

### **Table Of Contents**

- 1. Shed Foundation Basics
- 2. Shed Flooring
- 3. Shed Walls
- 4. Shed Roofing
- 5. Shed Siding
- 6. Shed Ceiling Styles
- 7. Shed Doors
- 8. Shed Ventilation
- 9. Anchoring A Shed
- 10. Shed Guttering
- 11. Shed Ramp
- 12. Shed Windows
- 13. Shed Mold & Mildew
- 14. Shed Upgrades
- 15. Specialty Shed Ideas
- 16. Shed Plans
- 17. About

## Introduction

First of all let me thank you for purchasing "The Shed Building Guide & Advice From A Friend". This book was compiled from my website and put together with the help of thousands of people/friends interested in sheds. The friends involved in this book come from different parts of the shed building perspective. We have collaboration with builders who wanted to give advice to people building their own shed. There are tips and advice from people who hired someone to build a shed and then thought of different things that would have made their shed or experience better. That's why this book can be a little something for everyone interested in shed building or just owning a shed.

This book is not a complete instruction manual with step by step process of how to build a shed. This book will have building ideas with instructions with all the different steps of shed building. However, it will also have advice and tips from people who have had sheds built but may have forgotten a certain design or tip that could have made their shed better. In addition, this book gets creative in explaining specialty sheds such as a greenhouse, man cave, cigar shed, etc.... Some of these may interest you and you can see how creative one can get with a basic shed.

Finally, we have links to a collection of shed plans and resources that are followers have used with great results.

I hope you enjoy this book as much as I have enjoyed compiling all of the information to provide you help with your shed.

Sincerely,

JB

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# Chapter 1 - Shed Foundation Basics

Anytime you are going to build a shed you have to think about the shed foundation construction. All structures are built from the ground up and your shed is no different. There are many options and they depend on where the shed will be located and what type of soil you have and your budget. One thing you do not want to do is build it directly on the ground as the moisture may rot the wood and also the shed may lean from ground settling.

Shed Foundation Construction Types Wood and Pier...



This shed foundation is good depending on the location and type of shed you build. It is also considered to be a post and beam foundation because the wood is not just sitting on the ground but it is attached to posts that are secured in the ground. The wood has to be pressure treated to withstand the moisture. Furthermore, posts are to be secured properly at the right depth for the weight of your structure so you do not have a leaning shed.

### Gravel...



A shed foundation of gravel is good for a small to medium shed. It is a sturdy foundation and can withstand heavy loads if you are putting equipment in your shed, but they are not the best for large sheds. A large shed that holds equipment should be on a concrete slab. Dig a hole the size of the shed and then put the gravel in the hole. It will need to be leveled and tamped down to make a secure foundation. You will then fill that hole with the right size gravel and spread it evenly. This will then need to be tamped down and even. Read more in depth description below.

### Cement Blocks...



These blocks make for an easy alternative for a shed foundation because they are readily available and can be delivered to your site. They are spaced at 3-5 feet apart and the shed is built right on top of the blocks. Level the blocks so you do not have a leaning shed and

a poor foundation. Cement blocks are easy to move and if you have a small shed and want to move it at some point then this may be your best foundation.

### Concrete Slab...



This is the strongest shed foundation construction and can withstand a full load contact. It is a great foundation for sheds with machinery. Therefore, if your shed is for equipment or a car then this is the one you want. With the concrete slab, you do have to be careful if the slab is much larger than your shed. If that is the case, then you run the risk of water resting on the slab and water damage to your shed. Think about your future water drainage. Read more in depth description below.

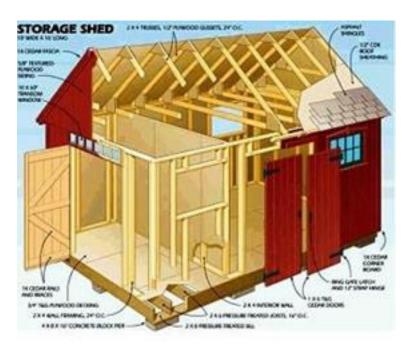
### **Gravel Shed Foundation**

How do you build the best gravel shed base?

Building a gravel shed base is not very difficult, but it has to be done right. You need to find the right spot for your shed and the right plans. Next, plan how the shed will be situated and prepare the ground. Frame the foundation and make it square. Place the proper gravel in the base and make sure the base is compacted. If you don't

prepare the gravel shed base properly, then the entire project could be ruined.

# Start With The Right Shed Plans



Your stuff is piling up and you need storage space. You know you need a shed but you are not sure what kind of shed you need. If you have a lot of storage needs, then you will need a bigger shed such as a gable shed. However, if you have a small amount of storage needs, then you may be able to build a small lean to shed. Do the proper assessment of your storage needs and then pick the right shed plan.

There are lots of options for a shed plan and I think the most common shed is a medium-sized gable shed. However, you need to look at multiple plans to find the right shed for your desires. Once you have the plans and you are going to build your shed make sure you get the proper permits. You can check here for permit questions.

# Pick The Right Spot For Your Gravel Shed Base

You have done your homework and you have picked the right shed for your needs. You have plans and the materials to build the shed you want. Next, look at your available land and find the right spot for your shed. You do not want the shed to be too far away from the house, because you may not want to make the long walk to the shed. Furthermore, you may not want the shed too close to the house if it is going to be noisy. For instance, if your shed is a man cave, then it may be too noisy to be next to the home.

I would recommend that you find a spot for your shed that is somewhat level but sloping. The right spot should be on a gentle slope for proper drainage. Do not build it in a floodplain or too close to running water such as a creek. That would allow you to prevent flooding in the future. In addition, make sure that the ground is of good soil. The soil needs to be firm and not soft. You do not want soil that is too soft, because then you may have structural issues due to the shed shifting. Once you have the desired location it will be time to prepare the ground.

# Prepare The Ground For Your Gravel Shed Base

Ground preparation can be a very difficult task depending on the spot you picked for your shed. Rocky land will make it more difficult to prepare as the rocks will have to be removed. Land that is an excessive slope will take a lot more removal of dirt to make the foundation level. This could also require a retaining wall. If you have a piece of land that is on a gentle slope then this will be easier to make level. I recommend you dig out the foundation to allow for a 4-6 inch gravel shed base.

The ground work is done and the gravel shed foundation area is level. The next step would be to tamp the ground with a manual or automatic tamper. I like to use a manual tamper by Ames, because it works very

well and the shed is a small structure so you may not need a large automatic tamper. However, if you are building a large shed, then an automatic tamper would be a wise choice. We like the one by Dirty Hands, which you can find on Amazon.

### Frame The Gravel Shed Base

Once the area for the Gravel shed base is level and tamped you will need to frame the foundation. Take your shed plans and find the dimensions of the shed foundation. The next step will be to take some 2x4's and make an outline of the shed foundation, like the picture below. It is recommended that you build the shed base about two feet extra in length and width from your shed plans. This allows for more drainage and a nice perimeter around the shed.



Square the frame properly by the method below.

- Length Measure and make sure the 2x4's measure exactly.
- Width Measure and make sure the 2x4's measure exactly.
- Measure diagonally from corner to corner and make sure that is exact also.
- Now you can screw together each 2 x 4 and place the proper pegs on the outside of the frame for stability. This will make sure it is a stable outline of your gravel shed base.

### Pick The Correct Gravel For Your Shed Base

There are a lot of options when it comes to picking the right gravel. You don't want it too large or too small. The gravel purpose is to allow drainage and provide support. The most recommended stone is 1/2" to 3/4" crushed stone. Do not use Pea Gravel. You can get the stone from many different providers. If the shed is small, then you may want to get bags of stone. However, if your shed is going to be large, then you may want the gravel delivered.

# Place The Gravel And Prepare For The Shed

The process is coming along nicely. You have the permits and the right shed plans. The ground is properly level and the gravel shed base is dug to a 4-6 inch base. The foundation is framed with a 2 foot extra length and width frame. The frame is squared and the soil is tamped. The right gravel is bought and delivered into the framed area.

Lots of work done already and a little more to go. Now place a 10-20 mil vapor barrier between the ground and the gravel to prevent moisture. Then place the gravel in the foundation and tamp it again with your Ames manual tamper. If it is a large area to tamp then go with the one by Dirty Hand Tools as it will make it easier. The gravel is now tamped and level so move on to the building process.

### Build The Shed On Your Gravel Shed Base

The permits are in place and the gravel shed base is properly prepared. Now it is time to build your shed. Below is a quick run down of your process. I have added links to other posts explaining each step of the process further.

You will begin with the <u>floor structure</u>. Make sure to choose the correct floor for your shed. Most sheds will be a wood floor, but there are exceptions depending on your shed needs.

The <u>shedwalls</u> will go up next. Frame the walls according to the plans. A <u>shed kit</u> Will have walls already assembled so adhere them to the foundation and floor.

Next will be the roof trusses and then the roof. Finish the <u>roof</u> with the right roofing material. Pick the right <u>shed ceiling</u> for the inside. Find the right <u>shed siding</u> for the outside. These choices will be determined on your shed design and needs.

Pick the right <u>windows</u> and <u>doors</u> foryour shed. These can be decorative or basic depending on your needs. Furthermore, don't forget about <u>shed ventilation</u> and if you are in a rainy area you may want to think about <u>shed guttering also.</u>

This is a post of <u>shed building videos</u> From our website that we found..

### The Best Gravel Shed Base Conclusion

Building the right gravel shed base is not very difficult. However, it needs to be a stepwise process to make sure it is all done correctly. If the foundation is not done properly, then the entire shed could shift and become unstable. Take your time and find the right shed plans. Then build the right foundation and shed that you need.

### **Concrete Shed Foundation**

How would you build a concrete shed foundation?

Find out the best way to build a concrete shed foundation by understanding how to prepare the ground for your concrete shed foundation. What is concrete and what is the best concrete for your foundation. Learn how to mix the concrete properly and finish the concrete like a professional.

It is time to build the shed you have always wanted. You made the decision to build it on a concrete shed foundation but you are unsure where to start. With the proper planning and some tips you will have the concrete foundation looking like you hired a professional.

Concrete Shed Foundation – Prepare The Ground Step One

The first thing you will need to do is find the proper area for you to build your shed. This will be determined by your landscape as well as the type of shed you're going to build. Make sure you have the proper permits for the building process. You can find more about your permits here.

Once you have the correct plans and the correct area for your shed you will need to begin the preparation for the foundation. If your ground has a lot of rock and plant roots then you will need to remove those from the soil. You want to make sure the soil is firm and not soft.

# **Step Two**

The next part of the process would be to dig the ground to the dimensions of your shed. For example, if the shed is going to be  $10 \times 10$  then you need to dig out a  $10 \times 10$  area in the ground. The typical depth will be 7 inches. The first 3 inches will be for the gravel base and the

remaining 4 inches will be for the concrete. However, it can also be at a depth of 8 inches. This would be for 4 inches of gravel and 4 inches of concrete.

Now that you dug the area to the proper depth according to the dimensions of your shed plan, you will need to build a frame for your concrete shed foundation. This is relatively easy as you will take 2x4 or 2x6 boards and place them in the outline of your shed base. Secure the boards to one another using deck screws and wooden stakes to hold them In place, see the diagram courtesy of bobvilla.com.



# **Step Three**

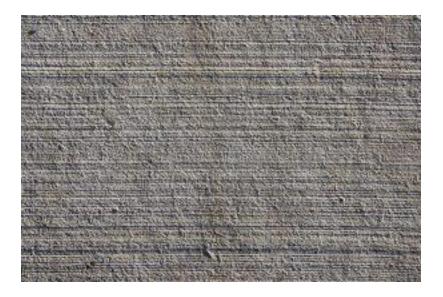
Once the frame is in place around the area for the foundation one will need to make sure that the frame is of the proper dimensions. Measure the frame from corner to corner both length wise and width wise. You want to make sure that the dimensions are even both ways. Then measure diagonally from corner to corner and make sure those measurements are accurate. Also, use a level across the top of the board framing to make sure the poured concrete will be level. Once these are complete and the measurements are correct, then you can prepare the soil.

Shedsforhome.com 13

### **Step Four**

Before pouring concrete you will need to first tamp down the soil to make sure it forms a firm base. True Temper has a great handheld tamper and Wen has a great powered tamper with great reviews. Next, you will fill the hole with 3 inches of gravel (or 4 inches if that is what you decided on). Most contractors use type 2 or 3 gravel and Quikrete has an all purpose gravel mix. Tamping the gravel will make a firm base for the next step. Once this is done make sure you put down a vapor barrier. We recommend a 20 mil vapor barrier. Next you are ready to move on to the concrete.

Concrete Shed Foundation – What is Concrete?



Concrete is a mix of gravel, sand, cement and water. You can purchase this with the gravel, sand and cement already premixed, such as with Quikrete or Sakrete. Other options are to buy the mixture separate and mix it entirely by yourself. However, the premix is perfect and easy for sheds.

Through a process called hydration the water activates the cement to bond the aggregate (sand and gravel) together. Some concrete

mixtures have polymers added to allow for quicker times for curing and resist cracking.

### **PSI Rating**

Concrete will also have a PSI rating which is a pressure per square inch rating. Depending on the contents of your shed you will want to find the right concrete mixture with the right PSI rating for what you are going to use for your shed. I typically recommend a high psi.

Concrete Shed Foundation – How Much Do I Need?



Now that you know you are going to build a concrete shed foundation you need to find out how much concrete to use. A quick calculation used from family Handyman: "Calculate the volume you need in cubic yards. Multiply the length (10 ft.) by the width (10 ft.) by the depth (.35 ft., or 4 in.) and divide it by 27 (the number of cubic feet in a cubic yard). You get 1.3 cu. Yds. Then add 10 percent to allow for spillage and slab depth variations to help determine the concrete cost per yard." Another options is a calculator found here.

If you are using Quikrete they have a calculator <a href="here">here</a> to give you an estimate for how many bags you will need to use for the

project. Sakrete has the same type of calculators for their products here.

## **Mixing Concrete**

Get a good concrete mixer. You can rent one or purchase one if you want. GoPlus makes a good concrete mixer with good reviews and reasonably priced. Add the dry mixture to the mixer and then add the appropriate amount of water. You can mix and watch for the proper consistency for your foundation. Once it is ready, empty the contents into a wheel barrow and start putting it in your framed foundation on top of the gravel.

