This guide will walk you through building an 8’x4'x4'(LxDxH) enclosure for a savannah but can also be used for a tegu as the size requirements are the same.

This enclosure is the minimum for an adult and should be used as a starting point. Savannahs/Tegus are mainly terrestrial ( ground dwellers ) but they are also slightly arboreal ( climbers ) so taller enclosures will be used by your monitor. The bigger you can go is always better. You will also want deep substrate at least 2' for an adult for burrowing and humidity retention. As written, the enclosure will have sliding doors but it can be easily modified to have swing open or fold down doors as you prefer. Hand pick all your lumber checking for strait none warping, least amount of knots, and no splits.

SUPPLIES:
(3) 4"x4"x8' ( optional depending on the climate where you are located )
 (30)2"x4"x8'
 (5) 4'x8'x3/4" plywood ( not osb use decking plywood )
 (12)3"lag bolts ( se attached pic )
 (1) 3# box of 3" deck screws ( see attached pics )
(1)1# box of 1 1/2 deck screws ( see attached pics )
(2)tubes of kitchen & bath silicone
(3)ceramic light fixtures Sealant Insulation Showcase lock ( see attached pic )
Electrical wiring ( if you don't know how to wire electrical outlets then get an electrician ) (12/2 or 14/2 gage )

This guide also assumes you have the following basic tools:
 1) Circular saw
2) Drill
3) Table saw
4) Caulk line
 5) Level
6) Screw bits
 7) Drill bits ( see attached pics )
8) tape measure
9) pencil
10) Carpenter’s square
11.) Optional: a jig saw.
If you do not have a jig saw, a hand saw will suffice. If you do not have these tools, the lumber department at your local home improvement store should be able to pre-cut the wood for you.

CUTTING (skip this section if you had the lumber department cut your wood)
 I like to make all my cuts first unless it needs to fit very tight.
1.) Cut two of the 2”x4”x8’s into seven 21” long boards.
2.) Cut thirteen of the 2"x4"x8's into twenty-six 45” boards
3.) Cut two of the 2”x4”x8’s into four 41” boards.
4.) Cut two 2”x4”x8’s into two 72” boards.
5.) Cut one of the 4'x8'x3/4" plywood pieces into 4’x41” pieces.

This step has the most cutting.

THE FLOOR
1.)Mark two of the 2"x4"x8' for stud placement on 16” centers. Put your first mark at 1.5”, and then every 16.75”. Do this on both 8’ boards and pre-drill two holes in the center. This will be where we will put the floor joist.
2.) Next place one of the 45” boards on each mark.
3.) Use the 3” deck screws and screw the boards together.
4.) Repeat until all the joists are in place.
 5.) Mark another sheet of plywood in the same fashion as the 2”x4”x8’.
 6.) Next lay the sheet of plywood and screw it to the floor joist with the 1.5” screws.

BACK WALL
1.)Gather two of the 2"x4"x8' and nine of the 2"x4"x45" pieces.
2.) Screw two of the 45" boards together to form an “L” (see attached pics you can do this by laying one board flat on the building surface and the other on its edge not the end but it's edge ) 3.) Repeat to make another “L” shape. You’re need these two Ls to screw the entire enclosure together.

END WALLS
You will need two of the 41” boards and three of the 45” boards for each end wall. Put a mark in the center of each of the 41” boards. These marks will be placement marks for studs. Pre-drill two holes at each end of the board, about ¾” from the end, and pre-drill another hole at the mark in the center. Put two of the 41” boards on your building surface. Place three of the 45” boards between them to form a wall and screw them together. Screw one of the half-sheets of plywood onto the wall studs and repeat for the other end wall.

FRONT WALL AND GLASS
This is the hard part. You will need two of the 8' 2x4s and six of the 45" 2x4s and the 21" 2x4s and the two 72" 2x4s. First make 2 “L” shapes as before and place them one at each end. Next get the 8' boards and mark them 6" inches from the end. Place them on the building surface. Place two of the 45” 2x4s on each mark on the 8 footers. Next, grab five of the 21” and one of the 72” boards, these will form the frame for the sliding doors. Place the 72" boards at 21 inches from the bottom of your wall then equally spaced between the bottom plate of the wall and the bottom plate of where the glass will sit. Screw everything in place, then get the other 72" board at the top against the top plate of your wall and screw into place.
Now bolt and screw the walls to the base of your enclosure and to each other. To bolt the walls together you will need to pre-drill the holes for the lag bolts ( 3 for each corner ).
 Now insulate everything ( if you live where it get long cold winters place the 4"x4"x8' under the floor to allow warm air to get under it ). Probably a whole section on insulating would be good, and I’m not sure how you could put anything below the floor?

SEALING: A note on sealant (Anything not petroleum based. I have used a product called seal-dry the only down side to this product is when it's dry it remains very tacky until the substrate is put in the viv. You can use FRP/fiberglass reinforced plastic. Also G4 sealant. I like Ames Blue Max check out YouTube for this ). To seal your newly built enclosure, you’ll first need to caulk all the corners with silicone. Make sure to be very thorough and seal all the joints between walls, and the walls and the floor. Once the silicone has completely dried and cured, then you can use your preferred sealant to seal the enclosure. Once the sealant has dried and aired out/cured out it will be time to add the ceiling. Grab two of the 2”x4”s and cut them to a tight fit at the top of the enclosure across the 4” depth. When you’ve cut them then space them and screw them into the walls. These form the ceiling supports. You’ll want to order your glass at this point to have an exact measurement of the opening. Be sure to leave at least 3”for the panes to overlap.

provided by Edward Reptilian Rickenbacker









