OLDIE THEATRE SQUARE

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Oldie Theatre Square

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A Thesis Submitted in Partial

Fulfillment of the Requirements

For the Degree of

Bachelor Degree of Architecture

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Abstract

Oldie Theatre Square

Oldies square will be beneficial to educate and understand the history of culture and social movements, and way of thinking during that period.

This project will be beneficial to theatre business and their supporting areas on the old building Scala Theatre, which is old and not a very interesting place for people walking past there, because its old character and old name of building when put the trend to it, instead of oldies character to support and make this oldie concept to be more obvious to attract more people to use this place and make profit to this old theatre.

The project will be putting new interesting activities in the oldies space to remind of "oldies" nostalgia which will be valuable to study how they were through their suffering and oppressed life. It is a kind of nostalgia that may be an inspiration for everyone who is interested in creation: e.g. creation in music composition, screenwriting, or fashion design.

Thesis Approved:

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Date   A.Chananya Apiwatphong, Chairperson

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Date   A.Apinantaya Buaaim, Advisor

Table of Contents   Page

Table of Contents   **Page**

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I would like to express my deep appreciation to A.Apinantaya Buaaim, my instructor and thesis advisor, for her most valuable advices.

All of officers at Scala Theatre existing site, through their interview and all kind.

My family, mother, father, aunt, grandfather, and brother, for all the best support me.

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CHAPTER 1: INTRODUCTION

Thesis title	**Oldies Square**
Project type	**Design Proposal for Interior Architecture design:**
	Oldies Square
Student name	**Ms. Priyanoosh Sookshooai**
Student ID	**501-7460**
Advisor	**A. Apinantaya B.**

Chapter1: Introduction

1.1 Project Background and Context

Scala is located in Siam. The owner is Pisit Tansajja, who also owns the very successful Salachalermthai Theatre. Its location is near Chulalongkorn University and Siam Square, where have been crowded with teenagers since about B.C 2512. It has a long history and its location near very famous place like Siam Square, where has been a center of fashion and teenagers, means the project will be supported by business purpose. Moreover, it is near the Bangkok Art Culture Centre and the National Stadium, where many teenager activities have surrounded this Theatre.

Oldie is a commonly used term to describe on music from the 1950s - 1980s, Rock 'n' roll music was very popular during this period: e.g. Elvis Presley and The Beatles. It influenced teenagers at that time, which was teenage period of our parents, who knew well the American Baby Boomers, who influenced the social culture movement. It is an example of an expression of themselves to appear in social movements to oppose problems such as the oppression of black people and war, the social movement and cultural movement, was expressed in appearances by

1

teenagers in many media such as music, film, and fashion. *"Oldies is a term commonly used to describe a radio format that concentrates on music from a period of about 15 to 55 years before the present day. In the 1980s and 1990s, "oldies" meant the 15 years from the birth of rock 'n' roll to the beginning of the singer-songwriter era of the early 1970s, or about 1955 to 1972, although this varied and some stations chose 1950-1969. In the early 2000s, 1970s music was increasingly included, and early 1980s music is beginning to also be called "oldies", though the term "classic hits" is used to distinguish the "new" oldies (the Generation X oldies) from the "old" oldies (the Baby Boomer oldies)."[1]*

Nowadays, a new trend is going to be nostalgia that is coming back again. *"Everytime oldies are new again. WCBS-FM, the nation's No. 1 oldies station for more than three decades until a 2005 switch, is ready to shift from its current "Jack" format and re-embrace the classic sounds of its past, according to online reports.*

"If this happens, it will be a fantastic move," said "Cousin Brucie" Morrow, one of the veteran DJs jettisoned when the station swapped formats. "There isn't a day that goes by that people don't come up to me and say, `We miss the station so much.'"
CBS Radio, owner of the station, declined to comment on the much rumored change."[2]

So, oldies can be like vintage style or worn by people in the present day. Scala theatre is one of the most famous retrospective sites. It should be valuable to people from the American Boomer period until now. The Scala Theatre site should be valuable to people who are interested, if the Scala Theatre is renovated to be of more interest as the project of Oldies Square.

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[1] http://en.wikipedia.org/wiki/Oldies
[2] http://new.music.yahoo.com/beastie-boys/news/are-oldies-the-new-jack-on-nyc-radio--45019874

1.2   Study Defined

1.2.1 Reason of Study

1.2.1.1 Inspired by oldies style of music, film, and pop art, this theatre project will be related with old film and music and will arrange and run business a selection of old movies and art movies to be shown in the theatre. The theatre space can also be space for Rock 'n' roll and blue concerts to support teenager culture, which will need the opportunity to properly express and use free time, which is better than drugs. Teenage behavior must be concerned with drug problems that might be decreased, and will be beneficial to solve some drug problems of teenagers in Thailand also. The management of this theatre will be money cycle of benefit from their teenager concert to publicity and return to be their opportunity to support, which bring their potential up to long term in developing to our country.

1.2.1.2 Oldies, the period of '60s, '70s, and '80s, has an intellectual value and most inspiration when we create art and design or compose a kind of music nowadays. When we try to create, design or compose any art, such as fine art, design, or music, we must remind ourselves of that period of the 20th century to help design and inspiration.

1.2.1.3 To remind others of the feeling of the old times. I would like to design an interior space that expresses values of "oldies" to give the community most creative inspiration in a newly designed interior space.

1.2.2 Objective of study

- To be the "oldie" information library

- To be the "oldie" source place

- To be a social center for "oldie" community.

- To understand characteristics of '60s and '70s concept

- To understand background of hippies and "oldies" concept

- To create nostalgic feelings when people come into the space

- To inspire any people who are interested to work with "oldies" concept

- To be the "oldies" theatre business place

- To be the place to support teenagers and decrease their drug problems

1.3   Thesis statement

Oldies square will be beneficial to educate and understand the history of culture and social movements, and way of thinking during that period. This project will be beneficial to theatre business and their supporting areas on the old building Scala Theatre, which is old and not a very interesting place for people walking past there, because its old character and old name of building when put the trend to it, instead of oldies character to support and make this oldie concept to be more obvious to attract more people to use this place and make profit to this old theatre. The project will be putting new interesting activities in the oldies space to remind of "oldies" nostalgia which will be valuable to study how they were through their suffering and oppressed life. It is a kind of nostalgia that may be an inspiration for everyone who is interested in creation: e.g. creation in music composition, screenwriting, or fashion design.

1.4   Scope of Research

-         To study the relationship of "oldies" behavior with the space.

-         To study structure, the technical system and engineering system in the theater project.

-         To study case study of theater, music hall, hall of fame, library, and souvenir shop.

-         To study the function and facilities of the theatre, supporting office, event hall, and library

-         To study and analyze about the target group that will suit the theater project.

-         To study the surroundings and environment of the retail area.

1.5   Design scope

Focusing on the principle function of the theater includes the following :

1.5.1   Main facilities

1.5.1.1   Public Area

          Main hall

          Event hall

          Reception

          Lobby

          Lobby lounge

1.5.1.2   Special Recreation

          Restaurant

Café

Theater

Hall of fame

Library

Souvenir shop.

1.6   Definition of terms

- **Oldie**

"Oldies" is a term commonly used to describe a radio format that concentrates on music from a period of about 15 to 55 years before the present day.

In the 1980s and 1990s, "oldies" meant the 15 years from the birth of rock n roll to the beginning of the singer-song writer era of the early 1970s, or about 1955 to 1972, although this varied and some stations chose 1950-1969. In the early 2000s, 1970s music was increasingly included,[1] and early 1980s music is beginning to also be called "oldies", though the term "classic hits" is used to distinguish the "new" oldies (the Generation X oldies) from the "old" oldies (the Baby Boomer oldies).

- **20th Century**

The **20th century** of the Anno Domini began on January 1, 1901 and ended on December 31, 2000.

- **Theater**

Theatre is a collaborative form of <u>fine art</u> that uses live performers to present the experience of a real or imagined event before a live audience in a specific place. The performers may communicate this experience to the audience through combinations of gesture, speech, song, music or dance. Elements of design and <u>stagecraft</u> are used to enhance the physicality, presence and immediacy of the experience. The specific place of the performance is also named by the word "theatre" as derived from the <u>Ancient Greek</u>.

- **Retrospect**

Retrospective compilations are sometimes assembled from an artist's <u>greatest hits</u>.

- **Nostalgia**

The term *nostalgia* describes a yearning for the past, often in <u>idealized</u>. The word is a learned formation of a <u>Greek</u> compound. It was described as a medical condition, a form of <u>melancholy</u>, in the <u>Early Modern period</u>, and came to be an important topic in <u>Romanticism</u>.

Nostalgia, in its most common meaning, caused the old front desk of <u>The Beverly Hills Hotel</u> (from 1942 to 1979) to be made into a bar.

In common, less clinical usage, nostalgia sometimes includes a general interest in past eras and their personalities and events, especially the "good old days" of a few generations back

recast in an idyllic light, such as the *Belle Époque*, Merry England, Neo-Victorian aesthetics, the US "Antebellum" Old South, etc. Sometimes it is brought on by a sudden image, or remembrance of something from one's childhood.

- **Rock 'n' Roll**

Rock and roll is a genre of popular music that originated and evolved in the United States during the late 1940s and early 1950s, primarily from a combination of the blues, country music, jazz, and gospel music. Though elements of rock and roll can be heard in country records of the 1930s, and in blues records from the 1920s, rock and roll did not acquire its name until the 1950s. An early form of rock and roll was rockabilly, which combined country and jazz with influences from traditional Appalachian folk music and gospel.

The term "rock and roll" now has at least two different meanings, both in common usage. The *American Heritage Dictionary* and the *Merriam-Webster Dictionary* both define rock and roll as synonymous with rock music. *Encyclopaedia Britannica*, on the other hand, regards it as the music that originated in the mid-1950s and later evolved "into the more encompassing international style known as rock music." For the purpose of differentiation, this article uses the latter definition, while the broader musical genre is discussed in the rock music article.

- **Popular Culture (Pop Culture)**

Popular culture (often referred to as **pop culture**) is the totality of ideas, perspectives, attitudes, images and other phenomena that are deemed preferred through an informal consensus within the mainstream of any given society.

Popular culture is heavily influenced by the mass media and permeates the everyday lives of many people.

The term "popular culture" was coined in the 19th century to refer to the education and general "culturedness" of the lower classes, as was delivered in an address at the Birmingham Town Hall, England. The term began to assume the meaning of a culture of the lower classes separate from (and sometimes opposed) to "true education" towards the end of the century, a usage that became established by the interbellum period. The current meaning of the term, culture for mass consumption, especially originating in the United States, is established by the end of World War II. The abbreviated form "pop culture" dates to the 1960s.

- **Pop Art**

Pop art is an art movement that emerged in the mid 1950s in Britain and in the late 1950s in the United States. Pop art challenged tradition by asserting that an artist's use of the mass-produced visual commodities of popular culture is contiguous with the perspective of fine art. Pop removes the material from its context and isolates the object, or combines it with other

objects, for contemplation. The concept of pop art refers not as much to the art itself as to the attitudes that led to it.

Pop art employs aspects of <u>mass culture</u>, such as <u>advertising</u>, <u>comic books</u> and mundane cultural objects. It is widely interpreted as a reaction to the then-dominant ideas of <u>abstract expressionism</u>, as well as an expansion upon them. And due to its utilization of found objects and images it is similar to <u>Dada</u>. Pop art is aimed to employ images of popular as opposed to elitist culture in art, emphasizing the banal or <u>kitschy</u> elements of any given culture, most often through the use of <u>irony</u>. It is also associated with the artists' use of mechanical means of reproduction or rendering techniques.

- **Baby Boomer**

A **baby boomer** is a person who was born during the demographic <u>Post-World War II baby boom</u>. The term "baby boomer" is sometimes used in a cultural context. Therefore, it is impossible to achieve broad consensus of a precise definition, even within a given territory. Different groups, organizations, individuals, and scholars may have widely varying opinions on what constitutes a baby boomer, both technically and culturally. Ascribing universal attributes to a broad generation is difficult, and some observers believe that it is inherently impossible. Nonetheless, many people have attempted to determine the broad cultural similarities and historical impact of the generation, and thus the term has gained widespread popular usage.

United States birth rate (births per 1000 population). The blue segment is the postwar baby boom.

In general, baby boomers are associated with a rejection or redefinition of traditional values; however, many commentators have disputed the extent of that rejection, noting the widespread continuity of values with older and younger generations. In Europe and North America boomers are widely associated with privilege, as many grew up in a time of affluence. As a group, they were the healthiest, and wealthiest generation to that time, and amongst the first to grow up genuinely expecting the world to improve with time.

- **1960s**

From left, clockwise: A soldier lies on the ground during the Vietnam War; The arrival of The Beatles in the U.S., and subsequent appearance on The Ed Sullivan Show in 1964, marked the start of the "British Invasion", contributing to the band's phenomenal success and tremendous influence on popular music in the U.S and around the world; the Woodstock Festival was held in upstate New York in 1969 in front of 400,000 concert-goers and featured some of the top rock musicians of the era; For the first time in history, a human being sets his foot on the Moon, in the Moon landing of July 1969; China's Mao Zedong executes the Great Leap Forward, a disastrous attempt to modernize the Chinese economy that ended in severe grain shortages and the deaths of tens of millions of people; U.S. President John F. Kennedy in the presidential limousine, minutes before his assassination on November 22, 1963; Martin Luther King Jr. makes his famous "I Have a Dream" speech to a crowd of over a million during the March on Washington in 1963.

The **1960s** was the decade that started on January 1, 1960, and ended on December 31, 1969. It was the seventh decade of the 20th century.

The 1960s term also refers to an era more often called **The Sixties**, denoting the complex of inter-related cultural and political trends across the globe. This "cultural decade" is a bit later than the actual decade, beginning around 1963 and ending around 1973, and in particular the years 1965-73 are sometimes referred as the "High Sixties".

In the United States, "the Sixties", as they are known in popular culture, is a term used by historians, journalists, and other objective academics; in some cases nostalgically to describe the counterculture and social revolution near the end of the decade; and pejoratively to describe the era as one of irresponsible excess and flamboyance. The decade was also labeled the Swinging Sixties because of the fall or relaxation of some social taboos especially relating to sexism and racism that occurred during this time.

- **Social and political movements/ Counterculture/social revolution**

In the second half of the decade, young people began to revolt against the conservative norms of the time, as well as remove themselves from mainstream liberalism, in particular the high level of materialism which was so common during the era. This created a "counterculture" that sparked a social revolution throughout much of the western world. It began in the United States as a reaction against the conservatism and social conformity of the 1950s, and the US government's extensive military intervention in Vietnam. The youth involved in the popular social aspects of the movement became known as hippies. These groups created a movement toward liberation in society, including the sexual revolution, questioning authority and government, and demanding more freedoms and rights for women and minorities. The

Underground Press, a widespread, eclectic collection of newspapers served as a unifying medium for the counterculture. The movement was also marked by the first widespread, socially accepted drug use (including LSD and marijuana) and psychedelic music.

Chapter2: Design Theory and Design Principle

2.1   Design Theory

My Oldies Square is a Theatre community. It will include an "oldie", retro, or art movie theatre and music hall. The main style of this theatre will be "oldies" or retro, which will be alternated to show art movie, concerts, and event showcases. This Oldies Square will represent a space of nostalgia for the period of 1960s, 1970s, and 1980s. The theory of design space will be a new way of oldies style with a nostalgia concept.

Relationship between Oldies, Popular culture, Culture movement, and Pop art.

"Oldies" is described as the style of art in the period between 1960 – and the 1980. The significant of this period is the history of the pop culture movement and this was influenced so much by popular culture in the theory of pop and the emergence of pop art, which can be called by the alternate name, New Realism.

Popular Culture, there was so much movement of people in that period, that will influence every subject throughout history.

*"**Pop Art** - A Movement in the Sixties.*

What's Pop? A play on words, a lifestyle, a particular generation, a new understanding of art? And What is Pop Art - The term for an influencial cultural movement of the sixties?

Pop Art does not describe a style; it is much rather a collective term for artistic phenomena in which the sense of being in a particular era found its concrete expression. When we apply the

epithet "Pop" to art, we tend to associate it with various superficial aspects of society. Pop Art performs a balancing act between the more euphoric, progress-orientated prospects of the epoch on the one hand, and its pessimistic, catastrophic outlook on the other. The increasing commercialization which permeates..."[3].

Pop Art is most popular medium to express the movement people's culture in 1960s – 1980s. Competitive advertising of industrial products create mass production, goods, art pieces and advertising. It is combination of consumer society, media, stars, and modern life. *"**Everything is beautiful**," raved Andy Warhol, in raptures at the glamour of modern life, consumer society, the world of the media and its stars. And in so saying, he was expressing the feelings of a generation who felt their age was dawning, an age of "love" and "freedom". In art, too, a new attitude towards the present was making itself felt. Jasper Johns, Roy Lichtenstein, Claus Oldenburg, Robert Rauschenberg, James Rosenquist, Tom Wesselmann, Richard Hamilton and many other artists were discovering Marilyn Monroe, Elvis Presley, Coca Cola, comics, advertising, household appliances and food cans as an independent aesthetic reality"[4].*

"To understand Pop Art, we need to understand social movement at that time before knowing about the birth of Pop Culture. In WWII, American culture changed so much to an urban society with increasing industry, that it made American society capitalist. That create many things from industry and capitalism were spawned, such as billboards, neon lighting, and superstars"

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[3] Pop Art, "Tilman Osterwold", Taschen
[4] Pop Art, "Tilman Osterwold", Taschen

Signatures of Design Theory

Signature of Oldies

- Music or entertainment (music, movie, and art)

- 1950s, 1960s, 1970s, and 1980s

Signature of Pop Culture

- Movement of culture to be industrial culture or capitalism

- Freedom of Expression

- Consumer Society

Signature of Pop Art

- Mass production (Quantity production and Rapid making)

- Poster advertising, billboard chart

- Neon lighting (The new lighting technology at that time)

- New Realism

The Signatures of Oldies Square Theory

The signature of 1960s – 1990s style will be used in design theory, which includes are the following;

1. Modern Life

2. Consumer Society

3. Age of "love" and "freedom"

4. Common life Household appliances, food cans etc.

5. Art media, music media, advertising media

6. Super Stars (Marilyn Monroe, James Dean, and Elvis Presley)

7. Comics

8. Neon Lighting

9. Industrial society : mass production

10. Easy to understand

Apply in Design Theory of Oldies Style

1. Physical (Design = Pop Art)

2. Psychological (Freedom expression)

Benefit from Research

The reason for the movement of popular culture at that time in American society, which was the most influential any around the world, will give inspiration to us to know how is social movement and character. This understanding can be adapted to solve some social problems, especially youth problems in our society, and give dimension to my project. Then, this theatre and music hall community can be a place for the new generation of Thai youth that will benefit from the solving of some social problems. Nowadays, there are a number of the new generation who are increasingly interested in a nostalgic style, so it will be a response to the youth, and supporting in their abilities to express their talent, and it will support in the long term a knowledge society, and develop our country.