# **Pouring The Concrete**



Step One

You will start on one end of the shed frame foundation and work your way to the other end very slowly. It will take one wheel barrow mixture at a time as it is a slow process because you want to get it right. As you place the mixture into the foundation, use a spade or hoe and slightly

Shedsforhome.com 16

spread mixture into the area which will get rid of any air bubbles and allow the concrete mixture to spread out smoothly.

### Step Two

Once the concrete is placed along one end of the frame it will be time to spread the mixture slowly towards the other side of the frame foundation. Do this slowly as you can only put enough concrete into the frame to spread it a little at a time. Repeat the process until you work your way to the other side of the foundation frame. As you are pouring the concrete you will need to use a 2x4 that is cut to fit across the foundation frame to screed the concrete and make it level, check out the video below.

## Step Three

Once the concrete loses its sheen use a wood float\_to smooth the surface and bring cement to the surface to make a nice finish. Immediately after this, use a stiff bristle broom\_and drag across the concrete to make a nonslip surface. Always drag the broom in the same direction for the entire foundation slab.

# **Step Four**

Expansion joints will need to be done to allow for expansion of the concrete. Use a groover and a straight edge to make the expansion joints. Rule of thumb is an expansion joint for every 10 feet of slab that is 4 inches thick. It should be to a depth of 1/4 the depth of the concrete.

### Step Five

Next water cure the concrete by spraying a light mist of water over the concrete and repeat for the next 3-5 days. You can skip this step by using acrylic cure and seal right after the concrete is finished and it will

cure and provide a protective barrier for the concrete in case of oil or gasoline spills. Quikrete has a nice article about concrete foundations here.

### **Concrete Safety**

Mixing concrete and pouring concrete can be a tough job. You need to make sure you have the right equipment for the job. Make sure you have the right equipment for your safety also. Make sure you have a good pair of boots for foot safety. Also, there will be a lot of dust with the mixing so wearing an air mask and safety glasses\_for protection. Proper safety gloves\_will help with hand protection.

### Concrete Shed Foundation – Conclusion

Building a concrete shed foundation can be done easily but it takes some time to do it right. Make sure you find the right place and get the proper permits for your shed. Prepare the ground for your shed by digging the foundation to the proper depth. Build the shed foundation framework and make sure it is level and squared off properly.

You need to tamp the soil and gravel for a firm base. Purchase the right amount of concrete according to the square area and depth of your foundation. Mix it properly and pour it slowly while using a 2x4 to screed the concrete to make it level and smooth. Place your proper expansion joints and finish the concrete by curing with water or acrylic cure and seal. Protect yourself with the right equipment and you will have a professional foundation in no time.

# Chapter 2 - Shed Flooring

There are many options when it comes to your shed floor design. However, there are some basic steps you need to adhere to when building your shed floor. Your shed floor design will depend on your shed foundation. If you have a concrete foundation then that will be your floor. However if you don't have a concrete foundation then you need to frame the floor. You will then need to decide your floor covering.

### Shed Floor Design – Foundation

Concrete – If you have a concrete foundation then you need to make sure your design has the ability to anchor your walls to your foundation. Your floor will basically be the concrete slab and then there are many finishing options to concrete. You can have a smooth or rough finish. Read the previous chapter for specifics with the concrete foundation.



Wooden Pier — If you do not have a concrete foundation then most likely you have a gravel, concrete block or a wooden pier foundation. If that is the case then your shed floor design will have you framing your floor on the foundation and then placing a floor covering on top of the frame. Before you frame the floor and while you are in the foundation stage it is a good idea to have a vapor barrier. The vapor barrier is a plastic covering over your foundation base that prevents moisture from getting to the shed floor and causing shed mold & mildew or wood rot.

Shedsforhome.com 19



Shed Floor Design – Framing

If your foundation is not concrete then you will need to frame and build your floor. Once you have your foundation level then you can start constructing your shed floor frame. The most important part of this process is to make sure your foundation is level. Once the foundation is level you will need to start the framing.

Squaring Joists- Make sure your joists are square at the ends so when you cut your joists to length then both ends will be square.

Crowning- The boards may have a bowing one way or the other and that is called the crown of the board. You want the crown or bowed side up so the weight of the shed will push the crown down and level up the boards more over time.

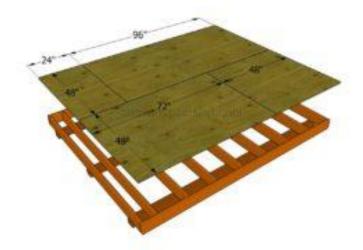


Framing – Depending on your shed plans this part can have different steps. However, the first part of the process is to build the outer frame of the shed floor and square up the joists on each end. Fasten them together with 16d galvanized nails. Then place each floor joist at 16" apart on center and attach them to the outer frame with the same type nails. Before securing the wooden joists completely, make sure to take measurements on a diagonal from one corner to the other. Make sure

these measurements are not more than 1/8 of an inch off but as square as possible. Then attach the joists securely.

Anchoring -You will then need to attach the floor to your foundation. There are multiple ways of anchoring your floor to your foundation and that depends on your plans. However if you have a concrete pier then you can use masonry bolts but you may also need to anchor with steel cable ground anchors. If you have a wooden pier then you will need to anchor with wood bolts. See the chapter on anchoring a shed.

## Shed Floor Design – Covering



Once your floor is

framed you will need to add floor covering. This will typically be plywood or OSB (oriented strand board). You will need to attach these boards where the wood fiber length is at a 90 degree angle from your floor joists to prevent sagging over time. It is a good idea to get tongue and groove boards as they make a more secure fit. Also, prior to nailing down the plywood or OSB it is a good idea to place wood glue on the joists to help secure the plywood or OSB even further to the joists.

# Shed Floor Design – Conclusion

Now that you have the basics to a shed floor design you can begin the building process. Some basic pearls are to make sure you have a good set of plans and follow them accordingly. When framing your shed floor make sure the foundation is level. Make sure your outer framing is square and check diagonal measurements before securing all floor joists. Place the floor joists with the crown up so they will level over time from the weight of the shed and attach to the squared frame at 16" on center with galvanized nails. Anchor your floor to your foundation according to your shed plans. Your floor covering will either be plywood or OSB and should be at 90 degree angles to the joists.

# Chapter 3 - Walls

After your foundation is done you need to do your shed wall framing. There are many options for the walls. Therefore, what you will need depends on the shed plan and if the plan includes windows. It also depends on the shed purpose. Get your walls done correctly by understanding the purpose and plan of the shed.

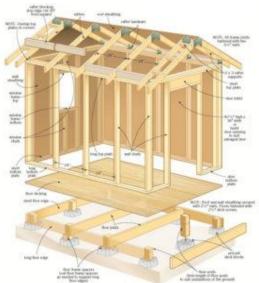
Shed Wall Framing – Options...



Options for your walls are plenty but it really depends on the purpose of the shed. For example, A <u>lean to</u> shed or <u>storage shed</u> will have walls without windows. This is because those sheds are used for security and storage. However, a <u>garden shed</u> or <u>potting shed</u> will have windows so they will need to be framed into the shed walls. If you want to get creative with the windows you can check out options in my previous post <u>shed windows</u>.



# Shed Wall Framing - Construction...



The walls are constructed after your <u>foundation</u> so you can use your foundation to precisely measure and make your shed walls. First, cut the top and bottom plates of the wall to the right length. Then cut your studs to the right height of your shed and secure them between the top and bottom plate. Now put the wall in place and secure it to the floor. To place a window in the wall make sure it is framed at the right dimensions and height of the wall. This will be done according to the plan you are using. Now, repeat the same process for the next wall according to the plan.

Shed Wall Framing - Conclusion...

Getting the walls right can be an easy process. You will need to make sure you have a clear purpose for your shed and a good set of plans. The plans should have a complete materials list and step-by-step instructions. Build the shed walls in a detailed fashion one at a time so you do not make mistakes. Take your time so it is done right. Watch the entire build a shed video series to see the building process.

# Chapter 4 - Roofing

# **Shed Roof Framing**

There are some basic tips for shed roof building that you need to follow to build the roof without problems. Once you have the foundation and floor done you will need to construct the roof frame. The process of building the roof frame depends on your plans. However, there are some basic tips to follow for constructing your rafters and quickly framing your shed roof.

### Shed Roof Framing- The Materials

Before you start the construction of your roof you should already have a good <u>set of plans</u>. Consequently, the materials needed for the construction will typically be listed in your plans. Follow the plans and build the <u>foundation</u>, and <u>shed floor</u>. Purchase the boards for your roof as per your shed plans. Get your drill, hammer, wood chisel, nails and screws needed for the project. You will also need to know how to use your rafter square so you can measure angles in your rafters. A portable circular saw and a miter saw will help you make accurate cuts in the wood. Check the resources page for a list of most common equipment and tools needed for building.

### Shed Roof Framing – Cutting The Rafters

Build the first roof rafter and then use this as your template for the rest of the rafters. First thing is to cut your board at the right length you will need. Then you will cut the rafter ends which is where each rafter will

meet in the middle of the roof. After the ends are cut you will then cut the birds mouth joint so the end of the rafter will attach to the shed walls.

### Rafter Ends:



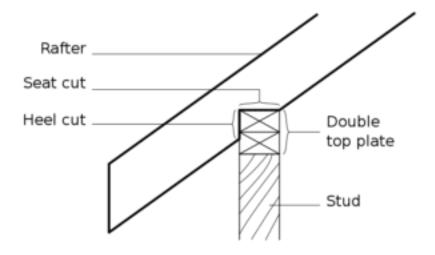
Measure your rafter angle needed using your rafter square according to your plans. These ends will meet in the middle of the shed roof so they have to be cut at the proper angles according to your roof plans pitch. Once the rafter end is cut you will move on to cutting your birds mouth joint.

### **Birds Mouth Joint:**



This joint is the end of the rafter that will rest on the shed wall. You may need the wood chisel to make sure all of the wood cut out of the birds mouth joint is removed. As you can see in the diagram that you

will need to make a vertical and horizontal cut according to your plans roof angle. This will make the birds mouth joint to allow the rafter to rest on the shed wall. Once this rafter is built you will then use this board as the template to build the rest of the rafters needed.



Shed Roof Framing – Assembling The Rafters

Now you have all the rafters cut at the proper angles and length. You need to assemble the rafters with use of your shed floor and a temporary woodworking jig.

### Placement of Rafters On The Floor:



You will place two rafters on the shed floor in the proper placement with the rafter ends touching in the middle and the birds mouth joints at the end of the floor where the birds mouth joint will attach to the shed walls. The rafters will form a peak in the middle where the rafter ends meet. This peak should be at the proper height of your roof according to your plans and the birds mouth joint should be even with the floor edges with about 1/2" overhang. Make sure that the boards are touching at the ends perfectly. Also, make sure the birds mouth joint is at the ends of the floor properly before moving on to constructing the temporary woodworking jig.

# Temporary Woodworking Jig:

Once the rafters are placed together on the floor at the proper angles and dimensions, you can then construct the woodworking jig. The temporary jig will allow you to place and construct each rafter at the proper angles for quick assembly. See the assembly of the woodworking jigs placed on the shed floor in the picture below.



# Shed Roof Framing – Attaching The Rafters With A Gusset



Cut a gusset from a scrap OSB or plywood at the proper angle and nail it to the rafters while they are placed in the woodworking jig. This will attach the rafters together. You can see the gusset in the middle of the rafters assembled in the picture above. Once the first two rafters are joined together, then you can easily place the next two boards within the jig for easy assembly. Once all the rafters are assembled, then you can remove the jig from your floor.

# Shed Roof Framing – Conclusion

Once your rafters are assembled you can place them aside and <u>build</u> the <u>walls</u> for your shed. Attach the shed rafters to the walls once they are framed and cover the roof rafters with your OSB or plywood. Next thing is to figure out the <u>roofing material</u> you want and install it at the

right time of the building process. Check out the <u>building a shed video</u> <u>series</u> to watch the entire shed building process. Find the right set of <u>shed plans</u> and get started today with building the shed you want.

# **Shed Roofing Materials**

So you have your shed plans, but what about your shed roofing materials? There are many options in regards to which type of roofing cover to choose. Some of it depends on your budget and also it depends on the style of your shed and the location of your shed.

Shed Roofing Materials- Types... Asphalt Shingles.

This is the most common type of shed roofing. The appearance of this roofing is very similar to your house and that is why most people choose this type of roofing. This allows a more uniform look between your shed and your home. Furthermore, there are many options in regards to which asphalt shingles to choose. Two types of shingles to consider are architectural and 3-tab shingles. Shingles are a lower cost and easy to repair and install. The only decision is in regards to which type and color you choose.





# Metal Roofing.

One of the newer looks for homes and sheds is the metal roof. There are lots of people who install this roofing and you can do it yourself with a little bit of work. You need to find the color that fits your shed roofing and also which will work with your landscaping. Be aware of some common mistakes that can occur so watch the video below. I found it to be helpful information.



### Rubber Roof.

This is not a very common shed roofing, but it does take mention as some people with sheds want a rubber roof. Once installed properly it is a very secure roofing cover that is more neutral and can go with just about any shed. Typically, most people seem to hire someone to install this but it can be a DIY project.



Tiles & Cedar shingles.

This is the most expensive shed roofing and I believe it to be the prettiest. However, it also requires some upkeep to make sure it looks nice. If you can do the asphalt shingles, then you should be able to install the tiles and cedar shingles. There are some ideas and issues to think about when installing and the video below seems to be a good beginning.



# **Shed Roofing Materials- Conclusion**

Once you have the <u>right plans</u> for your shed you need to find the right shed roofing. The one that fits your shed will depend on many factors such as look, cost to buy and cost to install. You also want to think about maintenance of the roof.

# Chapter 5 - Shed Siding

Your shed frame is built and now here are some shed siding ideas to help you get your shed covered and finished. There are many options for shed siding so choosing the right one is of importance. If you built your shed, then putting on siding will be pretty simple. There are many options that range from the cheap economical look to a more elaborate and expensive look. This depends on your budget and your needs. Read through the shed siding ideas and find out what you think is best for you.

# **Vinyl Siding**



There are many options with vinyl siding as it comes in multiple colors. Therefore, you can match the shed siding to the color of your home. This is especially true if your home has siding. If your home is brick then you can find a vinyl siding color that compliments your home.

Some drawbacks with vinyl siding is that you cannot paint it if there are blemishes that occur. If it breaks, then you have to repair the siding but that doesn't happen very often. Some positives are that you can clean it easily with a pressure washer.

