

Home Theater

Today a lot of families have (or want!) a big screen TV. Our "Home Theater" is actually a multimedia room which is an excellent way to showcase the big screen, and big sound of your system. This theater is a perfect fit for a basement, an attic, or a bonus room over the garage. Construction is simple and low cost. You will spend more money on seating than the materials to build the theater! The "theater effect" comes from the stepped floor with it's ramp way. At the front of the room you have the choice of placing your TV and Sound System in front of a wall, or being creative and building a false wall 3 feet in from the end wall of your room.

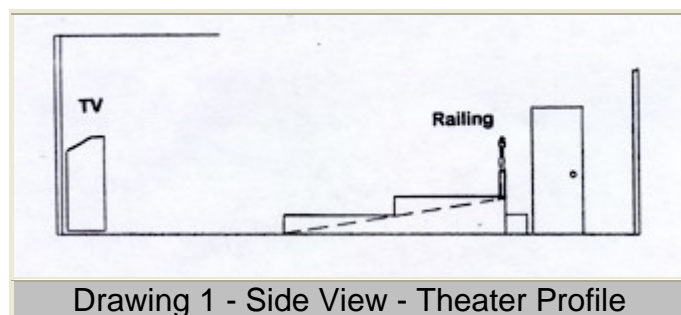
This design would allow the electronic equipment to be recessed and hide electric cords and speakers. The false wall would be constructed with 2x4 framing lumber and covered with black fabric/curtains except for the TV opening. Speakers could be placed behind or in front to the curtains. This adds a touch of class to your home theater. If you need more seating you could add two person love seats on each step.



Construction Considerations:

- The design of this theater will require 2 steps up to enter the theater area. An exception might be with a basement theater where you have the opportunity to design in a raised floor coming off your basement steps. If you are building this in a basement you will need to use pressure treated wood where it touches the floor and walls.
- The photo shows where the railing along the back protects the raised portion.
- The width of the step-downs holding the seats, and the aisle are determined by the width of your room. You will need approximately 5 feet wide to hold a love seat, or less for individual seats. The ramp way width is what's left after you determine the seating area.
- Another consideration is sound proofing. How loud do you want your sound system to be?

After determining the sizes of the step-downs, and width of the ramp, start construction on each step-down area. Each of these two sides will be called a **unit**. (See Drawings 2 & 3) Cut 2x8x10' into 2 - 5' pieces. Fasten 5' 2x8 on top of 10' 2x8 with scab boards that are 14" long 2x4's. Nail scabs on

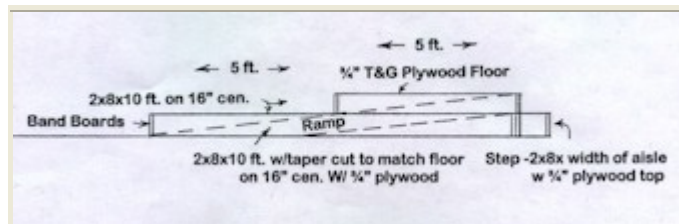


Drawing 1 - Side View - Theater Profile

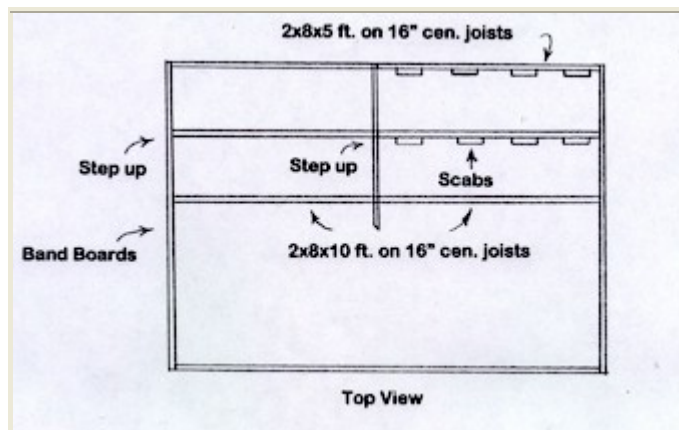
side of double high 2x8 every 24". Cut 4 front and back band boards for each unit. (Width determined by your room size)

Fasten front and back band boards to the above fabricated 2x8 step framing. This will make a box like unit. Add additional 2x8 step framed joists as necessary to have 16" spacing to support the floor. Position units at final location in your room, and secure in place.

Cut and nail plywood flooring for these step-down units. After both sides of the aisle are completed and installed, it's time to start the ramp way. The first step is to make a template for the ramp way joists. (See Drawing 4) Use 1 - 2x8x10 for the ramp template. Temporarily place your 2x8 ramp board on a 15" high block, with the other end sitting on the floor. Place another 2x8 board on the floor along side at the lower end as pictured. Scribe a pencil line along the top of the 2x8 sitting on the floor. This will be the correct angle to cut your ramp joists. Scribe a vertical line with a level on the opposite end as shown. This will be where your band board will be nailed.



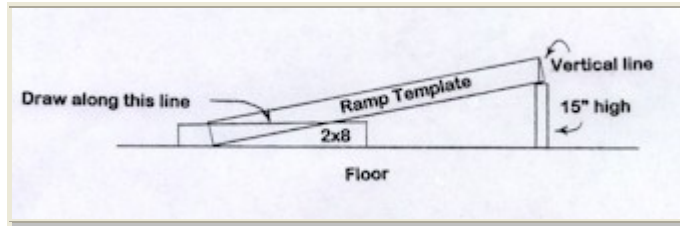
Drawing 2 - Side View - Step Down Unit Framing



Drawing 3 - Top View of Step Down Unit Framing

Cut and test fit this template before making the others. To install the ramp, place double 2x8 beam on floor at the rear (opposite end of TV at the entry step) to fill in the space between left and right step-down units. This beam is shown in Drawing 2 directly behind the single step you will build to enter the theater. After testing your 2x8 template for fit, install by setting the upper end on double 2x8 beam. Cut and nail a band board on these ramp joists, and flush up with lower beam. Toe nail this end of ramp joists to the lower beam. Place ramp joists on 16" centers, then cut and nail plywood flooring in place.

The step to enter the theater will be another 2x8 box cut to the correct dimensions to fill the walkway width. The depth of the step should be 11-12 inches. Install carpet to cover all of this new theater as well as the existing floor area of the room.



Drawing 4 - Building the Ramp Way Template

Install a railing of your choice on the back of the theater for safety. Basement installation offers the possibility of coming off your stairs with a flat floor leading to the theater. This would be accomplished by building your raised floor theater off of the second step of your stairs. You would then locate the step down to the basement floor somewhere that fit into your basement floorplan. This project should be fun to design and build, and just think of the many hours of enjoyment you will have with the volume turned up! Remember Sound Proofing!