

Prefabricated house essay



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A prefabricated house, also known as prefab house or modular home is a house that has its components manufactured in a off-site industrial facility. When we say prefabricated construction, we are referring to building parts, from roof sections up to the multi -room dwellings that are manufactured off site.

Prefabricated houses are durable and lightweight but they make for a living space that is comfortable yet affordable. By manufacturing a prefabricated house off-site, time, energy, waste and expenses can be reduced to a minimum during construction. It is much easier to arrange the slab put in for a prefabricated house as compared to the foundation used in building stick - built structures. Prefabricated homes is almost synonymous to speedy construction since with just a plot of land on which to build it, a house can be ready in just a few days complete with heating, plumbing and wiring.

In a week's time, you can have your house ready and you can already move in. Construction time can be reduced to about 1/3 when this method is employed. Built to be able to withstand being transported by a truck to the site, prefabricated houses are designed to be sturdy. They must also be substantial enough since they are to be dropped onto the foundation when assembled on site.

These houses are transportable, versatile and are made to last. Prefabricated houses offer a traditional exterior and a modern interior. It's like being able to enjoy the best of both worlds. Since there is uniformity in the design, materials may be ordered and cut exactly as specified. In this way, minimum waste during the building process may be achieved. There can little or no

physical impact to the property when employing this method since the lot remains untouched until the house will be put into place.

Solar power and water tanks are among the standard options offered when building prefabricated houses. The design of prefabricated houses is headed towards sustainability. This end may also be achieved in the kind of materials used in its construction. The competition between companies offering this kind of building technology lies in terms of design. Prefabs have been around for more than a century now.

Over the course of time, it has seen improvements in terms of form, design, function and cost. Since components are manufactured off – site, exposure to harmful elements may be avoided. Wood warping, misalignments and rain interrupting construction schedule may be eliminated. Prefabricated houses are built in accordance with the specifications of the Uniform Building Code. Its construction also follows the same Zoning regulations as its stick – built counterparts. It is further categorized as the log cabin kit, penalized homes and modular homes.

Penalized homes as opposed to modular homes are put together on the site. On the other hand, modular homes are already complete with doors, closets and fixtures. Modular homes are brought in chunks to the site. Modern architectural designers use this particular type of prefabricated house. Historic preservation areas declared by the city officials, Home Owner's Associations as well as areas that are subject to municipal design review are among the certain issues to be watched out for in building these homes.

Paula Estes, author of “ What is a Prefab House? ,” gives us an overview on prefabricated houses: The history of the prefab house goes back to the birth of America. Many of those escaping religious persecution in England took apart their homes before they left and brought them over on the boat to be reassembled in the new land. During the gold rush of the 1840s and 1850s, house kits were shipped to prospectors in California. In the early 20th century, mail-order prefab homes were shipped to people all over the country in thousand pieces. Owners could put the houses together themselves, like a giant Lego or Lincoln log kit, with each piece numbered. The modern prefab house that has come to be known as a mobile home or trailer began by modeling World War II Quonset huts.

Many of these homes were mass – produced in the post – war era. While these were affordable to families in distress, their unimpressive design became the image of low income and dullness. However, the prefab house of today goes beyond trailer parks and double wides. While still available and beneficial to low – income communities, the modern prefab house is crafted to appeal to futuristic aesthetics. The newer, upper – tier prefab houses are the latest trend with the rich and famous, and they look just as well – constructed as a traditional home built with studs.

Now, more than half of all the homes built in the United States use at least partial prefab materials. There are prefab house styles today to please any architectural taste, from Colonial to Southwestern to Ultra – modern. Sheri Koones, author of two books on the subject of Prefabricated Houses notes that prefabs are not necessarily less expensive than traditional houses. She then cites for example the Bay Area, where: Labor costs so much that factory

- built components could save 15 percent of construction costs, but in markets where labor is inexpensive, a prefab could actually prove more costly than a stick - built house [because] dollar amounts vary on the scale and finishes of a project.

