

BASIC STATS:

- What is(are) your name(s)? **Michael & Theresa Menrath**
- What do you do for a living? **Michael (me): Currently in the Army. Will be out in June 2013 & will go into tiny house building and designing. See: www.facebook.com/TinyQualityHomes. Theresa: She is a registered nurse currently employed at an ICU unit in an El Paso TX hospital. She also has a second job as a head nurse at a psych. hospital.**
- How many people do you/will be living in your tiny house? **-2. my wife and I only.**
- What part of the country do you live in? **-we will be living off grid in Tennessee.**
- How many square feet is your house? **-approximately 200 sq ft.**
- When did you start your build? **I started my build in May of 2012 (only had weekends and off time from the Army to work on the tiny house). What a wonderful adventure and experience this build has been. My fans on Facebook has have grown to over 3,300 "likes" since starting the page on Facebook in end of January 2013.**
- Is your house complete? **My tiny house is about 80% complete. The exterior is complete; the inside has about all electrical done, some paneling and built-ins are partially done. Basically needs plumbing, shower kit put up in place and interior finish and trim.**
- Have you been documenting your tiny house build and if so, where can people find that information? **I have documented every phase of my tiny house build from trailer perpetration to exterior finish and am currently posting interior pics as interior finish developers on: www.facebook.com/TinyQualityHomes. You will find all photos in my albums on the page plus I post them on my news feeds as I progress on my build.**

BACKGROUND:

- Why did you decide to build? **I've decided to build my tiny house after following the Tiny House Movement for about 3 years when I had stumbled across Jay Shaffer's (at that time) Tumbleweed Tiny House Company site and had purchased his book, Tiny House Book. In May of 2012, I've talked to my wife about my dream to build a tiny house, came up with a floor plan design (sketched on paper) that she and I both liked, and she told me, "let's make it happen!"**
- What was your life like before your tiny house? Were you fairly active, have you always had 'projects' going on? Were you fairly sedentary and looking for a change? Did you tend to work too much? (This question is an effort at trying to figure out WHO gravitates to the tiny house lifestyle). **My life as well as my wife's seemed like it always evolved around our very busy work schedules: I'm full time military - and anyone who's ever been in the military knows what that can be like. In fact, as I'm writing this, I'm on a 24 hour duty position which started Friday morning (April 26) and ends Saturday morning (April 27). This duty position is known as CQ or "charge of quarters" - barracks guard simply put. My wife, who is a RN is working 2 almost full-time jobs. Both jobs are night shifts. So, basically as I'm coming home from work, she will have a delicious meal ready for me then just a few minutes together, then off to work she goes for 12 hrs. She is still**

at her job when I get up in the morning and leave to go to my job in the Army. We were actually were looking for a change. We didn't want to evolve our lives around work. So, when I had presented to my wife my tiny house design and dream of starting a tiny house business and explained how we can cut most of our costs of living such as housing, utilities, high grocery costs, gas for traveling to our jobs, etc., we both fell head-over-heels in love with the tiny house concept and way of life - especially off grid. We realize we are spending a lot of money now to do this and a lot of our free time building the tiny house; but, also realize in the end, we will be financially FREE!

- How did you come to hear about the movement, figure out it was right for you and get started? I heard about the Tiny House Movement for the first time while deployed in Afghanistan in 2010 when I had "stumbled" across Jay Shaffer and Tumbleweed Tiny House Company ironically while searching on line for a bigger house, 2000 sq ft or more. After seeing pictures of tiny houses for the first time, and have read about how this type of life style produces financial freedom, I knew that this type of life style was for me and my wife who agrees whole heartily!
- What is/was your design inspiration? After looking at many tiny house designs, I've decided to use something similar to the Tiny House Builders - Dan Louche's tiny house design type. I had actually purchased a down-loadable tiny house plans with the estimate in cost of materials from the Tiny House Builders web site. I've actually studied these plans and came up with a floor plan of my own. I have the actual floor plan sketch I've drawn posted in my photo album on my TinyQualityHomes Facebook page. I wanted my design to be unique and something different... Something that includes lots of "first time" design features such as my 48 inch wide walk-in luxury shower in a "bump-out", cantilevered floor structure design; a garden window over the kitchen sink; a vent-less, parlor, gas fireplace with fancy fireplace trim and mantle piece; and lots of built-ins to include a built-in window fold-out sofa bed in the living room.

