

How to build My 50 Dollar Greenhouse

October 27th, 2008 by David LaFerney

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My \$50 Greenhouse

Welcome Stumbleupon Gardeners! How about a **Thumb up** if you like this article?

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The planning is over and construction on my **hoop house greenhouse** has begun. I've rounded up all of the materials and it looks like I'm going to end up with about \$50 in a 165 square ft. greenhouse. Granted I already had most of the materials because I'm an incorrigible pack rat, but even if I had bought everything new just for this **polytunnel** it would still only come to about \$120-\$150 – less than a dollar per square ft. Due to the fact that we are in the midst of a global economic meltdown, and the future is a bit uncertain keeping the cost of this project as low as possible is an important consideration.

After some research I've decided to build the structure of the hoop house out of 20 ft. joints of three quarter inch PVC plumbing pipe. Some similar greenhouse designs that I've run across use 10 ft joints of pipe and then fasten everything together with pipe fittings, but I'm saving quite a bit of cash with the long joints of pipe and by not using any fittings – also overall simplicity is improved. There is one thing though, you can carry 10 ft joints of pipe in the mini van, but hauling 20' pipe requires a truck and preferably a ladder rack. However, you could just cut them in half right at the home improvement store and then put them back together when you get home with the coupling that is built into one end of the 20' long pipe joints – 10' pipe joints don't have the built in couplers – just go to the home improvement store prepared with a saw or pipe cutter.

My hoop house green house is going to be 11 feet wide and 15 feet long, and will be about seven and a half feet tall in the center. You could make one of these as long or as short as you want, but using this design the width needs to be between 10-12 feet. 11 feet wide just happened to work out with the layout of my garden which has 3 foot wide beds with 5 ft paths between (the wide paths are so that I can keep it tidy with my riding lawn mower) so eleven feet covers two beds and the path between them. This width also makes the sides go fairly straight up from the ground for the first few feet – I've noticed that in some hoop house / polytunnel designs the outer edges are

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almost unusable because of the slope of the greenhouse sides.

If your Greenhouse is too Flat it will collapse!

You might be tempted to make your greenhouse wider and lower at this point to get more floor space out of it – but be careful. If you have snow in your area it will slide off of a high peak a lot better than it will if your greenhouse has more of a flattened shape – and the same goes for heavy rains. If your hoop house shape is too flattened it will cave in the first time it snows or rains really hard!

How to Build the \$50 Hoop House

I decided to begin the construction by building the end walls first – even though it would be more fun to throw up the main structure in just an hour or so and make a big showing of progress, I think that in the long run it will be quicker and easier to build the end frames first on my garage floor.



I temporarily attached a joint of pipe to a piece of 1x4 to establish the outline. You might be tempted to make your greenhouse wider and lower at this point to get more floor space out of it - but be careful. If you have snow in your area it will slide off of a high peak a lot better than it will if your greenhouse has more of a flattened shape - and the same goes for heavy rains. If your greenhouse is too flattened it will cave in the first time it snows or rains really hard!



Pre-drill the pipe and use one screw so that the pipe can swivel to whatever angle it naturally aligns to. For now just let the wood "run wild"

I used pressure treated lumber for much of the polytunnel end frames even though I usually try to avoid treated wood in the garden. In this case I think it's called for or else the greenhouse probably wouldn't last more than 2-3 years without rebuilding the frame. In any event I'll try to keep it off of the soil as much as possible.



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Build the rest of the frame to accommodate the door size that you want to use. My door will be 5 feet wide, but in most cases 3' wide would be adequate. If you want a more permanent greenhouse or you live where you will ever get more than an inch of snow you should use "two by" lumber instead of "one by" that is shown here.

Leave the piece that runs across the bottom of the door in place for now. Once everything is set in place it will be easy to cut out with a hand saw.



I used a bit of weather resistant glue at all of the joints to help make it all more rigid. Notice the wood recycled from concrete form lumber.



Mark the final outline once the wooden parts are assembled. Watch out for that screw when you saw to the line!



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TIPS

* Digging a hole in hard ground for a tree or shrub? Dig a starter hole and fill it to the top with water - come back later and you will be amazed at how much easier it is to dig. After you dig fill it with water again, and wait for it to soak in before back filling and planting - the more stable soil moisture will give your tree a better start.

*

* When planting trees don't mix a lot of organic matter into the soil or the tree might grow a compacted root ball in the improved soil without sending roots out into the surrounding ground. Just dig a hole and put the loosened dirt back in - then add compost or rotted manure as a mulch on top of the ground.

*

* If you get your beds ready before time to plant, consider covering them with a **plastic tunnel** to both warm the soil, and to keep it dry so that when the right day for pea planting (or whatever) rolls around you won't be delayed by frozen mud.

*

* **Try starting lettuce in a length of plastic gutter and transplant out all in one piece.**

*

* When shopping for spring seeds buy some for the Fall garden while they are available.

*

* When planting tiny fragile seeds cover with fine compost, potting soil, or peat moss so that the emerging plantlets don't have to fight through crusty soil.

*

* When starting seeds indoors you will get much quicker and more reliable germination by **keeping the soil warm** - about 70 F. But, once plants emerge they can get leggy under artificial light if you keep them too warm.

*

* When starting seeds under fluorescent lights you should keep the lights as close to the tops of the plants as possible - but even then the intensity is far less than real sunlight. Move your plant starts outside as soon as weather permits.

*

* When starting seeds keep the soil moist and warm until the plants emerge, but then try to let the surface of the soil dry out a bit between waterings.

*

* Check the germination rate of your seeds by putting 10 each between sheets of wet paper towels, keep moist and warm. In a week or so you will see how many you need to put in each spot.

*

* One of the most important factors to successful gardening is to plant at the right time. Nothing else matters if you get this wrong.

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Now just trim to the line - I used a reciprocating/sabre saw, but you could also use a hand saw or circular saw if it's all you have. Just make a straight cut in about the right place.



Now re-attach the pipe to the outside of the frame. I used screws and wire ties because I'm a belt *and* suspenders kind of guy.

The end wall frames ended up being reasonably light and very rigid. BTW, you might notice that the second one is different (simpler) from the first because this is a learn-as-I go process. Both of them work fine though.



back side of the greenhouse end frame



and the front side... Notice that the plastic that will be the roof and sides of your greenhouse are going to fold over the ends and staple to the wooden parts. If you don't have enough wooden structure in the ends you won't be able to fasten the plastic and you will have trouble with it coming lose when the wind blows - and during heavy rain or snow you will be more likely to have problems with the very top sagging and holding water (or snow). If the top sags, it holds water, that makes it heavy and it sags more, then it holds more water... eventually it collapses. You don't want that

This is the front side because it is all on one plane so that the plastic skin will lay flat on it. The back



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side has reinforcement gussets that stick out.

And Now for the Plastic

The plastic sheeting that I'm using is plain old non-UV stabilized 6 mil "clear" plastic sheeting from the lumber yard. There is exactly one reason that I am using this particular variety instead of special polytunnel / greenhouse plastic – it's what I have. I cut a 22' piece off of a 100' x 20' roll that I already had (I'm a contractor) which was about \$90 for the roll – so in essence I used about \$22 worth of plastic sheeting after you apply the 10% TN sales tax. Had I ordered real [green house plastic](#) from [littlegreenhouse.com](#) a similar sized piece of 6 mil plastic would have been about \$71 with shipping. The real deal would no doubt last much longer than the "visqueen" that I'm using, and also probably has better thermal and light transmittance. If all goes well maybe I'll get some of that next year. Also, It's hard to buy large pieces of heavy duty plastic like this without buying a whole roll, so unless you know a contractor or Mom and Pop hardware store that will cut you a piece you might really be better off ordering some of the good stuff. On the other hand a big roll of plastic sheet is one of those things that comes in awfully handy some times.



I just rolled the plastic out on the frame... Notice the falling leaves - I'm racing against fall weather with this project.



and cut it off nice and clean with a sharp utility knife. A scrap of wood to cut over and a sharp knife make this much easier.





after stapling the plastic to the front, flip the frame over and fold over the plastic and staple it to the back. Just fold the excess together as you go. Fold in the direction that will be down so that condensation won't collect under the folds.



then trim off the excess. Be careful not to make a miss-cut!



Cut the plastic out of the door opening - leave enough to fold double before stapling it to the frame. Notice the cuts back to the corners of at the top.



Thusly





Mark out the locations of the door sides on the ground, and drive fence posts or long pieces of rebar at the sides of the door frame.

If you have much wind I would recommend using steel fence posts or rebar that is at least 5/8" diameter in these spots. My fence posts don't match because they're left overs from previous projects – remember, I'm on a tight budget!

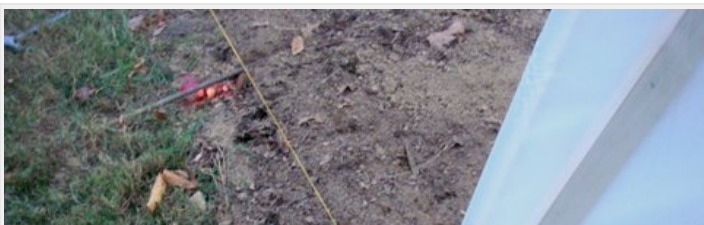


Check the fence posts for plumb and bend them a little if they need straightening.



Tie the hoop house end frames to the fence posts with wire ties, wire or rope.

The humongous wire ties made this really quick easy and strong, but If I didn't already have them I would just use "baling" wire, and it would work as well.





Once the end frames are in place pull a string to line up the stakes for the ribs.



Drive rebar pins every 3 feet to secure the intermediate ribs...



At this point it takes about 2 minutes to install the pvc pipes for the intermediate ribs - and the polytunnel takes shape. For a stronger, more permanent structure use more ribs and put them closer together - or even use larger pipe. I haven't tried it but I bet you could use up to 1 1/2" pipe - although you might have to bend it into shape on a warm day.

As you can see it's getting dark, and I'll have to finish this later. Total time invested so far is about 2 1/2 hours. I believe that taking the greenhouse down next summer, and re-assembling it in the fall will probably only take an hour or so, but I guess I'll see about that.





