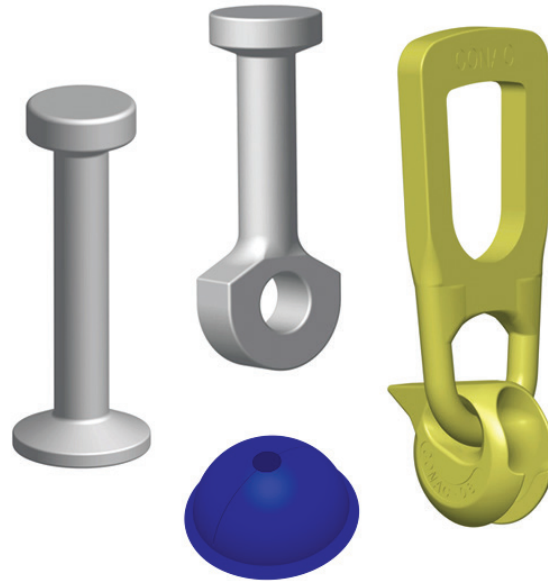


DR-Anchor

Lifting System

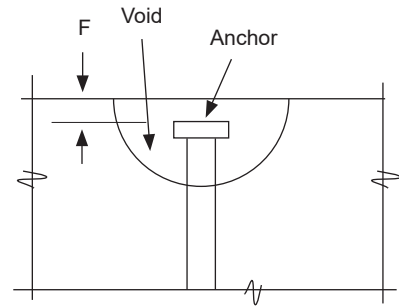
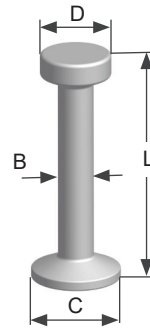


Economical and effective method for backstripping or face lifting in tension. The system code is stamped on the head of each anchor to match with the correct lifting unit. Stocked in hot dip galvanized; mill finish available on request.

DR LIFTING

CONAC
Concrete Product Solutions

DR ANCHORS

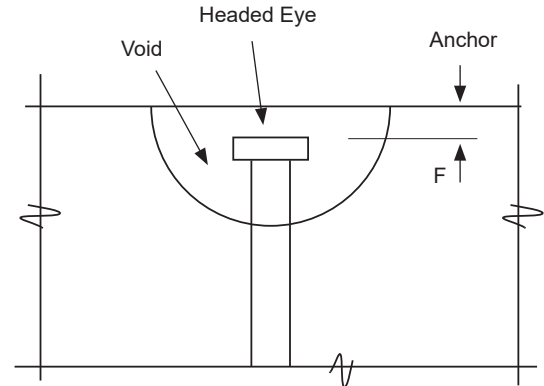
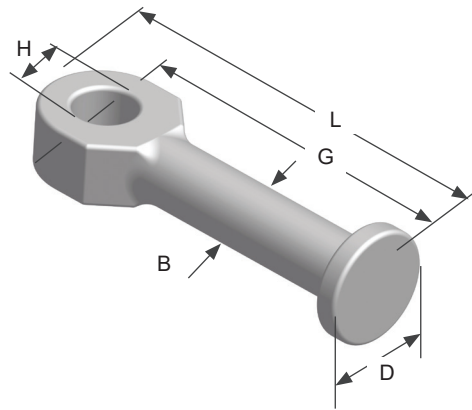