TECHNICAL:

- How do/did you find the time to work on your house with a job, kid(s), relationships, AND building a house? Did you do anything special to keep the balance? **Basically, the way I kept the balance of building a tiny house with work and relationship with my wife and daughter is, of course, I worked on the tiny house on week-ends and leave time granted to me from the Army. Since my wife works nights and sleeps during the days, I have usually begun my work on the tiny house after she arrives home from work, we have spent at least 1 hour together, then she goes to bed, and I go to work on the tiny house. Also, when I go to work on the tiny house, I had brought my daughter (who is 19) with me to help and learn what it takes to build a tiny house. My daughter has grown to love the tiny house movement and has taken lots of photos of me working on the tiny house.**
- Have you run into any problems with your local codes? How did you solve them? **Since my tiny house build has taken place (or started out in a work shop I've rented), and had moved it out in the yard outside the work shop, I've had no issues with codes. In fact, a City Fire Marshall had showed up to inspect my landlord's yard since he operated a "recycling yard". The Fire Marshall had taken an interest in my tiny house and became fascinated with it. I've actually invited him in the tiny house to see the unfinished interior. I've also asked him where he would recommend where to put up smoke detectors in the tiny house and how many would be enough. I think he was impressed, not only with the tiny house, but that I've had enough concern for safety for all inside the home to ask questions on what I could do to make our**

house safe. He also told me that having the two large dormer windows also adds to fire evacuation safety if a fire should start down stairs while we were sleeping, the two large dormer windows would be excellent way out to escape the fire.

- Where did you get the tools that you use? Were they yours, borrowed, rented etc.? **I've purchased most of the tools I've used on the tiny house - thought that would be good investment for my future business. Other items such as ladders, small portable scaffolding, and extra extension cords to bring power to the tiny house while working on it, we're borrowed from my landlord from where I'm renting the work shop.**
- How long did (are you expecting) construction to take? **I've actually didn't have build time schedule to stick by. This is a "just build and work on it when I have the time project". Money wasn't hardly the issue since my wife makes a very decent salary and most of the expense of the project has come from her earnings. The issue had always been time since I'm in the Army.**
- Have you/were you able to stay on schedule? **My tiny house construction is looking like to be complete and ready to roll to TN by the time or very shortly I'm out of the Army in mid June 2013. My "staying on schedule" was to be completely done by the time I'm out of the Army so we could move into our tiny home immediately after getting it set up in TN. As of right now, it's looking pretty good and look'n like I'm going to be completely done by the time I'm out of the Army in mid-June.**
- What is/was the most time consuming portion of your build? **The most time consuming portion of the tiny house build, I believe, to be the floor structure. This is due to having to use 2 x 8's rather than the typical way of 2 x 4's framed over the existing trailer deck boards. I had to do this because of the cross supports in the trailer's steel frame were bent. So, I framed 2 x 8's across from the trailer's two main outside steel frames from one side to the other. I also had to engineer design a "cantilevered" floor joist framing to extend two feet out from the trailer's rear steel frame and five feet extended inward joining up with a crossing floor joist (doubled for extra strength). All floor joists were lag screwed together with 4 and 6 inch x 3/8 inch thick lag screws with washers. Over 200 lag screws alone were used and every lag screw hole was pre-drilled then screws were hand cranked using a socket wrench. Also, what was time consuming on the floor framing was drilling holes through the steel frame of the trailer to attach the two 20 ft 2 x 8's outer floor joists to the trailer's steel frame with carriage bolts and locking nuts and washers on each side. I've worn out and / or broken MANY, countless drill bits trying to drill these holes through the trailer's steel frame.**
- What is/was the most limiting factor for your build? **The most limiting factor during my tiny house build was time available. I've been granted some leave time from the Army to build my tiny house; but, the build process seems to be "dragging on" since each build time is mostly from weekend to weekend (and from having to take some days off due to "burn-out").**
- Is your house on a trailer? If yes, how do you attach to the trailer? How do you move your tiny house? (Do you have a truck, do you hire it done?). **Yes. The house is attached to the trailer by a series of carriage bolts through the outer 20 ft 2 x 8's and through the steel frame of the trailer and secured with locking nuts and washers. I do have a F-250 Super Duty Truck with a complete towing package with in dash electric trailer brake adjuster. This is the vehicle I will be towing my tiny house with and all my future tiny house builds for customer deliveries of tiny homes.**
- Do you have accessory houses/dwellings that you use to supplement storage/working/living? **When we get our tiny house set up in Tennessee, we do plan on building "accessory" buildings such**

