MEMORANDUM FOR HEADQUARTERS, INSTALLATION MANAGEMENT AGENCY,  
2511 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA 22202-3926

SUBJECT: Revised Barracks Construction Criteria


2. We are making four changes to the barracks construction criteria to:
   a. establish the two-bedroom/one bath module as the standard module;
   b. require installation of a stove or cook top;
   c. require laundries in the barracks; and
   d. eliminate the separate soldier community building.

Request widest dissemination of the revised criteria.

3. The OACSIM POC is Mr. George Mino, P.E., DAIM-FDH-U, 703-428-7708, 
george.mino@hqda.army.mil; and the HQUSACE POC is Mr. Jeffery Hoaghouse, AIA, 
CECW-E, 202-781-5903, jeffery.t.hoaghouse@hq02.usace.army.mil.

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Major General, GS
Assistant Chief of Staff
for Installation Management
Co-Chairman
DA Facilities Standardization Committee

CARL A. STROCK
Major General, USA
Director of Military Programs
Co-Chairman
DA Facilities Standardization Committee

2 Encls
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<thead>
<tr>
<th>Item</th>
<th>Previous Criteria</th>
<th>New Criteria</th>
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<tbody>
<tr>
<td>Barracks and Support Spaces, Gross Area - Includes Soldier Community Facilities</td>
<td>Max 34 SM (366 SF) per space, or max 36 SM (388 SF) for barracks over 3-stories, or to meet site-specific requirements.</td>
<td>No change (limits set by Office of the Secretary of Defense)</td>
</tr>
<tr>
<td>Barracks Room, Net Area</td>
<td>Garrison Cmdr discretion: Max 17 SM (183 SF) Min 13 SM (140 SF) except for Korea Modified 2+0 (8.4 SM or 90 SF)</td>
<td>No change (upper limit set by Office of the Secretary of Defense)</td>
</tr>
<tr>
<td>Barracks Module, Gross Area</td>
<td>Limited only by OSD cap on total gross area (34 or 36 SM per space)</td>
<td>No change</td>
</tr>
<tr>
<td>Module Configuration</td>
<td>Garrison Commander discretion to select private modules (for any rank) or 2, 3, or 4-bedroom modules.</td>
<td>2-bedroom module with a kitchen and one bathroom. Module will be designated as 1+1 Enhanced (1+1E).</td>
</tr>
<tr>
<td>Soldier Community Building (SCB)</td>
<td>Downsize or delete</td>
<td>Integrate community functions into barracks buildings.</td>
</tr>
<tr>
<td>Cooking Facilities in each Barracks Module</td>
<td>Add a stove or cook top (optional outside U.S.), or design to make it easy to add in the future.</td>
<td>Stove or cook top, and a microwave oven required in each 1+1E module. With a cook top, provide convection microwave.</td>
</tr>
<tr>
<td>Barracks Room Closet, Net Area</td>
<td>U.S. - Approx 3 SM (32 SF) Outside U.S. – Max 2 SM with separate bulk storage, or max 3 SM if bulk storage in closet</td>
<td>No change</td>
</tr>
<tr>
<td>Bulk Storage (personal)</td>
<td>U.S. – Delete (replaced by larger closet) Outside U.S. – Garrison Commander discretion</td>
<td>No change</td>
</tr>
<tr>
<td>Laundries</td>
<td>Garrison Commander discretion to locate in each module, each floor, each barracks, or SCB</td>
<td>Provide a washer and dryer in each module, or shared laundries with at least one per floor.</td>
</tr>
<tr>
<td>Other support functions: CQ desk, lobby, activity rooms, mailroom, vending, pay telephones, mud room, etc</td>
<td>Garrison Commander discretion to select needed functions and locations</td>
<td>No change</td>
</tr>
<tr>
<td>Configuration and Exterior Appearance</td>
<td>Garrison Commander discretion to make similar to private sector housing</td>
<td>No change. Building configurations can include mid-rise, low-rise, garden apartments, town homes.</td>
</tr>
<tr>
<td>Module Access</td>
<td>New barracks shall not have windows opening to an exterior corridor (balcony) or landing</td>
<td>No change</td>
</tr>
<tr>
<td>Technical Design Criteria and Standards</td>
<td>Industry standards except where military standards are required to meet specific operational needs</td>
<td>No change. Use appropriate methods and materials for occupancy to achieve economy.</td>
</tr>
<tr>
<td>Acquisition Method</td>
<td>Maximize use of design-build and explore other alternative acquisition procedures such as privatization</td>
<td>No change</td>
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GUIDANCE