| PART NUMBER | SYSTEM CODE | LENGTH (L) | SWL TENSION (TON) | CORNER DISTANCE | BODY DIAMETER (B) | BASE DIAMETER (C) | HEAD DIAMETER (D) | HEAD RECESS (F) |
|-------------|-------------|---------------|-------------------|-----------------|-------------------|-------------------|-------------------|-----------------|
| | | 1-TON | | | | | | |
| DRA01055HG | 1.3 | 2-3/16" | 0.75 | 3-3/4" | 3/8" | 1" | 3/4" | 3/8" |
| DRA01065HG | 1.3 | 2-9/16" | 0.98 | 4-1/2" | 3/8" | 1" | 3/4" | 3/8" |
| DRA01085HG | 1.3 | 3-3/8" | 1 | 5-3/4" | 3/8" | 1" | 3/4" | 3/8" |
| DRA01120HG | 1.3 | 4-11/16" | 1 | 7-3/4" | 3/8" | 1" | 3/4" | 3/8" |
| DRA01200HG | 1.3 | 8" | 1 | 14-3/4" | 3/8" | 1" | 3/4" | 3/8" |
| | | 2-TON | | | | | | |
| DRA02045HG | 2.5 | 1-3/4" | 0.63 | 3-1/2" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02055HG | 2.5 | 2-3/16" | 0.83 | 4" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02070HG | 2.5 | 2-3/4" | 1.2 | 4-3/4" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02085HG | 2.5 | 3-3/8" | 1.64 | 5-3/4" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02120HG | 2.5 | 4-11/16" | 2 | 7-3/4" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02140HG | 2.5 | 5-1/2" | 2 | 9" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02170HG | 2.5 | 6-11/16" | 2 | 10-3/4" | 9/16" | 1-3/8" | 1" | 7/16" |
| DRA02280HG | 2.5 | 11" | 2 | 12" | 9/16" | 1-3/8" | 1" | 7/16" |
| | | 4-TON | | | | | | |
| DRA04075HG | 5 | 3" | 1.54 | 5-1/4" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04095HG | 5 | 3-3/4" | 2.21 | 6-1/2" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04110HG | 5 | 4-5/16" | 2.8 | 7-1/2" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04120HG | 5 | 4-11/16" | 3.22 | 8" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04140HG | 5 | 5-1/2" | 4 | 9-1/4" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04160HG | 5 | 6-5/16" | 4 | 10-1/4" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04180HG | 5 | 7-1/16" | 4 | 11-1/2" | 3/4" | 2" | 1-7/16" | 5/8" |
| DRA04240HG | 5 | 9-7/16" | 4 | 15" | 3/4" | 2" | 1-7/16" | 5/8" |
| | | 8-TON | | | | | | |
| DRA08120HG | 10 | 4-11/16" | 3.44 | 7-3/4" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08135HG | 10 | 5-5/16" | 4.17 | 8-3/4" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08150HG | 10 | 5-15/16" | 4.95 | 9-3/4" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08170HG | 10 | 6-11/16" | 6.11 | 10-3/4" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08220HG | 10 | 8-7/8" | 8 | 13-3/4" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08250HG | 10 | 9-7/8" | 8 | 15-1/2" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| DRA08340HG | 10 | 13-3/8" | 8 | 21" | 1-1/8" | 2-3/4" | 1-7/8" | 5/8" |
| | | 16-TON | | | | | | |
| DRA16250HG | 20 | 9-7/8" | 12.66 | 15-1/2" | 1-1/2" | 3-7/8" | 2-3/4" | 5/8" |
| DRA16500HG | 20 | 19-11/16" | 16 | 30" | 1-1/2" | 3-7/8" | 2-3/4" | 5/8" |

Allowable SWL based on 4:1 safety factor in 5,000 psi normal weight concrete.

EYE ANCHORS

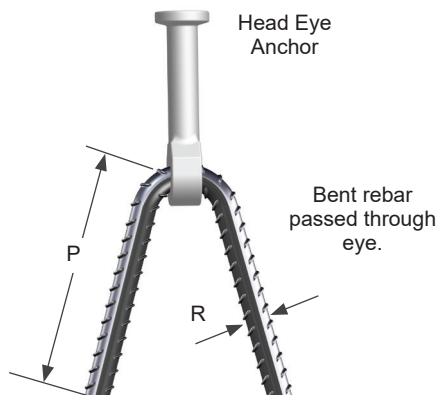
Used primarily in thin pannels utilizing rebar to extend the shear cone.



