

RAPIDOBAT®

For round and angular reinforced concrete columns





OUR CONVICTION: FORWARD CONSTRUCTING.

Not just to reflect the current state of building technology, but always to be a decisive step ahead – this is our promise. This is why we constantly achieve pioneering work in all product areas. Our employees consistently use their extensive practical experience and creativity to benefit our customers. Through regular collaborative dialogue with our target groups, we develop today the products which are needed tomorrow. With our dynamics we set consistently milestones in building technology – yesterday, today and tomorrow. This is what we mean by Forward Constructing.

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We are always there for you.
 We will be wherever you are.



RAPIDOBAT®

THE BRAND FORMWORK TUBES

THE PRODUCT

RAPIDOBAT® by H-BAU Technik is a disposable formwork system for casting round and alternative shaped concrete columns. The casing tubes consist of multilaminated paper layers, which are extremely robust.

In addition, the formwork tubes can be specially treated depending on the demands on the exposed concrete and the architect's requirements. A number of designs are available.

ADVANTAGES

- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Integrated ripcord for easy stripping
- Recyclable material
- Keeps its shape even in driving rain
- Matching capitals and bases available

APPLICATION AREAS

Using RAPIDOBAT® formwork tubes, combining architectural freedom with structural feasibility presents no problems. Simple erection, concreting and stripping allow economical and rapid construction. Depending on the client's wishes, the columns can be produced with a barely visible spiral marking for subordinate structures such as cellars or underground car parks, or with a seamless coating for high-quality exposed concrete columns, such as those used in large residential buildings and commercial projects.

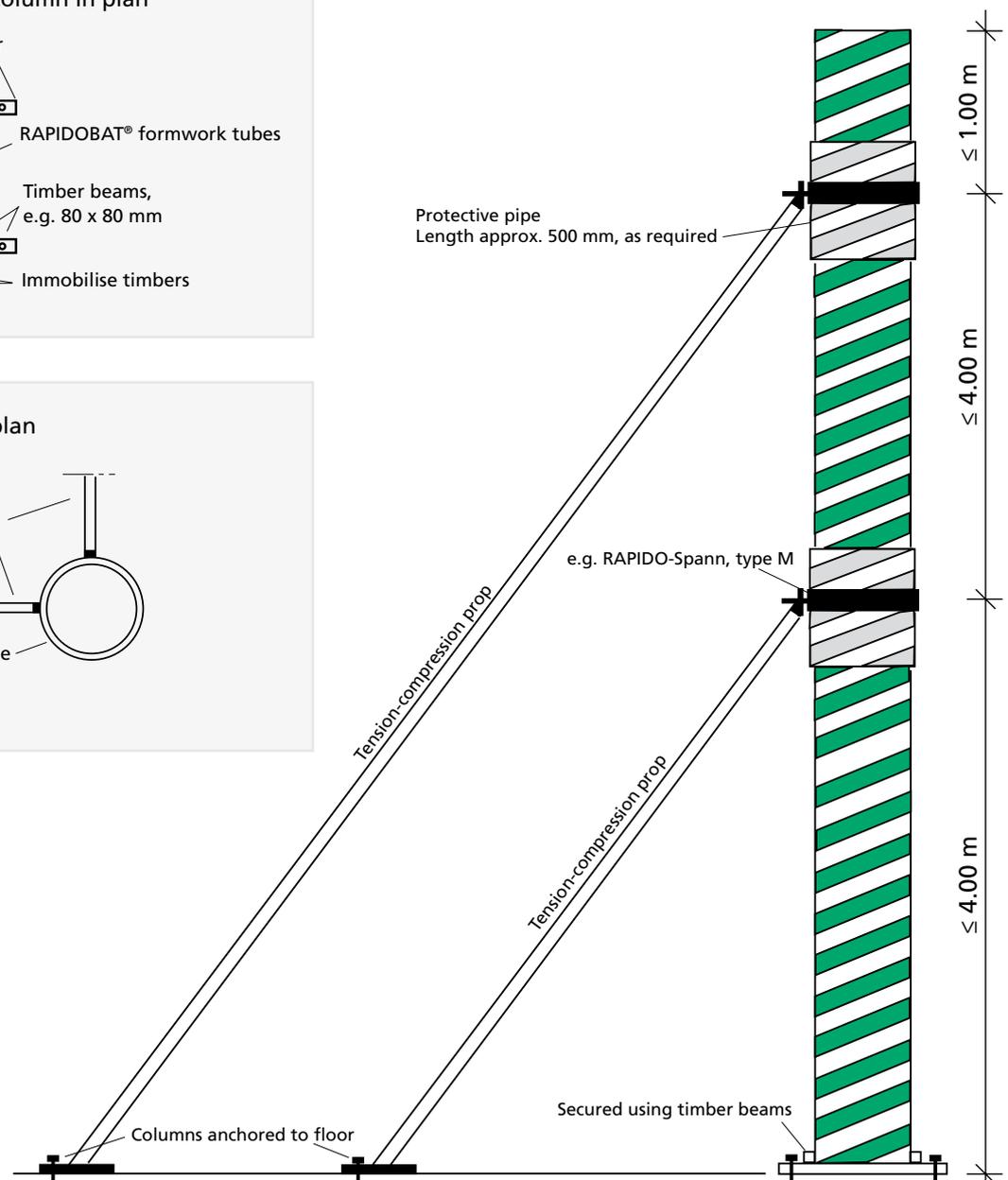
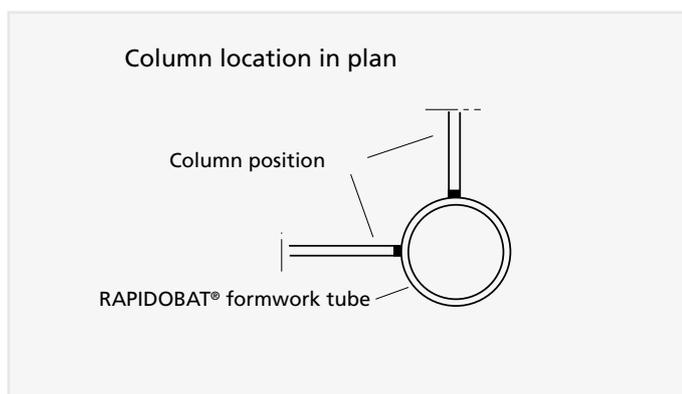
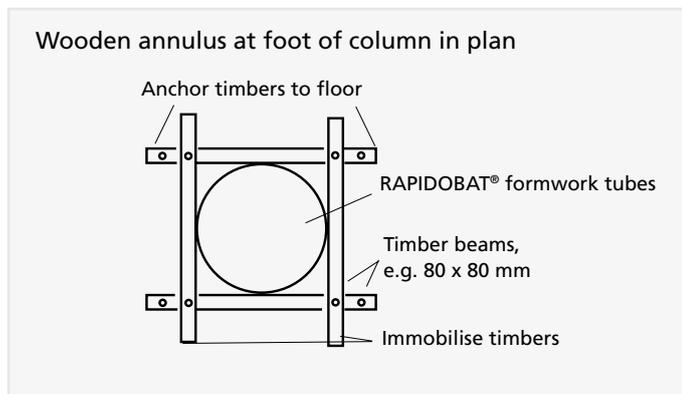
APPLICATION NOTES

SECURING THE RAPIDOBAT® FORMWORK TUBES

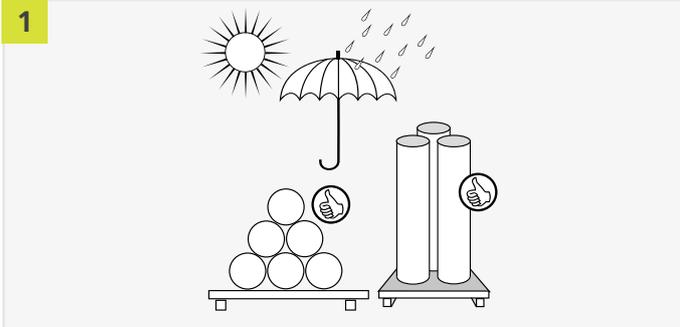
Up to a formwork tube length of 5.00 m the formwork tube can be secured using a single guy plane. Additional guy planes must be used for formwork tube lengths greater than 5.00 m. If heavy tension-compression props are used for guying, we recommend installing additional, short pieces of formwork tube beneath the RAPIDO-Clamp elements. This prevents pressure points on the formwork tube and the concrete column.

LOWER SUPPORTS

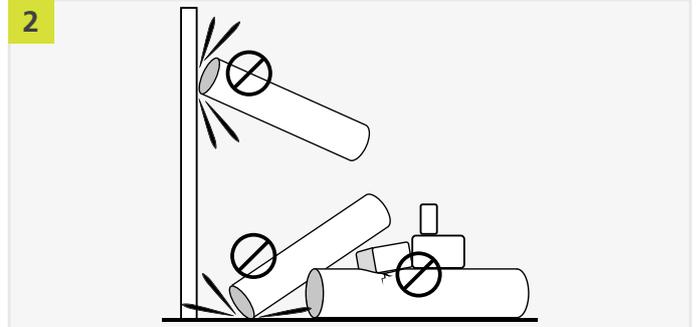
The lower RAPIDOBAT® formwork tube support can be easily provided by a wooden annulus (may be cut using a template), tightly surrounding the outside of the tube. Where larger formwork diameters are used, we recommend providing the formwork tube with an approx. 10 cm high wooden annular base. RAPIDOFIX was specially designed for aligning the RAPIDOBAT® Square and Rectangle models: simple, practical, good. Refer to page 27.



