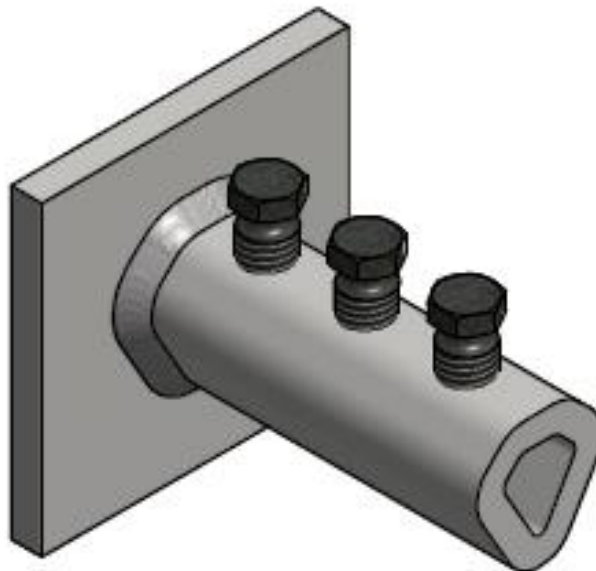


## MOUNTING INSTRUCTIONS

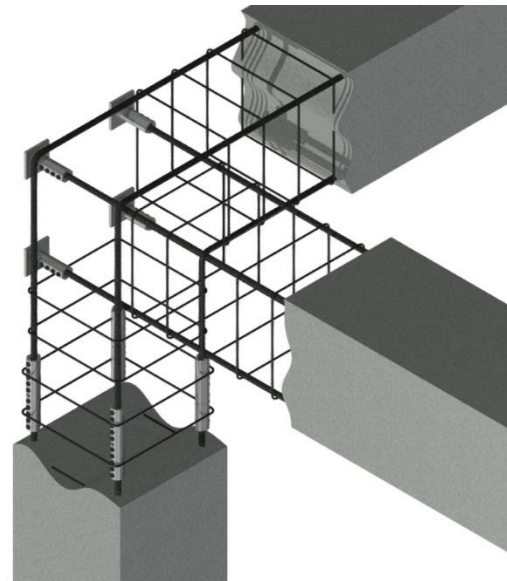
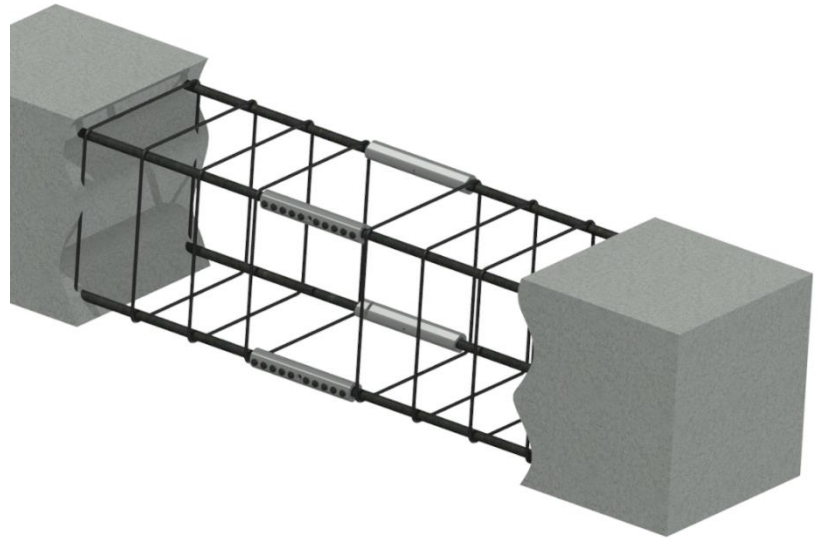
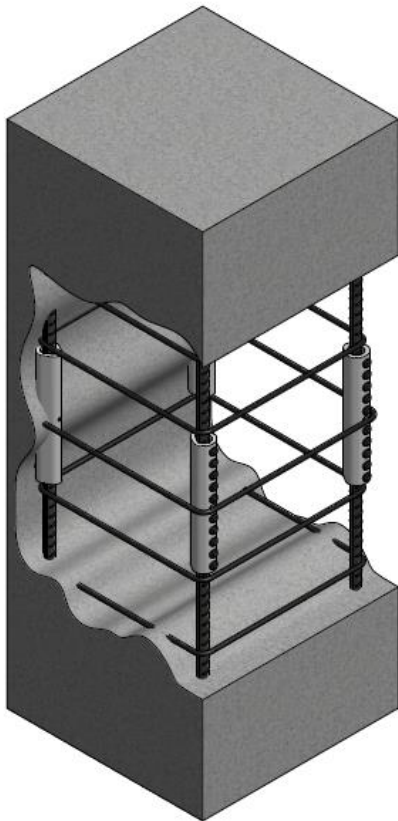