| PART NUMBER | TENSION SYSTEM CODE | ANCHOR LENGTH (L) | BODY DIAMETER (B) | HEAD DIAMETER (D) | HEAD RECESS (F) | HOLE LOCATION (G) | HOLE DIAMETER (H) | SWL (TON) | EDGE DISTANCE |
|-------------|---------------------|-------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-----------|---------------|
| | | 1-TON | | | | | | | |
| DRO1065 | 1.3 | 2-9/16" | 3/8" | 3/4" | 3/8" | 2-1/8" | 13/32" | 1 | 3-3/4" |
| | | 2-TON | | | | | | | |
| DRO2090 | 2.5 | 3-5/8" | 9/16" | 1" | 7/16" | 3" | 1/2" | 2 | 5-3/4" |
| | | 4-TON | | | | | | | |
| DRO4090 | 5 | 3-5/8" | 3/4" | 1-7/16" | 5/8" | 2-11/16" | 3/4" | 4 | 5-3/4" |
| DRO4120 | 5 | 4-3/4" | 3/4" | 1-7/16" | 5/8" | 3-7/8" | 3/4" | 4 | 6-1/2" |
| | | 8-TON | | | | | | | |
| DRO8115 | 10 | 4-3/8" | 1-1/8" | 1-7/8" | 5/8" | 3-7/16" | 1" | 8 | 5-3/4" |
| DRO8180 | 10 | 7-1/16" | 1-1/8" | 1-7/8" | 5/8" | 6" | 1" | 8 | 9-3/4" |
| | | 16-TON | | | | | | | |
| DRO16250 | 20 | 9-7/8" | 1-1/2" | 2-3/4" | 5/8" | 8" | 1-7/16" | 16 | 12-1/2" |

Allowable SWL based on 4:1 safety factor in 5,000 psi normal weight concrete.

Note: Headed Eye Anchors require use of bent rebar V through hole to develop tension capacity.



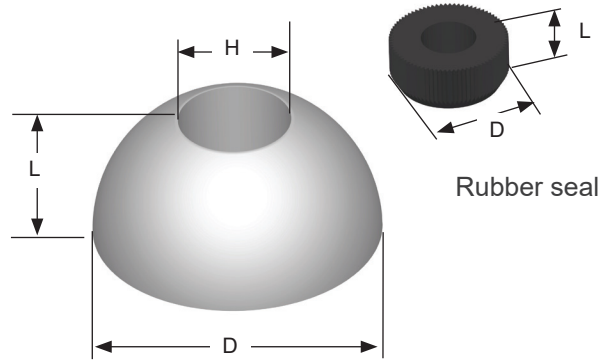
| TENSION VEES | | | |
|-----------------------|-----------------|-------------------------|--------------------|
| NOMINAL SYS. CAPACITY | ANCHOR PART NO. | REQUIRED REBAR SIZE (R) | BENT REBAR LEG (P) |
| 1 Ton | DRO1065 | 5/16" | 10" |
| 2 Ton | DRO2090 | #3 | 12" |
| 4 Ton | DRO4090 | #5 | 12" |
| 4 Ton | DRO4120 | #5 | 12" |
| 8 Ton | DRO8115 | #6 | 24" |
| 8 Ton | DRO8180 | #6 | 24" |
| 16 Ton | DRO16250 | #8 | 43" |

DR LIFTING



MAGNETIC RECESS FORMERS

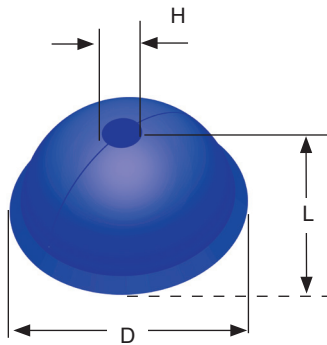
This steel body is turned from solid material and fitted with a high-performance magnetic system, providing a high-powered magnet for locating DR Anchors in steel forms.