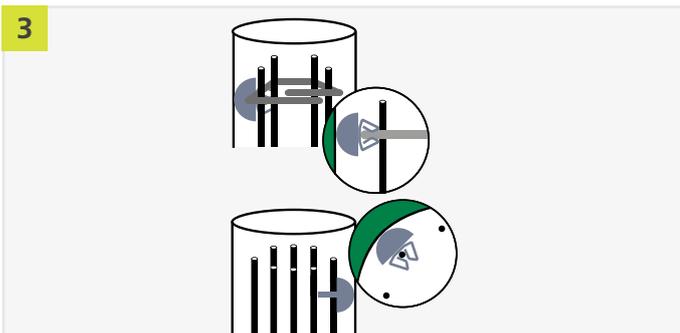
APPLICATION NOTES



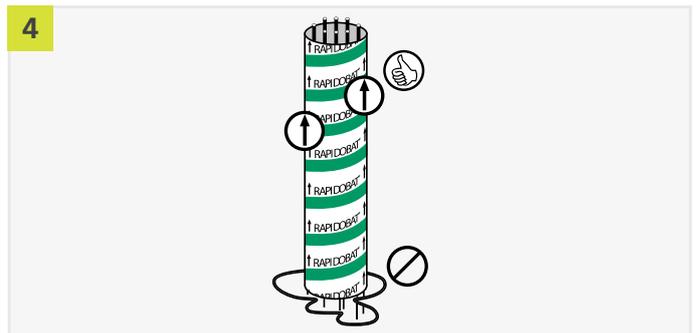
- RAPIDOBAT® formwork tubes must be stored upright and kept dry until used
- They must be protected from atmospheric and soil humidity, as well as heat
- Cover the top of Cretcon HD with film until concreting



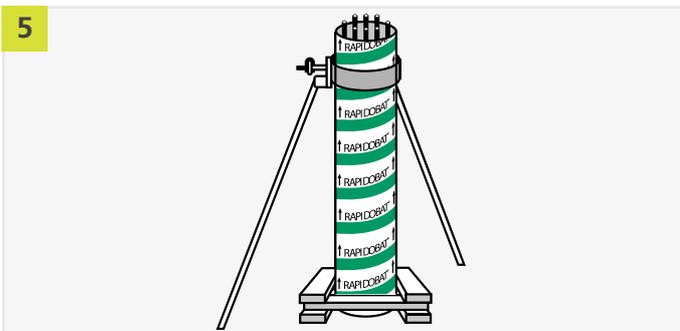
- Check the formwork tube for damage



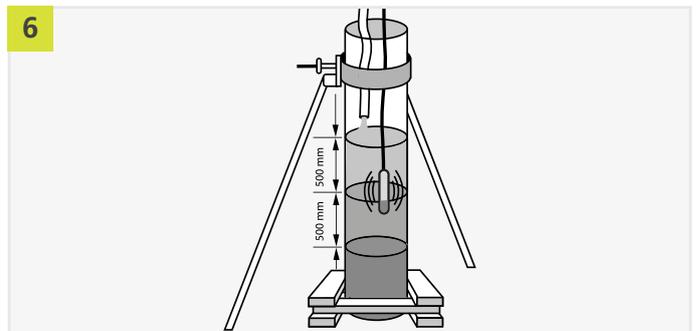
- When choosing column reinforcement, make sure that the external diameter of the reinforcement cage is not too large
- To install the reinforcement cage in the RAPIDOBAT® formwork, there must be sufficient space between the reinforcement and the tube so as not to damage the inner surface
- Spacers must not have sharp edges. We recommend that you use plenty of triangular surface spacers made of fibre concrete with hooks



- Remove standing water from around the columns
- Install RAPIDOBAT® formwork tubes with the arrow pointing upwards

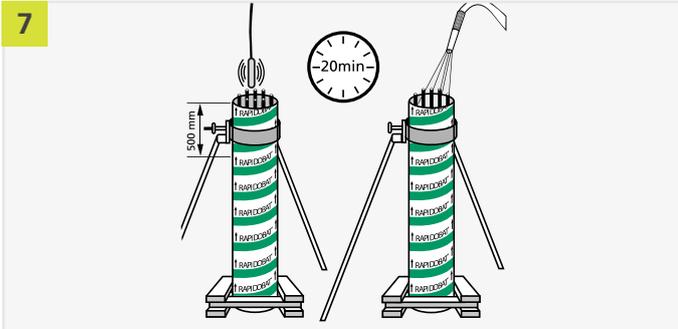


- Secure the bottom of the formwork tube with a wooden annulus (possibly a cut-out template), which tightly encircles the tube
- Columns higher than 4 metres require intermediate bracing in addition to the upper and lower anchoring devices
- For greater heights, bracing is necessary every 3-4 metres

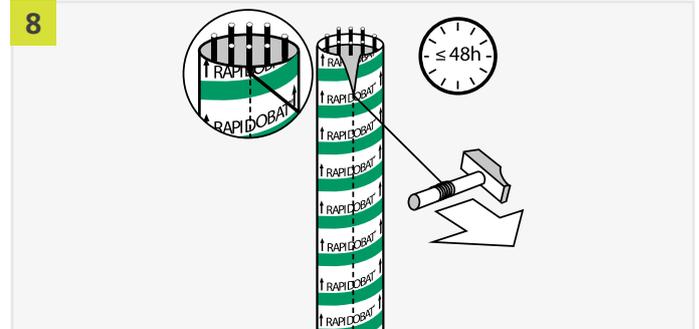


- The RAPIDOBAT® formwork tube is designed to withstand the vibrations and stresses of an internal vibrator
- Caution: Do not use an external vibrator
- Pour the concrete using a filling hose
- Concrete should be placed in the columns and compacted in layers of 50 cm
- Meld the poured layers together by needling

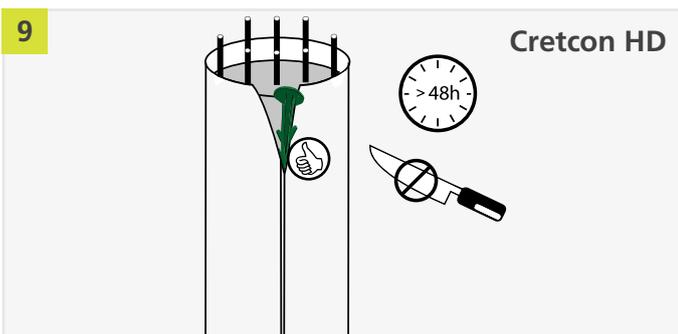
APPLICATION NOTES



- Re-compact the top poured layer before hydration begins
- After re-compaction, apply a water film to the column head
- See the DBV bulletin "Exposed concrete"



- The ripcord integrated in the formwork tube works like a zip
- Use a knife to cut the cover liner near the ripcord
- Wrap the ripcord around a hammer handle, for example, and pull from the top down
- The formwork tube can be opened and removed from the column.
- Make sure that the tube is completely detached from the surface of the concrete



- With RAPIDOBAT® Cretcon HD, the coating must be removed from the column
- Use a knife to score the Cretcon HD coating at the former position of the ripcord (pre-break point)
- Push an insulation anchor or a plastic nail up behind the Cretcon HD coating and pull downwards
- Do not use sharp objects
- The tube can be repositioned around the column as protection

GENERAL INFORMATION

CONCRETING SPEED

| Tube diameter mm | | Concreting speed m/h |
|------------------|------|----------------------|
| from | to | |
| 100 | 300 | 6.0 |
| 300 | 450 | 5.0 |
| 450 | 600 | 3.5 |
| 600 | 1200 | 2.5 |

- When using self-compacting concrete, the concreting speeds must be halved

STRIPPING DEADLINES

- RAPIDOBAT® unlined: Within 48 hours
- RAPIDOBAT® lined: Within 48 hours
- RAPIDOBAT® Cretcon HD: After a minimum of 48 hours

DISPOSAL

- RAPIDOBAT® formwork tubes can be disposed of with the paper recycling



RAPIDOBAT® Cretcon HD

FOR PERFECT
CONCRETE SURFACES

THE PRODUCT

The innovative RAPIDOBAT® Cretcon HD formwork tube provides a high-density concrete surface. With its active, absorbent Cretcon HD coating, the exposed concrete column acquires a previously unachievable, high-quality concrete surface. With the activatable Cretcon HD coating, it is now possible to achieve a previously unattainable high-quality concrete surface finish on exposed concrete columns.

ADVANTAGES

- Exposed concrete class SB 4, proved
- The new standard for exposed concrete construction owing to hydrogel-formwork-skin
- Pore-free, uniform colouring and a matt surface without extra effort
- Perfect exposed concrete not requiring cosmetic improvement

APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. The RAPIDOBAT® tube can then be used to protect the fresh concrete.

CRETCON HD® SURFACE:

H-BAU Technik has taken the RAPIDOBAT® Cretcon HD shuttering tubes and developed them for surface shuttering applications.