### **ALLIGATOR COUPLERS | ALC-AP** **ALLIGATOR COUPLING WITH END ANCHORING**



## THE MAIN APPLICATIONS FOR ALLIGATOR COUPLERS

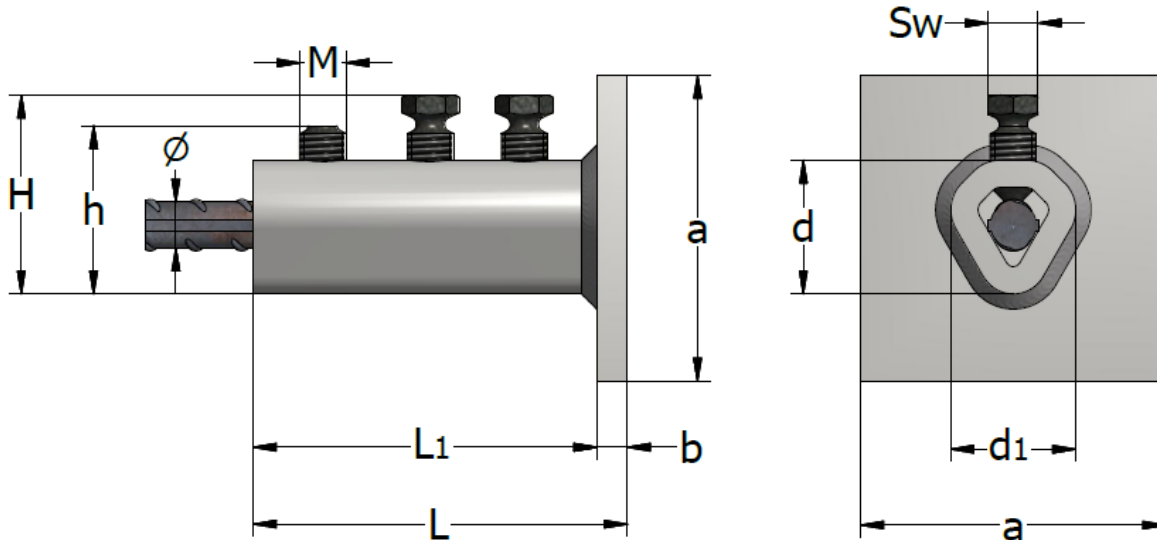
- for column construction
- to extend or repair existing structures
- to connect precast element to precast element
- to close access openings
- for the pre-fabrication of the reinforcing bar cage
- for fatigue applications



### ALLIGATOR END COUPLER – ALC-AP

The ALLIGATOR COUPLING WITH END ANCHORING is designed to ensure dead-end embedding of reinforcing steel bars in concrete. This helps to reduce the congestion and simplifies the placement of the reinforcing bars by eliminating the need for hooked ends. The ALLIGATOR END COUPLER includes half of an alligator coupling with a plate welded to one end, which will transfer the full tensile load of the bar when it bears against concrete. One advantage of this system is that there is no need for special preparation of the reinforcing bar.

Tighten the bolts using a torque wrench, an impact, electric or pneumatic wrench. Please see page 5-6.



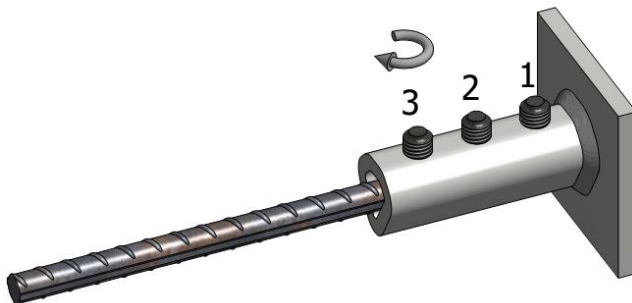
Type ALC-AP	Product no.	Rebar Ø [mm]	Breaking bolt number n	Breaking bolt thread M	L [mm]	a [mm]	b [mm]	d [mm]	d1 [mm]	H [mm]	h [mm]	SW [mm]	Torque moment [Nm]
10	43655	10	3	M12	88	80	8	33	34	Max. 46	36	13	95-115
12	43656	12	3	M12	98	80	8	33	34	Max. 49	39	13	95-115
14-16	43658	14/16	4	M12	123	100	8	37	38	Max. 55/57	45/47	13	95-115
18	43659	18	5	M12	150	100	10	44	42	Max. 59	49	13	95-115
20-22	66377	20/22	5	M12	175	100	10	50	50	Max. 63/67	51/55	17	190-215
25	43662	25	6	M16	205	100	10	55	54	Max. 72	60	17	190-215
26	63081	26	6	M20	225	150	15	63	62	Max. 83	68	22	355-415
28	43663	28	6	M20	225	150	15	63	62	Max. 85	70	22	355-415
30	63082	30	7	M20	255	150	15	70	69	Max. 87	72	22	355-415
32	43664	32	7	M20	255	150	15	70	69	Max. 92	77	22	355-415
36	43665	36	8	M20	285	150	15	77	74	Max. 99	84	22	355-415
40	43666	40	9	M20	305	150	15	76	74	Max. 101	86	22	355-415

## MOUNTING INSTRUCTIONS FOR ALC-AP COUPLER

- Mount the ALLIGATOR COUPLING to the reinforcement steel.



