

# EDGELIFT ANCHOR WITH FEET (ELAWF)

## DESCRIPTION

The elawf series of anchors are specifically designed for edge lifting and feature a built in anti-shear foot that eliminates the need for separate shear reinforcement. Suitable for thin panels and low strength concrete lifts, the new design has a larger slot designed for one or two trimmer bars, assisting the precaster during setup (2.5 & 7 tonne only refer to FIG 1 and FIG 3).

## FEATURES

- Designed for thin panels and low strength concrete concrete lifts.
- Anchor has built in anti-shear feature. This eliminates need for separate shear reinforcement.
- Compliant with NZ Approved Code of Practice "For the Safe Handling, Transportation and Erection of Precast Concrete".
- The new design now has a larger slot for one or two trimmer bars, assisting the precaster during set up (2.5 & 7t only).
- Concealed anchorage so that the face of the panel has no patching or tilt covers.

## PRODUCT IDENTIFICATION

The Reid ELAWF is instantly recognisable by the distinctive appearance. All the edge lift anchors have the load group (tonne) of the anchor stamped on the anchor head. Note that the load group signifies the lifting eye size to use with the anchor, not the working load that can be lifted by the anchor when cast into concrete as per FIG 2.

## APPLICATIONS

- Tilting and lifting of precast and on-site manufactured concrete panels.

## MATERIAL CHARACTERISTICS

- Forged ST52.3 Alloy Steel. Hot dip galvanised for corrosion protection.



FIG 1: 7 Tonne Edgelifter Anchor with Feet

FIG 2: 10ELAWF Product identification marks

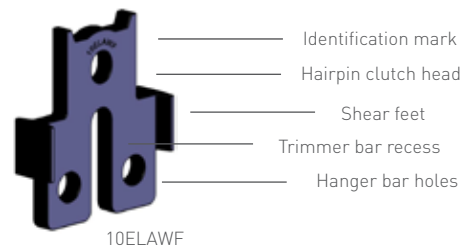


FIG 4: Rubber Recess Formers available in all sizes



FIG 3: 2ELAWF



FIG 5: Hairpin Clutch Available in 2.5, 7 & 10t sizes

Product Code	Anchor Load Group	Length of Anchor	Suitable Recess Former	Suitable Clutch	Clutch WLL
2ELAWF	2.5 T	98 mm	2ELARRF	2ELALE	2T
7ELAWF	7.0 T	114 mm	7ELARRF	7ELALE	7T
10ELAWF	10.0 T	161 mm	10ELARRF	10ELALE	10T

# EDGELIFT ANCHOR WITH FEET (ELAWF)

## INSTALLATION OF REID 2.5, 7 AND 10T EDGELIFT ANCHORS

- The anchor must always be used with two HD grade reinforcing bars or pre-stressing strand fitted through the eyes at the base of the anchor. This is to ensure that the anchor lifts to its ultimate strength (refer to FIG 6 and FIG 7).
- The anchor must be orientated at right angles to the edge of the panel, and have the appropriate two reinforcing bars or pre-stressing strands fitted through the pair of eyes at the base of the anchors (refer to FIG 8).
- These bars must be bent down into the panel at an included angle of 35° to 45° and with a bend diameter of 5 bars diameters.
- The specially designed feet provide superior anchorage in shear in both directions. No shear bars required.

WARNING - INCORRECT INSTALLATION CAN RESULT IN ANCHORS NOT PERFORMING TO SPECIFICATION.