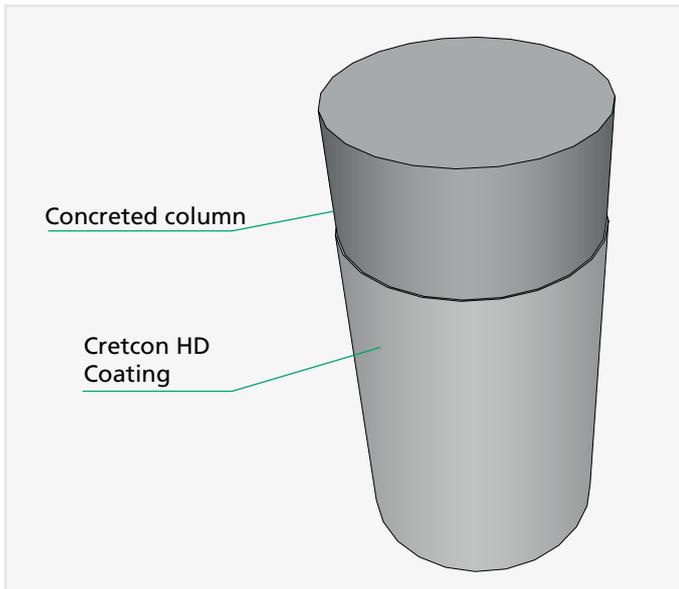
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TECHNICAL INFORMATION



CERTIFIED EXPOSED CONCRETE CLASSIFICATION:

- Highest porosity class P4
 - Highest colour uniformity class FT3
 - Highest texture class T3
 - Highest smoothness class E3
 - Highest construction joint and formwork skin joint class AF4
- Exposed concrete class SB 4

DIMENSIONS

| Type | Ø Internal [mm] | Ø External [mm] | Max. normal length [m] | Weight [kg/m] | Concrete requirement [m³/m] |
|------|-----------------|-----------------|------------------------|---------------|-----------------------------|
| 200 | 200 | 206 | 6.00 | 2.09 | 0.031 |
| 240 | 240 | 247 | 7.00 | 2.97 | 0.045 |
| 250 | 250 | 257 | 7.00 | 3.02 | 0.049 |
| 300 | 300 | 308 | 7.00 | 4.11 | 0.071 |
| 350 | 350 | 360 | 7.00 | 5.37 | 0.096 |
| 360 | 360 | 370 | 7.00 | 5.50 | 0.102 |
| 400 | 400 | 410 | 7.00 | 6.27 | 0.126 |
| 435 | 435 | 445 | 7.00 | 6.65 | 0.149 |
| 450 | 450 | 462 | 7.00 | 7.83 | 0.159 |
| 500 | 500 | 514 | 7.00 | 9.54 | 0.196 |
| 560 | 560 | 574 | 7.00 | 10.67 | 0.246 |
| 600 | 600 | 614 | 7.00 | 11.50 | 0.283 |
| 650 | 650 | 666 | 7.00 | 13.91 | 0.332 |
| 700 | 700 | 716 | 7.00 | 14.97 | 0.385 |
| 750 | 750 | 768 | 7.00 | 17.60 | 0.442 |
| 800 | 800 | 820 | 7.00 | 20.74 | 0.503 |



WINNER OF THE 2013 INNOVATION PRIZE

SHAPELIER, BETTER, PORE-FREE

Architects applaud the aesthetics of high-quality exposed concrete columns and contractors welcome the formwork solution to provide them. With its innovative, activatable hydrogel skin, RAPIDOBAT® Cretcon HD formwork creates a unique concrete surface. The innovation is leading the way where previous clients – and other protagonists of perfect exposed concrete architecture – had their reservations because of irritating pores, cavities and mottling.

Standard cardboard formwork tubes provided with a synthetic film insert were compared to the new, jointless RAPIDOBAT® Cretcon HD tubes in a technical evaluation.

During the first test run, Test A, technically incorrect concreting was carried out. In a further concreting run, Test B, the RAPIDOBAT® Cretcon HD casing pipe was correctly concreted. To make conditions more difficult, less suitable concrete was used in both tests.

The official test certificate issued by Dresden Technical University's Institut für Baustofftechnik (Institute for Construction Materials Technology) confirms the excellent results achieved by RAPIDOBAT® Cretcon HD. The test certificate is available to download at: www.h-bau.de

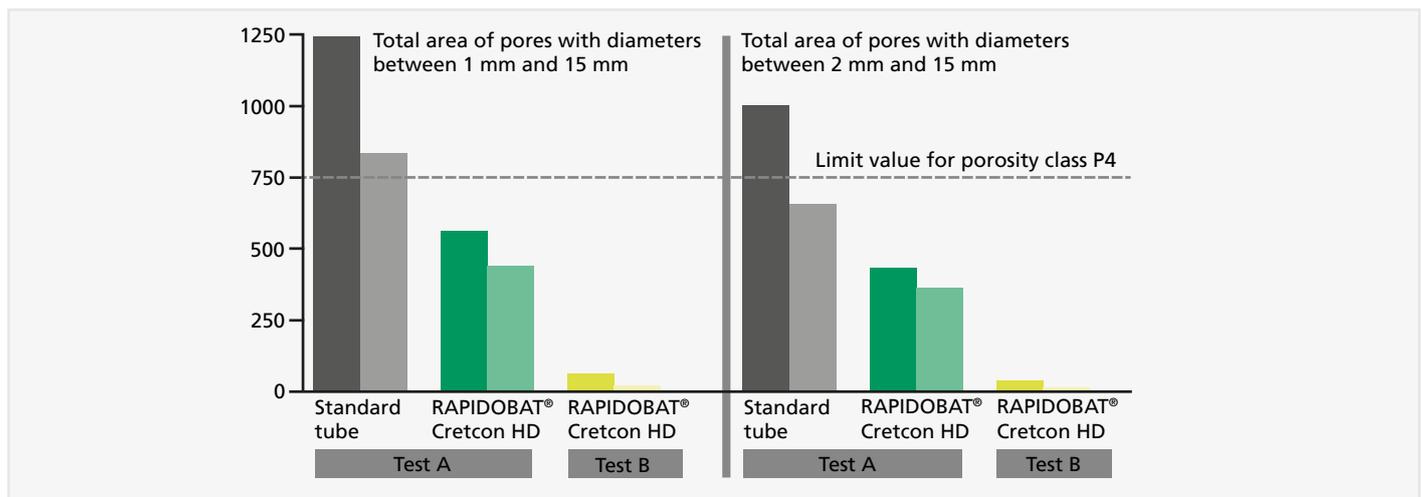


Fig. 1: Total pore area as a function of the type of casing pipe and concreting quality for pore diameters 1 – 15 mm and 2 – 15 mm (source: TU Dresden test report, ref. no. 5.5.1 - 38/2012, p. 10).

PORE-FREE SURFACE WITHOUT COSMETIC IMPROVEMENTS

The overall impression of finished columns by using RAPIDOBAT® Cretcon HD provides a very uniform colouring and a matt surface. Mottling is practically imperceptible. To achieve the best porosity class P4 (lowest percentage of pores) the cumulated pore area visible on the surface may not exceed the limit value of 750 mm². The test surface measures 500 x 500 mm. Despite the enhanced demands on exposed concrete classification the results confirm the overall impression (see Figure 1):

Pore counting on the RAPIDOBAT® Cretcon HD specimens, test B, resulted in an average pore area of 22 mm². This is **less than 3%** of the maximum allowable 750 mm² pore area.

Cosmetic post-treatment is no longer necessary. This allows reliable and absolutely unchallengeable classification into porosity class P4.

- **Test A:** despite the adverse conditions, the RAPIDOBAT® Cretcon HD specimen achieved the required limit of 750 mm² with a clear margin of safety.
- **Test B:** processing under appropriate concreting, however, using only partially suitable concrete, RAPIDOBAT® Cretcon HD is able to produce a nearly pore-free concrete surface.

THE HIGHEST CLASSIFICATION IN EVERY WAY

TEXTURE, FLATNESS, CONSTRUCTION JOINTS AND FORMWORK SKIN JOINTS

The RAPIDOBAT® design means the specimens meet the highest demands of the classifications specified in the DBV "Exposed concrete" fact sheet.

In contrast to the standard tube, RAPIDOBAT® Cretcon HD tubes do not have formwork skin joints and can therefore be unquestionably classified into formwork skin joint class AF 4.

COLOUR UNIFORMITY

The colour of the specimens is so uniform that they achieve the highest classification, FT 3, compliant with the DBV "Exposed concrete" fact sheet.

EXPOSED CONCRETE CLASS

Because all surface characteristics can easily be allocated to the highest DBV "Exposed concrete" fact sheet classifications, the RAPIDOBAT® Cretcon HD specimens achieved the highest exposed concrete class, SB4 (see Table 1).

The very low number of pores is particularly noteworthy. Using the innovative RAPIDOBAT® Cretcon HD, exposed concrete class 4 can therefore be achieved easily and above all very reliably.



Fig. 1: without RAPIDOBAT® Cretcon HD



Fig. 2: with RAPIDOBAT® Cretcon HD

| Columns from formwork pipes | Concreting | Individual classification | | | | | Exposed concrete class |
|-----------------------------|------------|---------------------------|-----|------|-----|------|------------------------|
| Standard tubes | A | P 3 | T 3 | FT 1 | E 3 | AF 4 | SB 1 |
| RAPIDOBAT® Cretcon HD | A | P 4 | T 3 | FT 3 | E 3 | AF 4 | SB 4 |
| RAPIDOBAT® Cretcon HD | B | P4 | T 3 | FT 3 | E 3 | AF 4 | SB 4 |

Tab. 1: Deriving the exposed concrete class from individual classifications (source: TU Dresden test report, ref. no. 5.5.1 - 38/2012, p. 10).



RAPIDOBAT® Lined

FOR VERY SMOOTH
CONCRETE SURFACES

THE PRODUCT

By employing a special foil, the concrete column meets the highest demands of formwork skin class SHK3 and texture class T3.