[She further notes that] usually, though, saving time means saving money (qtd. in Fornoff F - 1). LeeAundra Temescu, author of the article entitled, “Green House vs. Greenhouse,” supports the Koones’ claim that choosing to go prefab doesn’t automatically mean a remarkable cut on cost as she goes on to say that: Even if you’re willing to suffer the close quarters to save the planet, the cost may give you a pause. Fully loaded, the single - bedroom mkLotus lists at \$249, 000 - about \$356 a square foot - and that doesn’t include installation, site preparation, or the land itself. Granted, there will be significant saving on your monthly utilities - for one, your electricity will be free - but that saving comes at over double the cost, per square foot, of 93 percent of new home sold in the United States in 2006.

Living green may now be easy, but it still isn’t cheap. Going green comes with a price. Author Sarah Fister Gale in her article entitled, “The marriage of prefab and sustainability” further supports this claim as she writes: Glenn, Woelke and the rest of the prefab industry, however, quickly point out that modular homes aren’t cheap, which is another misconception that stems from antiquated modular home stereotypes. Sustainable prefab houses can cost about the same as a conventional home to construct but the quality and efficiency of the finished product is typically better because more of the investment is put into materials and technology rather than on - site construction crews. Cost of construction varies depending on design,

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complexity, geographical area and site conditions. Prefab homeowners will likely pay less for heating and cooling costs over the life of the home because the structures tend to be more energy efficient with less leakage.

Through a combination of good design principals, tighter construction, and energy efficient materials and technology, homes can save in energy use and water compared to a conventional home, with the possibility of additional savings from alternative energy, such as solar panels. Energy savings also comes from thoughtful architectural choices. Simon Lambert in his article entitled, “ New age of the prefab house. ” takes a second look at this contemporary development in building construction as he goes to say: Mention the word prefab to an architect, rather than the man on the street, and their eyes will light up with visions of glamorous modern buildings.

Now, a new exhibition taking place in London aims to convince the public that prefab really is fabulous and highlight how a new wave of modern houses are making living in a box desirable. The developments are a far cry from the identikit post – war prefab homes and most adopt modern glass, steel and wood styling. But the cool exterior is not just for looks, it is designed to be durable, easy and fast to build, and hides an inside where the finest architectural minds have worked to maximize space. Andrew Scoones says, “ Prefabrication and modern methods of construction have moved into a new phase, the industry has graduated from the pioneering stage and shifted up a gear. ” Different prefab methods are becoming popular, one of which is the Thoma Holz100 system. Susan Fronoff, in her article entitled “ When your ship comes in, prefab house could be on it,” she defines the system as: What ultimately led [Architect Gordon] Pierce and his wife, Peggy,

to bring the Thoma Holz100 system to Walnut Creek was the environmental sensibility of using sustainable wood – in this case, fast and easy – growing European larch – in a way that requires no glues, finishes or other chemicals.

Various sizes of lumber are layered vertically, horizontally and diagonally to form solid panels. Then dried wooden dowels are strategically pressed through drilled holes; because the dowels have only 5 to 7 percent moisture, they soak up moisture from the lumber (which is 12 to 14 percent moisture) and expand inside the panels to secure the structure (F – 1). Prefabricated houses are able to meet design specifications more precisely than on – site construction. There’s less construction waste, in the case of Holz100, the wood waste is turned into pellets that fuel the factory – and is less likelihood of mold (Fornoff F – 1). Then, there is the manufactured version of Kaufmann’s mkLotus prefab house.

This house features a foam insulation that is energy – efficient, recirculated water, LED lighting. It also has a “ living roof” to keep the rainwater out off the gutter. Rainwater stored from the basin is used for irrigation. It has a solar – panel system which produces sufficient amount of energy for the home and even to a hybrid car.

Everything in this house is recycled, energy efficient and sustainable from the floor to the wall to the door to the counter top and even to the lighting fixtures. The house being eco – friendly is an understatement. Mass customization is the future of this particular development in building construction according to Architect Douglas Cutler. He sees the trend of offering a wide array of options using a standard blueprint. An architect –

designed “ green home” that is factory built but without huge expenses is the vision of the company that goes by the name, Modscape.