Acoustic Design

1.1 Types of auditorium proposal

1.2 Acoustic Material

1.1 Types of auditorium proposal

Rooms for speech

A high level of speech intelligibility is the main goal in the rooms. Factors affecting intelligibility are the source level, background noise and reverberation. Low signal-to-noise ratios, especially in the frequency range of speech, make it difficult for listeners to understand a speaker. Noise criteria (NC) provides guidelines for acceptable background noise levels.

Rooms for music

The subject of space for live music performance has filled volumes, and is considered to add new insights and increased knowledge: and growing computing power aids in design and evaluation. However, more elusive and intuitive aspects are still part of the design process, the subjective impression of an audience is still the ultimate measure of a successful project.

Multipurpose rooms

Room that serve various purposes, such as speech and music, pose acoustic challenges.

Variable Acoustics

1 Acoustic conditions in a space can be varied through many different means.

2 Pulling a curtain over a hard surface to a completely computer-controlled adjustable environment

3 Contemporary concert halls may feature complex moving canopies or shutters, which can vary the air volume in a space, as well as the geometry, and the level of absorption, reflection and diffusion.

4 Low-tech versions of the same concepts have long been utilized in studios and performance spaces.

1.2 Acoustic Material

1. **Perforated metal sheeting**: Absorbing resonators in the wall and in some rooms in the ceiling, covered and concealed by perforated metal sheeting.

2. **Perforated plasterboard**: The ceilings are clad with sheets of perforated plasterboard.

3. **Tube-traps**: Installed in the corners of the rooms are excellent low-frequency absorbers.

4. **Flexible lining shells of plasterboard**: Installed in some rooms to act as low-frequency absorbers.

5. **Foam structures:** Fine tuning for high frequencies was accomplished by applying colourful highly absorbent foam structures as necessary, particularly in sharp angles.

6. **Double-sealed door panels**: The door were checked for sound transmissions and sound-insulated wherever necessary using double-sealed door panels of sufficient weight, sound proof door frames and flush rubber seals.

7. **Melamine resin foam elements**: To reduce resonance in the windows, melamine resin foam elements were installed between the panes.

8. **Timber cladding:** Some of the timber cladding in the rooms was designed as undulating paneling for low-pitch absorption.

2.2   Case Study

- **Primary case study**

  2.2.1 Esplanade Theatre

  2.2.2 Art House RCA

- **Secondary case study**

  2.2.3 Jerome Robbins Theatre

2.2.1 The Esplanade : Primary case study

Studying for : cinema complex facilities and interior design

Architect : The Office of Bangkok Architects(OBA)

Total Area : 105,187 sq.m

Location : Ratchadapisek Rd., Dindaeng, Bangkok

Year of build : 2006

Service Hours : 10.00 am – 1.00 am

Target group : every person

Number of seating : 12 megaplex cinemas, 280 seats for each.

Concept

Art and Entertainment Center. The purpose of this Entertainment complex is to be an Arte-tainment Avenue, which has the purpose of supporting Art and Culture in 7 categories of art, including music, sculpture, painting, poetry, performing art, architecture and celluloid art (movie).

The design principle is a combination of art and entertainment, as the concept of this building is "Living in Entertainment Art". The space facilities purpose is for art activities and a shopping arcade. The project uses any event activities to be an interesting point for customers who have their own lifestyle and class.

(Outside view)

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(Outside view)

Architecture

Reinforced concrete structure.

There are 6 storeys.

Space is spread in a long line, and it is divided into 2 main spaces; theatre and shopping arcade

The department store for 5 storeys.

The underground floor is the space for restaurant.

Clear glass wall envelopes are used for the road side of 1st-5st floor.

Solid walls are used on the 6rd floor.

The parking area, which is next to project building, is at the rear of the building on the north side. It can contain 800 cars.

Oval shape planning.

The decorated tilted column in the interior space at the main circulation of the atrium

The rear building is solid wall.

(Top View)

(Map)

22
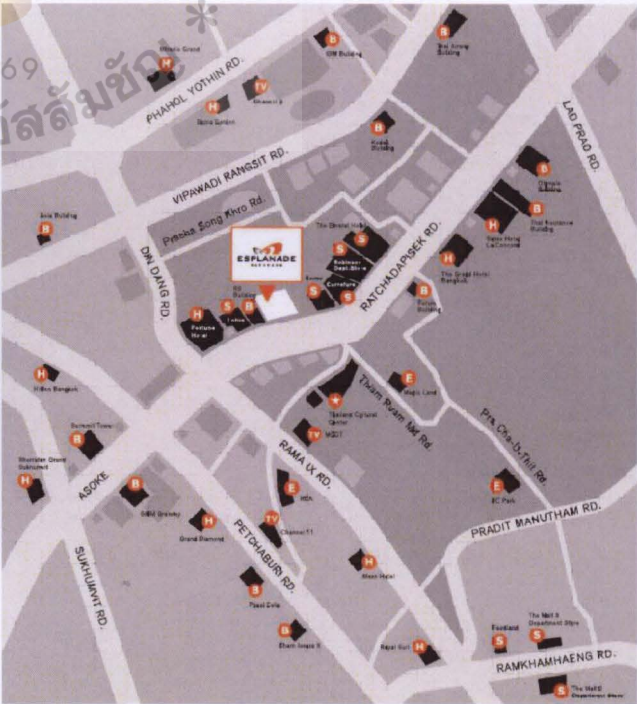
Idea of design

The main idea is the name of The Esplanade. Esplanade means the stream that is brought inside the building passes the feeling of a stream to the people who come inside the building and outside too.

Representing to the modern, glossy metals material and texture are used everywhere, for example, at the counter of the ticket booth and snack booth, on the big columns, and the advertising board. In the ceiling at the second hall, there is ornate metal to emphasize a modern style.

Material :

Crystal, glazing, reflected glass : in important places. For example, counter, ticket booth, reception, and lobby

Clear glass : Balcony

White painting cover with light : Ceiling

Light cover design : Blue cover light at ticket booth

: Warm white light at surrounding area (1-4 floor)

Concrete material : Column

Floor Material:

Granite, which is supported in the prime area.

Color mood:

White color : ambient warm white light.

Violet color :the main design color of the theatre, it can represent fun and seek. It is suitable for the entertainment space.

Blue color :at the light cove, for calming and not distinct the eyes when watching movies.

Lighting: at arcade

Emphasize more lighting in important area. For example, at the ticket booth area, snack booth, entrance area of cinema

Cove light : hiding in cove ceiling designed pattern along with zigzag crossed line. Warm white light. Generate whole area ambient light.

Down light :

1 st floor

Hiding in cove fluorescent ceiling designed pattern along with zigzag crossed line. Create warm white light

Down light : are use in any surroundings, which gives less light than in important areas.

White color : Ambient with

warm white light.

Advantage & Disadvantage

Advantage:

1. New building, creating an interesting environment

2. Underground tube (MRT), very comfortable to come from anywhere around Bangkok.

3. It is located in the center of the city.

4. Surrounding it are many people from night entertainment, offices, and schools, so there will be many target groups for supporting.

5. Several activities are provided which will mean several target groups of people, such as the school of music and performance, the extreme park, and entertainment facilities like ice skating, which make this building different from other nearby department stores in its ability to attract people to come to this building.

Disadvantage:

1. It will have the competitor like Central Plaza, which is going to be finished during construction.

Analyze the special function of The Esplanade

Ice skating, extreme park, center for children music school and performance are special functions for this floor, which this department store are including more than 1 special to be support itself to attract people and make a lot of people to come here. Actually, the Ratchadapisek area has not been successful for department store for a long time like Robinson and Jusco.

The concept activity for culture make a different identity to others, so it will be attracted youth to use activity service.

26

Electrical system

- Electrical system:

    Electrical room and generator room, which are located on each floor. These

are at the vertical electrical system of the building

- Sanitary system:

    Gravity downfeed

2.2.2: Art House RCA: Primary case study

Studying for : Art Theatre, event facility, and inside theatre design

Total Area : about 3,000 sq.m

Location : 31/8 RCA Rd., RCA Plaza, Bangkapi, Huaykwang, Bangkok

(UMG and Tops Building)

Service Hour : 11.30 am – 10.00 pm

Target group : Working person, kids, families, friends, and lovers

Number of seating : 2 Theatres, 136 seats for each.

Style of movie : Art, indy, and rate movie

Activity Facilities : DVD rent shop, coffee shop and Restaurant

Event : Movie promoting and events

Special event : Place for first round of Academy Fantasia

Special function : place for rent any activities, taking advertising photo, and talking for

business contact.

Customer Behavior

*Customers willing to watch movie only not for other objective

*Place to contact businessman and superstars

Programing of Movies

Only art, indy, and rated movies which have received a prize will be run in this Art

House RCA. These will be run throughout service hours.

Activity support art movie

DVD renting and saling shop, Promoting new indy movies (*Dvd rent shop : price 99

baht.)

Theatre and retail shop management

There are many retail shops at 1st floor of RCA Building. On the 2nd and 3rd floor there is no retail shop, but there is a go-cart riding area.

Inside Art House RCA, on the 3rd floor of the building , the restaurant and DVD rent shop are a rented area inside the owned area of Art House RCA.

Event

Period: 1 – 2 days

Relationship with outside facilities

- **RCA Building:**

1st floor   : Tops Supermarket, retail shop, beauty center, game center, key and shoe fixing.

2nd floor   : RCA Kart, Rama Theatre, and Toilet of building

3rd floor   : Art House RCA Theatre, Bowling (Closed)

- **Opposite Building:**

Starbuck, Music House (Practice room), toilets

(Front of RCA Building)   (Front of Art House Floor) 29

(Map)

Toilet

5 toilets for women, and 4 wash sink

4 toilets, 3 urinal, 3 wash sink

Staff (4 persons)

1. Ticket sale

2. Control room man,

3. Ticket check man (The first and last person who will open and close this house everyday.)

4. House keeper

*Out source – Mechanical and electrical Service

Toilet

5 toilets for women, and 4 wash sink

4 toilets, 3 urinal, 3 wash sink

Staff (4 persons)

1. Ticket sale

2. Control room man,

3. Ticket check man (The first and last person who will open and close this house everyday.)

4. House keeper

   *Out source – Mechanical and electrical Service

Technical (Picture inside the control room)

Sound Control Machine

Film Holder

Movie Projector
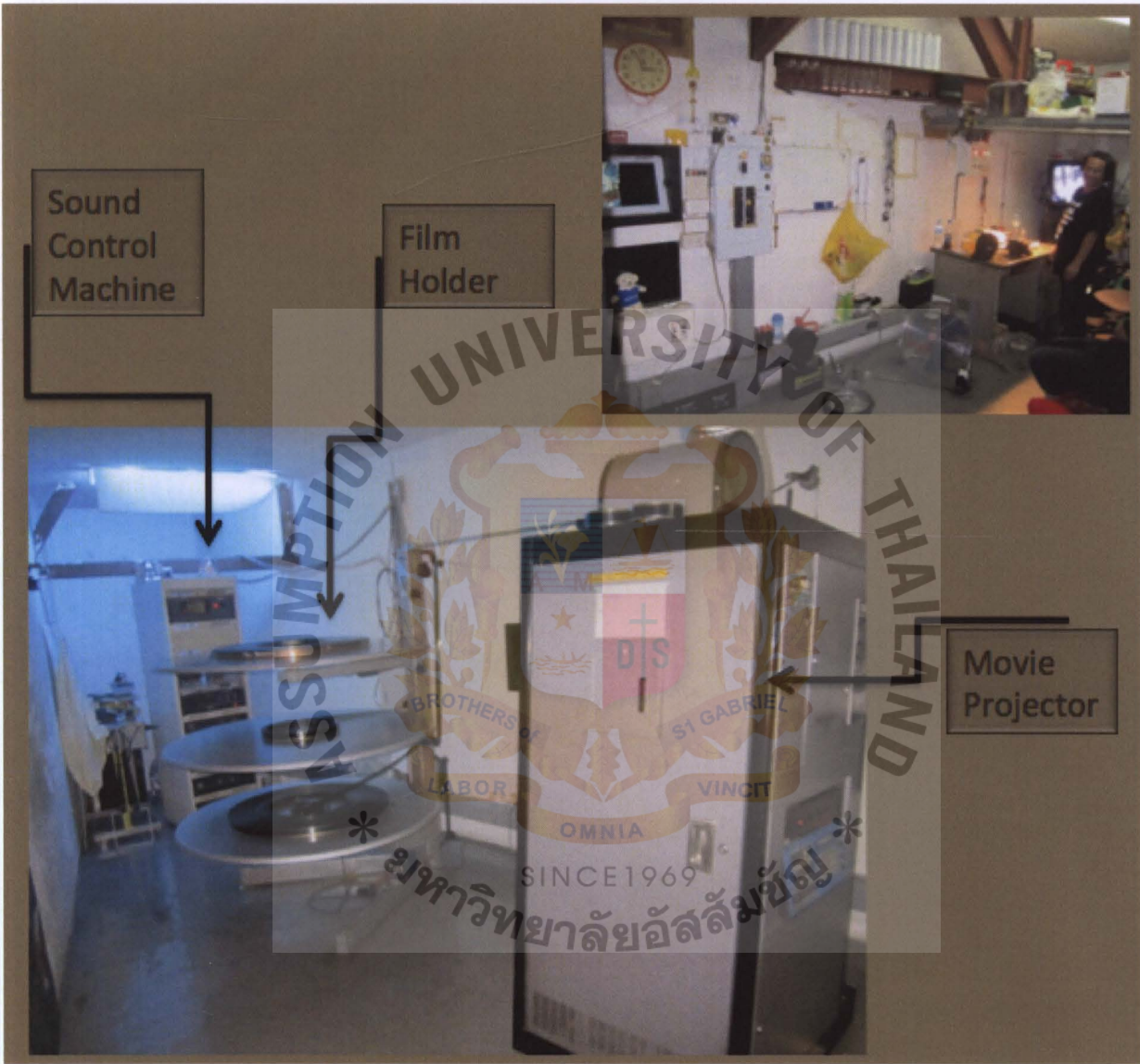
Concept

Art and indy movies around the world, that have received prizes.

"House RCA gives the royal treatment to films much ignored by the Hollywood-crazed crowd.

Design that makes the hand tremble because it's not just a politely-posh lobby with bold, erratic art on the wall;

it's a movie house, a film theater, not a crowded mall cineplex. House RCA is a boutique cinema in Bangkok

that only screens alternative cinema (indie and art films from all over the world) in its two theaters but the more

hardcore alternative. Here is the hotel gloss of its architecture and layout.

The space, physical and emotional, is quite overwhelming. Leather-bound armchairs and sofas are scattered

around the lobby right in front of the ticketing area. Go further to your left and you will see a DVD Library and

a cafe. At the time that we were there, a photo exhibit of Thai film Eternity (we caught the Director's Cut

version) has spilled onto the cafe so we decided to have coffee with its actors Ananda Everingham and Ploy

Chermarn"[1]

- Boutique Cinema

- Lifestyle

- Independent

- Art

- Not crowded

---

[1] http://spaceencounters.blogspot.com/

(Movable sculpture)   (Outside view of Art House RCA)

Material : at the lobby and reception

    Dark Wood   : Door, column, reception(ticket booth), cabinet, furniture, all

over the interior use dark wood is used(brown color)

    Metal Glaze   : Edged with wood

    Crystal, glazing,   : Counter, ticket booth, reception, lobby

    Clear glass   : Wall at the display area

    White painting reflected warm whote light: Ceiling

    White glossy floor   : Floor

    Wood   : Floor

    Wall paper   : Dark yellow pattern

    White Container pattern   : prefunction lobby

Floor Material:

    Concrete with white shiny color.

Color mood:

    White color   : ambient with warm white light.

Dark Wood   : to make the environment look old

Lighting:

    Crystal vintage Chandelier   : Main Lobby, restaurant, to spark specific area

    Vintage wall lighting   : Lobby and restaurant to create a vintage style

    Down light   : are used at circulation area to guide path.

Wall paper: Dark yellow pattern

Crystal vintage Chandelier
: Main Lobby, restaurant color

    Dark Wood   : Door, column, reception(ticket booth), cabinet, furniture, all over the interior dark wood is used

Material look like container: the material of theatre number that use look like a material of container

: at prefunction lobby

Down light : warm white downlight are used at circulation, which gives a direction path.

