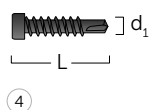
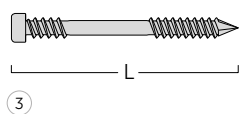
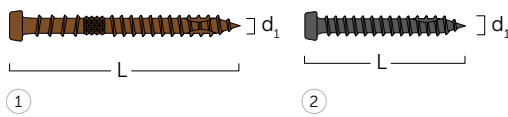


SNAP

CONCEALED CONNECTOR AND SPACER FOR TERRACES

- Versatile. It can be used both as a concealed connector for boards and as a spacer between boards and battens
- Developed to be used in combination with itself. By assembling two pieces, both functionalities are summed up for maximum efficiency and convenience
- Used as a spacer, it creates micro-ventilation under the boards and thus prevents water stagnation and ensures excellent patio durability
- PP (reinforced Polypropylene) material provides excellent durability at an affordable price



CODE	material	P x B x s [mm]	f [mm]	Ø [mm]	pcs
SNAP	reinforced polypropylene	70 x 28 x 4	7	5,5	100

FASTENERS

MINI - fastening on timber

d ₁ [mm]	CODE		L [mm]	pcs
5 TX 20	MNB550	①	53	200
	MNB560	①	60	200
	KKTN540	②	40	200
	KKTN550	①	53	200

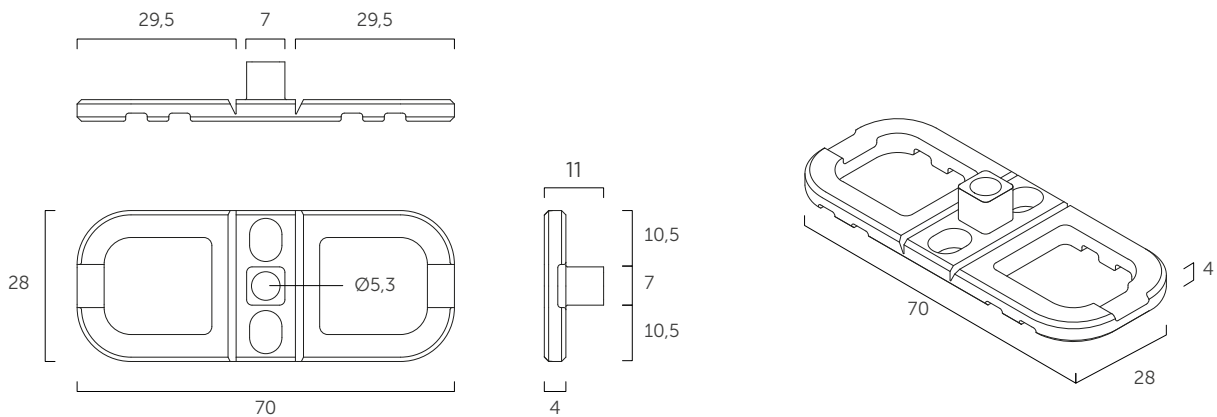
ZKK A2 | AISI304 - fastening on hardwood

d ₁ [mm]	CODE		L [mm]	pcs
5 TX 25	ZKK550	③	50	200
	ZKK560		60	200

KKA COLOR - fastening on aluminium

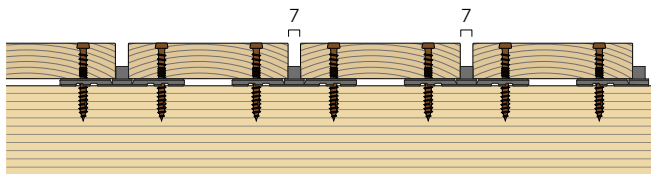
d ₁ [mm]	CODE		L [mm]	pcs
4 TX 20	KKAN430	④	30	200
	KKAN440		40	200

