

# PERENCANAAN TEKNOLOGI & SISTEM BANGUNAN (PTSB) 03

## PERTEMUAN 1: FUNGSI & PERMASALAHAN

**Bangunan Gedung** adalah **wujud fisik hasil pekerjaan konstruksi** yang menyatu dengan tempat kedudukannya, sebagian atau seluruhnya berada di atas dan/atau di dalam tanah dan/atau air,

**berfungsi** sebagai tempat manusia melakukan kegiatannya, baik untuk hunian atau tempat tinggal, kegiatan keagamaan, usaha, sosial, budaya, dan khusus.

OUTLINE

**BUILDING  
SYSTEMS**

**Definition**

Aspects

Observation

## PERTEMUAN 1: FUNGSI & PERMASALAHAN

HUNIAN	KEAGAMAAN	USAHA	SOSIAL & BUDAYA	KHUSUS
<ul style="list-style-type: none"><li>▪ Rumah tinggal tunggal</li><li>▪ Rumah tinggal deret</li><li>▪ Rumah susun</li><li>▪ Rumah tinggal sementara</li></ul>	<ul style="list-style-type: none"><li>▪ Masjid</li><li>▪ Gereja</li><li>▪ Pura</li><li>▪ Vihara</li><li>▪ Kelenteng</li></ul>	<ul style="list-style-type: none"><li>▪ Perkantoran</li><li>▪ Perdagangan</li><li>▪ Perindustrian</li><li>▪ Perhotelan</li><li>▪ Tempat wisata dan rekreasi</li><li>▪ Terminal, dan</li><li>▪ Penyimpanan.</li></ul>	<ul style="list-style-type: none"><li>▪ Pendidikan,</li><li>▪ Kebudayaan,</li><li>▪ Pelayanan kesehatan,</li><li>▪ Laboratorium, dan</li><li>▪ Pelayanan umum</li></ul>	<ul style="list-style-type: none"><li>▪ reaktor nuklir</li><li>▪ instalasi pertahanan dan keamanan, dan</li><li>▪ bangunan sejenis yang diputuskan oleh menteri</li></ul>

**Satu bangunan gedung dapat memiliki lebih dari satu fungsi**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN



UU No. 28 Tahun 2002 tentang Bangunan Gedung



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

Observation



**Construction**

**Structure**

**Technology**

**Performance**

# System



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## A. Human Factors

1. Maintenance of a thermal environment that will avoid undue but permit adequate heat loss from the human body.
2. Indoor air of acceptable quality.
3. Daylight, sunlight, and artificial illumination.
4. In family units, facilities for sanitary storage, refrigeration, preparation, and service of nutritional and satisfactory foods and meals.
5. Adequate space, privacy, and facilities for the individual and arrangement and separation for normal family living.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## A. Human Factors

6. Protection from noise from without, other units, and certain other rooms and control of reverberation noises within housing structures.
7. Design, materials, and equipment that facilitate performance of household tasks and functions without undue physical and mental fatigue.
8. Design, facilities, surroundings, and maintenance to produce a sense of mental wellbeing.
9. Control of health aspects of materials.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation



# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## B. Sanitation and Maintenance

1. Design, materials, and equipment to facilitate clean, orderly, and sanitary maintenance of the dwelling and personal hygiene of the occupants.
2. Water piping of approved, safe materials with installed and supplied fixtures that avoid introducing contamination.
3. Adequate private sanitary toilet facilities within family units.
4. Plumbing and drainage system designed, installed, and maintained to protect against leakage, stoppage, or overflow and escape of odors.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## B. Sanitation and Maintenance

5. Design and arrangement to properly drain roofs, yards, and premises and conduct such drainage from the buildings and premises.
6. Design and maintenance to exclude and facilitate control of rodents and insects.
7. Facilities for the suitable storage of belongings.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## Sanitasi



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## Utilitas



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## C. Safety and Injury Protection

1. Construction, design, and materials of a quality necessary to withstand all anticipated forces that affect structural stability.
2. Construction, installation materials, arrangement, facilities, and maintenance to minimize danger of explosions and fires or their spread.
3. Design, arrangement, and maintenance to facilitate ready escape in case of fire or other emergency.
4. Protection against all electrical hazards, including shocks and burns.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## C. Safety and Injury Protection

6. Design, maintenance, and arrangement of facilities, including lighting, to minimize hazards of falls, slipping, and tripping.
7. Facilities and arrangements to promote security of the person and belongings.

