





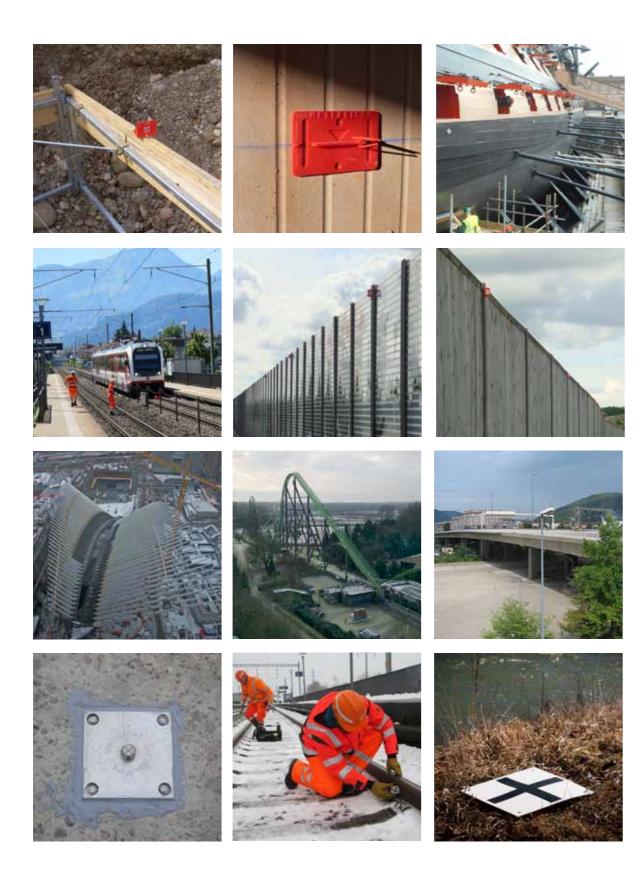




Datum Markers and Smart Targets Marking material and surveying accessories by Rothbucher Systems

The ideal addition to all surveying instruments

Request our price list





Since 1997, Rothbucher Systems has been developing and selling products for the documentation of surveying points on installations and for the observation of buildings and objects of all types

Our products are especially successful in the area of construction surveying and monitoring. Combined with high precision they facilitate the work with modern measuring instruments. They are useful in the field of safety if, for example, difficult or dangerous terrain cannot be walked over for surveying.

High-precision instruments are indispensable to achieve the high demands in surveying today. Therefore, pencil strokes, nails and other unidentifiable markers should be a thing of the past because they do not meet the needs of modern surveying. Precision starts with the surveying points. Only then can high-precision instruments achieve the expected results. This is why our products are highly valued by surveyors, architects, construction managers, and foremen, and why they are standard equipment at progressive construction sites around the world.

On our website www.smart-targets.com, we show many examples of our products in use. This is where you can always find our latest products, and how they can be used.

You will surely also find the right product for your current project on the following pages or matching markers and prisms to supplement your instrument.

You may also contact me personally if you have any questions.



Founder and owner of Rothbucher Systems

Content

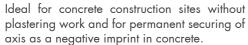
	Datum and Axis Markers RS10 and RS11	6 - 7
1 Pag. 1	Datum and Axis Markers RS20 and RS21	8 - 9
	Datum and Smart Targets RS30 to RS41	10 - 11
ISIS I	Smart Targets RS50 to RS71	12 - 13
	Smart Targets RSAKZ6 Survey Panels made of aluminium RSALU22	14 - 15
	Smart Angle Targets RS80, RS90 and RS100	16 - 17
18 M	Plastic Adaptors with Preinstalled Smart Angle- Targets RSAK80 and RSAK130	18 - 19
- T	Stainless Steel Adaptors with Preinstalled Smart Angle Targets RSAM80 and RSAMG80	20 21
	Plastic Housings with Swivelling Reflective Targets RS183	22 23
	Plastic Housings with 360° Rotary and Swivelling Reflective Targets RS192 and RS193	24 - 25
8	Stake-Out Aids RS95, RS96 and RS97	26 - 27

and the	Mini-prisms RSMP10, RSMP12 and RSMP15	28 - 29
	Plastic housings with rotary mini-prisms RSMP180, RSMP280 and RSMP380	30 - 31
	Plastic Housings with 360° rotary and Swivelling mini-prisms RSMP190, RSMP290 and RSMP390	32 - 33
40	4/4 Boundary Markers RSKM10 - RSKM40 and Measuring Point RSFP1	34 - 35
	Laser Markers RSLT10, RSLT151 and RSLT200	36 - 37
1	Laser Scanner Targets RSL-X90M and RSL301	38 - 39
1	Laser Scanner Targets RSL496 and ground markers RSL510	40 - 41
	Reflective Tagets and Accessories	42 - 43

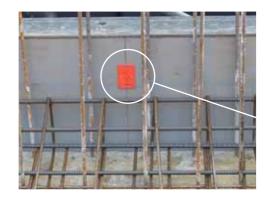




Ideal for concrete construction sites without plastering work and for permanent securing of











Datum and Axis Markers R\$10 and R\$11*



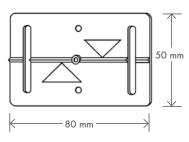
RS10 and RS11* are used to secure the surveyed measurements points at construction sites without plastering work and in door and window jambs.

