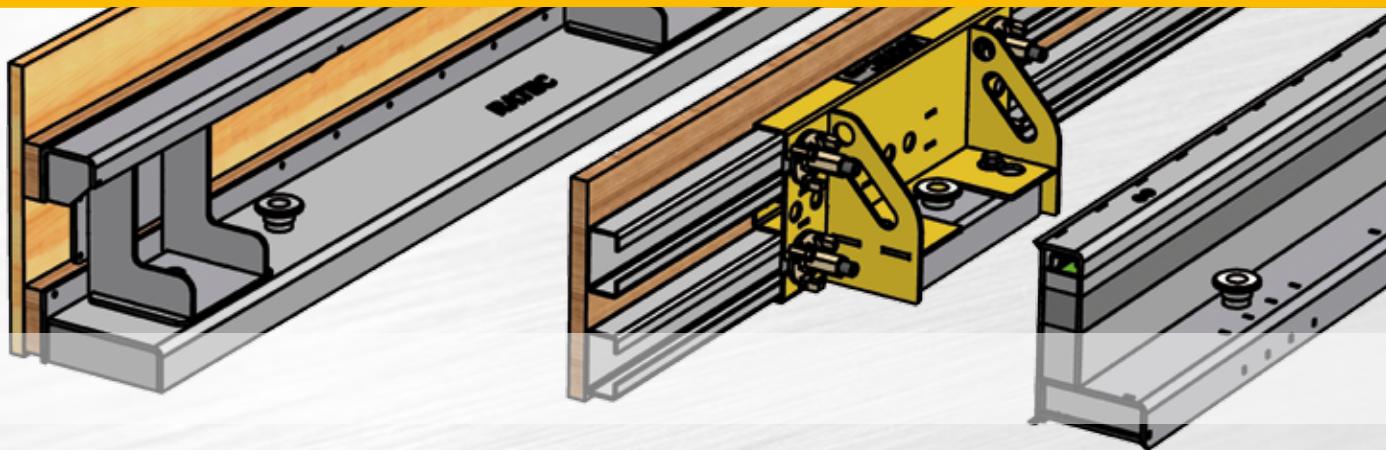




Ratec Shuttering System from Experienced Professionals

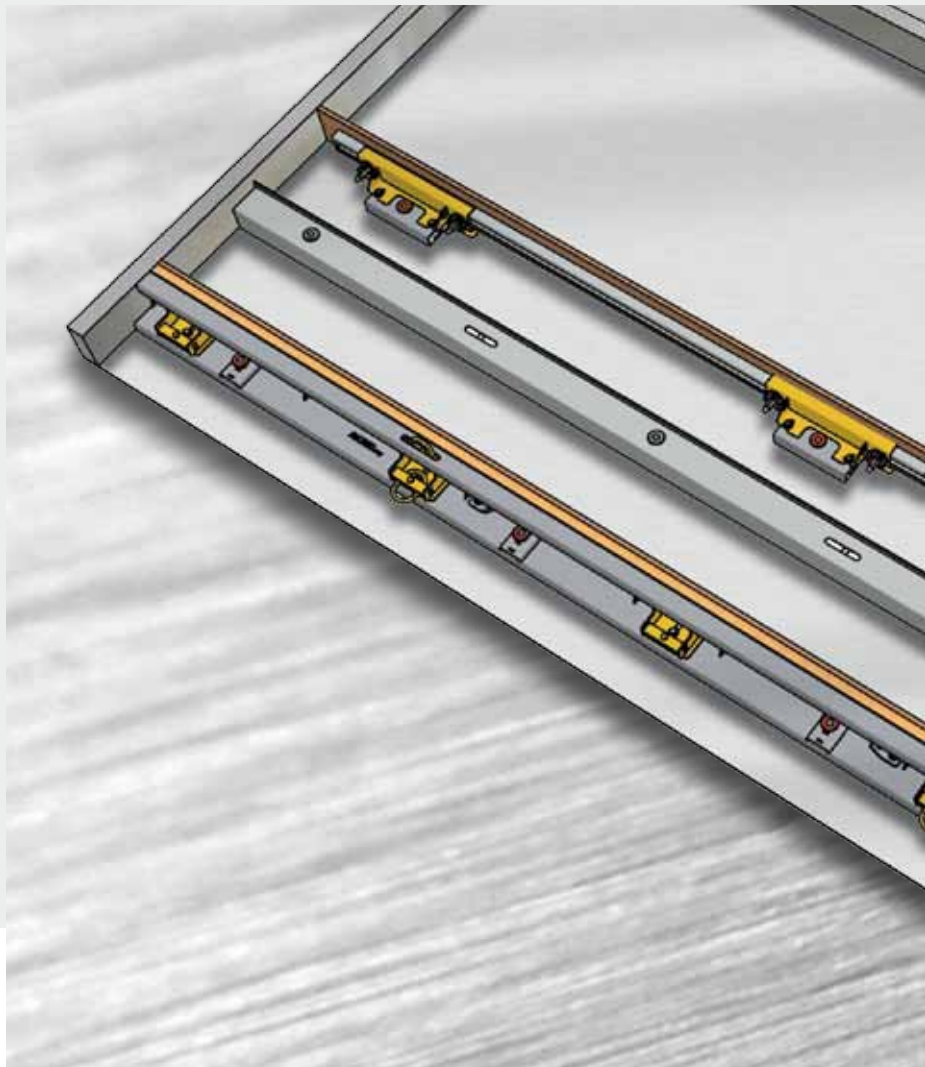
Flexible, fast, secure and efficient.



RATEC Shuttering System. Unbeatable Co

➤ Can be used in manual or robot-handling systems

RATEC shuttering systems have been used in the precast concrete industry for many years and have proven themselves in the toughest conditions worldwide. Improvements and innovations made over the years have developed a system that is flexible, secure, quick and efficient. At RATEC we continually look to the future, improving our products as new technology develops. In this way, we know our products offer cost effective, efficient solutions to precast producers.





mbinations.

➤ RATEC Shuttering System



MHS

The most flexible

PSV

The most versatile for solid elements

SAS-TOWER

The modular extendable for solid elements

SAS-MF

The most modular for solid elements

SAS

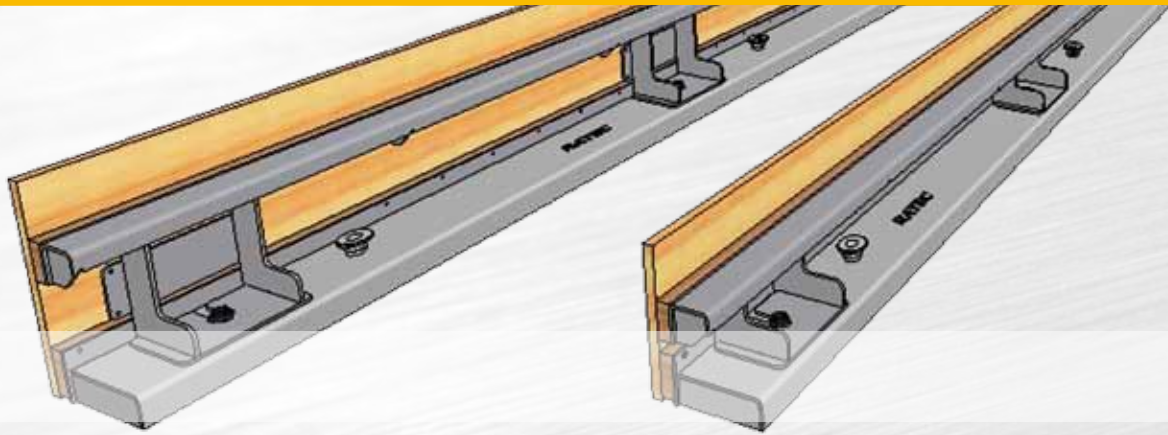
The most options for solid elements

RT U60 PRO

The Original for slabs and double walls

TT PRO

For TT slabs



MHS Modular Wood Shuttering System

➤ The most versatile shuttering system in the market.

