

flexDorm, ACUHO-I 21st Century Project

*Grand Prize winner of national competition
project for the future of the american campus*

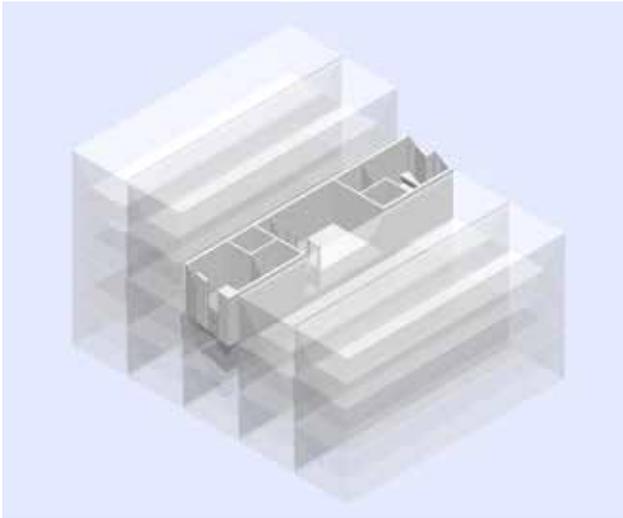


The 21st Century Project of the Association of College and University Housing Officers–International (ACUHO-I) is a multi-phased initiative leading to the construction of a new, state-of-the-art residential facility for colleges and universities. Through the flexDorm proposal, JLA continues to consider the future role of campus housing in helping to advance the excellence of American teaching, learning and research.

Recognition

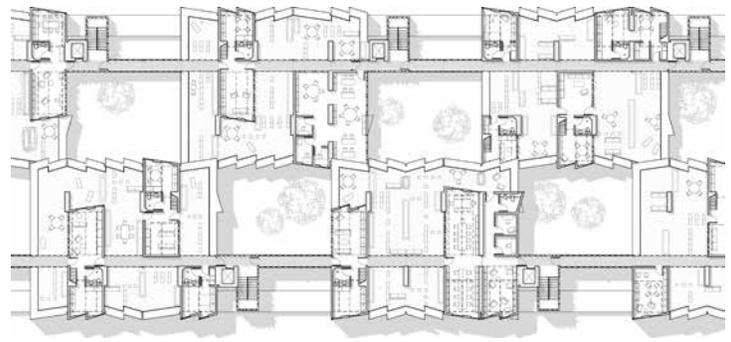
- Grand Prize Design Award, 2007 21st Century Project National Design Competition, Association of College and University Housing Officers (ACUHO-I)
- Architectural Record, "Competition Rethinks Student Housing for the Echo-Boom Generation", Alan Brake, April 2007, p40
- "College Dorms Get High-Tech Treatment", Peter Schworm, The Boston Globe, September 2, 2007, ppB2, B7



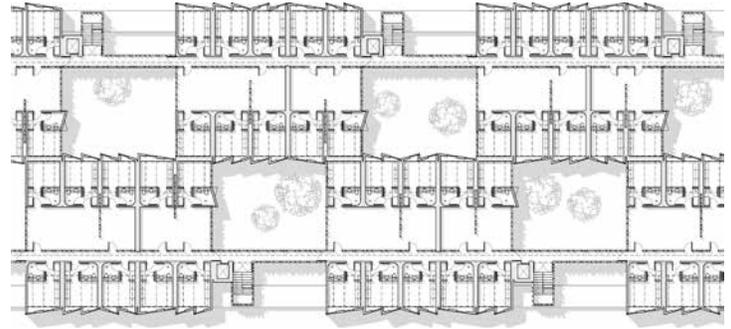


Modular Construction Cells

The building block of flexDorm is the 14'w x 10'h x 54' long prefabricated module consisting of two student rooms with intermediate corridor section and common area. Modular construction eliminates tedious on-site labor, increases quality control, decreases costs and streamlines schedule. Necessary void spaces between walls and floors provide superior air and structure borne acoustic isolation. Intermediate voids are also used to route mechanicals and provide continuous stack plenums for natural convection ventilation.

