

Crown stabilisation

Trees in urban environments are subject to extensive human interference. In general terms, urban living conditions are unfavourable for trees and shrubs, and often result in biological and structural weaknesses and abnormal growth and vigour. Tree care comes into the equation when location-based problems need to be prevented or corrected. The stabilisation of tree crowns is an alternative approach to professional tree care which avoids the need for pruning and preserves habitus of the tree. The stabilisation of tree crowns also ensures the safety of transport infrastructure and reduces the risk of falling trees.

Non-invasive systems

Break protection systems

prevents the detachment sections of the crown by means of horizontally placed dynamic and static systems. Elastic systems prevent the overloading of the crown section without hindering the crown movement. Low-stretch cables reduce the movement of sections of the crown which are in danger of breaking.

Support and load systems

stabilise crown sections that are in danger of breaking and so avoid the need for pruning or reduction which could alter the appearance of the tree. Crown-stabilisation materials must be appropriate for the weight of the section of the tree being treated.



tree save

The pros and cons of crown stabilization and pruning

Pruning

is particularly suitable for young trees and enables simultaneous growth pruning with small incisions. As no equipment is installed in the tree, natural oscillation is not affected either. Cutting can, however, have a negative impact on tree vigour and can also permanently change the appearance of the tree. Aftercare is often inevitable.

Crown stabilisation

maintains the appearance of older or poorly cut trees and shrubs without reducing the volume of the crown. The sap flow is not affected and there is no disease or injury due to pruning damage. If not carried out correctly, however, crown-stabilisation measures can restrict the natural movement of the tree. It is essential that the trunk is structurally intact for this approach to work. Load-bearing sections need to be inspected regularly, however aftercare is less intensive than with the reduction approach.



tree save® Only three elements!



Support sling with overload indicator

Hollow braid

Support sling

Support sling with overload indicator



Anti-abrasion cover enlarges the surface of the sling to minimize the friction

Stitched eye

Label

Indicates the breaking load, the length and installation date

Overload indicator always visible even in leafy areas

Overload indicator

The built-in breaking-point indicator is activated when the system load exceeds 75%. The red indicator clearly signals that action is required. The system continues to function in the meantime.

Tracer

To accelerate control, it is important to be able to visualize the installation date of the cabling system from the ground. The colour of polyethylene ring shows the installation year. We furnish one ring per 10m hollow braid.

2011	KST 0-211	1,50 €	1,79 €
2012	KST 0-212	1,50 €	1,79 €



2011



2012



2013

Green	Yellow	Red	Blue	brown	violet	orange	grey
1993	1994	1995	1996	1997	1998	1999	2000
2001	2002	2003	2004	2005	2006	2007	2008
2009	2010	2011	2012	2013	2014	2015	2016



Price for innovation

tree save© conforms with the German ZTV tree-care standard (Additional Technical Contractual Terms and Guidelines for Tree Care) and is suitable for use in break protection and support and bracing stabilisation systems, and in all types of branch systems. tree save© was awarded a prize for innovation by the 'Kuratorium für Waldarbeit und Forsttechnik' (German forestry and forestry technology institute) at the Interforst 2006 trade fair in Munich. tree save© was also awarded the Gala-Bau prize for innovation in 2004.



tree save Set 4t

The complete tree save® cabling kit allows you to dynamically secure tree crowns using the 4 or 8 ton system. It contains: 100m hollow braid rope, semi-static, 5 support slings 2x1,00m, 2x1,25m, 1,50m and 5 support sling with overload indicator 2x1,00m, 2x1,25m, 1,50m, 1 textile tape and splicing instructions.

KSTS 400 385,20 € 458,39 €



tree save Set 8t

It contains: 50m hollow braid rope, semi-static, 3 support slings 1,50m, 1,75m, 2,00m and 3 support sling with overload indicator 1,00m, 1,25m, 1,50m, 1 textile tape and splicing instructions.

KSTS 800 364,50 € 433,75 €



Support sling with overload indicator

50mm width sling with anti-abrasion cover and 20kN breaking load.

50 cm	KST 2-2050	12,50 €	14,88 €
75 cm	KST 2-2075	13,00 €	15,47 €
100 cm	KST 2-2100	13,50 €	16,07 €
125 cm	KST 2-2125	14,00 €	16,66 €
150 cm	KST 2-2150	14,50 €	17,26 €

Support sling

50mm width sling with anti-abrasion cover and 20kN breaking load.

