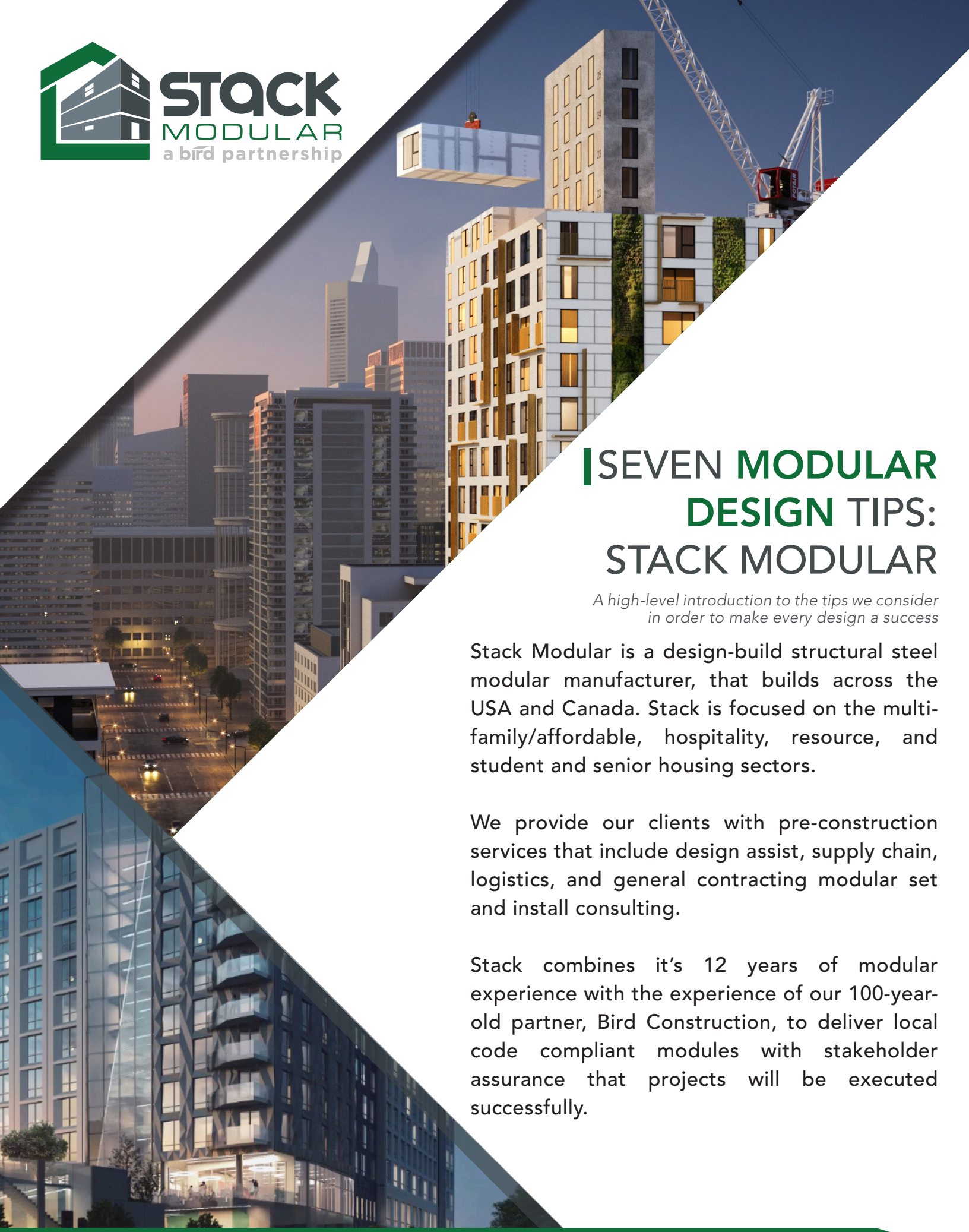
STACK MODULAR
a bird partnership



SEVEN MODULAR DESIGN TIPS: STACK MODULAR

A high-level introduction to the tips we consider in order to make every design a success

Stack Modular is a design-build structural steel modular manufacturer, that builds across the USA and Canada. Stack is focused on the multi-family/affordable, hospitality, resource, and student and senior housing sectors.

We provide our clients with pre-construction services that include design assist, supply chain, logistics, and general contracting modular set and install consulting.

Stack combines it's 12 years of modular experience with the experience of our 100-year-old partner, Bird Construction, to deliver local code compliant modules with stakeholder assurance that projects will be executed successfully.

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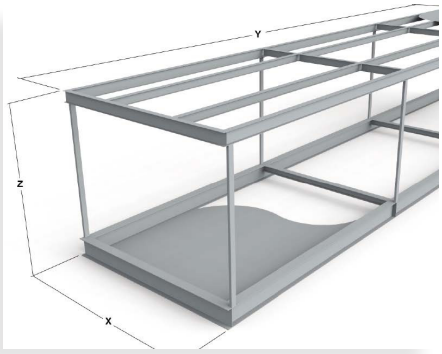
standardized sizes

01.

