

NCC COMPLIANT AS5216 CONFORMING

SAFETY ANCHOR HEXAGONAL HEAD

Range M6 - M16

Zinc Plated
Dry, internal applications

FEATURES & BENEFITS

- Ideal for safety critical & complex load case applications.
- Intended working life of 50 years.
- Comprehensive range from M6 to M16.
- Highest ETA rating (Seismic C2) for all anchor sizes.
- Fire rating to 120 minutes for all anchor sizes.

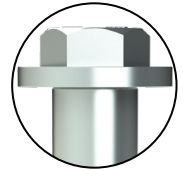
APPLICATIONS/TRADES

- Structural steel connection to concrete.
- Crane rails.
- Elevator guide rails.
- Machinery hold down.
- Plant room equipment hold down.

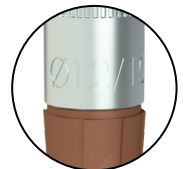
COMPLIANCE



AS5216



Large Ø structural washer for optimal load transfer



Product information on each anchor



Expansion sleeve & conical nut designed for long term resistance to dynamic load cases



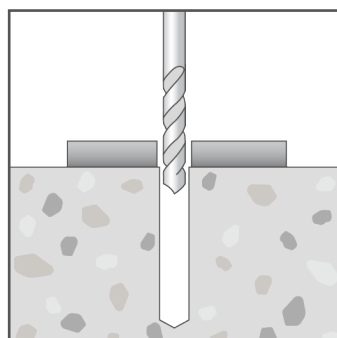
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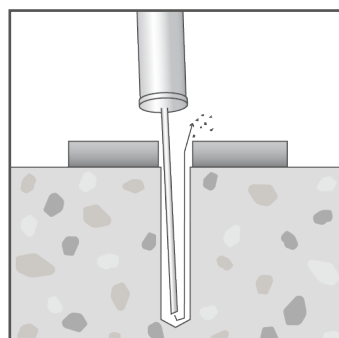
| RANGE | | | | | | | | |
|--------------|----------|-------------|--------------------|-------------------|---|---------------------------------|--------------------------------|-------------------------------|
| Product Code | Pack Qty | Thread size | Anchor length (mm) | Drill hole Ø (mm) | Drill hole depth (mm) @ t _{fix, max} | Minimum concrete thickness (mm) | Maximum fixture thickness (mm) | Fixture clearance hole Ø (mm) |
| | | | l_t | d_o | h_1 | h_{min} | $t_{fix, max}$ | d_f |
| AHVE0110070 | 50 | M6 | 70 | 10 | 80 | 110 | 5 | 12 |
| AHVE0110080 | 50 | | 80 | | | | 15 | |
| AHVE0110100 | 50 | | 100 | | | | 35 | |
| AHVE0110120 | 25 | | 120 | | | | 55 | |
| AHVE0112080 | 50 | M8 | 80 | 12 | 90 | 120 | 10 | 14 |
| AHVE0112100 | 25 | | 100 | | | | 30 | |
| AHVE0112120 | 25 | | 120 | | | | 50 | |
| AHVE0112140 | 25 | | 140 | | | | 70 | |
| AHVE0116100 | 20 | M10 | 100 | 16 | 100 | 140 | 20 | 18 |
| AHVE0116120 | 20 | | 120 | | | | 40 | |
| AHVE0116140 | 20 | | 140 | | | | 60 | |
| AHVE0116160 | 20 | | 160 | | | | 80 | |
| AHVE0118120 | 10 | M12 | 120 | 18 | 120 | 180 | 20 | 20 |
| AHVE0118150 | 10 | | 150 | | | | 50 | |
| AHVE0118170 | 10 | | 170 | | | | 70 | |
| AHVE0118200 | 10 | | 200 | | | | 100 | |
| AHVE0124140 | 5 | M16 | 140 | 24 | 140 | 210 | 20 | 26 |
| AHVE0124170 | 5 | | 170 | | | | 50 | |
| AHVE0124200 | 5 | | 200 | | | | 80 | |
| AHVE0124220 | 5 | | 220 | | | | 100 | |