OUTLINE

**BUILDING  
SYSTEMS**

Definition

**Aspects**

Observation

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

## Struktur



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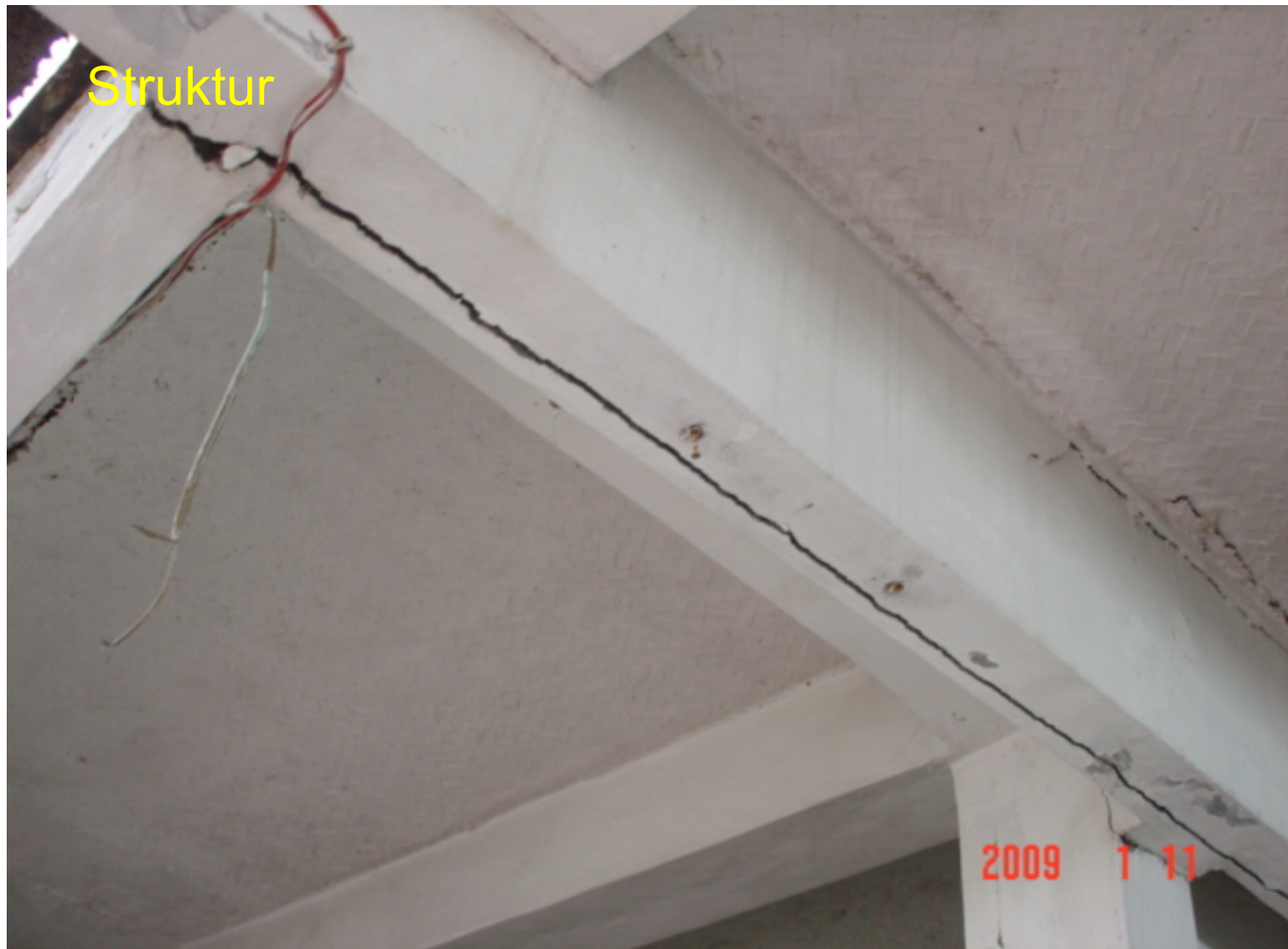
**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