# Shed Siding Ideas – Composite Siding



Composite siding is siding that is a mix of vinyl siding and wood siding. Some also refer to it as engineered siding. The advantages to this siding is that it is inexpensive as compared to wood siding. There is less occurrence of fungal accumulation since it is treated with antifungals. It comes in many different looks and because it is engineered the natural knots of wood are removed. Further, most are warranted for many years. Typical names are LP SmartSide, Catawba, Truwood.

# Shed Siding Ideas – Wooden Siding



Now you are looking at the most natural look for your shed. You built your shed from wood now you can cover it with wood. Installing is not much different then the other sidings, but there are different options to your wood finish.

If you are looking for a natural finish, then choose boards like oak and cedar which has some natural resistance to the elements. However, it can be costly.

On the flip side you can paint the wood siding, but then you have more maintenance. As the paint will chip and erode away and then you will need to scrape and repaint.

Think long and hard about the wood siding because it can get costly and with lots of maintenance.

# Shed Siding Ideas – Metal Siding



There are basically two options with metal siding. First, there is aluminum siding which can dent easily. However, it is resistant to corrosion. Second, you have steel siding which has more corrosion but this can be reduced by buying galvanized steel, which is a paint coating that protects from corrosion.

# Shed Siding Ideas – Cement Siding



Cement siding is made from cement, sand and cellulose fibers and is a very durable siding. It installs similar to the wood siding and has the advantages of being more durable and resistant to water, fire and insects. However, it is a little brittle so it can crack upon impact. Also, there are special tools to cutting the boards and the create a lot of dust when cutting. The most common name in cement siding is HardiePlank siding.

# Shed Siding Ideas – Conclusion

As you can tell there are many options and ideas to shed siding. As you build your shed keep in mind the siding options for the look of your shed. Also, keep in mind the siding options for your budget and ease of installation. Once installed make sure to keep a look out for <a href="mailto:shed mold">shed mold</a> as that can ruin the look of your shed. If you haven't built your shed yet, then find the right <a href="mailto:shed plan">shed plan</a> and get started today.

# Chapter 6 - Shed Ceiling Styles

What are the common shed ceiling styles?

There are many different styles for a shed ceiling. The most common styles are an open rafter ceiling, drywall ceiling or a wood ceiling. The shed ceiling you desire will determine the amount of work and effort required to make the shed your little oasis.

The following steps are a good start for your project.

- 1. Decide what type of shed ceiling you want.
- 2. Prepare the ceiling for the installation.
- 3. Install the ceiling
- 4. Clean up.

## Type of Shed Ceilings

As noted above there are many options for your shed ceiling. The three most common ceilings are the open rafter ceiling, drywall ceiling and a wood ceiling. An open rafter ceiling is the easiest because there is no finishing as it is just the open rafters showing. The open rafter ceiling is also the most common type of ceiling for a <a href="Lawn shed">Lawn shed</a> or a shed where you are storing equipment. If you are making your shed a little retreat, then you would want to get creative with your ceiling. This could make your shed look nice and inviting. If that is the case, then your next options would be a drywall or wood ceiling.

# Preparation For Your Shed Ceiling

Preparing your shed for the ceiling project can be relatively easy if you are going to have a ceiling that is primarily an open rafter ceiling. This type of ceiling would be more along the lines of the rafters showing and

then some light fixtures hanging down from the ceiling to provide light for your shed.

However, if one is going to have the shed as a retreat or home office then you might want to get creative with the ceiling. This would be either a drywall ceiling or a wood plank ceiling. Any of these ceilings will start with knowing the total square area of your shed ceiling so you can purchase the right amount of material. If you are looking at having a drywall ceiling, then you will also need to know the spacing of your rafters from your <a href="mailto:shed plans.">shed plans</a>. This spacing will determine the size and type of drywall you need to buy.

Once you get the drywall and fasteners you need to install the drywall and finish the drywall to a smooth finish. However, if you are installing a wood plank ceiling then you need to know whether you want a prefabricated wood ceiling with tracks or install a tongue & groove wood ceiling fastened to the rafters. Either one will look warm and inviting.

# **Open Rafter Ceiling**

For the open rafter ceiling one would have to build the shed to the specifications and then leave the rafters open. If one was going to have this type of shed ceiling, then installing a downrod light fixture and possible ceiling fan would be appropriate and provide some airflow as well as adequate light. It would also make the open area a little more warm and inviting even if it is for basic storage.



**Drywall ceiling Installation** 

The drywall ceiling is very similar to what one would see inside of their home. One would have to install the drywall and then have it finished. This would provide a smooth finish that could be painted a nice ceiling white. A bright ceiling will allow an extra bit of light from the <a href="windows">windows</a> and better visualization within the shed. This type of ceiling would require more labor as one would have to install the dry wall and then finish the drywall by smoothing.

# **Selecting Drywall**

There are three types of Drywall

- 1. Half inch for 16 inch framing
- 2. Five-eights inch for 24 inch framing
- 3. Half inch water resistant for humid areas.

Think long and hard about your shed and whether or not it will be in high humidity. This will depend on where you live. If high humidity, then choose the water resistant drywall and galvanized fasteners.

Drywall usually comes in either 4×8 or 4×12 sizes. Pick the size that fits your project and is easy to handle. If you can use the larger sheets, then you will most likely have less waste and easier clean up. However, the larger sizes are heavier and harder to handle. Estimate your square area for the shed ceiling and order the proper amount of drywall.



Once you have the dry wall you will need a utility knife and T-square to cut the sheets straight and to the proper length. If you are doing the job yourself, then you will want to rent a drywall lift to save you from injury, check out the video below. However, if you have some help then you can save some money on the drywall lift.

Place the drywall sheets perpendicular to the framing rafters and then tack the sheets in place with a drywall hammer. A drywall hammer is a different type of hammer then a conventional hammer as it is designed to not damage the drywall as much. Also, you do not want to install the drywall in line with the framing rafters as that will cause the drywall to sag and have "waves" between the rafters. To prevent this make sure the drywall is aligned perpendicular to the rafters.

Once the drywall is tacked in place with nails you have to use a drywall screw gun and properly fasten the drywall to the rafters. It is best to use a drywall screw gun because it is designed to place the screw in place without damaging the drywall. For the shed ceiling fasteners or screws I would recommend using galvanized fasteners as they will not corrode in high humidity and there is always a chance of humidity in an outdoor shed. Check out my post on <a href="mailto:shed-mold and mildew">shed mold and mildew</a>. Once the drywall is place then you will need to make cutouts for your lights and that can be done with a spiral drywall saw or a keyhole drywall saw.

# Finishing the Drywall

Find all screws that may be protruding and not screwed in all the way and take your drill and make sure the screws are fastened all the way. Do not use a hammer as that could damage the drywall further and make more of a job in finishing and smoothing the drywall.

Get a good drywall compound and using a utility knife cover the screw holes and the seams of the drywall with the compound. As you cover the areas make sure you wipe the excess with the knife so it is as smooth as possible. Once that is smooth you need to apply paper tape across the seams of the drywall and yes place more compound over the paper tape and smooth it by dragging the utility knife across the seam.



Once the compound is dry and uniformly white, then it is time to sand the drywall. Using a pole sander and a medium grit abrasive sand only the compound areas to where they are smooth. Don't sand it too much or you will sand down to the seam tape and you will have to do the process all over.

Your next step will be to apply a second coat of compound to the seams and let dry overnight, but then sand the area this time with fine grit drywall sandpaper. Repeat this process one more time for a third coat. After the third coat is dry and smooth, then wipe the surface down with a damp cloth and the shed ceiling will now be ready for priming and painting. Check out the video below that explains drywall finishing.

## **Wood Ceiling Installation**

A wood ceiling is a very pleasant looking ceiling and a very warm and inviting ceiling. I would recommend this type of ceiling if your shed was going to be a home office. However, it will also work for any type of

shed. If you're going to store lawn equipment then I would not look at this type of ceiling and I would probably look at an open rafter ceiling.



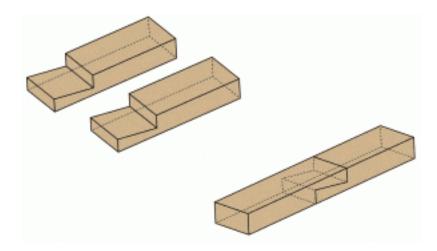
Nonetheless a wood ceiling is a very pleasant looking option and you could stain it whatever color you desire to match your shed. One could have a ceiling fan with a light fixture or even recessed lights, which would look quite nice for any type of retreat or home-office.

Prefabricated tongue and groove shed ceiling.

You will need to figure out the area of your ceiling and purchase the amount of wood paneling you will need for the project. If you are using a track system then you need to install the tracks on the framing joists. Once the tracks are in place you can start the installation of the wood paneling. As you place each board on the track you'll place a clip on the board to hold it in place and then placed the subsequent board in the tongue and groove section and then place more clips to hold the boards in place on the ceiling. At the edges where the boards meet the wall you will need to place some trim or moulding to clean up the edges for a nice look.

## **Tongue & Groove Wood Planks**

This type of ceiling can be installed on the rafters but perpendicular to the rafters. Depending on the length of boards this would allow you to stagger the seams. Therefore, not have all the boards join together on the same rafter. You would fasten the Wood planks directly to the rafters.



When you are joining the wood planks together it is very beneficial to add a scarf joint if they are not already cut this way. This is a type of joint where the edge of the boards are cut at a 45 degree angle. This allows them to fit close together making a nice-looking joint.

When installing this type of wood plank it is a good idea to leave approximately a half an inch at the edges where the ceiling and wall meet. This would allow for board expansion and prevent buckling. Below is a video installing tongue & groove pine.

Once the boards are installed, then the next step would be to stain the boards. One could use a natural sealant or any color of stain that you would prefer to see inside the shed. As with all ceilings you have to make sure you know the location of your light fixtures and ceiling fans. You need to go back and cut them out for a proper fit.

## Cleaning up



Cleaning up from your ceiling installation could require quite a bit of work depending on the type of ceiling you installed. However there could be quite bit of dust throughout the inside of the shed. This would need to be cleaned with either a vacuum, mopping or both.

You could rent a dumpster to get rid of the trash but it could be more expensive. Pick the right shed ceiling style from open rafters, to drywall ceiling to a wood ceiling. This will allow you to customize your shed to it's purpose. Once the ceiling is installed, then you can look at a custom shed floor if desired.

# Chapter 7 - Shed Doors

JB here and a new post on shed door options. Depending on your shed style you can have many different types of shed doors with some of the doors being very elaborate while some are basic doors. The doors are most commonly made from different materials including wood and metal. There are many styles of doors and some options include basic doors, sliding doors or even like a garage door.

Not for sure which door you need for your shed? It really depends on the purpose and style of your shed. For example, if you have a shed for lawn equipment then you may want a wide open doorway like a dual opening door. However, if you have a shed that is like a man cave then a regular door with a lock would be preferred.

# Types of Common Shed Door Options:

Basic Shed Door Options. This is exactly the way it sounds. A basic door with hinges. One of the easiest doors to install. You can even <u>build your own door</u> if you are handy enough. They come in all sizes and shapes and are custom to your opening. You can have wood or metal.



Sliding Shed Door Options: These doors are nice to maximize your floor space because these doors slide open on a track so no part of the door

swings into your floor space. With extra floor space you have more options in what you can do in your shed. Sliding doors are built with different materials including wood and glass so there are many options finding the one you want for your shed.



Dual Opening Shed Door Options: These doors open up together or one at a time. Very useful for sheds with lawn equipment or if you need a really large doorway to get any other equipment in or out of the shed.



Roll Up Shed Door Options: This is basically a garage door for your shed and looks really cool. You can find out how to build this in your shed at one of my <u>previous posts</u>. This door is locked and secured easily so it

adds to the security of your shed. Therefore these doors are just like the doors on a storage shed that one would pay a monthly fee to secure their belongings. They allow maximum floor space for storage but may not be the best door if you are going to do some work in your shed.



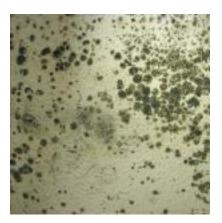
Now you know the basics of shed doors so you can get creative and find the right door for your shed.

# **Chapter 8 - Shed Ventilation**

Why do I need to know about shed ventilation?

If you are building a shed or already own a shed you need to know your shed ventilation options for many reasons. You need to need to make sure you shed has good air flow for health reasons. The contents in your shed need good ventilation for proper storage. The shed may get too damp and the shed itself could rot and disintegrate. If the shed boards begin to rot, then it could eventually lead to the shed being torn down.

## Shed Ventilation – Health Reasons



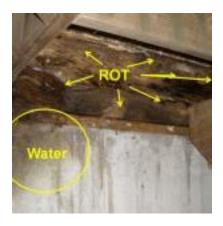
If your shed is not properly ventilated, then you could run the risk of developing mold throughout your shed. Mold is a fungus that grows in wet environments via spores. According to the Centers For Disease Control (CDC) mold can cause a variety of health effects for certain people while others are not affected at all.

The common symptoms are nasal stuffiness, throat irritation, coughing or wheezing, eye and skin irritation. However, more serious reactions can occur in people with mold allergies or chronic illnesses. They can

get serious infections in their lungs when they are exposed to mold. Read the full report from the CDC and you will know why you need proper ventilation for health reasons. Full report from the CDC.

If your shed already has mold, then there are certain things you can do to get rid of the mold. Also, there are other options for prevention of mold and treatment of mold. Check out my previous post on <a href="Shed">Shed</a> Mold & Mildew.

Shed Ventilation – Structural Reasons



If your shed is not properly ventilated, then you can develop standing water or increased humidity in your shed. Prolonged exposure of the wood to water can cause mold as noted above. However, if this water stays on the wood for a longer period of time it will cause damage to the wood itself.

## Shed Ventilation – Wood Damage

This damage will cause a breakdown of the wood fibers and over time it will cause the wood to rot. Once the wood starts to develop rot, then the stability of the wood will be in question. Once the stability of the wood becomes weak you run the risk of the entire shed to be damaged.

Therefore you can see the importance of shed ventilation to prevent high humidity levels inside your shed and subsequent damage. Proper

ventilation in your shed will protect the wood from rotting. It will also protect you from one day having to tear down your shed.

Shed Ventilation Types – Roof Options Turbine Vent or Whirlybird

A turbine vent is installed on top of the roof and forces hot air out of the shed. It is a rounded structure that has spinning blades. These blades will force the hot air inside of your shed out to the environment. Most research on the effectiveness of these vents have been done with attics.