| PART NUMBER | SYSTEM CODE | RECESS DIAMETER (D) | RECESS HEIGHT (L) | HOLE DIAMETER (H) | THREAD SIZE |
|-------------|------------------------|---------------------|-------------------|-------------------|-------------|
| KA13M | 1.3 | 2-3/8" | 1-1/8" | 13/16" | M8 |
| KA25M | 2.5 | 2-7/8" | 1-5/16" | 1-1/8" | M12 |
| KA50M | 5 | 3-11/16" | 1-5/8" | 1-1/2" | M12 |
| KA75M | 10 | 4-3/4" | 2-1/8" | 1-7/8" | M12 |
| | | | HEIGHT (L) | DIAMETER (D) | |
| KA13GM | Rubber Seal For Magnet | | 7/16" | 13/16" | |
| KA25GM | Rubber Seal For Magnet | | 1/2" | 1-3/16" | |
| KA50GM | Rubber Seal For Magnet | | 9/16" | 1-1/2" | |
| KA75GM | Rubber Seal For Magnet | | 3-4" | 1-15/16" | |

RUBBER RECESS FORMERS

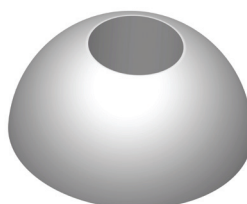
Used to Recess DR Anchors relative to the concrete surface. Each Rubber Recess Former requires one Wing Nut, Plate, and Stud Set to attach it to the form.



| PART NUMBER | SYSTEM CODE | RECESS DIAMETER (D) | RECESS HEIGHT (L) | HOLE DIA. (H) |
|-------------|-------------|---------------------|-------------------|---------------|
| DRR01 | 1.3 | 2-5/16" | 1-3/16" | 3/8" |
| DRR02 | 2.5 | 2-7/8" | 1-7/16" | 9/16" |
| DRR04 | 5 | 3-11/16" | 1-7/8" | 3/4" |
| DRR08 | 10 | 4-5/8" | 2-5/16" | 1-1/8" |
| DRR16 | 20 | 6-3/8" | 2-5/16" | 1-1/2" |

STEEL RECESS FORMER

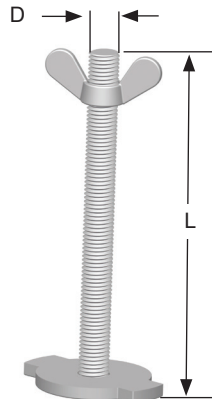
Drilled and tapped to allow bolting directly to the form. Can be welded to certain types of forms where location is permanent.



| PART NUMBER | SYSTEM CODE | RECESS DIAM. X DEPTH |
|-------------|-------------|----------------------|
| DRS01 | 1.3 | 2-5/16" X 1-3/16" |

WING NUT, PLATE & STUD SETS

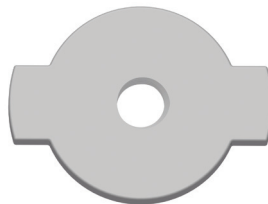
Used to hold the DR Rubber Recess Formers to the formwork.



| PART NUMBER | SYSTEM CODE | STUD DIA. (D) | STUD LENGTH (L) |
|-------------|-------------|---------------|-----------------|
| DRW01A | 1.3 | M8 | 1-3/16" |
| DRW02A | 2.5 | M10 | 1-7/16" |
| DRW04A | 5 | M10 | 1-7/8" |
| DRW08A | 10 | M10 | 2-5/16" |
| DRW16A | 20 | M10 | 2-5/16" |

DR ANCHOR THREADED PLATES

Can be used with stud or bolt recess former to form.



| PART NUMBER | SYSTEM CODE | THREADS |
|-------------|-------------|---------|
| DRWP01 | 1.3 | M8 |
| DRWP02 | 2.5 | M10 |
| DRWP04 | 5 | M10 |
| DRWP08 | 10 | M10 |

DR ANCHOR PLASTIC CAPS

Protective caps attach to head of DR anchor to prevent debris from filling the recess.