Aim to use the same steel module sizes. Where this isn't possible, try to keep the module sizes for a particular project to 5 or less. Design using the largest module sizes possible.

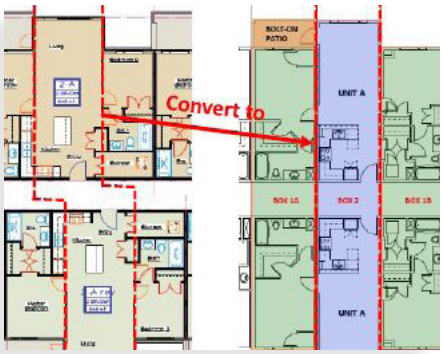
Module sizes are typically no greater than 4.40m x 22.8m x 3.66m [14'-5" x 75' x 12'] (W x L x H) outermost dimensions.



internal **alignment**

02.

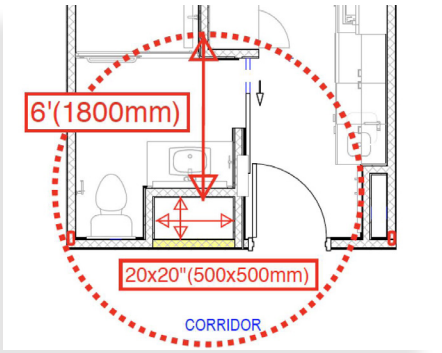
Do not have module seams cutting through mechanical or elevator shafts, door or window frames, millwork or cabinetry, or bathrooms.



service **shaft placement**

03.

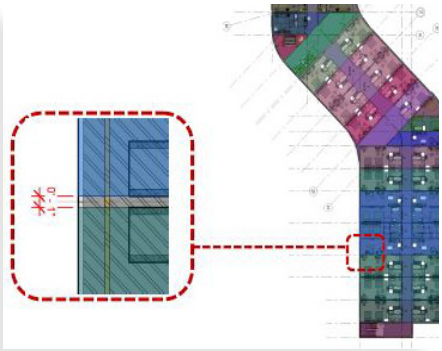
All wet modules and most gas modules require a mechanical shaft in the module. Place shafts along corridors and keep plumbing fixtures within 1800 (6ft). Begin with a 500mm x 500mm (20in x 20in) clear space for shaft.



space between modules

04.

Allow a 25mm (1in) air gap between modules to ensure the proper tolerance when placing modules.



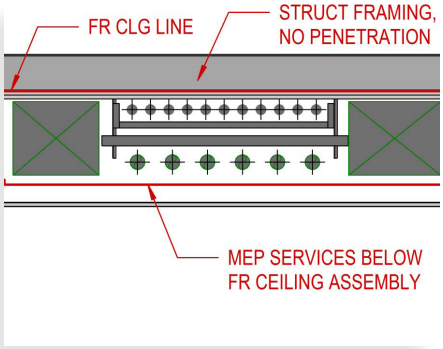
| at a **glance**

innovative modular buildings | manufacturing **precision** to suit clients specific requirements | leveraging **global** supply chain | superior steel frames for **asset longevity** | verified compliance and **stringent quality** control

standard **piping** & **ductwork**

05.

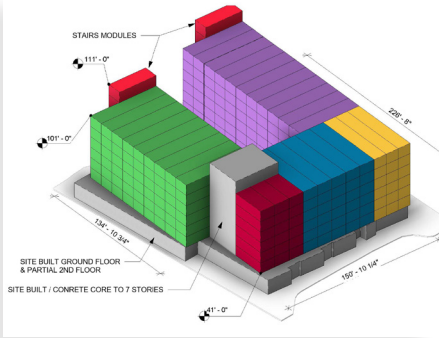
Keep sprinklers, plumbing, and ductwork out of the module's fire rated ceiling assembly.



site built / **concrete core**

06.

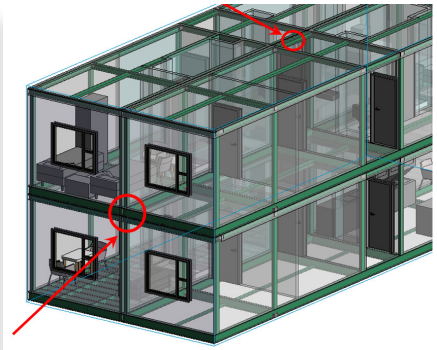
Try and place services rooms, gyms, laundry, and storage rooms in the conventionally-built portions of the design to limit odd modules, which slow design and manufacturing. Concrete cores typically required in high seismic areas and buildings over 6 stories.



structural **connections**

07.

Keep structural connections accessible.



STACK MODULAR **OVERVIEW**

40

Up to 40-storeys of structural steel modules

30-50%

Reduction in schedule

18 days

To ship to North America's west coast

100 years

Building projects across Canada and USA