

# About This House

This house was designed and built by Strawworks Inc. in 2016 and in many ways was an ideal project and a huge success. It hit all of the markers: designed and estimated in-house, built on time and budget, built using local materials, built with super levels of insulation, located 40 kms from home, built by a happy crew for a happy client. Today we showcase that and hope to drum-up more projects just like it!

We hope you enjoy your visit and ask a lot of questions.

## Specs.

**Exterior:** 1344 sq.ft. not incl. garage and porches

**Interior:** 1088 sq.ft (straw bale walls are thick!)

**Construction Timeline:** May 9th- Dec. 21, 2016

## Straw Bale Walls

Our signature work, the exterior walls are super insulated with 220 wheat straw bales. Combined with careful air sealing and plaster, they yield R-30 from a local, annually renewable resource that supports farmers! Strawworks Inc. has its own Engineered Wall System called Strawworks Wall System No.1 that spells out the specifics of the wall structure.

## Natural Plaster

The exterior straw bale walls are plastered with clay, lime, sand and straw. It's a tried and true combination we stand behind with permeability, longevity, beauty and low embodied energy in mind.

## Earthen Floor

You are standing on Ontario's largest earthen floor! Essentially we plastered the floor with a 3/4" layer of clay, sand and straw, let it dry, hardened it with a blend of oils and citrus thinner. Then we varnished it, waxed it and delivered a durable, natural floor, local floor with a unique old world feel.

## Super Levels of Insulation!

**It's about climate change, comfort and cheap heat.**

"It is estimated that at present, buildings contribute as much as one third of total global greenhouse gas emissions, primarily through the use of fossil fuels during their operational phase." Buildings and Climate Change, UNEP SBCI

Super insulated buildings help mitigate climate change by requiring less carbon emitting fuel to heat them. They are also more comfortable to live in and less expensive to heat and cool. It's a win win win!

You are surrounded by a thick layer of insulation: the foundation (R-28), the floor (R-24), the exterior walls (R-30), the attic (R-80). You are feeling warm from minimal heat. Judy feels that and is happy about owning a home that is cheap to heat.

## Non-Toxic Paints and Finishes

Did you notice you weren't hit with a waff of noxious smells as you walked through the door of this *new* house? That's because we didn't pollute the interior with building materials that off-gas. The indoor air quality of many new homes is often worse than outdoor air quality because of the paints, particle boards, drywall mud, glues and varnishes that go into them. In high enough doses those chemicals can make people sick. We care about our clients health, and our health as the installers, and only use non-toxic paints and finishes. Please see our product list to find out what we used and where we got them.



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## Suppliers & Contractors

**Foundation:** Nexcem ICF walls [nexcembuild.com](http://nexcembuild.com)

**Building Materials:** Kingdon Timber Mart [kingdontruss.com](http://kingdontruss.com)

**Steel Roof:** Havelock Metals [havelockmetal.com](http://havelockmetal.com)

**Windows and Doors:** Marvin [marvin.com](http://marvin.com) rep: Don Finnie

**Concrete:** Castleridge Concrete, Castleton, ON 905-344-7711

**Straw Bales:** Wayne Howard, Cobourg, 905-342-2093

### Non-Toxic Paints & Finishes

**Exterior Trim:** Allback Organic Linseed Oil Paint, Living Rooms, Kingston ON, 613-766-6821, [livingrooms.ws](http://livingrooms.ws)

**Exterior Siding:** LifeTime Wood Treatment, Chemong Home Building Centre, Peterborough, ON [valhalco.com](http://valhalco.com)

**Exterior Plaster:** Quartguard Silicate Paint, Permatint, Concord, ON [permatint.com](http://permatint.com)

**Interior Plaster:** Kreidezeit Lime Paint, Tockay Peintures Naturelles, Montreal, QC [tockay.com](http://tockay.com)

**Interior Pine (Windows, Stools, Doors):** Le Tonkinois, Bio-Impression Varnish, Living Rooms, Kingston ON, [livingrooms.ws](http://livingrooms.ws)

**Interior Caulking:** Eco-Bond, Eco Building Resource, Aurora, ON, 905 [eco-building.ca](http://eco-building.ca)

**Drywall Finishing Compound:** Murco, Eco Building Resource, Aurora, ON, 905-841-3535, [eco-building.ca](http://eco-building.ca)

### Clay/Lime Plaster on Straw Bale Walls

EPK Kaolin Bagged Clay, Tucker's Pottery, Richmond Hill, ON  
Granite Infield Mix (Clay/Sand), Hutchesons, Huntsville, ON  
Bondcrete Hydrated Lime, Doughty Masonry, Peterborough, ON  
Mortar Sand, Doughty Masonry, Peterborough, ON  
Chopped Straw - left over from walls

### Local Wood

**Soffit:** Eastern White Cedar, Laverne Harrison, Warsaw ON, 705-652-7704

**Siding:** Red Pine, Brian McIlmoyle, Lakefield, ON, 705-931-2105

### Contractors

**Construction:** Strawworks Inc., Peterborough, ON 705-868-7872, [info@strawworks.ca](mailto:info@strawworks.ca), [www.strawworks.ca](http://www.strawworks.ca)

**Plumbing:** Archer Plumbing Services, Woodville, ON, 705-439-1590

**Electrical:** K-VARS Electric Inc., Fenelon Falls, ON, 705-879-5811

**HRV:** Northumberland Mechanical, Port Hope, 905-449-7724

**Tall Tree Kitchens:** Dave Sharp, 705-313-3585, Havelock, ON

## A Happy Build

Have you heard that construction is a nightmare? That's true. Or it can be and often is. But Judy's build was very enjoyable and that's because we did our homework. We spent the winter designing, planning and estimating. By the time the shovel hit the ground, all decisions were made and all costs were on the table. There were no surprises, oversight or major changes. It was *all* planned out and decided upon beforehand. That set the stage for great company/client relations and a very enjoyable build.

Then again all planning would have been for not without a great crew to execute it. I would like to personally thank **Solomon Johnston, Sean Saunders, Adam Fox**. Each of you brought skill, hard work and good cheer to work everyday and together we built a house and had fun doing it. Judy, was present everyday, always ready to help, and did *all* the painting with friends' help and in many ways was the 5th crew member. Over seven months of construction, there were no arguments or blow-outs between us despite the heat and everyday life challenges. Today we are not clients or crew anymore, we are friends.

## About Strawworks Inc.

Strawworks Inc. is a design-build business that is owned and operated by Deirdre McGahern and has been since 2004. We are located in Peterborough, ON, and work within an hour of home. We specialize in design, estimating and building to ensure your home is built properly and the way you want it done. We take pride in our work and have fun doing it, because when built properly, straw works.

If you would like to build a straw bale home, shop, addition, cottage, commercial or community space within an hour of Peterborough, please give us a call. We are pros at realizing dreams.

cell: 705-868-7872 email: [info@strawworks.ca](mailto:info@strawworks.ca)

web: [www.strawworks.ca](http://www.strawworks.ca)



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