For permanent securing of the axis until the building is completed, the markers are already measured and fastened in the ceiling formwork, or the slab edge formwork at the axis. The negative imprints which are clearly visible for all trades are used for the dry wall construction or all further installations in the indoors.

The foreman uses the negative imprints at the ceiling edge to transfer the axis right to the freshly concreted ceiling with a string or laser. If required, they can also be used to install the facade.

Datum and axis markers of Rothbucher Systems have already been standard at many construction sites worldwide for years.

Datum and Axis Markers RS10/RS11*









For the protection of datum and axes on building sites with plasterwork.



RS21r fixed to a column. The protrusion is cut in 4-5 times with a carpet knife.



RS21r glued, fastened, and sprayed over with colour to prevent tampering.



Elastic "stubs" for securing the surveyed measurements are securely marked until plastering work is completed.

Datum and Axis Markers RS20 and RS21*



The markers RS20 and RS21* are installed on an unplastered or unrendered wall to provide an unmissable datum to all tradesmen.

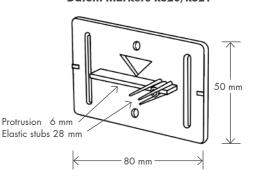
To avoid measurement differences when transferring, the markers have a ledge to which a ruler can be applied.

The elastic "stubs" ensure that the datum is stable until after plastering, and easy to find again. Heights and axes are also secured until plastering work is complete. To avoid tampering, the corners are sprayed over in colour.

After completing all work, the flexible "stubs" are easily pinched off, the rework is very little, and the markers remain under the plaster as proof.

We recommend gluing the markers and securing them at least once.

Datum Markers RS20/RS21





RS30r in industrial construction: Documentation of heights and axes in one product.



RS30r in industrial construction: A perfect measuring point for each measuring instrument.

Combination markers for surveyors and foremen – ideal when using different measuring equipment.



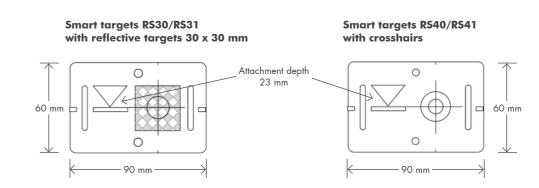
Datum and Surveying Markers RS30 and RS31* RS40 and RS41*



The combination markers RS30 & RS40 permit documentation and permanent security of heights and axis with a single product. If different measuring devices are used at a construction site, the combination markers are the best solution to avoid measuring differences. The height, axis and position number are indicated with number punch or water proof marker pen. Levelling instrument, laser, theodolites, or total station: the combined markers are the perfect surveying point for any instrument!

On difficult ground, the markers are permanently fastened with adhesive, or with dowels and screws. A protrusion to which the measuring rod or a measuring slat can be applied guarantees precise transfer of height.

Crosshairs are imprinted on the backing plate under the exact centre of each reflective target to ensure the survey point is durably marked. If the reflective target is damaged at any point, it can easily be replaced and the original survey point can be restored quickly, easily and cheaply.



Self-adhesive















Smart targets for diverse applications.

Smart targets RS50+RS51* RS60+RS61* RS70+RS71*



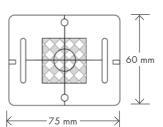
These markers can be used in a variety of situations. Inside buildings, heights and axes are clearly documented. The transfer of axes to the next floor can be done easily and accurately by means of laser or plumb line to stairwells or other openings.

Outdoors they can be fastened permanently to any desired point. There they can be used for the positioning with the tachymeter or are used as a batter board or for securing the height and axis.

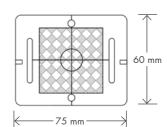
If the markers are fastened to the facade, surveyors and foremen can continue to use them during construction. Facade subcontractors can use them to measure glass or natural stone facades, or as needed. They are also great for 3-dimensional observation of facades, bridges and bulkheads, etc.

Crosshairs are imprinted on the backing plate under each reflective target to ensure the survey point is durably marked.

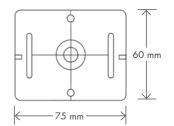
Smart targets RS50/51 with reflective targets 30 x 30 mm



Smart targets RS60/61 with reflective targets 40 x 40 mm



Smart targets RS70/71 with crosshairs



Arabtec Resident Tower Dubai





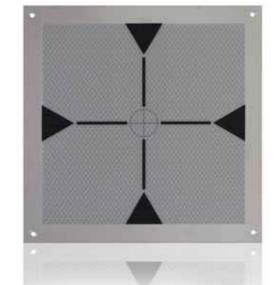






Smart targets RSAKZ6 and RSALU22





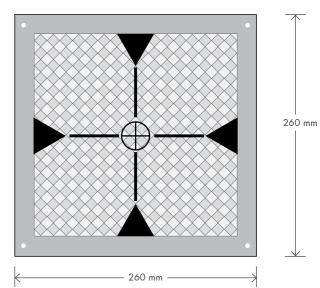
High-Precision Across Large Distances

The RSAKZ6 and RSALU22 smart targets are always used where measurements must be performed across longer distances.