MHS, modular wood shuttering system for solid elements (walls, slabs, small columns and beams) is produced in lengths from 2000 mm up to 8000 mm and is variable for heights from 100 mm up to 400 mm.

Due to less set up time it is possible to change the height via manual handling in less than 10 minutes.

MHS offers a maximum of flexibility due to combination of steel base and plywood.

RATEC automatic system guarantees a fast, secure and efficient positioning of shuttering.

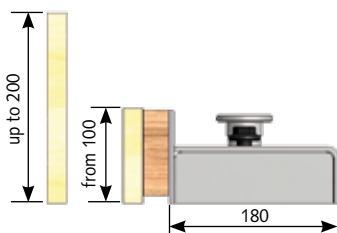
RATEC magnetic components with 2100 kg adhesive force are used.



➤ MHS - Modular Wood Shuttering System. Fast, Secure, Versatile, Easy.

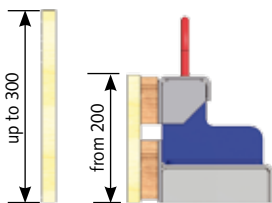
- Integrated high-performance magnet
- Shuttering length from: 2000 mm up to 8000 mm
- Basic width: 180 mm
- Adjustable heights: Solid elements: 100 mm up to 300 mm, Sandwich elements: until 400 mm
- Easy positioning
- Easy loosening and fixing of the shuttering
- Set up time < 10 Minutes
- Easy crane handling
- Fixing of inserts on plywood shuttering is possible

➤ MHS Base Element, height 100 - 200 mm



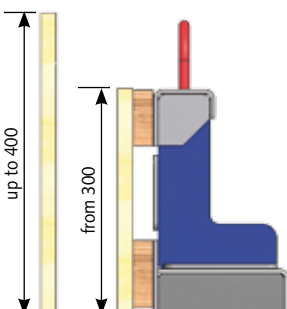
Example:
Height of
100 - 200 mm

➤ MHS Base Element with angle 1, height 200 - 300 mm

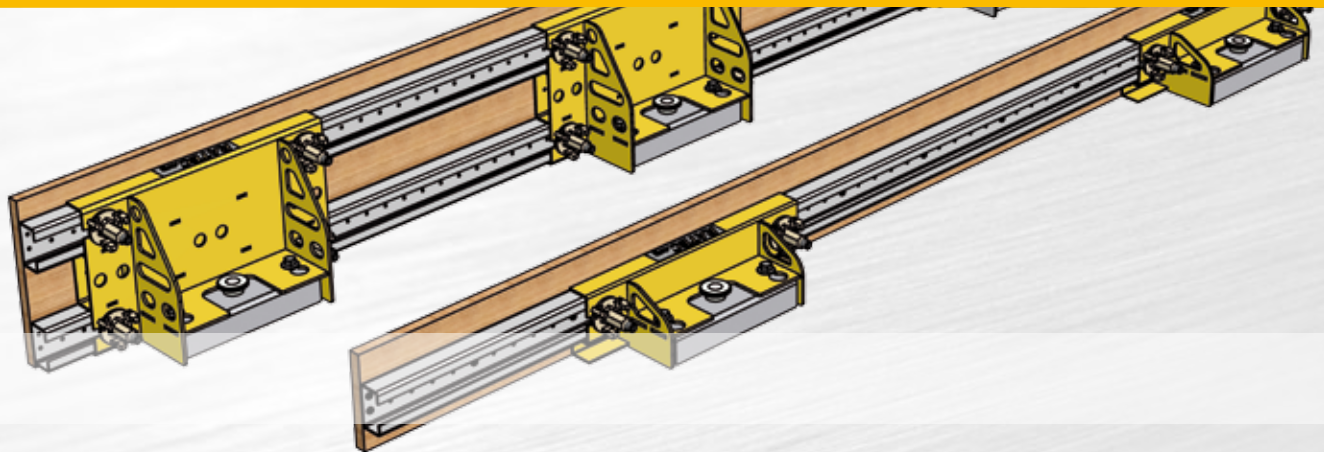


Example:
Height of
200 - 300 mm

➤ MHS Base Element with angle 2, height 300 - 400 mm



Example:
Height of
300 - 400 mm



PSV Pro-System-Vario

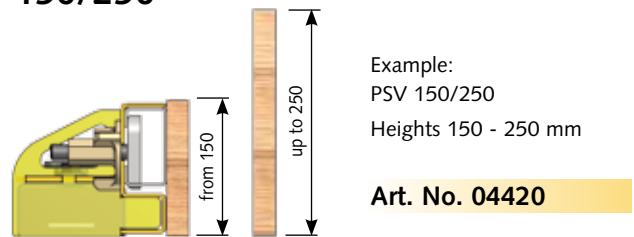
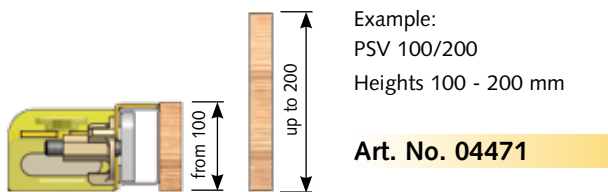
➤ The multi-functional shuttering system that perfectly complements SAS and MHS.

PSV is an adapter system utilizing our SPB Standard PRO Box magnets (SPB). Can be any length or height, making it the perfect complements so SAS and MHS systems for things like windows or door recess. Its intuitive design makes it easy to handle manually and so simple and quick to set up. The method of assembling the wood forms to the shuttering saves up to 60% in plywood consumption. The system is easier to handle by hand. It is fast, easy and secure.

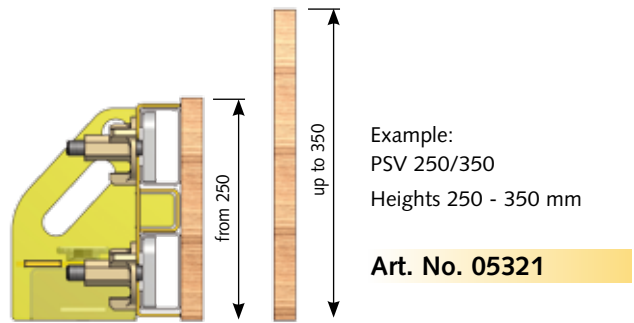
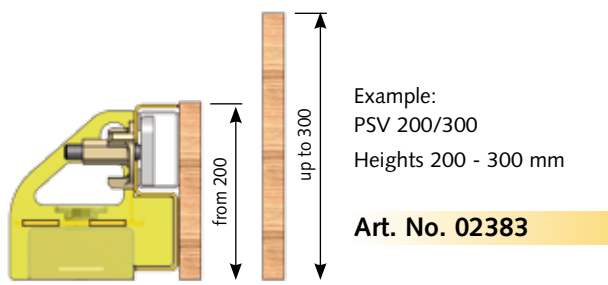


