



MODERN ARCH STRUCTURES, LLC

PRODUCT SPECIFICATION FOR THE PROCUREMENT OF BUILDINGS

The Building shall be constructed of 100% monolithic concrete with a thickness no less than 4" and no more than 8". Except the slab may be poured separately and must itself be monolithic but need not be monolithic to the portion of the Building above the slab. The embedded re-bar shall be #3's or #4's and any supports used during construction must remain entirely within the exterior concrete substrate. The Building must have an integrated roof and not require any extra roofing material to shed water. The Building must be demonstrated to meet or exceed environmental and sustainability requirements. The Building must be capable of being built with or without insulation, and when insulated it must meet or exceed an equivalent R60 rating. Insulation must be able to be applied during construction or years later with no adverse consequences to the structure including the opening up or tearing down of interior walls or partitions. The Building must be resistant to all forms of natural disasters and be fire proof (not able to sustain combustion) as well as survive a 30 minute 1200 degree fire of the interior contents at the maximum allowed loading capacity, without structural damage. The Building must be warranted for a minimum of 20 years for structural integrity. The Building shall not require any periodic maintenance in excess of .0125% of its cost of construction in any of the year one through twenty. The Building must have an expected life of 200 years. No materials other than concrete and steel shall be used in the construction excepting that plastic re-bar chairs may be used during construction so long as they are re-usable or remain embedded in the concrete and provide a desired functional use after completion. The construction time shall not exceed 7 days for the exterior shell and 7 additional days for an interior using a 4 man crew working no more than 8 hours per day. The interior must not provide any structural support to the exterior structure such that the entire interior can remain with a clear span if so desired. The inside height of the exterior shell must be no less than 12' at its highest point with an average high in excess of 9.8 feet. The Building must be capable of accepting all grades of windows/doors and shall not be built with a window/door buck or frame, unless such frame is formed during construction from concrete. Any forming material used during construction must be re-usable and there shall be ZERO waist of any material used for construction only or remaining in the Building after construction. The Building must come in two sizes, either 570 sq. ft. or 1300 sq. ft. and each size must be able to be connected to the other to make larger structures with no limitations on size or configuration. The Building must have square corners with no limitations on floor plans. The Building must be able to be built using 100% local and indigenous labor and supplies except for tools that are not currently manufactured in the local area. All material must be considered Green under internationally accepted standards. The exterior aesthetics must be customizable to mimic any standard construction design. Such customization must be able to be done with no additional cost of material.

The Building shall be a MAS-570™ or MAS-1300™ licensed from Modern Arch Structures.