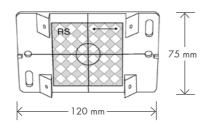
The RSAKZ6 markers are fitted with 60×60 mm reflective targets and the range is approx. 120 m, in the reflectorless mode up to 250 m and more.

The RSALU22 reflective target panels with aluminium plate 260×260 mm and reflective 220×220 mm targets for measurements up to 500 m.

RSALU22 with reflective target 220 x 220 mm



Smart targets RSAKZ6 with reflective targets 60 x 60 mm







Underground Station, World Trade Centre in New York City



RS90r, Underground Station, World Trade Centre



RS80r, Al Sadd Stadion in Qatar

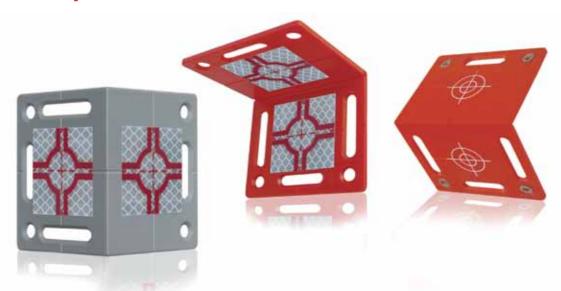


RS90g, Metro in Rotterdam



Al Sadd Stadion in Qatar

Smart Angle Targets RS80, RS90 and RS100



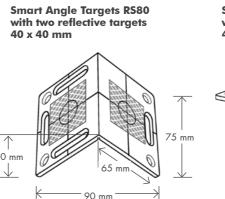
Solutions for Difficult Positions

These markers are used when difficult measuring positions would make it impossible to sight on the reference points.

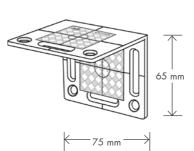
The RS80 markers are installed in "roof-shape". To observe facades and other points, these markers are very well suited as corner solutions. If heights and axis must be transferred from the outside to the inside and vice versa, the markers can be installed, for example, in the window jamb. You can then literally measure around corners.

The RS90 markers, permit sighting on the surveying points from almost any position. For example, an axis, can be sighted from the front, below or above.

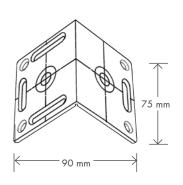
Crosshairs are imprinted on the backing plate under each reflective target to ensure the survey point is durably marked.



Smart Angle Targets RS90 with three reflective targets 40 x 40 mm



Smart Angle Targets RS100 with four cross hairs

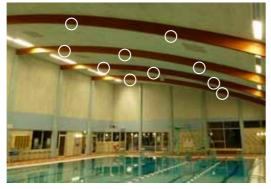




Observation of bridges



Observation of sound barriers walls



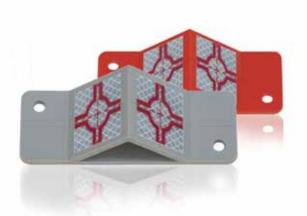
Observation of halls



Surveyors no longer need to enter danger zones

Angled Plastic Adapters RSAK80 and RSAK130





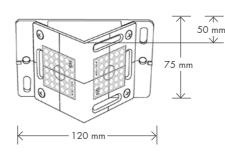
RSAK80 and RSAK130 are used on rails, bridges, noise barrier tunnels, dams, buildings, supports, high-bay shelves, glass and natural stone façades, etc. At a well-planned installation, adapters that are equipped with pre-installed smart angle targets permit access to the surveying point from almost any position.

On railway tracks, for example, the surveyor no longer needs to put himself in danger, but can perform his measurements from a safe position at any time. These targets can potentially eliminate dangerous and expensive road blocks that are no longer necessary, since many measurements can be simplified considerably. 3-dimensional observations are ensured by XYZ coordinates.

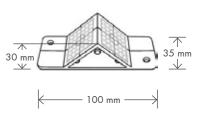
The targets are fitted vertically to the axis in lift shafts. The axes are clearly visible from any position for all workers.

Crosshairs are imprinted on the backing plate under the exact centre of each reflective target to ensure the survey point is durably marked.

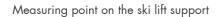
RSAK80 with reflective targets 40 x 40 mm



RSAK130 with reflective targets 30 x 30 mm

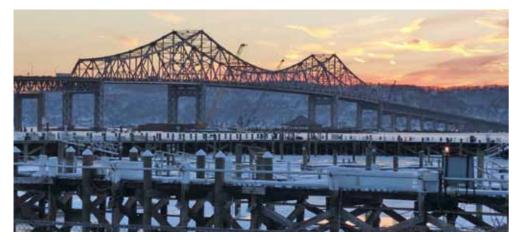








Coentunnel Amsterdam



Bridge monitoring (Tappen Zee Bridge USA)

Adapter RSAM80 and RSAMG80 Stainless steel V4A



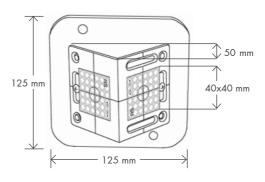
This stainless steel adapter with DW15 thread has been developed specifically for simple and permanent installation during new bridge construction. It is screwed into pre-installed anchor sleeves with adhesive, and aligned with the measuring point.