➤ PSV-System. Fast, Secure and Variable

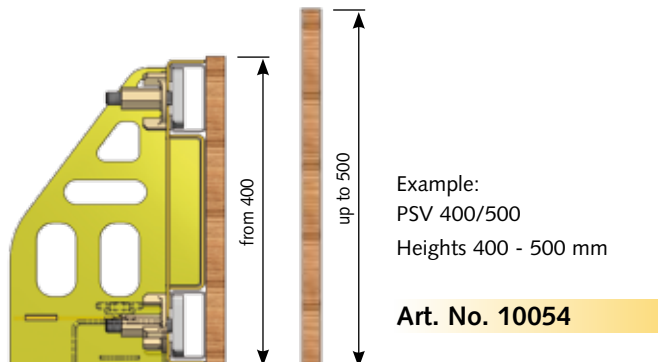
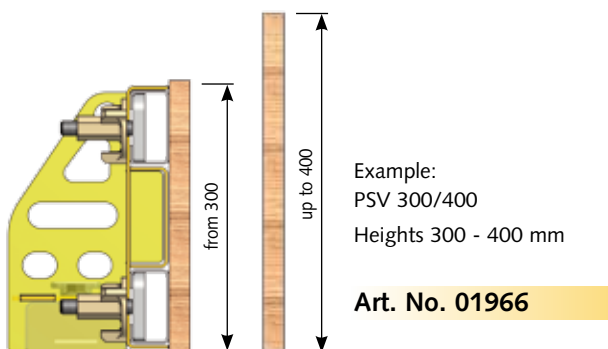
➤ PSV Adapter 100/200 and PSV Adapter 150/250



➤ PSV Adapter 200/300 and PSV Adapter 250/350



➤ PSV Adapter 300/400 and PSV Adapter 400/500

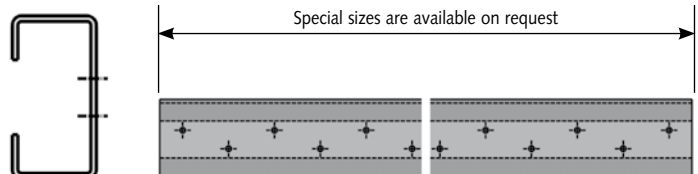


All adapters are available for concreting from both sides.

➤ PSV C Profile

Use as shuttering bracket to secure shutter skin. The PSV C-Profile is specially designed and fits on all PSV superstructures. With the given cut length each length is available adjusted by one millimeter .

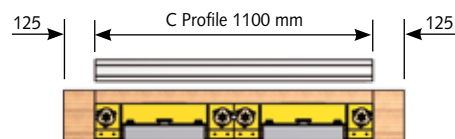
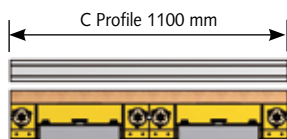
Cut length 250 mm	Art. No. 04472
Cut length 1100 mm	Art. No. 05398
Cut length 2000 mm	Art. No. 04495
Cut length 3000 mm	Art. No. 04478



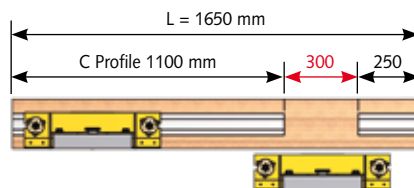
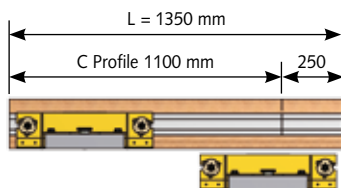
- Useable for all lengths and heights
- Easy positioning by fixing and loosening via push of a button
- PSV C Profile as carrier for shuttering materials (plywood, flake board or alkus multilayer plate)
- It isn't necessary to seal the visible surface, because screwing happens from the backside
- Concreting from one or both sides is possible
- Adaptable to any length and height to cast things like windows or door openings in elements
- System can be handled manually

Example for several length:

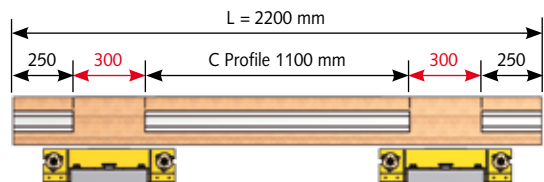
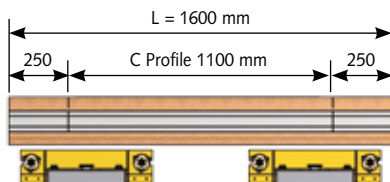
➤ Length 1100 mm - 1350 mm



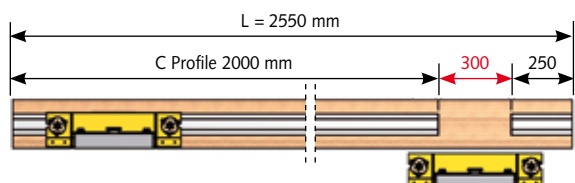
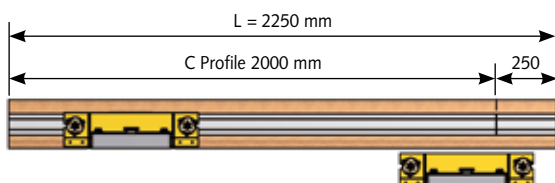
➤ Length 1350 mm - 1650 mm