## PERTEMUAN 1: FUNGSI & PERMASALAHAN



Struktur

OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**



# PERTEMUAN 1: FUNGSI & PERMASALAHAN

Konstruksi

OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

## PERTEMUAN 1: FUNGSI & PERMASALAHAN

Aksesibilitas



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

Aksesibilitas



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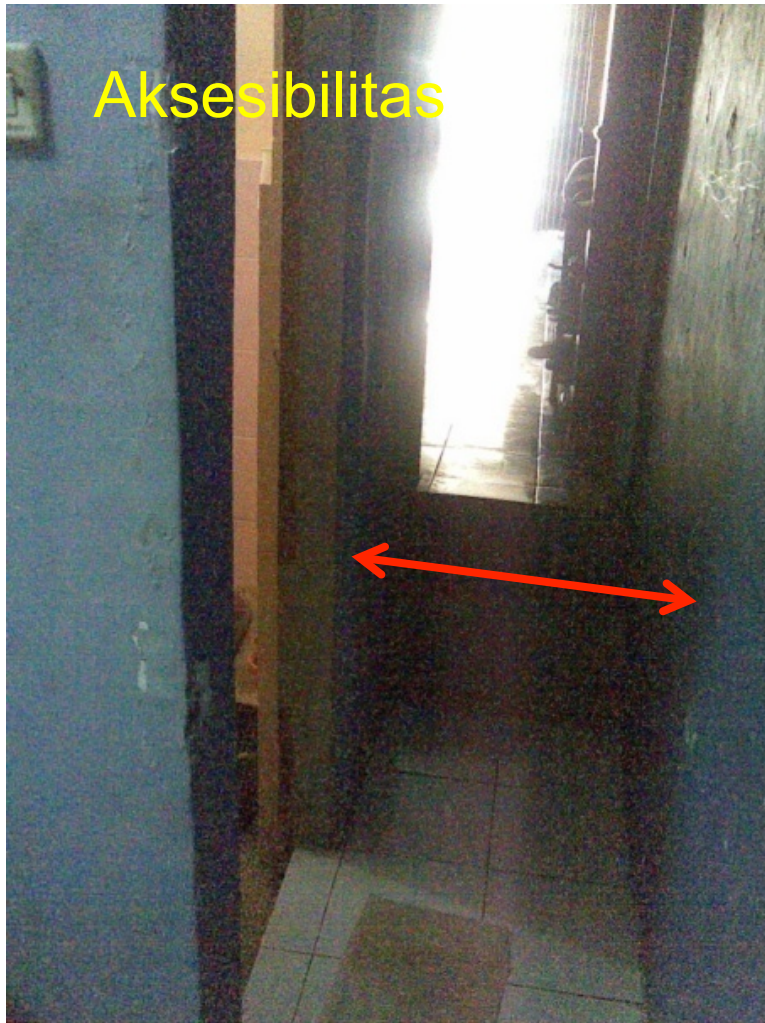
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SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

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**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

