

Conex Evolution 2.0

Sustainable Development with ISBU Containers



ARCHITECTURE + INTERIORS + LANDSCAPES www.kineticdesignlab.com As the largest Import / Export Port in the United States, 1.6 mil (ISBU) Intermodal Steel Building Units enter the Port of Houston Every Year.

□ *ISBU's are suitable to fit the needs of the Building Industry, as they incorporate standard units of measure in 8'-0", 8'-6", 20', 40' and 53' dimensional sizes. These sizes are easily compatible with architectural and structural engineered systems and technologies such as; wood, steel and concrete building components.*

□ However, some challenges are presented when selecting ISBU containers to build with. Lending institutions are slow to adopt the technology, and local governing building codes and inspection officials are unfamiliar with them.



Design

Residential





Commercial





Boheme Café & Wine Bar





□ Commercial restaurant facility located in the Montrose neighborhood of Houston. New spaces included, but were not limited to; galley kitchen line, walk-in cooler, dry storage, restrooms, mechanical / electrical and janitor service rooms.

Deliberately scaled to fit the context of the existing neighborhood and relate to surrounding buildings, as well as provide elevated views to parts of the City not often taken advantage of.

Boheme Café & Wine Bar

Circulation through

spaces is also a key

UPPER LEVEL FLOOR PLAN

□ The floor plan is critical to developing a project that makes use of the additional constraint of working with a container structure.

LOWER LEVEL FLOOR PLAN

(5)



Boheme Café & Wine Bar

□ Spaces should be determined by the requirements of the occupants/users, as well as any/all equipment to be used in the space regardless of function (residence, machine shop, restaurant, etc...) HALL ╏╏╏╢╢╢╢╢ В W/C 010

□ Pay close attention to the size and swing direction of doors and equipment to avoid conflicts.



ENLARGED FLOOR PLAN

ENLARGED FLOOR PLAN

□ Try to select materials based on their feasibility and how they help to add to or compliment the industrial nature of the ISBU container structure. □ Color is an important part in the design of the building. It can help enhance or diminish the scale and volume of the exterior spaces.





E

Coordination of insulation materials, glass for windows and exterior door selections need to be specified for the best possible thermal performance and to limit radiant heat gain.

□ Foundation assemblies can utilize both slab on grade foundations, as well as pier & beam above grade foundations.



1,514 sq. ft. Residence 373 sq. ft. Deck



1,514 sq. ft. Residence 373 sq. ft. Deck



R-PANEL AT INTERIOR WALL OF CONTAINER STRUCTURE

PERMITER STEEL CHANNEL, BOLTED TO SLAB TO MEET WIND LOADING REQUIRMENTS



WATER LINES AND DRAIN PENETRATIONS FOR HAND SINKS, TYPICAL

90 deg. ANGLE CONNECTION AT CORNER DETAIL

METAL CHANNEL STUDS AT FLOOR, TO BE FOAM INSULATED AND COVERED WITH 1 1/4" WOOD DECKING



TRADITIONAL COLD FORMED METAL HEADER AND JACK STUD FRAMING AT OPENINGS, TYPICAL

TRADITIONAL BREAKER PANEL BOX FOR ELECTRICAL



INTERIOR CEILING OF CONTAINER STRUCTURE

TRADITIONAL COLD FORMED METAL STUDS TO FURR OUT WALL FOR; <u>MECH., ELEC. and</u> <u>PLUMBING REQUIRMENTS</u>

1 ¹/₄" TOUNGE & GROVE WOOD FLOORING TO BE COVERED WITH COLORED EPOXY FINISH











Kinetic Design Lab ARCHITECTURE + INTERIORS + LANDSCAPES t: 713.898.2042

e: <u>kineticdev@msn.com</u> www.kineticdesignlab.com