#### Turbine Vent Research

One study revealed that over a 12 hour testing window the turbine vent lowered the attic temperature from 123°F to 113°F. This study also revealed that the turbine vent lowered the temperature of the roof deck materials from 146°F to 124°F. With the turbine fan spinning at 5 miles per hour it can move 347 cubic feet of air from the attic. If the speed increases, then it can move a lot more air. These are easy to install and can ventilate your shed rather easily. It is best used for medium to large sheds and not really smaller sheds as it tends to move a lot of air.

Turbine vent installation.

Find The Area

Find the area where you want to install the turbine vent from the inside of the shed. Make sure the area of installation is between two rafters. Drill a hole through the ceiling plyboard from the inside as it will go through the plyboard and through the shingle so you can locate the area on top of the shed.

## Mark & Install The Base

Once you have the location of the vent marked you will then place the outline of the vent or flashing over the hole. Take a marker and trace the diameter of the vent so you can then cut out that area for the vent. Then slide the flashing under the shingles and make sure the diameter of the vent is equal to the hole that was cut. Secure the flashing to the roof with some nails. You can caulk around the flashing to make sure the flashing has a watertight seal.

## Install The Whirlybird Fan

Line the base of the turbine vent to the flashing according the the pitch of the roof. This will make the turbine vent level. Then fasten the base to the flashing so you can install the turbine vent to the base with the appropriate screws. Make sure the turbine is level and it will spin and ventilate the shed.

# Vented Skylight



A venting skylight will add some sunlight into your shed as well as hot air to be removed from your shed. The basic installation is as below but can be different depending on the skylight you purchase. So make sure you read the instructions for proper installation below. This type of ventilation is best used for smaller sheds. However, if you have a larger shed, then you can look at a larger skylight or multiple skylights.

## **Automatic and Manual Vented Skylights**



There are many different options with a venting skylight as some of the skylights can be automatic open or manual open. There is a solar powered skylight too. The automatic skylights will open and shut depending on the heat and the need for ventilation.

Some of the automatic vents may require electricity or power and can be done with solar power. However, other automatic vents will have cylinders filled with gas that expand depending on the temperatures. This will open and shut the skylight accordingly. The manual vents are a good option as long as they are accessible for ease of opening.

# Vented Skylight Installation

To install the skylight you need to find the correct area for your installation in your shed. Mark the area with an outline of the vent. Then cut out the shape of the skylight. Once the area is cutout

then install the frame for the skylight. Depending on the skylight it can be either small or large.

Once the frame is in place you will need to make sure it has a watertight seal. This is done with a membrane that sticks to the frame. Then replace shingles around the frame. Depending on your skylight there are many different variations for installation so make sure you read the instructions carefully. Velux makes a great skylight and here are the typical installation instructions from their website.

# Ridge Vents

A ridge vent is installed at the peak of the shed roof for shed ventilation. The apex of the roof will have an opening and the ridge vent will be installed at the apex. The ridge vent will allow air to escape from the inside of the shed and ventilate the shed.

It is important to install the ridge vents in a straight line along the apex of the roof. Typically it is recommended to place a level chalk line and then secure one side of the ridge vent and or slope at a time. This will allow the ridge vent to be installed level and is secured with nails. Do not drive the nails in too far or it will cause the vent to buckle. Once the vent is installed then you will install the ridge vent shingles for the cap.

# Cupola

Cupolas are nice option for shed ventilation. They are typically used for larger sheds because of their size. They also can move a lot of air because of their size. To begin you need to choose the right size cupola for the shed. The typical calculation is 1.5 inches of cupola width for every foot of uninterrupted roof line.

Find The Area

The basic Installation Is to mark where you want the cupola placed and make sure It Is between rafters. For ventilation you will need to cut an opening in the roof leaving a 5-6" minimum around the inside perimeter of the cupola base. This will allow you to have enough room to fasten the cupola to the roof.

### Mark The Area

Measure the exact roof pitch so you can cut the cupola base so it will sit securely on your roof and at the right pitch. You will then install 2x4 to the inside of the base and secure them to the roof. Fasten the base to the 2x4s as this will secure the base in place.

## Install The Cupola

Caulk the outside of the base to make a watertight seal. Now it is time to place the midsection of the cupola to the base and then the top onto the midsection. Many manufacturers will have the <u>installation manual online</u>. The video below has a nice stepwise approach to the installation.

Cupolas are very neat vents as you can get quite creative with your cupola design to make your shed stand out.

Shed Ventilation – Wall options Gable Louver vents.

These are nice looking vents that can be different shapes. Most are round or square but can be triangular also. The typical size of the vent is determined by the 1 to 150 rule For every 150- square feet of space equals to 1 inch of ventilation. However, you need to check your local building codes as this can change depending on your area.

Installation is relatively simple as you will have to cut out the size of the vent from the wall. Like the other ventilation types you will need to make the cutout from the inside of the shed so you can make sure you are not cutting into any electrical cords or rafters.

Then secure the vent to the wall and make sure it is secure and caulked for a watertight seal. Some vents will have an inside and outside piece that will need to be secured together. So you may need two people to do the installation. This is a nice video review of a simple installation.

## Solar Powered Gable Vents & Fans

These are great options for a powered fan that runs on solar power and not with your electricity. Once installed you can put your mind at ease as the fan will run with the solar power and ventilate your shed nicely. It will typically be used for larger sheds but that really depends on the size of the fan you purchase. Installation is easy as noted in this video. There are many options available from many different manufacturers so check them out and read the reviews.

## **Powered Wall Vents**



A powered wall vent is a nice option provided you have electricity run to your shed. However, they can be solar powered also. They will install very similar to the louver vent but there will be a power option to move significant amounts of air out of the shed and provide for

adequate ventilation. This is a good option if you are going to do work in your shed that would require painting or fumes as it can ventilate the shed to a greater degree than other options.

Installation is somewhat simple in that it will be installed very similar to a louver event, but electricity will need to be run to the powered wall vent. <a href="Lomanco">Lomanco</a> makes great wall vents and their website has instructions in pdf format for all of their installations.

## **Shed Ventilation Conclusion**

If you are building a shed or already own a shed you need to know your shed ventilation options for health and structural reasons. You have many options for ventilation as you can have a simple vent or more elaborate options that include fans and electricity. The right shed ventilation will depend on the purpose and size of your shed. Proper ventilation will protect your shed from rotting and can protect your health so make the right choice for your shed.

# Chapter 9 - Shed Anchoring

There are many thoughts on how to anchor a storage shed. The best way to anchor a storage shed is in concrete. If your foundation is not concrete, then there are many great additional options. Learn how to do this today to secure your shed and its contents.

# How To Anchor A Storage Shed – Is It The Law?



You built your shed and then all of a sudden it is gone in the wind, POOF!! That has happened to a lot of people and to prevent damage to your things and your neighbors there are laws on anchoring a shed. Not all areas have these laws, but you need to find out if you live in such an area. If you do live in an area where you are required to anchor a shed, then read on and find out how to anchor a storage shed. You can check your <u>local zoning laws and building permits</u> here and that may help you find out if you need to anchor a shed.

How To Anchor A Storage Shed – New Versus Old Construction

## **New Construction**

The decision has been made to build a new shed. The foundation may be concrete, gravel or another type of foundation. It is up to you to find the right foundation for your shed. You can check out my previous posts on <u>foundations</u> to learn the differences between the possible

foundations. More specifically you can read the best tips for a <u>concrete</u> <u>foundation</u> or a <u>gravel foundation</u>. No matter which foundation you choose there are many ways how to anchor a storage shed.

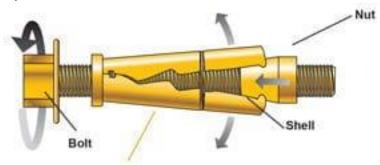
## New Shed On A Concrete Foundation

Whether the shed is prebuilt or going to be built from a shed plan you will need to have the concrete foundation first. The concrete foundation is the best way to anchor a shed. This is due to the fact that the anchor can be incorporated into the concrete foundation either while pouring the concrete or after the fact. It is also the most secure way of anchoring a shed. There are many different ways how to anchor a storage shed in concrete. The best ways are described below. These include expansion bolts, brackets and side plates.

Attach The Shed Directly To The Foundation
Anchoring the shed during the concrete foundation pour would
primarily be with brackets that will be installed with the concrete
pour. The anchors will be placed in the corners of the foundation and
while the concrete is wet. Once the concrete dries then the anchor is
firmly set and the shed can be constructed around the bracket and
adhered to the bracket to anchor it securely.

However, if the concrete foundation is poured and set then there are options for anchoring the shed. This will be with expansion bolts and brackets on the inside of the shed. You can also use masonry screws with side plates on the outside of the shed. Read more to see how to anchor a storage shed in concrete.

# **Expansion Bolts**



For this type of anchoring, the shed foundation will be poured and set. The framing will be done for the shed or the prebuilt shed walls will be erected. Install the expansion bolts at the corner of the inside of the shed. Use a drill with a masonry bit that is the appropriate size for the expansion bolt. At the inside corners of the shed you will drill down to a depth in the concrete to match the expansion bolt. Place a bracket over the hole and tighten the expansion bolt. Once you start to tighten the bolt the outside part of the bolt that is within the hole will expand. This will form a tight bond with the concrete, thus anchoring the bolt to the concrete. Now you need to attach the bracket to the shed frame. Amazon has many different types of expansion bolts that work nicely.

## **Brackets With Expansion Bolts**



Brackets will be attached to the inside of the shed with expansion bolts or masonry screws. The bottom plate of the bracket is secured to the

concrete with an expansion bolt. The side of the bracket is attached to the shed frame with bolts or screws. This is a simple installation and will anchor a shed nicely to the concrete foundation. The type of bracket will most likely be an L Bracket. There are many different types of brackets.





Side plates are installed to the outside of the shed. The concrete pad will have to be at a reasonable height so the side plate can be secured to the side of the concrete foundation. This is very easy to do and similar to the inside bracket. Place the side plate where the holes on top of the plate will be secured to the shed and the holes on the bottom of the plate will be secured to the concrete. You will need masonry screws for the concrete and again regular bolts or screws to secure the top of the plate to the shed. There are many different types of masonry screws depending on the length and width you need. Here is a great tool to help find the right masonry screw.

## New Shed Not On A Concrete Foundation

You decided that the new shed is not going to be built on a concrete foundation for a variety of reasons. However, there are ways of anchoring the new shed to concrete. Also, there are ways of anchoring the shed without concrete. Either way, if done right, will do well to secure the shed. It will also allow you to abide by the anchoring laws if you live in such an area.

## Anchor In A Concrete Hole



Your shed plans do not include a concrete foundation. However, you really want to anchor the shed in concrete. One way of doing this is to have a hole dug at each corner of the shed and fill it with concrete. In the concrete hole you add an anchor to the wet concrete. Once the concrete is set then the anchor will be set in concrete and you can then attach the shed to the anchor in concrete. I always recommend Quikrete and there tons of options so find the right product here. Attaching the shed to this type of anchor will depend on the shed and the anchor that you put in the concrete hole. If the anchor has a hole, then thread anchor wire through the hole and then attach the wire to the shed. If anchor wire is not strong enough then you can use straps or cables with the right type of anchor. Here is a nice video on attaching the anchor to the shed.

# Augers and straps or cables



Let's say you do not want to dig a hole and put in concrete. The alternative would be with an auger that is inserted into the ground at the four corners of the shed. The auger will have a round hole on top and then you can thread anchor wire through that hole and then attach that to the shed. This will be quite sturdy if done right. Milspec Anchors make a great product that has an installation rod included.

Placing the auger in the ground is the most difficult part and there are many ways of accomplishing this task but good old fashion hard work is the key. You will need to place a bar through the auger hole on top and twist it into the ground until firmly secure. The auger should be installed with the top angled away from the shed. This will give it more strength and security. The video below shows a person anchoring an Arrow Shed. The hardest part is drilling down the auger, but it can be done.

# New Plastic or Metal Shed

Plastic and metal sheds can also be secured the same way as noted above but the anchor wire is the key to these sheds. In a wood shed that is built from plans or a prebuilt wood shed the anchor wire or straps will be attached to the shed. However, in a plastic or metal shed the anchor wire will need to be threaded under the roof and over the roof trusses on the inside of the shed. The other end of the wire will need to be attached to the auger on the other side.

Tighten the anchor wire securely but not too tight or it will bend the metal shed or even crack the plastic shed. This type of anchoring will need to be checked every year to make sure it has not loosened. Watch the video above.

# **Old Construction**

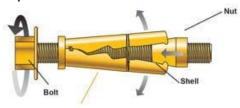


What if you already have a shed built but realize that you need to anchor the shed for security. The above options are still available but it will need to be done with a certain twist or change possibly. A lot of this will depend on the foundation and whether or not it is concrete or an alternative. Have no fear because here are the options on how to anchor a storage shed that is already built.

# Old Shed On A Concrete Foundation

Your older shed has a concrete foundation and most likely it is already secure. However, you want that added bit of extra security. So to anchor a shed that is already on a concrete foundation you will need to look at the three ways described above with expansion bolts, brackets and side plates.

## **Expansion Bolts**



The shed is built so go to the inside of the shed and depending on the size of the shed figure out how many areas of the shed you want to anchor to the foundation. If it is a small shed, then at each corner will probably work. However, in larger sheds you will place an anchor every 6-10 feet.

# **Brackets Attached With Expansion Bolts**



Brackets are easily secured to the shed by expansion bolts or screws. However, the brackets can be secured to the concrete foundation with either masonry screws or expansion bolts. If the bracket is an L Bracket on the inside, then I recommend expansion bolts. As noted above, drill the hole to the right size and depth for the expansion bolt. Place the bracket over the hole and then attach the expansion bolt. Next, attach the bracket to the shed with the proper

screws or bolts. There are different sizes of brackets. Find the right size bracket for your shed.

Side Plates With Masonry Screws



Side plates are kind of a retrofit and again are on the outside of the shed. For instance, the shed is built on a concrete foundation and the foundation is above ground level. This would allow one to attach a side plate to the foundation and the other end to the shed. You would use masonry screws for the concrete and galvanized screws for the shed attachment to the side plate. Galvanized screws will not rust so are better options on the outside.

# Old Shed Not On A Concrete Foundation

Next up is the shed that is built on a foundation other than concrete. It has been built for awhile but you realize you need to anchor the shed. This is really not much different than new construction since the shed is already built or assembled. The same options exist for this shed as one can anchor the shed in a concrete hole or with Augers.