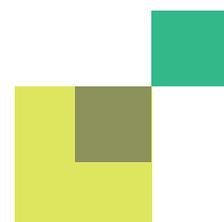
This means that RAPIDOBAT® Lined is particularly well suited to produce economical exposed concrete columns in a very short time.

ADVANTAGES

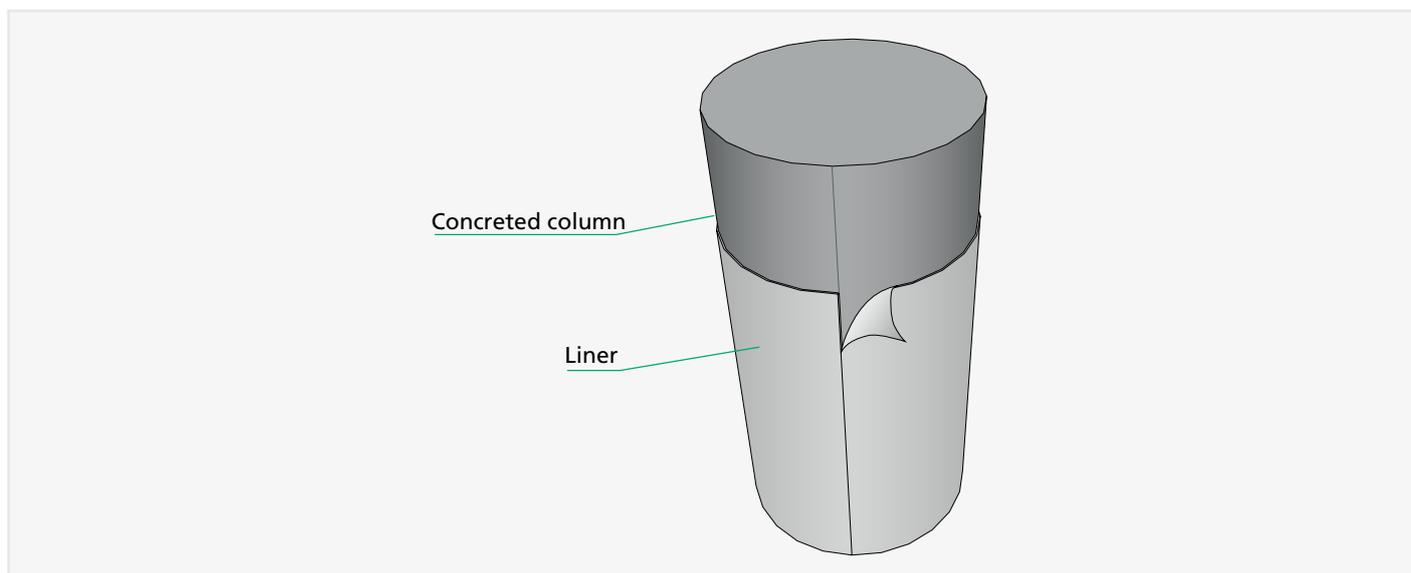
- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Recyclable material
- Keeps its shape even in driving rain
- Matching capitals and bases available

APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. The RAPIDOBAT® tube can then be used to protect the fresh concrete.



TECHNICAL INFORMATION



DIMENSIONS

| Type | Ø Internal [mm] | Ø External [mm] | Max. normal length* [m] | Weight [kg/m] | Concrete requirement [m³/m] |
|------|-----------------|-----------------|-------------------------|---------------|-----------------------------|
| 150 | 150 | 156 | 7.00 | 1.43 | 0.018 |
| 200 | 200 | 206 | 7.00 | 1.83 | 0.031 |
| 240 | 240 | 247 | 7.00 | 2.66 | 0.045 |
| 250 | 250 | 257 | 7.00 | 2.70 | 0.049 |
| 300 | 300 | 308 | 7.00 | 3.72 | 0.071 |
| 350 | 350 | 360 | 7.00 | 4.92 | 0.096 |
| 360 | 360 | 370 | 7.00 | 5.03 | 0.102 |
| 400 | 400 | 410 | 7.00 | 5.79 | 0.126 |
| 435 | 435 | 445 | 7.00 | 6.21 | 0.149 |
| 450 | 450 | 462 | 7.00 | 7.35 | 0.159 |
| 500 | 500 | 514 | 7.00 | 9.23 | 0.196 |
| 560 | 560 | 574 | 7.00 | 11.23 | 0.246 |
| 600 | 600 | 614 | 7.00 | 12.11 | 0.283 |
| 650 | 650 | 666 | 7.00 | 14.57 | 0.332 |
| 700 | 700 | 716 | 7.00 | 15.68 | 0.385 |
| 750 | 750 | 768 | 7.00 | 18.35 | 0.442 |
| 800 | 800 | 820 | 7.00 | 21.54 | 0.503 |
| 900 | 900 | 921 | 7.00 | 26.23 | 0.636 |
| 1000 | 1000 | 1025 | 7.00 | 30.81 | 0.785 |
| 1200 | 1200 | 1226 | 6.00 | 38.95 | 1.131 |

* Other dimensions and lengths on request



RAPIDOBAT® Unlined

FOR SMOOTH CONCRETE
SURFACES WITH BARELY
VISIBLE SPIRAL MARKINGS

THE PRODUCT

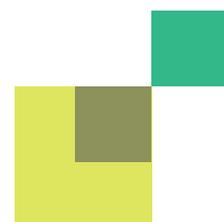
RAPIDOBAT® Unlined formwork tubes are characterised by a smooth concrete surface with barely visible spiral markings. They are highly suited to simple structures designed for functionality and economy.

ADVANTAGES

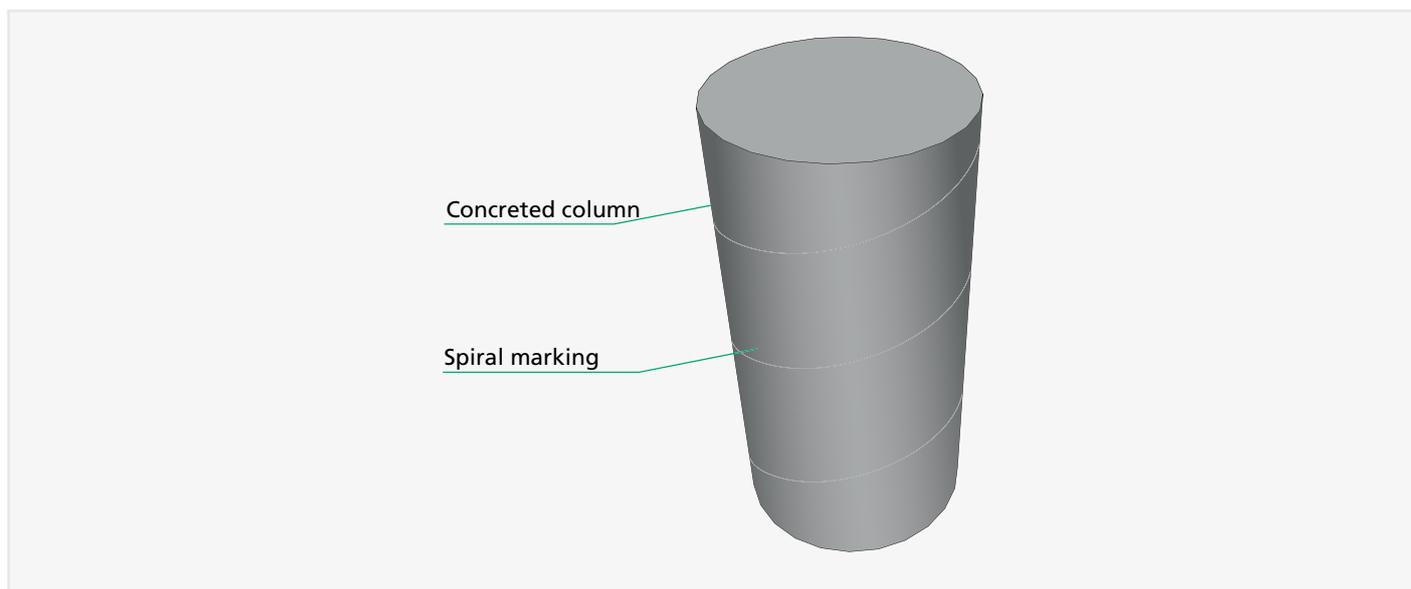
- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Recyclable material
- Keeps its shape even in driving rain
- Matching capitals and bases available

APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. The RAPIDOBAT® tube can then be used to protect the fresh concrete.



