

# **Course N°03**

## **CUTS AND SECTIONS**

## Purpose Of Cuts

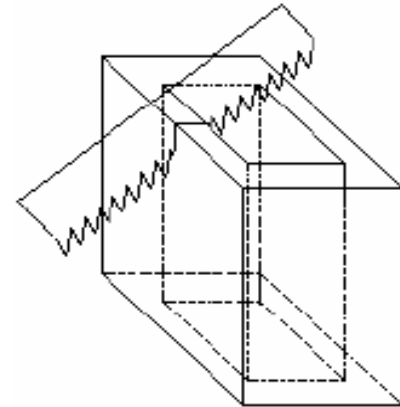
We have seen that we draw dashed the hidden parts of an object. The reading of the views will be difficult if the target object is hollow, that is to say, with the interior details.

**The purpose of the cuts is to draw a continuous line the inside of hollow objects.**

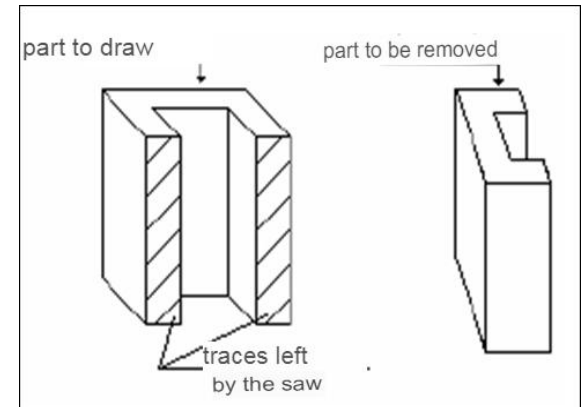
# Execution of a cut

## 1. Cutting plane

the box is symmetrical, we'll cut the part in the axis of the hollow part. The map P is the **cutting plane** .



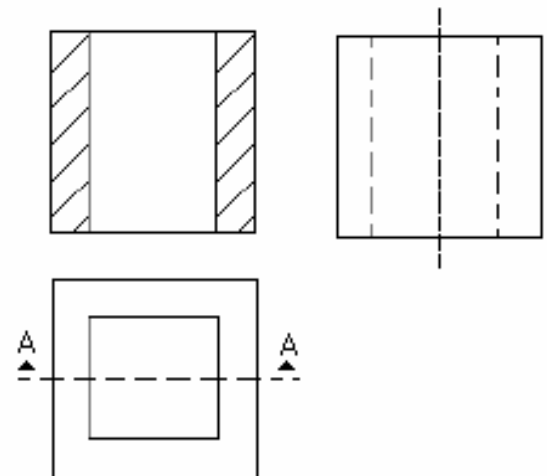
2. **Remove** the part between the cutting plane and the observer



3. Draw the remaining part.

4. Put **hash marks on the parts that have been cut**( traces left by the saw)

5. Identify **cut parts** a **thick line** that one of the parties views. This trait is called **cut**



# SIGHTING OF A CUT

1- **cuts are views** as the other, and place themselves in the same way that the views of ordinary.

## 2 - Designation of a cut

Cup AA cup BB etc, or cut AA', BB', etc., or more simply, A cut, cut B.

## 3-Registration of the plan

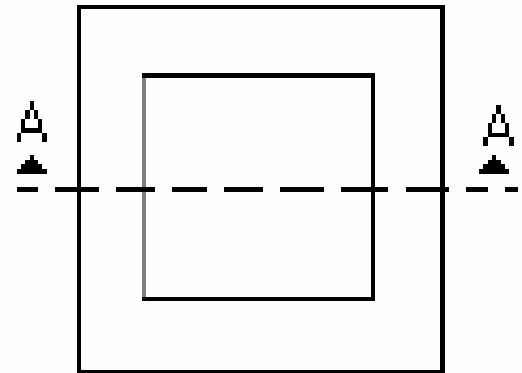
A line **joint end-reinforced ends** (axis)

## 4 - Sense of observation

Place a **arrow** in **strong line**, each **end** the cutting plane, indicating the direction observation.

## 5 - Designation of the cutting plane

Place two **uppercase letters in a strong line**.