Their take on the prefabricated house is mentioned in the article published last November 21, 2007 at the Sydney Morning Herald. Author Justine Costigan writes: In Modscape’s case, one unit equals a one – bedroom house, extra units add more space. Modular units, each of a standard size, are the key to the prefab market’s green credentials. Co – owner Jan Gyrn is passionate about the materials used to make a Modscape house. “ We use low – emission paints and adhesives, bamboo flooring and recycled plasterboard, double glazing and insulation and our design also includes the optimum – width windows for cross – ventilation. We take a holistic view and sustainability is built into our homes from the beginning – from the design and manufacture to the materials we use and how the houses are delivered and set up (qtd.

n Costigan). ” John Quale in his article entitled, “ LAST EXIT: Fixed Up, Looking Sharp: Prefab Housing Goes Green Gracefully, notes that prefab houses can both look nice but still affordable. Gone are the days when such houses are almost duplicate the trend of suburban sprawl as he goes to say that: Modular and panelized construction techniques are revolutionizing residential development, as prefab homes continue to increase in quality to the point where they can rival or even surpass conventional stick – built construction. Greater numbers of prefab homes hold the promise of significantly reducing the environmental impact of new residential development, but prefab home builders have not realized much of that potential so far. Although several companies have adopted EngeryStar –

rated models, few are seriously looking at the environment impact of their methods or materials.

And despite the popularity of magazines such as Dwell, which regularly feature \$300, 000 and up prefab homes, very few prefab communities aim for high – quality, contemporary design that fits into dense, urban communities. Architect Sarah Susanka’s foreword for Sheri Koones’ book entitled Prefabulous: The House of Your Dreams Delivered Fresh from the Factory makes this remarkable point as she writes: We’d never agree to have a new car assembled in the driveway or a new dishwasher put together on the kitchen floor. Yet when it comes to houses, many of us assume one built on site is superior to one constructed in a factory. Factory construction saves time, money and building materials, and it can result in sturdy homes that require less energy and maintenance. It doesn’t require sacrifices regarding the home’s design. The scarcity of available timber around the Great Lakes gave birth to the industry of prefabricated homes.

Building supply companies figured that they can use the remaining milling resources available for them to offer house plans and cutting wood to match. Since they are already in the business of selling stairs and mouldings, they have just included house customization to their list of services. Mail – order businesses are on the rise during the 19th century. Soon enough mail – order clothing gave way to ready made housing. One who opts to go prefab can go online to select the floor plan, materials and roof style he wants to be incorporated in the design of his house.

The assembly normally takes about 25 days. The finished product, or your home is shrink – wrapped for protection. It then arrives on site, configured to fit on the foundation provided for. Prefabricated homes are 85 % complete when delivered and then assembled on site. Standardized customization can be made possible by the aid of technology. The challenge in building prefabs is how to mass – produce it knowing that the owner is going to take it very personally.

For the designers, they must be able to strike the balance between being able to make their end users feel that a house is specifically designed for them at the same time mass producing that house to gain profit. But modern prefabs can now address the dilemma of living in a neighborhood where houses are serial replicas of one another. In going prefab, we must not forget to factor in shipping. One of the trickiest aspect of building prefab is the aspect of delivery. There are bridges that are declared to be off limits; a state’s transportation office declares the routes to take. For over sized loads, “ pilot car” is key.

A test run is being administered to make sure that the prefab house will be able to get to the site. With just a simple method employed, prefabricated homes are gaining an increase in popularity, thanks to its versatility. Thermal and acoustic insulation makes them fit to be a venue for student accommodations as well as a residential abode. The fact that they do come in various styles and of course color doesn’t exactly hurt. More diverse construction technique, diverse set of available materials and design system are already made available due to an increase in awareness on the sustainability of prefabricated homes. With the successful resurrection of the <https://assignbuster.com/prefabricated-house-essay/>

prefabricated houses, it's hard to guess that it is actually built in pieces or in whole at a factory somewhere.