TECHNICAL INFORMATION



DIMENSIONS

| Type | Ø Internal [mm] | Ø External [mm] | Max. normal length* [m] | Weight [kg/m] | Concrete requirement [m³/m] |
|------|-----------------|-----------------|-------------------------|---------------|-----------------------------|
| 150 | 150 | 156 | 7.00 | 1.14 | 0.018 |
| 200 | 200 | 206 | 7.00 | 1.51 | 0.031 |
| 240 | 240 | 247 | 7.00 | 2.15 | 0.045 |
| 250 | 250 | 257 | 7.00 | 2.24 | 0.049 |
| 300 | 300 | 308 | 7.00 | 3.19 | 0.071 |
| 350 | 350 | 360 | 7.00 | 4.32 | 0.096 |
| 360 | 360 | 370 | 7.00 | 4.42 | 0.102 |
| 400 | 400 | 410 | 7.00 | 4.94 | 0.126 |
| 435 | 435 | 445 | 7.00 | 5.35 | 0.149 |
| 450 | 450 | 462 | 7.00 | 6.55 | 0.159 |
| 500 | 500 | 514 | 7.00 | 8.12 | 0.196 |
| 560 | 560 | 574 | 7.00 | 9.09 | 0.246 |
| 600 | 600 | 614 | 7.00 | 9.75 | 0.283 |
| 650 | 650 | 666 | 7.00 | 12.01 | 0.332 |
| 700 | 700 | 716 | 7.00 | 12.96 | 0.385 |
| 750 | 750 | 768 | 7.00 | 15.55 | 0.442 |
| 800 | 800 | 820 | 7.00 | 18.42 | 0.503 |
| 900 | 900 | 921 | 7.00 | 22.75 | 0.636 |
| 1000 | 1000 | 1025 | 7.00 | 26.94 | 0.785 |
| 1200 | 1200 | 1226 | 6.00 | 34.36 | 1.131 |

* Other dimensions and lengths on request



RAPIDOBAT® Square

FOR SQUARE
REINFORCED-CONCRETE
COLUMNS

THE PRODUCT

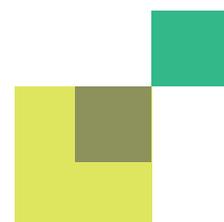
RAPIDOBAT® formwork tubes for square reinforced concrete columns consist of high-quality wound paper layers. The specially coated mediumdensity fibreboard inserts in the RAPIDOBAT® tubes provide a perfect concrete surface. The designs are chamfered at the corners.

ADVANTAGES

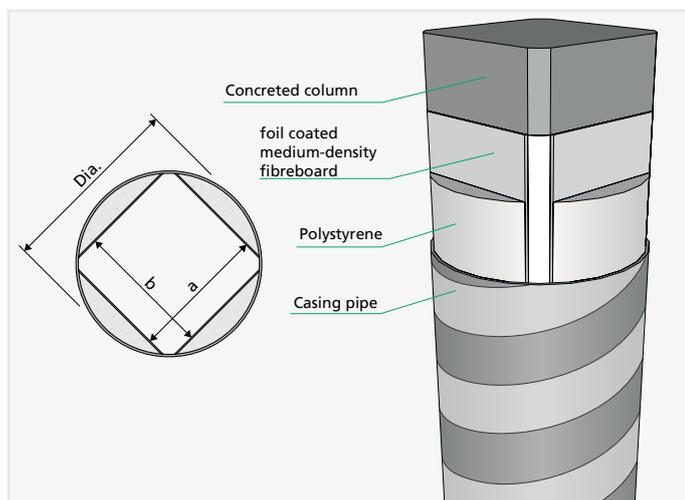
- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Recyclable material
- Inner and outer liners are impermeable to water
- Keeps its shape even in driving rain
- Matching capitals and bases available

APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. Using RAPIDOBAT® formwork tubes, combining architectural freedom with structural feasibility presents no problems. Simple erection, concreting and stripping allow economical and rapid construction.



TECHNICAL INFORMATION



The jointless formwork of design A and the plastic corner profiles of design B enable, with their formwork skin consistency, concrete surfaces for the highest demands.

Design A: formwork tube with integrated chamfer
Design B: formwork tube with plastic corner profile

DIMENSIONS

| Type | Design | Chamfer [mm] | Dimensions* a x b [mm] | Ø External [mm] | Max. normal length** [m] | Weight [kg/m] | Concrete requirement [m³/m] |
|-------|--------|--------------|------------------------|-----------------|--------------------------|---------------|-----------------------------|
| 20/20 | A | 18 | 200 x 200 | 273 | 5.00 | 6.90 | 0.040 |
| 24/24 | A | 22 | 240 x 240 | 325 | 5.00 | 7.30 | 0.057 |
| 25/25 | A | 21 | 250 x 250 | 342 | 5.00 | 7.50 | 0.062 |
| 30/30 | A | 24 | 300 x 300 | 411 | 5.00 | 9.50 | 0.089 |
| 35/35 | B | 22 | 350 x 350 | 515 | 5.00 | 14.10 | 0.122 |
| 40/40 | B | 22 | 400 x 400 | 615 | 5.00 | 17.20 | 0.160 |
| 45/45 | B | 22 | 450 x 450 | 667 | 5.00 | 21.50 | 0.202 |
| 50/50 | B | 22 | 500 x 500 | 737 | 5.00 | 26.80 | 0.250 |

* Other dimensions on request

** Longer lengths available. Horizontal panel joint above 5.00 m



RAPIDOBAT® Rectangular, hexagon and octagon

FOR ANGULAR
REINFORCED-CONCRETE
COLUMNS

THE PRODUCT

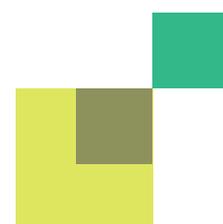
RAPIDOBAT® formwork tubes for angular reinforced concrete columns consist of high-quality wound paper layers. The specially coated medium density fibreboard inserts in the RAPIDOBAT® tubes provide a perfect concrete surface. The designs are chamfered at the corners.

ADVANTAGES

- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Recyclable material
- Keeps its shape even in driving rain
- Matching capitals and bases available

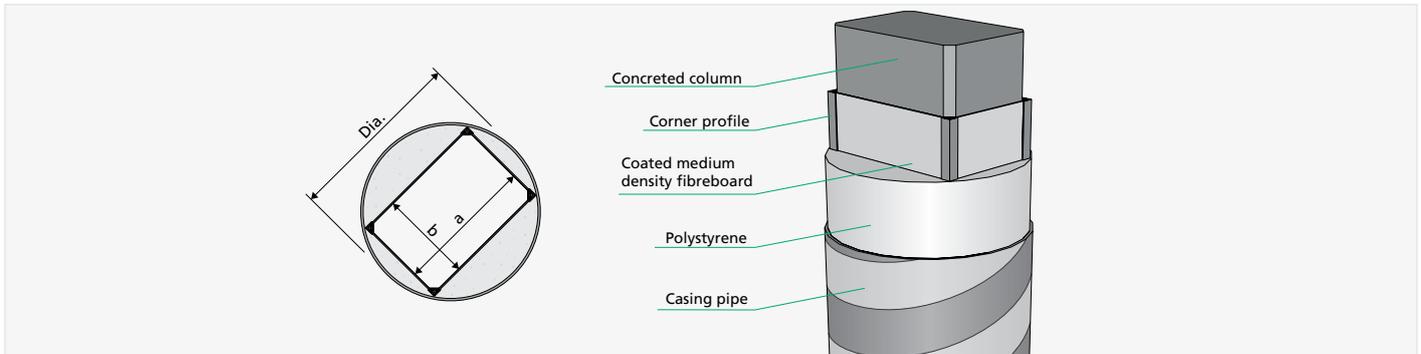
APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. Using RAPIDOBAT® formwork tubes, combining architectural freedom with structural feasibility presents no problems. Simple erection, concreting and stripping allow economical and rapid construction.



