

**Sam Houston State University
Loft and Bunk Bed Information**

The following guidelines will be adhered to concerning construction of lofts and bunk beds in residence hall rooms:

1. All plans must include a drawing, and must be presented and approved by the Resident Manager and the Facilities Manager before construction can begin.
2. All materials must be supplied by the resident.
3. University furniture and equipment must remain in the room or stored within the residence hall; storage arrangements, if available, may be made with the Resident Manager of the building. Storage may not always be available in all halls.
4. Loft and bunk beds are to be free-standing. Bolts, nails, etc. are not to be attached to the walls, ceilings, floors, or furniture to support the loft or bunk bed.
5. Lofts and bunk beds are to be completely dismantled before 24-hour "quiet hours" begin and removed from the room when the occupants finally vacate the room, either by changing residence halls during the year, or upon final check-out at the end of the Fall or Spring semester. At that time, the room should conform to the original room condition sheet, with all furnishings restored, as they were upon check-in.
6. The residents who build loft or bunk beds assume responsibility for any damages to the room caused by the loft or bunk bed, and will be billed accordingly. Furthermore, the University is not responsible for any injuries to the occupants of the room or their guests, as a result of the loft's or bunk bed's presence.
7. Upon completion of the building of the loft or bunk bed, the occupants will contact the Resident Manager to arrange for an inspection.
8. Lofts or bunk beds must be located and constructed in such a way that they do not interfere with access to windows, air-conditioning units, plumbing, or other items needing periodic maintenance; they must not interfere with or obstruct exit from the room in case of emergency.
9. Attached room fixtures (curtain rods, light fixtures, electrical switches, air conditioning, heating covers, etc.) may not be removed or relocated due to loft or bunk bed construction.

I have read and agree to the above stipulations.

Student _____ Hall _____

Student _____ Room # _____ Ext. _____

Check one: Loft _____ Bunk bed _____

Approved by: _____ R.M. Date: _____

_____ Fac. Mgr. Date: _____

Loft or bunk bed inspected and approved by: _____

Date: _____

After completion, this as well as the loft plans must go to the Facilities Manager for approval.

Revised 6/01

LOFT INSPECTION CHECKLIST

Date _____

Hall/House _____

Room _____

Ext. _____

Resident(s) _____

_____ Deck is of ½ “ plywood. No box springs allowed on deck.

_____ Supports are 4" x 4" and free standing.

_____ Angled cross supports of 2" x 4" or 1" x 4" present on head, foot and one side of loft.

_____ Cross beams are 2" x 6" or 2" x 8".

_____ Cross beams attached to supports with carriage bolts. (3/8 “ x 6 “)

_____ Lumber is in good condition.

_____ Loft is approved.

_____ Loft is not approved.

REASON: _____

SECOND INSPECTION DATE _____

_____ APPROVED

_____ NOT APPROVED

Resident Manager Signature

Part I

Terminology and Basic Construction Techniques

Terminology and basic construction techniques in constructing lofts is a fairly easy process once you have outlined a design for the loft, enumerated the materials you will need to build the loft, and acquired the necessary tools for the lofts completion. It is also very important that your loft design and construction follows the guidelines established by Physical Plant. The Facilities Manager at Physical Plant will approve all requests.

Terminology

If you choose to use these guidelines in the construction of your loft, it will be imperative that you understand the following terminology being used in diagrams and written description: (see Drawing A)

1. Loft Raised platform per guidelines – completed structure.
2. Deck Horizontal surface – ½” plywood.
3. Supports Vertical members 4" x 4" designed to hold deck and completed loft.
(see Drawing B & C)
4. Cross Beam Horizontal members attached to supports, designed to hold the deck joist and deck. (see Drawing B & C)
5. Deck Joists Horizontal members attached to the cross beam, designed to support the deck.
(see Drawing D & E)
6. Cross Supports Angled 2" x 4" or 1" x 4" used for strengthening and removing the wobble, if necessary.
7. Wedge 2" x 4" cuttings wrapped in carpet scraps, used between supports and wall for stability and reducing the wobble.
8. Cleat 2" x 2" beam running parallel with cross beam, used to support deck joists.
(see Drawing F)
9. Hanger Metal brackets nailed into cross beam, used instead of cleats to support joists.
(see Drawing G)
10. Lumber All lumber must be kiln dried and properly seasoned. “Green” lumber, tree limbs, etc. are not permitted.

