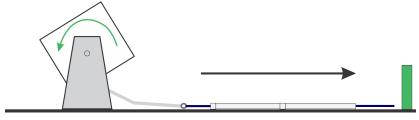


SAAF+PVC Quick Start Guide

These quick start instructions provide a summary of the steps required to properly install an SAAF following the SAAF+PVC method. Comprehensive installation instructions are available in the SAAF Manual: http://saav.measurand.com/home

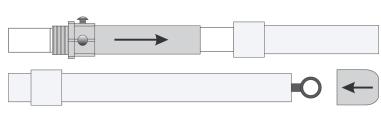


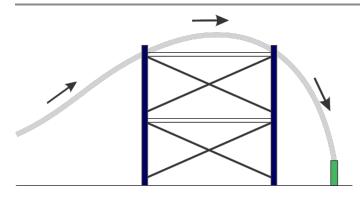
1. Clean and deburr PVC conduit. Lay out PVC conduit so that flares point away from borehole and run rope along the inside of each piece of conduit. Glue and assemble the conduit.

Place SAA reel on a stand such that it unreels from the bottom. Attach rope to eyelet on the end of the SAA and pull it into the conduit until one or two segments extend past the end. Check the SAA for twist by comparing the X-Marks at the top and bottom of the SAA. DO NOT attempt to adjust the SAA in the conduit. If twisted, contact Measurand for support.

2. Add an appropriate length of PVC over the end of the SAA sticking out of the conduit and attach an end cap.

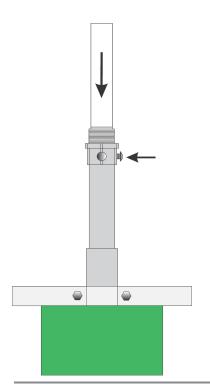
Attach the bottom half of top stack assembly from the included install kit to the PVC at the cable end of the SAA. Ensure the set screws are loose.





NOTE: A support mechanism that offers two points of support to ensure a minimum bend radius of 3.5 m (11.5') for 500 mm segments and 3 m (10') for 305 mm segments must be used for installation. For example, scaffolding, a bulldozer, or drill rig can be used to support the SAA+PVC assembly for insertion into the borehole.

3. Slide the SAA+PVC assembly over the support mechanism to create an arch and begin inserting the assembly into the borehole. Helpers will be required to ensure the assembly moves smoothly over the support mechanism. For long SAAs, a cable should be attached to the bottom of the SAA+PVC assembly and a winch used to control the descent into the borehole. Once the SAA+PVC has been lowered into the borehole, secure it at the top using the hanging fixture included in the install kit.



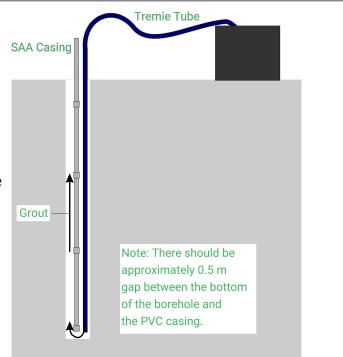
4. Compress the SAA in the PVC by applying downward force of no more than 20 kg (approximately 50 lbs) on the PEX. Tighten the set screws in the top stack to maintain the compression.

Find the azimuth offset using the SAA X-Mark Protractor.

Cut away excess PEX tubing and thread the top portion of the top stack onto the cabling and screw it to the bottom portion.

Tighten the cable gland on the top stack to prevent moisture from entering the SAA+PVC assembly.

5. Grout the borehole. Once the grout has set, remove the hanging fixture. Run the cabling to the earth station and connect to a data logging solution.



More detailed information about SAAF 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