as an additional "spare room" on wheels for guests and or rentals. We also plan on building underground food root cellar for storing canned food from the garden. Other accessory buildings will include a "power" shed for battery bank to store our solar and wind power devices. We also plan on a huge outdoor living area with a pavilion, stone patio and walk ways, decks from the tiny house and "spare rooms" with steps leading down to the outdoor living area and pavilion. This area will also have a fire pit and stone charcoal grill for outdoor cooking.

- Where did you get your plans? **Even though my floor plans have been inspired by Dan Louche's Tiny Living Plans, I've basically came up with my own design and drew the floor plan out myself on a piece of paper.**
- Have you consulted any 'professionals'? (structural, mechanical, plumbing, design etc.)? **The only help I've had during my tiny house build was from a friend of mine in the Army. He is an experienced electrician and plumber. He showed me how, while he did the work, to do the electrical work to include the breaker switch panels. I've learned a lot from working along side him and watching him do my electrical in the tiny house.**
- Are you insuring your house? With who? **We haven't found an insurance company as of yet who will ensure our tiny house (if anyone has, please do share that info with us).**
- Have you been using any sponsorships to help fund your house? How do you go about finding that sponsorship? **No. Just hard- earned pay from mostly my wife's income, and blood-sweat-equity from my labor.**

SPECIFICS:

- What sort of items do you have for cooking? **The items for cooking will be a four-burner gas cook top, over counter vented microwave, and a convection oven... And if you want to include the outdoor living area, the fire pit and stone charcoal grill.**
- Are you tied to the power grid or are you off grid? **We have no power supply (grid power) on our property in TN; so, we will be living off-grid (using solar and wind turbine system).**
- Are you going to have a washer and/or dryer? **Yes. We will have one of those marine/RV one unit washer/dryer units.**
- Where does your water come from? **The water source will come from a large water reservoir that has a funnel shape on the bottom and will be gravity fed to the house producing forced water pressure PSIs through the water lines in the house. Also, we will have rain water collection systems into rain barrels.**
- What kind of toilet are you going to have? **Composting.**
- What do you use for a heat source if anything? **A.C/ heat unit outside the home and a vent-less gas fireplace.**
- What are some of the space savings tricks you used? **Lot of built-ins! Built-in shelving in the wall cavities, in the ceiling area, in the built-in living room window seat. There is no such thing as "dead space"... it all gets used one way or another.**
- What do you have for insulation? **2" foam board insulation sealed in with spray foam (the great stuff).**

- Where are you planning to park your tiny house? **On our 22 ac of TN property. This property is unrestricted and it is in the land contract/covenant that cabins, trailers, and or RVs can be parked and lived in. You may even "camp" on the property, but no "tent cities" are allowed.**

PERSONAL:

- How much will/did your tiny house cost? **Around \$18,000 in materials when finished.**
- What is/was the most expensive part of your house? **Besides the trailer being the most expensive part of the tiny house... I would say, all the appliances/devices for the home; such as, fireplace (around \$2,000), composting toilet (around \$2,000), washer/dryer unit (around \$2,000), and then there's the solar system just under \$5,000, then add the wind turbine system (2 of them for about \$1,200 for the two).**
- 'Best' injury story (worst injury)? **Well, I haven't gotten injured; but, I did "drop" an entire upper cabinet (kitchen) on my daughter's head! I've just lifted the entire cabinet set and positioned it on the block (2 x 4) braces I've screwed to the walls to "hold" the cabinet in place while I screw it to the wall. I made the blocking so that the cabinet fits very snug to the ceiling. MIT was so snug I thought the cabinet was "wedged" in and was going to "hold itself" from falling. I had forgot and left my drill not within reach, but was near by. I think my daughter was sweeping up the floor and was near where I was working. I had let go of the cabinet, turned swiftly to retrieve my drill, but before I could get turned back around, I heard a crash and a loud, "ouch!" When I finally did turn around, I seen the cabinet on the floor and my daughter violently rubbing her head. I looked for signs of bleeding and asked her a bunch of questions, just like how I was trained in the Army to check for signs of TBI (traumatic brain injury). Thankfully, she was ok.**
- What has been your biggest accomplishment with your tiny house? **My biggest accomplishment with my tiny house is when I finally got the exterior of the house done. I've really enjoyed the many, many great comments I have gotten from my Facebook fans on my TinyQualityHomes Facebook page. I've also was so amazed on how, from Feb. to until now, my "likes" on my Facebook page has soared from the low 100's to now, over 3300 "likes". This is because the house has really taken on an awesome exterior look to it. I think, from all of the many comments concerning my tiny house exterior, my fans all mostly agree that my tiny house just looks so uniquely different from all the rest.**
- What is/will be the biggest benefit to living in a tiny house? **NO MORTGAGE PAYMENTS OR RENT payments ever again! And financial freedom that will allow us to relax and enjoy life so much more than we ever did in the past. The "tiny house plan" is our "retirement plan". It's a great retirement plan that ANYONE can afford!**
- Is there anything you'll miss about living in a standard house? What will you miss the most? **I guess the thing I might miss the most in the bigger house might be the bigger space; but, the more I think about the "bigger" space is more work involved with up keep of that bigger space and more stuff cluttering up your life to occupy all that space.**
- What has been the scariest part about building your own house? **I guess the scariest part about building my tiny house would be the roof. I've worked on asphalt shingled roofs in the past, but not a metal roof. I learned how by looking it up on the internet and studied how it was done and all the components involved in a metal roof job. The roof actually turned out great. I've installed ice guard on the eaves, valleys, and even the rake ends. There is also 30# felt paper put down over it all. After that, I put down some thermal guard (silvery-bubblely stuff) material to**

help insulate from penetrating heat from the sun. I've also installed vents in the eaves to allow heat to escape out from the eaves and not so much into the house. When I installed the foam board insulation, I had intentionally left a one inch gap for the under side of the roof sheathing to allow the roof to "breathe". Have you ever been in a mobile home in the summer? It gets hot in there. That is because the mobile home has a metal roof with no ventilation. There is no place for built up heat under the metal roof to go but into the house.

- If you could change one thing about your house what would it be? **Even though, I'm totally satisfied with my tiny house, if there was something different that I would have done, is that I would have designed the house more like the "McLoft" style tiny house from Humble Homes. The McLoft features a staircase instead of a loft ladder. Now, I did "scrubbed" the loft ladder, and put in stairs, but had to give up some storage space, but even that is being worked out to where I'll end up with additional storage instead.**
- Did you have cash in hand to complete your build, pay as you go or take out a loan to construct your house? **My wife initially had about \$3000 in savings in which she gave to me to get the house started... Starting with the purchase of the 20 ft trailer for \$1,750. After that, my wife gave me anywhere from about \$1,500 to \$2,000 every other week when she got paid. This is how the house project was financed. The great thing about this when done... No payments to anyone for our house!**
- Have friends and family been skeptical or supportive of your ideas? **A few friends as well as friends and family of my wife had been skeptical about us living in a tiny house; but after seeing my house and hearing the stories and ideas of financial freedom, they don't think we are "crazy" any more. In fact some of friends and family have asked if I would build them a tiny house in the future for them.**
- Is there anything else you would want other people to know about your house and build? **I guess the most important thing I want other people know about my tiny house and the way I've built it is, according to many of my Facebook fans as well, that I pay attention to detail. No matter how small it may be, I put a lot of thought in "how I would make it better".**