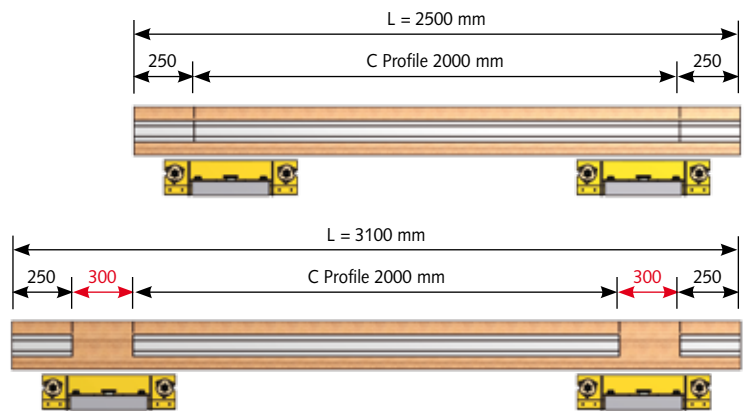
➤ Length 1600 mm - 2200 mm



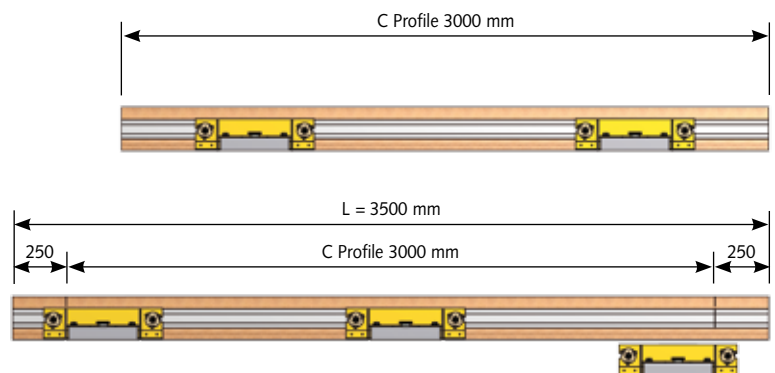
➤ Length 2250 mm - 2550 mm



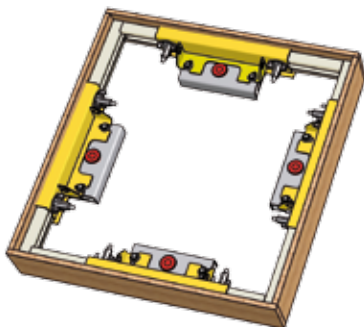
➤ Length 2500 mm - 3000 mm



➤ Length 3000 mm - 3500 mm



➤ Example window recess

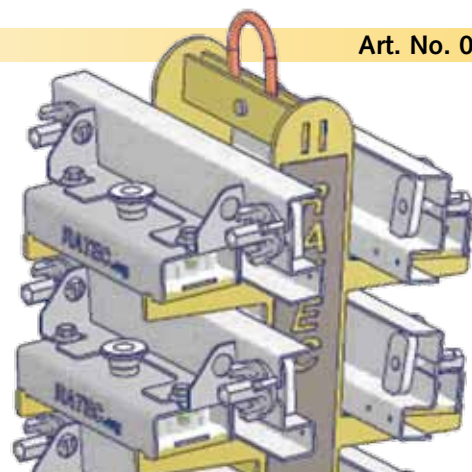
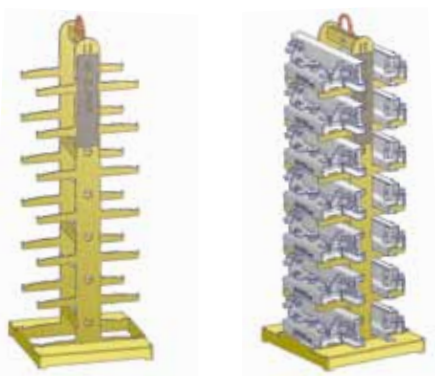


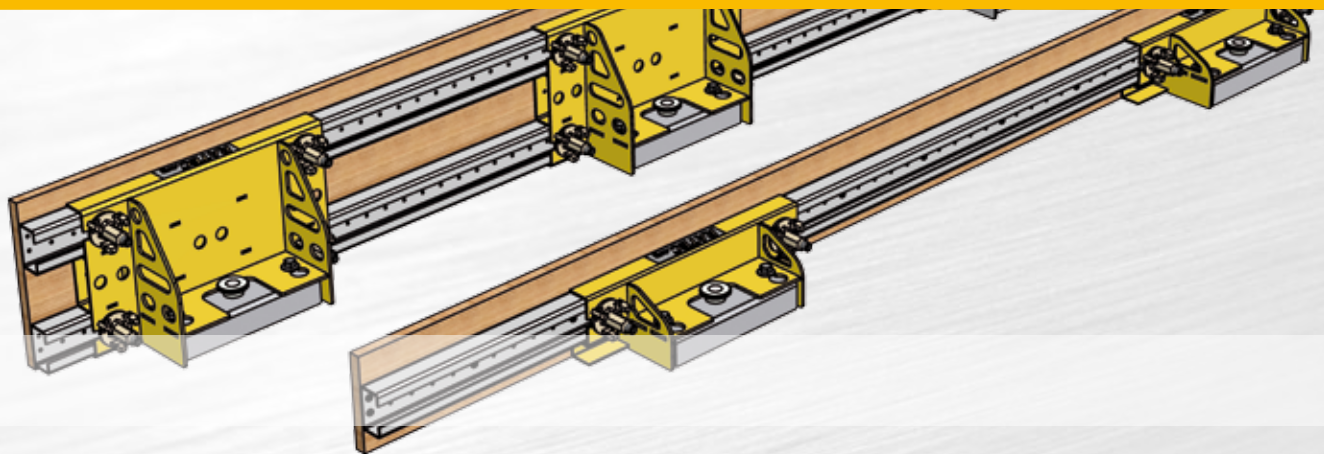
➤ Example door recess



➤ Magnet-rack

Art. No. 08919





PSV² Pro-System-Vario

➤ The consistent further development of the proven PSV-System

The versatility of the PSV has been enlarged, we call it PSV². Now, it can be withdrawn from the structural component. Thus, it is possible that the magnets do not need to be removed any more from the tilting table (pallet). This is an enormous advantage when producing series elements, as the calibration can be omitted. The PSV² retains other features of the basic PSV, the components SPB magnetic box as well as the PSV C-profile are also applicable with PSV². Further advantages like the simple and easy moulding and demoulding manually remain. The various application possibilities for windows, doors, recesses and cavities as well as for longitudinal and transversal cross shuttering sections make the PSV² an indispensable aid in the field of shuttering.

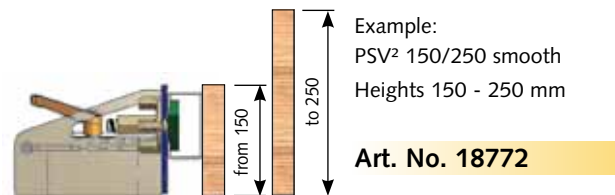
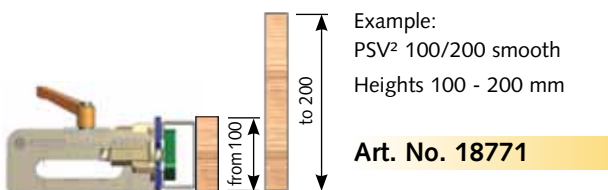


More information: www.ratec.org

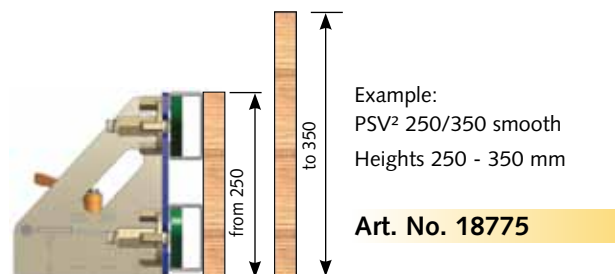
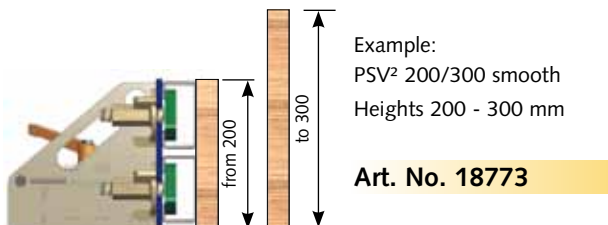


➤ PSV²-System. Fast, Secure and Variable.