Kenyamanan



OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN



Keamanan

OUTLINE

**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**

# PERTEMUAN 1: FUNGSI & PERMASALAHAN

Kualitas

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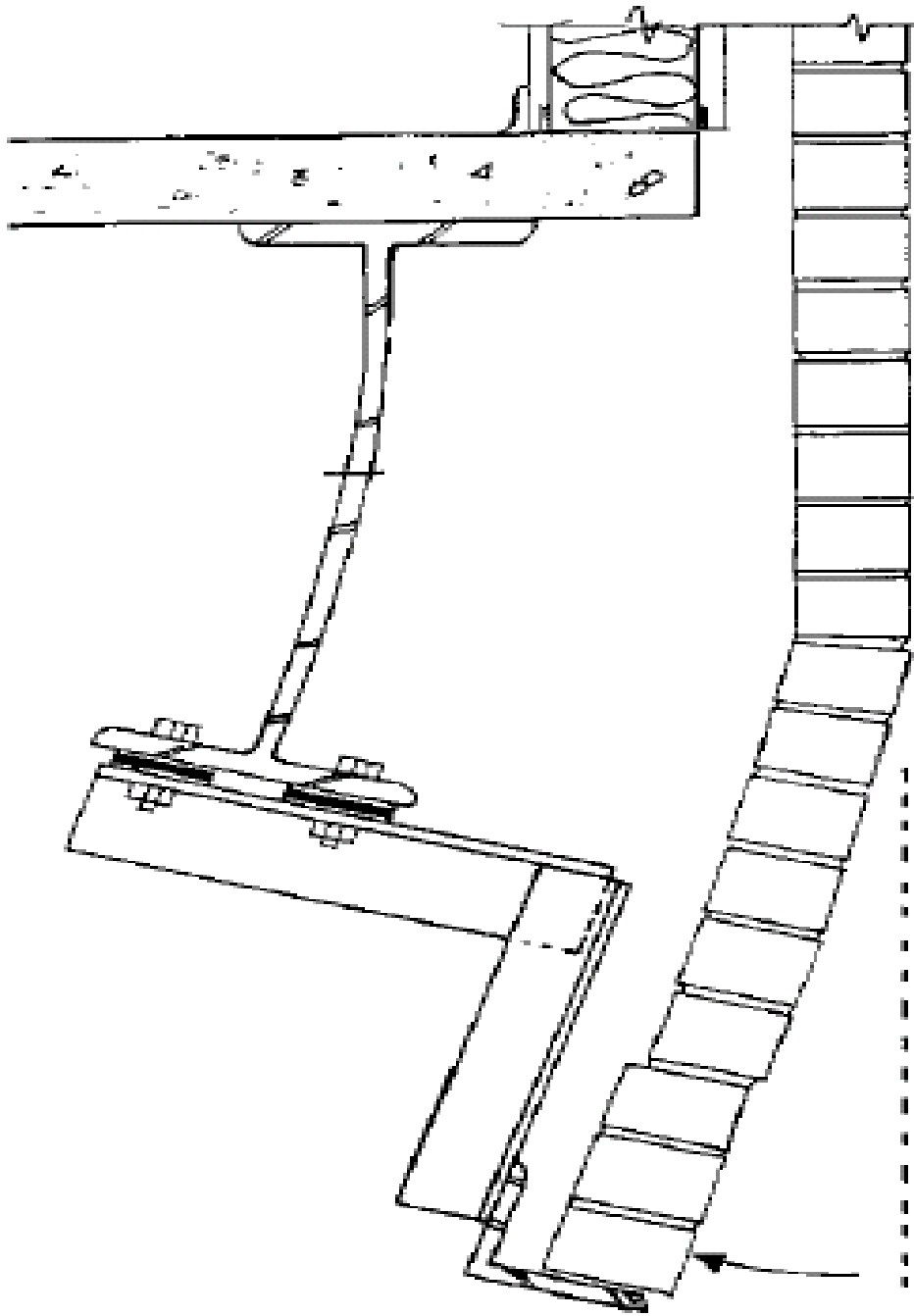
**BUILDING  
SYSTEMS**