Applicability: These revised criteria apply to new MCA-funded barracks, starting with FY 2005. The criteria can also be used for new barracks added by Congress to the FY 2004 MCA program, if practical. Barracks renovations starting in FY 2004 should also strive to incorporate the new criteria to the maximum extent feasible.

Barracks and Support Spaces, Area: There is no change in the overall gross area limits of the barracks and support areas (including soldier community functions) established by Sec Def memo of 6 November 1995.

Barracks Room, Area: There is no change in the maximum room area of 17 SM (183 SF) per Dep Sec Def memo of 25 June 2001. Also, the Army minimum remains unchanged at 13 SM (140 SF).

Barracks Module, Area: There continues to be no limitation on the size of the module per Dep Sec Def memo of 25 June 2001.

Module Configuration: The main reason for this revised guidance is to establish the two-bedroom / one bath (1+1) module as the standard configuration throughout the Army for new construction. The only exception is in Korea, which has a Sec Army waiver to construct modified 2+2 modules.

Since the VCSA issued new barracks criteria by memo of 11 Jul 2002, feedback has been received that shows private modules are not practical because of the OSD gross area limits. Additionally, private modules would double the number of bathrooms (creating a maintenance burden), make the goal of having laundries in each module economically infeasible, and impede social interaction. Private modules also would allow no distinction between the type of housing offered to a Private or Staff Sergeant. Whereas with a 1+1 module, the entire module is programmed for a NCO (from a construction standard perspective).

The four-bedroom module is also no longer an authorized option largely because of feedback that it would be a step backward in terms of privacy. While the module does offer the advantage of a larger shared area with a kitchen and laundry, there are concerns that it would be used effectively based on experience in the past with multiple bedroom VOLAR modules. Also, only a limited number of building configurations can accommodate four-bedroom modules.

The two-bedroom / one bath module with the larger rooms and closets will be designated as a 1+1E module (for enhanced) to differentiate it between the original 1+1 module.

Soldier Community Building (SCB): Since these criteria revisions eliminate the option for a central laundry for multiple barracks buildings, a separate soldier community building is no longer authorized. Accordingly, communal functions should be integrated into the barracks buildings, and minimized to free up more personal space.
Cooking Facilities: All new or renovated 1+1 barracks modules shall either have a stove or cook top in each barracks module, along with a microwave oven. If a cook top is provided, then the microwave oven needs to be capable of convection cooking. The preferred configuration includes a combination microwave oven / range hood (ducted to the outside) above the stove or cook top.

Bulk Storage & Barracks Room Closets: There is no change to the 11 Jul 02 VCSA criteria.

Laundries: A central laundry for multiple barracks buildings is no longer authorized. The preference is to have a full size washer and dryer in each 1+1 module. If not practical, then each barracks building shall have at least one shared laundry per floor.

Other Barracks Support Functions: There is no change to the 11 Jul 02 VCSA criteria.

Configuration and Exterior Appearance: There is no change to the 11 Jul 02 VCSA criteria.

Module Access: The previous criteria need reemphasis. New barracks designs can use any type of module access found on private sector, long term rental housing such as interior corridors, interior breezeways, central stairwells (garden apartments), ground level walk-up entrances, etc. Exterior wrap-around balconies are not authorized, as well as any other configuration that has barracks windows opening to corridors or stairwell landings. This limitation is required to avoid comprising privacy, physical security, command & control, and anti-terrorism/force protection.

Technical Design Criteria and Standards: There is no change to the 11 Jul 02 VCSA criteria.