GEOMETRY

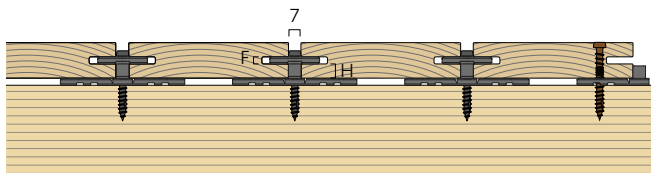


FASTENERS

Visible fastener - detail



Concealed fastener - cutter



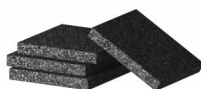
SYMMETRICAL/ASYMMETRICAL GROOVING

Min. thickness	F	4 mm
Minimum recommended height	H	7 mm

RELATED PRODUCTS



DECK BAND UV
 ADHESIVE BUTYL TAPE FOR PROTECTING JOIST



DECK BASE
 GRANULAR RUBBER SUBSTRATE



MINI
 DOUBLE THREAD SCREW WITH CONCEALED HEAD



CRAB MINI
 ONE-HANDED TERRACE CLAMP

INSTALLATION

VISIBLE FASTENER

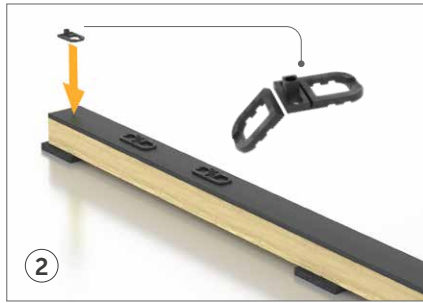


If you are looking for a quick, simple and inexpensive solution, not needing to worry about special processing on the boards, then visible fastening is best for you.

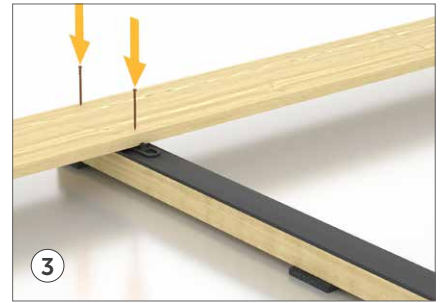
The MINI coloured screw, with its small inverted conical head, becomes a single unit with your deck giving you a feeling of perfect harmony. Water stagnation between board and batten is in any case mitigated by the SNAP clip under the board.



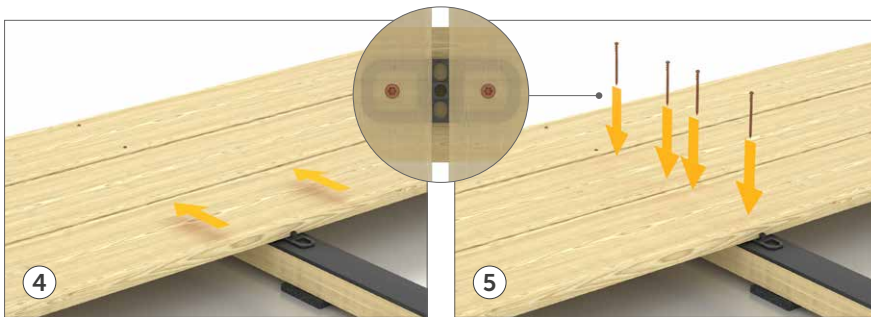
1 Place DECK BASES underneath the battens (approximately every 50 cm) and cover the batten with DECK BAND UV.



2 Using the notches provided, break off the SNAP and position it near the edge of the batten. Position the other whole SNAPS along the batten extension.



3 First board: place the first board on the SNAPS, to create the correct ventilation between batten and boards; fasten with suitable screws left exposed.



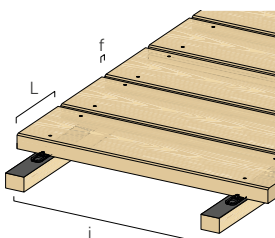
4 Position the next boards by placing them on the SNAPS positioned along the battens. Tighten the three boards using the CRAB MINI clamp, until the 7 mm gap is obtained.