For concrete bridges, anchor sleeves are often concreted into the cantilever arm and in the cap, at distances of approximately 3 feet. Due to their location they are outstanding markers for bridge surveying. Annoying holes in heavily reinforced concrete are not necessary. Neither are the dangerous and expensive road blocks, since the bridges no longer need to be accessed for surveying.

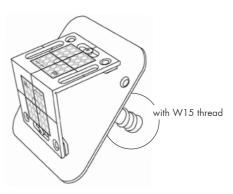
To monitor metal bridges and other metal structures, such as avalanche barriers and earth and rock movements, RSAM80 adapters without threads, for welding or dowelling, can be used.

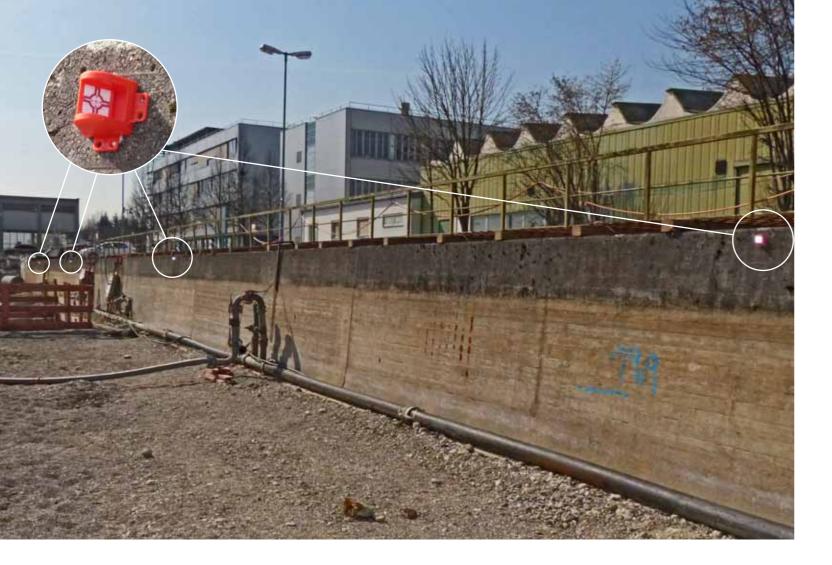
The clip system allows the original measurement point to be restored both quickly and cheaply in the event of damage. This is unique in surveying accessories.

Adapter RSAM80 with reflective targets 40 x 40 mm



Adapter RSAMG80 with DW15 thread with reflective targets 40 x 40 mm







Restore point RSFP-X80g for RS183 and Mini-prisms RSMP180, RSMP280 and RSMP380



RS183 on restore point RSFP-X80g for a simple and fast fitting on every base.

Swivelling Target Reflector RS183*





Plastic housing, turning and combinable

When using tachymeter and total stations, the reflective mark can always be aligned precisely with the measuring instrument. The reflective target can be turned in a radius of 180° making it possible to use the same survey point from different directions.

If the markers are installed in the area of the construction site before construction starts, the foremen or surveyors can use the same surveying point at all times during construction from the excavation to the highest floor. Depending on the construction phase, the markers are adjusted to the construction site process by alignment of the reflective target.

With the integrated plug-in system, several markers can be combined with each other. The targets can be connected to each other in both directions which enables measurement from different directions without having to turn the reflective targets. The distance between the measuring points, with targets which are combined with one another, is always 60 mm.

Adhesives permit quick and simple installation even on difficult surfaces. Provided holes permit attachment with dowels and screws.

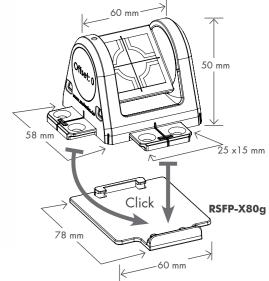
Offset: 0 Height of tilting axis: 30 mm

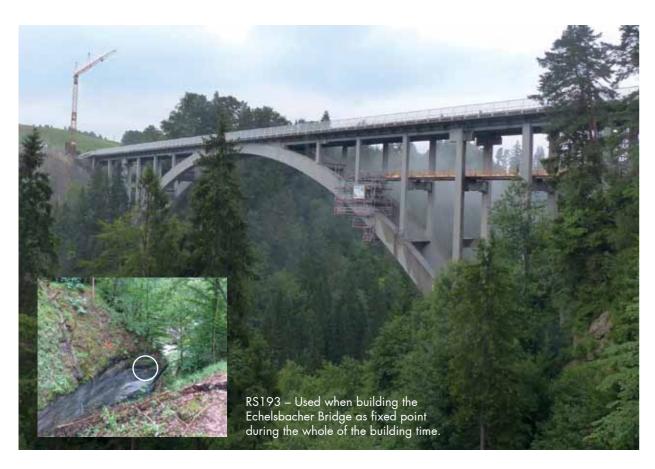






RS183 with reflective targets 30 x 30 mm











Example of the use of RS193rM as a fixed point on different surfaces and for the exact alignment of the drill carriage.

Target Markers RS192 and Reflective Target Markers RS193





Target Markers and Reflective Target Markers can swivel through 360°

Target markers RS192 are used for the deployment of the following instruments: Leica 3D Disto, Geomax Zoom 3D and Flexijet 3D.

