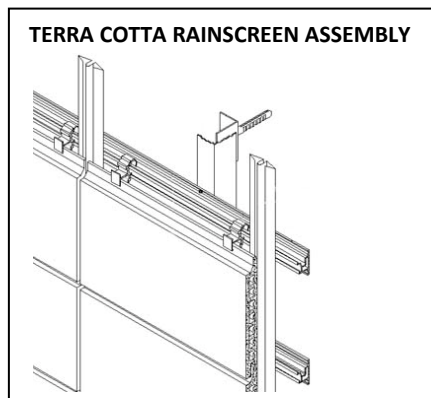


# Fort Belvoir Army Hospital Moves Rapidly Towards Completion with a Terra-Cotta Rainscreen Façade

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The Fort Belvoir Army Hospital, which is a state of the art Army Hospital containing 1.275 million square feet and intended to replace the Walter Reed Army Medical Center, is rapidly proceeding and will be completed by mid 2011. This facility is an "Ikon" project designed by HDR/Dewberry Joint Venture and construction contractor Turner/Gilbane Joint Venture and will cost \$806.9 million dollars. The state of the art facility features 120 in-patient beds, as well as primary and specialty care clinics and 3,500 parking spaces. It is an integrated-design, bid, build project that is to have a minimum 50 year life cycle.



The designers and Owner (the U.S. Army Corps of Engineers) chose a terra cotta pressure equalized and back-ventilated façade because it gave them a warm attractive and modern façade that fit in well with the many brick buildings on the Army base while projecting the design intent of a state of the art health care facility. Also, leading hospitals have been moving toward the rainscreen system as a method of dealing with the vastly increased performance requirements for medical and laboratory buildings.

Properly constructed rainscreen systems will eliminate leaks of air and water through the building façade which will save the Owner substantial amounts of money in energy savings. The open joints also allow the hospital to use less air conditioning and emit less carbon dioxide emissions into the atmosphere. Since there are no sealants or gaskets in the system used on Fort Belvoir, the façade should last for 80 to 100 years which is substantially more than the 50 year requirement.

However, hospitals are about delivering the best health care to their patients. The rainscreen system eliminates condensation, mold and mildew from inside the wall cavity because the moisture can escape through the open joints to the outside. Since wet places allow hospital germs to grow and multiply, their elimination can provide a healthier environment and better outcomes for immune deficient patients. Asthma sufferers are known to be adversely affected by mold and mildew also.



The performance and health benefits result in an attractive, modern facility that saves energy and will endure for a long period of time while helping to ensure the best outcomes for its' patients. This building will also meet silver LEED (Leadership in Energy and Environmental Design) as defined by the U.S. Green Building Council.



Shildan and Moeding are proud to be playing a role in building this state of the art hospital.