5 Fasten the boards using the MINI screws to the batten below. Remove the CRAB MINI clamp.



6 Repeat the operations for the remaining boards. Last board: repeat step 2.

ESTIMATED CLIP INCIDENCE - visible fastening



INCIDENCE ESTIMATE FORMULA PER m²

$$1\text{m}^2/i/(L + f) = \text{pcs of SNAP at m}^2$$

i = battens spacing

L = board width

f = gap width

INSTALLATION

CONCEALED FASTENER

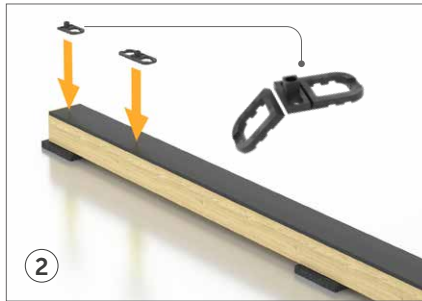


If the aesthetic appearance of your terrace is something that you greatly appreciate, concealed fastening is just the right solution: you will be enjoying the beauty of the wood immersed in your favourite landscape in no time!

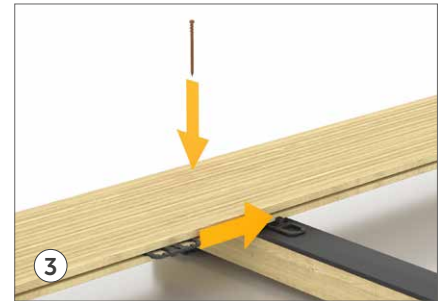
With the SNAP clip, installation is very quick and durability is excellent as its combined application prevents water seepage between the screw head and the timber, while micro-ventilation is created between the board and the batten.



1 Place DECK BASES underneath the battens (approximately every 50 cm) and cover the batten with DECK BAND UV.



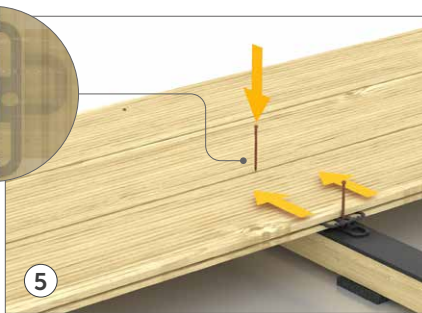
2 Using the notches provided, break off the SNAP and position it near the edge of the batten. Position the other whole SNAPS along the batten extension.



3 First board: place the first board on the SNAPS, to create the correct ventilation between batten and boards; fasten with suitable screws left exposed, or inserted concealed with the help of the appropriate accessories. Insert the second SNAP connector into the groove with the neck pointing downwards.



4 Position the SNAP so that the neck goes into contact with the neck of the other SNAP positioned under the board. Fasten them by inserting a MINI screw into the centre hole of the upper SNAP. Do NOT tighten at this stage.

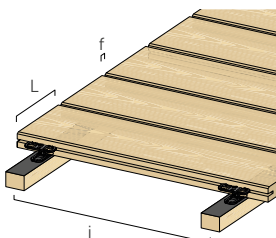


5 Position the next board by inserting it into the SNAP fastener. Using the CRAB MINI clamp, tighten the boards until the gap between them is 7 mm. Fasten the connectors by screwing the screws to the batten underneath.



