KRATOS™ vs. BLOCK

(ANALYSIS OF A 2000 SF HOME)

October 1, 2020

1 INCREASED SPEED OF CONSTRUCTION. Cycle time is reduced by several weeks during the Shell erection stage. Exterior walls, trusses, sheathing and interior partitions are completed in record time.

a. Because of the lightweight material, you do not have to wait for curing time before stacking block, allowing the crew to start erecting the structure within 24 hours after pouring the foundation

b. 3 to 4 days total time for exterior wall, roof trusses, and interior partition installation with small crew of 5 to 6 workers

c. No intermediate inspections for reinforced concrete, lintels, etc.

d. No concrete trucks or pumps to pour tie beams or cells

e. No waiting or stripping of beam forms

f. Trusses and walls can be hand set, no crane in most cases

g. Shell and interior partitions are ready for trades, no need for furring strips or batt insulation

h. Exterior wall sheathing and insulation pre-installed, standard R-value @ R18.

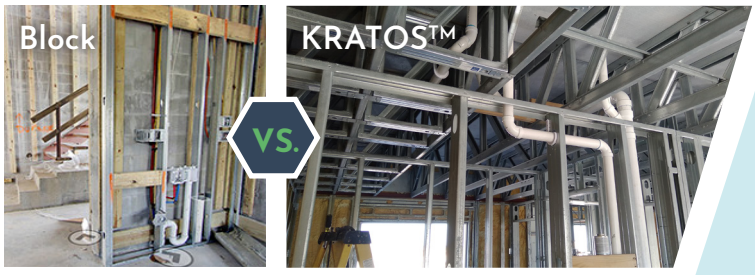
i. Hybrid technology provides advantage of pre-fab SIP-type panels, yet walls remain open and unobstructed from inside to facilitate strong connections, MEP trade work and inspections

j. All walls are pre-punched with electrical and plumbing service holes resulting in reduced labor and costs by MEP trades

k. Less skilled labor needed. No waiting for crews that are too busy and overworked

l. Fewer suppliers, trades, materials, and deliveries involved

m. Total approximate time savings of 10 to 12 working days



KRATOS™ WALL
STRONGER. GREENER. SMARTER. FASTER.

2 INCREASED CONSTRUCTION QUALITY.

a. All framing engineered and fabricated to 1/16" tolerances in factory

b. Steel walls will be both straight and plumb, allowing for a better smoother drywall installation that achieves a level 4 look without the extra costs

c. Steel trussed ceilings will be flat and consistent

d. Factory made window and door openings will be more consistent and squarer, reducing rework time chipping, cutting and adjusting the concrete openings

e. Closed Cell Polyurethane spray foam insulation provides more R-value per inch (~ 6.7R/inch), air and moisture barrier and increased structural rigidity

f. Method of attaching exterior sheathing to LGS structure eliminates thermal bridging. Penetrations and puncturing of the WRB, along with labor/materials associated with wrapping WRB/Tyvek, is eliminated

g. Insulation has almost no penetrations vs. fi-foil

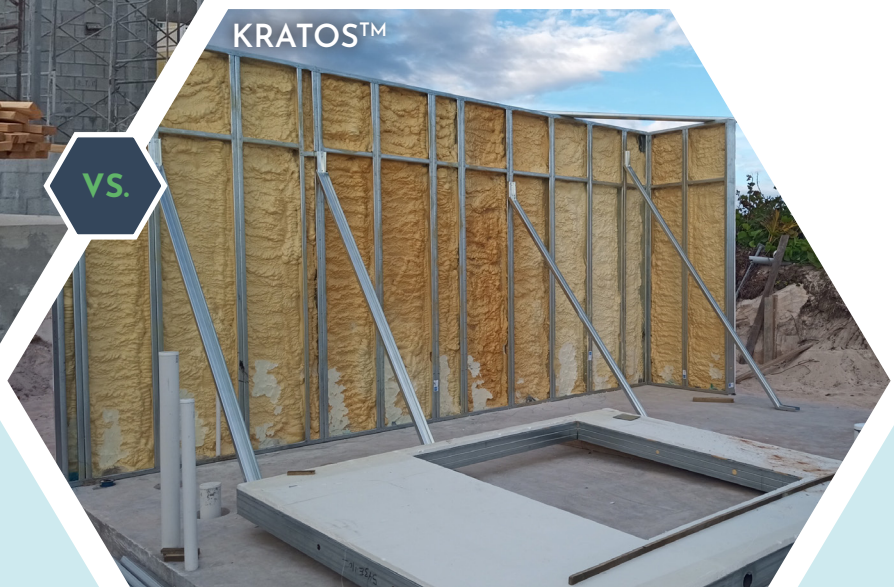
h. Panelized wall segments are custom designed to size and shape to facilitate installation and reduce number of connections/joints. Gables are integrated into walls below for added structural integrity and reduced exterior joints