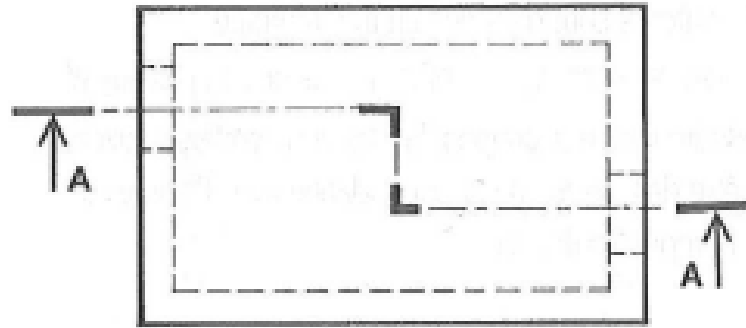
## CUT BRISEE HAS PLANS PARALLELS

It is often used in the **drawings of architecture** it allows you to show off on a **single design details that would require multiple straight cuts**.

### Remarks

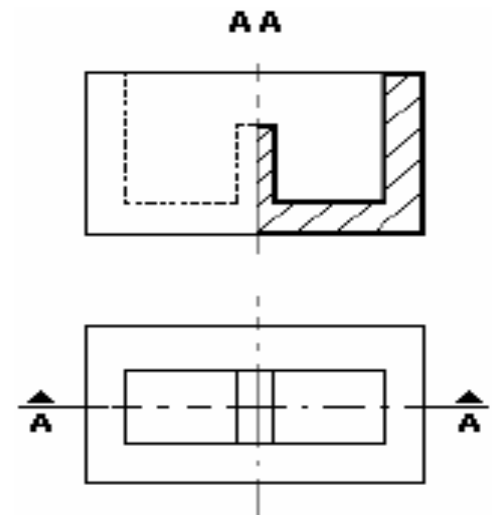
- The trace of the cutting plane is enhanced every **change of direction**.

Identify, on a cut, the breakage of the cutting plane by a line of mixed end reinforced at both ends.