Since the site location where I'm building my greenhouse isn't all that level I had to raise up one side of the end frames with some 2x6s that I ripped to fit – later I cut the tail off where it sticks out toward the fence. Also notice that this means that the PVC pipes that are the intermediate ribs are too low where they hit the ground...

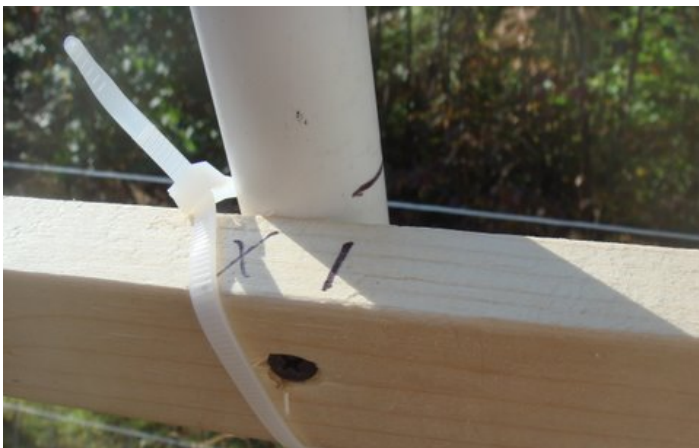


So I extended them with some scraps of PVC conduit that I had – I never throw anything away. BTW, the gray PVC conduit is sunlight resistant unlike the white – although somewhat more expensive and is less expensive! If you want to do a really good job you could use it instead. You **should** probably use the gray conduit instead of the white pipe that I used. You could even opt for schedule 80 conduit which is much thicker if you wanted to go whole hog, or if you needed to make a structure that is sturdier, more permanent or wider.



If you live where it snows – as pictured this [greenhouse structure](#) alone won't stand up to snow accumulation. But if you put a 2x6 or 2x8 ridge pole right down the middle to keep the peak from sagging it will be a lot stronger.

I strung it all together with 1x2s that I ripped out of some slightly used 2x4 studs. Using full 1x4s or even 2x4s for the top set of these would make the structure stronger.





I used a few wire ties to get everything located, and then drove a 1 1/4" drywall screw at each joint to secure it. As you can see by the lay out marks, I first measured and marked all of the locations so that it would go together reasonably straight.



If you look really close in this picture you will see the wires that serve as X bracing on the sides.



I used a doubled wire that I attached at the top and bottom of the ends using a washer and a screw.



I then used some scraps of wood to twist the double wires together and tighten them up like a rubber band airplane. You just want them to be snug so don't go nuts tightening them up. These wires really go a long way to make the whole structure more rigid and sturdy.





Now for the plastic covering – measure and cut your piece of plastic – you want a little extra in all directions – the piece that I used is 20' x 22'.



My greenhouse is 15' feet long so I cut a 2x2 x 15' – Here I'm positioning it in the center of one of the 20' edges of the plastic – leaving 2 1/2' of plastic past the ends of the 2x2. Staple it together just to hold it in position.



Now roll the 2x2 under one complete turn so that the edge you stapled is facing up under the top layer of plastic sheet.





Now screw a 1x2 on to secure the plastic. By wrapping the plastic around the 2x2, and then sandwiching 2 layers between the 2 pieces of wood you make a very secure connection, and also add some weight to the bottom edges to help keep them from billowing up in the wind. Do the same thing to the opposite edge, and then roll it all up and get someone to help you carry it to the hoop house and unroll it across the top...



Thusly. Now you almost have a greenhouse.



Roll under the edges on the ends and ~~staple them securely~~ **(Note: now that I have taken this down for the summer, I think that when I put it back up next fall instead of "stapling it securely" I'm going to just staple it a little bit to get it positioned, and then screw battens made of 1x2 or strips of plywood to hold it in place – it should be stronger and quicker)**, and other than the doors the structure of your polytunnel greenhouse is finished. Total time at this point – about 6 hours. Everything is a bigger job than it seems like it's going to be. Rake soil or mulch up to the gaps at the bottom to keep out drafts and (larger) critters. Cats in particular are likely to be attracted to such a nice sheltered spot with a bed full of soft loose dirt to dig in so pay attention to the details. Rocks, bricks or concrete stepping stones or blocks placed on top of the soil/mulch around the outside edges are probably a good idea.

Here is a forum discussion on alternative ways to fasten plastic to your greenhouse. I haven't tried the poly pipe clips that are discussed, so I can't vouch for them, but it looks like a good idea that I would consider. Here is a picture of a small greenhouse which uses that method:



This greenhouse uses clips made of sections of black poly pipe to attach the skin.



Before I even started on the hoop house I tilled copious amounts of compost into the beds where the greenhouse was going to end up. So, even though I probably won't get a chance to put up the doors until next weekend (which is Halloween), I'm all ready to plant some lettuce and spinach for (hopefully) some fresh mid winter greens. One of my goals in building this polytunnel is to have something fresh coming out of the garden or greenhouse all year long. That might be a little optimistic, but I'm going to give it a shot.

Addendum:

Complete Materials list for the "\$50 Greenhouse" – As Built

Each	Qty	Total	
\$4.23	6	\$25.38	20' x 3/4" PVC schedule 40 plumbing pipe
\$6.70	6	\$40.20	1x6x8' pt – ripped into 1x3s
\$4.99	4	\$19.96	8' steel "T" fence post
\$2.18	3	\$6.54	2x4 stud – rip into 1x2s
\$3.97	2	\$7.94	1x4x12' pt
\$5.73	1	\$5.73	2x4x16' rip into 2x2s
\$7.91	1	\$7.91	20'x1/2" rebar – cut into 18' lengths
\$4.88	.75	\$3.66	8" nylon wire ties – 100
\$5.47	.5	\$2.74	1 1/4" x 1lb drywall screws
\$6.97	.3	\$2.09	16 guage galvanized utility wire – 200' – for X braces
\$2.97	.25	\$0.74	3/8" t-50 staples – 1000
\$79.00	.22	\$17.38	20' x 100' x 6 mil clear plastic

Scraps of plywood for reinforcements – scrounged

\$140.27 Total

In the comments:

Deb says: August 23, 2009 at 5:36 am

I built this a couple weekends ago and it cost \$136 and some change from Home Depot. While it is more than \$50 in reality in August 2009, it is an easy and fun project you can do in an afternoon the first time around easily.

OK, that's a bit more than I estimated because I didn't count all of the minor bits that I just take for granted because I buy them in bulk and keep them on hand. These prices are what you would pay if you just bought the quantities that you need for this project. Drywall screws for example are only about a third as much when you buy a 25 lb box like I do being a contractor. However, you can shave most of the 20 dollar overage by using 5/8 rebar instead of fence posts, and gray UV resistant PVC conduit which is actually less expensive than the non resistant white plumbing pipe that I used – you can also do without wire ties, and use scraps of wire instead, etc. I already had everything on hand except for the PVC pipe and a couple of pieces of 1x6 lumber. However, surely almost anyone can get **some** of this stuff for cheap or free if they put some time and effort into it – so shop around and use your imagination to find what will work best for you.

Admittedly it might be hard for most people to build this for just \$50 out of pocket, but then again a serious scrounger can probably do it for even less.

Hind Sight – What I would do Differently

1. As originally built this [hoop house design](#) is subject to collapse under even a moderate snow load. It has to be beefed up a bit.
2. Use UV resistant gray PVC Conduit instead of white plumbing pipe – it should last longer and is actually less expensive
3. Use UV resistant greenhouse plastic instead of “visqueen” construction plastic – It's a good bit more expensive, but I'm so pleased with how the polytunnel turned out so far that I'm pretty sure the investment in durability would be worth while. However, if the extra expense meant putting off the project I would go ahead and use the cheap plastic because 1) The plastic will have to be replaced sooner or later anyway and the difference in cost seems proportional to the difference in life span 2) It wouldn't be worth putting off having a perfectly usable greenhouse.
4. I should have painted the PVC pipes with latex paint before applying the plastic sheeting – apparently this makes the poly sheet last longer, and maybe makes the frame pipes more resistant to UV.
5. Site Selection – As you can see in the pictures my garden is in a clearing in the woods and the truth is it doesn't get as much sun as I would like for it to – however I can still grow a nice garden – it just doesn't yield as much as it might. I can't really do very much about this, but you should keep in mind that you want as much sun as possible as well as a sheltered well drained spot that is as close to the kitchen as possible so that it isn't too much trouble to trot out and get a bowl of fresh lettuce for supper. All that being said – do the best you can with the spot you have, and you might be surprised with the results you can get with a little effort.
6. Next time I think I will use screws and battens made of plywood strips to secure the main skin to the end walls (I'm not talking about the end wall skin here) so that instead of using 200 staples I will use a couple of dozen screws to accomplish the same thing, but it will make it quicker to put up and take down. When I do it I'll add pictures for clarification.

BTW, Stumblers – Thanks for all the thumbs up. Feel free to [hotlink](#) the images or scrape the text as long as you leave the links intact!

Other homebuilt greenhouses:

- Another [PVC greenhouse](#) – quite similar to mine but with a few differences that are very worth looking at.
- A great [wood framed greenhouse design](#) – great construction details.
- An excellent article on [high tunnel greenhouses](#) by The University of Vermont.

The [Greenhouse doors are built](#) now and my small hoop house is complete.

Update – Dec. 10, 2008 – we had 2” of rain and 30 mile per hour winds last night and so far so good – no damage to the greenhouse.

Does it really work? Does the wind blow it away? Is it even worth the effort? Read [6 months in the Greenhouse](#).

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cherry says:

October 27, 2008 at 8:15 pm

Looks very similar to what my mom's greenhouse used to look like. The Finnish winters weren't so friendly on the plastic, though, so it has mostly been replaced by old window glass. The best tomatoes and cucumbers of my life have come from that greenhouse.

[Reply](#)



Michael James says:

October 27, 2008 at 8:26 pm

The Best of the best! So well documented, via text and photos that you must be a genius! So simple, so clean and neat, and this is what we all should strive to do. Thank you very much for taking your valuable time to contribute to those of us that aspire to "Off the grid living" and urban cultural creatives.

