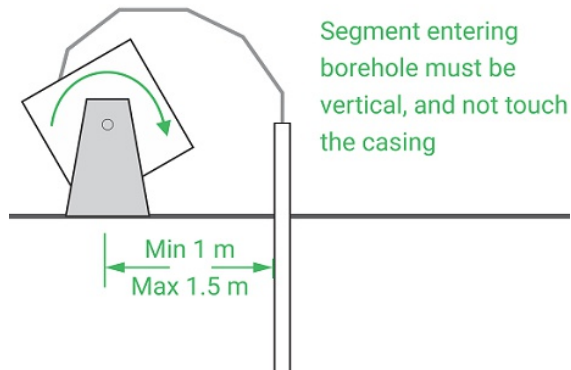


SAAV with Compression Clamp Quick Start Guide

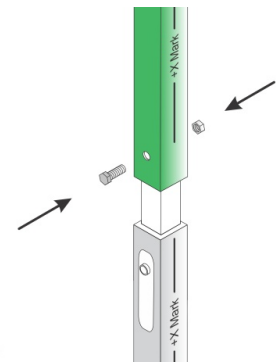
These instructions provide a summary of the steps required to properly install an SAAV in casings other than 70 mm or 85 mm OD inclinometer casing. Comprehensive installation instructions are available in the SAAV Manual: <http://saav.measurand.com/home>



1. Place the SAAV reel 1 m to 1.5 m from the borehole. Align the reel with the expected direction of movement. Unreel the SAAV from the top of the reel into the casing. Ensure that segments enter the casing vertically and avoid touching the top edge of the casing.

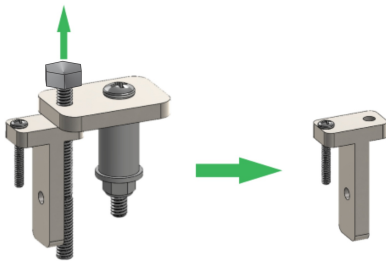
2. Detach one of the 1 m Extension Tubes (green) from the SAAV reel and attach it to the Springbox assembly (grey).

WARNING: Ensure that the Extension Tube is attached to the Springbox assembly such that the X-mark on the tubing aligns with the X-mark on the Springbox.



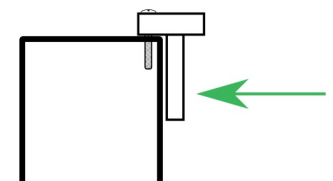
If the second Extension Tube is required, use the Extension Coupler provided in the SAAV Installation Kit.

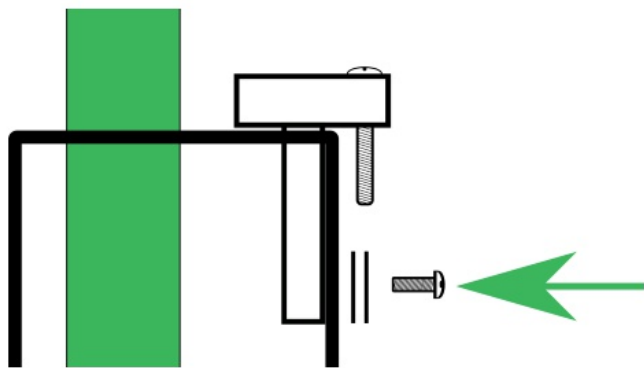
3. Use the **SAAV Installation Verification** tool from the **Diagnostics** menu in **SAAREcorder**. Lift the SAAV until it is hanging in the casing with one segment on the bottom. The angle reported by the tool will be around 4° to 6°. The tilts of the segments above the last segment should be close to 0°. Drop the SAAV straight into the casing. Apply approximately 5 lbs of downward pressure to compress it. Record the value for **Compression** reported in the tool and collect sample data. Repeat lifting and dropping until three sequential readings of **Compression** do not change by more than 1 mm (approximately 10 to 15 repetitions). Measure and record the azimuth offset of the SAAV using the included X-Mark Protractor.



4. Remove the bolt holding the Compression Clamp and the Extension Tube Anchor together.

5. Place the Compression Clamp on top of the casing with the metal side out, avoiding any grooves in the casing. Mark the casing through the hole in the Compression Clamp. Remove the Compression Clamp and drill a hole in the casing with a 6.5 mm (1/4") drill bit.

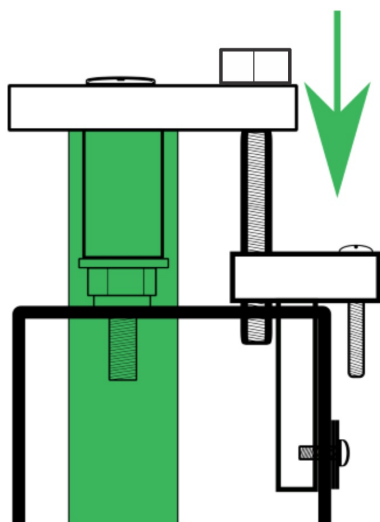
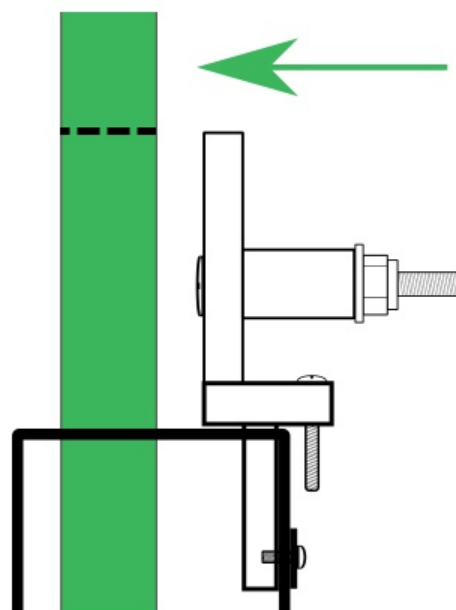




6. Place the Compression Clamp onto the casing and secure it into place. Depending on the thickness of the casing, the screw may be too long. The included washers should be used to ensure that the screw does not protrude past the clamp.

7. Set the Extension Tube Anchor on its short edge on top of the Compression Clamp. While applying a light amount of force on the Extension Tube (approximately 5 kg), mark a line along the anchor onto the tube. Cut the Extension Tube along the marked line.

WARNING: When cutting fibreglass, be sure to use the proper personal protective equipment (PPE), including goggles and dust mask. Please refer to <http://saav.measurand.com/safety-considerations> for a full description of PPE.



8. Insert the Extension Tube Anchor into the top of the Extension Tube. Compress the Extension Tube until you can screw the Extension Tube Anchor to the Compression Clamp. Tighten the bolt as far into place as possible using the ratchet provided. **Do not use a power tool as this can damage the threads!**

For casings with small inside diameters, the Extension Tube Anchor will need to be modified. The washer will need to be removed, leaving only the bolt, spacer, and lock nut, before the anchor is inserted into the Extension Tube and final compression is applied. For more information, please refer to the following article in our Support web site: <https://goo.gl/9Eb3Vb>

More detailed information about SAAV and other Measurand products is available in our Support portal knowledge base and online manuals at the following URLs:

<https://support.measurand.com>

<http://manuals.measurand.com>