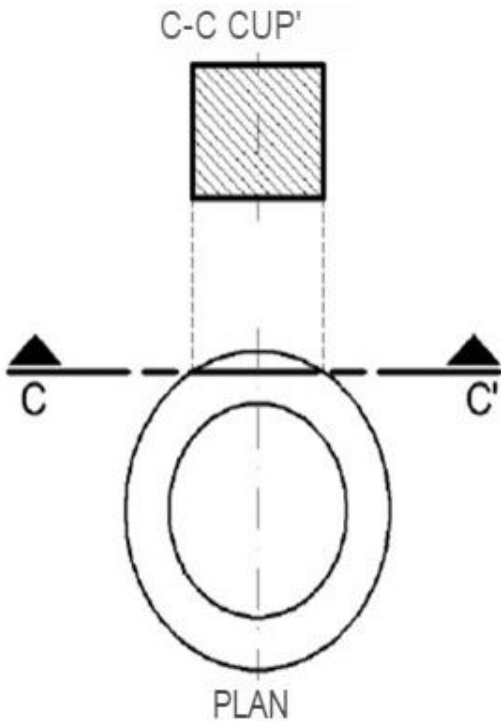
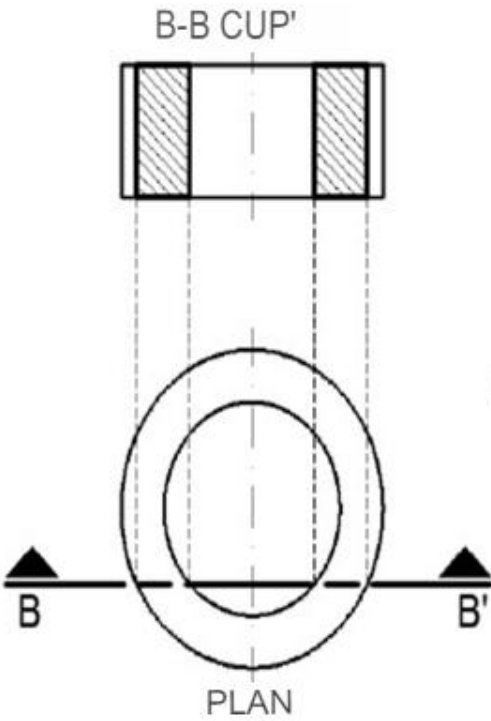
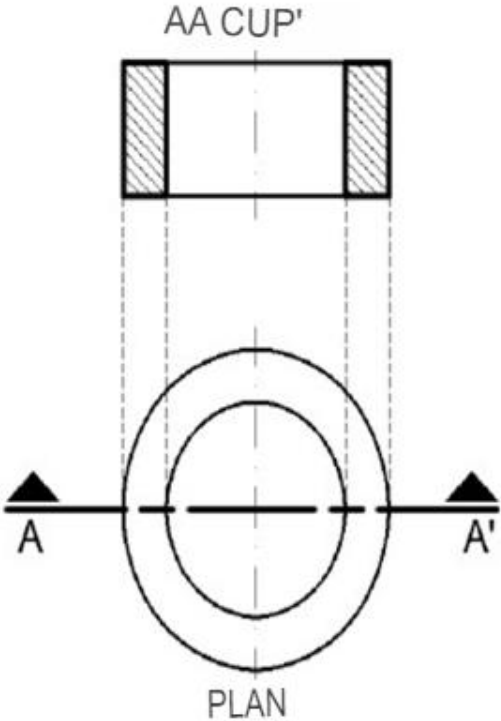
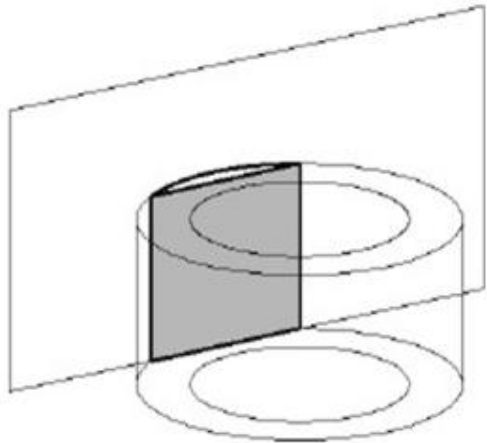
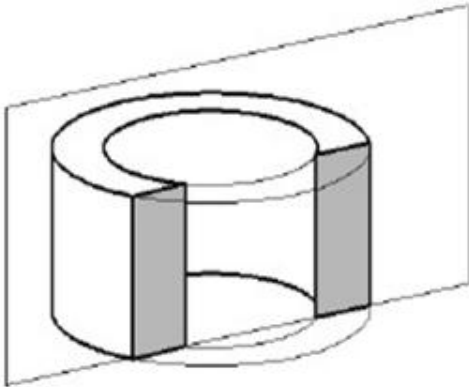
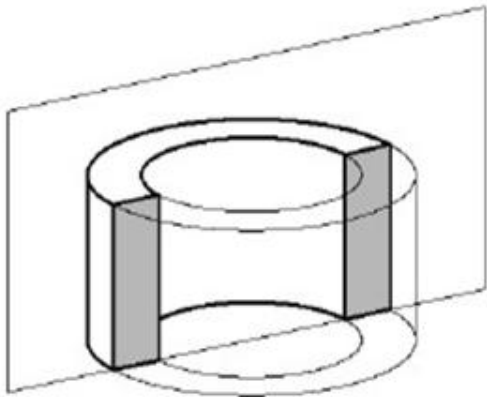