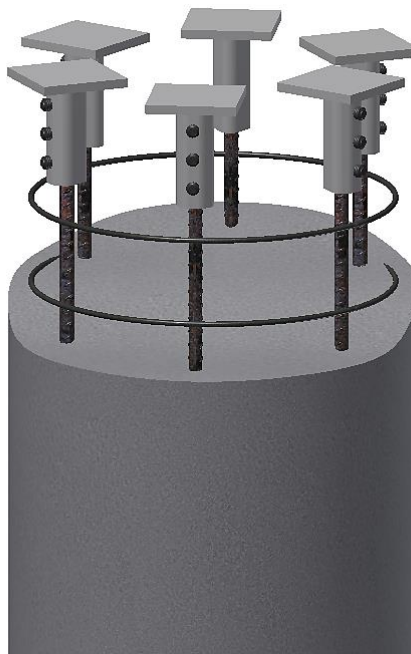
- Place the ALC-AP coupler over the end of the rebar until the rebar reaches the surface of the plate.
- Tighten the breaking bolt by hand.
- Do not lubricate the bolt connection.
- Mount the bolts as straight as possible.



Tighten the breaking bolts completely using an electric or pneumatic wrench as described on page 5-6. The bolts must be tightened from the centre outwards (1 to 3) until the heads of all the breaking bolts shear off.

Not removing/shearing of a bolt head during installation is acceptable provided the appropriate bolt torque is attained as detailed in the table on page 3. However, the installation is only considered satisfactory if the height  $H$  as in the table on page 3 is not exceeded. This must be measured to ensure satisfactory penetration and grip of the reinforcing bar.

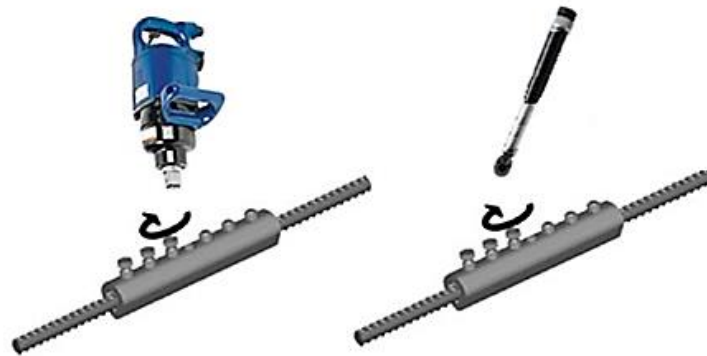
An example of using the ALC-AP – COUPLER is shown in the illustration below



## TOOLS FOR ALLIGATOR COUPLERS

- Use a high-speed, high-impact electric torque wrench or pneumatic wrench – we recommend a minimum of 1000 Nm.
- Try to prevent additional momentum when mounting/shearing off the bolts.
- When using an air impact wrench, check the air pressure, torque rating and air flow requirements before starting the installation process.
- Removing/shearing off bolt heads is not required if appropriate bolt torque is attained. In this case, please consult the table on page 3; the minimum height “H” has to be reached.
- When there is not enough space in the element to use a pneumatic or electric wrench, a handheld torque wrench can be used to shear the bolt or to attain the torque momentum according to the table on page 3. The wrench momentum has to be a minimum of 2x the breaking bolt torque.
- Using hardened, heavy-duty sockets with a maximum external diameter is recommended; see the table below.

Type ALC	Breaking bolt Thread M	SW / [mm]	Maximum socket wrench diameter /[mm]		
10	M12	13	Ø 26		
12, 14-16, 18	M12	13	Ø 36		
20	M16	17	Ø 27		
22, 25	M16	17	Ø 39		
28, 32, 36, 40	M20	22	Ø 33		



The above-mentioned wrenches with the tooling necessary for shearing off bolts M12, M16 and M20 are available in boxes.



60627

ALC Electric Mounting Kit



60626

ALC Pneumatic Mounting Kit

Aluminium box	Product no.	Type wrench	Torque moment (NM)
1	60627	Electric	1000
2	60626	Pneumatic	1000-1898



## CONTACT



TERWA is the global supplier for precast and construction solutions with multiple offices around the world. With all our staff, partners and agents, we are happy to provide all construction and precast companies who work in the building industry with full service and 100% support.

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