Zoning and Facilities

- **Public Area**
    - Main Lobby
    - DVD Rent Shop
    - Restaurant (Snack Bar, Coffee)
    - Event Hall
    - Corridor
    - Toilet
    - 2 Theatres

- **Private Area**
    - Staff area, office Area (Behind the ticket booth)
    - Back of house (Cooking, Storage)

- **Control Room**
    - 2 Movie Control Rooms (For each 2 of Theatres)

Percentage Zoning

Theatre	: 40 %
Lobby Area	: 10 %
Entertainment area	: 10 %
Restaurant	: 10 %
Staff area	: 10 %
DVD Rent	: 5 %
Corridor	: 5 %
Back of house	: 5 %
WC	: 5 %

Advantage&Disadvantage

Advantage:

1. Identity Boutique Theatre, creates different style from other cinema companies, which emphasize current movies.

2. In midtown working office.

3. Near RCA Pub, where people are familiar;

    - It is located on 3rd floor, where is not easy to get to

    - Less maintenance, escalator are often out of order

    - Far from people, it is not crowded

Analyze the special function of The Esplanade

Art House RCA is the boutique art theatre style, and attract only one specific target group. At the same time, the theatre house itself has its own identity. It is very a famous place for special movies and events. Many people never go there because it is quite difficult to get there compared to other theatres around Bangkok, which are attached to department stores. Therefore they are more worth more when people go out to shop, eat, and watch movies in the same place.

2.2.3: Jerome Robbins Theatre: Secondary case study

Studying for : Acoustic application

Total Area : 46,000-square-footthe six-story, concrete-and-glass structure

Location : 450 West 37th Street, Jerome Robbins Theater, WASA/Studio, New

York City, NYC

Year of Build : November 2005

Owner : Baryshnikov Arts Center

Completion Date : January 2010

Total Construction cost: $6 million

Target group : Working person, kids, families, friends, and lovers

Number of seating : 299 seats

Activity Facilities : performance and dance studio

Special function : dance studio practicing

Establish : Established as a creative laboratory and performance space, the center

comprised four daylight-filled dance studios, a studio theater, and offices when

it opened in 2005.

Concept

- Established as a creative laboratory and performance space, a new state-of-the-art performance venue for the Baryshnikov Arts Center (BAC)

- a non-profit performing arts group based in New York City and headed by renowned choreographer Mikhail Baryshnikov.

- The theater design involved a complete retrofitting of an existing theater within an arts complex located in Manhattan's West side.

- The client's goal was to create a high-tech performance space flexible enough in its design to accommodate dance, drama and musical events.

- Theater was to create a space that heightened the theatrical experience by enhancing the connection between audience and performer.

- The experience of the space is intended as an overture to the theatrical productions, and one that creates an expectation of quality, resourcefulness and creativity.

- BAC is also dedicated to building audiences for the arts by presenting contemporary, innovative work at low- or no-cost to ticket buyers.

Idea of Jerome Robbins

"The idea was to maximize the size of the room," admits Kapell. But then, he says, "The thing I find most satisfying and aesthetically pleasing about the project results from solving technical issues.

"This project was designed in close collaboration with the global consulting firm ARUP, whose Performing Arts Group is responsible for the design of theatrical lighting and acoustical systems.

ARUP also assisted us in the design of the orchestra and balcony seating, the control booth design and sightline analysis. Inserted into this existing blank box is a new "floating" mezzanine, to bring the total capacity of this theater to 299 seats."[1]

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[1] http://www.archdaily.com

Structural System

Existing building

exterior construction   lobby and gallery

Atmosphere:

Textural juxtaposition   reflect and rough surfaces

Concrete walls and mechanical ... exposed

Painting wall

Environment

Theatre

(Map)

Material:

Door:

Interior:

Floor:

Special surfaces

Limited palette of five materials and neutral colors.

The new Cast ... used ...

Structural System

Existing building   : Reinforced concrete

Interior construction   : Steel construction for Orchestra hall & Balcony and gallery

catwalks. Reinforced concrete floating floor.

Atmosphere

Textural juxtaposition   : refined and rough surfaces

Concrete walls and mechanicals   : exposed

Painting wall   : a warm black-brown to make "disappear."

Environment   : rawness, of the space

"The new theater is a textural juxtaposition of refined and rough surfaces in which the architects exposed the

concrete walls and mechanicals, painting them a warm black-brown to make them "disappear." Kapell wanted

to express the full potential, and rawness, of the space. So the crew stripped the room, then isolated the box from

external noise and rumblings by segregating the plant, silencing ductwork, and underpinning a resilient sprung

floor with a floating reinforced-concrete slab 4 inches above the existing slab."[2]

Material

Windows   : *Special Windows (sound control):* 900 Series Operable Acoustic Window

Doors   : *Special doors (sound control)*

Interior Finishes   : Acoustical Ceilings (Armstrong company)

Floor   : Carpet Bentley Prince Street, concrete expose, wood

Special surfacing   : LightBlocks (Stair Guardrails)

Limited palette of five materials and two paint colors.

The raw Cor-Ten steel railings echo the rough concrete of the box.

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[2] www.bacnyc.org/rent/jrt

Refined wood, acrylic panels and carpet : create an appropriate contrast.

The rough and the smooth, the raw and the defined :create a dialoque analogous to

the theatrical experience.

Lighting Design

Light with dimming system computerize lighting controls to create Theatrical ambient

and mood.

Adjustable Downlight at the ceiling of the theatre

Tracking Stage Light

Large steel grids : receive modular
sound-absorbing panels along the same walls

Expose Concrete

Acoustic Materials

Acoustical Wood Veneer Wall Panels: ☐Rulon Company

Acoustic wall panels : Rulon (slotted wood veneer); Decoustics (fiberglass)

The building's dense concrete walls : good sound insulators, highly reflective sound

Perforated, sound-absorbing wood-veneer panels : on the back wall

Bass absorbing insulation : along the uppermost section of the longitudinal walls.

Large steel grids : receive modular sound-absorbing panels along the same walls

Hung movable velour drapes : on either side of the stage

"According to acoustician Rachid Abu-Hassan, the building's dense concrete walls are good sound insulators. However, as the dense concrete is also highly reflective, introducing soft, absorbing finishes was required. To achieve the flawless acoustics desired, he installed perforated, sound-absorbing wood-veneer panels on the back wall, and bass absorbing insulation along the uppermost section of the longitudinal walls. For additional reverberation control in the event of amplified sound, the acousticians applied large steel grids that receive

44

modular sound-absorbing panels along the same walls, and hung movable velour drapes on either side of the stage."

"The heart of the project is Kapell's stadium seating, an ingenious structure centered in the space so that the lobby lounge could be tucked behind it. Framed in thin, pre-finished Corten steel and fitted with 238 plush, bench-style seats, it is configured to bolster sound quality and sight lines, improve circulation, and accommodate stage lighting and a balcony control room."

"The idea was to maximize the size of the room," admits Kapell. But then, he says, "The thing I find most satisfying and aesthetically pleasing about the project results from solving technical issues."

Acoustic Wall Panel
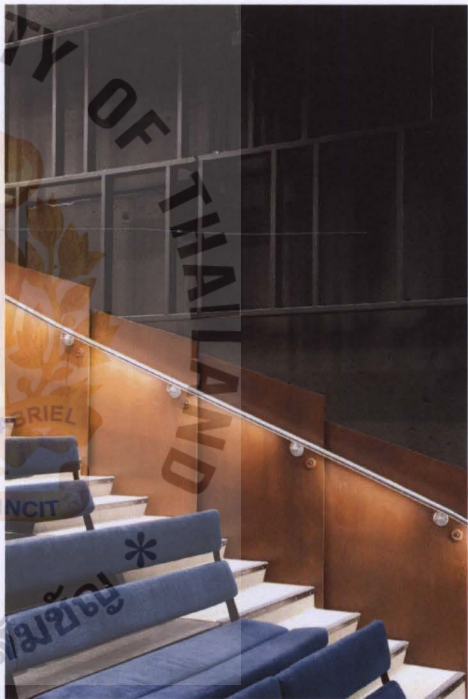
Large Steel Grid
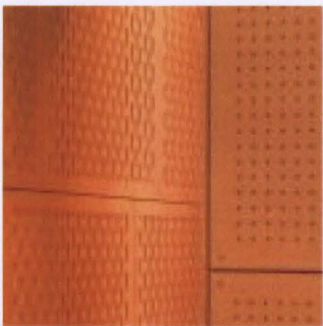
Perforate sound absorbing
material

Zonning and Facilities

- **Public Area**

    o Main Lobby

    o Event Hall, state-of-the-art venue for more fully realized dance, music, and

    theater events

    o Lounge

    o Corridor

    o Stage

    o a studio theater

    o Orchestra Seating

    o Balcony Seating

    o Restroom

    o four daylight-filled dance studios

- **Private Area**

    o Staff area, office Area

    o Change Room

    o Storage Room

- **Control Room**

    o Mechanical Room

    o Control Room

Percentage Zoning

Public area   :50%

Private area   :30 %

Control area   :20 %

Advantage&Disadvantage

Advantage:

1. Creative function and space facilities

Disadvantage:

1. No support to multipurpose use

Chapter3: Data Collection

3.1 Human Factors and Client Profile

3.1.1 Types of user

1. Guest

- Kids

- Teenage

- Adults

- disable

2. Staff

- Officer

- Housekeeper, mechanical, and technician

3. Temporary Staff

- Star

- Part-time staff

- Outsource service: exhibitor, light and sound controller

1. Guest		Characteristics	Psychological needs	
	5 - 12 K	**1.1 Kids** (5 – 12 years old) • Children • Students	• Safety • Comfortable • Education	
	13 - 20 T	**1.2 Teenage** (13 – 20 years old) • Students • Audience • Musician • Actor, actress	• Quality of sound • Comfortable • Education • Aesthetic appearance	• Friendliness • Enjoyable • Relaxation
	20 +	**1.3 Adults** (20 UP) • Working people • Audience • Musician • Actor, actress	• Quality of sound • Safety • Comfortable • Education • Aesthetic appearance	• Friendliness • Enjoyable • Relaxation

1. Guest	Characteristics	Psychological needs
	1.4 Wheelchairs • Patient • Handicap	• Quality of sound • Safety • Comfortable

2. Staff	Characteristics	Psychological needs
	2.1 Officer, Administrator • Receptionist • Manager	• Safety concerns • welfare
	1.2 House Keeper, Mechanical Service	• Safety concerns • welfare

3. Temporary Staff	Characteristics	Psychological needs	
	1.1 Star • Actor, actress • Singer • Teacher • Expert speaker	• Quality of equipment • Comfortable • Security • Aesthetic appearance	• Playful • Enjoyable • Relaxation • Welfare
	1.2 Part-time staff • Mechanical service • Electronica service	• Quality of equipment • Security • Welfare	

49

3.1.2 Physical and Psychological need

The relationship of female and male body dimensions to sofa seating. In order to determine how much space the seated body requires. The anthropometric measurements of major interest here are maximum body breadth and buttock-popliteal length.

	in	cm
A	42–48	106.7–121.9
B	6–9	15.2–22.9
C	3–6	7.6–15.2
D	28	71.1
E	62–68	157.5–172.7
F	90–96	228.6–243.8
G	40–46	101.6–116.8
H	26	66.0
I	58–64	147.3–162.6
J	84–90	213.4–228.6

134   INTERIOR SPACE·DESIGN STANDARDS

Male dimension s; base on 95th percentile data, the maximum body breadth dimension is 22.8 in, or 57.9 cm, with a nude subject, allowing for clothing and some body movement as well as change in posture and position, a minimum dimension of 28 in, or 71.1 cm, is suggested as a width allowance for a seated person. The overall dimension, therefore, included individual width allowance. A range of 3 to 6 in, or 7.6 to 15.2 cm, is suggested

SOFA SEATING / FEMALE
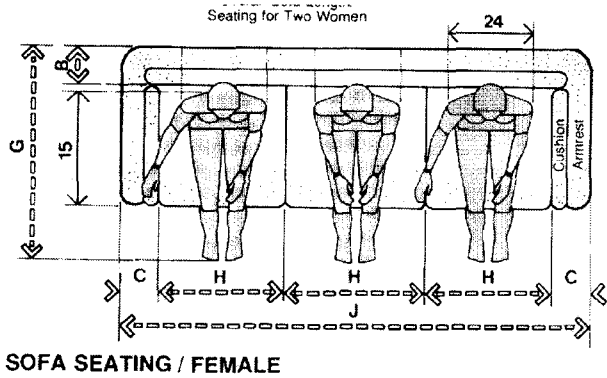
Using the bottock-popliteal length of the smaller person and adding a similar allowance of 6 to 9 in, or 15.2 to 22.9 cm, for backrest construction as well as a minimum zone in front of the sofa for foot movement, an overall depth dimension of 42 to 48 in, or 106.7 to 121.9 cm, is suggested. The relational for the drawing at the bottom dealing with the female data is the same. The information should prove not only useful in providing a keener insight into the general relationship between body size and furniture but of specific value in establishing preliminary design assumptions for institutional seating in spaces designed exclusively for the use of fames or of females. In spaces where seating is to be used by both sexes, the larger dimensions should apply.

LOUNGE SEATING / CLEARANCES

	in	cm
A	84–112	213.4–284.5
B	13–16	33.0–40.6
C	58–80	147.3–203.2
D	16–18	40.6–45.7
E	14–17	35.6–43.2
F	12–18	30.5–45.7
G	30–36	76.2–91.4
H	12–16	30.5–40.6
I	60–68	152.4–172.7
J	54–62	137.2–157.5
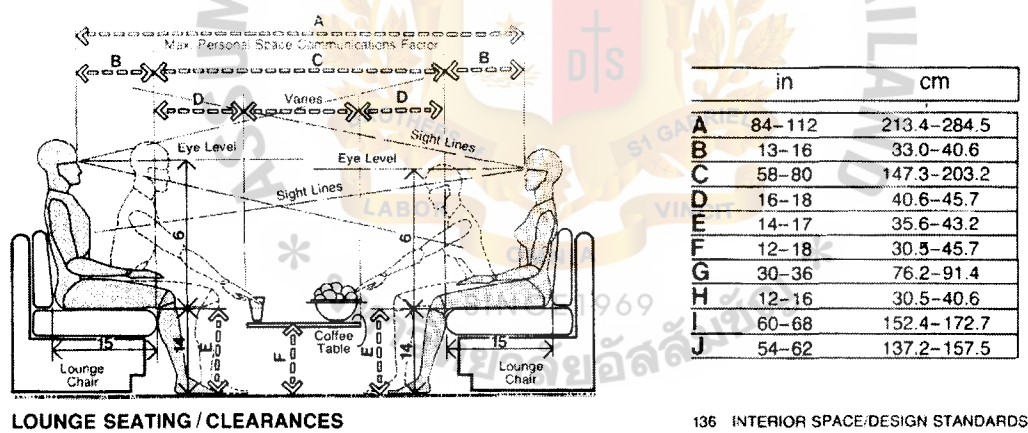
The drawings deal with the major clearances involved in lounge or conversational seating. The top drawing is based on a conversational grouping in which the clearance between the front of the seat and the edge of the table is limited between 16 and 18 in, or 40.6 and 45.7

cm. This clearance may require some degree of body contact or sidestepping for circulation and access.

Anthropometrically, however, it does accommodate human reach, permitting the seated person access to the coffee table without rising. The drawing also suggests a dimensional range for verbal conversation.

LOUNGE SEATING / CLEARANCE RELATIONSHIPS
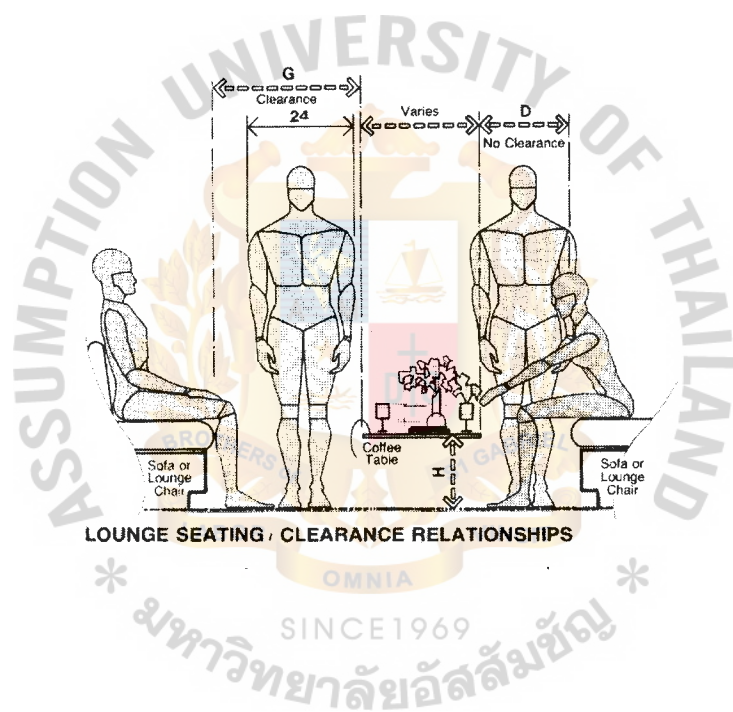
The second drawing illustrates a similar furniture arrangement that would permit circulation with full head-on access. The clearance indicated, however, to permit such access would make it impossible for most people to reach the coffee table from a seated position. This could be extremely undesirable in terms of food, beverages, and cigarettes. Given the choice between full head-on access and the accommodation of reach, the authors opt for reach and recommend the smaller clearance.
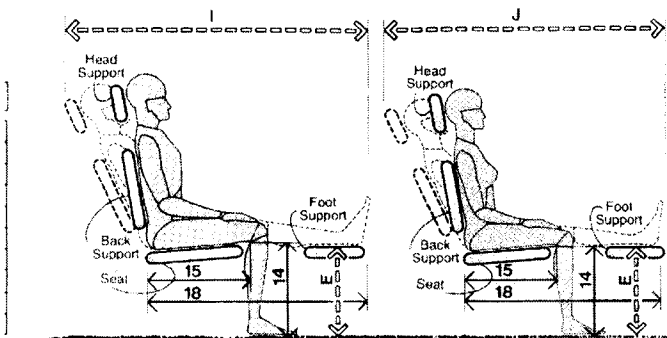
RECLINING CHAIR WITH FOOTREST / MALE AND FEMALE

	in	cm
A	84–112	213.4–284.5
B	13–16	33.0–40.6
C	58–80	147.3–203.2
D	16–18	40.6–45.7
E	14–17	35.6–43.2
F	12–18	30.5–45.7
G	30–36	76.2–91.4
H	12–16	30.5–40.6
I	60–68	152.4–172.7
J	54–62	137.2–157.5