50 cm	KST 2-1050	9,50 €	11,31 €
75 cm	KST 2-1075	10,00 €	11,90 €
100 cm	KST 2-1100	10,50 €	12,50 €
125 cm	KST 2-1125	11,00 €	13,09 €
150 cm	KST 2-1150	11,50 €	13,69 €

Hollow braid, static

14mm Liros hollow braid with green recognition strand and 20kN breaking load.

Meter	KST 2-121	2,10 €	2,50 €
100 m	KST 2-120	175,00 €	208,25 €



Hollow braid, dynamic

14mm Liros hollow braid with blue recognition strand and 20kN breaking load.

Meter	KST 2-131	2,10 €	2,50 €
100m	KST 2-130	175,00 €	208,25 €



Length of support slings

The sling length needs to be four times the diameter of the branch. For connections up to 5m, a hollow braid polyamide rope with 20% elongation is adapted. Use a hollow braid polyester rope with only 5% elongation for connections up to 20m. One support sling per connection is sufficient if the angle between the connections is larger than 90°. The same sling can be used for two connections if the angle between them is smaller than 90°. All hollow braid ropes are UV resistant.

tree save

Support sling with overload indicator

50mm width sling with anti-abrasion cover and 40kN breaking load.

75 cm	KST 4-2075	16,50 €	19,64 €
100 cm	KST 4-2100	17,50 €	20,83 €
125 cm	KST 4-2125	18,20 €	21,66 €
150 cm	KST 4-2150	19,00 €	22,61 €
175 cm	KST 4-2175	20,00 €	23,80 €
200 cm	KST 4-2200	21,00 €	24,99 €



Hollow braid, static

18mm Liros hollow braid with green recognition strand and 40kN breaking load.

Meter	KST 4-121	3,10 €	3,69 €
100 m	KST 4-120	265,00 €	315,35 €

Hollow braid, dynamic

18mm Liros hollow braid with blue recognition strand and 40kN breaking load.

Meter	KST 4-131	3,10 €	3,69 €
100 m	KST 4-130	265,00 €	315,35 €

Support sling

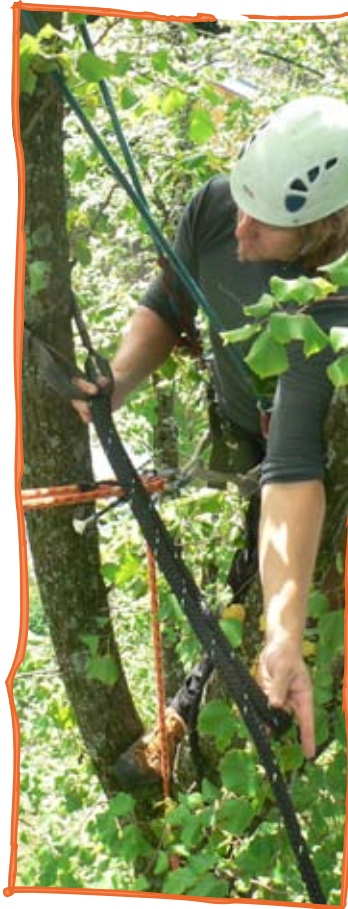
50mm width sling with anti-abrasion cover and 20kN breaking load.

75 cm	KST 4-1075	13,50 €	16,07 €
100 cm	KST 4-1100	14,00 €	16,66 €
125 cm	KST 4-1125	14,70 €	17,49 €
150 cm	KST 4-1150	15,50 €	18,45 €
175 cm	KST 4-1175	16,50 €	19,64 €
200 cm	KST 4-1200	17,50 €	20,93 €

Support sling with overload indicator

75mm width sling with anti-abrasion cover and 80kN breaking load.

100 cm	KST 8-2100	35,50 €	42,25 €
125 cm	KST 8-2125	37,00 €	44,03 €
150 cm	KST 8-2150	38,50 €	45,82 €
175 cm	KST 8-2175	40,00 €	47,60 €
200 cm	KST 8-2200	41,50 €	49,39 €
250 cm	KST 8-2250	44,50 €	52,96 €
300 cm	KST 8-2300	47,50 €	56,53 €



Steel cable

Static connection with 12mm diameter and 80kN breaking load.