6 Repeat the operations for the remaining boards. Last board: repeat step 2.

ESTIMATED CLIP INCIDENCE - concealed fastening



INCIDENCE ESTIMATE FORMULA PER m²

$$2 [1\text{m}^2 / i / (L + f)] = \text{pcs of SNAP at m}^2$$

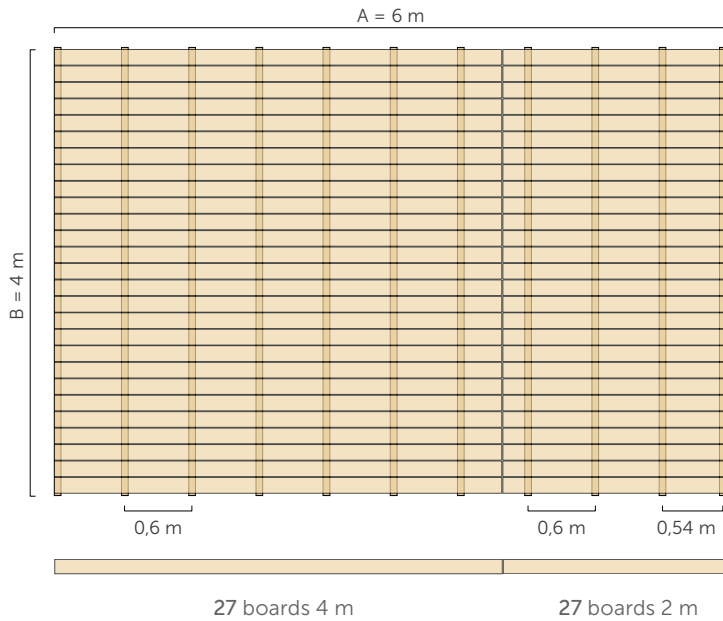
i = battens spacing

L = board width

f = gap width

PRACTICAL EXAMPLE - VISIBLE FASTENING

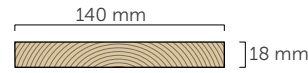
NUMBER OF BOARDS AND BATTENS



PATIO SURFACE

$$S = A \cdot B = 6 \text{ m} \cdot 4 \text{ m} = 24 \text{ m}^2$$

WOODEN PLANKING

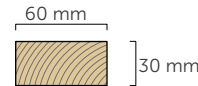


$$L = 140 \text{ mm}$$

$$s = 18 \text{ mm}$$

$$f = 7 \text{ mm}$$

BATTENS



$$b = 60 \text{ mm}$$

$$h = 30 \text{ mm}$$

$$i = 0,6 \text{ m}$$

$$\text{no. boards} = [B/(L+f)]$$

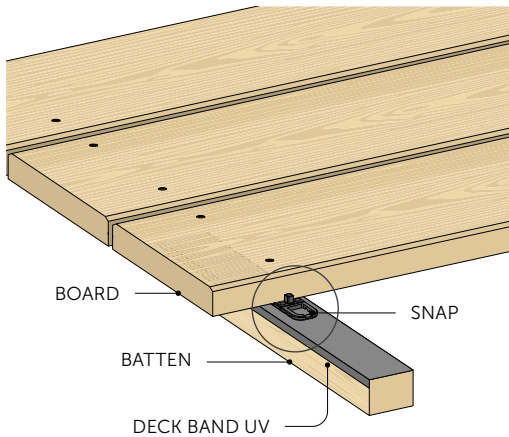
$$= [4/(0,14+0,007)] = 27 \text{ boards}$$

no. 4 m boards = 27 boards

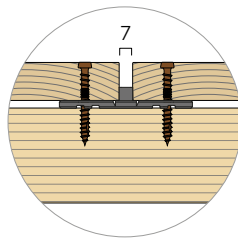
no. 2 m boards = 27 boards

$$\text{no. battens} = [A/i] + 1 = (6/0,6) + 1 = 11 \text{ battens}$$

SCREW SELECTION



Board thickness	S_{board}	18 mm
SNAP thickness	S_{SNAP}	4 mm
Pull-through length	L_{pen}	$4 \cdot d$ 20 mm