The drawing suggests an overall allowance for easy chair or reclining chair seating, including footrest, The buttock-leg length of the larger person is the most significant anthropometric measurement in establishing this clearance, it should also be noted that the height of the footrest is also a function of seat height. The footrest should be a few inched below the height of the seat

This drawing show the basic dimenions for the design of banquette seating. The lack of armrests makes if difficult to define seat boundaries. The user, therefore, tends to establish his own territory by assuming a desired sitting posture and placing personal articles next to him, such as a brief case, purse, or package. Since the nature of this type of seating can permit some form of body contact

3.2 Function and facility study

Area	Function	Guest	Staff	Temporary Staff
1. Lobby	Main Hall	•		•
	Reception	•	•	
	Lobby Lounge	•		•
	Waiting Area	•		•
2. Front Office	Office		•	
3. Event Hall	TemporaryExhibition	•	•	
	Storage		•	
4. Ticket Booth	Ticket Counter	•	•	
	Storage		•	
5. Light Meal Bar	Counter Cashier	•	•	
	Small Pantry		•	
6. Souvenir Shop	Cashier Counter	•	•	
	Showcase		•	
	Display	•	•	
	Storage		•	
7. Hall of fame	Small Open Hall	•		
	Counter Information	•		
	Resting Corner	•		
	Mini Theatre	•		
	Hall of fame	•		
8. Library	Counter Information	•	•	
	Book renting Counter	•	•	
	Movie renting Counter	•	•	
	Reading Corner	•		
	Audio room	•		
	Mini-Theatre room	•		
9. Restaurant	Cashier Counter	•		
	Back of House		•	
	Cooking room		•	
	Loading Area		•	
10. Bar	Lounge	•		
	Bar	•		
	Pantry		•	
	Cooking		•	
11. Theatre	Seating Row			•
	Stage	•	•	•
	Backstage		•	•
	Control Room		•	•
	Fire exit	•	•	•
12. Toilet	Female Toilet	•	•	•
	Male Toilet	•	•	•
	Storage		•	•
13. Staff Area	Locker Room		•	
	Toilet and Shower		•	
	Meeting room		•	
14. Part-time staff area	Powder room			•
	Toilet and Shower			•
	Star Lounge			•
15. Mechanical room	Air-Condition Control		•	•
	Electronic room		•	•
16. Rental Area	Retail Shop			

3.3 User Behavior

Timing table of user

Time / Department	08.00-11.00	11.00-14.00	14.00-17.00	17.00-20.00	20.00-23.00	23.00-02.00	02.00-05.00	05.00-08.00
Lobby								
In House Office								
Event Hall								
Ticket Booth								
Light Meal Bar								
Souvenir shop								
Hall of fame								
Library								
Restaurant								
Bar								
Theatre								
Toilet								
Staff area								
Mechanical area								

Temporary Staff

employee

51
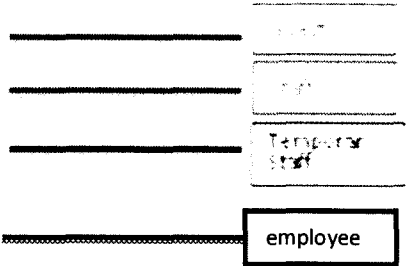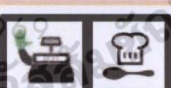
Guest user: Activity and circulation

Function	Activities
Lobby • Reception • Waiting Area	
Event Hall • Watching • Interactive • Shopping	
Ticket Booth • Buy ticket • Queuing	
Light Meal Bar • Buy light meal • Queuing	
Theatre • Audience • Party	
Toilet • Toilet • Dress up	
Bar • Drink • Dance • Smoke	
Library • Reading • Listen to radio • Watching	
Restaurant • Eating • Drinking • Listening • conversation	

Guest
Area

Staff user: Activity and circulation

Function	Activities
Lobby • Reception • Information	
In house Office • Reception • Office working	
Event Hall • Reception • Information	
Ticket Booth • Sell ticket	
Light Meal Bar • Sell Light Meal	
Souvenir shop • Cashier • Storage	
Hall of fame, exhibition • Reception • Information	
Library • Renting Counter • Storage • Information • Book binding	
Restaurant • Cashier • Cooking	
Bar • Cashier • Mixing Drinking	
Theatre • Checking • Cleaning	
Toilet • Toilet • Dress up	
Staff area • Dress up • Relax area • Dining	
Mechanical room • Fixing	

Staff Area

Staff user: Activity and circulation

Function			Activities
Lobby • Reception • Information			
In house Office • Reception • Office working			
Event Hall • Reception • Information			
Ticket Booth • Sell ticket			
Light Meal Bar • Sell Light Meal			
Souvenir shop • Cashier • Storage			
Hall of fame, exhibition • Reception • Information			
Library • Renting Counter • Information	• Storage • Book binding		
Restaurant • Cashier • Cooking			
Bar • Cashier • Mixing Drinking			
Theatre • Checking • Cleaning			
Toilet • Toilet • Dress up			
Staff area • Dress up • Relax area • Dining			
Mechanical room • Fixing			

Staff Area

Entrance — Clock-in — Locker / Dress up — stage — Locker / Dress up — Clock-Out — Exit

➡ Staff

Temporary staff user: Activity and circulation

	Function		Activities
Temporary Staff Area	Backstage • Dress up		
	Loading + Storage • storage • Prepare event		
	Theatre • Performance • MC	• Singing • Play music	
	Lobby • Waiting		
	Toilet • Toilet • Dress up		
	Event Hall • MC • Prepare Event		
Employee Area	Staff area • Fixing • Cleaning		
	Mechanical area • Fixing		

Dress up

Entrance   reception   Stage   Exit

Fixing, Prepare event
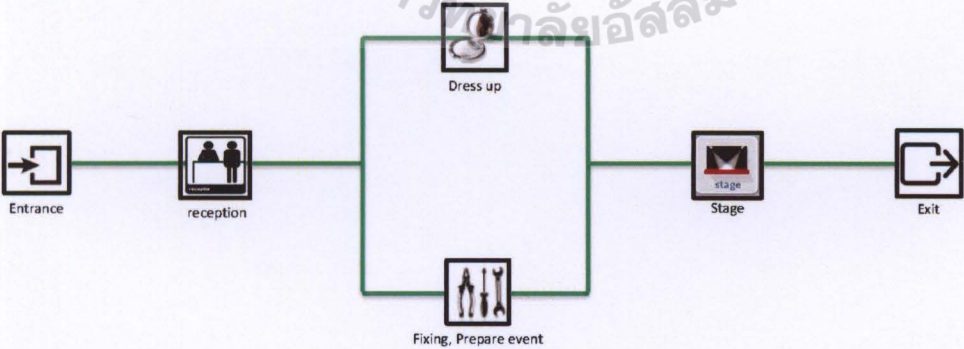
→ Temporary

Organization chart of Scala existing site

Temporary staff user: Activity and circulation

Organization Chart

Manager (1)
Assistant (1)
Head of Movie control room (1)
Office and Cashier (1)
Head of ticket (1)
Head of machine room (1)
Movie control assistant (3)
Office Assistant, Ticket Seller (2)
Ticket assistant (3)
Machine assistant (3)
House Keeper (5)
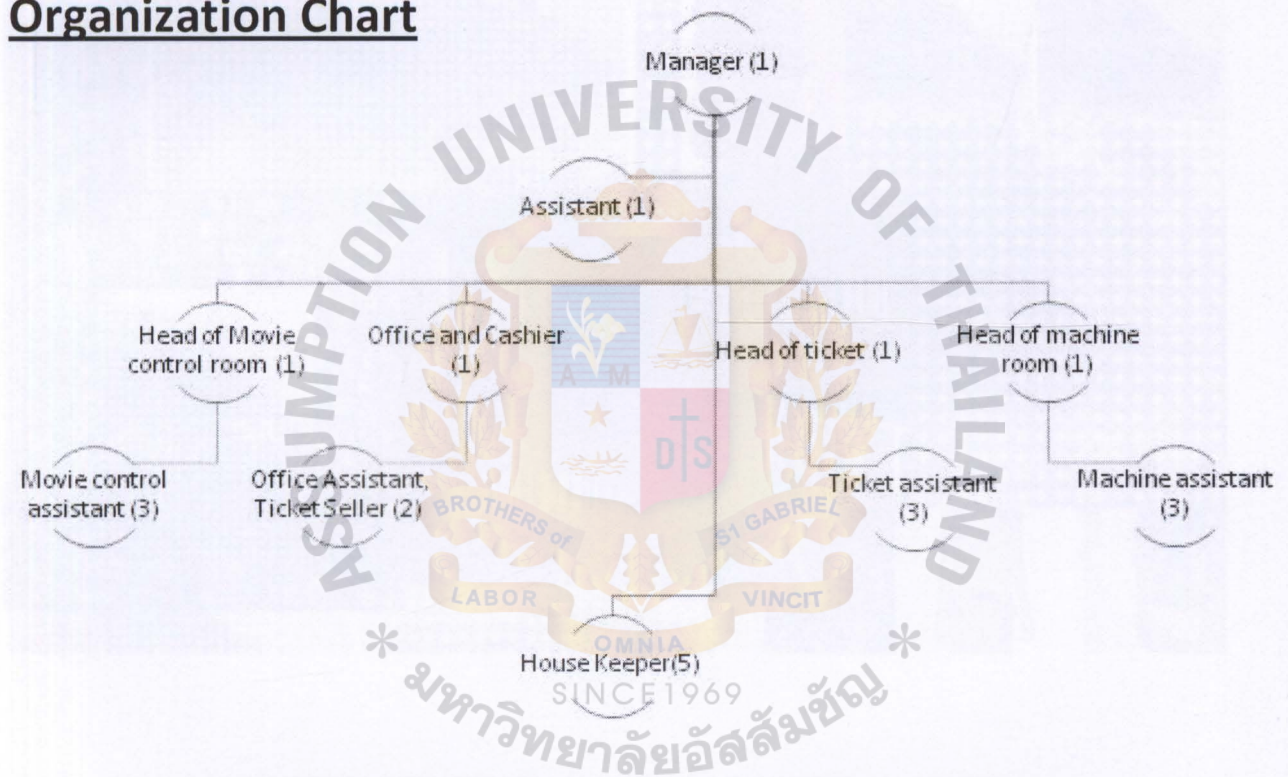
3.4 Aesthetic form

3.4 Site Analysis

- Existing Site (Scala Theatre)

Location:

- Siam Square Soi1

- Rama I Rd.

- Opposite Siam Discovery, Siam Center, Paragon, and Maboonkrong Center

Area Total: 8900 sq.m.

Owner : Pisit Tansajja

Architect : South East Asia Architect

Year of Build : December 31, 1969

Service Hour: Monday – Friday (11.30 am – 11.00 pm)

Saturday – Sunday (8.30 am – 12.00 pm)

- 5 movies for each day

- Last movie at 9.00 pm

- Weekend is usually a lot of people

- Parking about 200 cars

Target group : Every person

Number of seating : 800 seatings

Concept

Western & Eastern Architecture combine to male the Scala Theatre. It is a very big theatre. Scala is the 3rd theatre built after the Siam Theatre and Lido Theatre, where are belonging to Pisit Tansajja, who succeed with Chalermkrung and planned to build theatre in the area of Siam Square, where the land belongs to Chulalongkorn University.

Architecture

Reinforced concrete

3 storeys

Combining western & Eastern style

Flamboyant like ceiling pattern

The restoration building

Material

Terazzo : Floor (terrazzo and aluminum diagonal grid)

Ornament : Carved dark wood

Ceiling : White stucco with gold metal flower

White paint wall

Lighting

Neon ighting, various color at billboard cinemas

Incandescent, warm white light on ceiling flower pattern

Fluorescense as ambient light at cove ceiling

Staff

Staff: 20 persons

1. (1) Manager

2. (1) Assistant

3. (4) Movie control room

4. (4) Machine room (control air-conditioning, open and close air-conditioning)

5. (4) Ticket check, security guard (at night only)

6. (5) House keeper

7. (1) Office & Cashier

8. (2) Ticket Sale person

*Hoiday: **some** member of staff will be absent

*Lunch : 12.00 pm

Work Hour :

      8.30 : Open

      9.00 – 11.00 : First movie

      12.00 – 14.00 : Second movie

      15.00 – 17.00 : Third movie

      18.00 – 20.00 : Forth movie

      21.00 – 23.00 : Last movie

      24.00 : Close

Percentage Zoning of Scala Theatre

    Theatre   : 40%

    Lobby Area   : 25%

    Restaurant   : 20

    WC   : 15

Scala Facilities

1. Main Entrance

2. Lobby Area

3. Ticket booth

4. Pre function

5. Hall

6. Inside Theatre

7. WC.

8. Restaurant

9. Back of House

10. Control Room

11. Staff Area

Control Room : Mechanical area, maintenance area, system area.

Ventilation pipe
&
Projector

Platter Holder
of film roll

Types of auditorium proposal

Room for speech

A high level of speech intelligibility is the main goal in the room, courtrooms, etc. Facors affecting intelligibility are the source level, background noise and reverberation. Low signal-to-ratios, especially in the frequency range of speech, make if difficult for listeners to understand a speaker, Noise criteria (NC) providing guidelines for acceptable background noise levels.

Room for Music

The subject of spaces for live music performance has filled volumes, and is considered the epitome of room acoustics.

Objective values and parameters for acoustic performance exist.

Ongoing research continually adds new evaluation. However, more elusive and intuitive aspects are still of the design process, the subjective impression of an audience is still the ultimate measure of a successful project.

Multipurpose Rooms

Room that serve various purposes, such as speech and music, pose acoustic challenges

Variable Acoustics

Acoustic conditions in a space can be varied through many different means.

- Pulling a curtain over a hard surface to a completely computer-controlled adjustable environment

- Contemporary concert halls may feature complex moving canopies or shutters, which can vary the air volume in a space, as well as the geometry, and the level of absorbtion, reflection and diffusion.

- Low-tech version of the same concepts have long been utilize in studios and performance spaces

Room Boundaries

Geometry

Room shapes determine the reflection patterns for high frequencies and the build-up of standing waves for bass frequencies

3.5 Project specific

- Acoustic design

- Theatre design

- Building code

3.5.1 Acoustic design

- Reverberation

- Noise reduction

- Types of auditorium proposal

    Room for speech

    Room for Music

    Multipurpose rooms

    Variable acoustic rooms

- Room boundaries

- The objective of anti-resonance

- Absorbtive material

- Sound insulation audio material

3.5.1.1 Reverberation

Addressing the build up and decay of sound over time, is the most important aspect of room acoustics.

Reverberation times that are too long make speech perception difficult or impossible. If reverberation is too short, rooms sound "dead"

Reverberation is directly related to room volume; a great room volume results in proportionally more reverberation.

Reverberation is inversely proportional to the amount of sound absorbing material in a space. More absorbing material results in less reverberation.

Different room uses require different reverberation times.

3.5.1.2 Noise reduction

Sound levels in a room build up due to reflections from its enclosing surfaces, the size of the room and the amount of absorption in it determine the build-up of sound levels.

3.5.1.3 Types of auditorium proposal

Room for speech

A high level of speech intelligibility is the main goal in the room, courtrooms, etc. Facors affecting intelligibility are the source level, background noise and reverberation. Low signal-to-ratios, especially in the frequency range of speech, make if difficult for listeners to understand a speaker, Noise criteria (NC) providing guidelines for acceptable background noise levels.

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3.5.1.4 Room Boundaries

Geometry

Room shapes determine the reflection patterns for high frequencies and the build-up of standing waves for bass frequencies

REFLECTION PATTERNS IN DIFFERENT ROOM SHAPES

MODAL DISTRIBUTION IN DIFFERENT ROOM SHAPES

Irregularly shaped spaces can permit better design control, but are also more complex to predict.

Additional, weaker standing waves exist; tangential modes between four surface, and oblique modes involving six or more surface in all three dimensions.