Cable/m	KST 8-500	3,95 €	4,70 €
Thimble	KST 8-510	1,10 €	1,31 €
Rope clamp	KST 8-520	1,20 €	1,43 €
Shackle, 15 t	KST 8-530	11,90 €	14,16 €

Hollow braid, static

26mm Liros hollow braid with green recognition strand and 80kN breaking load.

Meter	KST 8-121	4,90 €	5,83 €
50 m	KST 8-125	210,00 €	249,00 €

Support sling

75mm width sling with anti-abrasion cover and 80kN breaking load.

100 cm	KST 8-1100	20,50 €	24,40 €
125 cm	KST 8-1125	22,00 €	26,18 €
150 cm	KST 8-1150	23,50 €	27,97 €
175 cm	KST 8-1175	25,00 €	29,75 €
200 cm	KST 8-1200	26,50 €	31,69 €
250 cm	KST 8-1250	29,50 €	35,28 €
300 cm	KST 8-1300	33,50 €	37,67 €

Hollow braid, dynamic

26mm Liros hollow braid with blue recognition strand and 80kN breaking load.

Meter	KST 8-131	4,90 €	5,83 €
50 m	KST 8-135	210,00 €	249,00 €



Support sling

100mm width sling with anti-abrasion cover and 120 kN breaking load.

100 cm	KST 12-1100	26,00 €	30,94 €
125 cm	KST 12-1125	28,00 €	33,32 €
150 cm	KST 12-1150	30,00 €	35,70 €
175 cm	KST 12-1175	32,00 €	38,08 €
200 cm	KST 12-1200	36,00 €	42,84 €
250 cm	KST 12-1250	39,00 €	46,41 €
300 cm	KST 12-1300	44,00 €	52,36 €



Steel cable

Static connection with 16 mm diameter and 140 kN breaking load.

Meter	KST 12-500	6,40 €	7,62 €
-------	-------------------	--------	--------



Accessories

Five rope clamps are necessary to manufacture an eye on a steel cable.

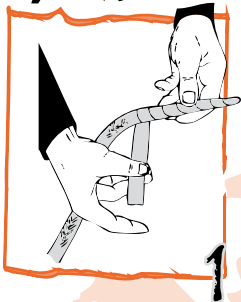
Thimble	KST 12-510	2,50 €	2,98 €
Rope clamp	KST 12-520	2,50 €	2,98 €
Shackle, 19 t	KST 12-530	19,00 €	22,61 €

Dimension

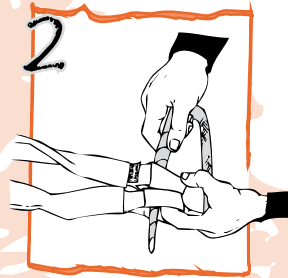
Branch diameter (cm)	Minimum breaking load of the system (t)
measure at the bottom at moment of installation	installation at 2/3 of the length of the branch
to 40	2
40 to 60	4
60 to 80	8
larger than 80	special intervention, case sensitiv



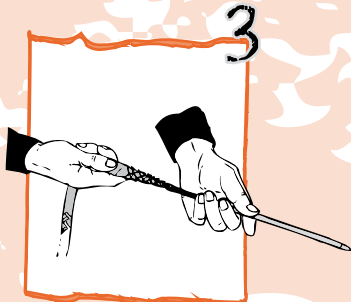
Splice instructions



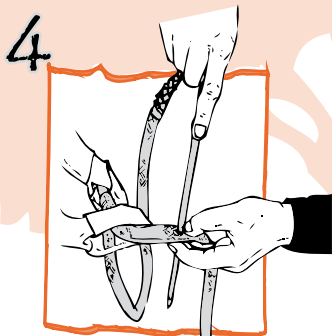
01_ Narrow the end of the hollow braid and seal it with tape.



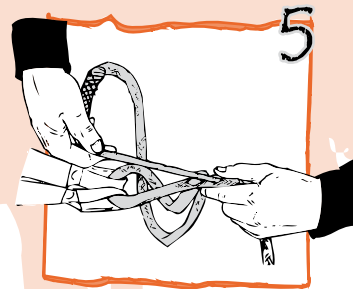
02_ Install the sling (length: four times the trunk diameter) around the tree. Pull the taped end of the hollow braid through both sling loops.