Loft Construction

This booklet is intended to help students design, and build secure and fire safe lofts for their residence hall rooms at Sam Houston State University. The techniques and designs in this booklet are only suggestions that are based on prior proven effectiveness. The creativity involved in loft construction is limited only by the creator. The particular ideas presented here are taken from three resources which should receive full credit for their contents:

1. Lofts, Design and Construction Regulations; Michigan State University, Department of Residence Halls, Second edition, May 1978.
2. “RP2”, Room Personalization and Resident Painting Program; University of Georgia, Department of University Housing, Second edition, January 1979.
3. Making Yourself at Home: A Practical Guide to Restructuring and Personalizing Your Residence Hall Environment; Anchors, S., Schroeder, C.C., and Jackson, S.; Commission III - Student Residence Programs American College Personnel Association, August 1978.

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Revised 6/01

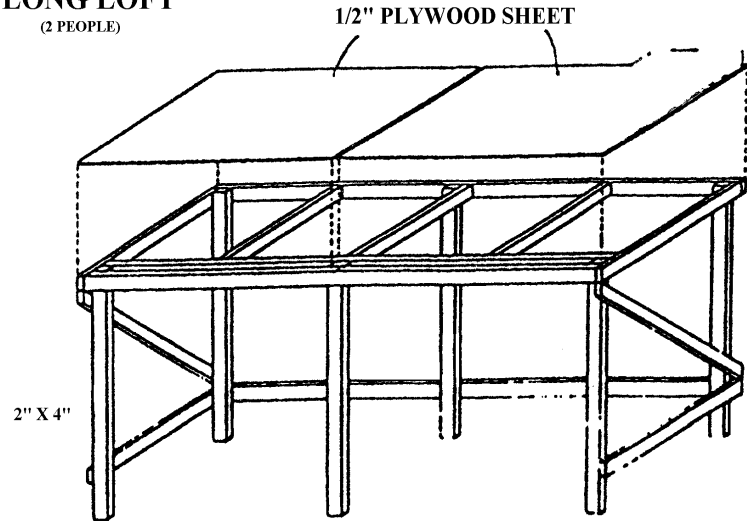
Construction Project Ideas

Design 1 - Long Loft (2 people)

This inexpensive long loft is great for folks who have little money and would get claustrophobia with a complete second floor over their head. It fits conveniently against the wall and only protrudes as wide as your mattress. Underneath is a great place for a sofa or your two study desks.

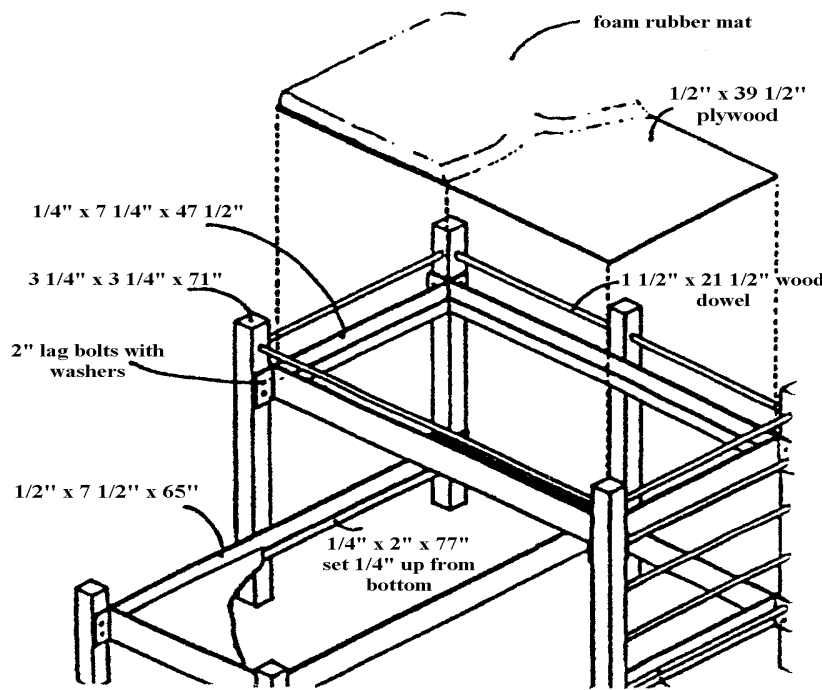
It is made with 2 x 4's and is extremely stable and needs no support from the walls. A thin wall or barrier can be placed in the middle of the deck to give you privacy since you will be sleeping so close to your roommate.