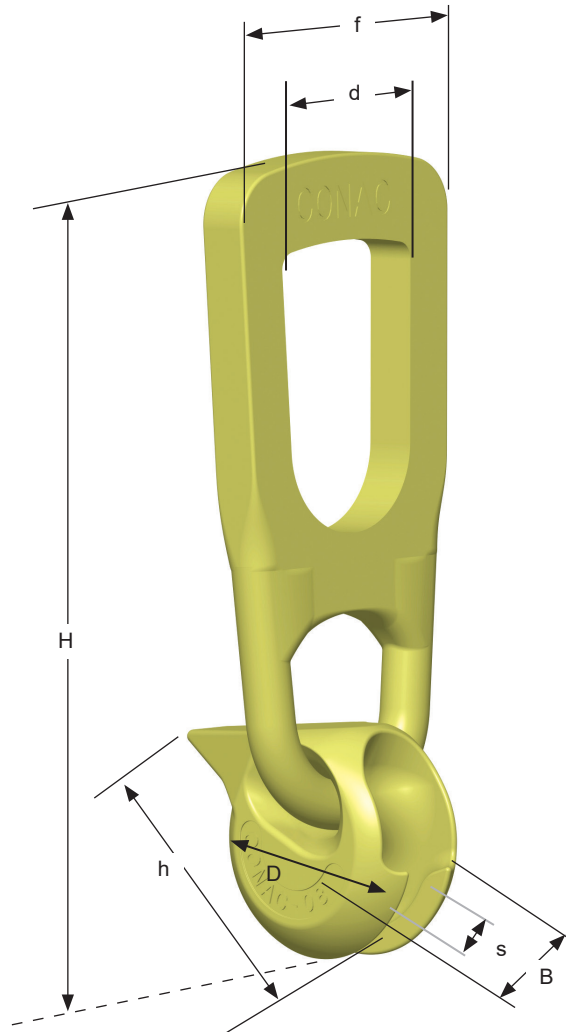
| ITEM # | SYSTEM CODE | DESCRIPTION |
|-----------|-------------|-----------------------------|
| DRR01 CAP | 1.3 | DR-ANCHOR 1 TON PLASTIC CAP |
| DRR02 CAP | 2.5 | DR-ANCHOR 2 TON PLASTIC CAP |
| DRR04 CAP | 5 | DR-ANCHOR 4 TON PLASTIC CAP |
| DRR08 CAP | 10 | DR-ANCHOR 8 TON PLASTIC CAP |

DR LIFTING

CONAC
Concrete Product Solutions

DR-ANCHOR LIFTING UNITS

For use with DR Anchors. Lifting Eye rotates on the anchor to the direction of load. The system Code is stamped on each unit to match with the correct anchor type.



| PART NO. | SYSTEM CODE (T) | SYSTEM CAPACITY (T) | HEAD DIA. (MM) | SHAFT DIA. (MM) | D | H | h | B | s | d | f | WEIGHT (LB/PC) |
|-----------------|-----------------|---------------------|----------------|-----------------|-----|-----|-----|-----|----|-----|-----|----------------|
| Lifting Eye 1T | 1.3 | 1 | 19 | 10 | 52 | 200 | 73 | 32 | 11 | 45 | 72 | 2.18 |
| Lifting Eye 2T | 2 | 2 | 26 | 14 | 63 | 220 | 91 | 42 | 16 | 58 | 87 | 3.1 |
| Lifting Eye 4T | 5 | 4 | 36 | 20 | 82 | 275 | 111 | 57 | 22 | 68 | 116 | 7.08 |
| Lifting Eye 8T | 10 | 8 | 47 | 28 | 104 | 390 | 150 | 72 | 29 | 84 | 160 | 19.62 |
| Lifting Eye 16T | 20 | 16 | 69 | 39 | 153 | 520 | 210 | 109 | 41 | 115 | 187 | 48.4 |

1. GENERAL

for the CONAC Lifting Eye

The CONAC Lifting Eye is a load lifting device. It grips the head of a DR anchor inside of the recess created by the CONAC Recess Formers. The bail is made from robust, hardened and tempered cast steel. The CONAC Lifting Eye meets the requirements of the "Safety regulations for lifting precast concrete units". Important references include but are not limited to: OSHA Part 1926 and ANSI 10.9.

