

AUDIOTRENDS

L E A R N I N G C E N T R E

Dedicated Home Cinema Check List

The following is a list of subjects that should be considered by all persons considering construction of a dedicated home cinema or a multi-purpose room that has pretensions to deliver some serious results. Audio Trends can help with all design work and under each heading is a description of what can be supplied to make the whole project run smoothly and efficiently.

We can oversee your entire project from start to completion, including various concepts, architectural and council approved plans through to the installation of acoustic panelling and audio visual equipment.

The list is fairly extensive and you may need assistance with just some or even every aspect. Please circle or highlight the areas that you would like to have further discussions.

Congratulations! You have now taken the first step towards the ultimate home entertainment experience – constructing your own dedicated home cinema. Wow! It is very exciting and we know from experience just how rewarding it can be to build your own dedicated home cinema.

BEFORE YOU START

However, the first thing to consider is just how many persons need to be seated in your cinema room? This may seem surprising, but is really the first question that should be addressed, whether you are building a dedicated cinema or 'converting' a current room to double as a cinema room.

The answer to this question will not only determine how many chairs you will need, the size of the room if building, but will also determine the size of the projected image that is required for easy viewing by everyone. As the number of people in the room increases, the image size will usually increase.

Not only the number of seats will affect the above, but also the style of seats. Audio Trends has a number of different 'customised' seating configurations which can be supplied in almost any fabric.

Now that you have answered the seating question, consider how much space you need and what style, environment or 'feel' that you wish to recreate. We can design art-deco, contemporary or traditional cinema rooms or build to your own design.

Style

- *Arrange meeting to discuss various options.*
- *Provide detailed drawings (to be supplied in conjunction with other specifications – see below).*

Architect

Renovating an existing room may not need the services of an architect, but for home-owners who wish to extend the building to accommodate the cinema room, then the services of an architect may be required. Michael Frizziero is our 'in-house' architect and can work with your builder or ours to achieve the result you need. He has had over 20 years experience and of course as one of our own customers will share your passion with the project.

- *Arrange meeting with Architect to discuss options.*

Builder

Need a builder? We can help there also! There are many good tradespeople out there that you can use to build your new home cinema. You may already have someone in mind. Fine. But, if you want people who are not only the best in their trade, but have also had experience in constructing home cinemas, then please contact us. No project is too big or too small. Our Ringwood showroom is testimony to our talented crew.

- *Arrange for meeting with Builder.*

Building Surveyor/Inspector

It is no longer a requirement to approach your local council for a building permit. Our 'in-house' Surveyor Neil Shafto understands some of the challenges involved in getting satisfactory plans approved and is more than happy to work with you, our Architect Michael Frizzier and within the Victorian Building Regulations to ensure a satisfactory result for everyone!

- *Arrange for meeting with Building Surveyor (Note: Plans need to be at least at preliminary stage first or finalised).*

It is usually a goal of most consumers to isolate or minimise the amount of sound 'escaping' from the home cinema room. This is important if construction is to be within the bounds of a present building or neighbours are within close proximity and you plan reasonably high levels of volume!

Walls

Outer – wall by builder (material to be advised).

Acoustically isolated internal wall/ceiling construction

For situations where it is imperative that no noise penetrate outside the cinema room, then special requirements are necessary. These include (on a stud wall) special isolation mounts and sealed with non hardening compounds. This is usually associated with Boral Soundstop products.

- *Provide drawings and instructions.*
- *Plaster – Discuss with Audio Trends benefits and various methods associated with Boral Soundstop Plaster system.*

Conventional internal wall/ceiling construction

Conventional in our terms, but not standard building practice! Very good results can be achieved in both noise reduction and acoustics without going to the lengths mentioned above! This is particularly so when proper methods and utilisation of acoustic materials are specified.

- *Plaster – Discuss with Audio Trends benefits and various methods associated with Boral Soundstop Plaster system.*

Note: Plaster on its own is not the best when it comes to good acoustics. Hard and straight surfaces should be minimised.

Room Acoustics – See below.

Ceiling – Decorative or Acoustic Panels

Your overall room style will probably dictate how you finish off the ceiling. But, remember this is a very important area – both visually and acoustically. First (audio) reflections can present a problem and acoustic treatment is the solution, especially if the overall ceiling height can be 3 metres or more.

- *Provide details on acoustic and/or decorative panels.*

Doors

Sound proof doors? No problem! These can weigh as much as 175kg and can be made to look good as well as minimise sound. Support frames need to be substantial! Cinema One at Audio Trends Ringwood Showroom feature two distinctive styles.

- *Provide drawings and instructions for construction and sealing of doors, include door seal installation and supplier details.*

Ventilation

A fully dedicated Cinema Room does not have windows, but will still require ventilation and air-conditioning. We can provide design details for quiet ventilation system. Include details of component manufacturer.