Definition

Aspects

**Observation**





OUTLINE

**INTRODUCTION**

Course Objective

Competency

Assignment

*Ars sine scientia nihil est!*  
*Skill without knowledge is of no value*

Dictum of Mignot [1400]

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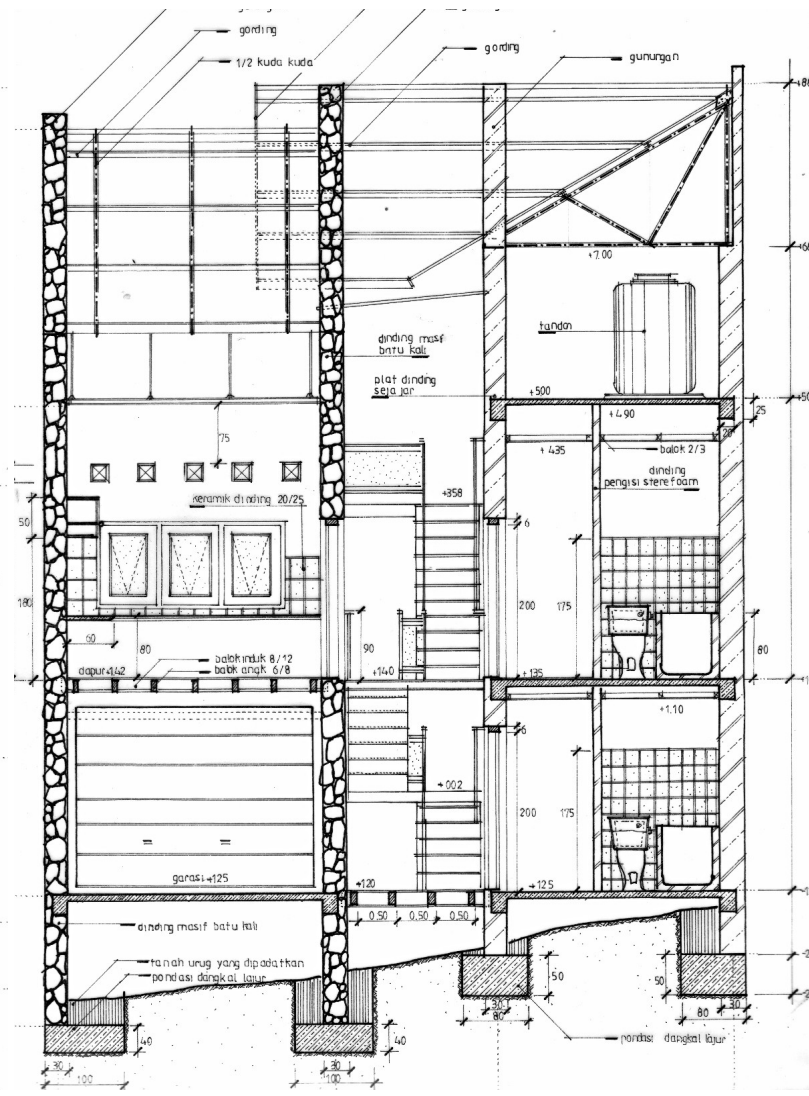