MINIMUM SCREW LENGTH

$$= S_{\text{board}} + S_{\text{SNAP}} + L_{\text{pen}}$$

$$= 18 + 4 + 20 = 42 \text{ mm}$$

CHOICE OF SCREW

MNB550

CALCULATION OF NUMBER OF SNAPS AND SCREWS

QUANTITY FOR INCIDENCE FORMULA

$$I = S/i/(L + f) = \text{pcs of internal SNAPS}$$

$$I = 24 \text{ m}^2/0,6 \text{ m}/(0,14 \text{ m} + 0,007 \text{ m}) = 272 \text{ pcs Internal SNAPS}$$

$$\text{waste coefficient} = 1,05$$

$$272 \cdot 1,05 = 286 \text{ pcs SNAP}$$

SNAP to be applied to edges

$$\text{no. of edge SNAP} = \text{no. of battens} - 2 = 22$$

$$\text{total no. of SNAPS} = \text{no. internal} + \text{no. edges} = 286 + 22$$

$$\text{total no. of SNAPS} = 308 \text{ pcs.}$$

QUANTITY FOR THE NUMBER OF INTERSECTIONS

$$I = (\text{no. of boards} + 1) \cdot \text{no. of battens} = \text{pcs. of SNAP}$$

$$\text{no. of battens} = (A/i) + 1 = (6/0,6) + 1 = 11 \text{ battens}$$

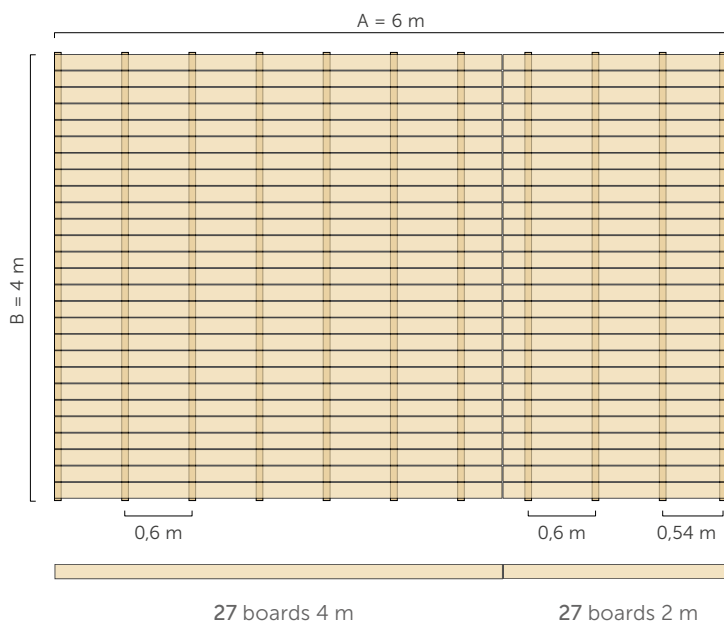
$$I = (27 + 1) \cdot 11 = 308 \text{ pcs SNAP}$$

NUMBER SNAP = 308 pcs.