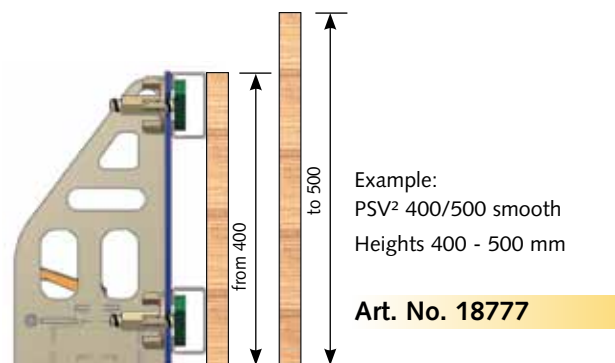
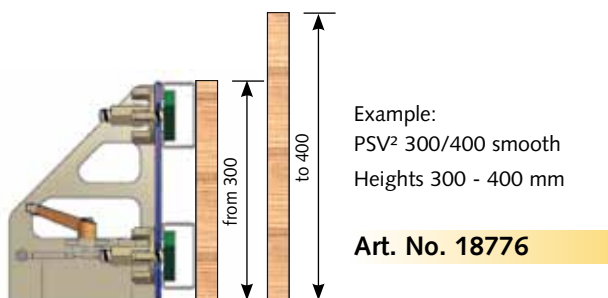
➤ PSV² Adapter 100/200 smooth and PSV Adapter 150/250 smooth



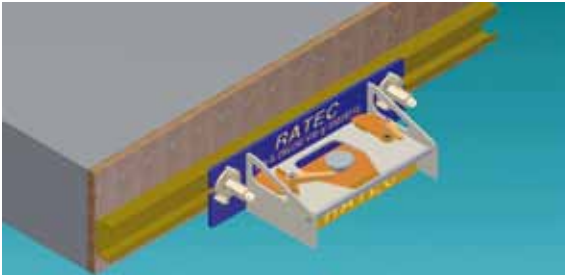
➤ PSV² Adapter 200/300 smooth and PSV Adapter 250/350 smooth



➤ PSV² Adapter 300/400 smooth and PSV Adapter 400/500 smooth

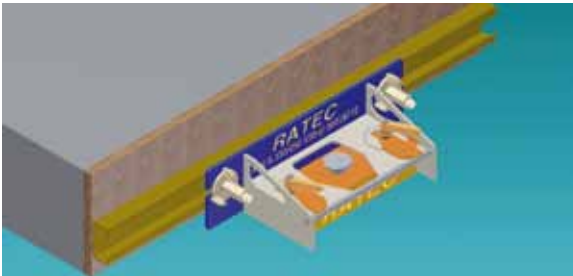


➤ PSV²-System. Instructions.



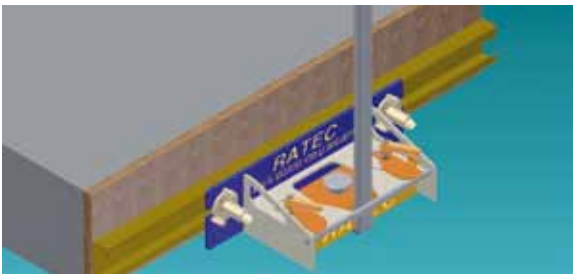
➤ Step 1

Initial situation



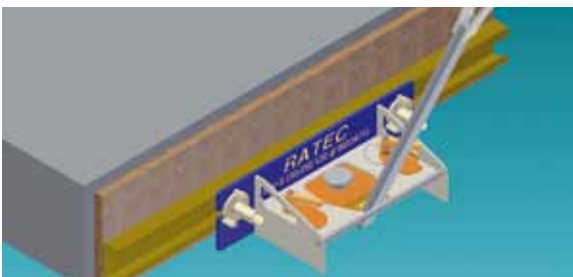
➤ Step 2

Opening of the quick connection on the SPB magnetic box



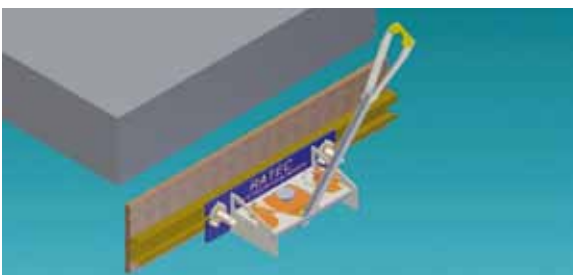
➤ Step 3

Inserting of the lifting tool



➤ Step 4

Retraction of the PSV² adapter on the SPB magnetic box



➤ Step 5

Removing of the concrete element from the tilting table (pallet)



SAS-TOWER

➤ Shuttering system for solid elements which can be modular.

The SAS-TOWER shuttering system for production of solid walls, solid slabs and also sandwich walls are available with length from 320 mm up to 8000 mm. Heights are variable from 100 mm up to 300 mm. The SAS-Tower is prepared for future requirements of concrete factories, due to variable height adjustment and shuttering profiles (plane steel, tongue and groove, shear key or grouting joint) which can be realized every time.

By using the RATEC crane beam it is possible to reduce setting up time up to 30%.

RATEC automatic system allows a simple, fast and efficient positioning of shuttering. RATEC magnet components with an adhesive load of 2100 kg are used.

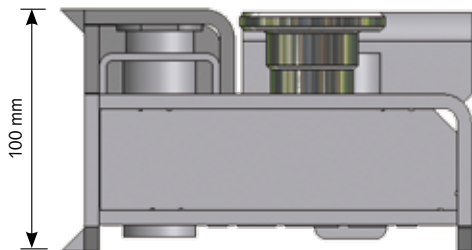


➤ SAS-TOWER which is modular can be placed exactly, clean and fast

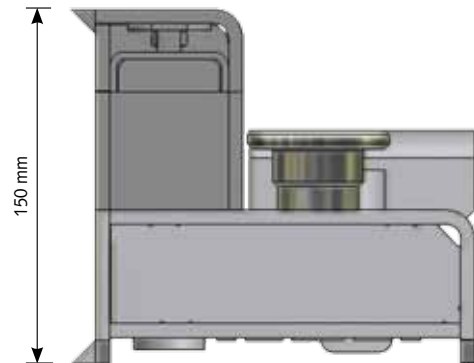
- With integrated high-performance magnet.
- Shuttering length from 320 mm up to 8000 mm.
- Completely adjustable for heights from 100 mm up to 300 mm
- Basic width: 160 mm
- Simple positioning
- Easy loosening and fixing of shuttering
- Reduces setting up time
- Sharp edged or with chamfer strip
- Simple crane handling by RATEC crane magnet beam
- Useable for SSC and normal concrete

Application:

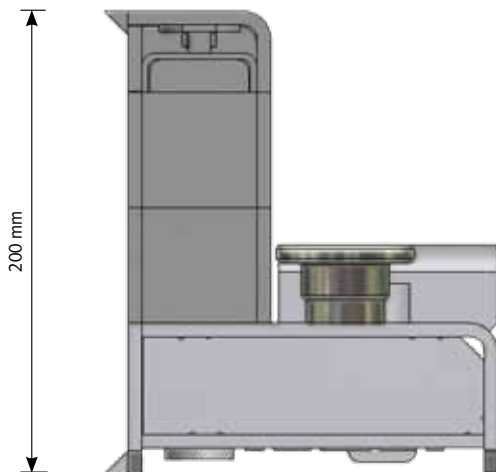
SAS-TOWER 100



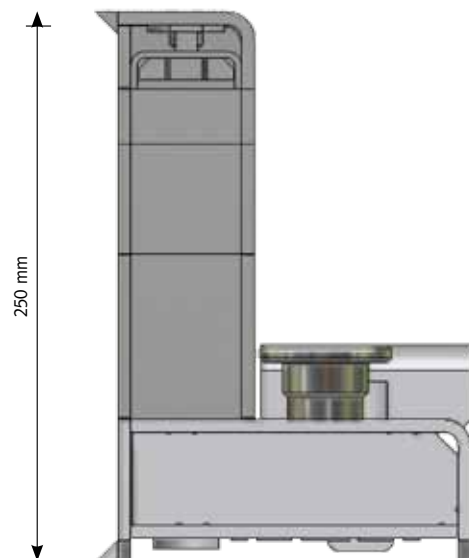
SAS-TOWER 150



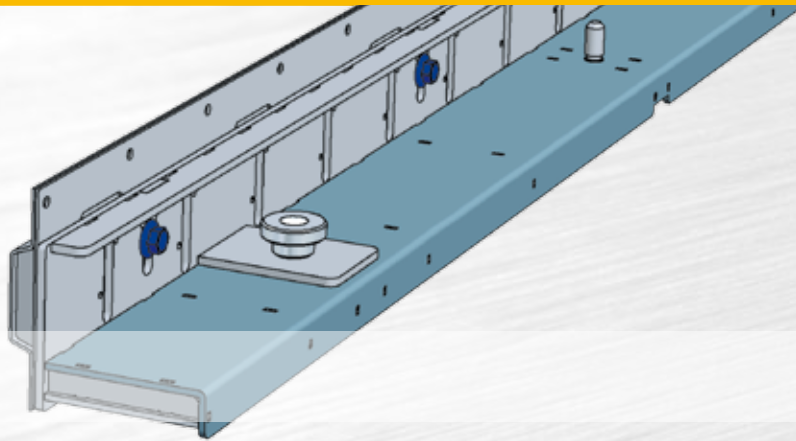
SAS-TOWER 200



SAS-TOWER 250



➤ Further heights are available on request or visit our website: www.ratec.org



SAS-MF Modul Flex Shuttering

➤ The most flexible modular shuttering system.

SAS-MF Module Flex shuttering system for solid walls and solid slabs is produced in lengths from 320 up to 8000 mm and variable for heights from 100 mm up to 400 mm.

Various shuttering materials (wood, alku, plane steel, tongue and groove, shear key, steel, wire rope loop) can be connected to the SAS-MF and makes it suitable for the most diverse requirements now and in the future.

Combination of steel base and steel profile with or without shear key guarantees a maximum flexibility.

Steel base is prepared to carry steel rope loop and wire rope loop inside the grouting groove. By using the RATEC crane magnet beam it is possible to reduce set up time.

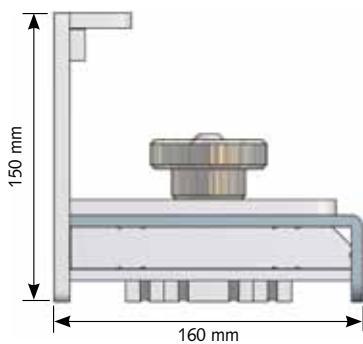
RATEC automatic system guarantees an easy, fast and efficient positioning of the shuttering. RATEC magnetic components with an adhesive force of 2100 kg are used.



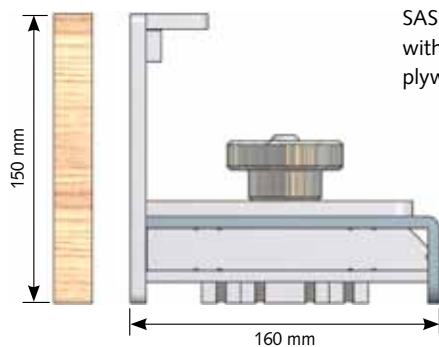
SAS-MF Module Flex Shuttering System. Fast, Secure and Flexible.

- Integrated high-performance magnet
- Shuttering length: 320 mm up to 8000 mm
- Basic width: 100 mm up to 200 mm
- Completely adjustable to several heights: 100 mm up to 400 mm
- Sharp edged or chamfered
- Easy positioning
- Easy loosening and fixing of the shuttering
- Less set up time
- Easy crane handling
- Fixation of inserts at the wood shuttering is possible
- Useable for SCC and normal concrete

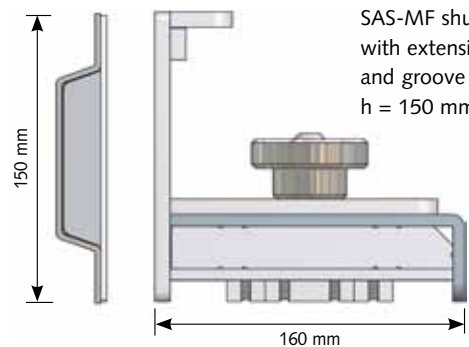
Application:



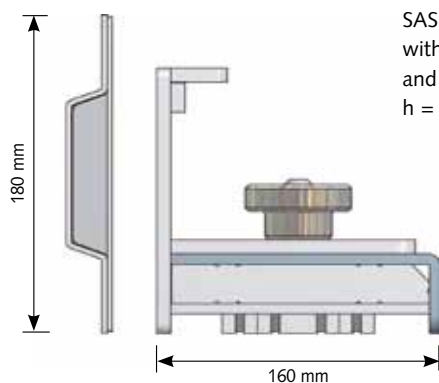
SAS-MF shuttering base for
fixation of extension parts



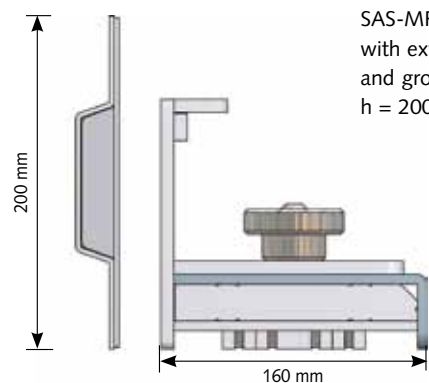
SAS-MF shuttering base
with extension wood,
plywood



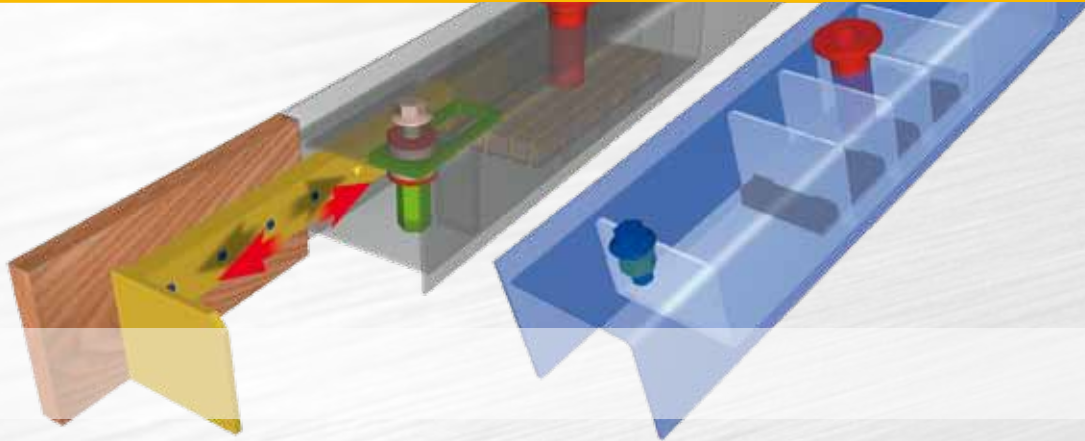
SAS-MF shuttering
with extension steel
and groove
h = 150 mm



SAS-MF shuttering
with extension steel
and groove
h = 180 mm



SAS-MF shuttering
with extension steel
and groove
h = 200 mm



SAS Standard Automatic Shuttering

➤ The most flexible shuttering system on the market.

SAS is a shuttering system for systematic production of cladding, sandwich walls, solid walls and slabs. The SAS is available in length up to 8000 mm and heights from 60 mm up to 400 mm.