[Reply](#)



kevin says:

October 27, 2008 at 9:40 pm

i prefer to use the grey conduit as it stays more flexible and is uv resistant, you could also use this plan with canvas painters tarps and paint it with the white rubberized roof coating to make a storage shed

[Reply](#)



David LaFerney says:

October 27, 2008 at 10:11 pm

@cherry – I doubt if the plastic will last more than one or maybe two seasons here either, but this gives me a chance to find out if I like greenhouse gardening or not without spending a ton of money.

@Michael James – Thanks for the compliments I'm glad that you found it interesting or useful. And I agree that we should try to produce more of what we use at home and in a more sustainable way than trucking it clear across the continent.

@kevin – I agree – the sunlight resistant conduit would be more durable, and if I had counted the cost before I started the difference might be inconsequential. I'll look into that.

[Reply](#)



ingermaaike says:

October 28, 2008 at 12:29 am

That is just perfect! Thanks 😊

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beverlyz says:

October 28, 2008 at 12:44 am

What a clever innovation! Thanks for sharing!

[Reply](#)



Tomato Lady says:

October 28, 2008 at 1:50 am

I'm very impressed. Hope to see pics of monster lettuce and spinach in the coming months! Definitely a thumbs up. Best of luck!

[Reply](#)



online meeting reviews says:

October 28, 2008 at 2:18 am

Great article worth a thumbs up. Have any other great cheap ideas?

[Reply](#)



Diana Lee G. says:

October 28, 2008 at 3:28 am

I enjoyed reading this and found it well written and informative, but I would have appreciated more

details on "the plastic". I didn't see where you stated what kind of plastic you used. What size? What "gauge"? You referred to it as "plastic", "the plastic" "plastic sheeting", and such. You apparently assumed knowledge on the part of your readers that some of us do not have. But anyway, it was still interesting.

Reply

ingozi says:

October 28, 2008 at 3:39 am

Very nice. I doubt that I could do it for the price though, so I guess I'm lucky to be a pack rat too! Here in So. California we have some wonderfully high winds when the Santa Ana's come – especially where I live. So what I'm planning is a lower profile greenhouse that is dug into the ground actually. Thanks to your great photos and explanations, I've got the inspiration I need. Cheers!

Reply

Dennis says:

October 28, 2008 at 3:54 am

I think this is a great idea. I was looking for a way to build one of these for a while... Although i was thinking about plexi-glass instead of plastic... I know we are trying to keep the cost down, but durability was more what i am going after. Does anyone know if you can screw plexi-glass to the pvc pipe of would the plexi-glass break ?

Reply

bruce says:

December 15, 2009 at 11:25 pm

screws can be used if you predrill holes in the plexi-glass.i have used this method on several of my projects involving plexi-glass.

Reply

Gleno says:

October 28, 2008 at 4:07 am

Great work, professional looking and attractive final product and — best of all — inexpensively done. Your documentation, photos and instructions are fantastic. Thank you for taking the time to share.

Reply

Bill Canaday says:

October 28, 2008 at 4:30 am

Any clue what urban zoning laws might have to say about something like this? I'd be interested in trying but I'm not too keen on the \$500 tickets the City of Detroit passes out like candy.

Reply

Sherry says:

October 28, 2008 at 5:07 am

Just wondering where your from. We live on the East Coast USA and I'm not so sure the plastic will hold up to our snow.

Reply

steff says:

October 28, 2008 at 5:44 am

Hey nice one all round.
its all good...

Reply

Steven Sexton says:

October 28, 2008 at 6:12 am

Thanks I have wanted to try one also, now with your plans it should be much faster to build. I also am a pack rat and have much of what I need already.

I also have 70 triple glaze windows 18" X 36" have any good ideas on how to use them. Got them from old store freezer doors. The glass is also one way and heated if you were to hook it up.

Reply

David LaFerney says:

October 28, 2008 at 6:15 am

@online meeting reviews – I'm just full of cheap half baked ideas – you should check back or subscribe so you don't miss a single one.

@Dianna Lee G – That is indeed an oversight. I used plain old 6 mil clear (more or less) plastic sheeting from Lowes. I've added a better explanation and a link to a source for the real stuff in the article. Thanks for pointing that out.

@Ignozi – we have some pretty fierce winds here in central Tennessee too, but they're usually only violent for pretty short periods. Our region has many commercial greenhouses that are shaped like this and I've never seen one blown down. My mileage may vary. I'll post about it after we have some wind.

@Dennis – I'm sure that you could use greenhouse panels run horizontally kind of like they do those economical carport covers. I would be more concerned that the plastic pipe wouldn't hold the screws securely enough. I would certainly want to upgrade to Schedule 80 conduit if I were going to try that.

@Gleno – Thanks for the comment and the complement.

@Bill Canaday – No idea, you would have to check with your local codes. Good luck with that. It would probably be more likely to pass muster if it was behind a privacy fence.

@Urban Organics – Thanks for the link and the thumbs up. Nice [organic gardening](#) website.

@Sherry – I'm in middle Tennessee and we don't usually get very much snow what with global warming and all. This is not as flimsy as it might look, but you could easily beef it up by putting the ribs closer together. Putting them on 18" spacing instead of 36" would only cost about \$20 dollars more. Your guess is as good as mine about how much snow it would hold before it collapse, but I would probably want to clean it off often to be on the safe side.

Thanks to everyone for the compliments and thumbs!

Reply

littlewren says:

October 28, 2008 at 6:26 am

Some friends of mine built a greenhouse almost identical to this one in design, and it worked just fine, although in our temperate climate it is necessary to give some thought to ventilation, even in winter.

Simple as it is, believe me having these instructions will save people a great deal of trial and error, and should produce a nice tidy result. The beauty of this one is that while the new materials are relatively inexpensive, almost all of them can be sourced cheaply or for free. It strikes me that the same design could be used to build a shade house using shade cloth instead of plastic.

It would have to be a pretty rampant council that took exception to one of these in your back yard, but as it would not be classed as a permanent structure I am guessing most of us could get away with it without any hassles.

Reply

Robert Frost says:

October 28, 2008 at 6:39 am

ALL THOSE PICTURES AND ALL THESE COMMENTS ARE PHOTOSHOPPED.

plus, you called it a \$50 dollar greenhouse and clearly it would be \$120. I hate when people say things just to grab your attention and then you read the fine print and you find out that \$50 dollars has nothing to do with it. In fact, the price is higher and they just wanted you to read their blog SOOO BAD.

So...you suck. gg

Reply

Sarcastic Mom says:

October 28, 2008 at 7:00 am

Great project – thanks for detailing. Very inspiring and informative.

Oh, and don't worry about Robert Frost up there... I think he just needs to take "the road less traveled" and get lost on it. 😊

Reply

all truths are half truths says:

April 6, 2010 at 12:56 am

all truths are half truths confirmed on the title, no doubt the plans are nice and the green house looks sturdy but when 50 bucks is the budget and thats what the title says its a big disappointment to not be able to do any of it 😞, maybe offer a smaller green house plan for 50 dollars actually

Reply

David LaFerney says:

April 9, 2010 at 7:11 am

I'm sorry that you feel that way, but the truth is that you can probably build this greenhouse for less than \$50 if you use a bit of creativity, and scrounge hard enough for recycled or freecycled components. Even if you just go to your most convenient corporate retail outlet and whip out the plastic – because that would certainly be easier – it's still pretty accessible.

Reply



< **Mary** says:
October 28, 2008 at 7:16 am

Thanks for the pictures and wonderful instructions. There is a lady near Madison, Wisconsin that talks on her blog about her hoop houses and walking around in them in the winter picking vegetables and now I know what she is talking about! It will be on my agenda for the next season!
We had snow in South Central Wisconsin today!

Reply



< **Diana Lee G.** says:
October 28, 2008 at 11:55 am

Thanks for the added information! Now have I have something useful I can do with some of the lengths and lengths of pvc pipe I salvaged and have been saving for several years. :>)

Reply



< **Fern** says:
October 28, 2008 at 1:26 pm

Great article! You definitely got my SU thumbs up! 😊

Reply



< **SimplyAlon** says:
October 28, 2008 at 9:31 pm

Hello neighbor! Hailing from Bartow County, GA. Absolutely loved the simplicity of design and DIY instructions. It was informative and now taken as a personal challenge to construct such a structure on a smaller scale, as I am limited in space. Thank you for sharing and patiently sharing with step by step photos. I know it can be challenging. I look forward to seeing my own end result. I believe you would make a grand instructor on some other DIY sites. Grand Job, Many Kudos and of course a Stumblers thumbs up!

Reply



< **Tony** says:
October 29, 2008 at 3:27 am

Hi, great idea many thanks for the great explanation you have inspired me. (I worry about the UV resistance of the pipe though.)

Can I offer a suggestion based on what I did a few years ago in my large coldframe/ mini green house.

I placed about 10 x 25 litre containers full of water on the floor. Placed boards over them and then put the plant pots (Or beds) on top

I then placed a 12 inch square 12 volt solar panel which went straight to a suitable fan. This fan drew the air from a pipe in the apex of the green house down to floor level and blew it over the water containers.

This keeps the greenhouse cooler during the day, warmer at night (Plants like even temperatures) and excess moisture condenses on the water containers keeping the humidity down.

The more the sun shines the more heat is pumped below. You can use old pop bottles, jam jars or whatever is to hand (full of water) for the storage.

Have fun
Tony

Reply



< **Jack** says:
October 29, 2008 at 10:39 am

Really like the idea and direction. I think you are right on with the single ribs (as opposed to jointing or adding couplings).. I think it will add to the simplicity and crazy enough stability –KISS.

Being somewhat of a contractor myself, I can see how the only real "purchases" would be that of the conduit (pvc) & plastic sheeting that I would buy...Brother Frost needs to understand that those of us who are resourceful enough to think about providing our families with food in the off season, are often times the same ones who have other extra items.... lets say for a rainy day. Right on with your bad self.