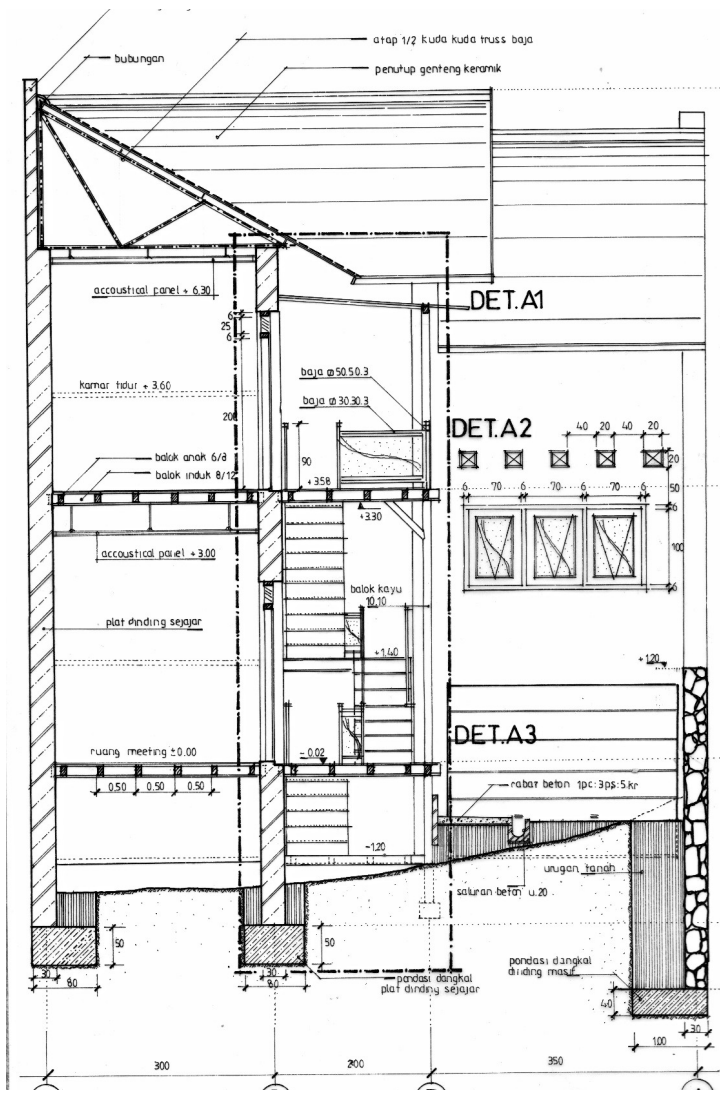
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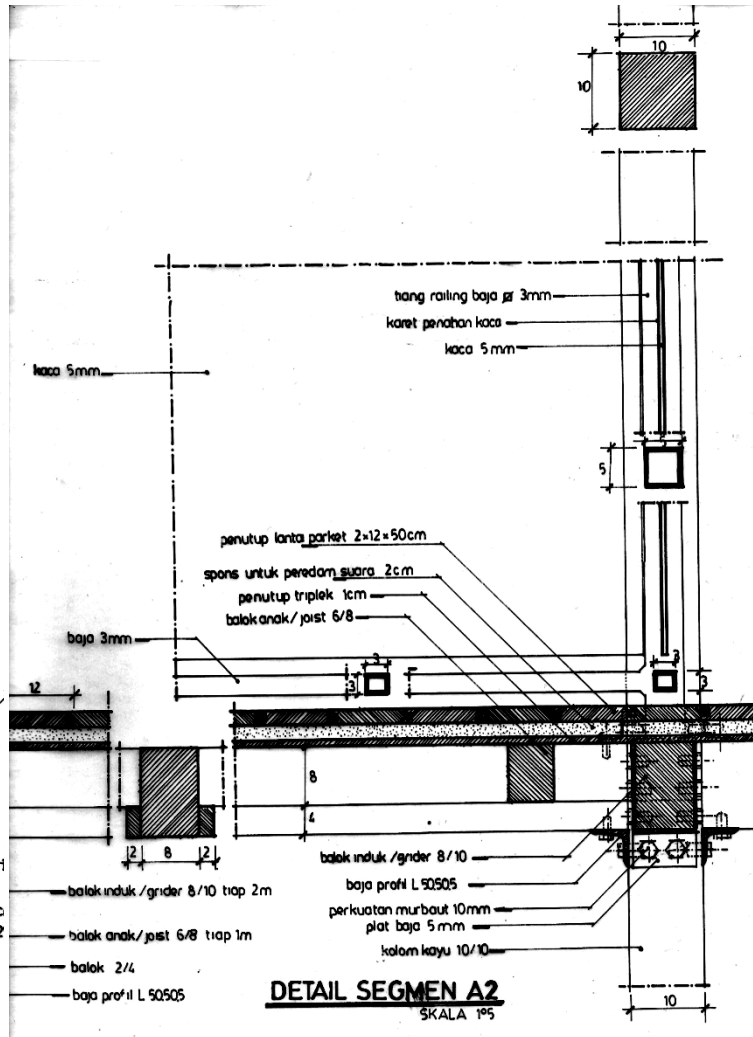
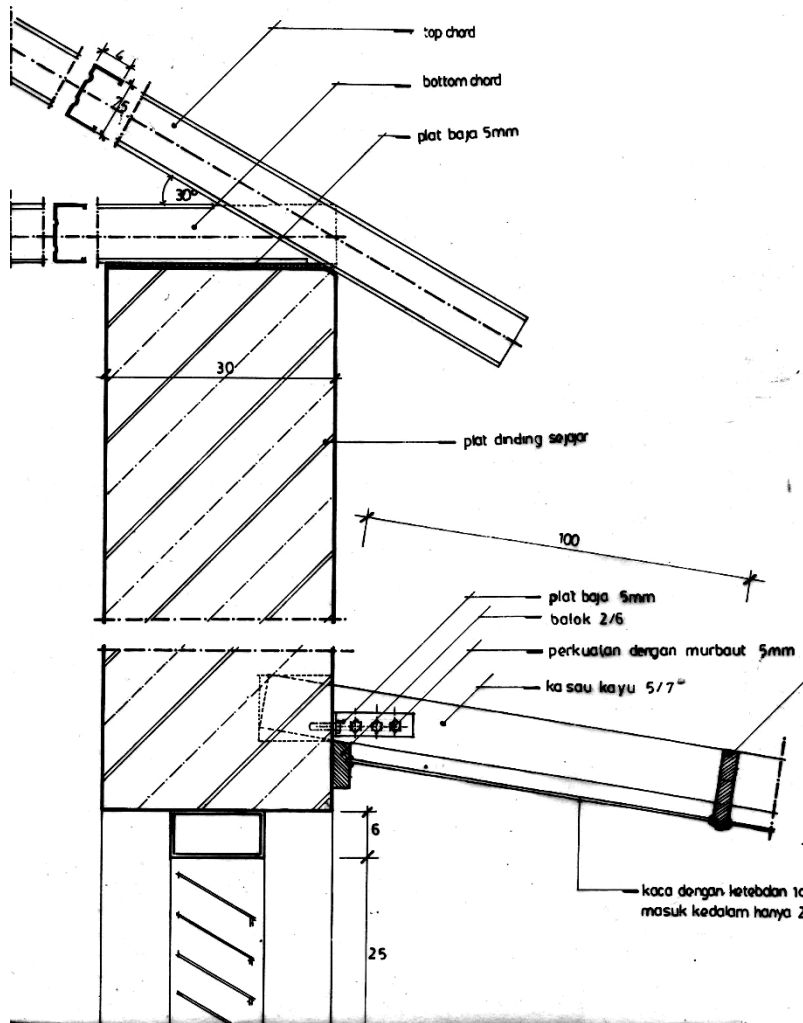
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Competency

