

Items to Take Note of Prior to Installation

- When the home was built, was there rock present? Rock may involve additional costs when excavating the area.
- Are you in a flood area? If you are, the Estate model is not a recommended shelter.
- It can take 2-4 good rain events for the shelter and ground to settle in completely.
- Set 12" above the initial grade.
- The initial grade should be 6-8" from the vents of the shelter.
- Installation can be 3+ hours to complete.

Tools/Equipment Needed

Transit String and Stakes or Marking Paint Tape Measure Tamper Chain (to set the shelter in the ground) Garden Rake Round-point Shovel Ladder Optional sub surface rock for base layer under shelter Backhoe or mini-excavator (ability to carry up to 3460lbs)

We recommend that you call the local authorities, septic company, and/or 811-DIG to receive a dig clearance to ensure that there are no underground utilities when preparing to install the shelter.

Installation Summary

- 1. Mark the location for installation.
- 2. Dig the hole and grade the bottom of the hole (optional rock layer can be added).
- 3. Install the shelter and optional ground anchors (recommended for high water table areas).
- 4. Backfill the hole and install any optional utilities.

Installation Instructions

- 1. Prior to starting the installation process, check with local building codes and regulations as each jurisdiction will have different requirements and permitting/approvals may be required.
- 2. Once the shelter has been offloaded, mark the site for installation using marking string and then paint the lines on the ground to allow for digging.
 - 1. Allow for a generous working area (30') around the installation spot as the excavated soil will also need to be placed).
 - 2. The installation surface needs to be a level area.
 - 3. Standard practice is to not dig within 6' of a permanent structure and 10' if the ground is sandy.
 - 4. The hole should be dug 2' wider and 2' longer when measured from the outside of the extended side shelter.
 - 5. You will also need to dig the stair entry 2' wider and 2' longer than it's dimensions.
- 3. You will want to establish the grade on the installation site and dig the hole 12" deeper than the shelter's exterior height of the main body. This step should be dug form the average of the grade of the four corners.
- 4. When digging is completed, check your measurements with a transit and remove any remaining dirt with your shovel and rake.
- 5. Once you have hand graded the hole, you should tamp the bottom of the hole to ensure it is level. If desired, add a small layer of sub-surface rock .
- 6. The shelter is now ready to be placed in the hole.
- 7. Chain the shelter from the lift points at the corners and use the backhoe or mini-excavator to maneuver the shelter into place.
- 8. This step is optional if there is no water in the hole after digging but recommended if in a high water table area There are 4 rectangular cut points at the corners of the extended shelf on the shelter these are where the optional ground anchors should be installed.
 - 1. The 36" earth ground anchors can be installed using an anchor machine or using a short 2x piece of lumber.
 - 2. The anchors will need to be securely tightened against the shelter floor.
- 9. The shelter is now ready to be back filled . Do not drive over the shelter when back filling the hole.
- 10. This is the time to ensure any electrical or water hook ups are completed using the conduits on the front of the stair case entry of the shelter.
- 11. It is recommended that you sod, plant grass seed, or place hay around the shelter once grading is complete.
- 12. Ensure that the door of the shelter is the highest point once completed to prevent any water from entering the shelter.
- 13. If permitting and having to ensure code compliance, ensure appropriate approvals and checks are completed.

For additional information on the installation of the Survive-A-Storm Shelters' Estate Model Storm Shelters, visit: A Step-by-Step Guide: Installing Underground Tornado Shelters - https://survive-a-storm.com/underground-install