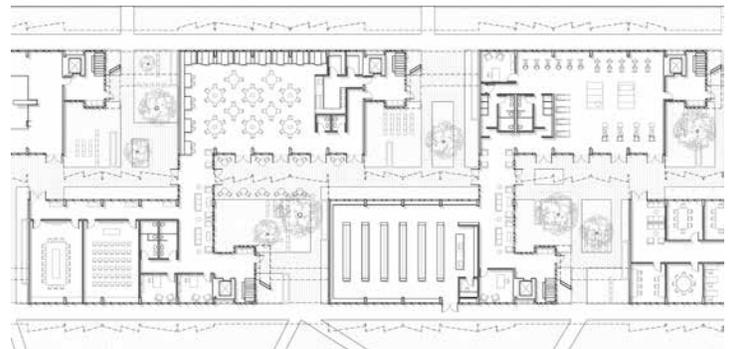


Roof Plan



Typical Floor Plan

The typical corridor and room relationship geometries combined with moveable partitions enable the variable programming of a shared common zone as: private living; kitchen; private dining; private conference; public lounge; public dining; group study or recreational space.



Ground Floor Plan

The open ground floor areas can be developed from year to year to compliment the complexion of the varying unit mixes above and might include: academic instruction space; faculty offices; large media resource study lounges; dining commons; fitness or convenience retail uses. The courtyards are scaled to promote open air study and informal scholarly discourse.



flexTrolley

Maximum room lay-out flexibility is enabled by a system of moveable modular wall pieces. Combined with conventional furniture, these space-maximizing tools allow the individual student the ability to find her own balance of living, learning, group learning, dining and relaxation (above, single bed trolley).

flexPlan

Modular room dimensions together with mobile modular furniture types allow students a full range of options in setting up their room layouts. Room dimensions facilitate natural daylighting and allow for comfortable single or double occupancy lay-outs with or without food prep (at left, Conventional Double). The unit incorporates future materials such as 'switchable mirror glass' and smart wall projection.



flexSuite

Moveable pocket walls and additional door locations allow for multiple configurations of room suites and public lounges. An entire range of unit types can be created depending on year-to-year student roommate preferences, eliminating forced sharing or unintended singles. A sampling of possibilities is shown above.

Design Solution

flexDorm is a new type of college and university housing, designed to free students, faculty/administrators and college planners from the limitations of prescribed programming. Rather than forcing living and learning configurations into a predetermined building package, flexDorm's multi-level versatility allows for continuous adaptation to current needs.

For students, flexDorm offers almost limitless lifestyle and learning possibilities. For any given semester, the dorm set-up can reflect a broad range of unit type mixes. Possible private bath unit type configurations with differing price points include singles, singles with living area, doubles with living area, triples quads, five and six-student suites. Using 'mini-doubles' with semi-private baths, capacity can be doubled while still retaining individual sleeping privacy and without resorting to stacked beds. All types can be configured with or without in-room cooking and can therefore be easily tailored to undergraduate, graduate or faculty lifestyles.

For faculty/administrators, flexDorm minimizes the risks of year to year planning while allowing the freedom to experiment with alternative living/learning models. The typical corridor and room relationship geometries, combined with moveable partitions, enable the variable programming of shared common zones. At the campus level flexDorm's ground floor is based on the concept of open plan lease space intermixed with intimate-scaled academic courtyards.

The adaptability of flexDorm means that university planners have an additional tool to use in responding to the changing long-term demographics and educational priorities of their institutions. Especially important is the flexibility of its common spaces to adapt to evolving informal and group learning pedagogies. As campuses grow and evolve, fixed real estate changes in its relationship to other campus components. flexDorm was designed for multiple institutional scenarios including undergraduate, graduate, faculty housing, and conference housing.

flexDorm technology incorporates advanced construction techniques as well as anticipating materials and technology which may arise in the future. The housing's modular construction cells are based on the dimensions and assembly method of modular home technology. This method allows a majority of off-site construction to maximize factory quality control methods while reducing unpredictable on-site construction labor and pricing conditions. Construction schedules can be dramatically reduced and resulting project soft costs minimized. The building construction incorporates future materials such as 'switchable mirror glass', smart wall projection and parts-free floating heating and cooling valances. Ecologically responsive features include: interlocked windows to prevent cooling loss, stack ventilation chases, semi-conditioned public spaces, prefabrication waste minimization, green roof and courtyard stormwater retention.

More than a functional tool for accommodating daily, yearly and generational changes in use, flexDorm is on the vanguard of changes in the way institutions of tomorrow will conceive of the pursuit, dissemination and conservation of knowledge. The flexDorm will be a beehive of myriad complex interconnections, unplanned in the details of its configurations but ready to serve the future through its rich variability.

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Client The 21st Century Project of
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