## HALF-CUT

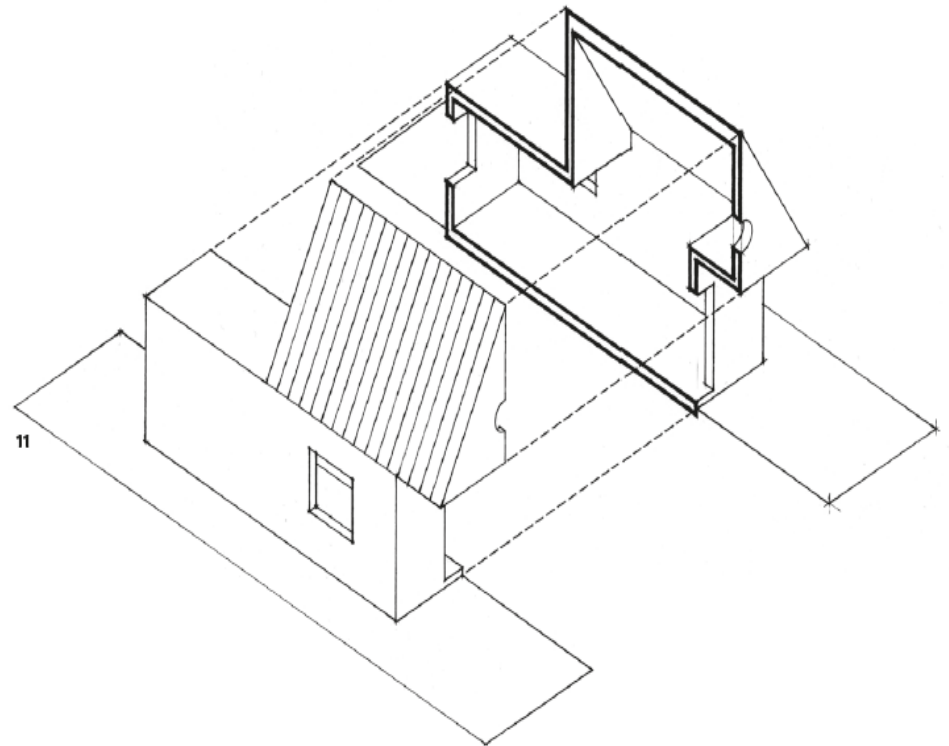
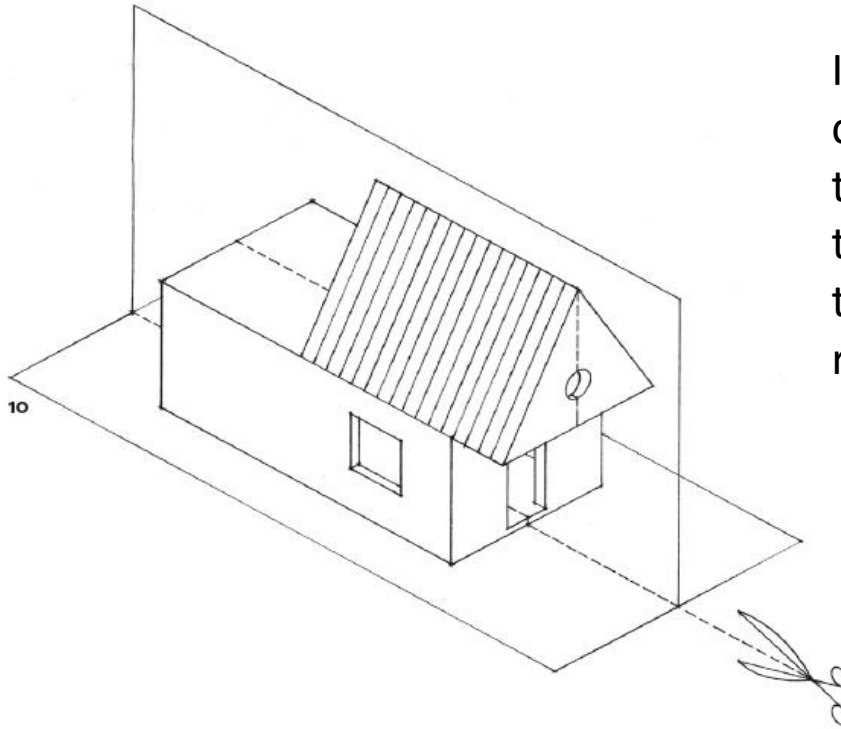
If the part is symmetrical, half a cut can suffice for the understanding of the internal forms.