I am really interested to see how the wind effects it. I live just south of Charlottesville, VA and we see sporadic (but intense) wind gusts seasonally. Today for instance I could see it blowing away entirely.

Any thoughts of slightly heating for the deep winter months?

Jack

Reply



David LaFerney says:
October 29, 2008 at 10:49 am

@littlewren – I'm sure you are correct about the ventilation, I'll have to give it some thought – we always have a few 60+ degree days in the middle of January. That's a good point about it being a temporary structure, a lot of codes have exceptions for anything without a foundation.

Robert Frost said...

"ALL THOSE PICTURES AND ALL THESE COMMENTS ARE PHOTOSHOPPED" – It's true they are, also I'm a spy – an undercover agent for the FBI – sent down here to infiltrate the KU-KLUX-KLAN ... It's also true that the headline is a hook, and I do want people to read my blog, however I actually did build this for about \$50 out of pocket. Some of the other materials have been in my garage for years. Just for you I'm working on a rundown of the materials required, and their approximate costs. Maybe that will make up for my evil ways.

Sarcastic Mom said .

"Great project – thanks for detailing. Very inspiring and informative." Thanks.

Mary said ... "We had snow in South Central Wisconsin today!" Wow – sounds like you really need something like this.

Diana Lee G. said ...

"Thanks for the added information! Now have I have something useful I can do with some of the lengths and lengths of PVC pipe I salvaged and have been saving for several years. :>)"We should stop calling ourselves pack rats and start saying recyclers. 😊

Fern said ...

"Great article! You definitely got my SU thumbs up! 😊" All of the encouragement has really made it worthwhile – Thanks.

SimplyAlon said ... "I believe you would make a grand instructor on some other DIY sites." I actually do a bit of that – Thanks.

@Tony – You are entirely correct about how beneficial thermal mass is – I have a small winter plant maintenance room where I use 4 black 55 gallon drums full of water to buffer the temperature and humidity, and it works great. This project was designed for Simplicity with a capitol S though, and it will have to rely on the soil to act as a heat sink to the extent that it can. Your solar fan sounds like a great add on though – if the sun is shining the fan is fanning. I will have to do something, I can't always run home to ventilate just because the sun comes out. Thanks for the suggestions.

Reply



Cheryl says:
October 29, 2008 at 9:41 pm

Excellent, excellent, excellent. Love the step by step directions with the pictures. I'll try this over my two established beds for next spring.

Reply



MadMan says:
October 30, 2008 at 3:04 am

Dude, this page rocks! Even if the thing blows down with the first gnarly winds, it was a good project and the documentation is about as good as it can be. I can hardly wait to see the doorway done, and see what the weather has to say about the materials and construction techniques used.

Reply



Jamie says:
October 30, 2008 at 4:33 am

What an inspiration! Great job! I may try something similar to this in my small city yard. Thanks so much!!

Robert Frost.... What a sad, angry individual!

Reply



Mike Taylor says:
October 31, 2008 at 9:01 am

@David,

I have a very similar hoop structure, also made of 1" PVC, and it has been up, exposed to full sun in southern California, for about 15 years. I wouldn't worry about the UV for a while 😊

BTW, You have been both Stumbled and Dugg (Digged?)

Reply



Pam says:
October 31, 2008 at 9:50 pm

Wonderful instructions and the photos actually add a good deal of clarification. I started to make a similar one but with jointed connections some years ago and ran into a lot of problems with joints and trying to stabilize everything. This looks so much simpler and straightforward (and do-able by one person) so I am going to have to give it another shot.

I am wondering, for those of us in high wind areas, if it would be a good idea to build a sort of windbreak on the north or even on three sides, varying the height from perhaps 3 feet on the sides to 6 feet or so on the north and maybe face it with foil or some such? Perhaps straw bales with plywood facing, covered with silver insulation or even just painted white to reflect light?

Robert Frost: try to find something on your keyboard that isn't the same tired kneejerk reaction which is so BORING, useless and unimaginative. Do people like you have comments like this on a sort of speedial, so you can wander through the maximum number of sites annoying the maximum number of people in the minimum amount of time? Perhaps you should consider getting a life...maybe doing something so you can have a glimmer or what real people are up to? Then perhaps, instead of so vividly demonstrating your ignorance for all to see, someday you might also be able to contribute something a fraction as useful as this site is. One hugely helpful thing would be a computer program which automatically deletes any comments including the word "photoshopped", in case you need a project to get going on.

Reply

 < **Alf Inge Fredriksen** says:
November 1, 2008 at 6:01 am

Hi and thanks for this fantastic share! I live at the west coast in Norway, and this greenhouse looks perfect for my use. The winter is really hard here, same as in Alaska, but the spring and summer is fine. I will have to take it down for the winter, it will not survive. And reassemble it again in the spring time. Again,,, Thanks for this great share! Soon there will be a greenhouse of your design in Norway!

Alf Inge Fredriksen

Reply

 < **Allison Clark** says:
November 2, 2008 at 3:40 am

gave you a thumbs up! nice project to share with everyone.

Reply

 < **Heather Dempsey** says:
November 2, 2008 at 10:37 pm

This is great. Thanks for the inspiration. The growing season isn't quite long enough for me so this will be just the thing.

Reply

 < **Fran** says:
November 3, 2008 at 12:18 am


Hey, we had the same idea, and made the winter before last. It was not constructed near as good as you did, and therefore the first time a good wind came along, it did not withstand very well. But it did work in keeping our plants safe all winter. We are in the process of replacing all our windows presently (house built in 1939), and are recycling the old lumber and windows (16 of them) to construct a more permanent greenhouse. Keep up the good work!

Reply

 < **Andrew Perkins** says:
November 3, 2008 at 10:04 am

Nice how-to! Appreciate you taking the time to do this – it's been a fleeting dream of mine to make a greenhouse over a couple of my raised beds for winter greens. This may spur me on to clean out my garage so I can create a similar project. Happy gardening! = Andrew Perkins,
<http://www.scrimshaw.com>

Reply

 < **Myrna** says:
November 4, 2008 at 5:29 am

We have a similar greenhouse (16x32 with 4' pony walls made of lexan and wood with the PVC pipe arched overhead. It's a great hoophouse but will collapse if the snowload is too great. We take the visqueen off in the winter. Unfortunately we put it on a week too early last April and had to rebuild it when a late blizzard collapsed the PVC pipe.

Reply

 < **gib hayes** says:
November 7, 2008 at 12:39 am

Nice job. you kept it simple. My first attempt at hoop house was a disaster. Used 10 foot w/ 4 way connectors, 1/2 in thin wall, with no framing, and flap closures on ends. It lasted till the next wind storm. About 7-8 yrs ago, rebuilt a 28' unit. I had some 14', 2x6 white cedar [port orford], which I used to frame base and ends. made french doors out of 4 old window frames, used self tapping screws to attach 5/8" pvc to frames as well as the horizontal bracing[of which, starting a/ top added

2 more runs a/ approx 4' centers making a total of 5 runs [2 each side, 1 top center. As i was working alone I used duct tape to hold bracing until attaching w/ 1 1/4" self tapping, stainless screws. 1 per rib. Drove 30" 3/8" re-bar into ground, 3 on each side to pin to ground, then for good measure dog legged out from frame 36" a/ 4' centers w/ 30 " risers inside and out side and attached the plant racks. It has worked great. I would recommend using greenhouse plastic as the poly stuff only lasts about 8-9 months and the blows out [usually in january of course]. Next one will be 1" pvc, as a neighbor donated 9, 20' pieces w/ rebar in concrete to slide it onto [which I may or not use]

Reply

Miss Britt says:
November 14, 2008 at 8:48 pm

this is awesome! your tutorial is easy to understand and the pictures are great. THANK YOU!!!!

Reply

Jane says:
November 16, 2008 at 2:13 am

Truly inspiring.
A fully functional food tunnel for 50 dollars and with crystal clear instructions for dummies like me.
Big thank you.
Great site by the way.
Double thanks.

Reply

Freeform1 says:
November 17, 2008 at 6:39 am

Yep...I'll give ya a thumbs up, 4sure!...isn't tooooo many times one comes upon a website that's NOT trying to sell ya something...good stuff, matey.....

Reply

Jerry Brady says:
November 18, 2008 at 11:41 am

Thanks for the info, I will give it a try.
Please send me pics. of what yours produced
and any updates.
Thanks, Jerry Brady

Reply

sharon B says:
November 18, 2008 at 8:53 pm

Thank you for the project instructions, my brother
in Fla. has one almost like yours and I always wanted to try and build one. Now I have all the info.
I need thumbs up great project.
P.S. Don't worry about Mr. Frost he just seems very negative.
Sharon

Reply

Miri Mariki says:
November 19, 2008 at 2:33 am

Hey! Great job.
We built one very similar in our organic garden up here in the mountains west of the continental divide in New Mexico (7200 ft elevation).
Sun did cause minor damage to the plastic (most clear or frosted plastic will deteriorate given enough UV)... we are also closer to the sun up here in the mountains... sheer winds did rip the plastic, (which had been deteriorated) but only after we had emptied the greenhouse. We got a really good season thanks to this lil baby.
We grew 20 or more tomato plants in ours... our killing freeze comes in late september/ early october ... the only tomatoes that really suffered through it all were the ones closest to the plastic wall.
Kudos!

Reply

davesworkout says:
November 19, 2008 at 6:47 am

that is amazing! I think I am gonna try this at home.

Reply



< Kathryn says:
November 19, 2008 at 9:56 am

Loved the article, it is EXACTLY what I have looked for in building my own greenhouse. I would be interested in your doors and how you did those. I can pretty much work, build and create anything if I have some kind of instructions or some ideas. I would appreciate assistance on the doors.

Thanks so much again

Kathryn

Reply



< Chris says:
December 7, 2008 at 2:43 am

Great tutorial. Thumbs up!

Reply



< Maura says:
December 10, 2008 at 3:42 am

umm... awesomeness! This is so cool and well laid out. I can't wait to make my own. I would love to know some of the other things you have made and how. You must have other great ideas to share.