NUMBER OF SCREWS = (no. of boards · no. of battens) · 2 = 594 pcs MNB550

PRACTICAL EXAMPLE - CONCEALED FASTENING

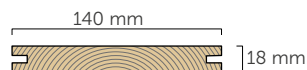
NUMBER OF BOARDS AND BATTENS



PATIO SURFACE

$$S = A \cdot B = 6 \text{ m} \cdot 4 \text{ m} = 24 \text{ m}^2$$

WOODEN PLANKING

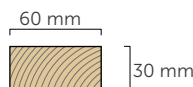


$$L = 140 \text{ mm}$$

$$s = 18 \text{ mm}$$

$$f = 7 \text{ mm}$$

BATTENS



$$b = 60 \text{ mm}$$

$$h = 30 \text{ mm}$$

$$i = 0,6 \text{ m}$$

$$\text{no. boards} = [B/(L+f)]$$

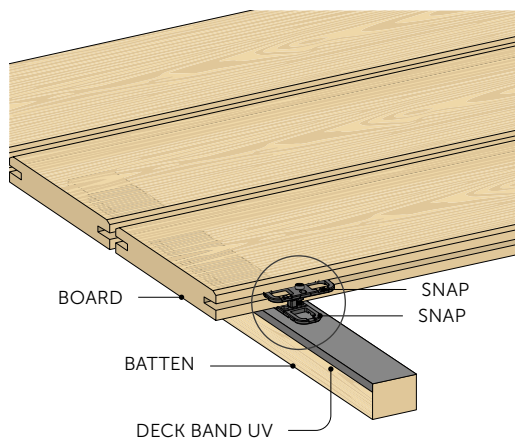
$$= [4/(0,14+0,007)] = 27 \text{ boards}$$

$$\text{no. 4 m boards} = 27 \text{ boards}$$

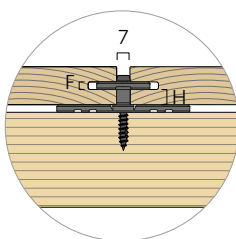
$$\text{no. 2 m boards} = 27 \text{ boards}$$

$$\text{no. battens} = [A/i] + 1 = (6/0,6) + 1 = 11 \text{ battens}$$

SCREW SELECTION



Screw head thickness	$S_{\text{screw head}}$	2,9 mm
Grooving thickness	F	4 mm
Grooving dimension	H	7 mm
SNAP thickness	S_{SNAP}	4 mm
Pull-through length	L_{pen}	$4 \cdot d$ 20 mm



MINIMUM SCREW LENGTH

$$= S_{\text{screw head}} + F + H + S_{\text{SNAP}} + L_{\text{pen}}$$

$$= 2,9 + 4 + 7 + 4 + 20 = 38 \text{ mm}$$

CHOICE OF SCREW

MNB550

CALCULATION OF NUMBER OF SNAPS AND SCREWS

QUANTITY FOR INCIDENCE FORMULA

$$I = S/i/(L + f) = \text{no. of intersections}$$

$$I = 24 \text{ m}^2 / 0,6 \text{ m} / (0,14 \text{ m} + 0,007 \text{ m}) = 272 \text{ no. of intersections}$$

$$2 \cdot I = 2 \cdot 272 = 544 \text{ pcs of SNAP}$$

waste coefficient = 1,05

$$544 \cdot 1,05 = 572 \text{ pcs SNAP}$$

SNAP to be applied to edges

$$\text{no. of edge SNAP} = \text{no. of battens} - 2 = 22$$

$$\text{total no. of SNAPS} = \text{no. internal} + \text{no. edges} = 572 + 22$$

$$\text{total no. of SNAPS} = 594 \text{ pcs.}$$

$$\text{NUMBER SNAP} = 594 \text{ pcs.}$$

$$\text{NUMBER OF SCREWS} = (\text{no. internal SNAP})/2 + \text{no. edge SNAP} = 286 + 22 = 308 \text{ pcs MNB550}$$

QUANTITY FOR THE NUMBER OF INTERSECTIONS

$$I = (\text{no. of boards with SNAP}) \cdot \text{no. of battens} = \text{pcs. of internal SNAP}$$

$$\text{no. of boards with SNAP} = (\text{number of boards} - 1) = (27 - 1) = 26 \text{ battens}$$

$$\text{no. of battens} = (A/i) + 1 = (6/0,6) + 1 = 11 \text{ battens}$$

$$\text{no. of intersections} = I = 26 \cdot 11 = 286$$

$$\text{no. of internal SNAP} = I \cdot 2 = 572 \text{ pcs of SNAP}$$

$$\text{no. of edge SNAP} = \text{no. of battens} - 2 = 22 \text{ pcs of SNAP}$$

$$\text{total no. of SNAPS} = \text{no. internal} + \text{no. edges} = 572 + 22$$

$$\text{total no. of SNAPS} = 594 \text{ pcs.}$$