Acquisition Method: There is no change to the 11 Jul 02 VCSA criteria.

Documents on Web – This memo can be viewed on the ACSIM Facilities & Housing website - http://www.hqda.army.mil/acsimweb/fd/construction/milconbar.htm
MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: New Barracks Construction Criteria

1. Consistent with the Army's transformation, barracks construction criteria have been revised to improve soldier well-being and provide a better value to the Army. The new criteria are less restrictive and incorporate industry standards in order to provide improvements at no additional cost to the Army. These changes resulted from a comprehensive barracks review and survey conducted by the Assistant Chief of Staff for Installation Management and the Army Corps of Engineers.

2. Our single soldiers deserve the best housing we can provide. This new barracks design philosophy will allow commanders greater flexibility to transform barracks into living quarters that more closely resemble those in the private sector. Barracks remain the Army's top facilities priority because of their impact on well-being and readiness. I strongly endorse these changes.

[Signature]

JOHN M. KEANE
General, U.S. Army
Vice Chief of Staff

3 Encls
1. New Army Barracks Construction Criteria
2. Memo, Dep Sec Def, 25 Jun 01
3. Memo, Sec Def, 6 Nov 95

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ENCL 2
SUBJECT: New Barracks Construction Criteria

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Chief, United States Army Center for Military History
Superintendent, United States Military Academy
Commandant, United States Army War College
Director, Center for Army Analysis
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<tr>
<td>Barracks and Support Spaces, Gross Area - Includes Soldier Community Building (SCB)</td>
<td>Max 34 SM (366 SF) per space, or max 36 SM (388 SF) for barracks over 3 stories, or to meet site-specific requirements.</td>
<td>No change (limits set by Office of the Secretary of Defense)</td>
</tr>
<tr>
<td>Barracks Room, Net Area</td>
<td>1+1: 11 SM (118 SF) 2+0 (Korea): 8.4 SM (90 SF)</td>
<td>Garrison Commander discretion: Max 17 SM (183 SF) Min 13 SM (140 SF) except for Korea 2+0, which is 8.4 SM (90 SF)</td>
</tr>
<tr>
<td>Barracks Module, Gross Area</td>
<td>Max 47 SM (506 SF) for each 1+1 module</td>
<td>Limited only by OSD cap on total gross area (34 or 36 SM per space)</td>
</tr>
<tr>
<td>Private Modules</td>
<td>Only for NCO's</td>
<td>Garrison Commander discretion to authorize for any rank</td>
</tr>
<tr>
<td>Soldier Community Building</td>
<td>U.S. – Required Outside U.S. - Optional</td>
<td>Downsize or delete</td>
</tr>
<tr>
<td>Cooking Facilities in each Barracks Module</td>
<td>Microwave oven</td>
<td>Add a stove or cook top (optional outside U.S.), or design to make it easy to add in the future</td>
</tr>
<tr>
<td>Barracks Room Closet, Net Area</td>
<td>U.S.- Approx 2 SM (21 SF) Europe: 2 SM (21 SF) Korea (2+0): 0.6 SM (7 SF)</td>
<td>U.S. - Approx 3 SM (32 SF) Outside U.S. – Max 2 SM with separate bulk storage, or max 3 SM if bulk storage in closet</td>
</tr>
<tr>
<td>Bulk Storage (personal)</td>
<td>U.S. - In SCB Outside U.S. - In barracks</td>
<td>U.S. – Delete (replaced by larger closet) Outside U.S. – Garrison Commander discretion</td>
</tr>
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<td>Laundries</td>
<td>U.S. - In SCB Outside U.S. - In a central location in the barracks</td>
<td>Garrison Commander discretion to locate in each module, each floor, each barracks, or SCB</td>
</tr>
<tr>
<td>Other support functions, e.g., CQ desk, lobby, activity rooms, kitchen, mailroom, vending, pay telephones, mud room</td>
<td>U.S. - In SCB Outside U.S. - In a central location in barracks</td>
<td>Garrison Commander discretion to select needed functions and locations</td>
</tr>
<tr>
<td>Configuration and Exterior Appearance</td>
<td>Large multi-story, masonry buildings (barracks)</td>
<td>Garrison Commander discretion to make similar to private sector housing</td>
</tr>
<tr>
<td>Module Access</td>
<td>No restrictions</td>
<td>New barracks shall not have windows opening to a balcony or landing</td>
</tr>
<tr>
<td>Technical Design Criteria and Standards</td>
<td>Military standards (often exceeding industry standards and codes)</td>
<td>Industry standards except where military standards are required to meet specific operational needs</td>
</tr>
<tr>
<td>Acquisition Method</td>
<td>Mostly design-bid-build</td>
<td>Maximize use of design-build and explore other alternative acquisition procedures such as privatization</td>
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BACKGROUND