TECHNICAL INFORMATION

RAPIDOBAT® RECTANGULAR



DIMENSIONS

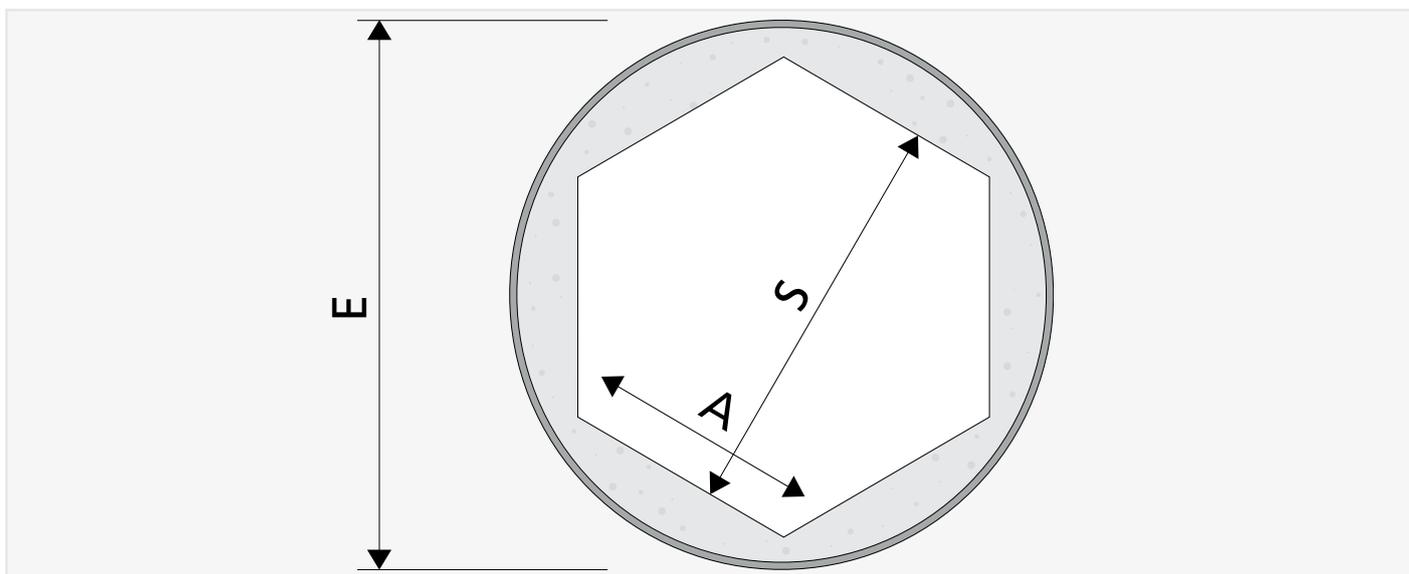
| Type | Chamfer [mm] | Dimensions* a x b [mm] | Ø External [mm] | Max. normal length** [m] | Weight [kg/m] | Concrete requirement [m³/m] |
|---------|--------------|------------------------|-----------------|--------------------------|---------------|-----------------------------|
| 175/240 | 22 | 175 X 240 | 325 | 5.00 | 7.80 | 0.042 |
| 200/240 | 22 | 200 X 240 | 359 | 5.00 | 8.50 | 0.048 |
| 200/250 | 22 | 200 X 250 | 359 | 5.00 | 8.60 | 0.062 |
| 200/300 | 22 | 200 X 300 | 410 | 5.00 | 9.80 | 0.089 |
| 200/350 | 22 | 200 X 350 | 460 | 5.00 | 9.90 | 0.122 |
| 200/400 | 22 | 200 X 400 | 512 | 5.00 | 13.90 | 0.160 |
| 200/450 | 22 | 200 X 450 | 512 | 5.00 | 14.20 | 0.202 |
| 200/500 | 22 | 200 X 500 | 572 | 5.00 | 15.50 | 0.250 |
| 240/300 | 22 | 240 X 300 | 410 | 5.00 | 9.70 | 0.040 |
| 240/350 | 22 | 240 X 350 | 445 | 5.00 | 11.00 | 0.057 |
| 240/365 | 22 | 240 X 365 | 461 | 5.00 | 12.50 | 0.062 |
| 240/400 | 22 | 240 X 400 | 512 | 5.00 | 14.00 | 0.089 |
| 240/450 | 22 | 240 X 450 | 572 | 5.00 | 15.30 | 0.122 |
| 240/500 | 22 | 240 X 500 | 572 | 5.00 | 15.30 | 0.160 |
| 250/300 | 22 | 250 X 300 | 410 | 5.00 | 10.00 | 0.202 |
| 250/350 | 22 | 250 X 350 | 460 | 5.00 | 11.10 | 0.250 |
| 250/400 | 22 | 250 X 400 | 512 | 5.00 | 14.30 | 0.089 |
| 250/450 | 22 | 250 X 450 | 572 | 5.00 | 15.20 | 0.122 |
| 250/500 | 22 | 250 X 500 | 614 | 5.00 | 18.00 | 0.160 |
| 300/350 | 22 | 300 X 350 | 512 | 5.00 | 13.70 | 0.202 |
| 300/400 | 22 | 300 X 400 | 572 | 5.00 | 16.10 | 0.250 |
| 300/450 | 22 | 300 X 450 | 572 | 5.00 | 15.50 | 0.122 |
| 300/500 | 22 | 300 X 500 | 614 | 5.00 | 17.20 | 0.160 |
| 350/400 | 22 | 350 X 400 | 572 | 5.00 | 17.70 | 0.202 |
| 350/450 | 22 | 350 X 450 | 614 | 5.00 | 17.50 | 0.250 |
| 350/500 | 22 | 350 X 500 | 665 | 5.00 | 20.40 | 0.160 |
| 400/450 | 22 | 400 X 450 | 665 | 5.00 | 20.30 | 0.202 |
| 400/500 | 22 | 400 X 500 | 665 | 5.00 | 20.10 | 0.250 |

* Other dimensions on request

** Longer lengths available. Horizontal panel joint above 5.00 m

TECHNICAL INFORMATION

RAPIDOBAT® HEXAGON

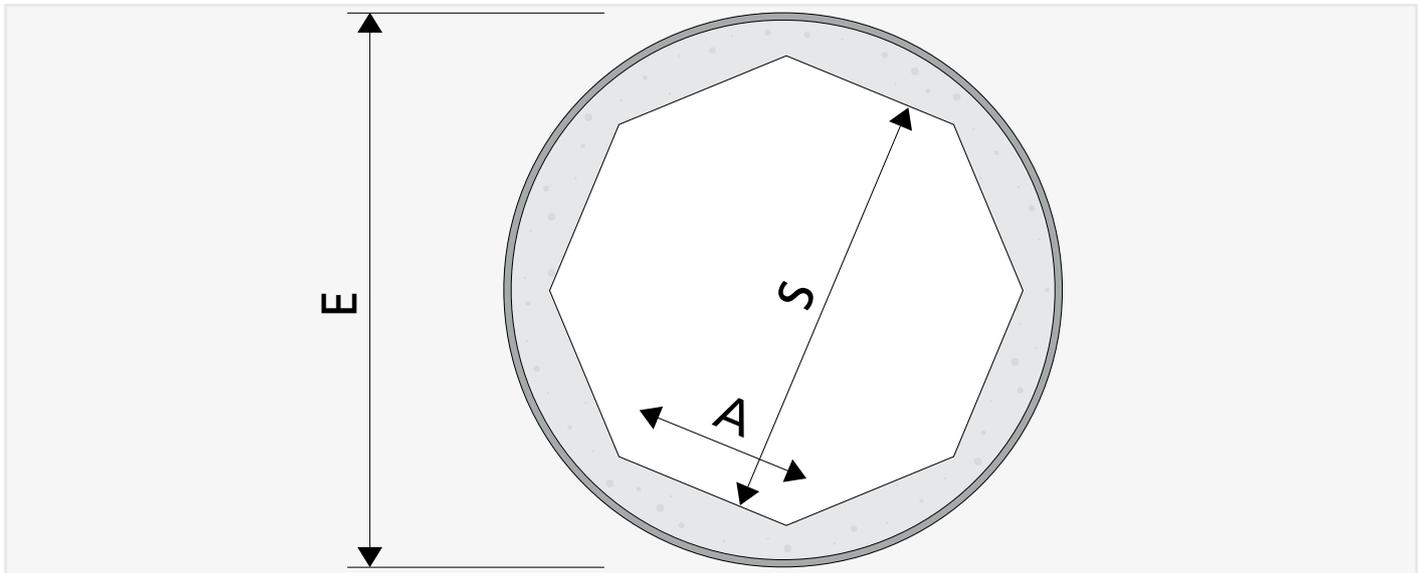


DIMENSIONS

| Type | Ø E [mm] | S [mm] | A [mm] | Weight [kg/m] | Concrete requirement [m³/m] |
|---------|----------|--------|--------|---------------|-----------------------------|
| 173/100 | 209 | 173 | 100 | 2.70 | 0.03 |
| 260/148 | 307 | 260 | 148 | 4.70 | 0.06 |
| 335/198 | 410 | 335 | 198 | 6.50 | 0.10 |
| 530/298 | 614 | 530 | 298 | 11.90 | 0.23 |
| 670/398 | 818 | 670 | 398 | 22.60 | 0.41 |