REFLECTIONS FROM DIFFERENT SURFACE SHAPES
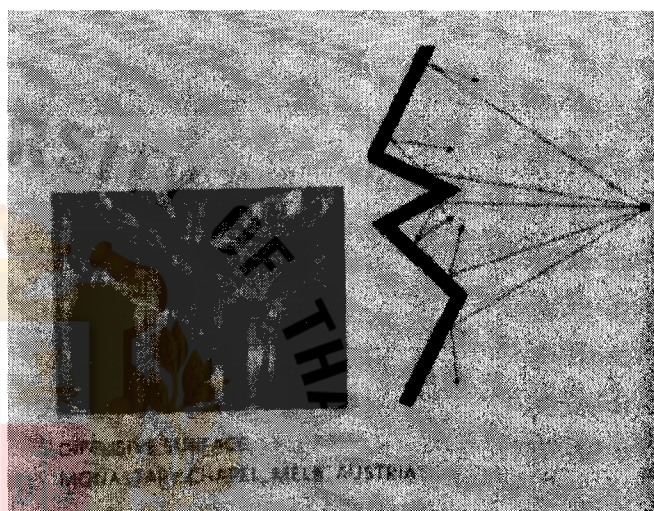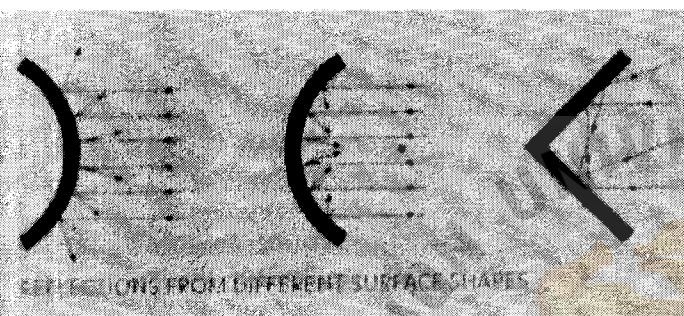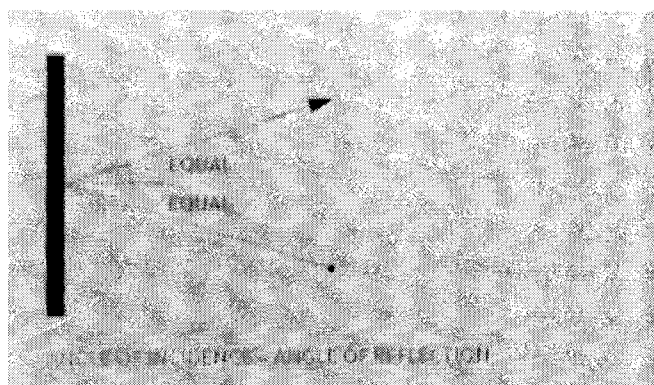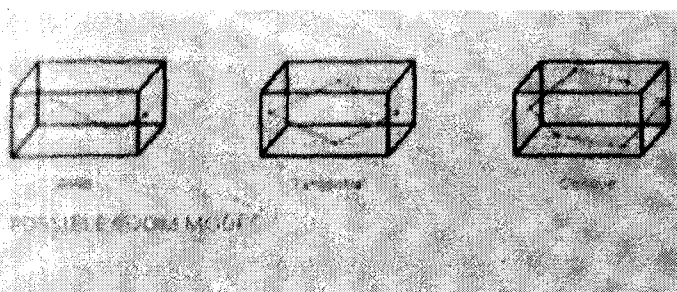
Reflections

Flat surfaces, with dimensions sufficiently larger than the wave-length of a sound result

in specular reflections, where the angle of reflection equals the angle of incidence.

Reflection Patterns depends on the surface shape:

<u>Convex surface</u> diffuse wave fronts, creating a wide distribution pattern of the sound energy, and can often be used to acoustical advantage.

<u>Concave surfaces</u> focus wave front to one point, creating uneven reflection patterns. Focal points of any geometric form should not be near the location of any receiver.

<u>Corner reflections</u> can be problematic because they reflect sound back in the direction of the incoming wave front.

Echoes

Distinct echoes are generally undesirable in a space. Concave surfaces can create creep echoes or "whispering galleries"

Flutter echoes can occur in room with parallel hard surfaces, or hard concave shapes.

Diffusion

Duffusion occurs when a wave is reflected from a surface and the sound energy is redistributed diffusely back into the space.

To diffuse a sound wave, the reflecting surface should generally have irregularisties at approximately the scale of the wavelength of the sound.

3.5.1.5 The Objective of Ant-resonance

- To be sound satisfactory in anti-resonance
- To be perfectly cleared of sound condition

In open plan areas such as restaurants, home theatres, museums, offices and conference rooms, the space can become very noisy. This is because the wall and ceiling surfaces reflect the sound and below it to bounce back into the room hence creating echo and reverberation. So we need to consider the appropriate treatment in general interior decoration and various kinds of decorative acoustical materials.

3.5.1.6 Absorptive material

It is the property of a material and surface that absorbs sound waves, not reflect them.

Absorption of material is depended on and affected by:

- Size

- Shape
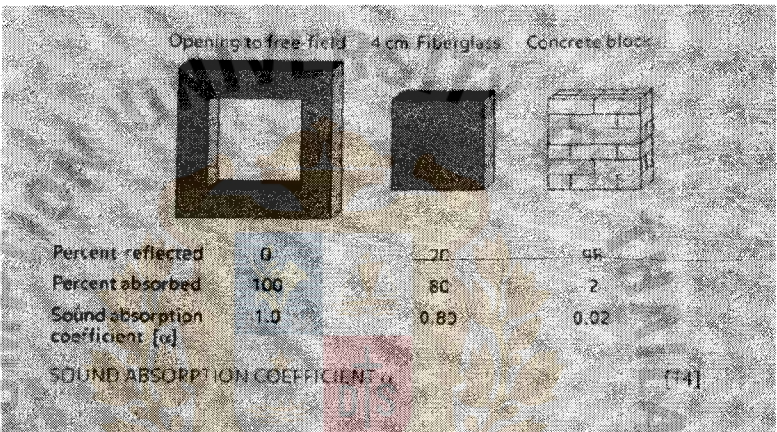
- Location
- Mounting method used

  Opening to free-field > Fiber glasss > Concrete block

IMPROVEMENTS TO IMPACT NOISE INSULATION
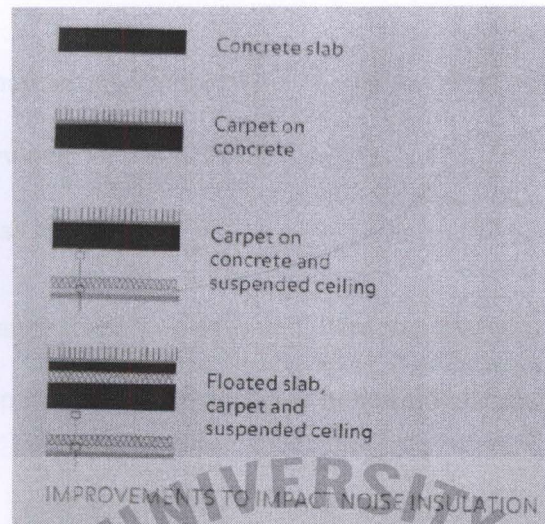
- Footsteps on the hard floors: a soft surface can be added, such as carpet.
- Impact vibrations from equipment can be reduced by the separation of source from the structure with the resilient supports

A good sound absorber : Porous Material

- wood wool cement board

- perforated wooden acoustic panel

- fiberglass wall panel

(Porous absorbers – thickness and airspace behind)

ABSORPTION BY AIR

POROUS ABSORBERS – THICKNESS AND AIRSPACE BEHIND   [16-17]
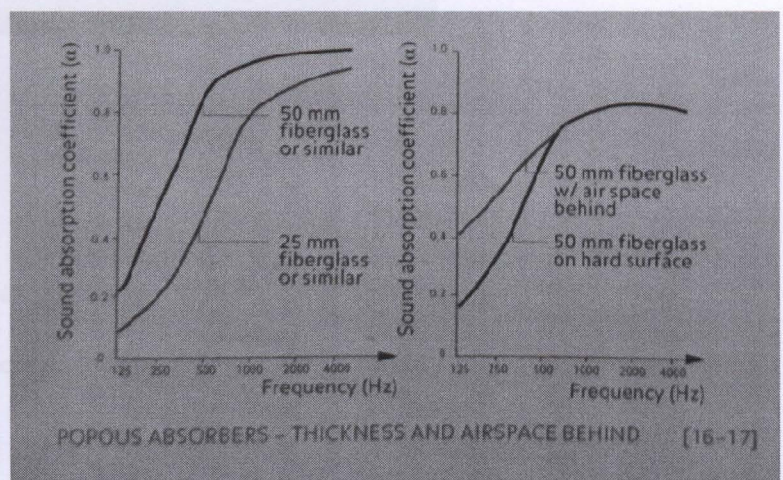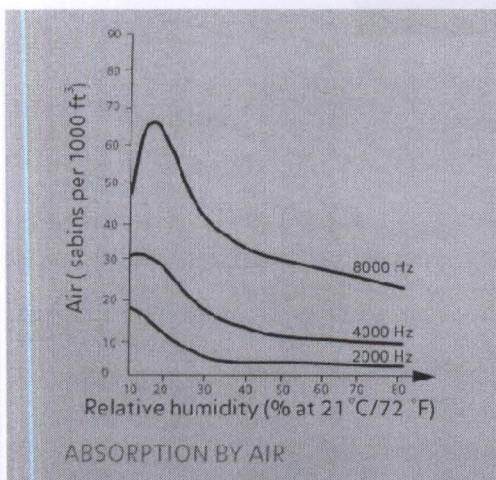
3.5.1.7 Sound insulation

- concrete
- plywood
- glass panel

To prevent annoyance from outside sound, hard material will be used to keep the sound out, which its combination installation of absorber material to be quality of sound inside interior space.

SOUND TRANSMISSION CLASS RATINGS [14]

Caution

- Don't crack
- Double panel of wood or glass panel will be better than s single panel (It will make a gap between them, which will be provide a quality of sound prevention)

3.5.2 theatre design

- Stage and equipment
- Formular to design theatre

Stage and equipment

- Proscenium arch
- Stage
- Wing
- Apron
- Orchestra pit
- Stage floor
- Auditorium
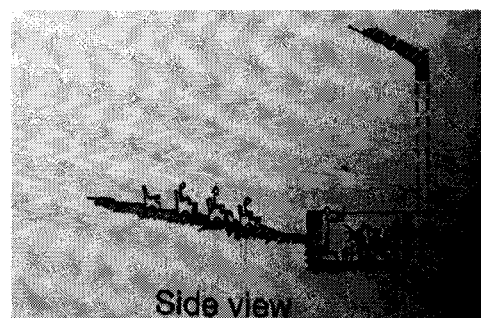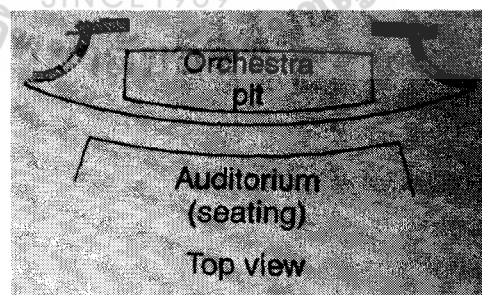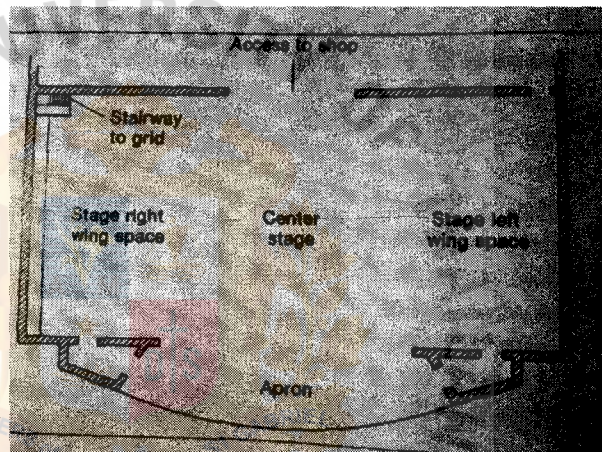
Auditorium

- Each seat approximately perpendicular to the proscenium arch.

- To reduce the reflection of the sound waves in an auditorium, none of its finished surfaces (wall, ceiling, floor) should be parallel with any others.

- The side walls out from the proscenium arch, slightly opened fan

- The rear wall is usually curved

- The ceiling slopes toward the rear of the house

- The floor is raked, or inclined, from stage to the rear of the house (Angling of floor, not only the acoustics but also the view of the stage.)

- The lighting control booth is generally located at the back of the auditorium.

Hydraulic lifts raised to create large forestage

Lift 1 at auditorium level for increased seating; 2 lowered to create orchestra pit
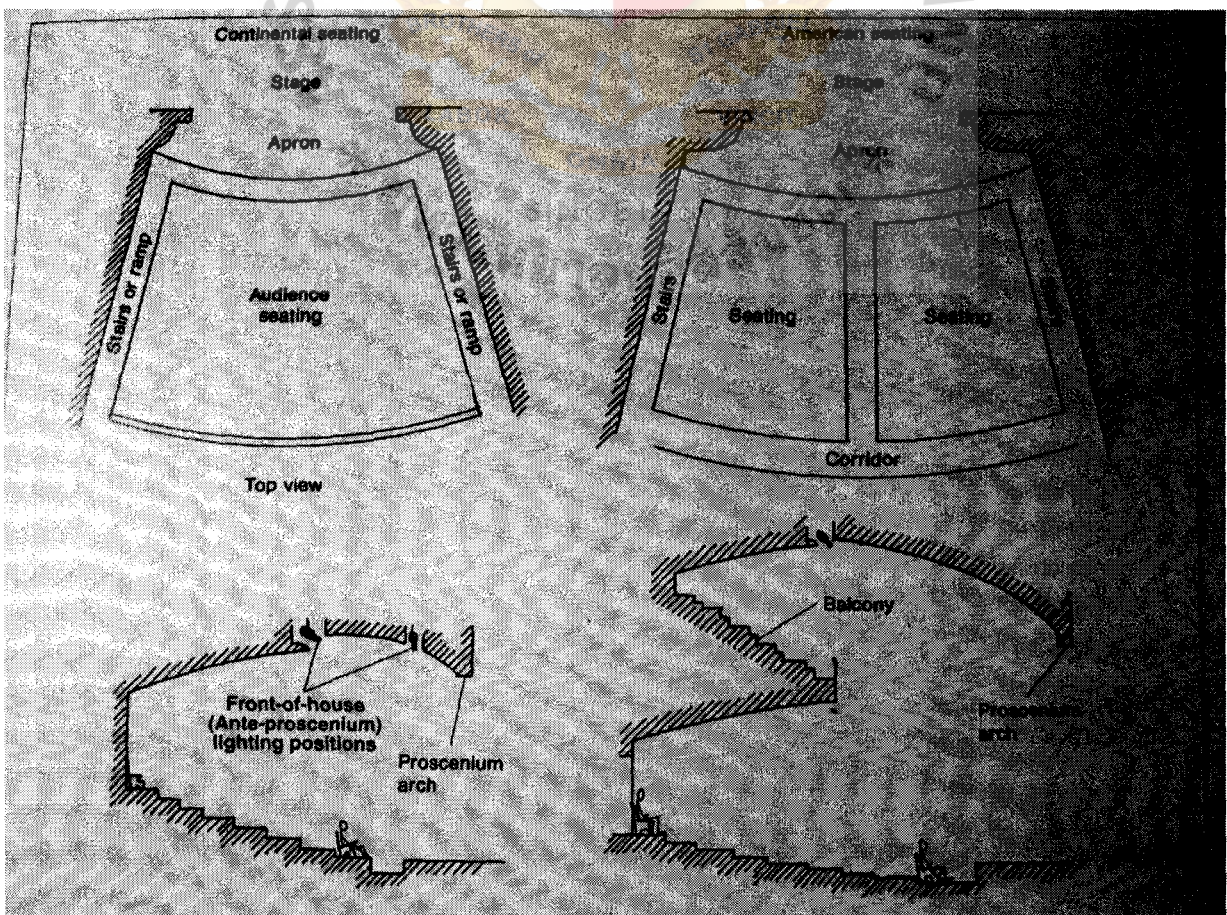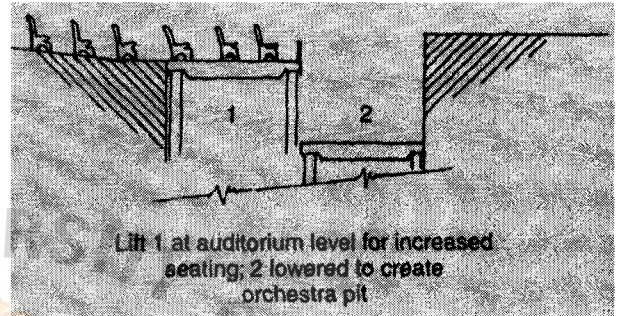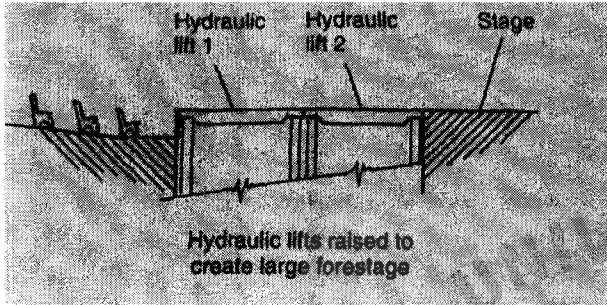
Trap

- This removable sections provide access to the space beneath the stage

- These holds can be fill with stairs, an elevator, aslide (depending on the desired visual and physical effect)

Traps

Steel I beams to support edges of traps

Basement floor

Section A to A
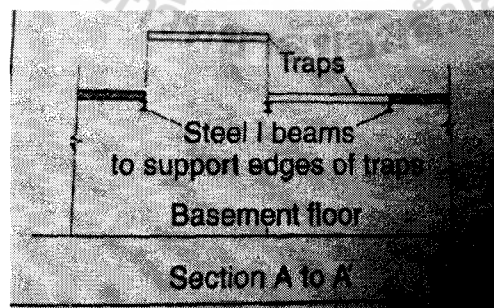
- Fly loft (Fly system)