Applicability: These criteria apply to new MCA-funded barracks, starting with FY 2003. The criteria can also be used for new barracks added by Congress to the FY 2002 MCA program, if practical. Barracks renovations starting in FY 2003 should also strive to incorporate the new criteria to the maximum extent feasible.

General Design Philosophy: As the Army's force structure, doctrine, and equipment are transforming, so must barracks to keep pace with the changing expectations of soldiers. Excellent housing for single soldiers is critical to maintaining the quality force the Army needs to maintain its superiority in this dynamic environment. The best way to do this is to make barracks more like private sector housing, and to provide the flexibility to adapt to constant change.

Mid-Program Review: The modernization of the barracks complexes where permanent party soldiers live and work is the most important facility initiative in the Army. In light of the huge remaining commitment for this program, the Army initiated a comprehensive barracks mid-program review in November 1999. In February 2001, a joint OACSIM and HQUSACE Barracks Team issued a report that provides ample support for a new barracks design strategy that eliminates restrictive criteria and incorporates, to the greatest extent practical, industry standards for both functional and technical criteria. The report included results of a comprehensive survey of over 2,000 soldiers, 300 unit leaders, and 100 public works personnel. With less restrictive functional criteria, the Army will obtain more value and increase soldier well-being by allowing barracks to more closely resemble economical commercial housing such as apartments, hotels, extended stay suites, condos, college dormitories, or residential type housing. The report is at http://www.hqda.army.mil/acsimweb/fd/construction/milconbar.htm

OSD Approval: To allow more flexible barracks criteria and to incorporate many of the recommendations in the Barracks Complex Mid-Program Review Report, the Army sought and obtained relief from restrictive OSD criteria. The Deputy Secretary of Defense issued a memorandum dated 25 June 2001 (Encl 2) that:
- Increased the maximum room size from 11 SM to 17 SM.
- Deleted the module limit of 47 SM.
- Allowed the option for private modules.

The above changes were approved under the assumption that they would not increase program costs because they merely provide flexibility to redistribute the space that is currently authorized for new barracks projects. Making greater use of industry standards will offset the cost of any additional amenities.

Standard Criteria versus Standard Designs: The previous barracks standard designs required compliance with a few types of designs with little, if any, opportunity for innovation or adaptation to local conditions. Several years of experience with the standard 1+1 barracks designs have identified many lost opportunities for improvement. Therefore, it was clear that the new criteria should only establish broad design
parameters to allow installations and their design agents the flexibility to maximize innovation, soldier well-being, and value. This flexible design strategy has been a resounding success for over 20 years of family housing construction.

**Private versus Common Areas:** The new criteria gives commanders the flexibility to design barracks with an appropriate balance between private and common areas, depending on local circumstances. Within the overall gross area limits established by OSD, the barracks can now be designed to increase the size of the modules at the expense of common areas, if commanders believe the common areas are not being used enough or present a control and maintenance burden. Private areas can also be enlarged by reducing the space needed for circulation and utility systems.