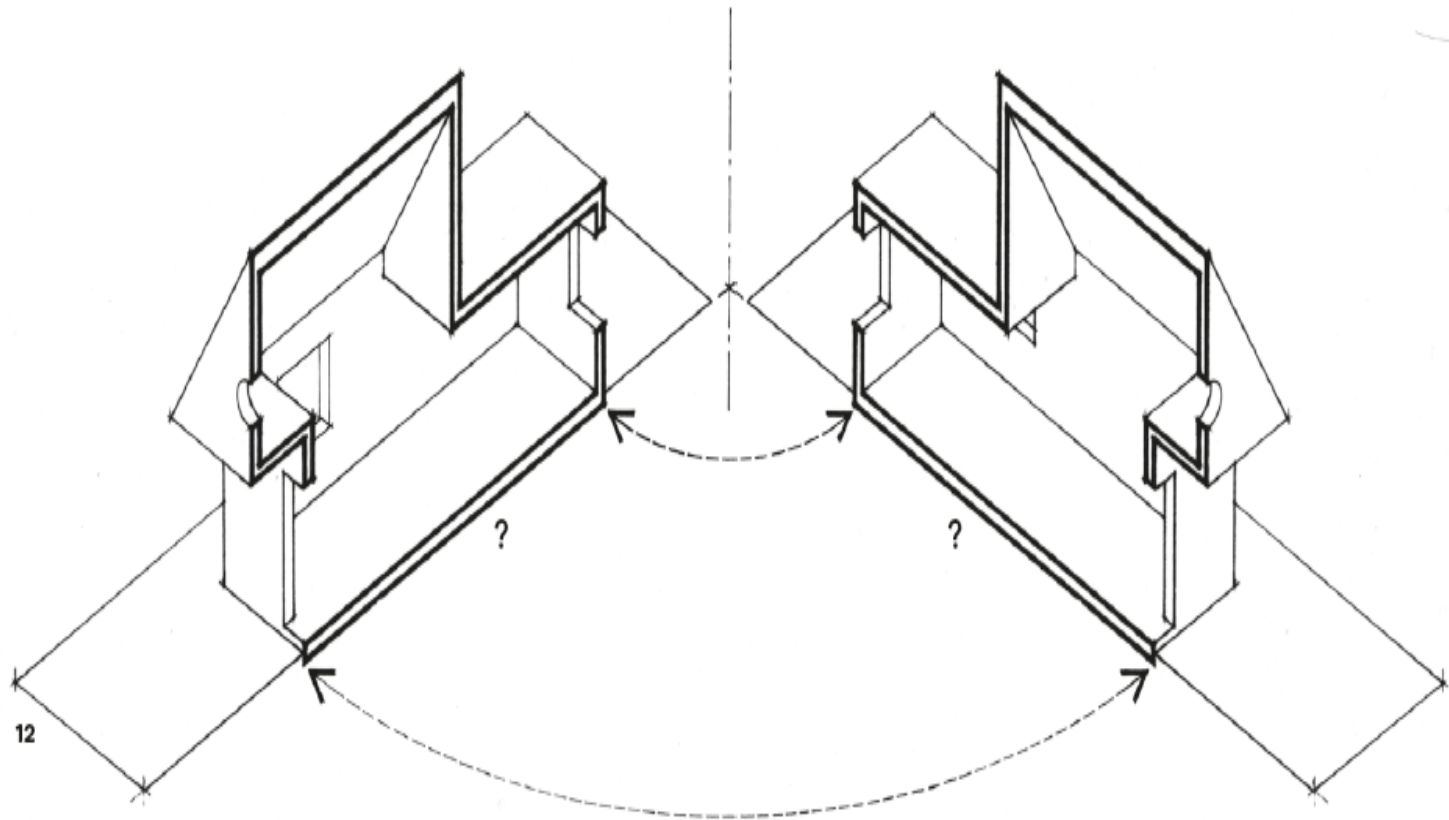


Here are three different cuts in the same object.



In **Architecture**, commonly referred to as a cut, is a cut-vertical, perpendicular the floor of the building, and carried out through the important places of the area of the building : the berry, the doors, windows, openings in the roof, the level changes,...

