sash Rondo	Ø3,5 x 25 mm, small head, A2



## Transport:

If the windows are transported laying on the side frame there should be a protection in the gap between side sash and side frame.

## Critical measurements



### AS SPIILKA INDUSTRI

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 www.spilka.no

**Following information applies for the Classic serie:**

Spilka product are tested according to pr EN 13126 – 11 Static load test.

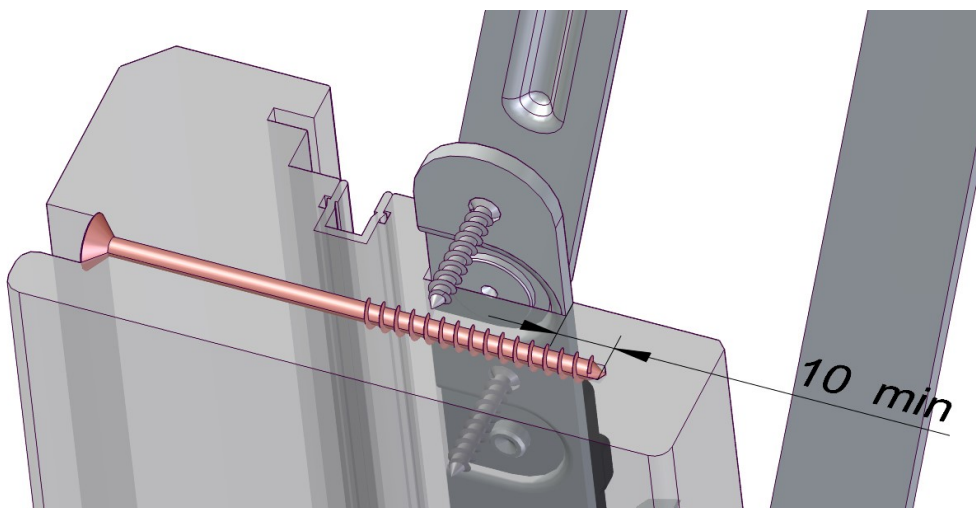
The window manufacturers is responsible for the frame, sash and the fasteners (screws and/or blind rivets) with respect to strength and has to consider if the window system is strong enough for the relevant load that will occur.

The side frame made of wood (both sides) has to be strengthen with a screw (Ø5) when the weight of the sash is over 60 kg. The screw is positioned in the groove for the lining behind the upper rivet on the hinge as shown on the figure below. If there is no groove for the lining the screw head/hole to be covered by a plug.

**Mullion:**

Note! Window in combination (opening window) divided with mullion, can not be used when the sash weight is over 60 kg. When the sash weight is 60 kg and less and opening windows are used, mullion-bolt hast to be used.

Window in combination fixed and opening window (with sash weight over 60 kg) divided with mullion, the strength of the mullion and frame be considered by the window manufacturer.

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