**Additional Facilities:** New criteria will be issued separately for the other facilities in a barracks complex including brigade headquarters, battalion headquarters, company operations facilities, and dining facilities.
GUIDANCE

Barracks and Support Spaces: The new criteria issued by the Dep Sec Def in June 2001 (Encl 2) does not increase the overall gross area limits of the barracks and support areas (including soldier community buildings) established by the Sec Def in November 1995 (Encl 3). There was little support for increasing these limits because of concern it would lead to program cost growth. However, the Dep Sec Def June 2001 memo did provide the Services with the flexibility to allocate the area as they see fit, which allows the soldier's private space to be enlarged (rooms and modules).

Barracks Room: Although the barracks survey showed that 45% of soldiers were either satisfied or very satisfied with the size of their room, 73% said they would give up the activity rooms in the soldier community building (SCB) to get a larger room. Also, a larger room was the second most desired improvement after an eat-in kitchen, but only by 2% points (and it was the most desired at 4 of the 10 installations). There are many reasons why the room should increase from 11 SM to 13-17 SM:

- In a two-bedroom Army Family Housing unit, the bedrooms have to be a minimum of 150 SF and 120 SF, respectively. Third bedrooms are supposed to 100 SF minimum. Also, per accepted architectural guidelines, primary bedrooms should be a minimum of 120 SF.
- Note that the above limits apply only to sleeping areas. Considering that barracks rooms are living/sleeping rooms, 118 SF is inadequate.
- A room larger than 135 SF (13 SM) would meet the minimum assignment standard for NCO's.
- The Army is aggressively promoting a new education initiative to get soldiers to pursue a college degree online. To adequately support this effort, the rooms should be large enough to comfortably accommodate a full size desk. Such a desk doesn't fit in a 118 SF room without deleting a major piece of furniture like the entertainment center.
- Some soldiers have personal furniture (such as a recliner), which does not fit, comfortably in a 118 SF room.
- The current room size is not large enough to comfortably entertain more than one guest. Increased socializing in the rooms should help improve unit cohesion.
- The Army plans to assign only two junior enlisted soldiers in all of its 2+2 modules in the U.S., which would give each soldier 180 SF (17 SM).

Barracks Module: The barracks surveys showed strong support to provide modules larger than the 47 SM allowed by a Sec Def memo of 6 November 1995. The reasons were to enlarge the:

- Barracks room.
- Walk-in-closet: Increase from 2 SM to about 3 SM to accommodate military gear and the bulk storage requirement currently being provided in the SCB.
- Service area to include a stove (or cook top) and a small table and two chairs (or a counter with stools).
Private Modules: The barracks standard has changed roughly every decade. The next step after a shared module (1+1) would be a private module. By making greater use of industry standards, savings can be achieved to offset the cost of additional bathrooms and service areas. In this manner, private modules could be constructed within the existing OSD limits on gross area and unit price cost. Reasons for building private modules include:

- Basically equivalent to 1+1 but with a private bathroom.
- Renovations are yielding many private modules.
- Simplifies NCO room assignments.
- Affordable within unit cost caps.
- Strong support from soldiers and unit leaders.
- It’s the next step to support the future force.

Soldier Community Building (SCB): The SCB’s will need to be downsized or deleted to offset the additional area needed for the larger barracks rooms, closets, and service areas. This is prudent because the barracks surveys confirmed anecdotal information that the SCB’s are being underused, except for the laundry facilities. The surveys also identified strong and widespread support for relocating or deleting the main functions in the SCB – laundry, bulk storage, and activity rooms. Underused SCB’s are a waste of money, a control and maintenance burden, and take away space from the modules because of the OSD limit on the total gross area of modules and support spaces.

