Not a city block, but a concrete block.

The primary reason that the January 12, 2010 earthquake was so devastating in Haiti is that the sub-standard masonry and concrete construction could not withstand the magnitude of the tremor. Because workers were paid for quantity not quality, they traditionally short-changed cement, the most expensive component in block, and added substandard sand to the concrete mixture.

Building back better requires a change in approach!

The issue now is concrete.

Actually, concrete masonry blocks – blocks that withstand at least the pressure of 1,900 pounds per square inch (psi), and made to American Society for Testing and Materials standards. The process to achieve ASTM performance standards for accreditation is based on specific concrete design mixtures of stone, sand, water, and cement, all of which must be mixed in precise proportions with mechanical mixing equipment. It is equally critical to develop the expertise to consistently make the same reliable product, which means implementing good procedures, training workers, and maintaining quality control.

Right now, Haiti does not have the ability to produce this standard of block.

So, for those who can afford it, ASTM quality block is purchased from the Dominican Republic, at great expense, and transported to wherever it is to be used in Haiti. If the block could be made to ASTM specifications in Haiti, such accreditation would increase employment opportunities, eliminate the import and transportation costs, and provide Haiti with a new – and growing – construction industry producing a steady source of in-country income. It is precisely this kind of investment in long-term economic development which will help Haiti achieve ultimate self-sustainability.
There is already a fledging block plant – the only employer in Domond, near Cange in the Central Plateau. The 15 employees there make 1,000 blocks a day for which there is great regional demand, even though the block yields about 1,200 psi. Because the goal of this plant is to create fair sustainable employment in Haiti, pursuing ASTM accreditation will mean not only a superior product, but also growing employment opportunities with a company that will last. Through the 34-year relationship with the Episcopal Diocese of Upper South Carolina and the village of Cange, Clemson University engineering students are working alongside the Domond Haitians to improve productivity and to reach ASTM standards.

Raw materials must be transported 25 miles to Domond from the sand and stone quarries and since the plant has no truck, the cost of sand and stone is excessive. Because there is only one block press, any malfunction means lowered production time. Large customers are reluctant to place business with small producers whose production is entirely dependent on one machine and who cannot deliver the product to the construction site.

BUT…

You can help turn these stumbling blocks into building blocks for Haiti’s reconstruction – schools, clinics, churches, even a Cathedral.

The investment in this foundational activity is minimal:

1 16-wheel heavy duty dump truck      $100,000
1 industrial quality concrete mixer            30,000
1 block press                                      30,000
1 stone crusher                                     15,000

*It all begins with the block!*

If you’d like to help, please make your check payable to the Domestic and Foreign Missionary Society, annotate it for “Haiti – Building Blocks” and send it to The Episcopal Church Center, Development Office, 815 Second Avenue, New York, NY 10017 or contact Elizabeth Lowell, elowell@episcopalchurch.org, 212-716-6041.