

# LOCK C

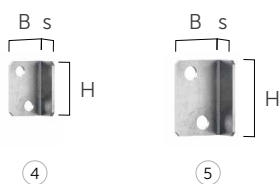
## CONCEALED HOOK TIMBER-TO-CONCRETE CONNECTOR

- Quick installation on concrete. Easy to hook system with screw anchors on concrete and self-drilling screws on timber
- Fastening on concrete is concealed. When installed without grooving, it generates an aesthetically pleasing joint shadow
- The timber beams can be easily removed for seasonal requirements



CODE		B x H x s [mm]	n <sub>screws</sub> - Ø [mm]	n <sub>anchors</sub> - Ø [mm]	n <sub>LOCKSTOP</sub> - type	pcs <sup>(*)</sup>
LOCKC53120	①	52,5 x 120 x 20	12 - Ø5	2 - Ø8	2 LOCKSTOP5	25
LOCKC75175	②	75 x 175 x 22	12 - Ø7	2 - Ø10	2 LOCKSTOP7	12
LOCKC100215	③	100 x 215 x 22	24 - Ø7	4 - Ø10	2 LOCKSTOP7	8

(\*) number of connector pairs  
Screws and LOCK STOP not included in the package.

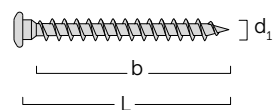


### LOCK STOP

CODE		B x H x s [mm]	pcs
LOCKSTOP5	④	19 x 27,5 x 13	100
LOCKSTOP7	⑤	26,5 x 38 x 15	50

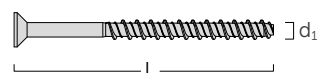
### FASTENERS

#### SBL | ROUND-HEAD SCREW AND FLAT UNDERHEAD



d <sub>1</sub> [mm]	CODE	L [mm]	b [mm]	pcs
5	TX 20 SBL570	70	66	200
7	TX 30 LBS780	80	75	100

#### SKS CE | SCREW ANCHOR WITH COUNTERSUNK HEAD



d <sub>1</sub> [mm]	CODE	L [mm]	d <sub>0concrete</sub> [mm]	T <sub>inst</sub> [Nm]	pcs
8	TX 30 SKS75100CE	100	6	20	50
10	TX 40 SKS10100CE	100	8	50	50

## STRUCTURAL VALUES

### TIMBER-TO-CONCRETE JOINT | F<sub>v</sub>

CODE	UNCRACKED CONCRETE			TIMBER				CHARACTERISTIC VALUES (EN 1995:2014)		
	B <sub>C,min</sub> [mm]	anchors SKS CE [n <sub>c</sub> - Ø x L]	R <sub>V,d,concrete</sub> [kN]	secondary beam minimum dimensions		screws		R <sub>V,k,timber</sub> [kN]	C24	GL24h
				b <sub>J,min</sub> [mm]	h <sub>J,min</sub> [mm]	type	[n <sub>J</sub> - Ø x L]			
LOCKC53120	120	2 - Ø8 x 100	12,1	78	120	SBL	12+12 - Ø5x70	17,2	18,0	
LOCKC75175	120	2 - Ø10 x 100	20,8	105	175	SBL	12+12 - Ø7x80	30,8	32,7	
LOCKC100215	120	4 - Ø10 x 100	35,5	130	215	SBL	24+24 - Ø7x80	61,5	65,4	

### GENERAL PRINCIPLES

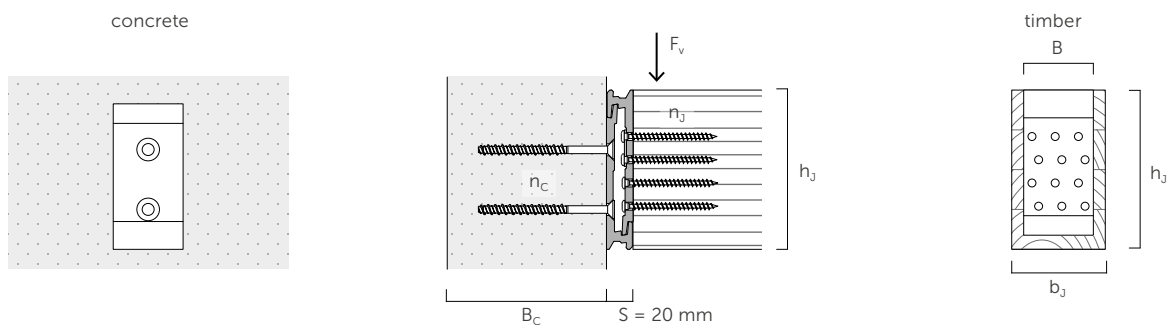
- Characteristic values are consistent with EN 1995-1-1, in accordance with ETA-19/0831 and ETA-11/0030 for screws without pre-drilling hole. The design values of the anchors for concrete are calculated in accordance with the respective European Technical Assessments. The strength value can be accepted as valid, for higher safety standards, even in the presence of pre-drill.
- The design values are obtained from the characteristic values as follows.

$$R_{V,d} = \min \left\{ \begin{array}{l} \frac{R_{V,k,timber} \cdot k_{mod}}{\gamma_M} \\ R_{V,d,concrete} \end{array} \right.$$