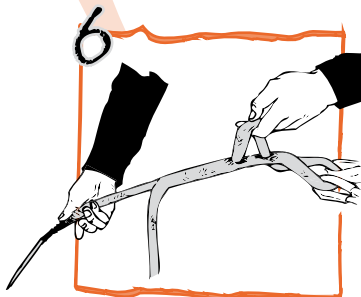
03_ Set the taped end of the hollow braid inside the splicing fid. The wire cage at the back of the needle must be tightened around the braid. It helps to narrow the end of the braid smoothly.



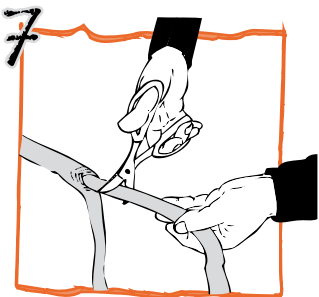
04_ Pierce the hollow braid with the fid, obtaining an eye of about 5cm.



05_ Approximately 5 cm behind the first hole introduce the needle inside the cover, and make the splice.



06_ The hollow braid must be spliced over a length of 40 cm approximately. Squeeze the rope cover to facilitate the splicing.

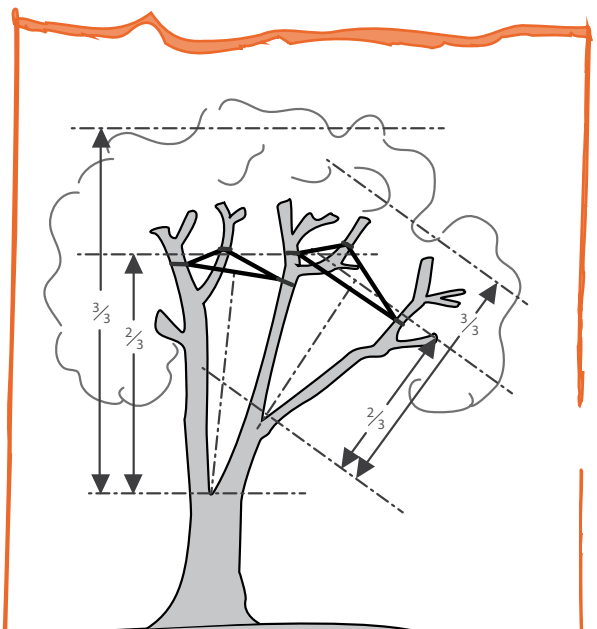


07_ Pull the end of the hollow braid out. Remove the needle. Cut the hollow braid in the desired length and narrow the end. Pull the splice end inside the cover again.



Installation height:

The cabling system is limiting the lever effect and therefore forces applying to the tree crown. Cabling systems should be installed at least at $\frac{2}{3}$ of the length of the branch to secure. If you need to install the system lower than at $\frac{2}{3}$ of the length of the branch you should use a stronger breaking load. For an installation at two levels, the lower connection should be made half way between the mechanic default and the connection installed at $\frac{2}{3}$ of the branch length.





ARS scissors

The particularly strong steel scissors allows you to cut the hollow braid easily and precisely. 19 cm, 70 g.

SPLA 111 24,90 €



ARS Profi-scissors

ARS textile scissors stand out due to the ergonomic shape and are excellently suited for cutting polyester textiles. 26 cm

SPLA 211 83,90 € 100,34 €



EASY Splicing fid

Aluminium fid with screw thread inside. Insert the taped end of the rope inside the needle, rotating slightly. For hollow braided rope up to 18 mm.

SPLA 113 19,90 € 23,80 €



Rope bag

This waterproof carrier and storage bag made of strong canvas holds around 100 metres of (Ø18mm) hollow rope. The hollow rope can be fed from either side of the bag. Extra straps for attaching of materials and equipment.

SPLA 110 20,00 € 23,92 €



Cable clamp for ropes 8-16 mm

Assists the installation of steel cabling systems combined with a pulley systems.