Cooking Facilities: The barracks survey showed that 90% of leaders supported providing kitchens in each barracks module. Note that company commanders and 1SG’s comprised almost two-thirds of the leaders surveyed. Also, soldiers chose eat-in kitchens as their most desired improvement over five other choices, including a larger room. The other choices were a private bathroom, washers and dryers in the barracks, larger closet, and a shared living room. These results are reinforced by the low usage of the dining facilities (DFAC’s), and the overwhelming support for ration allowances versus DFAC meal cards. The evidence is clear that if soldiers were given the choice, they would use the DFAC less and prepare more meals in their modules or eat out more at restaurants. The top three reasons for not eating at the DFAC were poor food quality, menu selection, and inconvenient hours of operation. There are many good reasons why new Army barracks should have a kitchenette in every module:

- The Army needs to eliminate inequity with the other Services. The Air Force has been providing stoves in each module since FY 1996, and the Navy will start installing cook tops in each module starting in FY 2003.
- It would be a huge well-being boost based on the overwhelming support in the surveys.
- One of the goals of the barracks modernization program is to minimize the well-being gap between married and single soldiers. Kitchens are an essential feature in every family housing unit.
- It would eliminate a NCO-officer disparity. For example, a 2nd Lieutenant gets to live off-post or in a BOQ with a kitchen, whereas an E-6 currently only gets a microwave oven.
- The move toward industry standards should also apply to functional criteria, and kitchens are a standard feature in commercial apartments.
• In spite of prohibitions against hot plates, there is anecdotal evidence that many soldiers use them, and a stove is safer.
• Many soldiers work odd hours (like Military Police or Aviation personnel) and when they are off duty, the DFAC’s are closed.
• It is assumed that meals prepared in kitchens would be healthier than fast food.
• It is inconvenient to use the community kitchen and soldiers can’t leave anything there because it will probably get stolen. And preparing and eating meals with guests would benefit socializing.
• Life safety is not a problem due to sprinklers. Added protection could be provided with timer switches to prevent unattended cooking. Also, a fine mist fire suppression range hood could be provided, although it is not required by code if the building has fire sprinklers.
• Cooking odors can be minimized with range hoods that exhaust to the outside. Also, garbage disposals would reduce garbage waste.
• Selection between a cook top or stove should consider size, cost of appliance and type of funding, infrastructure cost, and ease of maintenance & repair.
• The chain of command would have to hold soldiers accountable for cleanliness. Making the stoves electric smooth tops would make cleaning much easier.

Should a commander decide not to provide cook tops or stoves in a new barracks in the U.S., the barracks must be constructed in such a manner that the appliances could be easily added in the future.

Bulk Storage & Barracks Room Closets: The barracks survey confirmed anecdotal reports that bulk storage in barracks located in the U.S. is not being used much. Nevertheless, the soldier should have a convenient and secure place to store bulky items (such as a bicycle or empty boxes), or military equipment. Given a choice for an alternate location for their bulk storage, only 19% opted for keeping it in the SCB. Of those who would prefer it in the barracks, they chose a larger closet by a 3:1 ratio over a central location on each floor. Therefore, it is reasonable to delete the bulk storage in the SCB and enlarge every closet from 2 SM to 3 SM.

Laundries: The survey results are clear that soldiers would prefer for the laundry to be closer to their rooms. Due to the cost avoidance by deleting the SCB, and being able to use less costly appliances, decentralized laundries should not be more costly than central laundries. See below for pros and cons:

Central Laundry:
• Increases the chance of a soldier finding an unused appliance, but makes it easier for personnel not living in the barracks to use the appliances.
• More convenient for maintenance personnel, but more inconvenient for soldiers (may have to walk outside).
• Location adjacent to mud room convenient for washing field jackets but it also encourages soldiers putting field gear (webbing) in the washers and dryers, which leads to premature wear and failure.
• Some claim that there would be a lower risk of theft in a central laundry, but anecdotal information shows that the CQ’s do not provide the oversight needed to prevent theft.
• It was envisioned that soldiers would socialize in the activity rooms or lounge while their laundry was being done, but the surveys and anecdotal information showed that this rarely happens.
• Requires costly commercial laundromat construction and appliances.