LONG LOFT
(2 PEOPLE)



Design 2 - L-Shaped Bunk

This L-shaped bunk bed has plenty of flexibility and can fit comfortably into any room. It provides sleeping room for two, a potential location for a desk by the bottom bed, and plenty of storage space underneath the bottom bed.

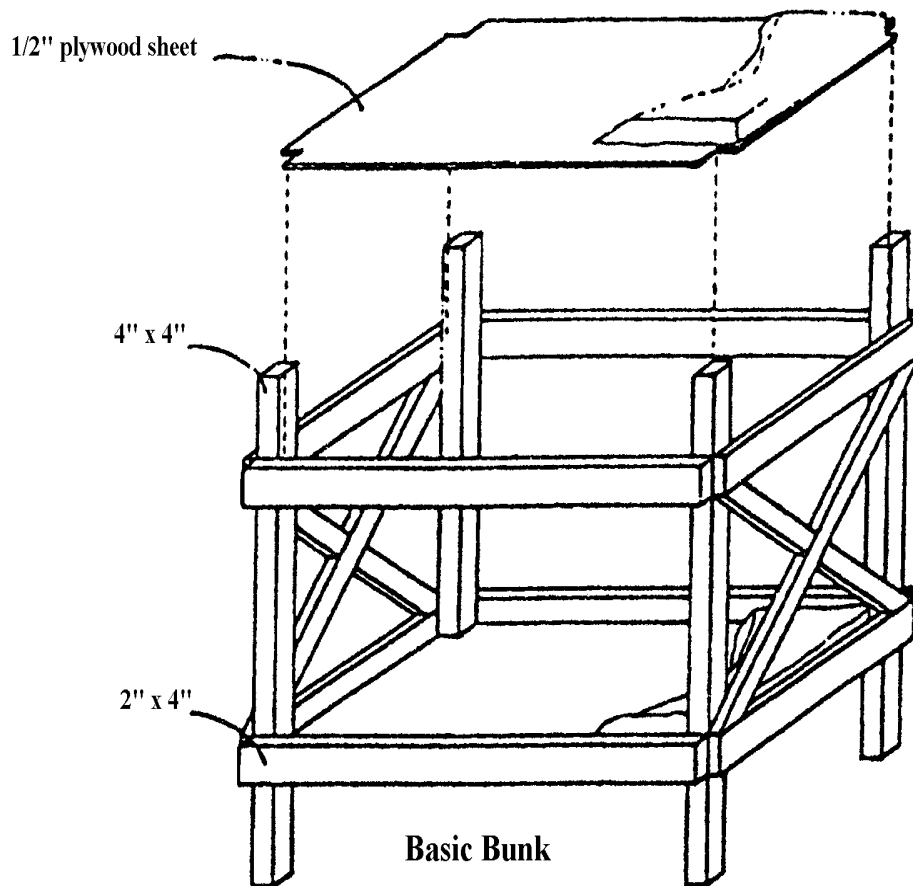


Don't be confused by what looks like a complicated project. Our plans are simple and straightforward and any beginner can successfully complete this project with some patience. First make a list of pieces needed and then start cutting your lumber up until you have all your parts ready for assembly. Next put together the two ends of the bunks and then start filling in the missing pieces.