We recommend the use of the magnetic version (RS192M)

You can also use the restore point RSFP-X90 with this version (see Page 42).

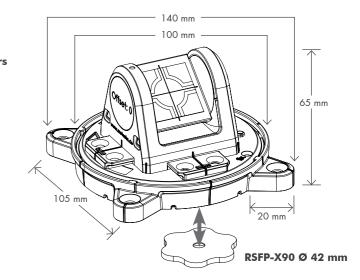
The reflective target markers RS193 for use with tachymeter and total station. The reflective marker can always be set up accurately on the measuring instrument and rotated through a radius of 360°. Thus the same survey point can be used from all directions. When using fixed point RSFP-X90, the targets can be removed and later replaced on the same survey point.

If required the specially developed protective cap RSPC10 protects the reflective mark from fouling.

RS192 with target markers 20 x 20 mm

RS193 with reflective target markers 30 x 30 mm

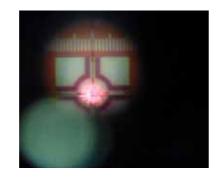
Range approx. 80 m Offset: 0 Height of tilting axis: 45 mm



RS95 – Stake out work on the batter board.







RS96 – Stake out work on the base plate.

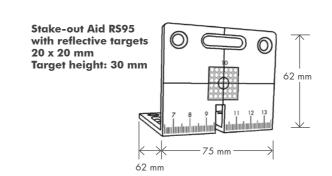
Stake-out aids RS95 and RS96 with reflective target marker and RS97 with non-reflective target marker



Stake-out aids RS95, RS96 and RS97 were developed specifically for stake-out work on the batter board and on a floor slab. Exact measuring of the survey point on the floor slab often causes major problems particularly in the "final phase" with the last 5-10 cm. The work is very time-consuming due to the continual side to side, backwards and forwards with the prism pole and the prism pole always has to be exactly plumb. Stake-out aid RS95 or foldable stake-out aid RS96 or RS97 is placed on the ground, and the assistant can use the measuring scales to reproduce and transfer the surveyor's directions quickly and precisely.

Advantages of the stake-out aids:

- \rightarrow They make surveying the axes on the batter board easier.
- ightarrow Dimensions can be measured quickly and precisely on the floor slab.
- ightarrow The surveyor's dimensional data can be transferred accurately to the floor slab.
- \rightarrow There is no need for precise plumbing of the prism pole.
- → Orientation scale for left and right: the number 10 corresponds to the axis.
- → Orientation scales for backwards and forwards.
- → Foldable: fits in any shirt pocket and in any instrument case. (RS96/RS97).
- → After just a little practice enormous saving of time.



Stake-out Aid RS96
with reflective targets
20 x 20 mm

RS97 with
target markers
20 x 20 mm

Target height: 20 mm

75 mm





RSMP15 Hearst Castle USA



RSMP10 placeable in the smallest column



RSMP15 for measurements with Robotic total station during the loading.



RSMP12 - Monitoring on the brickwork

Mini-prism RSMP10, RSMP12 and RSMP15



RSMP10 with 12.7 mm and RSMP12 with 17.5 mm mini-prism

With the mini prisms RSMP10 and RSMP12, surveyors can now easily and quickly take measurements in cracks, gaps and corners. Fixed dimensions (see product drawings) give the surveyor the exact path from the point of measurement to the base of the housing or the tip of the spike. In forensics prisms are used for the exact surveying of bullet holes. PLEASE NOTE: For precise measurements, the prism must be directly aligned with the surveying instrument!

When using the mini prisms for surveying settlement, the spikes can be removed and thus be inserted or glued into the smallest cracks or holes. On façades, historical buildings, supports and many other objects, monitoring is possible with measuring points that are barely identifiable for the general public. On concrete or masonry objects, small holes can be drilled to countersink the prisms flush with the surface.

Plastic Angle Plate RSMP15 with 12.7 mm mini-prism

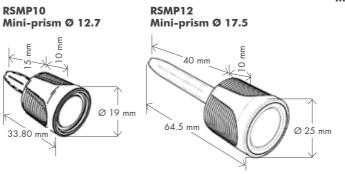
RSMP15 with 12.7 mm mini-prism sticks quickly and easily even to difficult surfaces, e.g. glass and marble facades, historic buildings, steel girders, rails, gas and oil pipelines, etc. or can be fixed with dowels and screws.

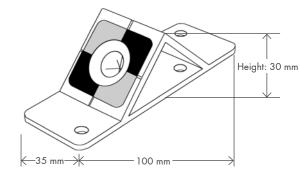
When using robotic total stations:

- → permanent settling monitoring can be carried out during the building work,
- → settling measurements are possible on railway tracks while under the load of rail traffic,
- → bridges and other structures can be monitored even more quickly and precisely.

The prisms can be used up a maximum angle of 30 degrees, in any direction.

RSMP15 Mini-prism Ø 12.7





RSMP10 with Ø 12.7 mm Mini-prism: Offset -10.1 (minus 10.1) [Leica +24.3] RSMP12 with Ø 17.5 mm Mini-prism: Offset -11.3 (minus 11.3) [Leica +23.1] RSMP15 with Ø 12.7 mm Mini-prism: Offset -10.1 (minus 10.1) [Leica +24.3]













RSMP380 with restore point RSFP-X80g.