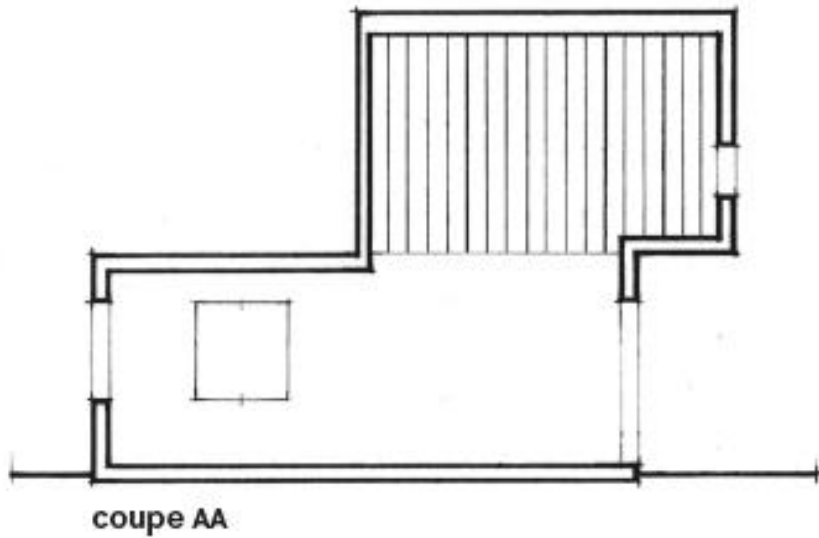




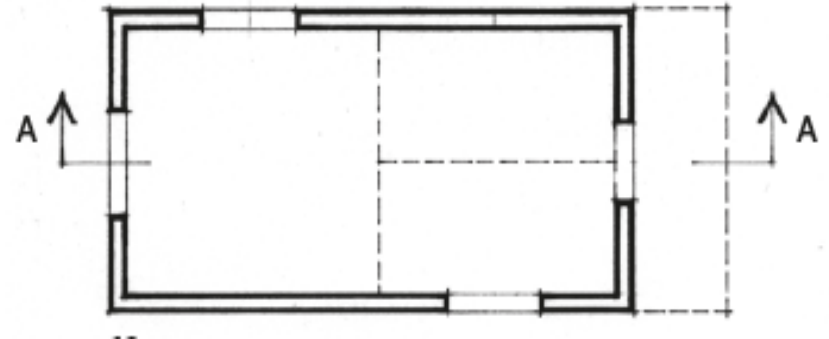
### A cut can be seen in two opposite directions

The interior elevations are represented in the cut. The sense in which we look at, therefore, must be chosen so that **show the interior elevations interesting.**