The system can be used for manual and robot handling.

Economical aspect is: to use less plywood, to reduce moulding and demoulding time, easy cleaning and a higher quality of the final product.

An easy, variable, fast, secure and efficient positioning is guaranteed by a shift able RATEC automatic system.

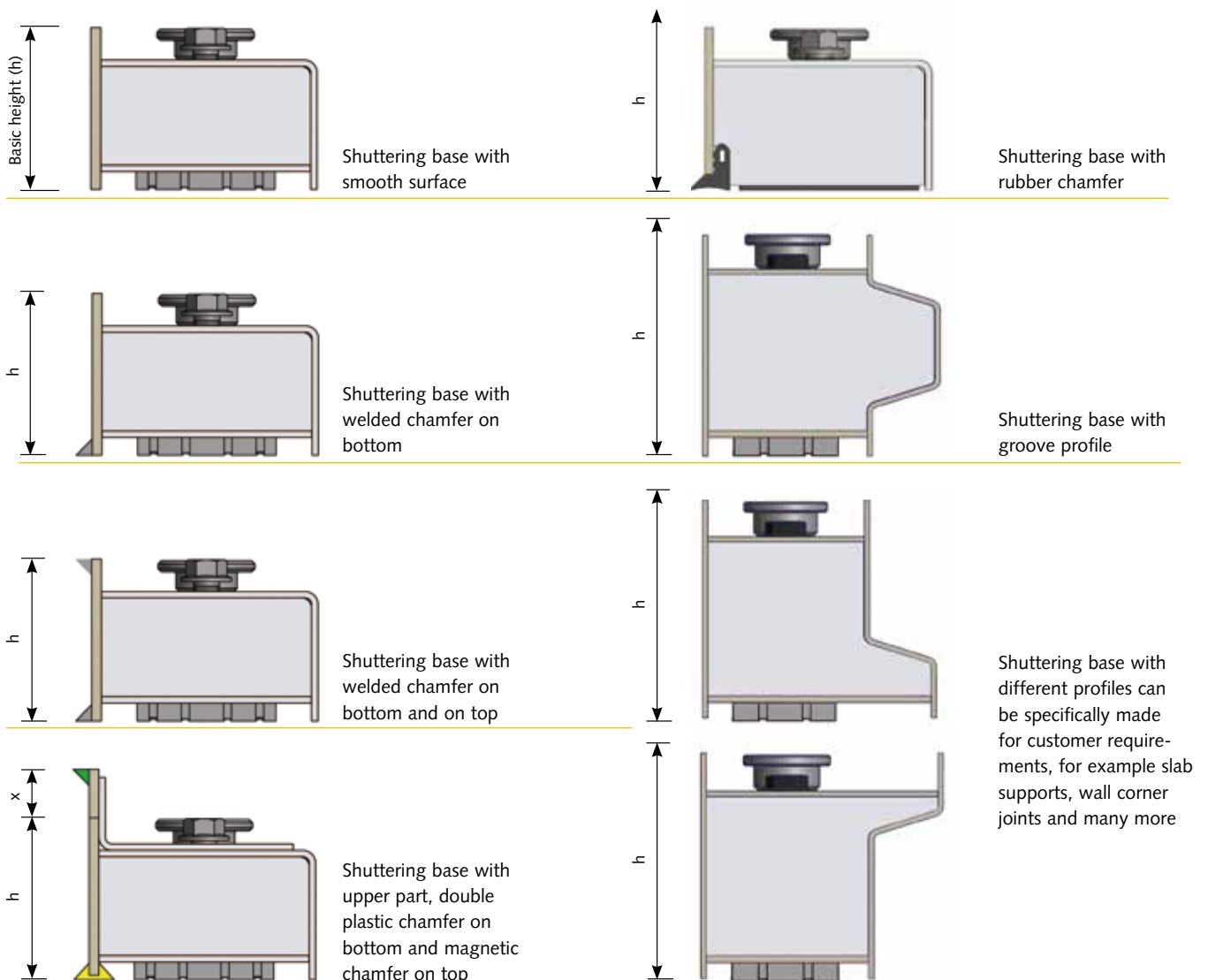
RATEC magnetic components with an adhesive force from 450 kg up to 2100 kg are used according to the requirements.

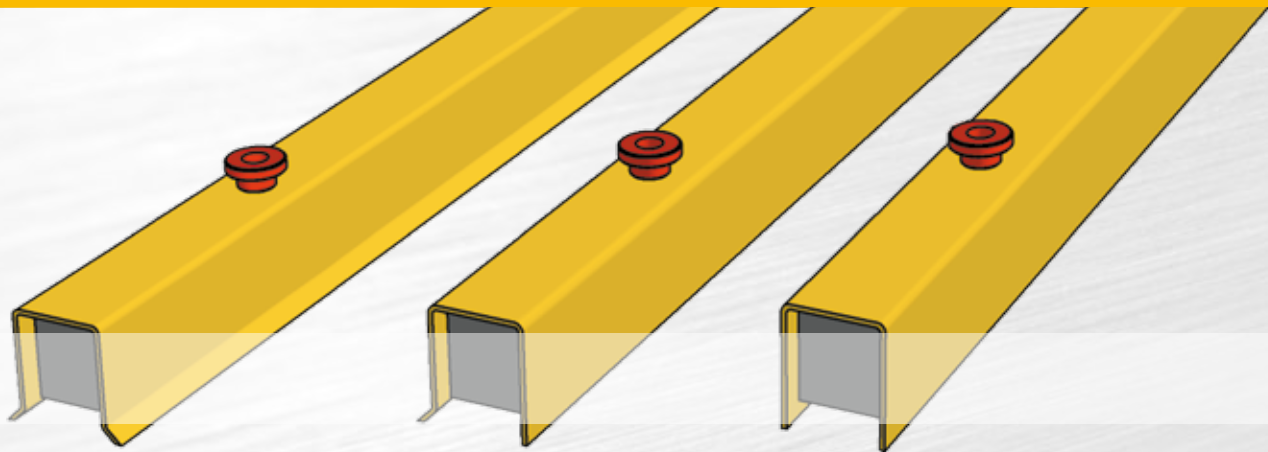


➤ Standard Automatic Shuttering System. Fast, Secure and Efficient

- Integrated high-performance magnet
- Shuttering length: 250 mm up to 8000 mm
- Basic width: 80 mm up to 200 mm
- Adjustable heights: 60 mm up to 400 mm
- Extendable on both ends up to 400 mm
- Sharp edged or chamfered
- Easy positioning
- Easy loosening and fixing of the shuttering
- Easy handling via robot, handling crane or RATEC Rail-Slider
- Fixation of inserts is possible
- Reduce the use of plywood
- Can be used in any direction or angle to create recess

Application:





RT U60 PRO

➤ The fastest shuttering system for moulding and demoulding.

RT U60 PRO shuttering are equipped with the RATEC Automatic System that can be activated with the push of a button after positioning on the casting bed by using a foot or robot. RT U60 PRO can be configured in many lengths and heights, with or without chamfer or draft, etc. Telescopic extensions complete our program. Further solutions are always possible - ask our team.

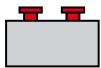


➤ RT U60 PRO System. Fast, Secure, Efficient - The Original

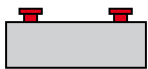
- Shuttering length: 250 mm up to 3980 mm
- Heights: 50 mm up to 100 mm
- Easy positioning
- Easy loosening and fixing of the shuttering
- Adaptable for all current shuttering robots
- Easy handling, also manual
- Can be used for element slab and double wall production

➤ The standard profiles of the RT U60 Pro System.