Laundry in Barracks:
• Moving the laundries into the barracks (in one location or on each floor) should be more convenient for soldiers but it would slightly increase the number of required appliances.
• The concern about not being able to find an unused appliance and forcing soldiers to walk around the barracks looking for a washer or dryer would be minimized by installing enough appliances at each location (at least two washers and four dryers), and restricting access to soldiers in designated rooms (such as by a cipher lock).
• Restricting access to certain rooms would also increase accountability due to unit integrity in the barracks. This would help soldiers police themselves to ensure the lint filters are cleaned, the rooms are kept tidy, and the appliances are not abused by cleaning web gear.
• There is evidence that decentralizing the laundry would be very well received by soldiers. The barracks renovations that have one washer and dryer per floor (serving 4 modules) have been very popular based on anecdotal reports.
• Overall, 58% of the DPW personnel supported decentralizing the laundries, with the lowest support at Fort Eustis (33%) and the highest at Fort Carson (80%).
• Decentralized laundries would offer circulation efficiencies by possibly eliminating the need for folding tables, and possibly being able to open directly to a corridor or landing. Also a simple residential dryer exhaust could be used rather than a more costly manifold system.

Laundry in Modules
• While central laundries require costly, commercial grade appliances; laundries in each module could use low-cost, residential quality appliances. Stackable compact or full-size units may be considered if space is a concern.
• Although the cost of this alternative may at first glance appear prohibitive, an economic analysis may show that on a life cycle cost basis, it could be affordable within the existing combined funding caps for barracks and furnishings.

Other Barracks Support Functions: With the SCB’s being downsized or deleted, commanders can decide whether space needs to be allocated for functions such as a CQ station, barracks manager’s office & storage, lounge, activity rooms, visitor’s restroom, vending & ice machines, telephones, mail delivery, and mud room (or boot and equipment rinse stations). If the barracks modules do not have stoves, a small kitchen should be provided with only a stove, sink, garbage disposal and minimal cabinets. Care should be exercised so as not to oversize these support spaces, which
would unnecessarily constrain the amount of private space that could be allocated to each soldier.

Configuration and Exterior Appearance: The objective of the new criteria is for Commanders to select barracks that more closely resemble private sector, long term, rental housing. This includes the discretion to choose residential designs, where appropriate.

Module Access: New barracks designs can use any type of module access found on private sector, long term rental housing, e.g., interior corridors, interior breezeways, central stairwells (garden apartments), ground level walk-up entrances, etc. Therefore, it is reasonable to stop building new barracks that have barracks windows opening to balconies or stairwell landings because this type of design is only used in the private sector for budget motels. The reason this type of design is not typically used for rental housing is because it significantly compromises privacy and physical security. From a military perspective, such designs also compromise anti-terrorism/force protection and command & control.

Technical Design Criteria and Standards: Traditionally, Army barracks have been designed to technical standards that in many cases exceed industry (private sector) codes and standards, e.g., use of Type II non-combustible construction versus Type V construction, and use of electrical metal conduit versus armored cable. Such an approach is not in the Army's best economic interests. Therefore, consistent with current Federal and Defense Department policy, future barracks designs shall not exceed private sector standards unless there is a compelling and justifiable operational requirement. Also, renewed emphasis shall be placed on selecting materials, equipment, and finishes that have the lowest life cycle cost, not necessarily the lowest O&M cost. Unified Facilities Criteria document UFC-1-300-02 “Military Use of Model Building Code” has been developed for use by the Services. This single model code will afford the Services the opportunity to bring their design and construction practices in line with private sector practices.

Acquisition Method: The barracks program can reap dividends by leveraging industry innovation and best business practices. This can be done, for example, by making greater use of design-build or other alternative acquisition procedures, extending the length of warranties, adding maintenance requirements to construction contracts, and privatization. The new barracks criteria will maximize these dividends by allowing the flexibility for contractors to provide the best living environment for soldiers at an economical cost. These acquisition procedures together with the concepts of Sustainable Design and Development should encourage innovation and alternatives to the traditional planning, design, construction, and maintenance process.
MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS

SUBJECT: Design and Construction of Unaccompanied Enlisted Personnel Housing

In November 1995, former Secretary of Defense William Perry issued policy implementing the 1+1 Unaccompanied Enlisted Personnel Housing (UEPH) construction standard in order to provide unaccompanied members with more privacy and amenities. The 1+1 construction standard consists of a module with two 11 square meter living/sleeping rooms and a common bath and kitchen/service area for two enlisted members. These criteria also limited each module to 47 square meters and the gross area to 66 square meters.