Miniprism RSMP180, RSMP280 and RSMP380



Plastic housing, turning and combinable with prisms in 12.7 mm, 17.5 mm und 25.4 mm

When using these mini-prisms the measuring points can always be exactly aligned on the measuring instrument and turned in a radius of 180°. This enables the use of the same survey point from different directions. Bridges, facades and many more structures can be observed quicker and more accurately in this way. With the integrated plug-in system, several prisms can be combined with one another. This enables the measurement from different directions, without the need to turn the prism.

The system is supplemented with the restore point RSFP-X80g - see accessories (Page 42). The prisms can be easily fixed when using the restore point RSFP-X80g even on a difficult base with our assembly adhesive RSMK-Fix. After completion of the measurements the prisms can be quickly and easily taken off, and, if necessary, plugged-in again.

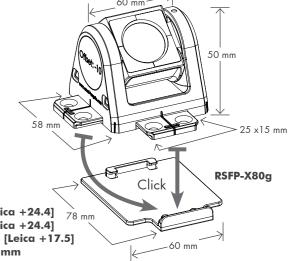
An unplugging of the prisms in the alignment enables the measurement from almost all directions. Provided holes permit attachment with dowels and screws

With mini-prism RSMP180 – in the ATR mode ranges of 100 m to 250 m can be achieved. With mini-prism RSMP280 – in the ATR mode ranges of 300 m to 500 m can be achieved. With mini-prism RSMP380 – in the ATR mode ranges of 500 m to 700 m can be achieved.

The ranges are dependent on the type of instrument used and are affected by the weather and environmental conditions.



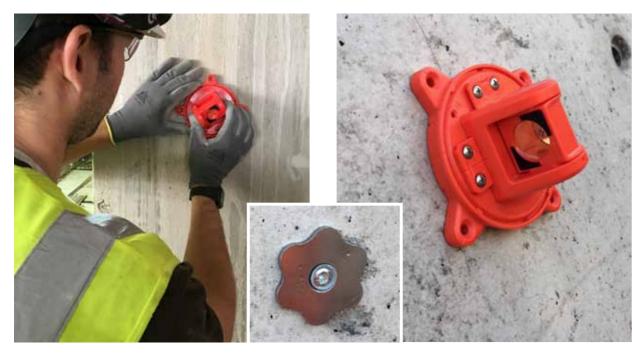




RSMP180 with Ø 12.7 mm mini-prism: Offset -10 (minus 10) [Leica +24.4] 78 RSMP280 with Ø 17.5 mm mini-prism: Offset -10 (minus 10) [Leica +24.4] RSMP380 with Ø 25.4 mm mini-prism: Offset -16.9 (minus 16.9) [Leica +17.5] Height of tilting axis for RSMP180, RSMP280 and RSMP380: 30 mm



Monitoring of HMS Victory in the Historic Dockyard, Portsmouth.



RSFP-X90 (small picture in centre) as restore point for mini-prisms RSMP290r or RSMP390r.

Mini-prism RSMP190, RSMP290 and RSMP390





Plastic housing, turnable and swivellable with prisms in 12.7 mm and 17.5 mm and 25.4 mm

These prisms can be easily stuck on or fixed with dowels and screws even on difficult bases such as, for example, glass and marble facades, historic buildings and gas and oil pipelines. A magnetic version of the base plates is also available for easy installation on steel structures.

When using tachymeters and total stations

- ightarrow the prism can always be aligned accurately with the measuring instrument,
- \rightarrow the prism can be turned in a radius of 360°, making it possible to use the same survey point from almost all directions,
- → bridges, facades and other objects can be monitored even more quickly and more accurately.
- → when using robotic total stations permanent settlement measurements can be carried out during the construction.

With Mini-prism RSMP190, in the ATR mode ranges of 100 m to 250 m can be achieved. With Mini-prism RSMP290, in the ATR mode ranges of 300 m to 500 m can be achieved. With Mini-prism RSMP390, in the ATR mode ranges of 500 m to 700 m can be achieved. The ranges are dependent on the type of instrument used and are affected by the weather and environmental conditions.

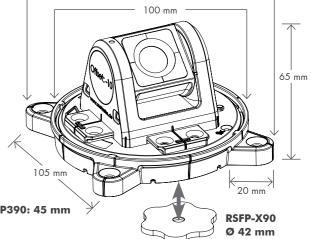
By aiming at already known measuring points ranges of up to 1,000 m can be achieved with robotic total stations. For measurements in manual mode depending on the focus, ranges of approx. 200 m can be obtained.

RSMP190 with Ø 12.7 mm mini-prism: Offset -10 (minus 10) [Leica +24.4]

RSMP290 with Ø 17.5 mm mini-prism: Offset -10 (minus 10) [Leica +24.4]

RSMP390 with Ø 25.4 mm mini-prism: Offset -16.9 (minus 16.9) [Leica +17.5]

Height of tilting axis for RSMP190, RSMP290 and RSMP390: 45 mm















When used as a fixed point on the ground, this point should be surveyed with a prism so that if necessary, for example, if it suspected that the fixed point has been moved due to foul play, it can be checked quickly and easily.