Reply



< Dave says:
December 18, 2008 at 8:47 pm

Great tutorial on building a greenhouse! I have some leftover windows and patio doors that I was thinking of using for a similar project. I'll be adding you to my TN Garden Blog Roll.

Reply



< David LaFerney says:
December 23, 2008 at 10:29 am

You've a great site there, and I tried to add you to my blog roll as well, but either a bug in WP 2.7 or the theme is preventing it. I'll get it working eventually though. Note the new theme with threaded comments – Oh yeah!

Reply



< Barbara says:
December 23, 2008 at 6:09 am

I'm disappointed I can only "thumbs-up" your post just once. This is a great tutorial. We've been talking about building a greenhouse, but thought it would be too time-consuming or expensive. Thanks for posting this!

Reply



< David LaFerney says:
December 23, 2008 at 10:26 am

Yeah, that bums me out too. Seriously, anyone who wants a greenhouse should really be able to have one with a bit of effort.

Reply



< Ian says:
January 31, 2009 at 8:18 am

any follow up on how it is performing?

Reply



< David LaFerney says:
January 31, 2009 at 9:29 am

It was sunny and 5 degrees outside when I took this picture in the middle of January. Notice the ice on the inside of the plastic?



The greenhouse performs just fine, but because I didn't finish until around the first of November it has been slow to get a lot growing in there. I tell about it some in this article about [cold frames](#). I'm planning on trying to get some extra early tomatoes from the greenhouse in the spring and keep some going extra late in the fall. As well as some other stuff. Subscribe to the feed!

[Reply](#)

 [Bill Buron](#) says:

[March 1, 2009 at 3:40 am](#)

Ok you say my garden photo at Freedom gardens and know that I am into building things for lesBut you got me! That green house is beautiful. My raised bed gardens are set up to have low hoop houses installed over them easily. A friend of mine has a high hoop house like yours built over two raised beds that are set up similarly to mine, but I think yours is much better built and more permanent. I like my idea of the air mattress filled with water and using a creigs list \$5 heater to heat it up better than your rope light Idea but if it works use it. One of My cold frame also cost me nothing but time and is very much like yours. Keep up the good work

Bill

[Reply](#)

 [David LaFerney](#) says:

[March 2, 2009 at 9:49 pm](#)

You know the thing is not to get hung up with how someone else did theirs. My greenhouse ended up being what it is because of the materials that I had to work with. Yours looks great to me, and I bet your neighbor's works great too. It's such a simple thing, you almost can't go wrong – unless you build something that just falls apart the first time it snows or the wind blows.

[Reply](#)

 [karenlq](#) says:

[March 4, 2009 at 8:07 am](#)

I just love the step by step photos. Now my husband can build it with me without taking the time to learn all about them. He is an electrician and wants to use conduit instead of pvc. That may help it survive our windy site in the middle of rural Ireland. Over here they are called polytunnels and are quite popular as you would rarely get a summer that would allow a tomato to be grown outdoors. Thanks for the great guide.

[Reply](#)

 [David LaFerney](#) says:

[March 4, 2009 at 8:46 am](#)

Thanks for your comment. I'm finally getting a steady supply of salad greens, and it is my plan to try to get some extra early tomatoes as well. I appreciate the information that you would call this a polytunnel. Perhaps if I add that to the tags and whatnot more people like you will be able to find it. Get your electrician busy and you should be able to have one of these going in a weekend or two.

[Reply](#)

 [John](#) says:

[March 23, 2009 at 6:01 am](#)

dude nice job thanks for posting im gonna use this for a smaller greenhouse you made it look easy and now im ready to give it a try thanks so much and happy gardening..

[Reply](#)

 [Greg Spinks](#) says:

[March 24, 2009 at 7:18 pm](#)

Great article. I've been searching and thinking about a ploy house very similar. This just answered a lot of questions. Thanks

[Reply](#)


 < [Loving Husband](#) says:
April 15, 2009 at 10:25 am

AWESOME GREEN HOUSE !!!, I cant wait for my palm seeds to germinate. I just bought some from [realpalmtrees.com](#) about two weeks ago and i placed them in a plastic bag with a damp clothe. Then i placed it in sunlight and now i am having some growth from the seeds. I have a quick question though... they have some palm trees that endure the snow, does anyone have a palm tree that's endured the snow?

Here's the link... let me know if you have had a palm tree that can endure the snow? and if so, how did you keep it from freezing?
[SNOW PALM TREES...CRAZY!](#)


I PLACED THIS BLOG TO BE NOTIFIED...SO LET ME KNOW

Reply

 < [Dustin](#) says:
April 17, 2009 at 1:27 pm

This is sweet! I'll be giving it a go when the weather gets warmer. THANKS!

Reply

 < [lynn](#) says:
May 4, 2009 at 12:37 am

thanks for the hoophouse walkthrough. i'm conspiring to improvise on elliot coleman's 3/8" rebar hoophouse. it will be parallel to a 25' airstream (parked for the next 7 months or more). elliot's design has the rebar covered with pvc. i originally planned to make 'rebar sleeves' from blankets but a friend talked me into using ducttape to cover the rebar so i'm going to try that. in the summer, my intention is to provide shade for the trailer and a dry living space outside that will include my kitchen (will use a silver shade tarp). i'll make the additional framing needed from bamboo. in the winter, i'll switch over to 6 mil construction plastic, and close up the drafty bits to create some passive solar heat. i think eliot uses the rebar to make the frame stronger to protect against wind and snow load. not sure if i'll need either but i like it! thanks again.

Reply

 < [David LaFerney](#) says:
May 4, 2009 at 3:14 am

After having used this hoop house for about 6 months and seeing it withstand some pretty gnarly winds – but no snow to speak of – I can vouch for the integrity of the basic design. I would make this comment though – it is a lot more stable when the doors are closed on both ends – open doors make it billow and move around a lot more in the wind. If I wanted to make it stronger I would do one or both of these 1) Use more ribs, putting them closer together. 2) Use bigger pipes for the ribs – 1 1/2" pvc would be a lot stronger.

Good luck with your RV sun space. Sounds like a plan to me.

Reply

 < [bob](#) says:
May 11, 2009 at 4:25 am

Nice job:) I built something similar a couple of years ago to grow some special herbs. It wasn't as nice as yours but it did the trick. Thumbs up:))

Reply

 < [Sue](#) says:
May 30, 2009 at 2:09 am

I'd love to have one like this, and just about this size. And I'm impressed that it cost under \$50.00! I'm no good with tools, so may put a bug in my son's ear, when he comes for a visit this summer.

I'm wondering how it worked out for you sunlight-wise, based on your site selection.

If I wanted to have a hoophouse for off-season (winter?!) growing, I would be inclined to put it somewhere that gets more shade in the summer, but full sun when the trees aren't covered with leaves, which is pretty much November through mid-May where I live. If I'd just want to start things a month or two early, and grow late into the fall, I would probably want it to go where I get lots of sun in the summer too.

Reply

 < [David LaFerney](#) says:
May 30, 2009 at 7:57 am

Just like you speculate – in the winter the leaves fall off of the trees and the greenhouse gets plenty of sun. This Spring the greenhouse got a little bit more shade than is probably ideal, but the tomatoes that I planted in there on March 15 (at least a month early in my area) have 2" green tomatoes on them right now (May 29) and I have high hopes for ripe tomatoes 2-3 weeks earlier than usual.

I've been very happy with the performance of this simple structure. You should check out this article – <http://doorgarden.com/04/6-months-in-the-greenhouse>

Reply

 **Robert** says:

June 2, 2009 at 7:51 pm

Thank you for such a well written photo article and good step-by-step photos. I have been a garden-less apartment dweller for 4 years and acutely miss being able to grow fresh food. But that will all end soon when I move to a new location with a large yard. That will be the opportunity to construct a greenhouse. Like you I'm definitely on a budget, but I have time. Instead of PVC pipe, I was thinking of ripping scrap lumber down to lathes of about 1 1/4 x 3/8 inch section and then, with some epoxy adhesive, laminating them together to create the hoops. A tip I learned from boat builders is that with a good supply of such thin wood sections, you can tack together a structure using hot melt glue and when it is up and organised the way you want, you can go around and make the connections more permanent either with screw/nail/nylon tie fixings or epoxy glue.

I also thought the flat section might have advantages compared to the circular shape of pipe.

I walled in the side of a car port like this once and it worked well. You can use the same technique to build cold frames.

For increased stiffness at the end, you could cut plywood to the full shape of the end and then make fairly large cut outs on either side of the door. They would permit enough light to enter, and the shape stiffness of the ply sheet would be far greater than you could hope for from just the rigidity of the pvc hoops of your design.

Robert

Reply

 **Dale Oddson** says:

June 24, 2009 at 9:45 am

Thanks so much for an awesome site. I feel very inspired and hopeful seeing things like this take shape. I greatly appreciate your hard work in sharing this design.

Reply

 **Ed** says:

June 29, 2009 at 7:19 pm

You're awesome. Nice instructions, documentation & pics. Keep up the great work.

Reply

 **Sales Engineer** says:

June 29, 2009 at 8:22 pm

Recently I have been helping a horticulturist friend deliver plants to various garden centres and nurseries throughout Scotland. It has given me the chance to look at many 'polytunnels'. The only examples I have seen which have extensive cross bracing are over 15 feet wide and just slightly less than that tall. This makes me think that unless wind strength is unusually high for a particular location, there is no need to worry about lateral strength.

In any case, should the amount of movement be worrying, you could always attach guy ropes.

Reply

 **David LaFerney** says:

June 30, 2009 at 1:46 am

We have some pretty high winds here at times, and so far I really haven't had any problem at all. It's best for the doors to be closed when it's windy so that the covering doesn't billow up, but I seriously haven't had a problem.

Reply

 **danahyatt** says:

June 30, 2009 at 6:26 am

I have been looking for plans to build a greenhouse for winter crops too. However, the one shown here does not look like it can withstand California Winds, up to 70 MPH. I worked construction on the North Sea in Scotland and Wales and the wind picks-up in the winter. The rain freezes and blows like darts. I am sure you will feel like a French Girl with a Mini Skirt in a Hurricane when you build this greenhouse. Anyway, good luck.