SPLA 130 120,00 € 143,52 €



YALE splicing needle

Insert one end of the hollow braid into the flexible wire cage situated in the back of the needle. The rope can be spliced easily. For hollow braided ropes up to 18mm

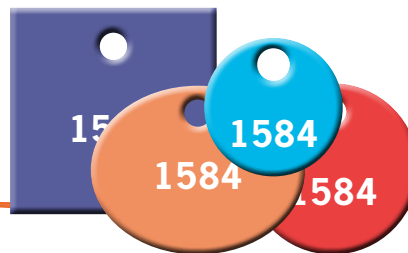
SPLA 112 59,90 € 71,64 €



Splicing kit

Comprises 4 Paddle carabiners (KA 26), a pair of scissors (SPLA 111) and the splicing needle (SPLA 112). Installing and handling cabling systems with these tools is a piece of cake! The set is always within reach. There is no more need to disturb the ground worker.

Kit **SPLA 120** 179,90 € 215,16 €
 Etui **SPLA 121** 79,90 € 95,56 €



Arbor numbers

Use aluminium plates to individually identify and catalogue trees. Choose size, numbers and colour. Price per piece:

32 x 32 mm	PBA 01	1,98 €	2,36 €
39/30 mm oval	PBA 02	1,65 €	1,97 €
Ø30 mm	PBA 06	2,03 €	2,43 €
Ø26 mm	PBA 08	1,91 €	2,28 €

>100 pcs 5% discount, >500 pcs. 7%, 1000 pcs. 10%.

Aluminum nails

Length: 50 mm; Ø 3mm

Piece **PBA 1050** 0,29 € 0,35 €



tree save® light



tree save light

tree save® light combined with 2 and 4t hollow braid is perfectly adapted to secure young trees, shrubs, and plant-securing. You only need to cut the protection sleeve, insert the hollow braid and you are ready to install tree save® light. To secure bigger branches or parts of the tree crown the use of support sling is advised.

Meter	KST 2481	2,10 €	2,51 €
50 m	KST 2485	85,00 €	101,15 €



Support sling with strap

The difficulty to fix a support sling on to a cylindrical stem or branch disappears when you use a support sling with integrated strap. Just add the H to the article number.

KST 4-1150H 15,50 + 6,50 = 22,00 €



Symbionta - Mykorrhiza fertilizer

- 100% pure and made of vegetable raw materials, therefore environmentally and ecologically friendly.
- 100% free from animal components or animal products
- Enriches the ecologically important soil life.
- Improving the soil conditions by 80% with humus producing substance.
- Long time effects of the fertilizer, vitalises the plant during the entire growing period.
- Nutritions the plant Gently by slow-flowing nutrients.
- Exceptional results through high-quality nutrients.
- Mycorrhiza positively affects the water supply and avoids drying out.



tree save

Contains mineral rock flavour.

Nutrients: malt germs, coarse colza meal, ammonium sulphate (organic), phosphate, lava rock flour, mycorrhiza, effective microorganisms.

Endomycorrhiza

Universal

Tuja, Sequoia, Metasequoia, Juniperus, Taxus, Cupressus

Acer, Malus, Pyrus, Sorbus, Haselnuss, Prunus, Platanus, Aesculus

Ectomycorrhiza

Organic wood

Pseudotsuga, Picea, Abies, Pinus, Larix

Juglans, Carpinus betulus, Carpinus ostrya

Ekto-/Endomycorrhiza

Universal

Tilia, Populus, Ulmus, Betula, Fagus, Quercus, Fraxinus

Symbionta Organic wood

Contains fungi, which form ecto-mycorrhiza. Suits many deciduous trees and conifers. Provides best water supply, even with low precipitation and after replantation. Allows successful cultivation on difficult habitats. Strong root development avoids erosion.

25 Kg **MALT 20** 54,90 € 58,60 €

Symbionta universal

Contains fungi, which form endo-mycorrhiza. Suits many tropical trees, herbaceous plants, orchard trees and indoor cultures. Enhances the nutrient supply and root penetration of the soil. Creates resistance against pathogens and a good salt tolerance. Allows a successful cultivation of polluted soils with heavy metal legacies. Reduces erosion.

25 Kg **MALT 10** 59,90 € 65,78 €



We offer a 15% discount for every order superior to 900kg.