Prefabricated homes have earned the stigma of being kitsch and low end. But throughout the course of time, architects, up and coming and esteemed alike have been successful in taking this method a step further. They have now included craftsmanship, quality and customization among the terms synonymous to prefabricated abodes. These houses have already earned the appreciation of those with the most discriminating of tastes. Design savvy clients have been captivated by the appeal of these homes. Modern design elements constructed in an eco – friendly manner set in a traditionally low cost appeal, has been increasingly popular among the upper class.

Prefabricated homes offer an option for clients who dream to own a house that is modern yet ecological. With this building technology slowly earning a following, a sustainable living experience is somewhat close to reality. Soon, prefab homes will not be left to the pages of the magazines. They can very well grace you own neighborhood too. With more and more prefabricated homes built around the country, designers hope that one day, it can easily become a natural choice for the people who regard sustainability as a top priority.

Elegant and energy efficient, prefabs are all about sustainability.

Prefabrication leads to green. It is really a healthier and wiser option to build for Mother Nature. It's great to know that more and more people are beginning to realize the truth to that. People who are aware and are serious

about the aspect of sustainability recognized the new age or prefabrication. Quality truly speaks for itself.

The rise of the prefabricated homes changed the way we commonly think about housing. Prefab movers are directed toward the goal of rendering well thought of designs and contemporary abodes made available to every customer. There is no denying the fact that prefabricated homes is more concept than concrete. But we are nevertheless intrigued by the benefits it can offer.

Soon, it may be among the many options particularly in the domestic housing market. The excitement for an alternative in building homes grows with the idea of prefabrication. Poorly designed and constructed abodes are among the many drawbacks of the traditional building technique. Current realities existing within the confines of the domestic market tempers this feeling of excitement.

There is a resistance in change among city planners, developers, lenders, suppliers, contractors and builders. Guarded by the lack of demand and risk, potential prefab developers, designers and fabricators, wait until later. There is no demand because some information are lacking. Majority of the consumers are not so much is not at all aware of modern prefabrication.

Someone really has to spread the word. And a lot of us must lend an ear to this cause. The government, together with other agencies and even us citizens has paid little attention to issues involving transitional housing until after a crisis hits and catches us unguarded. This is quite evident during Hurricane Katrina. Consumers just need to be educated.

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When it happens, things will change and there will be a lot of incredible possibilities in terms of home design. The design of tomorrow's home currently being drafted. What we know for sure is that the result is certainly a lot different from our idea of a house back when the days were young. With the advent of new technologies and available materials, we are at the same time reshaping the way we used to build our homes. Prefabricated abodes do look like they were handcrafted as opposed to houses built on studs. Floor plans are designed to accommodate the ever – changing patterns of our everyday lives.

But nevertheless architects and designers alike still lean upon ancient materials and building technologies. How would homes look like in the future? We can only assume. It is often debated whether prefabricated abodes are mere platforms for the Frank Gehry wannabes or whether they are the new cutting edge of design. Prefabs have begun to go high in style.

Steel and glass, a play of geometric shapes, and flowing interiors are evident in the design of such homes. These are the very characteristics that appeal to esteemed architects the world over. Architects say that in this day and age, one size fits all doesn't ring true anymore. Computer aided design methods make it possible for architects to apply the way Lego blocks are moved around with their prefab models. Architects further claim that with the avant – garde looks of their prefabs, buyers who crave for a touch of high design to their homes can be won over.

We all have, in one way or the other dream to have our own home. The image of a home that is powerful and iconic endures. For the blessed few,

who belong to the upper class in society, this dream is not exactly hard to achieve. But as working class citizens like you and me, owning a house is quite like a struggle.

With the aid of efficient mass production methods available today, social reformers, public officials, philanthropists, together with builders, architects and engineers dream to be able to prefabricated affordable housing facilities. Today, prefabricated houses ranges from the conventional to the radical. Prefabs, just like in the old days never fails to ignite the feelings of excitement and controversy. Prefabricated homes have played a vital role in the international response to natural disasters particularly during Hurricanes Katrina and Wilma. At the end of the day, building prefabricated houses serves as an outlet for architects who have the passion for the environment.