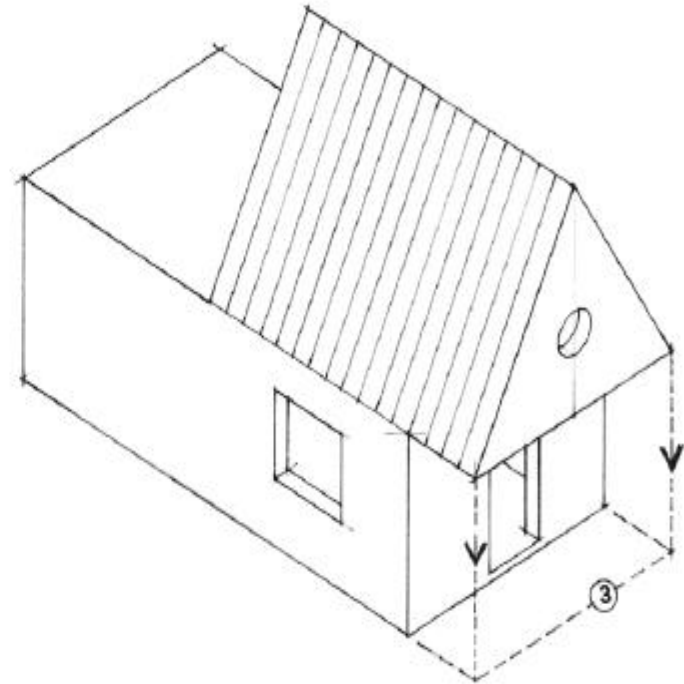
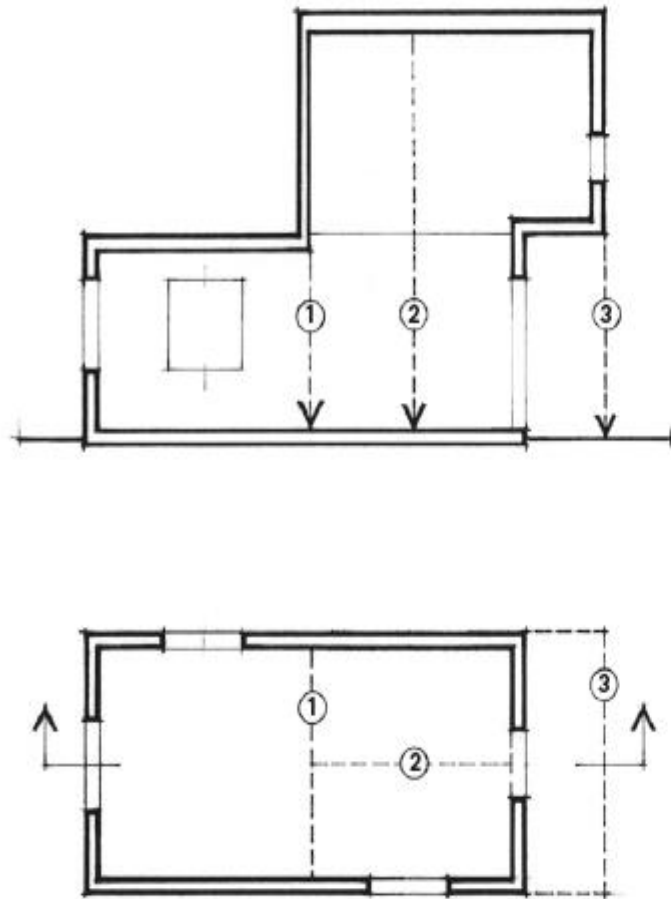




