

Design essay – building back safer

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In the desolate aftermath of Typhoon Hanna which killed thousands of people, shattered more than a million homes, and tore up millions of Reese, the Idea of building back better and safer might sound like an Impossible dream. But for the international aid workers, " building back safer" has become a mantra in the wake of natural catastrophes that have taught them lessons which they can use in helping the locals and victims of the said typhoon. And many of these victims said that the goal of building back safer is very essential if they are to face future typhoons with confidence.

It can take many shapes, but it sure does face many obstacles as well, most particularly in countries that bear most natural disasters and offer brutally of the effects due to lack of preparations and safety measures. In our proposal, our group decided to have a pure wooden structure as a model house for building back safer for it does not only have to be safe, it must also be economical because the homeless families due to the typhoon Hanna are mostly the poor ones. We would like to consider their financial status as well.

And in order for these females to start all over, they first need to have a house again which means they will need it as soon as possible. So we come up with an Idea to design a house in which the materials are readily available in the market for easy purchase, spaces are properly planned for their daily routines, the house is intended to allow fast construction, and most significantly, It is designed along side with the considerations for a typhoon-resistant house. The model house looks like a common nip hut applied with some modifications in terms of construction.

The primary materials to be used are most likely similar to that of a nip hut which includes nip shingles or locally known as "pawed" for the roof. Make walling for the walls, wooden planks for the floor and stairs, solid circular wood for the posts and stilts, bamboo for the handrails and to be used as a gutter as well. The house must be built on higher or safer ground to be more safety from floods. The plan for the house is to elevate all spaces except for the latrine and the cooking area which will be located a minimum of 15 Ft distance outside the house.

The house will stand on stilts above a ground planted with grass so the water has more space to UN, and with a plinth level of 3 foot 1 meter above normal tide or minimal flood level and a plinth area of 200 sq. Ft. Or more or less 60 sq. Meters which can also be expandable to 320 sq. Ft.. We prefer to use stilts so that in case of a flood or a storm 1 OFF house. The columns will be firmly anchored to the ground to prevent flood water washing them out and to avoid floatation of the structure as well if the flood level gets too high. This is also useful in times of earthquake for if the columns are anchored, it can withstand earthquakes.

As for the walls, the group decided to have an Mammass walling for we read an article in which stated that it can withstand high wind speed. We also consider the minimum wall height of 7 Ft from plinth level. And in terms of construction, we also consider the proper bracing and connections for the wall studs so it may not rip up easily in times of strong winds. There is a provision of two doors and two windows, which will be located in the front and at the back of the house, and will be provided with designated bracing as well because bracing will make the structure more assistant to winds.

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We settle on a gabled type of roofing or "dos sagas" with a canopy for its roof design will allow rain water harvesting that can be use for the latrine and other purposes. The roof slope or pitch is 30 degrees with a roof projection of 18 inches on both sides of the roof for proper roof drainage and to prevent the roof from blowing away. We also provide an awning-like opening in the roof which can be use for emergency situations such as in times of storm surge in which the house will be full f water; the occupants will have another way out.

The roof, which is made up of nip shingles will be provided with bamboo bracing as well to help keep the roof intact against wind forces. And aside from bamboo bracing, unused automobile wheel will also be placed on top of the rooftop make it more secure. Another thing is to place wheel interiors, which can be used as a life saver, under the roof, or near the roof openings. The wheel and wheel interior can both float during floods and high waters and can be used by the occupants as a life saver.

The spaces inside the house are properly analyzed to help promote good circulation in the interiors. The font side is facing south which is suitable for doors and windows in terms of green architecture. Since the house stands on stilts, the main entrance has a stairs leading to the porch. The major spaces inside are the living area adjacent to the entry porch; the dining area which is placed between the living and the kitchen to make it more accessible to both spaces; the sleeping area that is located on 1. 80 meter mezzanine floor.