Reply

 **gjperera** says:

June 29, 2009 at 10:06 pm

Great post...just read it on Lifehacker, this is exactly what I was looking for, I too would like to build a similar greenhouse. My biggest concern is being able to take it down easily (I live in Miami, FL) and hurricane season lasts for about 5 months, so I need to make sure that my greenhouse can be torn down quickly.

Thanks for the detailed guidelines and for sharing your experience.

Reply



David LaFerney says:
June 30, 2009 at 1:44 am

Actually, you can take the plastic off of the tunnel part and the doors off of the ends pretty easily. That's how mine looks right now – just the ends and the ribs. At that point there isn't much to catch in the wind. In October I'll set it back up for the fall and winter.

Reply



gjperera says:
June 30, 2009 at 3:31 am

That would be wishful thinking for me...winds hit over the 30MPH you referenced above...more like 70MPH+ at which time I think that the greenhouse would be 2 blocks away from my home in someone's pool and not to mention the debris that would hit those fragile plastic tubes...thanks for the feedback though...I can opt for your suggestion for the less threatening storms.

Reply



CondoGarden says:
June 30, 2009 at 12:06 am

This is good. This is really, really good.

I used to run a small greenhouse operation (13000 sq.ft. under "glass") in south Georgia many years ago. We used a mix of commercially purchased bow-type greenhouses and home-built wooden frame ones in the 30x100 ft range. It really teaches you what you do and don't need in a greenhouse.

A lot of people could benefit from a small greenhouse to start plants in or to carry them over the winter. I had been thinking of doing a posting on my blog of a simple design, but you've done such a great job that I may just link to yours instead.

Reply



David LaFerney says:
June 30, 2009 at 1:49 am

Thanks, that really means a lot from someone with actual experience.

Reply



H P Beals says:
October 19, 2009 at 11:31 pm

I've wanted to build a greenhouse for sometime. Your directions were outstanding but I live in Nebraska and had to add some extra heating. I use an electric oil radiator that I had hanging around and bought a plug-in thermostat. To help keep it warm inside I built one hoop wall inside the outer wall and covered both with plastic. I then blew air between the walls with a fan creating an insulation blanket. The outside wall blew up great and my heating costs have gone way down. Thanks for the ideas

Reply



Gib Hayes (Rockyplants) says:
June 30, 2009 at 6:45 am

I have a similar hoop house 28' long, that, after much trial and error was erected about 7 years ago. It has withstood quite a bit of wind just fine, due to, I believe, its flexibility and general shape. It moves around with wind but has never blown out or flown away. It also sheds snow quite nicely. Gib

Reply



Kate B says:
July 1, 2009 at 10:00 pm

I'm excited to give this a try, especially after I read the 6 months follow-up post too. We live in NW PA. I'll let you know how it goes!

Reply



Avi says:
July 2, 2009 at 10:22 am

Use insect nets instead of plastic in warm season.
For vegetables (tomatoes, cucumbers, herbs) use Meteor Patented BioNet.

For fruits use Multi-Protect net.

visit: <http://www.meteor.co.il/english>

Reply

Northern grower says:

July 24, 2009 at 4:48 pm

Looks like something my husband and I can do! We live in southern Maine, so will let you know how the snow affects the structure. I like the simplistic design and like you, we have most of the "stuff" hanging around the garage and barn!

Thumbs up!

Reply

David LaFerney says:

July 24, 2009 at 7:26 pm

You might want to seriously consider going up a size of pipe to Inch and a half, and spacing the ribs closer together to help compensate for snow. I would try to find out what other people in your climate have successfully done.

Good luck!

Reply

Avi says:

July 24, 2009 at 5:27 pm

Why not add insect nets for the doors and vents ?

In the summer time the heat is too much and you should use insect nets on the opening to allow adequate ventilation.

At: <http://www.meteor.co.il/english> you can learn more.

Reply

mikeyfitch02 says:

July 29, 2009 at 8:22 pm

Thanks for a detailed description from point A to point B. I am going to be building temp. greenhouse this year to go over my koi pond. My only problem with this is I need the greenhouse to be atleast 18-19 ft wide. So I am not sure how to make this 12 ft wide greenhouse to fit what I need.

Reply

David LaFerney says:

July 29, 2009 at 9:20 pm

I've thought about this and here is how I would make this wider or more heavy duty:

Use 2" or 1 1/2" pipe and couple them together using couplings made for pressurized water systems - because they are deeper than drain fittings and will stand up better to being bent - to get the length that you need. Glue them with pvc cement and let them dry real good before bending. Then use steel fence posts instead of rebar stakes to position the ribs. The steel fence posts would also probably let you make the bottoms of the sides more vertical and rigid, and you could possibly forgo some of the wooden stringers if you wanted to.

I have no idea of what the practical limit would be for width if you did this. If you try it, let me know.

Reply

Dean Brousseau says:

August 2, 2009 at 7:58 am

Nice design, quite ingenious, thanks for sharing.

Reply

Evy says:

August 3, 2009 at 3:13 pm

Hi, I hope you dont mind me writing a bit about your Greenhouse and link them to you 😊

regards Evy

Reply

David LaFerney says:

August 4, 2009 at 9:06 am

No, don't mind at all.

Thanks.

Reply

charles fields says:

August 8, 2009 at 9:51 am

Excellent! I always wanted to build a greenhouse but never got around to it. I thought about using re-bar and heavy plastic but your idea is better. Thanks.

Reply

Deb says:
August 23, 2009 at 5:36 am

I built this a couple weekends ago and it cost \$136 and some change from Home Depot. While it is more than \$50 in reality in August 2009, it is an easy and fun project you can do in an afternoon the first time around easily.

Reply

David LaFerney says:
August 27, 2009 at 7:12 am

Hey Deb, email me a picture or two – david dot laferney at gmail dot com – and I'll add them to the article. I would say that your success is pretty good proof of concept.

Reply

dan says:
September 18, 2009 at 2:36 am

that is so cool, has me tempted to put one up in my yard

Reply

Rosemarie says:
October 23, 2009 at 12:13 am

I wish I could give you 10 thumbs up, this is wonderful and such precise instructions. Have you ever thought of using it in summer for a little house to have backyard sleepovers?
I wish I could make this, oh I can after reading this but I don't know where to put it.
Thanks

Reply

Bobby D. R. I. says:
October 25, 2009 at 1:57 am

Great do-it yourself option! Thanks for the tips, I agree you should use the "battens" at the bottom edges along with Gray PVC (actually it's Electrical PVC as opposed to White Plumbing PVC) I will be following most of these ideas in early Spring to sell some plantings. Thanks again ! Happy Gardening 😊

Reply

Carport says:
November 4, 2009 at 5:25 am

I love it. I've been looking into different greenhouses and they can be really expensive. Even just building some planter boxes can cost more than your greenhouse. I looks great too. Thanks for the instructions.

Reply

Connie says:
November 29, 2009 at 1:28 am

Hi David,
Great tutorial. where do you get such a large sheet of plastic?
Connie

Reply

David LaFerney says:
November 29, 2009 at 8:49 pm

I got my plastic from Lowe's, but you can get builders plastic in rolls up to 20 feet wide by 100 feet long at just about any contractor supply or home improvement center. Or you can order a cut piece of uv stabilized greenhouse plastic online.

Reply

Mauritius Resto says:
December 4, 2009 at 11:45 am

Great post. Really interesting tips to build a greenhouse on the cheap. Normally, it costs a considerable amount to buy a readymade greenhouse.

Reply



solarpanelsforsale says:
December 8, 2009 at 7:31 am

That is a really really great job on that green house and also a very nice write up. I can't believe you were able to do it for only \$50. The weather is quite warm here were I live so a green house isn't necessary, but it looks like fun to build. I think the materials would cost a bit more over here as well.

Reply



Cecil says:
January 5, 2010 at 5:13 pm

Just wanted to give you a BIG THANKS for a well-documented 'how-to'! So glad I stumbled onto your website. I have just a spot in my garden to try this on!

Reply



Kathy says:
January 6, 2010 at 12:42 am

I cannot wait for the weather to warm up here in upstate NY so that I can make one of these greenhouses. The step by step instructions were so detailed I dont think I will have any problem putting this together. Thanks for sharing a wonderful idea!

Reply



Deno says:
January 17, 2010 at 7:08 am

Great Idea only one word of advice, It may be different where you live but the bricks and block around the base of the unit would be a haven for slugs and they'd be inside your beds every night.

Reply



David LaFerney says:
January 18, 2010 at 7:34 am

I've never had that problem in the greenhouse. I don't know exactly why, but it could be that it is never overly wet in the greenhouse, because you have to do all the watering. Also I always water in the morning so by night it just might not be moist enough for them.

Reply



Joyoy says:
February 9, 2010 at 2:55 am

Deno, I used to have slug problems too. Now I save egg shells and crush them to put on the ground around plants. Slugs and snails don't like the sharp edges and won't cross them. Also the egg shells add calcium to the soil. Guess you could have all your neighbors give your their egg shells and you could put around the inside edges of your greenhouse.

Reply



Annie says:
January 17, 2010 at 12:20 pm

Just wanted to say thanks so much for the detail in this article. I live on the Big Island of Hawaii – in a rainforest. We have the opposite problem of most gardners – we have to keep the rain OFF! I thought it was going to be too difficult and expensive, but you have proven me wrong. Going to start construction tomorrow! Thanks again! 😊

Reply



Michael says:
January 18, 2010 at 4:38 am

Hi David,
Great information!! Came across this website, very interesting! I do have a question. I am wanting to build a greenhouse at my business.
I am wanting to grow pansies, petunias, etc for hanging baskets. I was wanting to use this same geenhouse size.
Couldnt I use the inside beds for starters for the hanging baskets? Im eager to get started!!
Michael

Reply



David LaFerney says:
January 18, 2010 at 7:37 am

I'm sure you could do that, but I think what most people do who make hanging baskets of annuals is to start seeds in flats or plugs and transplant several plants into each hanging basket.

