# <u>9 x 12 A – Frame Storage Shed Instruction Manual</u>

# Statesville Truss & Components 453 Fanjoy Road Statesville, NC 28625 Office: 704-873-9301 Fax: 704-873-9302 www.statesvilletruss.com

**Deal's Metal** 

449 Fanjoy Road

Statesville, NC 28625

Office: 704-872-6098 Fax: 704-872-6038

www.dealsmetal.com

#### 9 x 12 A-Frame Storage Shed

1. Lay your pre-assemble 12' runner out on floor.



- 2. Set your cap blocks out. 3' from each end of pre-assembled runners and have the runners sitting 6' apart for the width. (Not shown in video, because we are building this one on a concrete floor.)
- 3. To install the first gable end, measure over 14" from the end of the gable and make a mark. Do this on both sides of the gable end. Then sit the gable end on the back space of the runner and nail it onto runners. Start with the back gable. (Make sure your 14" mark is lined up with the outside of the runner board.)



4. Install front gable by doing the same as step 3. Measure over 14" from the end of the gable on both sides. Then slide the gable on the front space of the runner and nail it onto the runners. (Make sure your 14" mark is lined up with the outside of the runner board.)



5. Now you must square the building up by measuring from the front right corner gable to the left back corner gable and get your measurement. Then measure from left front of corner gable to right back of corner gable and get the measurement. These two numbers should be the same. If not adjust by sliding one end forward or backward to square up building.



6. Next you will begin to put the other two panels in. First you run a string from the front gable at the bottom to the back gable at the bottom. From the back gable, count two spaces towards the front gable and install the panel in that space. Pull the edge of the panel to within a 32<sup>nd</sup> of the string you installed so that all panels line up even. Then nail it in. You should put at least two nails on each side of the panel when attaching it to the runners.



7. Now you are going to put the floor joist in between the panels. Use the spaces between the 14.5" 2x4's. When you lay the joist in the space align the joist so that it's 4 1/4 off the string that you used in the previous step. Once in place, nail it in. You will have 4 joists to install in this step. (Make sure you measure both sides, it should come out to 4 ¼ but you may need to make adjustments if you are off any)



- 8. Now you will install blocks that are 45 <sup>3</sup>⁄<sub>4</sub> at each corner, going down the side of the building so that the joist are secure and the plywood will have something to nail to.
- 9. Next install the 45 ¾ 2x4 between the front gable and 1<sup>st</sup> panel, making sure it fits up against the ends of the floor joist. Nail it in. Then get another 45 ¾ 2x4 and place it flat on top on the 2x4 you just installed, lining it up with the vertical 2x4's from the front gable and 1<sup>st</sup> panel. Nail it in.



10. Next get a 46 ½ 2x4 and install it between the 1<sup>st</sup> panel and 2<sup>nd</sup> panel, making sure it's up against the floor joist. Nail it in. Then get another 46 ½ 2x4 and place it on top of the one you just installed, laying it flat and line it up with the vertical 2x4's from panel 1 & 2. Nail it in.



11. Next install the 45 ¾ 2x4 between the 2<sup>nd</sup> panel and back gable, making sure it fits up against the ends of the floor joist. Nail it in. Then get another 45 ¾ 2x4 and place it flat on top on the 2x4 you just installed, lining it up with the vertical 2x4's from the front 2<sup>nd</sup> gable and back gable. Nail it in.



12. Follow steps 9-12 for the other side of the building.



13. Next you will add the 12' 2x6 stripping board down the side of the building. Align it at the bottom of the front gable to the bottom of the back gable. This should be flush at each end. Nail it in. Install nails through 2x6 at front gable, each panel and back gable.



- 14. Now you are going to mark the stripping boards for the sides of the building by lining them up with the one you just installed and make a mark where the 2x4 crosses over it at each panel.
- 15. Then go to your front gable stripping board (middle ways up) make a mark so that you can line the side stripping board up with this line to install so that it's level with front and back gable stripping boards.
- 16. Now get a 12' 2x4 stripping board and nail in the two outside edges against the front and back gable sides. Once this is in place you line the panels up with the marks you made on the back of the 2x4 you are installing. (you may have to push or pull the panel to line them up) Nail it in once aligned.
- 17. Next get another 12' 2x4 and place it at the top of the side wall. Flushing it with the truss 2x4's. Nail the two ends first and then align the middle panel with the marks on back of the 2x4 you are installing. (you may have to push or pull the panels to line them up) Nail it in once aligned.





This is what the finished frame should look like.

- 18. Follow steps 15-17 for the other side of the building.
- 19. Now you are going to install the floor. Start at the front door of the building. Lay the floor down and push it up against the frame. Then you will make a mark on the floor to cut out around the middle 2x4. Cut a small notch out of the floor so that the floor can slide around the middle 2x4 and be flush with the bottom outside board. (See video for a visual) Once this piece of floor is in. Nail it down.
- 20. Next install the middle piece of flooring. It will slide up against the 1<sup>st</sup> sheet of flooring. Nail it down.