Note: For a fixture thickness (t_{fix}) that is less than the $t_{fix, max}$ value tabled above:
 - increase both the drill hole depth (h_1) & concrete thickness (h_{min}) by $(t_{fix, max} - t_{fix})$ actual)

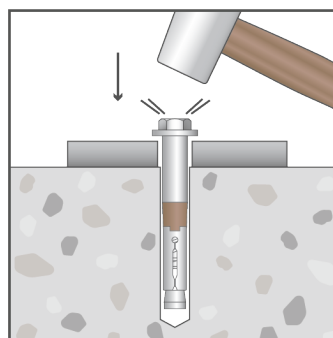
INSTALLATION



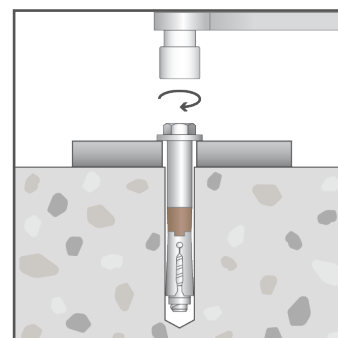
Drill hole through fixture into substrate to the specified diameter and depth



Clear hole of drilling debris.



Insert anchor into hole and drive until anchor is flush with the surface of the fixture.



Using a wrench, expand anchor by tightening to the specified installation torque.

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PRODUCT INSTALL & PERFORMANCE INFORMATION

| Product Code | Anchor length (mm) | Maximum fixture thickness (mm) | Drill hole depth @ t _{fix, max} (mm) | Minimum concrete thickness (mm) | Socket size AF (mm) | Installation torque (Nm) | Design capacities | |
|--------------|--------------------|--------------------------------|---|---------------------------------|---------------------|--------------------------|-----------------------------------|---------------------------------|
| | | | | | | | Uncracked concrete - tension (kN) | Uncracked concrete - shear (kN) |
| | | | | | | | N _{Rd} | V _{Rd} |
| | l _t | t _{fix, max} | h ₁ | h _{min} | SW | T _{inst} | | |
| AHVE0110070 | 70 | 5 | 80 | 110 | 10 | 15 | 10.7 | 11.0 |
| AHVE0110080 | 80 | 15 | | | | | | |
| AHVE0110100 | 100 | 35 | | | | | | |
| AHVE0110120 | 120 | 55 | | | | | | |
| AHVE0112080 | 80 | 10 | 90 | 120 | 13 | 30 | 13.0 | 17.2 |
| AHVE0112100 | 100 | 30 | | | | | | |
| AHVE0112120 | 120 | 50 | | | | | | |
| AHVE0112140 | 140 | 70 | | | | | | |
| AHVE0116100 | 100 | 20 | 100 | 140 | 17 | 50 | 16.3 | 29.7 |
| AHVE0116120 | 120 | 40 | | | | | | |
| AHVE0116140 | 140 | 60 | | | | | | |
| AHVE0116160 | 160 | 80 | | | | | | |
| AHVE0118120 | 120 | 20 | 120 | 180 | 19 | 100 | 28.5 | 40.0 |
| AHVE0118150 | 150 | 50 | | | | | | |
| AHVE0118170 | 170 | 70 | | | | | | |
| AHVE0118200 | 200 | 100 | | | | | | |
| AHVE0124140 | 140 | 20 | 140 | 210 | 24 | 160 | 36.6 | 73.8 |
| AHVE0124170 | 170 | 50 | | | | | | |
| AHVE0124200 | 200 | 80 | | | | | | |
| AHVE0124220 | 220 | 100 | | | | | | |

Note:

Concrete cylinder compressive strength = 32MPa

Single anchor capacity - no nearby edge, minimum recommended concrete thickness

For combined load cases (tension & shear) - must also comply with $(N^* / N_{Rd}) + (V^* / V_{Rd}) \leq 1.2$

Important Disclaimer: Product performance information contained herein is based on ETA certificate data and AS5216:2021 inputs as appropriate. Capacity information is limited to very simple load case configurations and is provided to enable a relative comparison within and across product ranges. The design of an anchoring solution for a particular application should be conducted by an appropriately qualified design professional.