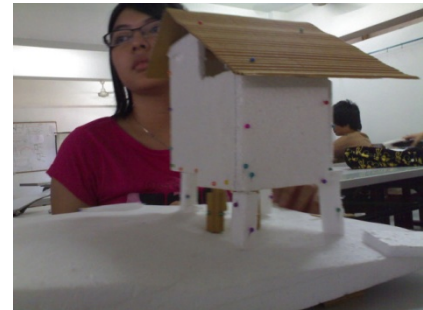
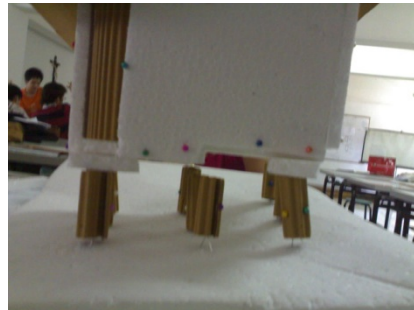
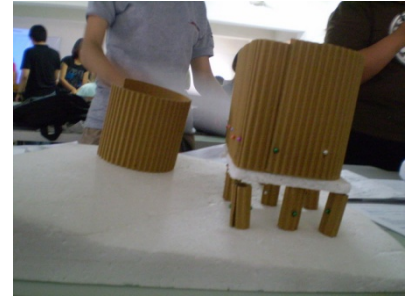
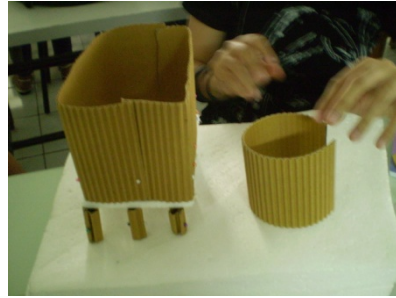
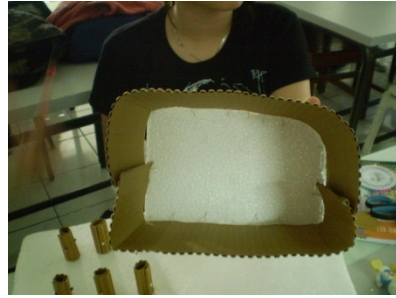
Assignment