Reply



Michael says:

January 18, 2010 at 10:00 pm

Thanks David, I appreciate your response! Your really doing something good here with your information. We need more people like yourself!
Michael

Reply



caglar says:

January 18, 2010 at 10:45 pm

It is really helpful information about greenhouses. I live in a village and greenhouses are very important for us,
there is also a very useful guide that i got great informatin about greenhouses:

<http://agricultureguide.org/>

Reply



erica says:

January 28, 2010 at 11:10 pm

Thank you so much for this. This will be our project this year. I need fresh veggies in the winter!

Reply



jonathan says:

January 29, 2010 at 3:47 am

i live in florida, how would this structure hold up to our hurricanes.

Reply



David LaFerney says:

January 29, 2010 at 5:14 am

I don't suspect that it would stand up to a hurricane at all – but mine has done fine through moderately high winds. If you wanted to make it more wind resistant you would just need to beef everything up – bigger pipes and more of them closer together, and batten down the plastic really well. At some point the wind is going to wipe it out.

Reply



Andy Holtkamp says:

January 29, 2010 at 11:39 am

This is the simplest and most concise instructions I have read yet. And I look at alot of hoop house sites. Very well constructed and illustrated. I actually think even a build dummy like me can make this work. Also the link to the half hoop was perfect for my situation with limited space. Thanks for taking the time.

Reply



Toni says:

January 31, 2010 at 4:37 am

oops! Sorry about your collapse! I still think it's a great design, still inexpensive even with larger diameter pvc.

New Mexico is fairly windy – 20 mph sustained with 35-40 mph gusts happens often. Bewteen that and snow loads, our university extension service recommends building hoophouses with 2 inch pvc and 3 foot spacing between the ribs. They claim this will withstand 50 mph winds plus some snow load although they do say don't let the snow build up.

Between snow storms this winter, I experimented with building one end wall using 1 1/2 inch electrical pvc plus your instructions and pictures. It came out just great and was very easy for one person to do so I'm very motivated to keep going with this design.

Reply



David LaFerney says:

January 31, 2010 at 5:12 am

Thanks for the encouragement. I'm not at all giving up on it – it's too much fun. I did think it was in the best interest of full disclosure to show the failure when it happened. It might help someone else come up with a better inexpensive greenhouse, and everyone benefits.

Reply



ThunderStarDagda says:

February 1, 2010 at 2:18 am

This is a wonderful DIY project! I've shared this link with my Magickal Herbology teacher, and she's shared it with her 2nd semester students. We all thank you! Brightest Blessings 😊

Reply

Joy says:

February 9, 2010 at 2:48 am

Good to see how easily the collapsed greenhouse came back into shape once the snow was removed. We put our hoops 2 ft apart except in the middle where we have 3 hoops 18" apart. Hadn't thought about the weight issue. We planned to eventually make this a permanent greenhouse with vinyl panels attached to the hoops. Now I'm wondering about the weight. What do you think?

Reply

David LaFerney says:

February 9, 2010 at 7:20 am

The thing about that is if you live where there is any snow at all the panels would keep it from sliding off. Weight might even be an issue in a heavy rain if it couldn't readily drain off.

Reply

Michelle Vera says:

February 17, 2010 at 6:22 am

Funny story. I had this idea last year and this year decided to go large. You say you can't carry 20 ft. PVC pipes in a car and would need a truck?

I was able to get 4 20 foot 1 inch pvc pipes in my Honda Civic 2 door. I'm waiting for someone to submit their video to Americas's Funniest Home videos. At first I thought I would horseshoe them through the windows. I got one pipe in and it decided to straighten itself out going across the front seat. I'm glad there were no cars around. I closed the windows and did the same thing but could not get the trunk closed. By then I thought I would just drive home really slow. So I went to get in the car and had to limbo into the seat. You can be sure somebody finally came to my aide when I was DONE!

Reply

Lee says:

March 17, 2010 at 4:10 am

I was researching greenhouses and stumbled upon your article. In a word, fantastic! I live in Albany NY and wanted to extend my growing season. Just not quite long enough to get those red peppers and, of course, I would love to be able to reap more eggplant, squash, etc. As spring weather is upon us, at least for the moment, I am most excited about undertaking this project and so appreciate the clear instructions you offer along with the great photos. Tomorrow I will head to Home Depot to acquire materials. Thanks again and happy gardening!

Reply

Michael says:

March 17, 2010 at 9:09 pm

Hi Dave,
I love your site. I have a question for you. My dad and I built a 16x10 greenhouse. We built the greenhouse out of 2x4's and used the 6 mil plastic to cover the greenhouse. I put heavy weed paper on the floor of the greenhouse and put mulch over the paper. It works great. We have been having 60 degree days which is awesome but inside the greenhouse its 80 degrees!! We built a square opening on the one end of the green house. I thought about putting a box fan in that opening. I used a screen door on the other end. I have black eyed susan, zinnias, impatiens, pansies in there right now. What would be the most simplest effective way to go? I dont want to wait much longer in fear of frying my plants! Help!!
Thanks for all of your information on here Dave!!

Reply

David LaFerney says:

March 17, 2010 at 11:39 pm

All I do is open the door in the morning when the weather is supposed to be warm and close them at night if it is going to get cold.

I'll tell you this though 80 degrees in March is not the same as 80 degrees in June - it isn't as hot and stressful because it isn't accompanied by the direct radiation of the summer sun.

I've neglected to get around to opening it up before until the inside temp was in the 90s and it didn't seem to hurt a thing. Of course you don't want your potted plants to be too dry at the same time that it gets hot. As long as the soil is cool and moist you probably won't hurt anything.

Reply

eugene says:
March 19, 2010 at 5:11 am

what length rebar is that? how far down did you drive it into the ground? and how much sticking out of the ground? also, what grade rebar is that? is it resistant to earth?

Reply

David LaFerney says:
March 19, 2010 at 8:17 pm

The ones I used are 18-24 inches long and I left about 6-8 inches sticking up for the pipes to slide over. It's just regular 1/2 rebar not rust resistant, but it should last a pretty long time. If your soil is soft or sandy you might want to use longer pieces and drive them in farther.

Reply

eugene says:
March 19, 2010 at 7:20 am

also, can you go a bit further into how you tensioned the wire. i'm not quite sure how you did that. thanks.

Reply

David LaFerney says:
March 19, 2010 at 8:14 pm

You just wind them up like the rubber band in a model airplane. The wire is run in a loop so it is doubled exactly like a rubber band, so you put a stick between them and start winding. When it is tight enough you just leave the stick in and let it lodge against one of the frame parts. Maybe tie it a bit to make sure it doesn't unwind.

Reply

Char says:
March 23, 2010 at 7:11 am

I've been looking for several years for a inexpensive greenhouse but they have always been beyond my reach. I found your site and it appears to be what I've been wanting. Thanks for the detailed instruction and pictures. Hopefully with the landlord approval I can try building this. I'm kind of got the same problem you have though, there is only one area available and it is in a shady spot. Plus I live in NE Indiana which has some pretty harsh winters at times.

Reply

Steve Cope says:
March 24, 2010 at 3:24 am

G'day David from Downunder,

It was your design that finally decided the intended shape of my own greenhouse which will be assembled after I have had my heart operation. In Melbourne an igloo type greenhouse can be purchased for around \$860.00. The only major difference in design is the use of hollow stirrups for the hoops to be inserted, which are hammered into the soil (or concreted) during construction. The base frame and door frames are treated pine and UV protected clear PVC sheeting is used for the roof and walls. Gravel or small pebbles will be used to bury the ends of the PVC sheeting to ensure no movement. The greenhouse will be 4.5 metres long x 2.8 metres wide x 2.7 metres high and will contain staging instead of soil beds. That way I will achieve 2 growing levels on the left and right hand side and 2 smaller levels at the front and back. As we will be growing most of our own vegetables, herbs and berries I need all the medium I can get. I will send photos as the building commences. Thankyou for your article; it has given me many ideas. Well put together.

Regards,

Steve Cope (Melbourne, Australia)

Reply

Edward says:
March 29, 2010 at 3:50 pm

I would rethink using Polyvinyl Chloride (PVC) pipe. Chlorine is used in the production and it is a highly toxic material. Go to http://www.uvm.edu/sustainableagriculture/Documents/HighTunnels_SelectingStructure.pdf and read this for some good information on hoop greenhouse structures. There is plenty of useful information in there.

Reply

David LaFerney says:
March 29, 2010 at 5:25 pm

I agree that we should all rethink all of the products that we use and the things we do. Chlorine is poisonous, but it is a naturally occurring element which is contained in all kinds of things we use every day – table salt for example. The fact that PVC (both the pipe and skin of the green house) are made out of Oil is a bigger issue to me. But any material you use has

an energy/carbon footprint, and if a greenhouse like this is used to produce food in your backyard instead of 1500 miles away like most of it is then I think it probably improves the sustainability of our life style. Thanks for the comment though

Reply



tom carsley says:

April 3, 2010 at 3:16 am

Mr. David LaFerney,

Please contact me about the plans for this greenhouse. I tried to find a contact email with no luck. I want to use your plans for a self help in crisis book. My email is in the form.

Thank you,

Tom Carsley

Reply



Pat Richardson says:

April 7, 2010 at 3:28 am

This is just what we have been looking for. How about if we leave the plastic off during the summer and put netting over for protection?

Reply



Ronnie says:

April 9, 2010 at 3:25 pm

Thanks so much. You did all the hard stuff. I just followed the leader.

Works great.

Reply



Denise from ARk says:

April 14, 2010 at 10:50 am

We've done this for years...not for a greenhouse but for camping. We just use the open tunnels over the picnic tables for camping and it only takes about a half hour to set up.

I do, though, have a metal hoop house with 4yr UV rated plastic and 2 layers thick with a fan blowing to keep them apart. It works like a dream in central Ark. I only ran heat during a few cold snaps, and turned it off during the day. It would have needed more heat this winter, though. The first year we used the construction plastic, and it lasted exactly one season. But it was cheap cheap.

Using a shade cloth over either type of plastic helps it last a little longer.

Denise from Ark

Reply



Denise from ARk says:

April 14, 2010 at 11:01 am

Oh and I have one more comment: For our quonset huts in camping, we use 10' poles connected by a 4-way connector. Use 4' poles as a "spine" between each set of "ribs" and it is stronger.