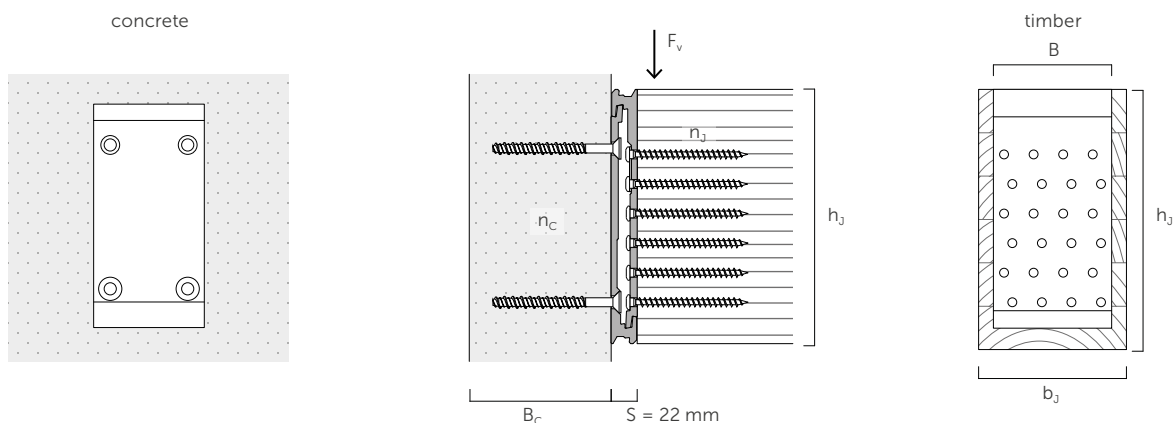
- The coefficients  $k_{mod}$  and  $\gamma_M$  should be taken according to the current regulations used for the calculation.
- In the calculation phase, a strength class of C25/30 concrete with thin reinforcement was considered, in the absence of distances from the edge.
- Wood and concrete elements must be sized and checked separately.
- The connector must always be fully fastened on both the timber and concrete sides, using screws and anchors of the same length respectively in all holes.

## INSTALLATION

### LOCKC53120 INSTALLATION



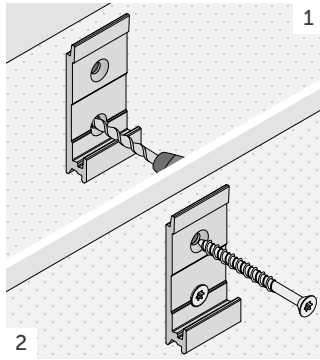
### LOCKC75175 AND LOCKC100215 INSTALLATION



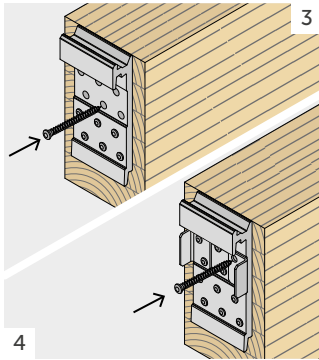
## INSTALLATION



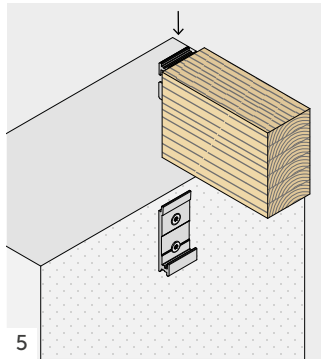
### EXPOSED INSTALLATION WITH LOCK STOP



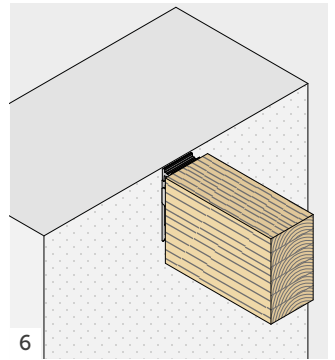
1 Place the connector on concrete and fasten the anchors according to the installation instructions.



3 Place the connector on the wooden beam and fasten the first screws. When using LOCK STOP (optional) position LOCK STOP and fasten the remaining screws.

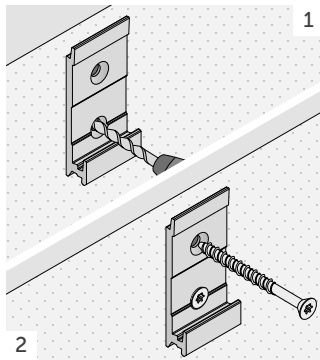


5 Hook the beam fitting it from the top to the bottom.

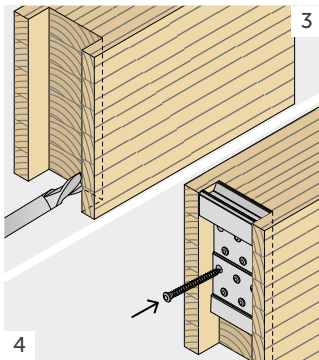


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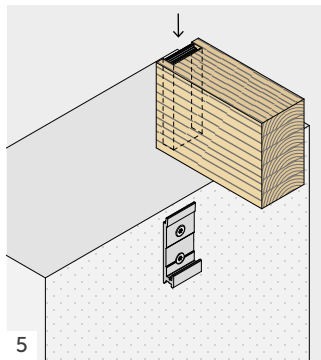
### SEMI-CONCEALED INSTALLATION



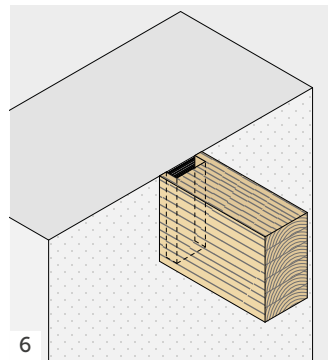
1 Place the connector on concrete and fasten the anchors according to the installation instructions.



3 Perform full grooving on the secondary beam. Position the connector and fasten all screws.



5 Hook the beam fitting it from the top to the bottom.



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