

ARCHITECTURE A4859

PRE-FAB, MODULAR AND FLATPACK

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Mondays, 11:00 AM – 1:00 PM

412 Avery

In 2008 MoMA published and exhibited the comprehensive catalogue and exhibition: *Home Delivery: Fabricating the Modern Dwelling*, curated by Barry Bergdoll and Peter Christensen. Building upon this significant resource, this seminar will look at developments from 2008 to today, examining and researching new projects and developments utilizing three methods, **Prefab, Modular and Flatpack** fabrication and design, from product to process.

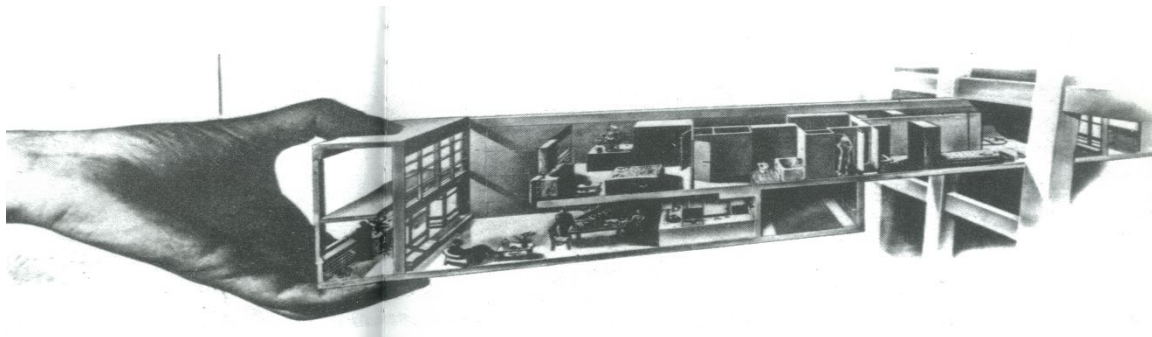
We will become familiar with the history of exemplary Prefab, Modular and Flatpack processes and projects to date; and focus on recent developments evolving in the last ten years. To this end, the seminar material will be assembled into a Database for subsequent publication by the Public Design Commission*. From the Database a number of current key projects will be selected as “case studies” to be analyzed and documented more extensively looking at “pros and cons of various methodologies and their design and construction processes.

As with other densely populated and expanding urban metropolis's; New York City is currently looking to pre-fab/modular/flat pack methods to expedite building processes. As viable alternatives to traditional building methodologies and construction; this research would explore how these types of construction impact the "bureaucratic flow chart" so to speak- of design, construction, approvals, etc. Current conversation at NYC have been discussions for design-build projects – as methods for expediting construction; and to look at how these three methods might be viably deployed in the NYC building landscape.

The Center for Architecture is a second venue for socializing these issues with the Profession and interested communities. The long term goal of the database project would be to build a reference for architects, users and our agency partners for how prefab/modular/flatpack can be applied to not only housing, but also other building types and utility structures.

*The New York City **Public Design Commission**, known legally as the **Art Commission**, is the agency of the [New York City government](#) that reviews permanent works of architecture, landscape architecture, and art proposed on or over city-owned property. The Commission comprises 11 members and includes an architect, landscape architect, painter, sculptor, and three lay members, as well as representatives of the Brooklyn Museum, Metropolitan Museum of Art, New York Public Library, and the Mayor.

** Pre-fab, Modular and Flat-pack would be the second in a series following: [Designing New York: Quality Affordable Housing](#) a collaboration of the New York City Public Design Commission, The Fine Arts Federation of New York, and the American Institute of Architects New York Chapter.



Unite D'Habitation, Le Corbusier illustration of single unit illustrating wine rack analog

WORKING DEFINITIONS:

Prefab is a broad term that encompasses several different types of building. Technically, any home that has sections of the structure built in a factory and then assembled on site can fall under the “prefab” designation. Both Modular and Panel Built fall under the umbrella term of prefab, but just as different types of dogs are all canines but differ from each other, Modular and Panel Built both qualify as prefab, but are still different.

Flat Pack/ Panel Build Panel building is accomplished by laying down the floor and then lowering each section of wall in to place one at a time. This type of construction can be useful in building houses that don't work neatly as modules and it can be just as structurally sound as other types of prefabricated building. Commercial prefabricated building is often done this way as it allows for wide open spaces and high ceilings. It is also much less expensive to transport a building in panels than in modules if it is large enough.

Modular With modular building, the house is constructed in separate box-like modules which are then secured together to form a whole. Since the modules have to be transported on the backs of flat-bed trucks over highways, they generally have to be no longer than the truck and no wider than 16'. This traditionally meant that every room in the house had to be less than 16' wide, but with new technology, old barriers in modular building are breaking down and houses are becoming infinitely customizable.