## Anchor In A Concrete Hole

Just like above you will need to dig a hole and then place concrete in the hole. I like to use quickrete concrete\_as there are many options available. Find the type of anchor you want to set in the concrete and then set the anchor in the concrete and let the concrete set. Now the anchor is secure and you can attach your shed to the anchor with anchor wire or straps. See the video above.

# Augers and straps or cables



Augers for a pre-existing shed is no different than a new shed construction. Anchor the auger at each corner if the shed is small or every 10 feet or so if it is a larger shed. Place the anchors a few feet away from the shed and insert them at a 20 degree angle away from the shed. Once secure in the ground, then attach the shed to the auger with anchor wire or straps. Check out the video above to see this done with anchor wire.

## Old Plastic or Metal Shed

Old Plastic and metal sheds can also be secured the same way as a new plastic or metal shed above. I would recommend an auger with anchor wire. The anchor wire will need to be threaded under the roof on the outside. Then the anchor wire will be threaded over the trusses on the inside of the shed. Attach the anchor wire to the auger on the opposite side of the shed. Tighten the anchor wire securely but not too tight or it will bend the metal shed. It could even crack the plastic shed. As noted above, this type of anchoring will need to be checked every year to make sure it has not loosened. Watch the video above.

## How To Anchor A Storage Shed – Conclusion

There you have the best thoughts on how to anchor a storage shed. I believe it is best to anchor a shed in concrete. If your foundation is not concrete then there are other options. One can dig a hole and place concrete in the hole for a more secure anchoring. However, if the shed

is small to medium then you could use augers and anchor wire or straps. If you do not have shed plans, then get <a href="Free Plans Here">Free Plans Here</a>.

Shedsforhome.com 68

# Chapter 10 - Shed Guttering

What are the best ideas for shed guttering?

Not all sheds have gutters. However, some sheds need shed guttering to prevent water damage or collection of water for planting. There are many options available including add on systems and custom shed guttering. Prevent the possibility of wood rot or foundation erosion by installing shed guttering. Not sure how to do this? Read more...

## Shed Guttering – Why

You spent all this time finding the right <u>shed plan</u> and getting the lumber and now you are going to build your shed. However, you need to think about what you are going to do about rainwater runoff. The water that can accumulate around your shed can be massive. Therefore, you need a strategy to handle this water.

Also, with guttering you can get creative by catching the rain water so you can reuse it for your garden or plants. Furthermore, by having a gutter system you can protect your <u>shed foundation</u> from erosion by moving the water away from the shed.

# Shed Guttering – Options

You can install basic guttering if you are building your own shed. The installation is simple and can be done yourself. However, to make it easy get somebody to help you. The options are outlined below with videos but include aluminum gutters, add on systems and a unique Hall's Rainsaver system.

### Install Aluminum Gutters

There are many options to guttering and aluminum gutters are a great option. They are relatively easy to install but you may want to hire a professional for installation. Aluminum gutters will add a nice custom look to your shed. They are more expensive than the other options but for the right shed they will be perfect.

## Install Add On Guttering.



There are also add on guttering systems with plastic or metal brackets that are installed and then plastic gutters are snapped into place. This is a nice easy weekend activity for shed guttering. Pretty easy install as you can see from the video.

Shedsforhome.com 70

Hall's Rainsaver Guttering.





Finally, there is a Hall's Rainsaver kit that attaches to the shed roof by a bracket and then the guttering is attached to the bracket. It is a gutter system that can be installed quickly and will save the rainwater for use in your garden or plants. However, the simplicity is the ability to install this system quickly with it's "Rainsaver Bracket". As you can see from the pictures it can quickly install on the shed roof and then the guttering attaches to this bracket. Then you can direct the water to just about anywhere you want.

# Shed Guttering – Conclusion

Don't be fooled thinking you do not need shed guttering. Save yourself the future headache of a ruined shed foundation or sloppy watery mess next to your shed. This can lead to wood rot if the area stays wet enough. Find the guttering system that looks good with your shed plan and explore the options that fit. Get the right <a href="mailto:shed-plans">shed plans</a> and build the shed you need for your home.

Shedsforhome.com 71

# Chapter 11 - Shed Ramp

## How to build a shed ramp?

Building a shed ramp can be quite easy. You need to calculate the slope of the ramp. Decide on the foundation for the ramp. Will you attach the ramp to your shed or just let it rest on the shed. Assemble the final ramp and you're done. Learn more below.



You built your shed and now you need easier access to the shed. Therefore, you need to learn how to build a shed ramp. A ramp for a shed is different than a handicap ramp for a house because the handicap ramp has a different slope by code. However, a shed ramp can be at many different angles but you do not want to build it too steep. If you need the ramp for walking into the shed or for driving a vehicle into the shed makes a difference on the build of your ramp.

## How To Build A Shed Ramp – Slope

The first part of building the ramp is getting the slope correctly. This allows one to plan and get the right materials for the building process. Once you get the slope then you need to make sure the ground is level. So you will need to do a little digging to get it

level. This is a very important part to the shed ramp, because you do not want your ramp abnormally tilted.

How To Build A Shed Ramp – Foundation

Decide if you want to have a gravel or concrete <u>foundation</u> for the ramp. Furthermore, you may want to just have the ramp lay on the ground. Having it lay on the ground is fine for most ramps but not good if you are driving equipment on the ramp. Heavy equipment can prevent the ramp from being level and drive the edges further into the ground if not on a secure foundation. Therefore, you need to make sure you have a gravel or concrete foundation for your ramp if you are using equipment.

How To Build A Shed Ramp – To Attach Or Not?

Now that you have the slope and the foundation done you can start the building process. This is relatively simple but you first have to decide how you want your ramp attached to your shed. You can actually have it attached to the door opening or you can build the shed ramp and place it at the opening not attached. Which way you decide depends on the purpose of your ramp. If it is for a walking slope then you can get by with building a ramp and placing it at the doorway. However, if you are driving equipment on the ramp, then it is recommended to attach it to the building for stability.

How To Build A Shed Ramp – Put It Together

Cut your frame with the right angles from the slope calculations above. Make sure the framing is not too far apart or the boards on top may sag over time. Therefore, 12-16" framing is appropriate for most shed ramps. Once the framing is in place then attach the top boards to the frame. You may also want to attach a no slip cover on the ramp for

safety. This will help heavy equipment tires with gripping the ramp for ease of entry and less slippage.

How To Build A Shed Ramp – Conclusion

Now that you found a great set of <u>shed plans</u> and you built your shed you need to build the shed ramp. Keep the above tips in mind as you build your ramp. Get the slope, level the ground, and figure out your foundation. Then build your ramp and decide whether to attach it to the shed or not. Add a nonslip cover to the ramp for safety and ease of equipment driving up the slope. Don't make it too difficult.

# Chapter 12 - Shed Windows

#### Windows

When building your shed you definitely will want some shed window ideas to let light into the shed. There are various options for windows and some are costly while others are more inexpensive. Your shed plan will most likely dictate what windows you install. For example a basic <u>storage</u> or a lean to shed\_may not have any windows since it is all about safety and storage. However, a <u>potting shed</u> will definitely have windows as will your typical <u>garden shed</u>. So pick the <u>shed plan</u> you want or need and then you can decide on the windows. You also will want to think about the cost of the windows and the quality depending on your climate and weather conditions.

Shed Window Ideas – Wall Options...

There are many options with wall windows and it depends on the style of your shed.



A single pane glass window is inexpensive and easy to install and will add adequate sunlight into your shed but not provide much protection from the weather. A double pane glass window is good for areas with harsher climates and will help keep your shed insulated from the weather.



If you are dressing up your shed, then you can put a potting window with a box for plants outside. You can even <u>build the planters box</u> with the right plans since you are building your shed anyway.



Some people will put shutters around their windows while others like the windows with just a small frame. It really depends on your style.

Shed Window Ideas – Door Options...



There are a few door options in my opinion and again it depends on the purpose of your shed. If your shed is for storage and protection, then I do not recommend windows on the doors. However, if you are going to have a shed that is going to be used a lot, then a window on the door is a good option to allow you to see outside. Most of the windows on the doors are typically made with the door so you can find the many options when choosing your door. Some have installed screen doors also, but that is for another post.



Furthermore, transom windows are really nice. If you did not know, they are the windows above the door and fixed into the wall. They let in constant sunlight also.

## Shed Window Ideas – Roof Options...



If you are using your shed for gardening or potting, then you may want to think about windows on the roof to allow sunlight into your shed. It will help with the plants for sure. You can use glass or Polycarbonate sheets. I recommend the Polycarbonate sheets because they are tougher than glass and can withstand the weather elements better. If you put the sheets on the wall and the roof then you can build your shed into it's own greenhouse.

# Shed Window Ideas, Conclusion

As you plan and build your shed you will definitely want some windows depending on the <u>plan you choose</u> to build and the purpose of the shed. Finding the right shed windows can be overwhelming but if you think about the shed purpose, then it can be real simple.

# Chapter 13 - Shed Mold & Mildew

How do you treat shed mold & mildew?

Shed mold and mildew can be treated by prevention first. The right ventilation and controlling humidity is the first step. Once it is present then it can be treated by using the proper products depending on your level of damage. Read more to find the best answers.

So you built the perfect shed and now it has been taken over by shed mold & mildew. This is a real possibility as shed mold happens all the time and can ruin your shed. There are also many health ramifications with mold and mildew. You can read my shed ventilation article <a href="here">here</a> that touches upon the health risks. You can take certain steps to prevent the mold. Some of these steps are done in the building process, so make sure you understand what can be done. Once you have the mold you will need to find out how to get rid of it and prevent it from coming back.

Shed Mold & Mildew – Building Process Prevention

Apply caulk to outside of shed. That's right, caulk the outside seams around windows, doors, trim and vents. Don't caulk the interior as it is not a good enough seal and can still be penetrated by water. This will prevent any water from entering the shed and causing mold. Choose a good caulk and the one we like is by Big Stretch with good reviews on Amazon.

Install vents in your shed. You can install ridge, gable or soffit vents which allows better air flow. The video below shows installation of a soffit vent in a home but it will be similar for a shed. This air flow will prevent stagnation and decrease humidity. It is increased humidity that allows the mold to grow. So proper air ventilation is a must. If the soffit vents are not enough, then evaluate all your options. There are

many additional options with powered vents and fans. There are skylights that vent the shed and also allow light into your shed. You can check out my in depth article on <a href="mailto:shed-ventilation">shed ventilation</a> here.

Shed Mold & Mildew – How do I get rid of this stuff?

There are many home recipes on the internet to get rid of mold. However, bleach always come to mind with getting rid of mold. You can dilute 1/2 -1 cup of bleach for every gallon of water. How much bleach really depends on your mold growth (and your tolerance). You will need to scrub the area with the solution and make sure to rinse it good and let it dry. If you do this take safety precautionswith ventilation as bleach can be harsh. You can get the proper air mask\_and gloves\_here and they work great for just about all products.



For outside mold, I have personally used wet&forget\_and can say that it works amazingly well. All you do is dilute it and spray it on the outside area and then the natural rain will wash it away with the mold. It does take a little time to get results and you may need to re-apply it until the mold is completely gone. However, it works and saves you the scrubbing.

Shed Mold & Mildew – Now it's gone, how do I prevent it?

Dehumidifier. A good dehumidifier will be a must if you have a shed that is constantly under attack with humidity and subsequently mold. HomeLabs\_has the top rated one on Amazon. I think it works really well and is well worth the money for prevention of mold. However, there are other options below.

Exhaust fans. These help with air circulation. Putting it in while building the shed is perfect, but if you did not do that, then there are other options. The easiest option is a window fan. Just place it in the window and turn it to exhaust. It will get air moving and help keep it dry. Holmes makes a great exhaust fan that has a thermostat and fits nicely in the window. It is a great addition to any shed for ventilation.

Moisture absorbents. There are many options on the market when it comes to moisture absorbents. Basically there are canisters of absorbents you put out in the shed and they draw in the moisture. Damp Rid is one that many people use and it does a good job. However, you can also use kitty litter as that has worked for some.

## Shed Mold & Mildew – Conclusion

Be cautious of mold whether you are in the process of <u>planning for a shed</u> or you already have a shed built. If you are in the planning stages, then make sure you build the proper prevention in your shed from the beginning. It is better to prevent mold from showing up as opposed to treating it after the fact. However, if you have mold, then clean it up. Make sure you use a product that not only cleans it but kills the spores. Do all you can to prevent the mold so you can enjoy your shed for years to come.

# Chapter 14 - Shed Upgrades

# What are the top 12 shed upgrades?

Once you've made the decision to build a shed you will need to spruce it up with some upgrades. There are many shed upgrades that are fantastic and you will find the top 12 shed upgrades for just about any shed in this article.

## **Preparing For Your Shed**

You've made the decision to build a shed. Therefore, you will need to make sure that not only is it built properly, but you need the best shed upgrades. The type of upgrade you will need really depends on the purpose of your shed.

Obviously if you built a shed that is for a man cave then you most likely will not want flower boxes on the windows. However, if you build a lawn shed to store lawn equipment, then you most likely will not need To put a 40 inch plasma screen television on the wall.

Have no fear, I have gone through the variety of options that most people install for their shed. This is by all means is not an all inclusive list, but it is a list of the most common upgrades.

### 12. Flower boxes



If you are a gardener then you may want to have flower boxes. This is a nice upgrade to your shed because it will allow you to update the exterior. Flower boxes are easy to build and easy to install even if you have a shed that is already built. Depending on what you want to plant inside of the flower box will determine the size of the flower box you need to install.

You will need a good wood that will stand up to the weather. Redwood and cedar is best, but expensive. However, there are many alternatives like Acacia, Black Locust, Cypress, Douglas-Fir and Teak. Cypress is rot and insect resistant but sometimes hard to get.

Here is a step-by-step process of how to build a flower box and a couple of videos to give you some instructions.

## **Building the Flower Box**

- Find the size of the box you want to build according to the size of your window and what you are going to plant.
- Cut boards to the length and width of the boxes according to your plans or dimensions.
- Glue and screw the front, back and bottom boards together to make the box. Then fasten the side boards and make a nice box.
- Drill weep holes in the bottom of the box to allow for drainage.

- Sand it down to make it smooth. You can stain or paint the box.
- Use galvanized steel brackets to install on the shed so it does not rust.
- Below are some videos that I found that explain the process nicely.

#### 2. Ventilation

Choosing the right ventilation is not difficult but it is a necessity. This will depend on the purpose of your shed. If you have a basic lawn shed, then that would lead to different ventilation as compared to a cigar shed.