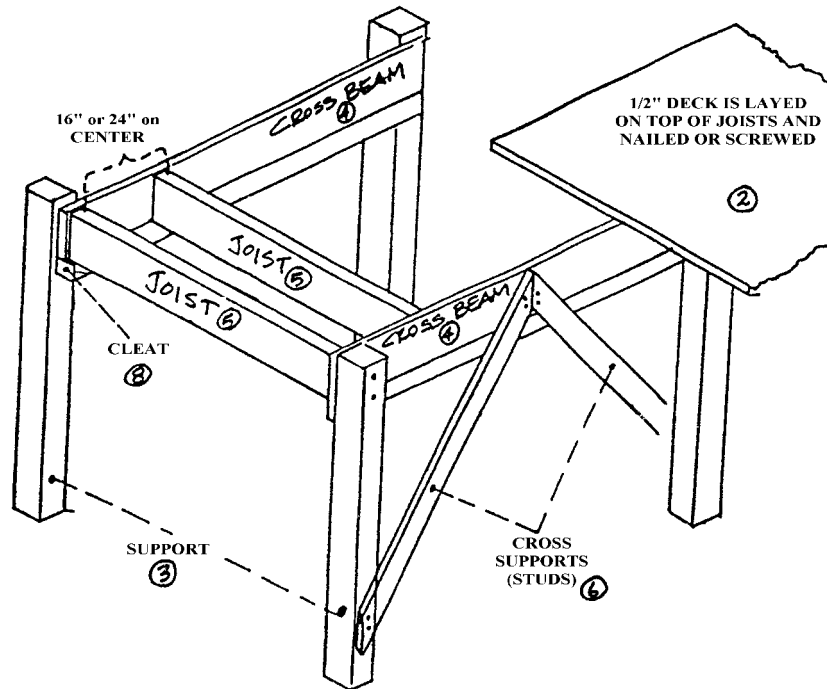
One of the neat things about this particular style is its flexibility. It is very nomadic and can be taken down and carried off to your next home when you graduate.

Design 3 - Basic Bunks

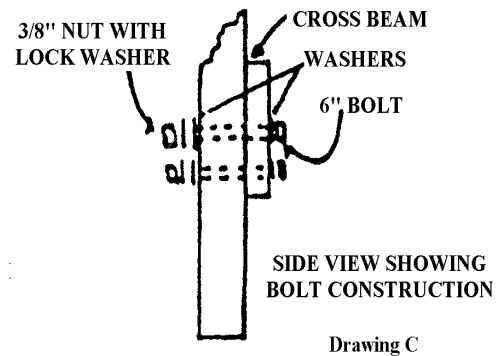
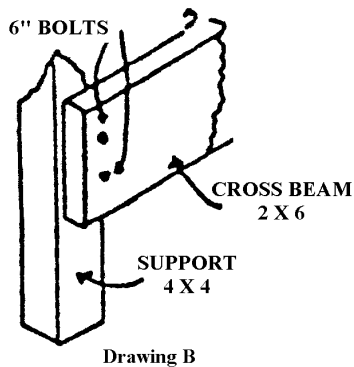
The traditional bunk bed is a great way to add a more personal touch to your room. It is easily constructed with 4 x 4's on each corner and with 2 x 4's providing the necessary stability and foundation for the two decks. To insure stability, we recommend that you use ½ inch plywood for the decks. You will want to determine the size by the type of mattress or foam you will be using. A good way to save money is to simply build your bunk around your mattress. Of course you will want to check to make sure you can store your old frame.



