## TENSION ANCHOR



### **KATTSAFE**

#### **AP110 Tension Anchor**

The Kattsafe tension anchor is a proprietary concrete anchor system used in overhead or re-belay situations.

The tension anchor is a unique single plate, non-weld device that can be used in direct tension or shear for overhead applications.

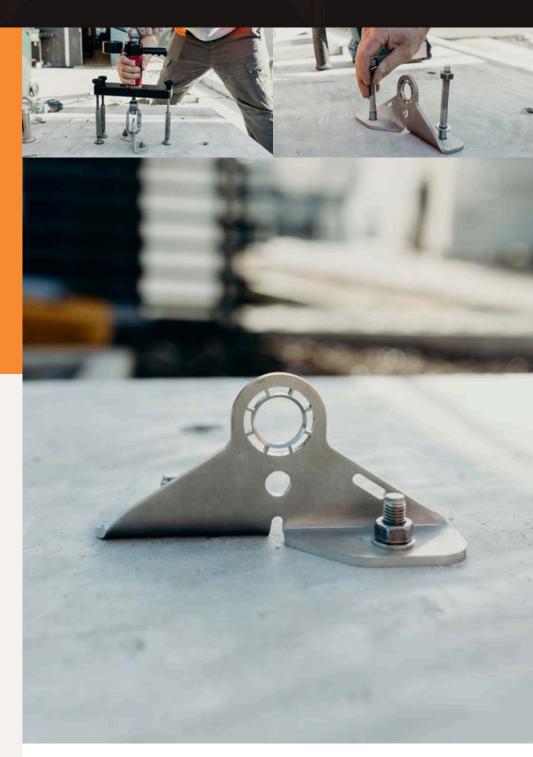
#### **HOW IT IS USED**

The tension anchor is designed to be used at angles greater than 20 degrees and constant tension, and is engineered for rope access use in overhead and rebelay applications under façade overhangs, as well as general fall arrest use. It can be installed onto concrete or steel structures.

Its unique no-weld stainless steel composition ensures the tension anchor has no performance weak points and can be load rated up to 21kN single person use. Its simple design ensures easy installation, as the device only requires two fixings.

This anchor can also be used for rescue situations if a fall has already taken place on the same device.

For rope access applications, two anchors must be used.





### **TENSION ANCHOR**

The tension anchor is an overhead or re-belay anchor system for safe work at height.





#### Load rating

Load rated to 21kN single person use rating, and a 50kN break test peak load rating with rescue after fall capabilities.



#### Overload indicator

The anchorage devices unique overload indicator provides ease of inspection showing if a fall has taken place.



#### Label slot

Making it easier for inspection and maintenance crew to recertify, and enabling a clear and easy view of the label.



#### Pull testing

The unique load aperture in the device is designed to allow for single point pull testing.



#### No weld construction

The device is a single 316 SS plate with a no weld design ensuring there are no performance weak points.



#### Simple installation

Super quick and easy installation as fixture to the surface only needs 2 x M<sub>12</sub> wedge anchor fixings.



## TENSION ANCHOR CONFIGURATIONS

AP110E Tension anchor - epoxy adhesive fix

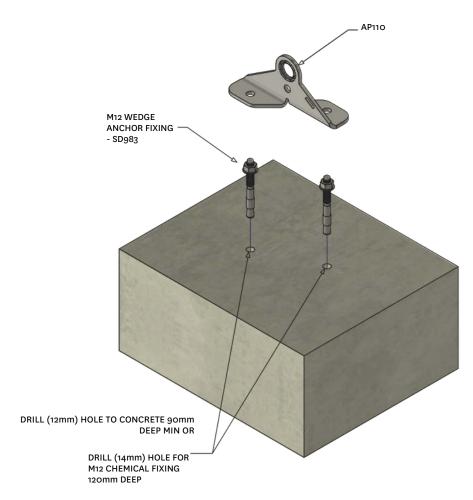


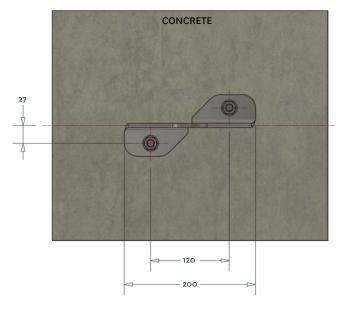
AP110S Tension anchor - seismic wedge fix