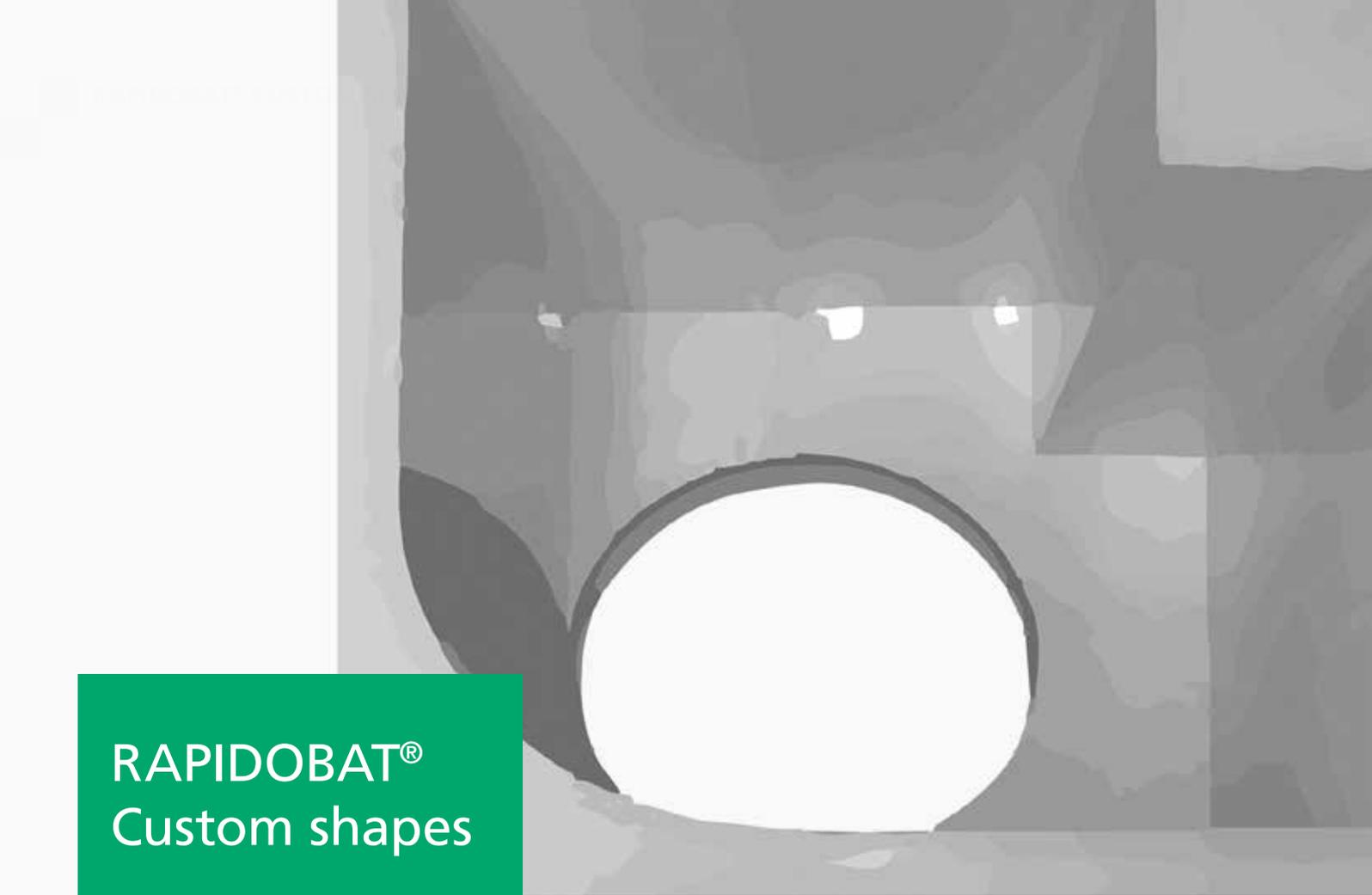
TECHNICAL INFORMATION

RAPIDOBAT® OCTAGON



DIMENSIONS

| Type | Ø E [mm] | S [mm] | A [mm] | Weight [kg/m] | Concrete requirement [m³/m] |
|---------|----------|--------|--------|---------------|-----------------------------|
| 231/96 | 257 | 231 | 96 | 3.50 | 0.03 |
| 277/115 | 307 | 277 | 115 | 4.60 | 0.06 |
| 323/134 | 359 | 323 | 134 | 5.40 | 0.10 |
| 370/153 | 410 | 370 | 153 | 6.30 | 0.23 |
| 554/229 | 614 | 554 | 229 | 11.40 | 0.41 |
| 739/306 | 818 | 739 | 306 | 21.80 | 0.41 |



RAPIDOBAT® Custom shapes

FOR CREATIVE
REINFORCED-CONCRETE
COLUMNS

THE PRODUCT

Any and all creative and complex custom shapes are possible. From conical columns to ellipses or L-columns.

We manufacture to your drawings and specifications. Just ask!

ADVANTAGES

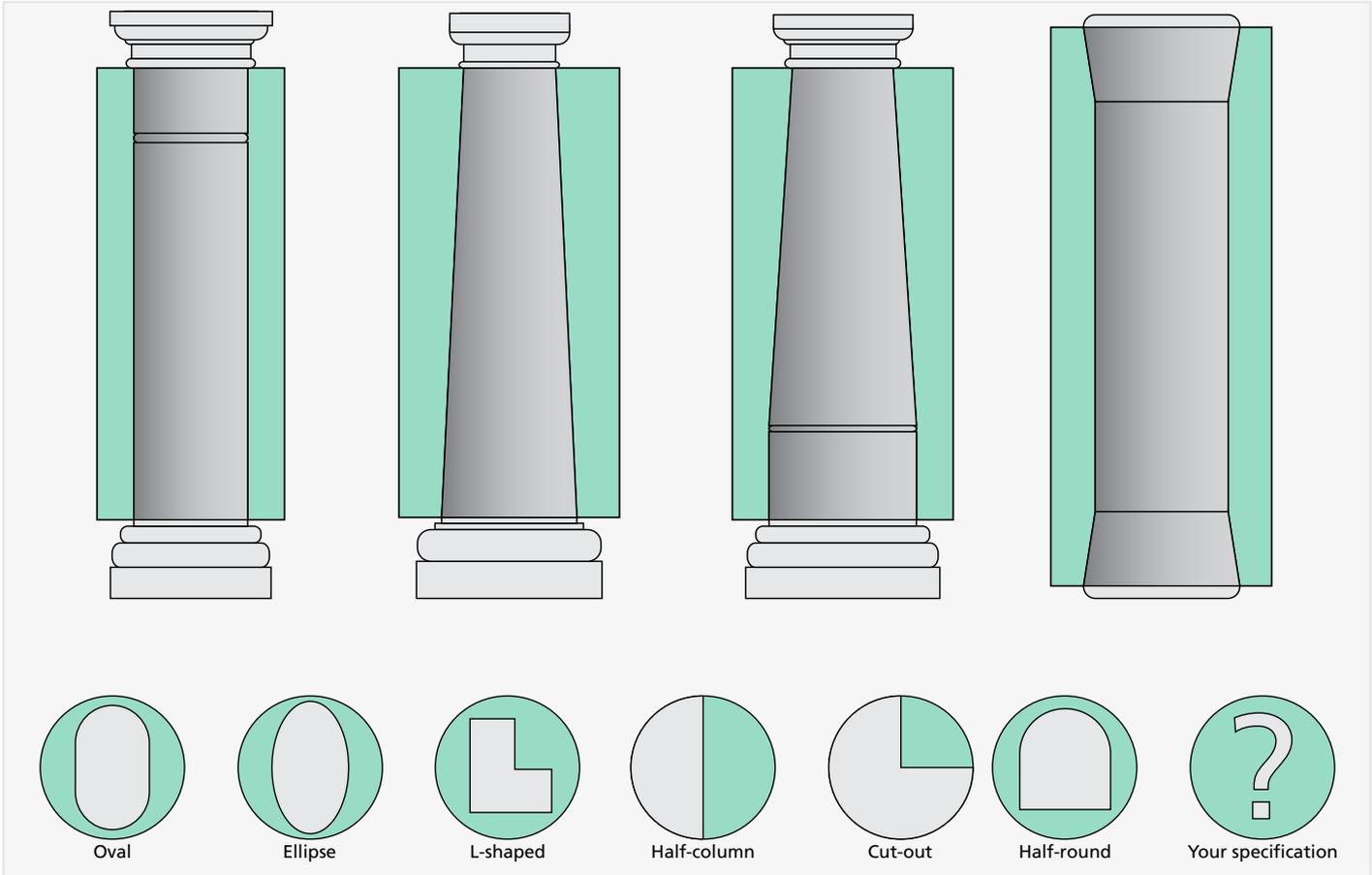
- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Recyclable material
- Keeps its shape even in driving rain

APPLICATION AREAS

The integrated ripcord allows quick and easy stripping of the reinforced concrete column. The RAPIDOBAT® tube can then be used to protect the fresh concrete.

TECHNICAL INFORMATION / VARIANTS

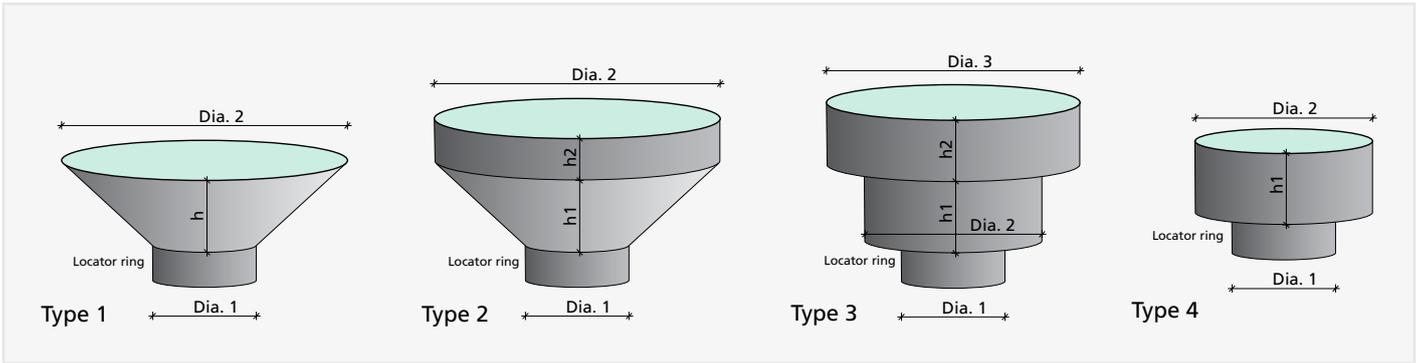
FORMWORK FOR SPECIAL APPLICATIONS



PLASTIC COLUMN HEADS

One- and two-piece plastic column heads with locator ring for angular and round columns. Attached to the RAPIDOBAT® formwork tube by means of the locator ring.

Wide range of dimensions possible. Just ask!





RAPIDOBAT® Capitals and bases

FOR ENHANCING THE
AESTHETIC APPEAL OF
REINFORCED-
CONCRETE COLUMNS

THE PRODUCT

The capital and base shuttering consist of a two-part rigid polystyrene foam shuttering element. These shuttering elements eliminate virtually all of the usual constraints that apply when designing columns. For the construction of stylish new buildings and structures, as well as for the restoration of historical buildings, these shuttering elements are a quick, cost-effective solution. By applying the gel-like release agent to the shuttering, it can be removed without hassle.