The Army submitted a proposal to the Installations Policy Board to amend the 1995 policy criteria by eliminating the 47 square meter restriction, increasing the living/sleeping areas to a maximum of 17 square meters, and, where cost effective, permit construction of private modules. This revision to the original policy would not change the overall intent of the December 1995 policy.

This proposal was vetted through the Engineering Senior Executive Panel, the Housing Policy Panel, and the Installation Policy Board to ensure that these changes were consistent with quality of life initiatives already in place, and to assess the cost implications if the new design standard was approved. With the recommendation of the Installation Policy Board on December 18, 2000, I am issuing the following changes to the 1+1 UEPH construction standard:

- The module area limit of 47 square meters is eliminated.
- The maximum net area per living/sleeping room is increased from 11 square meters to 17 square meters.
- Construction of private modules will be permitted.

These criteria changes are issued on the condition that their adoption not result in cost increases to UEPH buildings or increase the average cost to house each military member. Therefore, the existing gross area limitation for UEPH remains in place, and the unit cost guidance for UEPH issued by my staff will apply regardless of the selected design criteria.
The Service Secretary waiver authority outlined in the 1995 policy remains unaffected by this new guidance. Where Service design guidelines do not incorporate these permissive amended criteria, then the November 1995 policy criteria described above applies. Finally, existing unaccompanied housing will not be considered inadequate for assignment because of these revised criteria.

Adoption of this permissive guidance will allow the Services greater flexibility in designing and constructing unaccompanied housing by making greater use of industry standards. More importantly, eliminating the 47 square meter restriction allows the Services to better use limited space to increase the individual room sizes in each module, further enhancing quality of life for our single military members.
THE SECRETARY OF DEFENSE  
WASHINGTON, DC 20301-1000

6 NOV 1995

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Under Title 10 USC, Section 2856, the Secretary of Defense is required to establish the maximum allowable area per occupant for new, permanent, barracks construction. This memorandum complies with that requirement and establishes a new standard design criterion for future permanent party UEPH construction. The new standard does not apply to housing constructed for transients, recruits, or members receiving entry-level skill training. The standard is optional for barracks outside CONUS funded by other than the United States or constrained by site conditions, and for barracks to house other than full-time active duty Service members.

New construction (and rehabilitation where feasible) of UEPH will be based on a module consisting of two individual living/sleeping rooms with closets and a shared bath and service area. The module will contain a maximum of 47 sq. m. of gross area, measured from the center lines of all enclosing interior walls and to the outside face of exterior walls. Designs should be developed to produce 11 sq. m. of net living area per living/sleeping room, measured from the inside face of the walls to include all clear floor areas.

The maximum overall gross UEPH area, including all modules and support spaces, will be 66 sq. m. per module. To accommodate specific mission requirements, the Department of the Army is entitled to an additional overall gross UEPH area of 2 sq. m. per module. Up to 4 sq. m. per module may be added to the 66 sq. m. overall gross UEPH area for high-rise facilities (over three stories) or to meet other site-specific requirements.

This standard should be implemented as soon as practical, taking into consideration UEPH projects are at various stages of design and construction. The standard may be waived by the Secretary of a Military Department under the following circumstances:

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* wherever the Secretary determines that unique mission requirements or operational commitments are better served by congregate living (possible examples: Seal Teams, Force Reconnaissance Marines, Special Forces)
* wherever the Secretary determines that the collective quality of life for members of a Service would be more enhanced by constructing to a lesser standard but providing new quarters to a larger number of members

Existing UEPH will not be considered inadequate for assignment because of these new criteria. But I recognize that their announcement represents a commitment to upgrading the level of privacy provided to each Service member as our resources and ingenuity permit. I challenge each Service to implement the new standard as part of an integrated UEPH plan which considers optimal use of existing, adequate quarters, renovation of those which can be made adequate, traditional military construction, and innovative use of private sector solutions.

William J. Perry