- To fly scenery

Top view

Detail of a typical stage floor. 2 x 3 sleepers are on 16-inch centers. Sleepers and sleeper pads are not attached to slab. Floor detail courtesy of Landry & Bogen, Theatre Consultants.
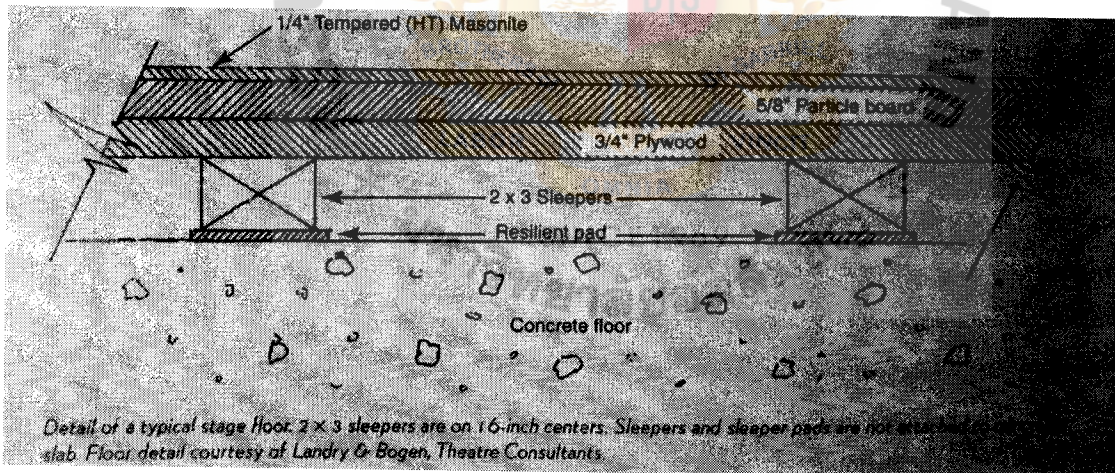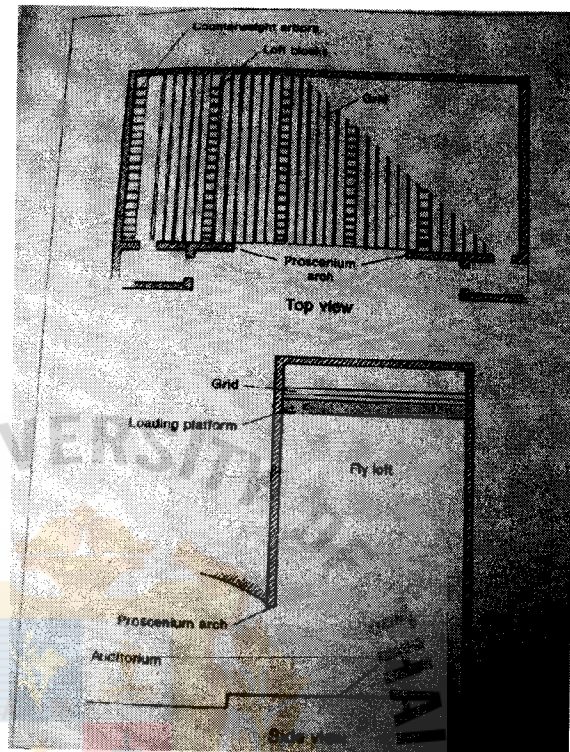
- A good floor compose of several layers

- The subfloors should be soft wood (such as pine or plywood)

- Resilient and tough

- Hold nails and fasteners

- Floor surface – Masonite

Formula to design theatre

H = height of screen

b = width of screen

y = perspective of the most people (มุมมองของคนดูที่มากที่สุด)

fz = distance from screen to the last row seat

Ha = The height from the bottom of the theatre screen

D = The height from the ground to the eye level

f = Distance from screen to the first row seat

Hz = the height of the distance between the center of the projector to the

floor of the nearest row seating

O = the perspective from the theatre wall or the wall seat

u = the distance between the screen to the back wall of the screen (the gap

to put the loud speaker and the structure of the screen)

S = the width of the walkway along the wall
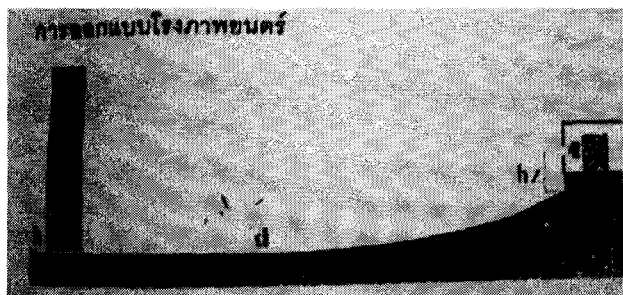
For the best visual cinematic experience

1. Its picture must be clear

2. Comfortable

3. Follow the dimension of theatre design
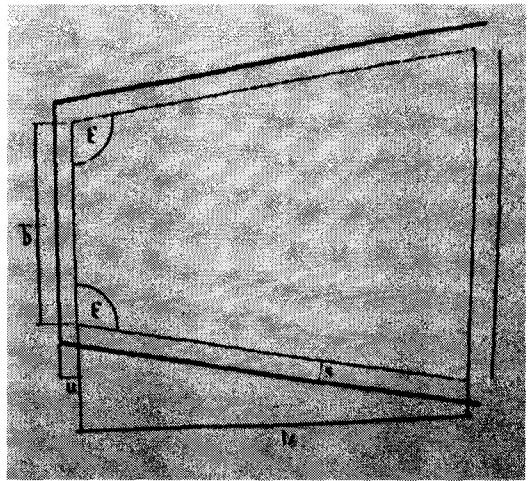
Armrest

It must be provided : 55 cm. width

*For the condition of the small theatre: can join armrest between seating.
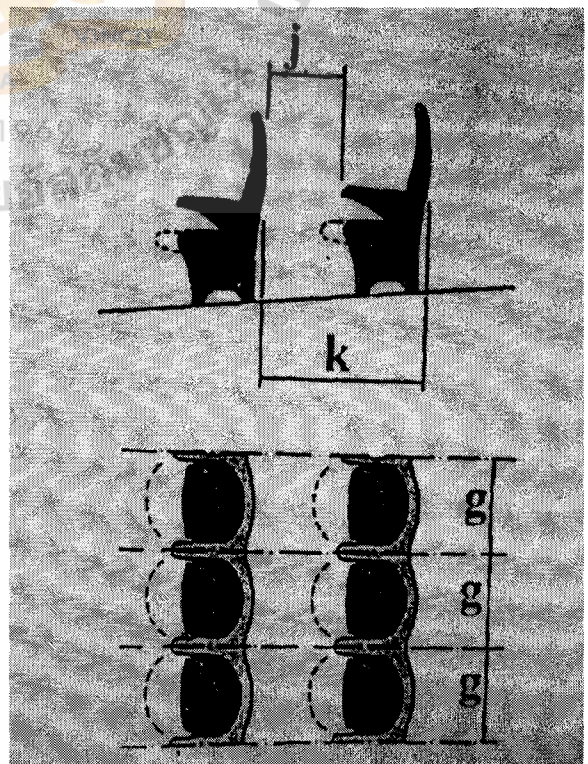
3.5.3   Building code

- Fire exit staircase

- Fire exit door

- Corridor

- Fire retardant material

- The percentage of toilet

- The maximum seating per row in theatre

3.5.3.1 Fire exit staircase

- Inclining not less than 60 degree (Minimum)

- The width of outer fire staircase not less than 80 cm. (Minimum)

- The width of inner fire staircase

    - The walls have to be solid, but to have ventilation and an exit door

    - Lightings have to be enough in daytime and nighttime

- The front of staircase must be no less than 1.50m or the width of the staircase

- The fire exit door has to be fire retardant for not less than 1 hour

ผนังกันไฟ
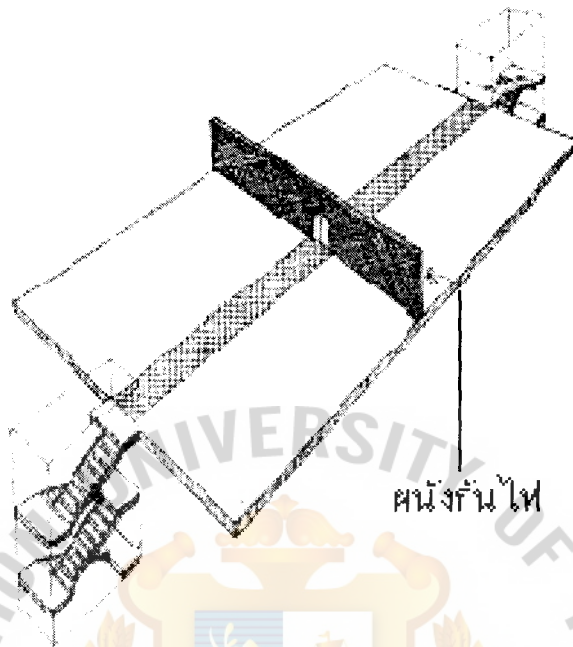
3.5.3.2 Fire exit door

Width : not less than 1.50 m

Height: not less than 1.50 m

The width of every door in theatre: will be equal to the ratio of 1 cm. per number of seating of the theatre

Threshold: the levelof theatre will not be lower than the outside, and it will not be taller than 2.50 m.

Above the fire exit door: there must be a sign for the fire exit above the exit door.

3.5.3.3 Corridor

Theatre is the public building type, so the minimum width of the corridor is not less than 1.50 m.

3.5.3.4 Fire retardant material

- Inside wall of theatre: at least 2 hours fire retardant material
- Qualification of every material inside theatre and corridor
  - o Material will not catch fire below the temperature of 750 celsius
- Restaurant : there must be fire retardant material in the kitchen

3.5.3.5 Refractory materials

Refractory materials must be chemically and physically stable at high temperatures. Depending on the operating environment, they need to be resistant to thermal shock, be chemically inert, and/or have specific ranges of thermal conductivity and of the coefficient of thermal expansion.

3.5.3.6 The percentage of toilet, urinal, wash sink, shower room in Theatre, Auditorium

The unit per 200 sq.m or 100 persons

Theatre, Auditorium		Toilet	Urinal	Shower room	Wash sink
	(1) Men	1	2	-	1
	(2) Women	3	-	-	1

3.5.3.7 The maximum seating per row in theatre

- **In cases where one row of seating is flanked by 2 aisles:**

  the maximum seating must not be more than 20 seats.

- **In case where more than one row of seating is flanked by 2 aisles:**

  the maximum seating must not be more than 16 seats

- **In case where one row of seating is flanked by 1 aisle:**

  the maximum seating must not be more than 6 seats

4.1 Area Requirement from case study

Function and Area requirement : Case Study 1, Scala

Function	Units/Clients	Area (m^2)	Area (%)
Main circulation	-	2391.734	27.84
Reception and Front Office	3 - 4	348.79	4.06
Ticket booth	2 - 3	25.773	0.3
Theatre	896	1199.30	13.96
Event hall	80	286.080	3.33
Restaurant and bar	50	356.52	4.15
Toilet	20	92.78	1.08
Employee area	15	310.135	3.61
Maintenance area	6	134.01	1.56
Retail shop	-	3439.08	40.11
Total area		8591	100

40.11 %   27.84 %   3.61%   3.33 %   1.56 %   4.06 %   4.15 %
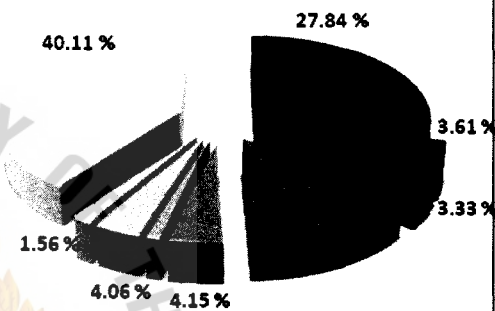
Function and Area requirement : Case Study 2, Art House RCA

Function	Units/Clients	Area (m^2)	Area (%)
Main circulation	-	502	25
Reception and Front Office	3 - 4	304	15.49
Ticket booth	2	18	0.91
Theatre	240	504	25.68
Event hall	30	266	13.55
Souvenir shop	25	95	4.5
Restaurant and bar	54	116.2	5.92
Toilet	8	78	3.95
Staff area	3 - 4	150	7.64
Maintenance area	2 - 3	24	1.22
Total area		1962.2	100

Sales

3.95 %   7.64 %   0.91   25 %   5.92 %   1.22 %

84
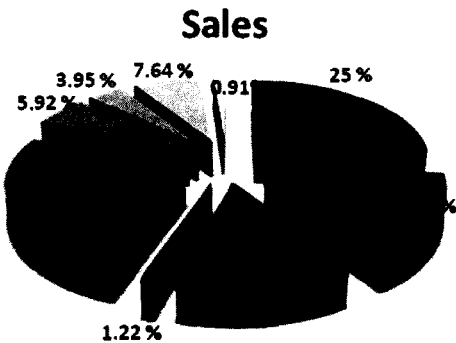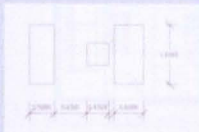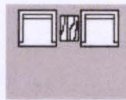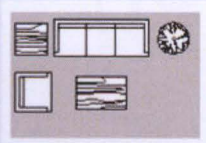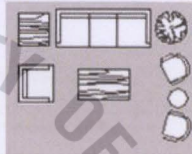
4.2 Area requirement comparison chart between the case study and the project estimated area requirement.
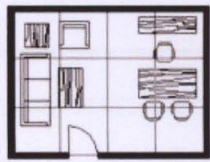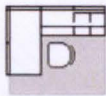
Function	Case study Scala (Area in %)	Case Study Art House RCA (Area in %)	Project's average area allowance (Area in %)	Project's average area allowance (Area in sq m)	Project's area requirement (Area in %)	Project's area requirement (Area in sq m)
Main circulation	27.84	25	26.42	2893	43.227	2577
Reception and Front Office	4.06	15.49	9.75	652	0.41	22.568
Ticket booth	0.3	0.91	0.605	44	0.75	40.89
Theatre	13.96	25.68	19.82	1704	20.399	1100.554
Event hall	3.33	13.55	8.44	552	4.31	232.752
Souvenir shop	-	4.5	-	-	0.388	20.956
Hall of fame	-	-	-	-	4.31	232.752
Library	-	-	-	-	16.97	915.889
Restaurant and bar	4.15	5.92	5.035	468	4.72	254.7129 sq m
Toilet	1.08	3.95	2.515	170	1.75	94.6075
Employee area	3.61	7.64	5.625	460	0.45	24.486
Maintenance area	1.56	1.22	1.39	158	2.45	132.528 sq
Retail shop	40.11	-	-	-		
Total			79.6	7101	100	5395.0574

Summary of project area requirement of each area
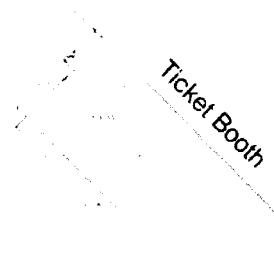
Function	Area requirement (sq m)
Main circulation	2577
Reception and Front Office	22.568
Ticket booth	40.89
Theatre	1100.554
Event hall	232.752
Souvenir shop	20.956
Hall of fame	232.752
Library	915.889
Restaurant and bar	254.7129 sq m
Toilet	94.6075
Employee area	24.486
Maintenance area	132.528 sq
Total	5395.0574
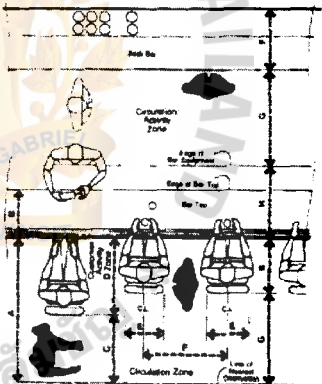
AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Reception and Waiting area						
Reception desk	Front desk counter Chair Computer Telephone Fax Cabinet	2	2	7 sq m		Time-saver Malestrom
Waiting Area	2 person set • 2 Lounge chairs • 1 side table	2	3	1.98 sq m		http://web.ku.edu
	4 person set • 1 sofa & 1 lounge chair 1 coffee table • 1 end table • 1 planter	4	1	3.2 sq m		http://web.ku.edu
	6 person set • 1 sofa & 1 lounge chair • 1 coffee table • 1 end table • 2 pull up chairs • 1 planter	6	1	5.18 sq m		http://web.ku.edu
					Total Furniture	17.36 sq m
					Circulation 30 %	5.208 sq m
					Total area	22.568 sq m
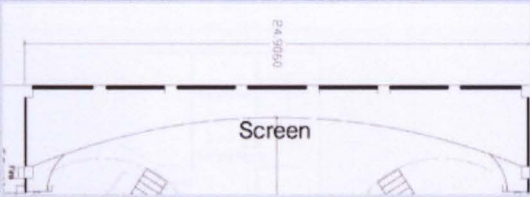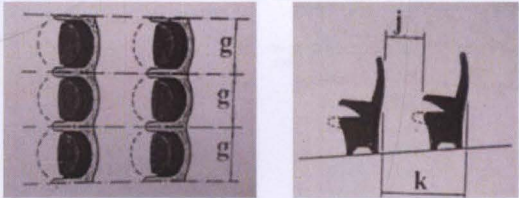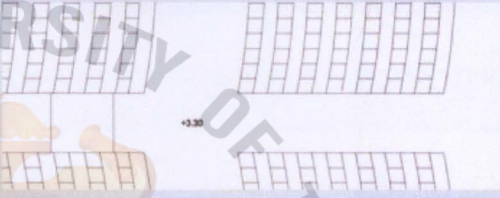
Front Office						
Manager Station • 1 Manager	• Management desk • Management Chair • Credenza or work table • Guest chair • Soft seating	1	1	13.2 sq m		http://web.ku.edu

Officer Station
• 1 assistant
	• Primary work surface and pedestal
	• Secondary work surface
	• Desk chair
	• Variables
	  ▪ basic unit
	  ▪ extended work surface and overhead storage
		4	4	20.88 sq m		http://web.ku.edu