FIG 6. Edge lift anchor in panel

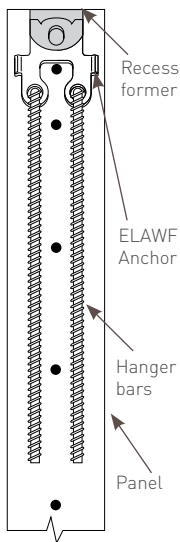


FIG 7. Hanger bar installation

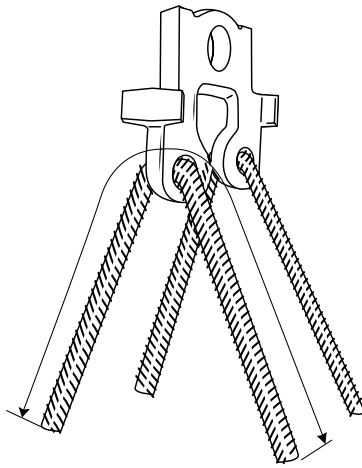


FIG 8. Hanger bar length - refer to tables 1B, 2B & 3B

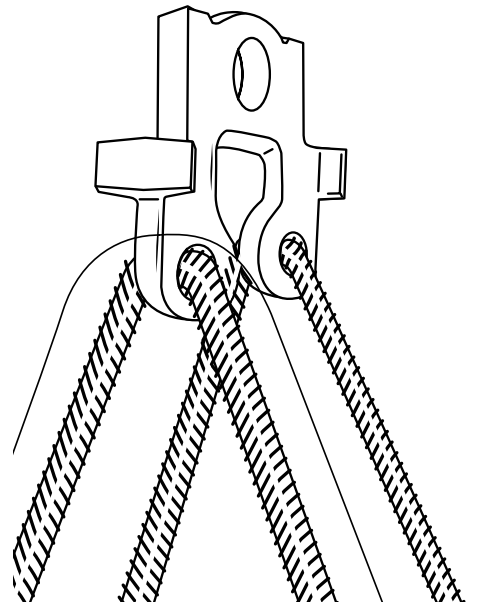


FIG 9::  
Cut and Bend Length as per Table B

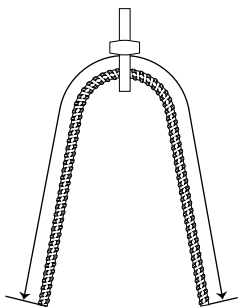


FIG 10:  
Minimum Bend Diameter of grade HD16 (500E) reinforcing bar

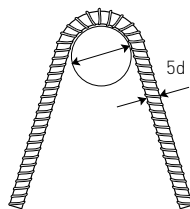
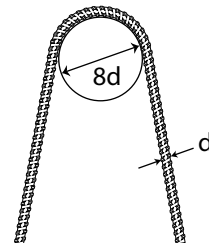


FIG 11:  
Minimum Bend Diameter of grade HD16 (500E) GALVANISED reinforcing bar



# EDGELIFT ANCHOR WITH FEET (ELAWF)



↑ Lift Table 1A

2ELAWF Shear Lift Working Load Limit (T)					
Panel Thickness (mm)	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
100	1.50	2.00	2.40	2.50	2.50
120	1.80	2.30	2.50	2.50	2.50
150	2.20	2.50	2.50	2.50	2.50



↑ Lift Table 1B

2ELAWF Tension Lift with Hanger Bar Lengths (mm)					
W.L.L Tonnes	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
2.50	740	620	550	510	470
2.00	610	520	460	420	390
1.50	480	410	370	340	320
1.00	350	310	280	260	250

1. Min 100mm thick panel.
2. Cut & Bent length HD12, 2 req per anchor. Refer Fig 2 min bend diameter 60mm.
3. Refer to Table C for required minimum reinforcement in concrete.



↑ Lift Table 2A

7ELAWF Shear Lift Working Load Limit (T)					
Panel Thickness (mm)	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
120	1.80	2.40	2.90	3.30	3.80
150	2.20	2.90	3.50	4.00	4.50
175	2.50	3.30	4.00	4.60	5.20
200	2.80	3.70	4.50	5.20	5.90



↑ Lift Table 2B

7ELAWF Tension Lift with Hanger Bar Lengths (mm)					
W.L.L Tonnes (T)	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
7	1910	1580	1380	1240	1140
6	1650	1360	1190	1080	990
5	1390	1150	1010	910	840
4	1130	940	830	750	690
3	870	730	650	590	540

1. Min 120mm thick panel.
2. Cut & Bent length HD12, 2 req per anchor. Refer Fig 2 min bend diameter 60mm.
3. Refer to Table C for required minimum reinforcement in concrete.



↑ Lift Table 3A

10ELAWF Shear Lift Working Load Limit (T)					
Panel Thickness (mm)	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
150	3.20	4.20	5.10	5.90	6.70
175	3.70	4.80	5.80	6.70	7.60
200	4.10	5.40	6.50	7.60	8.50
250	5.10	6.60	8.00	9.30	10.00



↑ Lift Table 3B

10ELAWF Tension Lift with Hanger Bar Lengths (mm)					
W.L.L Tonnes (T)	Concrete Strength at time of lift				
	10MPa	15MPa	20MPa	25MPa	30MPa
10	2070	1710	1500	1350	1250
9	1870	1550	1360	1230	1140
8	1680	1390	1220	1110	1020
7	1490	1240	1090	990	910
6	1290	1080	950	860	800
5	1100	920	810	740	690
4	900	760	680	620	570

1. Min 150mm thick panel.
2. Cut & Bent length HD16, 2 req per anchor. Refer Fig 2 min bend radius = 80mm.
3. Refer to Table C for required minimum reinforcement in concrete.

Table C: Minimum reinforcement 0.15%

Panel Thickness (mm)	Min. Vertical Reinforcement in concrete
100	Ø 10 @ 500crs
120	Ø 10 @ 425crs
150	Ø 12 @ 500crs
175	Ø 12 @ 425crs
200	Ø 12 @ 750crs
250	Ø 16 @ 1050crs