21. Now you are going to install the last sheet of flooring. You will have to make another cut like in step 19 (cut around the middle 2x4) so that this sheet of flooring lays flat and is flush with the outside edge of 2x4. Once completed, slide floor in place and nail down.



- 22. Next you will be installing the 12' stripping boards on the roof. Place a 12' 2x4 on the outside edge of the roof installing it flat and flush with the side top stripping board. Nail it in place.
- 23. Next you place another 12' 2x4 (stripping board) at the ridge. Measure down 3 ½ from the peak from the front gable and the back gable. Line your stripping board up on those marks so that the stripping board is 3 ½ from the peak and nail it in.
- 24. Next you will be installing the middle stripping board on the roof. Put this stripping board in the middle of the top and bottom stripping board. The middle should be 20 %. Mark this on both ends. Put your stripping board in place and nail it in.



25. Next you will put the vapor barrier on the roof. Take your first piece and tack it on the outside roof stripping board so that it's flush with the stripping boards at the front gable. Once in place nail it down. Use 1" sheet rock nails, 3 nails on each end of vapor barrier.

- 26. Now put the second piece of vapor barrier on. Overlap second piece of vapor barrier onto first piece at the black line. (about 6 inches) Once lined up and flush with outer stripping boards on outside walls nail it down.
- 27. Now install the third piece of vapor barrier. Line this piece the same as you did the second piece and cut off excess at back gable end. Also cut off any excess vapor barrier along sides of building at ends of stripping boards.



- 28. Next you will prepare to put the metal on the roof. You should have a 3 ½ overhang. So start with the overlap side (It goes on the end) and mark the metal 5 inches next to each rib, so the screws will be straight. (Mark both ends of the metal)
- 29. Now lay the metal on the roof at the back of the building. Measure 3 ½ from bottom so that the metal will stick over the building 3 ½ inches. Align metal so that the ½ of overlapping rib is with the gable pitch end, other half hangs over. Screw metal in place using the marks you made.
- **30.** Now lay the second sheet of metal on roof and overlap it on the rib, make sure it's even with the first sheet of metal at the bottom and screw it on.
- 31. Now lay the third sheet of metal on roof and overlap it on the rib, make sure it's even with the second sheet of metal at the bottom and screw it on.
- 32. Next get your chalk line and stretch it across metal roof from the stripping board on front gable end to same stripping board on back gable end. Pop the string and then put the screws in beside each rib along the chalk lines you just made.



- 33. Next follow steps 28-32 for the other side of the roof.
- 34. Next you will put in the door panel and its purpose is to cover the raw wood.
- 35. Hold the panel up in place and mark the areas on the metal where you need to make the cuts so that it will slide by the 2x4's on each end of door.
- 36. After you get the metal cut, put it in place and screw it in.
- 37. Next step is setting the door. Place the door in the framed area and adjust door so that the spaces are even around the door on both sides.
- 38. Then you will put the screws in the metal frame. You don't have to use each hole but at least every other hole.



39. Now you will put the dripedge on the bottom edge of the building. Hold the drip edge in place and made proper marks to cut out in metal so that it fits flush onto the bottom edge of the building.



- 40. Next you will prepare to put the side metal panels on the building. Measure from the top of building to bottom of building and get the measurement where you want the screws to be. On this building the screws should be 3" down from top on first stripping board to 45" down on second stripping board, to 83" down on bottom stripping board. All these measurements should be in the middle of the stripping board. This is where the metal panels will screw into.
- 41. Now lay four of the metal panels out and line them up even. Make sure before you measure for your holes that the metal panels are laid so that the overlap edge will go on outside edge of building.
- 42. Mark the top piece of metal panel with a marker. Measure down 3" make a mark, 45" make a mark and 83" make a mark and do this on each rib. Get a small drill bit about the size of the

screw you will be using and drill holes in metal. This will be the hole you use to install the metal onto the building.



- 43. Next get your first sheet of metal and put it in place. Line the ribs up with the ribs from the roof ribs, making sure the overlap edge are on the outside of the building. Once lined up make sure its level and screw in place. Only put screws into the top row and middle row of holes you pre-drilled. (These holes should line up with the 3", 45" and 83" marks you made to screw into the stripping board. You will need to attach a base trim in with the bottom row of screws at a later step.
- 44. Next get your second piece of metal panel and overlap that sheet of metal panel onto the first sheet. It should be flush. Only put screws into the top row and middle row. You will need to attach a base trim in with the bottom row of screws.
- 45. Next get your third piece of metal panel and overlap that sheet of metal panel onto the second sheet. It should be flush. Only put screws into the top row and middle row. You will need to attach a base trim in with the bottom row of screws.