i. Concrete floors stay cleaner and scratch free due to no masonry work or beam pour

j. Ability to design and engineer structures up to 200MPH wind rating with X4+ double-stud configurations for increased safety and differentiation in marketplace

k. Job site stays cleaner and less impacted. No masonry trucks, concrete trucks, etc.

VS.



3 INCREASED OVERALL SAVINGS.

a. Less debris/dumpsters. All metal and plastic waste can be recycled. A typical dumpster filled with concrete costs around $750

b. Due to light weight, foundation steel and concrete can be reduced, in many cases up to 33% less concrete and steel in the footers

c. 5,½" galvanized steel walls have plenty of room for electrical boxes and other rough-in mechanicals. No chipping out concrete labor or delays

d. Reduced cycle time, processes, trades, back-office transactions. Entire structure can be fabricated and shipped to jobsite in advance/during permitting.

e. No separate flashing, window bucks or trim application needed

f. Less AC tonnage required

g. Less expensive Builders Risk insurance.

h. Reduced footprint size (or increased living SF) due to thinner exterior walls. (approx. 3" of savings in wall thickness means 1SF additional living space for every 4 linear ft)

4 ENVIRONMENTAL & FINANCIAL SUSTAINABILITY FOR BETTER MARKETABILITY.

a. Low to no waste fabrication/framing process of <1%, turning junk cars and appliances into homes instead of cutting down our forests. 6 junk cars replaces cutting down 203 trees

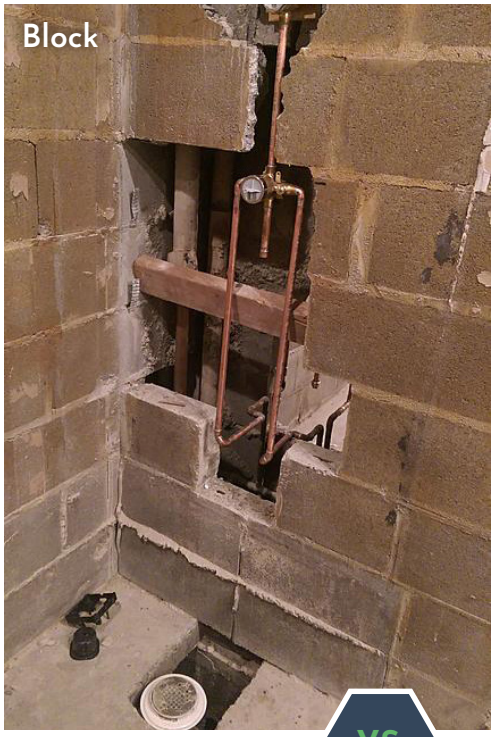
b. Reduced HVAC system sizes and better energy efficiency means lower CO2 footprint and electric bills. Typical savings in AC costs is 60% to 80% compared with traditional builds

c. Flexible R-value configurations in walls for any climatic region.

d. Steel Construction inhibits rot, mold, mildew, termites, insects and is fire-rated

e. Lower overall TCO (Total Cost of Ownership) due to energy efficiency, low/no maintenance, lower annual insurance rates due to non-combustible classification.

f. Technology facilitates Energy Star, FGBC, LEED certifications as desired/required



VS.