Reply



Edward de Bruin says:

April 18, 2010 at 4:04 am

This greenhouse seem to be very sturdy, I have no doubt that it will take all the snow that can accumulate on it! I saw such type of greenhouse a few years back on "Sherries Greenhouse and Garden" website and the pictures while covered in six inches of snow and it did the job well! Thanks for the idea and plans.

Edward

Reply



dog food says:

April 23, 2010 at 5:07 pm

Considerably, the article is really the freshest on this notable topic. I concur with your conclusions and will certainly thirstily look forward to your forthcoming updates. Saying thanks definitely will not simply just be enough, for the exceptional lucidity in your writing. I can quickly grab your rss feed to stay abreast of any kind of updates. Authentic work and much success in your business dealings!

Reply



Susan G says:

May 3, 2010 at 2:49 am

I have visited your blog before. The more I visit, the more I keep coming back! ;~)

Reply

Elena says:
June 10, 2010 at 12:33 am

David,

I found your article very helpful. I am thinking about building it and using it in the summer as well. If that were the case I know that I would need to provide some ventilation and cooling. Do you have any ideas on how I could do that? Any help you can provide would be greatly appreciated.

Also how do you provide air circulation in your greenhouse?

Thanks, Elena 😊

Reply

micahel says:
June 11, 2010 at 2:00 pm

what size poly pipe is used for the clips

Reply

lucie says:
July 5, 2010 at 6:12 am

Nice job, I have been serfing for hours trying to find a greenhouse to build this was the only one that I understood, you see I'm a visual thank you

Reply

Marty says:
July 6, 2010 at 8:30 am

Outstanding job with photos and directions. Your as you go thought process really helped me think of I have to recyle into project. Looking forward to future engineering updates.

Reply

tom russell says:
July 9, 2010 at 4:20 pm

I built the structure as you described but did one really stupid thing. I obtained a piece of 80% shade cloth and placed it on the top to lower the interior temps which were reaching 110+. It dropped the temp down 15 degrees but when the outside temps reached 90+ degrees. The fabric heated up and warped the hoops even though I had the the door and the window in the back wall open. The weather has been exceedingly hot this week I wired concrete block to the hoops at the center of the bow and closed the door and window the extreem heat of 135 softened the pvc and the block pulled everything back in to line. the guy at greenhouse where i purchased the uv resistant plastic said I needed to cover the whole structure to prevent that from happening.

sorry about the epstile, but I wanted to help stop anyone else from making such a bone head mistake. TSR

Reply

tom russell says:
July 9, 2010 at 4:26 pm

sorry. the length and width of the shade cloth was 6 x 15.
tsr

Reply

eReplacementParts.com says:
July 17, 2010 at 12:26 am

Nice easy to follow guide. Thanks for sharing this one. The green house seems to be pretty dang durable.

Reply

DeniseinArk says:
July 28, 2010 at 7:27 pm

EDIT: I just realized that comment referred to here isn't on the blog. I got it through email, but you must have already realized and deleted the comment. Forgive me for not checking first. @ DoorGarden admin: The exact same post under another name has come up on another blog to which I have subbed. The comment was about saving money on monthly womens' supplies, so it's not like the subjects were anywhere near the same. This person is likely either a spammer or someone who is

just using your site to advertise his/her own blog. Just a head's up.

Reply



< David LaFerney says:
August 11, 2010 at 1:59 am

I am ever vigilant for comment spam. Thanks.

Reply



< [cosmatology](#) says:
July 30, 2010 at 12:52 am

Any person have any updates on this? Would like to know more.

Reply



< [Garden Much](#) says:
July 31, 2010 at 6:20 am

Very thorough documentation – i like it 😊

Reply



< [Stephen Cope](#) says:
August 11, 2010 at 7:15 pm

I am in the process of constructing a similar greenhouse with galvanised iron hoops and foundation tubes. As such, I have produced a similar blog at <http://www.greenhousebirth.blogspot.com/> if anyone would like to compare notes. These igloo type greenhouses are now very popular "down under" and can be bought in kit form. The basics are still the same except ours don't need to be disassembled for the winter. The cover will be ultraviolet inhibited polythene, and requires frame guard tape to protect it from any potential burning. Hope my finished "product" looks as good as yours.
Regards, SJC.

Reply



< [move out cleaning](#) says:
August 16, 2010 at 7:39 pm

Do it yourself and thrift are two great forgotten american values...I will be making one of these int he spring.

Reply



< [Immoore333](#) says:
September 7, 2010 at 7:40 pm

We built one fall 2009 from these plans. Ours is longer due to size of plastic we bought (we didn't want to waste it). We love it!!!! We ate salad from Nov 2009 till May 2010. It really extends our growing season in east Tennessee. Thanks you so much for posting the instructions!!!

Reply



< [thinayr](#) says:
September 12, 2010 at 11:20 pm

I am building a similar greenhouse.

I could not find grey PVC so I got the white and a quart of premium exterior paint (as suggested)... I've painted two of my 'ribs' but started to worry that the paint was going to eventually break down and flake inside the greenhouse, which would be no bueno...

Has anyone tried painting their pvc? I don't know if I should continue or stop...

Reply



< David LaFerney says:
September 13, 2010 at 7:39 pm

I haven't tried it yet, but after 2 years I'm about to replace my plastic for the first time, and it has generally just given out all over **not** at the ribs.

Reply



< [kim](#) says:
September 18, 2010 at 9:27 pm

What a great site! Fabulous. Thanks! Kim

Reply



Greenhouse Plans says:
September 22, 2010 at 10:44 pm

This is great information. I used to work at the Noble Foundation in Oklahoma. We built many similar structures for a few years.

Thanks for posting this very detailed process.

[Reply](#)



kaevin lee says:
September 25, 2010 at 6:18 pm

I just have to say THANK YOU!!! i had been struggling with a sturdy design with out dishing out of pocket for a commercial style hoop house/greenhouse. However after coming across this. I decided to save it and give it a whirl. It was really easy. My father is an electrician so it was easy to find a lot of what I needed from his scraps. So that really cut down my cost.

From start to finish. It was simple. Your pictures did help a great deal as I'm not the type to be able to picture building something in my head. I didn't inherit that family gene haha. I was able to complete the construction myself. With just my father coming back to check my measurements. LOL. AND VOILA...an awesome hoop house. I did use the center board for extra support in case of snow. And it seems to be holding just fine. We had a bad rain and wind storm and a huge limb fell on the greenhouse.. It bounced off like a 10 year old on a trampoline haha. other than a little dirt and some minor scratches. It was perfectly fine. I cant express to you just how happy I am with this design. So thank you so much. it has really made my gardening an even bigger treat. not to mention I have been able to start my perennial business on the side selling babies and reproducing large quantities off cuttings from all my other shrubs and house plants. Just starting to build another one for my veggies. And I know this will be even easier the second time around.

THANK YOU THANK YOU THANK YOU

Kaevin Lee
Richmond Va

[Reply](#)



Mike Borlovan says:
October 13, 2010 at 7:46 am

What a great way to build a nice little greenhouse with such modest means! With so much detailed instructions and even step-by-step pictures.

Simply, excellent! It can't get easier than that!

[Reply](#)



Shain says:
October 17, 2010 at 8:00 am

I am planning on giving these instructions to my husband as a "Honey Do" project for this winter. I would like to use mine as a storage green house for my plants that love the heat and humidity of North Carolina, but can't stand to be cold. In the past my home has suffered the brunt of the winter invasion. I am concerned though about how to retain the heat of the day to keep my plants warm enough at night. Do I need to keep a heater in it? Thank you for wonderful instructions and pictures.

[Reply](#)



electric fence wire says:
October 27, 2010 at 8:28 pm

nice n superb article, this may very helpful for amateur blogger

[Reply](#)



Willena Lazzell says:
November 1, 2010 at 5:39 pm

Thankyou for this interesting article. I would like to come back in the future. Thanks again

[Reply](#)



Portland Oregon Landscaping says:
November 13, 2010 at 1:05 pm

Wow! Amazing step by step tutorial. I am going to use that! We actually already have most of those materials just sitting around our shop! Thanks for taking all the time to post this and catalog the process.

[Reply](#)



Vitamin Water says:
November 18, 2010 at 2:51 pm

we both have those traditional picture frames and digital picture frames at home. both are great for displaying family pictures ""

Reply

Cheri says:

November 23, 2010 at 9:25 am

You are awesome, to provide a pictorial step by step guide! I will build one of these as soon as I have \$50 extra 😊 Thanks.

Reply

diet says:

November 24, 2010 at 12:35 pm

Nice blog, you give me some good to start using on my own website/blog!

Reply

robot says:

December 3, 2010 at 1:31 pm

Sorry for the vast accounting, but I'm real affectioned the new Zune, and hope this, as well as the excellent reviews some additional group make scripted, faculty supply you determine if it's the right action for you.

Reply

sex says:

December 7, 2010 at 6:23 pm

They're in good hands and hopefully, they'll get even better.

Reply

M. D. Vaden Portland Landscape & Tree says:

December 9, 2010 at 6:12 am

Nicely illustrated.

So many sites and handbooks have inadequate drawings or images. Your article goes the extra mile. I'm still debating whether or not to add one to our own landscaping.

Reply

cheap sexy lingerie says:

December 18, 2010 at 6:09 pm

I like the post, and I agree somewhat with Andrew

Reply

Boost Sperm Volume says:

December 21, 2010 at 7:18 am

A low semen volume analysis evaluates certain characteristics of a male's low semen volume and the sperm amount found in the semen fluid. It may be done while investigating a couple's infertility problem or maybe after a vasectomy to verify that the procedure was successful. It is also used for testing most of the donors for semen fluid donation. These days it's really possible to increase semen with completely safe ways including taking herbal pills from the many online shops.

Reply

Kai says:

January 5, 2011 at 4:30 am

Great guide, gave me a lot of good ideas and a great reference, but you could have been a bit more honest about it costing more than 50 bucks for most people 😊

Reply

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