Basic ventilation is a necessity to combat mold and mildew. It will also prevent damage to your shed contents or the shed itself. You can check out my in depth article about <u>shed ventilation here</u>.



Gable vent or turbine vent. These are the two most common vents for your shed as they can move air in and out of the shed easily and without power usage. Easy to install or add on to your shed.



Powered wall vent. This is a workhorse for exhaustion. It would be typical in a shed that you are doing a lot of painting or craft work that has fumes. Also for a cigar shed where you need to exhaust smoke out of the shed. Just remember that if you have to exhaust a lot of air you need to have a supply of good fresh air coming into the shed to displace the bad air.

### 3. Gutters

Let's face it, not all areas have the same climate. If you live in an area that has a rainy season then you need to think about shed gutters. Also, if you have a yard that stays soggy then you want to think about a gutter. My previous post about shed guttering can be found here.



Gutter options for sheds are not vast. <u>Halls Rainsaver</u> guttering is a nice add on solution as it is easy to install and not very costly. One can

collect the water for use in the garden. Also if your shed is a potting shed then you a fresh supply of free water for the taking.

Other options would be for custom gutter installation and would be recommended if you have a larger shed to justify the cost. However, I am a big believer in guttering as it will keep your foundation stable and decrease the risk of your shed sliding off the foundation.

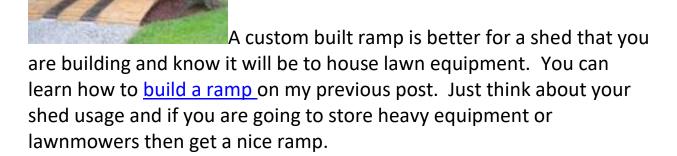
There are many nice options with guttering. Most people will install the same guttering that is on their house to make the buildings look uniform.

## 4. Shed Ramp

This is an upgrade that many want and need. If you are going to be moving heavy objects into and out of the shed then you will need a shed ramp. This is especially true if one is using the shed as a lawn shed. Moving in mowers and tillers is much easier with a ramp.



There are options for ramps that people overlook. If you have a shed that is already built with steps, then you can get portable ramps. These are great for moving in lawnmowers into and out of your shed. However, it also is great for driving your lawnmower into the bed of a truck for transportation. A portable ramp is much cheaper and more versatile.



## 5. Insulation

Most sheds can get hot. Most people do not want to install insulation on the inside because then they would have to finish the ceiling. So what is the alternative?

What if you could paint your shed and somehow that would help keep it cool? There is a solution. There is a paint additive that will reflect the heat from the sun and prevent your shed from getting too hot.



Sunshield Radiant Heat Barrier Paint Additive is made by 3M and is a paint additive used as an energy saving barrier. It has been used on many different structures over the years.

There are microspheres that are hollow and form a barrier when mixed with your paint. This allows them to block the heat from the sun and keep your shed cool.

It mixes well with colors so if you want to paint your shed a nice green or blue it won't mess up the color. Because it is mixed with the paint it will get into every crack and crevice. Therefore, it will block the heat from the sun in the hot months and keep the heat inside the shed in the cold months.

## 6. Windows

All sheds should have windows. I cannot stress that point enough. It provides light inside of the shed and also ventilation. It is better to have <u>plans</u> that have windows already in the plans. If you have a shed that is already built and you need to add a window, then that can be done. It will take some time but here is a <u>series of videos</u> that will guide you how to install a window in a wall without a window.



Not only can windows provide a lot of ventilation, but they can also provide a nice look to your shed. If your shed is a potting shed, then you can put a flower box outside of the window. Some windows look

great with a flower box and siding around the windows like in the picture below.



## 7. Audio System

You have a shed and you are going to spend a lot of time in the shed so you need to listen to music. You can bring a radio to the shed and listen to music or you can install speakers in your shed.

I prefer an Alexa from amazon. They are great devices that can stream music and give you weather reports and look up just about anything you want. It is a great small and cheap alternative but it will need a wifi connection to get the most out of your device.

Speaker installation can allow you to link your phone to the speakers directly or you can have a receiver connected to the speakers and that would give you more options for music. If your shed is going to be for a man cave type shed then you may want this option and a television also. You can install the speakers for music or for surround sound. Pyle makes a good speaker that is versatile.

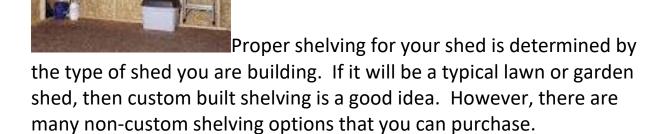
#### 8. Television

This is primarily for sheds that are going to be more of a retreat and not so much for storing lawn equipment. It can also be for a potting shed or a shed that doubles as a workbench area. Having the game on in the shed while doing some woodworking wouldn't be a bad idea either.

When finding a television for a shed determine the size of television you would need. Once you have that idea down, then I recommend finding a smart TV that can stream you favorite programs. Of course your shed will need to be close enough to your house to get access to your home network. You can buy a wifi extender if needed.

Smart televisions like the Roku television by TCL is a good option. I have two of these televisions throughout my home and they work like a dream. This allows you to stream your cable and apps like Netfilx, Vudu, Hulu, etc... Depending on the size of your shed you can get 32", 42" or if a man cave 50+ inch.

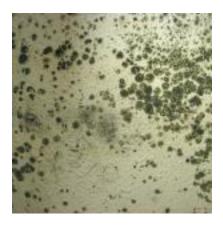
## 9. Shelving



Metal shelving could rust if the humidity in the shed is too high. However, they are sturdy and can be adjusted nicely. Some have wheels and can be moved easily.

However, there are also nice options with plastic shelving. Some are stackable and can be customized for just about any purpose. I have these and they work great for me and I have stacked them many different ways.

## 10. Mold and Mildew Prevention



We have a few articles already about mold and mildew, so check those out <a href="here">here</a> if you need to. However, the basic key is to have proper ventilation for the shed.

Also, you can add dehumidifiers to your shed and that would keep the humidity level down. These neat devices suck the humidity out of the air. However, you will need to empty the water container every so often. You can buy a hygrometer that will tell you your humidity level and allow you to adjust the ventilation as needed.

The words to live by are "an ounce of prevention is better than a pound of cure." So prevention of mold and mildew is the best thing.

## 11. Add Landscaping



This isn't really an upgrade to the shed itself, but it is an upgrade to the look of the shed. Having the proper landscaping would add a lot to the look of the shed.

It could also add a lot to the value of the shed and your property itself. If you do not know much about landscaping, then there is a <u>great landscaping software program</u> that can help. I have used it myself and it makes landscaping easy to understand and put together.

## 12. Build A Deck



This is another upgrade that is overlooked by many people. Having a nice small or big custom deck around your shed can really make it a standout building in your yard.

It can double as a gathering place for your buddies when they come over to visit. It can be decorated with your plants that you potted in

your shed. The possibilities are endless and each one will allow you to enjoy your shed that much more.

# **Shed Upgrade Conclusion**

Those are the most common shed upgrades that most people want to make their shed more enjoyable. There are many more options that are available depending on your needs. Just remember to think ahead about the purpose and style of shed you want. If you already have a shed, then there are still options for you to make the shed what you want. Learn more shed ideas on our blog and start <u>building your shed</u> today.

# Chapter 15 - Specialty Shed Ideas

## Lean To Shed Construction

How do you build a lean to shed?

A lean to shed can be a great addition to your home. Pick the right plan for your needs and find the right spot for your shed. You can construct this shed on a patio or an area close to your home. Start with the proper floor and move on to the walls and roof. Do this correctly and you will have a great storage shed for just about anything.

# Lean To Shed Construction – Thoughts



Start your lean to shed construction project today so you can have an easy to build shed for your storage. A lean to shed is one of the most common sheds built today. This is because lean to shed construction is a very easy build and can be done in a weekend. Once built, the lean to shed will give you ample space for storage. Furthermore, since it is built up against the house it is hidden from the yard and therefore perfect for a storage solution that is hidden.

If you are not into building a lean to shed from plans, then you can buy a shed kit. Some of these kits are of good quality and will last quite

awhile. There are many options at the local department store. There are many options on Amazon also and they can delivered to your door. Building these kits is like building a lego building as the steps are easy and minimal tools required.

# Lean To Shed Construction – Before Building

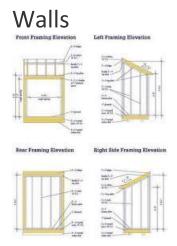
Once you make the decision to build a lean to shed you will need to get a couple of things done first. First of all get a good set of plans. There are hundreds of different styles of lean to plans and you can access a good set of plans here. Second, evaluate your home and yard so you find the right place for the shed to be built. Now that you have the plans and the place for your shed it's time to build. You will need to get the materials to get your project started right. The materials needed will be according to the plans you chose. Make sure you use pressure treated lumbar so it can withstand the elements.

# Lean To Shed Construction – Building Foundation and Flooring

Once you have the <u>plans</u> and the lumber, you will begin building the shed from the ground up. Most lean to sheds are built next to a home. Half the time the shed is built on a concrete slab and the other half of the time the floor will be on the ground. Check out my post on <u>shed foundations</u>. This may help you decide on the proper foundation.

If on a concrete slab, then proceed to building your walls. If you have a wooden floor, then my recommendation is to put down a gravel base. This will take some preparation to make sure the ground is level. Then <u>build the floor</u> on top of the gravel foundation. Once the

floor is constructed per your shed plan then cover the floor with plywood.



The walls are built according to the plan and size of your shed. However, you need to make a decision if you want a window with your lean to shed. There are many different types of windows and you can find out more from my previous post on window ideas.

You also need to find out what type of door you would like to have for your shed. I recommend sticking with a single door or double door if you are storing a lot of things in the shed. However, there are more door options available. Read more about door options here.

## Roof



The roof is a single pitch roof so the water runs away from the back to the front of the shed. The construction of the roof is very simple. Your <u>plans</u> will have this according to the size of the lean to shed you are building. The <u>roofing material</u> can be vast but I would stick with a basic asphalt shingle roof or a metal roof. You may want to build in a guttering system on the shed so you can catch the water and use it for your plants, garden, etc... Read more about <u>guttering</u> on my previous post.





A lean to shed is a very basic and easy shed to build. The size of the shed will depend on how much storage you need and the use of your shed. Make sure you have the right set of <u>shed plans</u> and build the right lean to shed that fits your desires. Don't forget about prebuilt sheds that you can assemble if you do not want to build from a set of plans. You can watch a typical shed being built on my previous post <u>build a shed video series</u>

## How To Build A Cigar Shed

Why build a Cigar Shed? You love your cigars, but you have no place to smoke them except outside. A cigar shed is the best solution to your problem. Also, a cigar shed can double as a man cave for your buddies to come over and watch the game with a smoke. How do you setup a cigar shed you might ask? You can convert an existing shed or build your own cigar shed but you need to make sure it is built with the right ventilation. Once your cigar shed is done you will have to outfit it with cigar accessories. Learn more below...

# Why Build A Cigar Shed?



You have a bundle of cigars that you have properly humidified and are ready to enjoy. However, it is very had to enjoy them outside when the weather is bad. If only you had a place to smoke them inside without smelling up the house. Smoking outside in the cold will make you smoke them fast and not enjoy them as much. There is nothing worse than trying to smoke a nice cigar in a hurry as it will taste like hot ash.

You can smoke the cigar in your house but then you have to worry about the smell. Furthermore, if you have a family you do not want to fill the house up with smoke. You most likely don't have the proper ventilation in the house to accommodate the smoke either. Furthermore, if you don't have the right purification system, then your house will have a permanent cigar smell.

# Cigar Shed Or Mancave?

There are many mancaves that are built in houses and some are very elaborate. A lot of those areas are typically an entire downstairs that has been converted to a mancave. However, it is still in the house and you still have to worry about the smoke and smell. Also, adding the proper ventilation in your home could be tricky.

The cigar shed is a great alternative. You can build a shed cheap and with the right plans you can make it just what you want. Depending on what you want inside your cigar shed you can make it a mancave also. You can go really big and have enough room for a pool table and chairs. The possibilities could be endless.

# Where To Place Your Cigar Shed

It is nice to have your cigar shed away from the house because of the smell. Also, if you are going to have the guys over for the big game and smoke some cigars it is a good idea to be out of the house. This will allow the family to enjoy the house without the smell and enjoy the house without all the guys yelling about the game.



In addition, being separate from the house allows you to have your own quiet sanctuary for thinking and reading. Sometimes, just getting away from everybody and smoking a nice cigar putting your thoughts together is a must. Listening to some nice jazz music and getting some work done while smoking a Churchill cigar is also a nice retreat from the stress of life.

# Cigar Shed conversion

If you have a shed already in the yard that is not being used, then you can convert it to a cigar shed. You will be limited on the size of the shed, but you can outfit the shed exactly the way you want and have your own little cigar smoking oasis.



The first thing to do is clean out the shed and get rid of things you don't use. Did you know that on average 40% of things we store away are never used again?

## Getting Rid Of Old Stuff

Go through your shed and find out what you do not need and throw it away. There is a great method called the PACT method to getting rid of clutter. Check it out on my previous post <a href="here">here</a>. You need to make sure the garage has the right shelving to store the stuff that was in your shed.

## Combustibles and Smell



Make sure you get rid of all combustible things out of the shed. You really do not want to blow up your cigar shed the first time you light up that cigar. Once the combustible stuff is removed, you want to make sure you get rid of the gasoline smell. There are many air purifiers that can accomplish this task and ionizers also. I have an ionizer and they

work great! All smells gone quickly. Furthermore, you need to have great ventilation, which will be covered below.

## **Conversion Modifications**

If you are going to make an elaborate mancave type cigar shed, then you may want to refinish the inside of the shed if the walls are bare rafters. You can hang some drywall and finish the ceiling with drywall if you want. However, I would recommend you make the ceiling as high as possible for the smoke to drift upwards. Don't forget to insulate the shed walls to help keep the proper temperature throughout the year.

Then make sure you have the proper ventilation in the ceiling to exhaust the smoke. Sometimes a ceiling fan on reverse will help draw the smoke upwards and out of the middle of the room. You also need a good air intake and this can be a window opened slightly, vents or a portable air conditioner/heater.

## **Building Your Cigar Shed**

You have collected a significant number of cigars right now that are humidified properly. At this point you realize that you want the cigar shed, but you do not have a current shed in your yard. Therefore, it is time to look at building the perfect cigar shed for your cigar smoking.