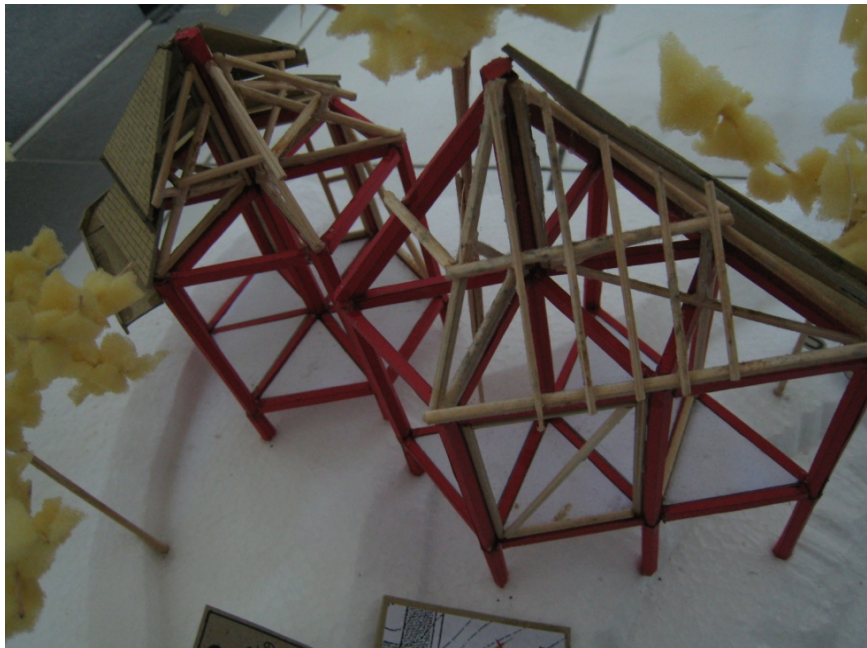
OUTLINE  
 INTRODUCTION  
 Course Objective  
 Competency  
 Assignment





OUTLINE  
INTRODUCTION  
Course Objective  
Competency  
Assignment





Models are **good mediums** to give feeling of the topography and study the building construction.

OUTLINE

**INTRODUCTION**

Course Objective

Competency

Assignment



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OUTLINE

**INTRODUCTION**

Course Objective

Competency

Assignment



OUTLINE

## INTRODUCTION

Course Objective

Competency

Assignment