Kobanol/Numero Deux Model Homes

The homes HMI constructs in this region of Haiti have cement slabs, cinder block walls, two plank doors, $3' \times 7'$, four wooden windows, $30'\times30'$, four slotted block windows, $30'' \times 48''$, and tin roofs.

The initial homes constructed by HMI (seventeen homes built from April 2008 to March 2013) were built using traditional foundations according to engineering guidelines developed by licensed Haitian engineers. They also were custom designed for each location by a Haitian architect. The foundations required considerable excavation and masonry work with an average slab costing about \$3000. These houses had a hip roof design that was different for each house. The Numero Deux house also had five raised panel doors – two exterior and three interior costing approximately \$1000. After the devastating earthquake of January 2010, building materials and labor costs escalated to where the cost of building these houses went to \$12,500.

In order to attempt to reduce the cost of construction so that more people could be moved out of these deplorable living conditions, a team from HMI began researching other options. We were introduced to Fr. Glenn Meaux's Kobanol Model home in March 2013. Fr. Glenn had been working in the Central Plateau area of Haiti about a mile outside of the city of Hinche for twenty-three years at the time and had been building this type home for thirteen of those years. He had built over 200 at the time of our visit.

Fr. Meaux's model was unique in so far as each house was exactly the same. They had cement slabs but used a

"floating slab" design which had more rebar but did not require very much excavation or special masonry work. This structural pattern utilizes only a six inch (6") footing around the perimeter and an average of four (4) inches throughout the foundation.

HMI requested and Fr. Meaux was gracious enough to send his crew to Numero Deux for two weeks to train the HMI team and actually build three of the Kobanol model homes. The process went very well with the HMI team building the third house by themselves after working on the first two with the Kobanol team. The end result was that the cost of the houses dropped from \$12,500 to \$7,500.

Because of the different terrain, cultural patterns and climate in Numero Deux compared to Kobanol (Numero Deux is mountainous and rainy – Kobanol is flat and dry), a few modifications to the Kobanol model were implemented. These included elevating the foundation some, changing window placements and adding a back door to improve air circulation and provide more security. These were all done while staying in the target figure of \$7,500. Thus the Kobanol/Numero Deux Model was developed.

This home is very functional, durable and practical for all aspects of Haitian culture and environment. It is built completely by members of the local Haitian community incorporating a blend of paid and volunteer labor in order to keep costs down and encourage cooperation among the local community families receiving homes. The materials are also purchased locally – all of which has a tremendous positive effect on the economy of the area which is basically agronomy and bartering in nature.