				Total Furniture		34.08 sq m
				Circulation 20 %		6.816 sq m
				Total area		40.89 sq m
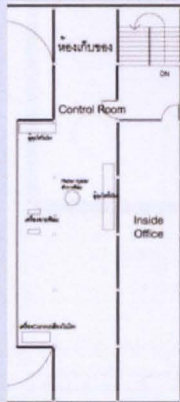
AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Ticket booth						
Ticket booth	• **Counter** • 0.60 x 4.80 m. • File cabinet 0.35 x 4.80 m. • Chair 0.45 x 0.45 m. • Queuing area 3 x 9 m.	3	2	47.04	Ticket Booth	Survey at Scala site
					Total Furniture	47.04 sq m
					Circulation 30 %	14.112 sq m
					Total area	61.152 sq m
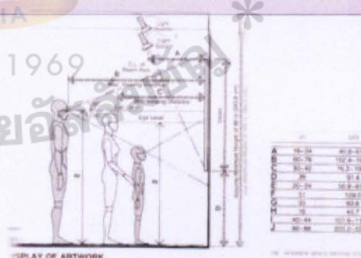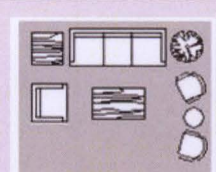
AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Light Meal bar						
Light Meal bar	• Counter bar 0.70 – 0.96 m. • Back bar 0.60 – 0.76 m. • Computer cashier • stool	3	2	(Min = 6.93 sq. m / unit Max = 9.33 sq. m / unit) 16.92 sq m		Time-saver Malestrom
					Total Furniture	16.92 sq m
					Circulation 30 %	5.076 sq m
					Total area	21.996 sq m

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Theatre						
Theatre auditorium	• Screen size 25 m. (Arch screen) Width 0.50 × 25 = 12.5 sq m	820	1	12.5		Intervier Scala site, Survey at Art House RCA
	• Chair seating set 0.55 × 0.49 m. • Aisle distance between seating 0.50 m.	800	800	242		Thesis Book
	• Aisle in theatre Min width = 1.5 × 20 m = 30 sq m	800	6	180		Building code
	• Exit door 2.00 m	800	5	10		
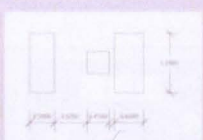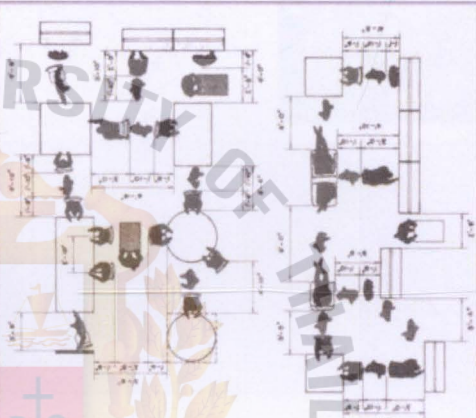
AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Theatre						
stage	• Front stage 15/100 theatre area	10	1	0.15×1199 = 179.85		Intervier Scala site
	• Back stage 5/100 theatre area	10	1	0.05×1199 = 59.95		
	• Powder room 7.8 ×3.80 m - Male - Female - shower - toilet - sofa - change cloth room	10	2	59.28		Intervie w Box shot studio

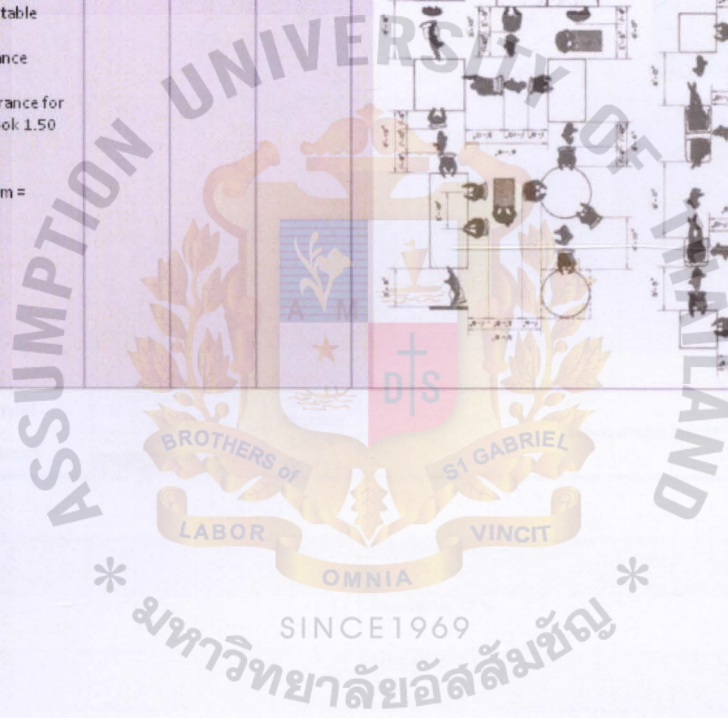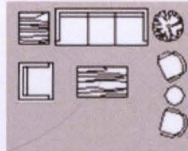| AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Theatre						
Control room	• Projector • Platter Holder • Sound control • Electrical control machine • Storage	5	1	112 sq. m.		Survey at Scala site
					Total Furniture	846.58 sq m
					Circulation 30 %	253.974 sq m
					Total area	1100.554 sq m

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIRE MENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Event hall						
Event hall	• Information counter & Register • Computer	2	1	3.50 sq m		Time-saver Malestrom
	• Display board (Distance from display board min 2.00 m)	9 – 10	40	4 sq m*20 = 160 sq m		website
	Resting area bench or armchair 6 person set • 1 sofa & 1 lounge chair • 1 coffee table • 1 end table • 2 pull up chairs • 1 planter	6	3	15.54 sq m		http://web.ku.edu
					Total Furniture	179.04s qm
					Circulation 30 %	53.712s qm
					Total area	232.752 sqm

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Souvenir shop						
shop	▪ Cashier counter 0.45 × 1.2 m. ▪ Computer	Assistant = 2 Customer = 3	2	(Min = 2.1 × 2.7 = 5.46 sq m) (Max = 2.84 × 2.84 = 8.06 sq m) 16.12 sq m		Time-saver Malestrom
	▪ Shelf 0.45 × 2.1 m. 0.45 × 2.8 m.					
	▪ Display on counter top ▪ Display cabinet ▪ Storage					
					Total Furniture	16.12 sq m
					Circulation 30 %	4.836 sq m
					Total area	20.956 sqm

AREA	FURNITURE & EQUIPMENT	NO. OF USER	NO. OF UNIT	AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
Hall of fame						
Hall of fame	• Information counter & Register • Computer	2	1	3.50 sq m		Time-saver Malestrom
	• Display board (Distance from display board min 2.00 m)	9 – 10	40	4 sq m*20 = 160 sq m	 DISPLAY OF ARTWORK	website
	Resting area bench or armchair 6 person set • 1 sofa & 1 lounge chair • 1 coffee table • 1 end table • 2 pull up chairs • 1 planter	6	3	15.54 sq m		http://web.ku.edu
					Total Furniture	179.04 sq m
					Circulation 30 %	53.712 sq m
					Total area	232.752 sqm

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIRE MENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Library						
	• Information counter & Register • Computer • Cabinet	2	12	7 sq m		Time-saver Malestro m
	• Book shelf (0.60x1.50 m) with clearance = 5.4 sq m	150	60	324 sq m		Survey at TCDC and Book interior space standard
	• BookShelf set with various reading table types • Sub clearance =1.00 m • Main clearance for barrow book 1.50 m. (10.30x10.30m = 106.09 sq m)	150	3	318.27 sq m		Survey at TCDC and Book interior space standard

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIRE MENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Library						
	Resting area 6 person set • 1 sofa & 1 lounge chair • 1 coffee table • 1 end table • 2 pull up chairs • 1 planter	6	3	15.54 sq m		http://w eb.ku.ed u
	• Mini Theatre or audio room (R = 2, area = 8.68 sq m)	16	4	34.72 sq m		Survey at TCDC
	• Computer searching corner with clearance (1.00x1.00m = 1 sq m)	5	5	5 sq m		Survey at TCDC
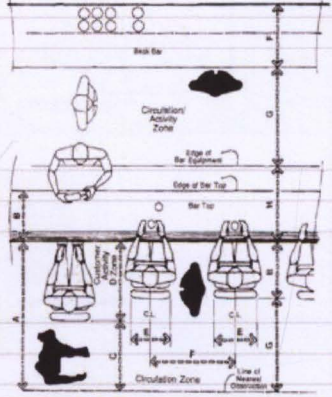
AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIRE MENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Library						
					Total Furniture	704.53 sq m
					Circulation 30 %	211.359 sq m
					Total area	915.889 sq m

		Restaurant					
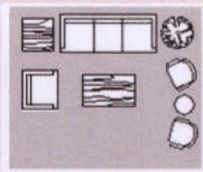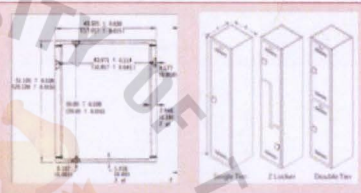
| AREA | FURNITURE & EQUIPMENT | NO. OF | | AREA REQUIREMENT (SQ.M.) | TABULATION CHART | Reference |
		USER	UNIT			
Dinning table	Dinning table Rectangular table type 0.6 x 1.2 m. 0.75 x 1.2 m. 0.75 x 1.5 m. 0.9 x 1.8 m. 0.9 x 2.1 m.	20	2 Wheelchair	10	(1.89x10) 18.9 sq m		http://bisontech. gfps.k12.mt.us/ar ch/kitchen_space _planning.jpg
	Dinning table Square table type 0.75 x 0.75 m. 0.9 x 0.9 m. 1.05 x 1.05 m. 1.2 x 1.2 m. 1.35 x 1.35 m.	72	2 Wheelchair	12	(3.645x12) 43.74 sq m		
	Dinning table Round table type 0.75 m. 0.9 m. 1.05 m. 1.2 m. 1.35 m.	4	4 Wheelchair	12	(5.4675x12) 65.61 sq m		
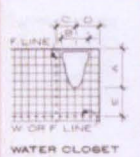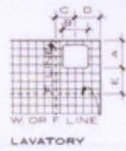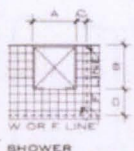
Bar counter (Coffee & Alcohol)

Coffee bar & Alcohol bar	• Counter bar 0.70 – 0.96 m. • Back bar 0.60 – 0.76 m. • Stool 0.40 – 0.60 m. • Distance between stool 0.30 m	Bartender = 3 Customer = 16	4	Min = 6.93 sq. m / unit Max = 9.33 sq. m / unit 37.32 sq m		Time-saver Malestrom
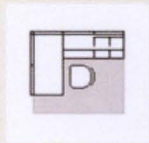
Kitchen

Kitchen	Broken-U • Stove • Oven • Refrigerator • Dish washer Single wall • Stove • Oven • Refrigerator • Dish washer	8	3	(10.212 Sq. m / unit) 30.363 sq m		http://bisontech.gfps.k12.mt.us/arch/kitchen_space_planning.jpg
				Total Furniture		195.933 sq m
				Circulation 30 %		58.7799 sq m
				Total area		254.7129 sq m

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Restroom						
Restroom	Water closet for handicap 3.08 sq.m. / unit	5	5	15.4		http://bisontech.gfp s.k12.mt.us/arch/res ources.html
	Water closet 0.76 sq.m. / unit	50	50	38		
	Bidet 0.725 sq.m. / unit	15	15	10.875		
	Lavatory 0.34 sq.m. / unit	25	25	8.5		
					Total Furniture	72.775 sq m
					Circulation 30 %	21.8325 sq m
					Total area	94.6075 sq m

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Employee area						
Female Employee area	Sofa group 6 person set • 1 sofa & 1 lounge chair • 1 coffee table • 1 end table • 2 pull up chairs • 1 planter	12	2	10.36 sq m		http://web.ku.edu
	Bench 1.30×0.45 = 0.585 sq m / unit	4	4	1.17 sq m		http://www.archiexpo.com/prod/fit-interiors/benches-for-locker-rooms-58086-146631.html
	Locker 0.45×0.5 = 0.225 sq m / unit	20	20	4.5 sq m		

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Employee area						
Female Employee area	Water closet 0.76 sq.m. / unit	2	2	0.76 sq m	WATER CLOSET	http://web.ku.edu
	Lavatory 0.34 sq.m. / unit	4	4	0.68 sq m	LAVATORY	
	Shower 1.30x0.85 = 1.105 sqm / unit	2	2	2.21 sq m	SHOWER	
	Bidet 0.725 sq.m. / unit	1	1	0.725 sq m	BIDET	
					Total Furniture	20.405 sq m
					Circulation 20 %	4.081 sq m
					Total area	24.486 sq m

AREA	FURNITURE & EQUIPMENT	NO. OF		AREA REQUIREMENT (SQ.M.)	TABULATION CHART	Reference
		USER	UNIT			
Maintenance area						
	• Desk Officer Station 5.22 sq m / unit	2	2	**10.44** **Sq. m.**		http://web.ku.edu
	• Air control room 8x7 m = 56 sq m	5	1	56 sq m		Survey at Scala site
	• Electrical generate room 4x6 = 24 sq m	5	1	24 sq m		
	• Coil room 4x5 = 20 sq m	5	1	20 sq m		
					Total Furniture	110.44 sq m
					Circulation 20 %	22.088 sq m
					Total area	132.528 sq m

4.3 Bubble Diagram

Relationship diagram:

Reception and waiting area
Ticket booth
Theatre
Event Hall
Souvenir shop
Hall of fame
Library
Restaurant and Bar
Toilet
Employee Area
Maintenance Area
Retail shop

Functional diagram:

Restaurant
254.71
sq m

Toilet 94.605 sq m

Library
915.889 sq m

Hall of Fame
232.752
sq m

Toilet Booth
40.85 sq m

Theatre
1100.554 sq m

Employee
24.48 sq m

Maintenance area
232.528
Sq m

Event Hall
232.572
Sq m

Guest Visitor

Staff

4.4 Conceptual development

Free Expression of Popular Culture

Pop Art Characteristic

• Bright color, series of color	
• Color in a series of silkscreen • Repeating in mechanical row Mass and repeat quantity	
• Obscure and melancholic Dark and feel lonely	
• Radiate spellbound quality (forget oneself, be absent-minded, be a dreamy state, fancy; be in a transport; be in a rapture, be carried away, be lost in thought)	
• Sentimentalism of media Character of media Star, Billboard advertising	

Psychedelic Art Media of Popular Culture

- Physical concept
- Psychological concept

- Physical concept

Media	• Star idol, entertainment	
• Star idol • Entertainment		
Popular	• Popular, mass, capitalism, repetition	
• Popular ----- Mass, Capitalism • Mass production ----- repetition		

Psychedelic Art Media of Popular Culture

- Physical concept
- Psychological concept

- Psychological concept

Popular culture	
• Freedom -----no control, no limit, float	
Popular culture	
• Movement-----Expression	
Popular culture	
• Emotion -----Human Feeling, Expression	