(Special sizes and heights are available on request) Magnet quantity and adhesive force are adjusted for each shuttering.



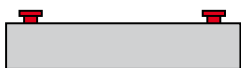
Length 500 mm



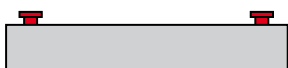
Length 750 mm



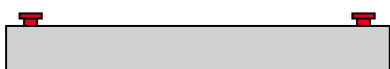
Length 1000 mm



Length 1250 mm



Length 1500 mm



Length 2000 mm



Length 2500 mm



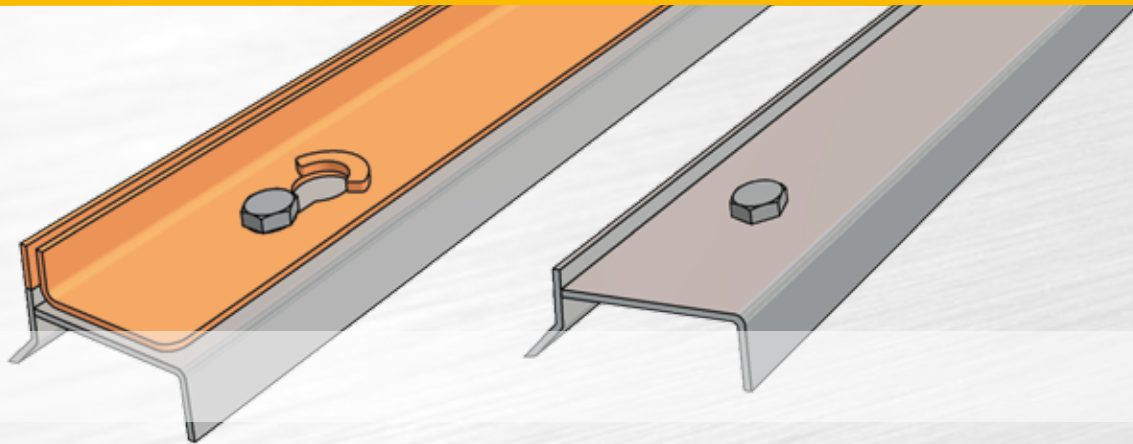
Length 3000 mm



Length 3500 mm

Standard height: 60,65,70,75 or 80 mm
Standard width: 60 mm
Steel plate: 3 mm





TT PRO Shuttering System for Slabs

➤ **The fastest shuttering system available for casting TT-slabs.
Significantly better product quality without welding.**

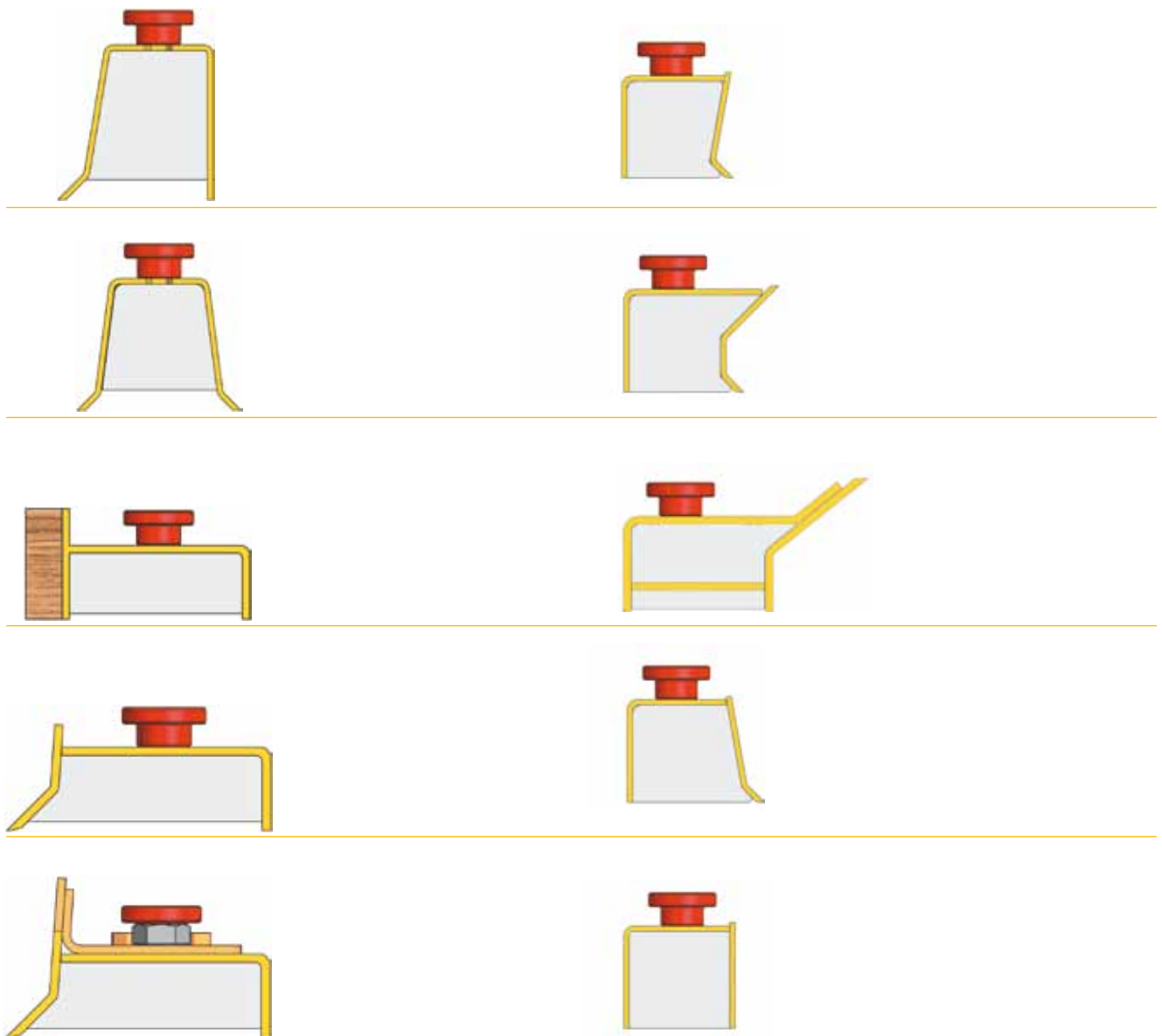
The RATEC TT PRO shuttering system simplifies moulding and demoulding of TT-slabs. This revolutionary innovation reduces the set up and changeover time by up to 50%. No crane is needed. The combination of using the SPB 900 and the angle adapter for the top header as well as the EURO RTM 900 to secure the stern header eliminates the need to weld the shuttering system. This also reduces the set up. The scale of economy is unbeatable.



➤ TT PRO Shuttering System. Secure, Efficient, Top-Speed Production

- Integrated high-performance magnet
- Lightweight and easy to position
- Height, length and profile of the TT base element according to customer's specifications
- Complementary products: SPB, EURO RTM, holding down clamp

➤ TT PRO shutters are produced according to customer's specifications.





➤ RATEC program



➤ Shuttering magnets



➤ Shuttering systems



➤ RATEC Battery System



➤ Inserts & Insert Magnets



➤ Special shuttering



➤ Upcrete® Pump Station

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Meet the better ideas!

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