2. OPERATING INSTRUCTIONS FOR THE CONAC LIFTING EYE

1. Hold the CONAC Lifting Eye upside down such that the opening of the bail is placed directly on the anchor head (Figure 1).
2. Rotate the bail until the anchor head has reached the end of the channel (Figure 2). The lip of the bail should be entirely level with the surface of the concrete as shown in the figure.

*If the lip is not level, the anchor head is not completely inside the channel and further rotation of the bail is necessary. Failure to do this could cause the anchor head to bend.

3. The CONAC Lifting Eye can then be used for a straight pull (Figure 2) or for parallel/transversal shear pulls. For parallel or transversal shear pulls, the bail lip must point in the direction of the pull.

Warning: For transversal/parallel shear pull, the bail lip must point in the direction of the pull, as shown in Figure 4. If positioned incorrectly (Figure 5), the Lifting Eye can come loose.

Figure 4

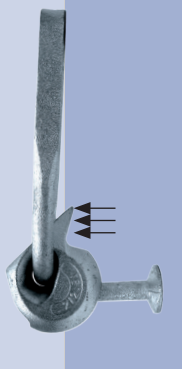
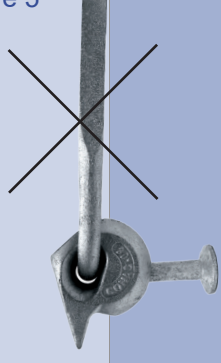


Figure 5



Warning: Do not allow the crane lines to form an angle less than 90 degrees during an edge lift application. This condition can bend the lifting eye bail and could lead to premature failure.

Figure 1

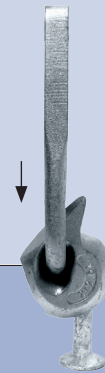
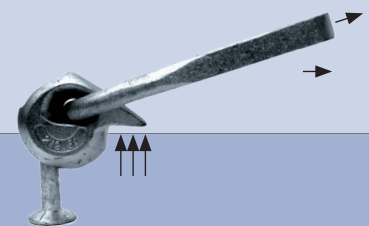


Figure 2



Figure 3



OPERATION INSTRUCTIONS



for the CONAC Lifting Eye

3. IDENTIFICATION

The identification meets the "Safety regulations for lifting precast concrete units" as follows:

| | |
|------------------|-------------|
| Manufacturer | CONAC |
| Type | Lifting Eye |
| Size | e.g. 4t |
| Manufacture Year | e.g.04 |
| Batch Number | e.g.1234 |

4. CARE, INSPECTION AND MAINTENANCE OF LIFTING EYES

CONAC DR Anchor Lifting Eyes may become worn after extended use or may be damaged through misuse, overloading, or a number of other factors, any one of which may affect the Safe Working Load of the Lifting Eye.

Responsible users will establish a system of periodic inspections which should include the following:

1. Inspect for general condition and wear.
2. Assure that the bale is free to rotate in all directions.
3. If the bale is bent or twisted, the Lifting Eye must be destroyed.
4. If the throat of the lifting body appears to be spread or deformed, the Lifting Eye must be destroyed.
5. If it appears that the Lifting Eye has been heated in any way, the Lifting Eye must be destroyed.

Destroy any unit that is worn, damaged, bent or twisted by cutting off the bale. No repair or welding is permitted.

| | | | | | |
|-------------------------|-------|-------|-------|-------|------|
| Maximum Working Load | 1T | 2T | 4T | 8T | 16T |
| Maximum Channel Opening | 11 mm | 16 mm | 22 mm | 30 mm | 41mm |

Warning: Before lifting the Lifting Eye should be checked to ensure that it is fully engaged with the anchor. Lifting eyes and anchors from different manufacturers should not be used together. Failure to observe any safety recommendation can result in a service failure of the lifting system.

Warning: The crane line and bail of the lifting hardware must be turned in the direction of the cable forces before the lifting operation begins. The crane line must not be allowed to apply a sideward force on the ball. This condition is dangerous and could lead to premature failure of the hardware or insert.

Warning: Do not modify, weld or alter in any way the Conac Lifting Eye.