- 46. Next apply steps 40-45 to the other side of the building.
- 47. Next you will be installing the j-channel around the door. Hold a piece of j-channel beside the door, having the piece flush with the bottom of the building and make your cut at the top if needed. Then screw in.
- 48. Install the other piece of j-channel to the other side of the door as you did in step 47.
- 49. Now get the top piece of j-channel and place it on the top of the door. Get a marker and draw a line around the j-channel on each side where the side panels are and then cut it out. Also cut off excess of top j-channel.

50. Now that your piece is ready, bend the lips down where you made the cut and install above door so that the lips go into side j-channels. Then screw in.



51. Now you will be installing metal panels on the front side. Get one of the shorter pieces of metal panels and center it above the door. The bottom side of metal panel will slide inside of j-channel on top of door. Use a maker and mark the backside of metal on the sides and top at ridge. Make your cut so that it follows the pitch of the roof. You can do this with the metal screwed on or you can cut it and then install it. Put screws beside ribs. Don't worry if the cut is not exact because your rake trim will cover the air gaps.



- 52. Next you will install the left sheet of metal panel onto the front. First measure at the bottom of the building so that this sheet of metal panel will be even with the bottom of the side metal panel. Make two marks on the front bottom of building so that when you install the metal panel you will know to line bottom of metal up with those marks you just made at bottom of building.
- 53. Next you will measure from center of rib at top j-channel to the end of j-channel at top of the door. This should be a 1". Make a mark on the metal panel
- 54. Next you will measure from top of J-channel to bottom mark you made in step 52. Should be 75 ½. Make a mark on metal panel and then cut that 1" out from mark to mark. This will allow the metal panel to sit in place against the j-channel at the door and allow the metal panel to overlap above the j-channel.
- 55. Next put the metal panel in place and make a mark on the back side of panel at the roof so that you know where to cut the pitch out or you can screw the panel in place and then make

the cut along the roof pitch. Again don't worry about the air space the rake will cover all air holes.

56. At the corner of the panel where the side and front panels meet, if it laps over the other side you may have to cut that rib off. Just score it with a razor knife and bend it and it will come off. Screw the metal panel on.



- 57. Next you will put metal panel on right side of door. Apply steps 52-56 to complete this step.
- 58. Next you will apply metal panels to the back side.
- 59. Next measure up from the bottom of building so that the metal panel will be even with the side metal panels. Make your marks on the bottom of building so that you know how to line it up.
- 60. Next get your metal panel and line the center rib of that metal panel up with the center of the ridge and make sure that it's lined up with the bottom marks you made. Make a mark at top of the metal panel and on each side so that you can cut out the pitch of the metal panel so that it follows the roof line or you can screw the metal panel in place and cut the pitch out once it's screwed in. Again don't worry about air holes because the rake will cover them.
- 61. Next you get the next metal panel and install it onto the overlap edge of previous metal panel and screw in place and cut pitch at roof line or you can make marks at top and cut pitch out and then screw in place. Again don't worry about the air holes because the rake will cover them.
- 62. Next you get the last metal panel and install it onto the overlap edge of previous metal panel and screw in place and cut pitch at roof line or you can make marks at top and cut pitch out and then screw in place. Again don't worry about the air holes because the rake will cover them.



- 63. Next you will install the base trim at the bottom edge of the building. This will keep insects from entering your building through the bottom edge of the metal.
- 64. Start on one side. On the base trim hold it in place and make a mark 1" from the front end of the base trim. The hem will be the bottom edge. Cut that 1" out. This is so that once it's wrapped around it all closes up.
- 65. Now you will slide the non hemmed edge up under the side metal panels and screw it in using the holes that was pre-drilled on the side metal panels.



66. Next step you will install the corner. Start with any corner. Measure from top corner of building to bottom corner of building. Make your cut at top and install. Screw corner onto building making sure its straight. Do this for all four corners.



67. Now you will install the rake trim. Line the first piece up with the outside of roof metal panel and then it should extend to center of ridge. Make your cut so that it's straight with rib on metal panel below it. Install using screws. Apply this to all four pieces of rake trim.



- 68. Next you will install the ridgecap. On the end of the ridgecap mark 2" on each end of ridgecap metal and 2" in the center of ridgecap. Once you have made your marks, cut it out from each end to the last crease and cut a straight line in the middle of the ridge where you made your mark. Then once you have that cut made fold over the two longer pieces. They will overlap each other.
- 69. Next install the ridgecap on roof. Put the ridgecap so that it's in the center of your rake trim. Screw it down and then do the same to finish out the ridgecap on the other side. Follow step 68 for this side.





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