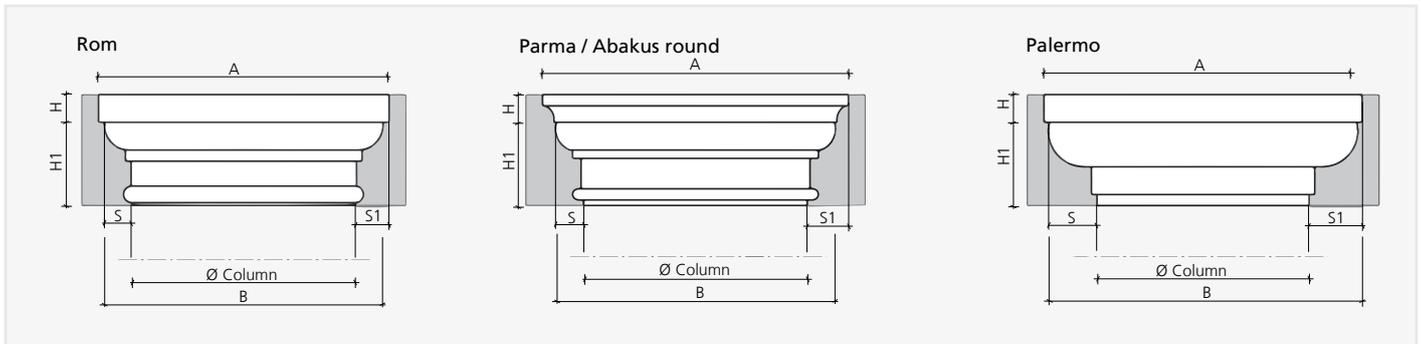
ADVANTAGES

- Capitals and bases can be produced at low cost
- A wide variety of geometries possible
- Shuttering can be completed in very little time
- Can be used multiple times if treated with care
- Wide range of accessories such as shuttering elements and abacuses

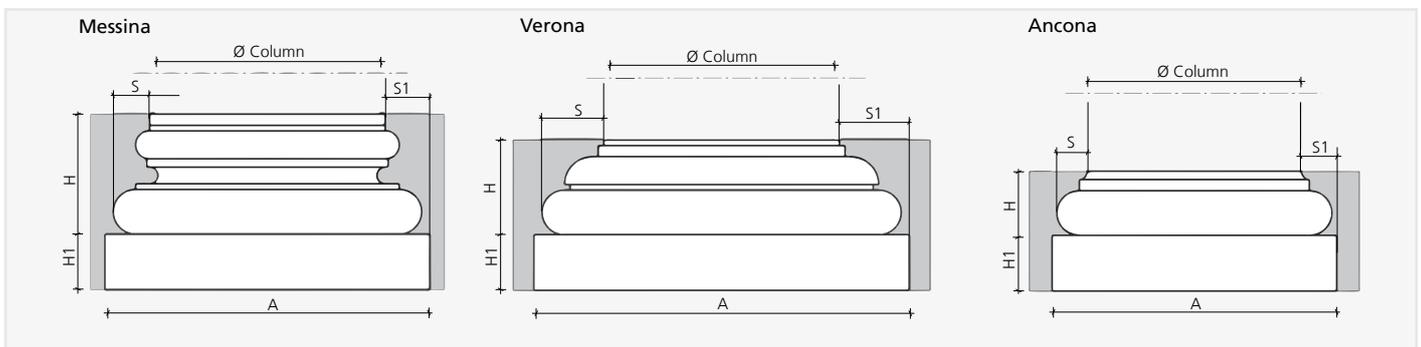
APPLICATION AREAS

To achieve the best concrete surface finish, the base must be filled with concrete first. The shuttering tube must then be fixed to the concrete base. The capital must then be shuttered in the correct position on the shuttering tube and secured there. Concreting can then begin.

TECHNICAL INFORMATION



| Capital type | H [mm] | H1 [mm] | S [mm] | S1 [mm] | A [mm] |
|----------------|--------|---------|--------|---------|----------------|
| Rom | 50 | 150 | 50 | 60 | Ø Column + 120 |
| Parma | 50 | 150 | 50 | 90 | Ø Column + 180 |
| Palermo | 50 | 150 | 100 | 110 | Ø Column + 220 |



| Base type | H [mm] | H1 [mm] | S [mm] | S1 [mm] | A [mm] |
|----------------|--------|---------|--------|---------|----------------|
| Messina | 200 | 100 | 80 | 90 | Ø Column + 180 |
| Verona | 200 | 100 | 70 | 80 | Ø Column + 160 |
| Ancona | 200 | 100 | 55 | 65 | Ø Column + 130 |

Only a few of the many capitals and bases available for RAPIDOBAT® formwork tubes are shown here. Please ask to see further options!



RAPIDOBAT® Accessories

FOR SECURE RETENTION WHEN CONSTRUCTING COLUMNS

THE PRODUCT

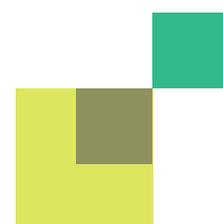
Our proven fastening elements have been specially developed for RAPIDOBAT® shuttering tubes and provide secure retention when concreting.

ADVANTAGES

- Tried and trusted manufacturer of highest quality column formwork for more than 20 years
- Suitable for all dimensions
- Some are continuously adjustable
- Can be used multiple times if treated with care

APPLICATION AREAS

The RAPIDOBAT® accessories allow for easy fitting, concreting and removal of the shuttering tubes. This, in turn, allows for quick, cost-effective progress in construction.



TECHNICAL INFORMATION

RAPIDO-SPANN

INTENDED USE:

- Upper/superior fixation of RAPIDOBAT®
- Intermediate restraint for exceptional lengths
- Vertical alignment

TYPE SELECTION DEPENDS ON:

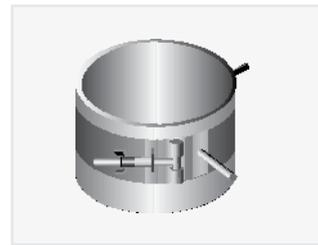
- Formwork tube diameters
- Local conditions
- Application specific needs

RAPIDO-CLAMP TYPE M TYPE TENSION BELT



- Fixed steel-sheet sleeves
- Dywidag bar anchors for attaching the tension and compression props
- Ø 200-600 as a fixed variable
- Set includes 2 pcs.

TYPE STEEL SLEEVE



- Adjustable steel sleeves
- Dywidag bar anchors for attaching the tension and compression props
- Ø 250-1200
- 5 adjustable sizes

RAPIDO-CLAMP TYPE D



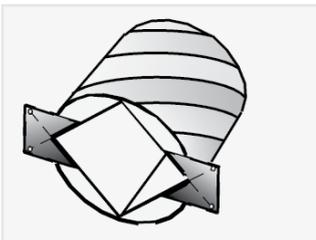
- Adjustable tension belt
- Dywidag bar anchors for alignment with diagonal ties and pressure props
- Clamp with softbearing
- Ø 200-1200

RAPIDO-CLAMP TYPE P



- Adjustable tension belt
- 3 plastic eyelets for tensioning
- Ø 150-1200

RAPIDO-FIX



- Steel angle brackets for alignment of RAPIDOBAT® square and rectangle
- Suitable for all dimensions
- Set includes 2 pcs.

RAPIDOBAT® SLEEVE



- For extending and stabilising RAPIDOBAT® formwork tubes.
- Fixing by hook-and-loop tapes (Velcro® stripes)
- Ø 150-600

INSTALLATION AIDS FOR CAPITALS



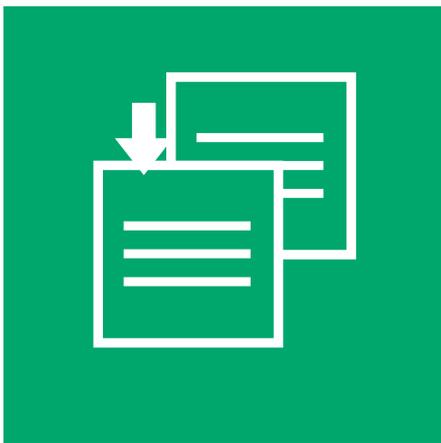
- Suitable for all capitals and tube diameters

DEBONDING AGENTS FOR CAPITALS AND BASES

- Gelatinous release agent
- Requirement per capital/base: approx. 0.65 litres

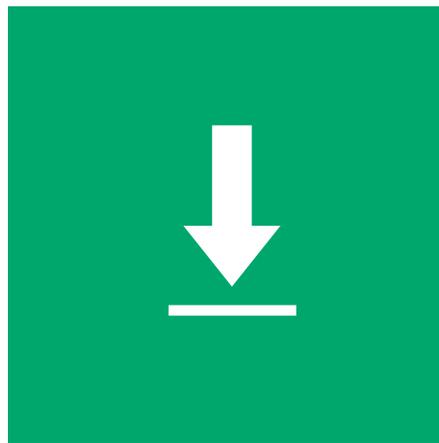
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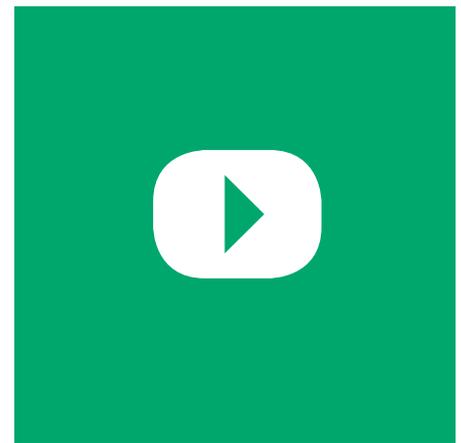
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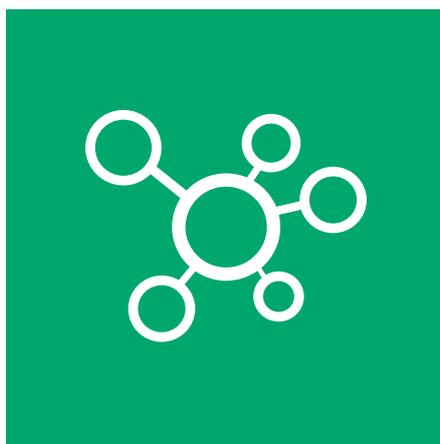
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