Collage

Extrude

Chapter 5 : Design Solution

5.1 Conceptual Design

Concept : Freedom Expression of Popular Culture

Conceptual Model Development

Freedom Expression
of
Popular Culture

- Expression
- Freedom
- Mass Production
- Culture Movement
- Star Idol

<u>Diagram</u>

Collage	
Extude	
Outline	
Simplify	

- Diagram

EXPRESSION
FREEDOM
MOVEMENT
Mass - Production
Star - Idol

PSYCHEDELIC Art Media
of Poppular Culture

Different   Perception

5.2 Design Approach
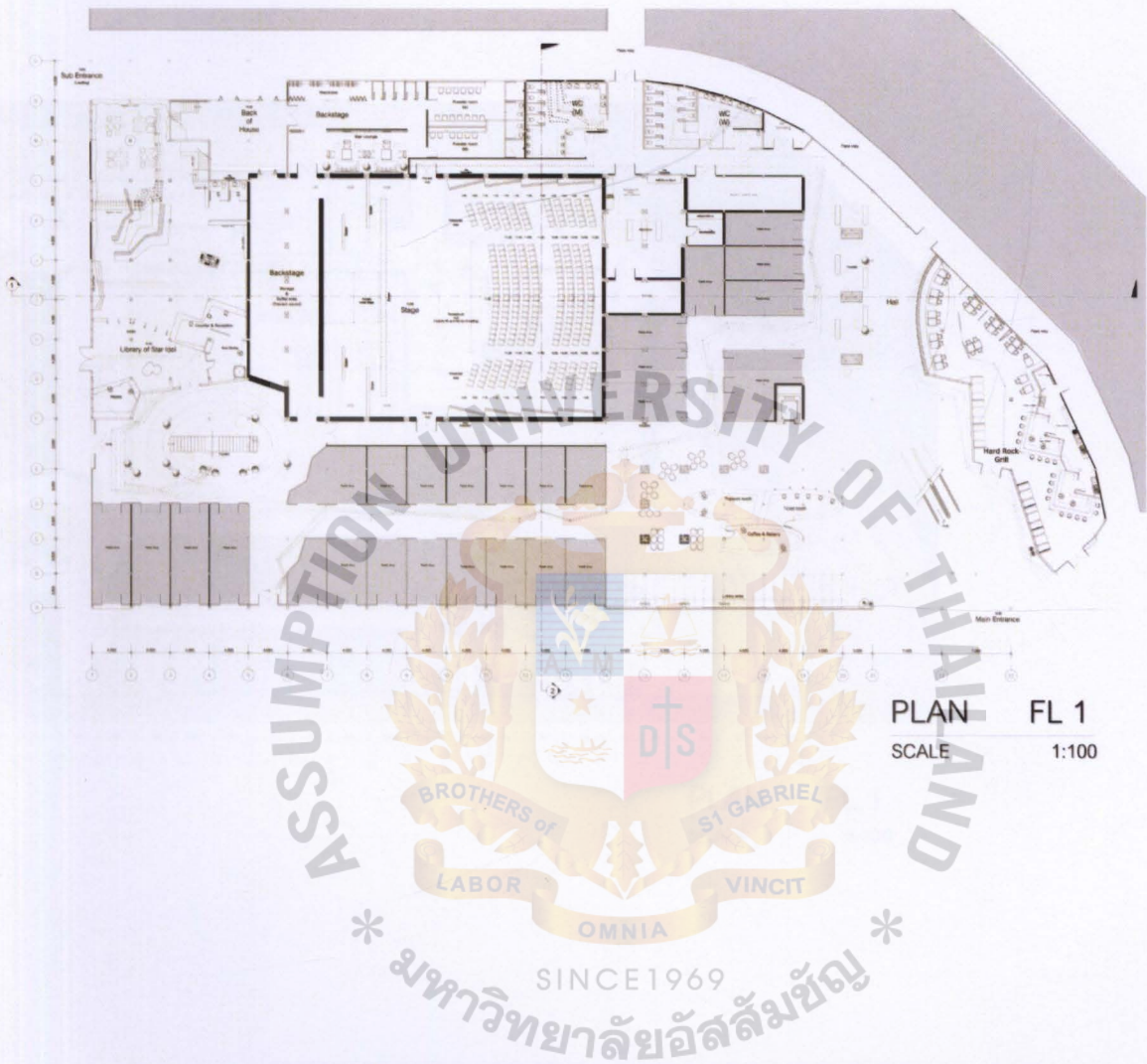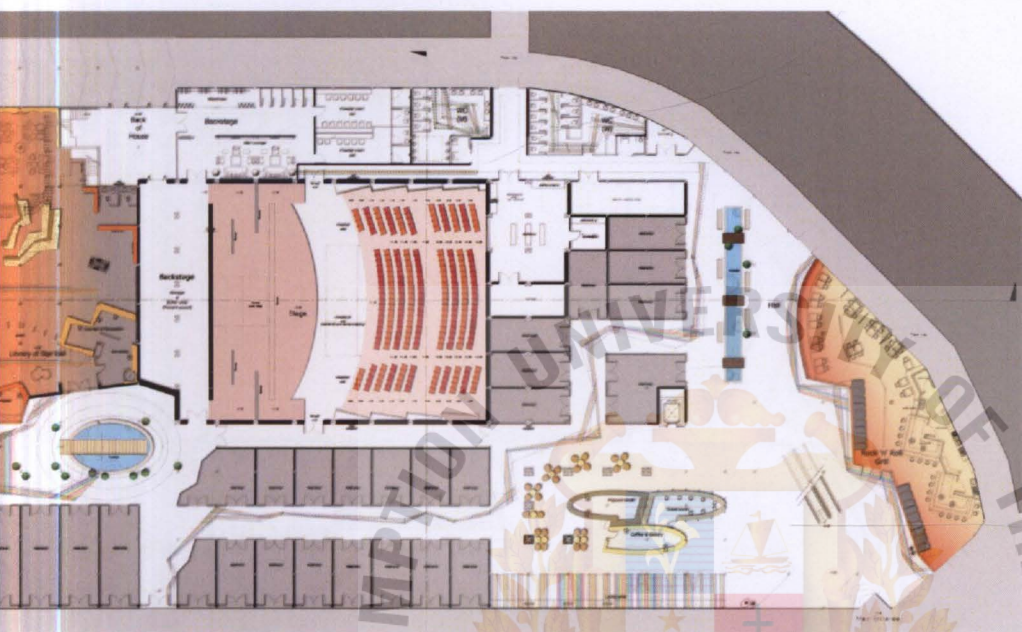
PLAN   FL 1
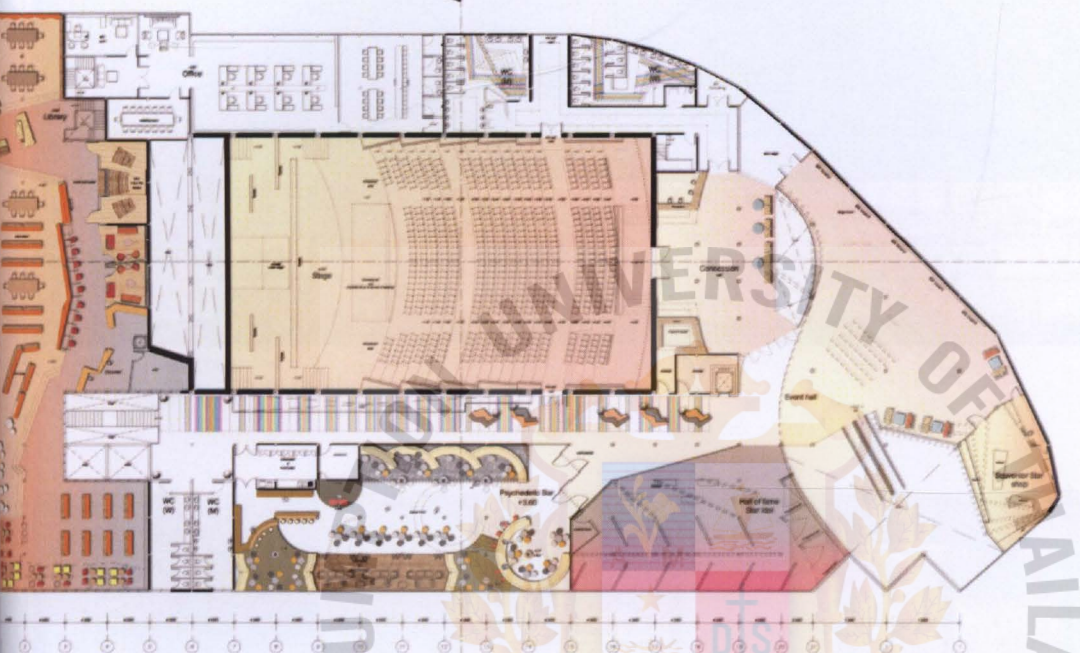
SCALE   1:100

PLAN FL 1
SCALE 1:100

PLAN   FL 2
SCALE   1:100

SECTION ①
SCALE 1:50

SECTION ②
SCALE 1:50

AA-J
AB AC School of Architecture
Oldies Theatre

INS205
Thesis in Interior Architecture
Prilyaneosh S.

112

5.3 Design Development
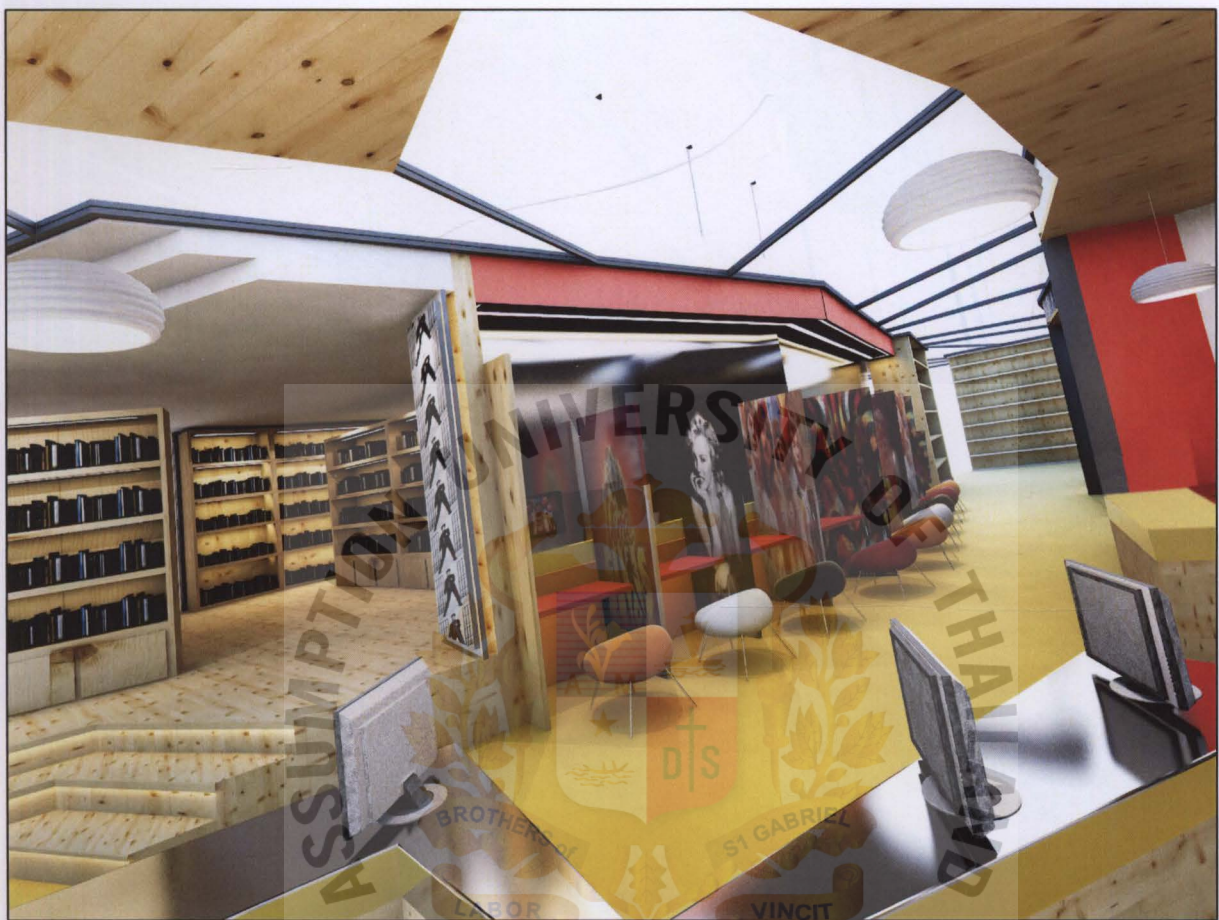
5.3.1 RECEPTION, LOBBY AREA
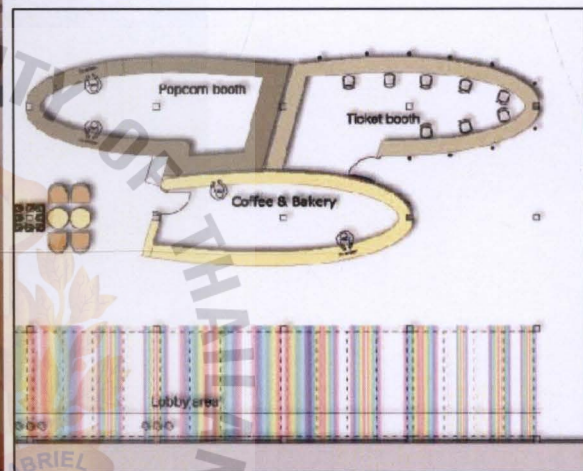
5.3.2 COFFEE & BAKERY
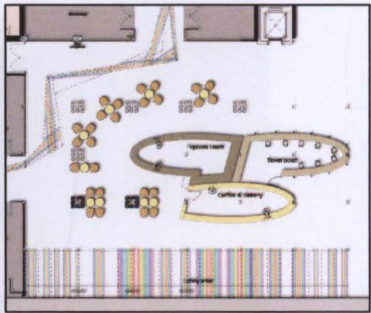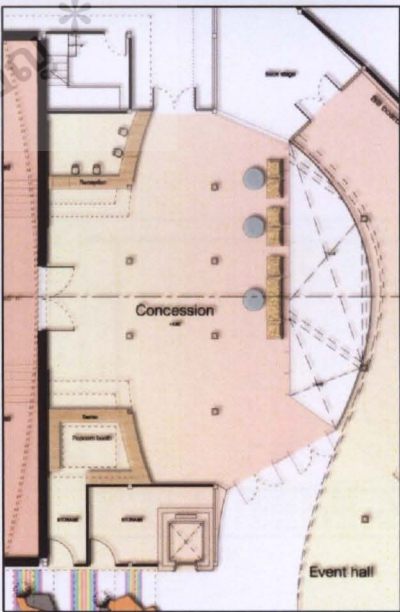
5.3.3 RETAURANT (Rock 'n' Roll Grill)
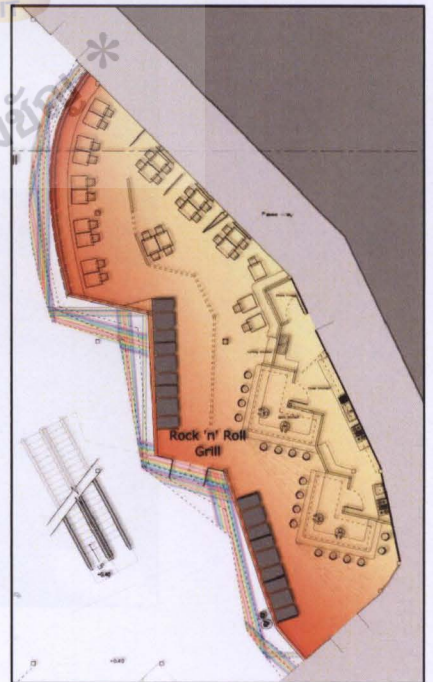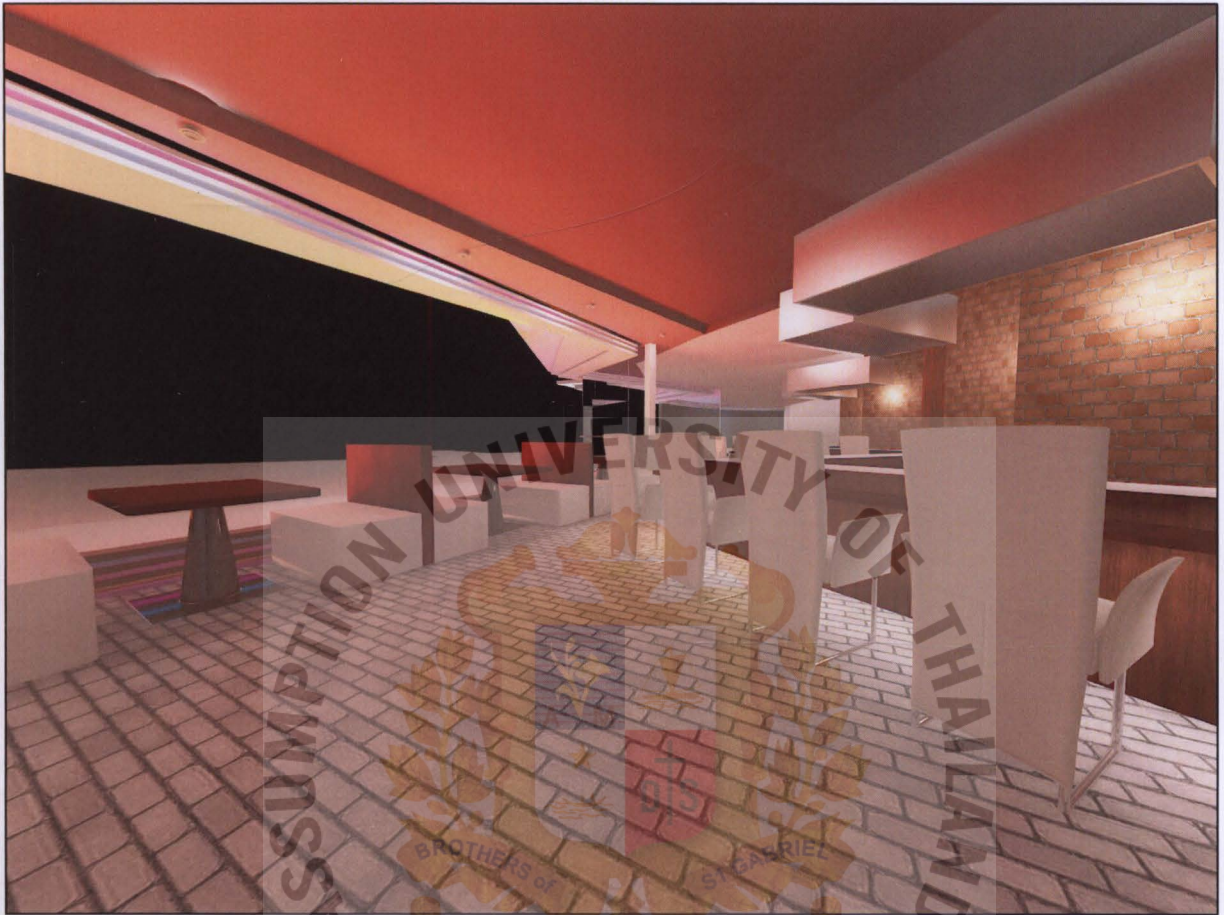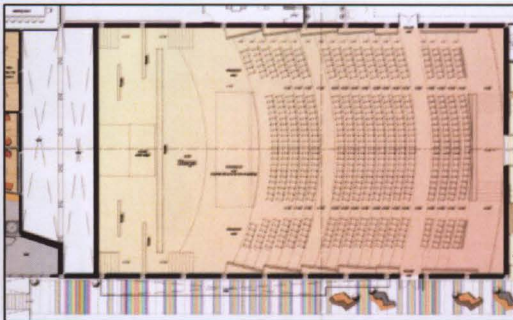
5.3.4 BAR (PSYCHEDELIC BAR)

5.3.5 LIBRARY (LIBRARY OF STAR IDOL)
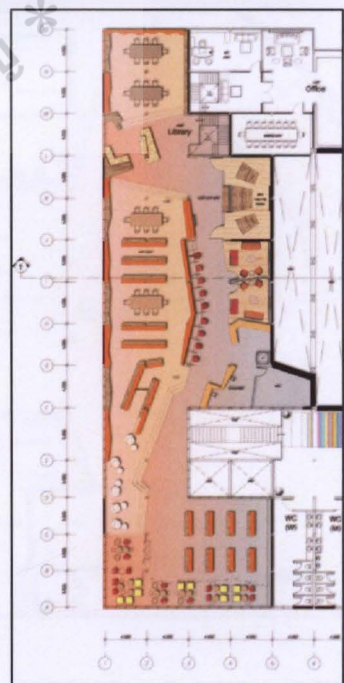
5.3.6 CONCESSION (LOBBY INSIDE THEATRE)

5.3.7 THEATRE

5.3.8 RETAIL SHOP