# The Plans

The first thing that you will need to do is get a set of <u>shed plans</u>. I would recommend getting a significant number of plans to review so you can find the right shed to build. This will depend on the contents of what you have in your shed and how you will use your cigar shed.



Therefore, if you want to have a cigar shed with the pool table and seating then you will need to find a set of <a href="shed plans">shed plans</a> that are large. If you want to have a cigar shed that is suitable for two or three people to sit in a comfortable room that is ventilated, then you will need a smaller set of shed plans.

## Permits and Ideas

Once you have the proper shed plan you will need to get the permits for your area. You can find out some zoning laws in your area here. Once you have your plans you will need to find the area in your yard that would be perfect for your shed. Certain things to consider would be the terrain of the yard and the distance from the house. You will need to choose a spot that is not too far to walk from the house, but it is manageable in the winter time. You also want to consider how loud the shed will be if you're having a bunch of guys over to watch the football game. If you think it will be loud most of the time, then you need to look at placing your shed a good distance away from the house, so you do not disturb the family.

# Foundation

When it comes to building your shed the first thing you will want to work with is the foundation. There are a number of options depending on the terrain. Check out my <u>shed foundation post here</u>. One of the easiest options would be a gravel foundation, which would be good for a small to medium-size shed.



However, there are other options including a wood pier foundation as well as a cement block shed and the concrete slab. If you were going to have a pool table and heavier furniture, then you will really need to look at a more sturdy foundation like cement foundation. However, most foundations will work just fine.

## Walls and Roof

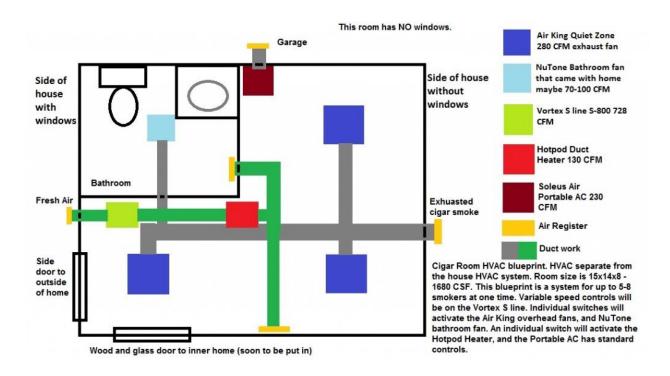
After your foundation is constructed you will need to construct the walls and roof for your cigar shed. You will build the walls and depending on the shed plans that you are working with. I have included a video of a simple shed wall construction and there is a whole video series I found on building a shed from start to finish here.

Next you will decide whether or not you want a shingle roof or a metal roof. I would recommend a shingle roof as it will be quieter during the rainstorms. However, eventually you may have to replace the shingles whereas a metal roof may last longer. Another alternative that some have used would be a rubber roof. This is a good roof and it is a quiet roof also. You can check out my previous post on <u>roofing materials</u> here.

# Cigar Shed Ventilation and Air Flow

The most important part of any cigars shed would be the ventilation. Any cigar shed needs to have a proper ventilation and that means

proper air intake as well as proper exhaustion of air. You cannot only put in an air exhaust system as you have to replenish the bad air with good air. This can be accomplished many different ways. This is a nice schematic I found for an inside cigar room ventilation system.



# **Exhaust System**

The first thing that I would recommend would be to get an adequate exhaust System that can move the proper cubic feet of air quickly. Check the CFM rating and noise rating. You do not want a great exhaust system that is so loud you cannot have a conversation with someone in the room. This will primarily depend on the size of your shed. However, once you decide on the proper exhaust system then you will need to decide how you will build your shed to allow proper air intake.

## **Turbine Vent**

You can move a lot of air with a turbine vent, however you are dependent on the outside flow of air to turn the turbines and exhaust the cigar shed. I would not recommend this due to the possibility of cigar smoke buildup within your shed because the outside air is not turning the turbine fast enough.

## **Power Exhaust Fans**

I would personally recommend a power exhaust fan. There are many options for this type of the exhaust system. One that is really interesting is a solar gable fan. This is an exhaust fan that runs on solar power and therefore there is no electrical cost with clearing out the smoke from your cigar shed.

Another option would be powered wall vent. I believe these are a good exhaust system for a cigar shed as you are not dependent on solar power or wind power. I believe it is more trustworthy to have an exhaust system that is with electricity rather than dependent on the outside elements. You will need to find the right size of the exhaust system depending on your shed. Just remember to check the CFM and noise rating.

## Air Intake

The air intake for exhausting smoke can be accomplished on many fronts. One way this can happen would be with floor vents or a cracked window that would allow air to go into the shed. However, you would be in trouble in the colder winter months as that air would be quite cold. An alternative would be to have a portable air conditioner/heater that can ventilate the shed by providing air conditioning in the summer months and heat in the winter months.

# Cigar Accessories

Now this is where it becomes really exciting to have a cigar shed. Getting the proper accessories for cigar smoking we'll make it that much more enjoyable. The most important things that I recommend is seating, television and audio system, air purification system, humidors, wall ornaments, ashtrays and as well as lighters and cutters.

## Seating

Every great cigar smoking space has wonderful leather chairs. You will need a minimum of three chairs, so you can allow more people to enjoy your cigar shed with you. You will also need to have some individual side tables as well as a main coffee table in front of the chairs.

The main coffee table would be great to house a humidor as well as your accessories of lighters and cutters. The side tables and be good to allow for individual ashtrays as well as drink holders. Below is a listing of chairs and tables that would look nice.

# Television and audio system

Any great cigar room would require a television to enjoy watching the football games or sporting events while smoking your cigar. If your shed was big enough then you could have a big enough television to have a guy's night out for cigars as well as football or whatever sporting event you would like to watch.

My recommendation, as per my other posts also, is to buy the best television that you can afford so you do not need to replace it soon. As with all technological gadgets they become outdated quickly. This would be the same for audio systems. Above is a sampling of both televisions and audio systems that would work fine in a cigar shed.

# Air Purification Systems

There are many options for an air purification system. I do recommend a number of them and my recommendations are primarily with the rabbit system as well as a good ionizer. The air purification systems allow you to eradicate the smoke as well as the smoke byproducts from the air. The exhaust system removes smoke from the room quickly. The air purifier cleans the air. The ionizer is a wonderful invention that will remove the cigar smell in your shed. Here are some great products noted on Amazon. I own these and can attest that they do a great job.

### Miscellaneous

There are many options in regard to the accessories with lighters, cutters as well as ashtrays. Two main cigar cutters are a V cut and a double guillotine cut. Some lighters have a cigar punch in the bottom of the lighter. Also, you can buy cigar punches by themselves to carry on a key chain.

There are great lighters that are available, and I would recommend a torch lighter. Colibri makes a great lighter but also there is one by Vertigo that has a lifetime warranty.

# Don't Forget The Cigars

Once you have your cigar shed completed you need to make sure that you have cigars to smoke. The only company that I use, and they are the largest company selling cigars is <u>JR Cigars</u>. They have a great collection of most brands of cigars. The cigars are shipped well humidified, secure and quickly. However, there are many different companies that you can search for and don't forget to find you local tobacconist.

## Conclusion

If you are a cigar lover and you need to find a place to enjoy your cigars, then why not a cigar shed? If you have an existing shed, you can make some simple modifications to convert the shed, so it has adequate airflow and exhaust. However, if you do not own the shed then you can build a cigar shed easy with the right set of plans. You will need proper air intake and exhaust as well as air purification. There are many accessories to purchase to make it your personal retreat for cigar smoking, but they are all worth the time, effort and money.

# Shed Gym

There are a number of reasons to build a shed gym. Reducing your risk of obesity and obesity related diseases. Saving money on a gym membership. Convert an old shed, that is not being used, to a shed gym. Build a shed gym to keep from cluttering the house with workout equipment. Finally, outfit your own personal gym with all of the accessories you desire.

# Shed Gym – Obesity and Health Concerns

With the rising surge of obesity and the declining health of the population, getting healthier is important. If you want to combat obesity and obesity related health risks you have to start working out and dieting. How you accomplish this can be done a number of different ways, but working out in the convenience of your home is a good start.



## Obesity

According to the Centers For Disease Control (CDC) The prevalence of obesity was 39.8% and affected about 93.3 million of US adults in

2015~2016. The percentage of obesity is not only rising in the US but also throughout the world. The health risks associated with obesity are rising also. There are a record number of people with obesity related illnesses such as heart disease, stroke, type 2 diabetes and certain types of cancer. Not to mention obesity related back and spinal problems and lost days of work.

## Medical Cost Of Obesity

Did you know that "the estimated annual medical cost of obesity in the United States was \$147 billion in 2008 US dollars; the medical cost for people who have obesity was \$1,429 higher than those of normal weight." The lost days of work and time with family due to illness is growing also. You can read the CDC full report here.

## Shed Gym – Saving Money On A Membership

So you decide you want to start working out and get in better shape. You need to start somewhere so you turn to a gym membership. However, is that really a good idea? Are you really going to travel to the gym daily?

## **Gym Costs**

According to the <u>USA Today</u>, "The average gym membership costs just under \$60 per month, and 67% of memberships go unused. Meanwhile, memberships to specialized workouts like Crossfit have the fit-minded shelling out hundreds per month." Now that sounds like a lot of wasted money not to mention a waste of time traveling.

#### **Time Constraints**

Most people workout at different times and that is according to their schedule. Some need to workout early in the morning but others late in the evening after work. The time it takes to get in the car early in the

morning or late after work and drive to the gym can be bothersome. If it becomes too much of a hassle, then you won't go to the gym and workout.

## **Gym Classes**



In addition, some gym classes are only offered at certain times that might not be convenient for you. At this time there are many home workout routines that are great alternatives to the gym classes. These include the online series of workouts and dvds. These are accessed through your smart phone and can be streamed to your television. Most cable companies have OnDemand workout series that you can watch at anytime. The options are growing daily and are endless.

## Weight Lifting



If you are not into doing a cycling or yoga class, then you may want to start lifting weights. However, you don't want to be around the muscle heads of the gym hogging the weights and making fun of the weaker patrons. Or you are a muscle head and you do not want to fight for the extra weight that you need to use for your workout. Either way a home gym is the way to go because you can have the best of both worlds as you go from weak to strong you have nobody that can interfere with your workout.

## Shed Gym – Building or Converting Your Shed

Now that you are motivated and ready to start working out at home you need the space. You do not want to clutter up the kids bedroom with weights and equipment. Working out and blasting music in the house for your workout will disturb the family also.



You may have an old dusty shed out back that would be perfect for your shed gym. So you need to go and clean it out or at least get rid of the clutter to make your shed gym. You may need to make a few modifications so your gym will be perfect for your needs.

## Converting Your Shed- Electricity

The first thing you need to do is make sure there is electricity at your shed. You will need to plug in your stereo system or exercise equipment. You may also want to add an exhaust fan to keep the area cool and also keep the gym smell to acceptable levels.

# Converting Your Shed – Flooring

Next you want to make sure your flooring is correct. If the shed is rather old and you have stored some heavy equipment, then you need to look at replacing your floor to make it sturdy. Also, there are overlays that might work for your gym floor and they make a nice alternative to the wood as they are rubber. There are many good choices below.

## Converting Your Shed – Windows

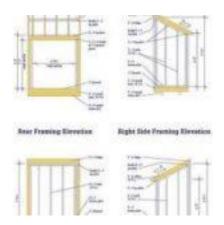
The scenery has to be nice also, so you need to make sure your shed has plenty of windows. If the walls and ceiling are not finished then you may want to drywall them so you can make it like another room in

your house. You can check out my previous post on <u>shed ceilings</u>. The video below is a nice review of drywall installation.

# **Building Your Shed**

In the off case you do not have a shed at home but are excited to build one, then you are in the right place. The majority of this website is dedicated to the building process so I put links below to the posts dealing with the different parts of the building process.

## **Building Part One**



The first step in this process is to find out what kind of workouts you may want to do now and in the future. That way you can realize the equipment you will need now and what you may need in the future as you get stronger and more in shape. All of this will determine the size of your shed so you can find the right shed plans.

# **Building Part Two**

Once you find the right plan, then building your shed will be a step by step process. You will start with the building codes and permits. Make

sure you have those for sure. Then get the proper supplies to build your shed.

## **Building Part Three**



Next step is to build the foundation. There are many different types of foundations that depend on the terrain and where you are going to build your shed. There are many options with gravel and wood piers, etc... Check out my previous post <a href="here">here</a>. Moving on to the <a href="flooring">flooring</a> will be next and you need to make a good decision because of the equipment that will be in the shed.

# **Building Part Four**



After the foundation and flooring, you will need to move on to the <u>walls</u> and <u>roof</u>. Don't forget to think about your <u>ventilation</u> options at this point as that can be incorporated into the build and not after the shed is done. Don't forget the shed<u>siding</u> & <u>guttering</u> and you will be just about done.

## **Building Part Five**

Once the shed exterior and roof is built you will do the inside work with finishing the walls and the ceiling. This will take a few days to let the drywall cure and then do the painting. After that is ready I would put down your rubber floor and bring in the equipment and accessories.

# Shed Gym – Equipment Needed

Now that you have the shed gym ready you have to make it exactly the gym you want. This is all in the eyes of the owner. I have some recommendations below, but you will have to make up your mind on your exercise needs.

Yes, every gym needs a great stereo and television. This is definitely a must so you can get lost in your workouts and music. You also may want to workout while watching TV, (the golf channel for me, ha).

## Electronics – Audio Systems

There are so many options here and it depends on your budget. If you want to spend a lot of money, then you could have built in speakers in the shed. Your smartphone can connect to the receiver and you can play music. Or if you are limited by budget, then you can get the typical small bluetooth speaker and play music as needed.

### Electronics – Televisions

As far as televisions go, I say the bigger the better. When it comes to electronics my rule of thumb is to spend the money and get the best you can afford so you do not have to replace it early. I prefer televisions that allow streaming and have had great luck with TCL televisions from Roku. They stream most cable television apps as well as Netflix, Vudu, Hulu and many others.

# Cardio Equipment & Benefits Of Cardio

There are some basic staples to every gym and that is the cardio equipment. Not everybody likes to do cardio, but everyone probably needs to do cardio. The benefits of cardio cannot all be stated in this blog post but its positive effects are vast. Decreasing blood pressure, controlling blood sugar, decreasing the demand on your heart and the list goes on and on. It is best summarized in this <u>infographic by the</u> Cleveland Clinic.

There are really three options that I typically recommend for cardio equipment. The treadmill, elliptical or stationary bike. Any of these will do fine for your cardio needs.