4/4 Boundary Markers RSKM10 to RSKM40



The boundary markers can be used as a 1/4, 1/2 and 3/4 limit or measurement point. They ensure the correct measurement of limit and measuring points on firm surfaces within property boundaries.

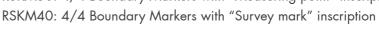
Precise documentation is ensured along inner corners, at a partition or wall and at outer corners. The boundary markers are attached to the base using the special RSMK-FIX mounting adhesive.

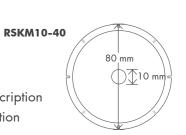
The following products are available:

RSKM10: 4/4 Boundary Markers without inscription

RSKM20: 4/4 Boundary Markers with "Limit" inscription

RSKM30: 4/4 Boundary Markers with "Measuring point" inscription





Measuring Point RSFP1



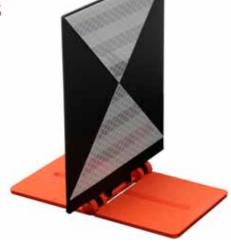
The aluminium plate RSFP1 has a 5/8" stainless steel thread for screwing on a prism or a measuring instrument. If the plate is used as a fixed point at the bottom, the surveyor can position his instrument on his tripod precisely above the cross.

RSFP1 is supplied with a plastic or aluminium protective cap for the $5/8^{\prime\prime}$ thread.



Foldable Laser Targets RSLT10



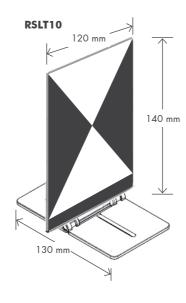


The laser target RSLT10 was developed for the fast and exact alignment of a line laser on axis.

The laser target can be folded down and can then be stored in the laser box or stowed away in another space saving place.

Place the laser target on the axis on which you want to align the laser. Turn the laser with active axis line in the area of the laser target to the left and right until you see the laser line on the laser target and line up the laser on the centre of the target.

Please note: To set up the head must be at the same height beside or behind the laser. Only in this way can the reflection of the laser line be clearly seen and used even in bright sunlight up to a range of 30 m.

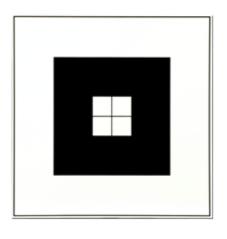


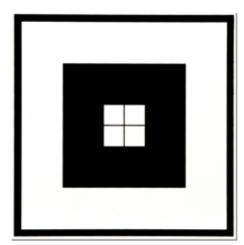






Laser TargetsRSLT151 and RSLT200





The laser targets are used for a quick deployment or when implementing the following instruments:

- → Leica 3D Disto
- \rightarrow Geomax Zoom 3D

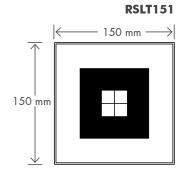
The Laser Target RSLT151 is self-adhesive. If the target is used on inside smooth surfaces the self-adhesive can be used several times.

The Laser Target RSLT200 can be fixed on any base with assembly adhesives.

Both targets are waterproof, temperature and UV resistant and suitable for internal and external use.

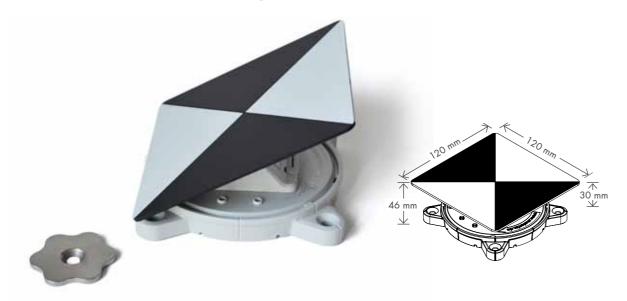






200 mm 200 mm

Laser Scanner Targets RSL-X90M

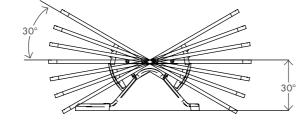


- → Very suitable for use with scanners from Leica, Geomax and Faro.
- → Fixed points for connecting several positions.
- ightarrow Allocation of spatial reference information to a geospatial dataset.
- → Magnetic non-magnetic version available on request.
- → For repeated measurements only a small barely visible stainless steel mark remains on the object.
- \rightarrow In connection with fixed point RSFP-X90
 - a) The target marker RSL-X90M can be placed on the same point again,
 - b) Exactly the same survey point can be calibrated with mini-prisms RSMP190M, RSMP290M, RSMP390M with tachymeter and total station,
 - c) The XYZ-coordinates of the tachymetric measurement can be used.
- → If need be, the laser scanner targets can also be permanently glued or fixed.



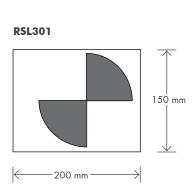






Laser Scanner Targets RSL301*

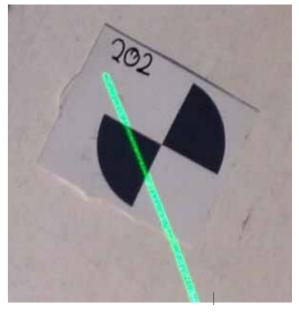




- → Very suitable for use with scanners from Leica, Geomax and Faro,
- → Fixed points for connecting several positions,
- → Allocation of spatial reference information to a geospatial data set,
- → With inscription space for clear assignment of measurement points,
- → Quick and easy attachment,
- → Waterproof,
- → Suitable for indoor and outdoor use.

