

# Heavy Duty Anchor

## DESCRIPTION

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A heavy duty preloaded single cone anchor with a thick expansion sleeve providing high expansion reserve, even in cracked concrete.

Specifically designed to meet the requirements of the **OSH Approved Code of Practice for the Safe Handling, Transportation and Erection of Precast Concrete.**

Manufactured for propping applications where resistance to cyclic loads is paramount.

## FEATURES & BENEFITS

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- Every bolt is individually proof loaded on installation.
- Simple foolproof installation, which can be loaded immediately.
- Dome washer provides 2 tonne clamping load
- Each bolt provides visual confirmation that bolt has been correctly set.
- Fire resistant fastening solution
- Eliminates need for additional washer in prop foot anchoring.
- Allows subsequent confirmation that anchor remains set at correct clamping force (2 tonne).
- Economic solution

## APPLICATIONS

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- Propping
- Fastening steel angles to concrete
- Formwork
- Column base plate fixing



## LIMITATIONS

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Not suitable for vibrating machinery. Where anchor bolts are subject to long term continual cyclic tension loads Reids recommend the use of Liebig bolts.

## MATERIAL CHARACTERISTICS

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8.8 grade high tensile bolt with mild steel sleeve, Plastic crush zone washer, mild steel dome washer  
120mm x 18mm

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## INSTALLATION

1. Drill 18mm diameter hole to a depth of 20mm greater than the bolt insertion depth.
2. Minimum concrete strength should be greater than 15Mpa.
3. Ensure the domed washer is correctly placed on the bolt (see diagram 1).
4. Tap bolt through material to be fastened.
5. Tap bolt into concrete.
6. Tighten bolt until cone washer is flattened (as per diagram 2).
7. When the Reids Heavy Duty Anchor is correctly installed there is no gap visible between the flat and domed washers.

Prior to tightening



Reids HDA properly set



## HDA18110 HEAVY DUTY ANCHOR

### DESIGN CHARACTERISTICS

Ultimate Steel Tensile Strength	$N_{tf}$	54.0kN
Design Steel Tensile Capacity	$\Phi_t N_{tf}$	48.6kN
Ultimate Steel Shear Strength	$V_f$	71.5kN
Design Steel Shear Capacity	$\Phi_s V_f$	57.2kN
Design Capacity, 20MPa Concrete	$\Phi_c N_{tc}$	33.3kN
Design Capacity, 25MPa Concrete	$\Phi_c N_{tc}$	37.2kN
Design Capacity, 30MPa Concrete	$\Phi_c N_{tc}$	40.7kN
Initial Preload	$N_{ti}$	20.0kN
Design Slip Capacity	$\Phi_{slip} N_{ti}$	13.0kN