LOFT



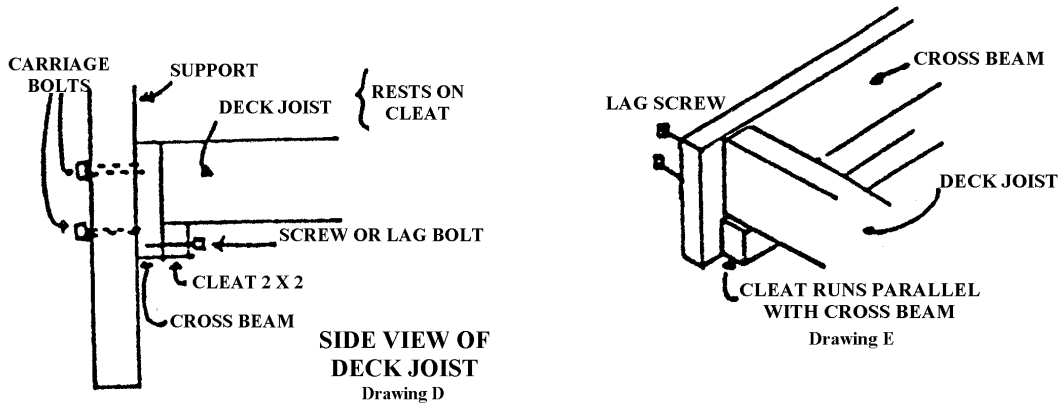
SUPPORT AND CROSS BEAM



Supports - must be free standing and not attached to the building. They are to be 4" x 4" (you can save by nailing and gluing two 2" x 4" together to make a 4" x 4") of sufficient length and are needed at every corner. They will need to be "wedged" to the building (protected to prevent damage to the wall) or cross supports can be used to prevent "wobble".

Cross Beam - these are to be of 2" x 6" material and cannot exceed 12" in length. If the span is to be greater than 12", 2" x 8" should be used. They are to be bolted to each support with two carriage bolts 3/8" x 6" and two washers, plus lock washer.

DECK JOISTS DETAIL

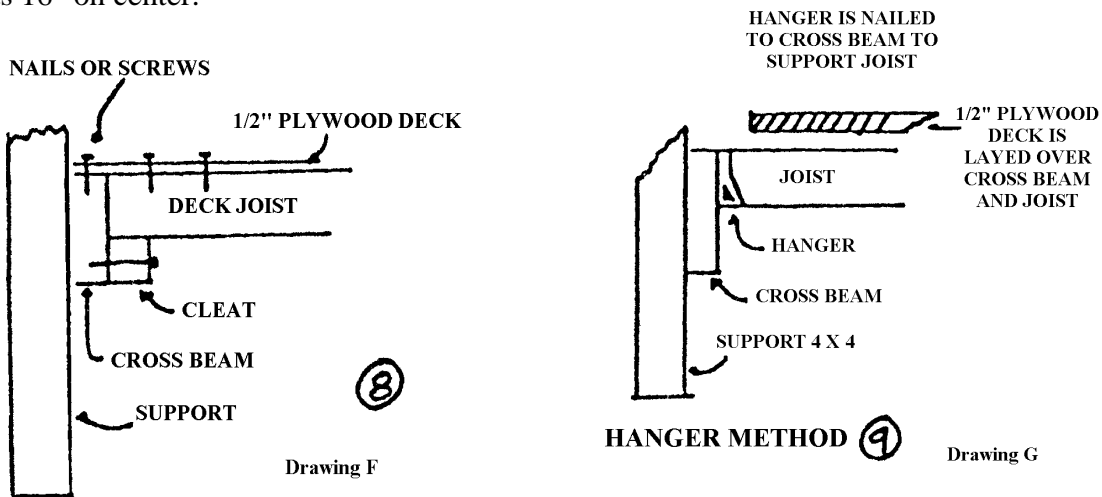


Deck Joists - are to be 2" x 4" and are not to exceed 6' in length. Anything over 6', 2" x 6" are to be used. They are to be 16" on center if 5/8" flake board or particle board is used for the deck. If 1/2" plywood is used, the deck joists may be spaced 24" on center. The deck joists are to be screwed to the cross beam with two 1/4" x 3" screws or lag bolts with washers.

The deck joists may be attached by either the use of cleats or hangers - see drawings D and E.

Cleat Method: The 2" x 2" cleat is to be screwed with 1/4" x 3" screws or lag bolts under each deck joists 16" on center.

Hanger Method: Hanger is to be nailed into cross beam and joists is fitted in it.



Deck - The deck is to be made of 1/2" plywood to be nailed or screwed to the deck joists and cross beam approximately every 16". 5/8" or thicker flake board may be used in lieu of 1/2" plywood, although not recommended for the following reasons: (1) ruins saw blades, (2) hard to nail, (3) may warp, (4) extremely difficult to remove for resale purposes, (5) need additional joists at 16" center - required (not 24" as with 1/2" plywood).