The laser scanner target RSL301 is self-adhesive. If the target is used internally on smooth surfaces the self-adhesive effect can be used several times.





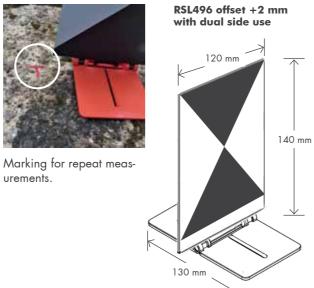
*Self-adhesive

Laser Scanner Targets RSL496



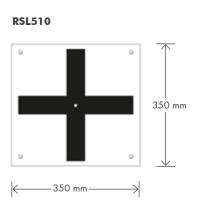
- → Very suitable for use with scanners by Leica, Geomax, Faro as well as the scan function of the Leica MS50 and for bolt VZ 400 from a distance of 50 m.
- → Fixed points for connecting several positions.
- → Allocation of spatial reference information to a geospatial dataset.
- → Can be used from two sides since it is printed on both sides (offset +2 mm).
- → Suitable for indoor and outdoor use.
- ightarrow The laser scanner target can be folded down and stowed in a space saving manner and transported.





Ground Marking RSL510





- → Large, waterproof target markers 350 x 350 mm.
- → Survey points for use with drones.
- ightarrow A hole in the centre for the exact calibration by GPS.
- \rightarrow Can be fixed to the ground with tent pegs.
- \rightarrow Can be used many times.



Accessories for rotary and swivelable reflective targets and mini-prisms

Restore points RSFP-X80g and RSFP-X90

The corresponding reflective targets, mini-prisms or laser scanner targets can always be restored to exactly the same survey point with the restore points.



RSFP-X80g Plastic Restore Point for RS183, RSMP180, RSMP280 and RSMP380

With the restore point RSFP-X80g prisms can be quickly and accurately fixed, for example, to the track system. At the end of the measurements the prisms are just removed, only the low priced restore point is left behind. On building sites the restore point is used as a fixed point. The reflective targets or the mini-prisms can be clicked in and out as required. The possibility of the changeover from the horizontal to the vertical position and vice versa enables measurement from almost 360° with the same measuring point.

RSFP-X90 Restore point made of stainless steel For RS193M, RSMP190M, RSMP290M and RSMP390M

Magnets in the floor plate hold the reflective target or the mini-prism exactly on the desired point. The restore point RSFP-X90 is made of special stainless steel which reacts to magnets.





The plastic cover RSPC10 protects prisms and reflective targets from fouling. Magnetic protective cap RSPC10M is available for hard to reach points, on tunnel roofs for example. With the metal cubes RSPC50 the protective cap RSPC10M can be easily removed and replaced again.



Metal Cube RSPC50 with 5/8" Internal thread

The metal cube RSPC50 is screwed onto a prism bar with the 5/8" internal thread. The magnetic protecting cap (RSPC10M) can easily be removed from the plastic housing and replaced, even from difficult positions.



RSMK-FIX Adhesive

RSMK-FIX
RS-MK-FIX
RS-MK-F

- → Powerful fixing adhesive with immediate initial adhesion.
- \rightarrow Free from isocyanate and silicone.
- \rightarrow Permanently elastic and suitable for a wide range of uses.
- \rightarrow Odourless.
- ightarrow RSMK-FIX is suitable for use with all Rothbucher Systems products.
- → Can be applied using all common dosing pistols.
- → A good dosing pistol is recommended.



Reflective Targets RSZ2-RSZ22

Reflective targets are available in the following sizes:



RSZ2	20 x 20 mm	\rightarrow	Range approx. 50 m
RSZ3	30 x 30 mm	\rightarrow	Range approx. 80 m
RSZ4	40 x 40 mm	\rightarrow	Range approx. 100 m
RSZ6	60 x 60 mm	\rightarrow	Range approx. 120 m
RSZ22	220 x 220 mm	\rightarrow	Range approx. 500 m

The ranges are average values and are exceeded by most current measuring instruments. A minimum distance of 10 m is required for some instruments.

In order to guarantee accurate measurements with reflective targets the target angle should be a maximum of 30°. Survey markers with reflective targets are exclusively recommended for carrying out distance measurements using a tachymeter or total station.

Survey markers with crosshairs, but without reflective targets, are available for the use of levelling instruments, theodolites and construction lasers.

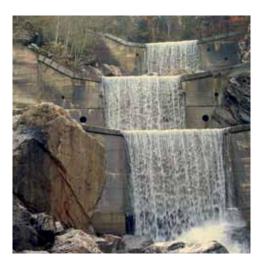
























Products from Rothbucher Systems guarantee clear, lasting and unmistakable measuring points.

Request our price list

Georg Rothbucher Lattenbergstrasse 12 D-83457 Bayer. Gmain,

www.meterriss.de

Tel. +49 (0) 8651 2749 Fax +49 (0) 8651 3090 Mobil +49 (0) 171 7314961

rs@meterriss.de