## Weightlifting Equipment & Benefits Of Weightlifting

There are some people who are afraid of lifting weights and love to do cardio. However, lifting weights have their own benefits that are different than cardio alone.

Lifting weight will increase your muscle mass and increase your metabolism. The weight training will stimulate bone growth and

decrease your incidence of Osteoporosis. You can check out this nice post by Health magazine on the benefits of weight lifting.

## Weight Bench & Dumbbells

There a number of options with weight lifting and the main two pieces of equipment is a weight bench and some dumbbells. I prefer the Powerblock and Bowflex dumbbells as they can go from a very light weight to a heavy weight easily. Also, they do not take up a lot of space like a bunch of separate dumbbells would.

#### **Smith Machines**

As you get stronger you may need to handle heavier weights and the safe way to do this would be to look at a Smith Machine. This is a machine that has a self spotting feature to allow for that extra bit of safety. These machines are for people who already have a lot of muscle and strength. However, the possibilities of exercises are endless with these machines.

#### **Extras**

Some honorable mentions of equipment would be weight lifting bands. I found these to be a great alternative to the weights as it can lead to better range of motion. However, it is also beneficial if you are recovering an injured muscle. Don't forget the water cooler if you do not have water in your shed gym

## Shed Gym – Conclusion

As you can tell there are a number of great reasons to start a home shed gym. The health benefits of starting your exercise program cannot be stated enough. You can save money on a gym membership provided you stick with your program. A shed gym is a great option so you do not clutter up the house or garage. It will provide a sanctuary for your workouts and you can make it your own perfect gym without the hassle of a regular gym. Make sure you outfit your gym with the right equipment for your needs and future exercising needs.

### **Build A Greenhouse**

Why would you build a greenhouse and what are your options? There are many reasons to build a greenhouse including a consistent place for gardening, multipurpose shed, retreat for your hobby and a greenhouse is a nice addition to your home. The options for your greenhouse are vast and include heating, lighting, landscaping, water supply, types of windows and siding, etc...

## Build A Greenhouse – Consistent Place For Planting

So you are a real gardening expert at this time in your life. You love planting and all there is to do with planting. However, you have one problem... You cannot do your hobby year round. This is exactly why you need to build a greenhouse. A greenhouse is a perfect place to do ALL of your planting and potting in one place. It allows all of your plants to grow in one specific area that is a perfect environment. You can keep all of your equipment in one place and do all of the work in one place that will be outfitted to your exact needs.

# Multipurpose Shed

If you have a greenhouse, then it can also double as a multipurpose shed. You can store all of your other items in the greenhouse shed, provided it is not so many items that it makes your shed unusable for planting. However, with the right shelves and the right plan for <u>organizing your shed</u> you could be ahead of the game with your storage issues.



# Humidity

A greenhouse shed will be the perfect humidity for the plants. You will want to keep it at a perfect humidity so the plants will thrive. There are many options to ensure your humidity level and you can purchase a hygrometer to measure the humidity. The humidity will be determined by the temperature within the greenhouse. Make sure you have a heat source for the colder months. You can buy nice greenhouse heaters that will do the trick. It is an easy task, but one that is well worth the time and effort to make sure your plants are perfect.

# Sunlight

Sunlight is one of the most important aspects of a greenhouse. ALL of your plants will need sunlight to grow and your greenhouse will need to make sure that there is plenty of sunlight coming into the greenhouse shed to feed the plants. Sunlight will be converted to the all important oxygen through photosynthesis right there in your greenhouse. There are many ways to ensure sunlight and they include glass windows, plastic panes and some have even used plastic bottle walls to reflect the sunlight into the shed.

### Year Round

One of the nicest aspects to build a greenhouse is the ability to garden and plant year round. One can grow tomato seeds in the late winter and then put the plants in the ground when the time is right. That is one of the most satisfying aspects of having a greenhouse shed. Furthermore, having all of your planting and potting tools in one place is a great idea and can keep you more efficient with your gardening and planting throughout the year.

## Save Money

You may ask yourself, how in the world am I going to save money? This is relatively easy, as seeds are very cheap but plants can be very expensive. By planting the seeds in the proper environment at the right humidity you are ensuring that your plants will be successful. Plants bought at the store can be very costly and also may not be very healthy. Therefore, by growing your plants from seed you are ensuring that you have the healthiest plants at the most inexpensive cost. It is a win – win for you and your planting.



Courtesy Of Sarah x Sharp

Build A Greenhouse - Planning & Styles

### Size

There are many options when it comes to the size of your greenhouse shed. Most of all it is determined by the amount of space you will need to do all of the planting that you desire. If you are not going to have a lot of plants then a simple lean to shed would be appropriate. However, if you are really serious about your planting and you have a lot of equipment and desire, then you need a much larger greenhouse. This will be determined by your space requirements.

### Color

Many people have built greenhouse sheds from kits and from scratch. One of the nicest things about having your own personal greenhouse shed is that you can decorate it however you want. I have seen many different scenarios where a shed will have many plants growing on the inside and some of the inside plants are rather large. Furthermore, you can paint the greenhouse framing any specific color you want. So you can cut loose and make your greenhouse shed exactly what you want.



## **Plans**

When it comes to greenhouses there are a few different plans that you can find. Some of the plans are kits and others are architectural plans that can be built. As noted above you will need to find the right size for

your level of planting and storage needs. Recently we have noticed that more of the greenhouses are being assembled via kits but don't underestimate the ability to build a nice greenhouse with the right set of plans.

### Lean To

This greenhouse is just like a lean to shed. However, it has nice windows to allow for the sunlight. It is a smaller greenhouse shed and is more for a gardener that will plant occasionally. It is not intended to be a big area for planting. If you are going to have some storage in addition to planting, then this really isn't the greenhouse for you.

## **Potting Shed**

A potting shed is exactly what most will want or need for a greenhouse. It's main purpose is to pot plants and do gardening tasks. A right size potting shed will have enough room for all of your planting needs and when spruced up with the right options (see below) it could be a nice sanctuary for your hobby.

## **Elegant Addition**

Some greenhouses are built to be a very nice addition to a house. They are not typically kits but built from plans. They are built to look like the house with the right type of siding and brick so it matches nicely. If done right it can really add to the value of the house, but you will need a good set of plans to get it done right. There will also be a lot of planning on your end to make it look elegant both inside and out. I have some tips and suggestions below so don't forget to check it out.



Build A Greenhouse – Get Started

### **Permits**

As with all projects the first step is to get the right permits for the job. If there is going to be a big elaborate job then a permit is a must. However, depending on the size of the job you may not need a permit. For example a small lean to greenhouse shed that is built from a kit can be thrown together quickly. This type of greenhouse shed would not need a permit most of the time. Here is a <a href="Link from HomeAdvisor">Link from HomeAdvisor</a> to help you get started.

### Foundation

From my <u>previous post</u> here there are many different types of foundations for any shed. With a greenhouse you may want to do some planning. If you are building from a plan and not a kit, then think about what you are going to do with the greenhouse. Water supply will

be needed so you need to think about a drainage system. All plants love water so lots of water can spill on the floor so it has to be cleaned up. That is where a drainage system and the proper foundation comes into play.

A gravel foundation is a nice and inexpensive way to get a nice foundation. However, if you are using this foundation as your floor, then over time it could turn to mud. So be careful as you may have to put more gravel down over time. Some have thought about putting a gravel foundation and then a wood floor like a typical shed. I do not recommend that due to the water issue and wood rot, so don't do a wood floor.

A concrete foundation, in my opinion, is the most appropriate. You can build a drain system in the floor or just sweep the excess water after you water the plants. It will also allow for easy stacking of the pots and plants and you don't have to worry about wood rot.



### Kits

There are many greenhouse kits one can build and most are really nice. You have to figure out your foundation issue first and then build the kit that fits your needs. I have seen some kits modified nicely to fit exactly what the person desires and needs for their greenhouse.

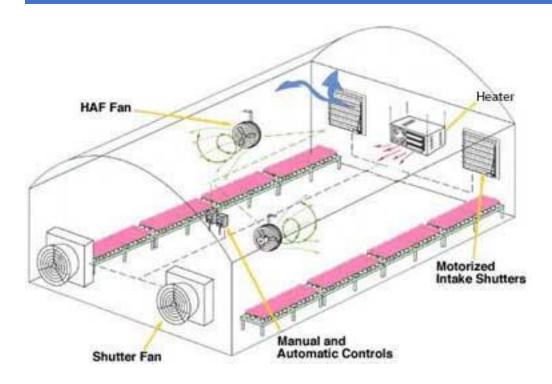
## **Framing**

Greenhouse framing is not like typical framing. The framing can be with metal studs or with a typical wood frame. It depends on the plans and if you are building a greenhouse kit. If the studs are metal, then they will most likely be galvanized to prevent rust. Spacing for the framework will depend on the plans and windows that will be installed.

### Ventilation

A greenhouse will be warm and humid to allow for proper plant growth. You do not want it to get too wet inside or you can develop mold. Therefore, you will need the proper ventilation and heat. There are a number of options for ventilation and you can check out my previous post on ventilation here. However, here are the basics but you can find a more detailed description at Greenhouse Megastore here.

- Calculate the CFM (cubic feet of air/minute) or the amount of air required for your greenhouse.
- CFM = length x width x height.
- CFM calculation = shutter speed recommendation.
- less than 1000 = 12" shutter fan
- 1000-1300 = 16" shutter fan
- 1300-2700 = 20" shutter fan
- 2700-6300 = 24" shutter fan
- 6300-12640 = 30" shutter fan



# Ceiling

The ceiling in a greenhouse will also be plastic panes or glass and some nice options are skylights with gas powered lifts depending on the humidity and temperature inside the greenhouse. Other options include sun dampening shades that can protect the plants from too much sunlight and heat.

# **Build A Greenhouse Options**

## **Shelves**

As with all sheds and greenhouses you will need the proper shelving for your planting and potting things. There are a number of **options for shelving**. Depending on the look of your greenhouse you may want to get shelves that match. For instance, the framing is typically a metal

frame so metal shelving would match nicely. However, plastic shelving may be less expensive and work nicely. It may not look as nice though.

### Water

If you build a greenhouse for planting you will need a water supply. All plants love water and you need water for your plants. Therefore, plan for a water supply as you may have to run a separate water line to the shed. If you have a guttering system, then you can save the water in a barrel and use it for your plants. You can check out my guttering article here.



# Drainage

Now that you have water available you have to think about draining it out of the shed. Planting and potting is nice, but you have to use water and water can be spilled everywhere. Once you have water throughout the inside of the shed you have to drain it out of the shed. I prefer a drain in the floor so it can be swept to the drain and funneled away from the shed foundation.

## Guttering

I touched on this earlier in the article. It is going to rain so why waste it. I learned this from my grandmother who saved all kinds of rain for the garden via a bucket at the gutter. They now have neat options for water saving such as Hall's Rainsaver. You do not have to get that elaborate, but you can make something that will work. If you can save the rain water then you can use it for your plants.

# Skylights Gas Powered and Manual



I believe that skylights are a must with greenhouses and there are two types that I think of. The manual opening and closing skylight and the automatic type. I prefer the automatic. It just makes life easier with

the gas powered cylinder opening and closing the skylight depending on the humidity and temperature. I believe it is a great option and one you will love because of it being automatic.

# Lighting

Having the right lighting for the greenhouse can be twofold. On one hand it can really light up the greenhouse for a great look. This is especially true if it is to be a dual purpose for planting but also an elegant addition to your home. However, if you are planting seeds for the garden, then you will need some grow lights and tables. You will need to put that together to allow for the proper amount of growth in the darker lit months.

### Build A Greenhouse – Conclusion

There you have it. All the things you need to know to build a greenhouse. You can build a greenhouse from plans or a kit, but think about the size and purpose of your greenhouse. Options are many when it comes to outfitting the greenhouse so make sure you do your homework. Build it on the proper foundation with a water supply and drainage system. Make sure the skylights are installed and you will be on your way to planting and potting like never before.

# Chapter 16 - Shed Plans

# Ryan's Shed Plans

Ryan's Shed Plans has thousands of plans that can be easily built. Is this true? Are they that easy to build? Having a website that delivers information about sheds and shed building we decided to a review. So let's dive right in and give you some information.

Ryan Henderson is a master woodworker with over 30 years experience and has developed Ryan's Shed Plans. This is a detailed digital book with 12,000 shed plans available for instant download with many different bonus offers. The plans are detailed because they are written by a master woodworker. He has taught many newbie woodworkers over the past 30 years how to build sheds and other woodworking projects. He is skilled in the art of woodworking and put together a nice, large set of plans. The plans are easy to read with step-by-step instructions.



Ryan's plans have thousands of plans and a number of these plans you may find on the internet for free. However, good luck trying to find all of these plans on your own to evaluate and review. It has taken him years to compile all these plans.

I tell most of my subscribers to use his program as a resource just like you would a book. His plans are not all you would ever need in regards to shed plans, but it is a nice start. For the cost of the program, it is on par with any book you would buy at the store to find shed ideas or plans. However, you get thousands of plans and 4 bonus offers instead of a few good plans.

This is an inexpensive but great set of plans given the amount of information you get with 12000 shed plans and bonus offers. As noted above some of the plans you can find on the internet if you have the time and resources. However, if you want it all done for you in a complete package then <a href="https://creativecommons.org/length="check it out here">check it out here</a>.

### **About**

### Who is JB?



website. I grew up in a construction family where my dad and uncle worked in the construction business. There were 5 boys and we all had to work in the business as young men at some point in our lives. Those years taught us valuable lessons in regards to a hard day of work and skills that would stay with us forever.

Throughout those years I learned a lot and decided to give back to my dad and uncle by putting together a website dedicated to construction and building. I chose a shed building website because building a shed contains just about every part of the building process.

As the website took off we gathered thousands of subscribers who wanted a resource for a shed building guide. With their help and my years of tips and knowledge I put together this shed building guide.

I hope you enjoy this book as much I did putting it together.

Sincerely,

JB

### Resources

I would like to thank many resources for the help that was provided in gathering information and pictures for this book. The list below is not totally complete as the contributors were so large. Most resources were quoted in the book at the section of the chapter.

Icreatables.com

Bobvilla.com

Pixabay.com

Ryan's Shed Plans

Quikrete.com

Sakrete.com

CDC.gov

HomeAdvisor.com

Greenhouse Megastore

Puff.com

House-Improvements.com

This Old House

There are many more and we respectfully thank each and every person and company that helped with the compilation of this book.