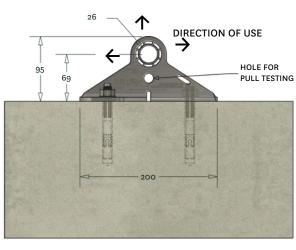




## **PRODUCT DIMENSIONS**

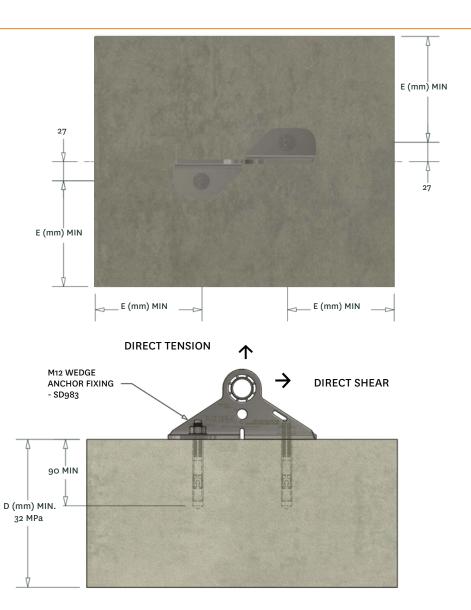








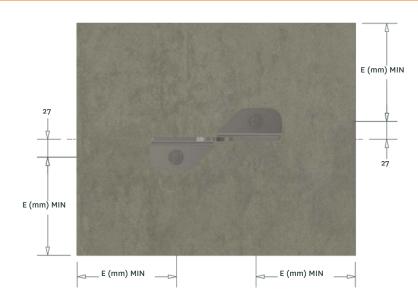
# SEISMIC WEDGE FIXING REQUIREMENTS

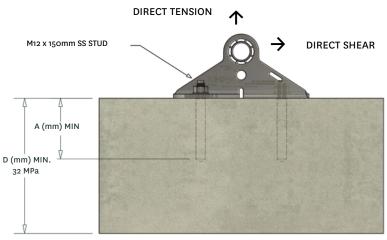


Anchor type	Load (kN)	Load direction	D: Slab thickness (mm)	
SD983	12	Tension	150	100
SD983	15	Tension	150	100
SD983	21	Tension	150	100
SD983	12	Shear	200	180
SD983	15	Shear	200	230
SD983	21	Shear	280	280



# EPOXY ADHESIVE REQUIREMENTS





Anchor type	Load (kN)	Load direction	A : Anchor Depth (mm)	D : Slab thickness (mm)	E : Edge distance (mm)
SD932.150	12	Tension	100	150	100
SD932.150	15	Tension	100	150	100
SD932.150	18	Tension	120	150	100
SD932.150	21	Tension	120	150	100
SD932.150	12	Shear	120	200	180
SD932.150	15	Shear	120	200	230
SD932.150	21	Shear	120	280	280



### **TECHNICAL SPECIFICATION**

#### **Tension anchor**

#### AP110

The tension anchor is used in overhead applications or where direct tension is required. System design, supply, layout, installation and certification by an Alta approved installer, as per the manufacturer's instructions and current standards.

#### **Materials**

316 stainless steel

#### **Dimensions**

- 200 (L) x 85 (W) x 95mm (H)
- See diagrams on pages 6-8

#### Weight

0.7 kg

#### Fixings (refer to installation manual)

- 2 x stainless steel M12 x 125mm seismic rated wedge anchor or
- 2 stainless steel M<sub>12</sub> x 150mm stud to be used with epoxy adhesive

#### Rating

- Single person use installed rating: 21kN
- Break test peak load rating: 50kN
- Rescue can be performed off the same anchor if situation permits

#### Compliance

The tension anchor is designed and manufactured in accordance with requirements of Australian and New Zealand Standards AS/NZS 1891.4:2009, AS/NZS ISO 22846 and AS/NZS 5532:2013.

#### Testing

- Testing and performance based on AS/NZS1891.4:2009 and AS/NZS5532.2013
- Dynamic load test: 15kN
- Static load test: 15kN
- Ultimate static load test: 50kN

#### **Product warranty**

10 Years from date of purchase subject to correct installation. Use and maintenance to be in accordance with manufacturer's specifications and recommendations. (This excludes wearing parts).

#### Inspection and maintenance

Inspection and certification required every 12 months by competent person in accordance with manufacturer's specifications and requirements of Australian and New Zealand Standards AS/NZS 1891 and AS/NZS 5532. (Refer installation manual)

#### Important note

- Minimum thickness of concrete: 200mm. Thickness less than 200mm requires compliance by having structure certified and the anchor proof load tested as per AS/NZS 1891.4:2009.
- Device is for personnel use only.



## WARRANTY INFORMATION

Warranty period on this system: 10 years from date of purchase

Should you have a warranty claim as a result of a defect the following procedure must be followed:

Identify the following information:

- The product/system name and code number.
- The date of purchase/installation.
- Installation company details.
- The installation identification number.
- The name of the company using this system.
- A description of the defect/warranty claim.
- The periodic system maintenance report.

Forward the above information to sales@kattsafe.com.au or contact technical helpline, 1300 301 755.

#### Terms and conditions

All warranty claims must be made in writing within 14 days of the appearance of the defect.

Incorrect installation or work done by a non accredited Kattsafe system installer will void all warranty rights.

Systems that have been installed using non proprietary equipment will void all warranties.

System roof/cladding and concrete penetration seals are not covered in this warranty.

Systems/components that have not been maintained in accordance with manufacturer's/legislative requirements will void warranty.

Systems used by incompetent persons or use with non compatible accessories ie. harness gear, lanyards, travellers, fall arrestors etc. will void warranty.

Systems/components used for purposes other than their intended use will void warranty.

General wear and tear is expected and will depend on the frequency of use and is not covered by warranty.

## **Alta Safety**

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#### TECHNICAL DRAWINGS KEY





Person Capacity



Abseil