- *Include details with internal room drawings*

Air-Conditioning

See Ventilation

- *Provide design details for quiet ducted or split Air Conditioning system. Note: This needs to be done in conjunction with ventilation even though this may be minimal in some cases.*

General

If Boral Soundstop Plaster system is being utilised, then it is important that 'openings' are properly sealed including power point, speaker connectors or even air-conditioning. Doors likewise should have special seals.

- *Provide drawings to detail methods of penetration for electrical and other services that maintain the level of isolation designed. Customer to specify requirement*

INTERNAL ACOUSTICS

Naturally, both the external and internal walls are important features of any room dedicated to home cinema. Great pictures are obviously important, but without good sound the whole exercise will probably be futile! Many think that by simply purchasing expensive equipment they are guaranteed of top performance! Nothing could be more misleading and in fact more disappointing. To be blunt, the acoustics of the room are actually **more important** than the equipment! This doesn't mean that low quality

components will be acceptable, but rather that good components will perform significantly better in a room that is acoustically treated.

For example, you may remember that places like the Sydney Opera House received a lot of criticism from Opera buffs when first opened. A lot of work was needed to achieve the results now enjoyed. It was a similar story with the Victorian Arts Centre here in Melbourne. Good acoustics like the Hollywood Bowl or Caesars Palace in Las Vegas didn't just happen – they were designed on principles based on the laws of physics! Good acoustics are no accident.

You can be absolutely confident of this fact – Audio Trends have the know-how to make your room not only look fantastic, but also supply and install acoustic treatments that deliver the best in sound! Our Ringwood showroom is living proof. Please consider the following:

Room Dimensions

Room dimensions are important. But as we said earlier, new construction should revolve around how many persons you need to seat in your cinema.

- *Calculation of optimum room dimensions within the bounds of the planned building. Report to include recommendations on equipment that will conform to optimisation criteria.*

Walls & Ceilings

Straight walls are a no-no when it comes to good internal acoustics. There should be a combination of both hard (reflective) and soft (absorptive) materials.

- *Detail the position and type of materials suitable for the reduction of early reflection and the control of reverberation time (RT60) to levels suitable for sur-round sound. Provide drawings & construction details.*

Colours

There is a world full of colours and materials. However, not all are suitable for use in 'full' acoustic situations. If your room will be a multi-purpose room, then the choice can open up.

- *Work with interior designer or owner as needed for panel, fabric or material colours.*

Lights

- *Work with interior designer or owner as needed for placement of wall or ceiling lights that coincide with acoustic treatment.*

Floor

Customer to advise type of preferred floor coverings if not carpet. We suggest that carpet be laid on a 'hair' underlay rather than synthetic products.

- *Incorporate floor finish/covering into the acoustic design.*

Furniture

Audio Trends have been designing and manufacturing custom furniture products for more than 25 years. We know what is required to combine functionality with quality craftsmanship.

- *Design furniture to suit requirements and incorporate design into acoustic design.*

Seating

Audio Trends has a range of specialised cinema seating. These can be supplied as single chairs or combinations and are available in both leather and macro-suede materials.

- *Recommend suitable types and incorporate final selection into acoustic design.*

Raised seating Platform

- *Provide drawings and instructions for acoustically correct construction of raised platform, including installation details.*

Stage

- *Provide drawings and instructions for acoustically correct construction of stage, including installation details.*

Speakers

The choice in speakers is absolutely mind boggling, but you probably already know that fact! We have carefully selected our various brands to suit specific situations and combinations.

Therefore, we highly recommend that you discuss the various options before you commence your project.

- *Recommend subwoofer/speaker system.*
- *Recommend optimum placement within the bounds of interior designer's requirements.*

SIMULATION

This is just another possibility and will appeal to those clients who are either building a recording studio or who demand every design parameter to be considered fully.

- *Enter room into 3D acoustic simulation program. Run acoustic simulation to optimise designed acoustic parameters.*

MEASUREMENT AND REPORTING

Again, if you want to be certain about everything, then we can arrange for the finished room to be measured electronically.

- *Measurement and reporting of internal acoustic performance of completed project.*

OPTIMISATION

All products should be optimised or calibrated for best performance, particularly vision products. This sounds pretty logical. But surprisingly these products do not leave the factory calibrated for best results. Factory settings are just that; factory settings! Transportation can also have a big effect on performance. Therefore, we highly recommend that calibration be done by a qualified ISF (Imaging Science Foundation) technician after initial installation. Note: all audio equipment purchased from Audio Trends is by default optimised by our installation department at time of delivery.

- *Calibrate all visual products.*

SUMMARY

As you can see, true dedicated home cinema covers a lot of parameters. The above may seem a little daunting, but just like cooking a good meal, the secret is in both the use of top quality materials, thorough preparation and attention to even small details.

The good news is that you have a team of experts to help you get it right, a team of people who will share your passion and be just like a good friend. That is what Audio Trends is all about! We look forward to discussing your requirements.

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