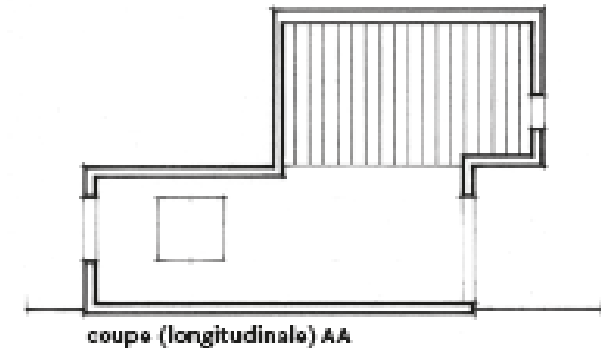
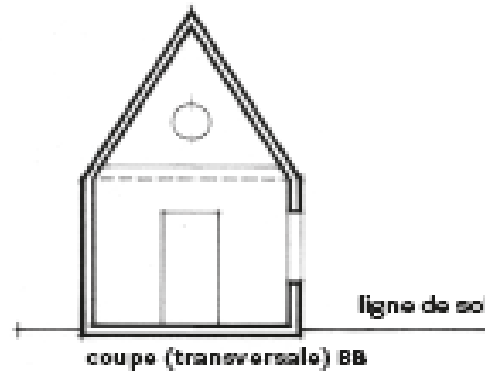
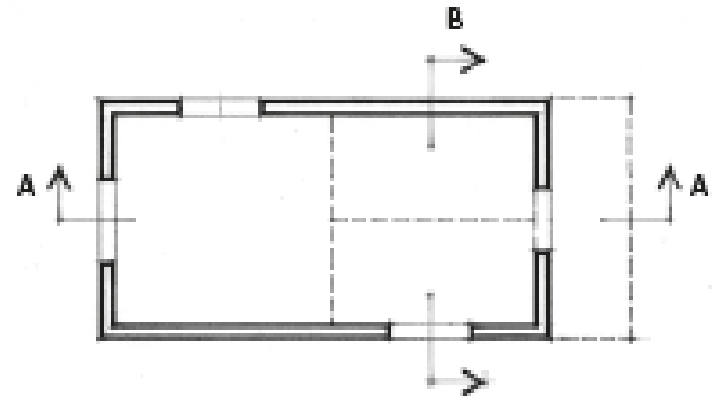
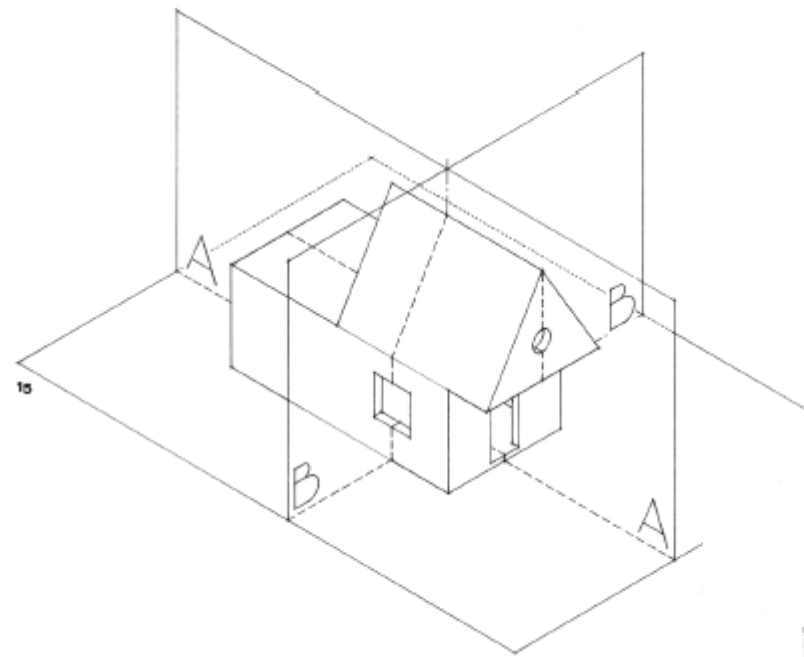
**Location** chosen for the cut and the **meaning** in which we look at it, therefore, indicated by **plan** by a **line and an arrow with capital letters** to help identify the cut ( by the cut AA )



**The choice of the location** smart cuts is essential to a good reading of the spatial system and constructive. It is thus of primary importance. The cuts are represented at the same scale as the plans.



On a plan also appear on the edges by significant ceiling, outlined with dashes, attempt to be expressed on a two-dimensional representation, a third dimension.



Cut **cross-sectional** is a cut in the direction of the **width** of the building ( here the **cut BB** ).

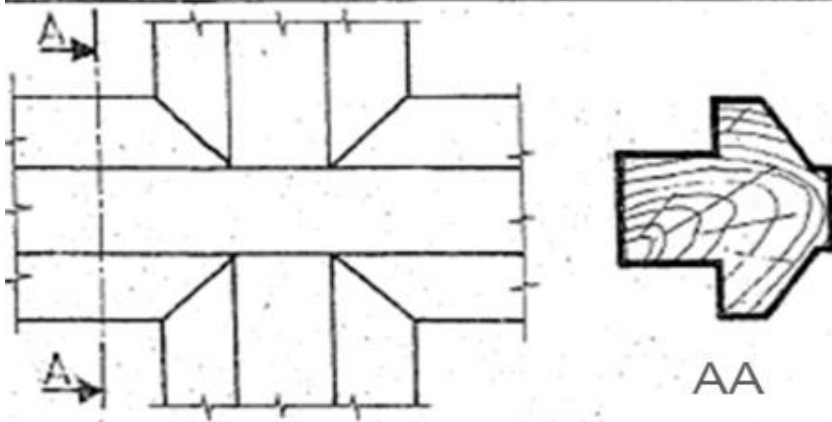
Cup **longitudinal** is a cut in the direction of the **length** of the building ( here the **cut AA** ).

The **ground-line, depicted by a thick line**, must always be in place (but it is necessary to show the cutting foundations and ground)

# Sections

A section is a **simplified section** where we do not represent that the parts located in the cutting plane

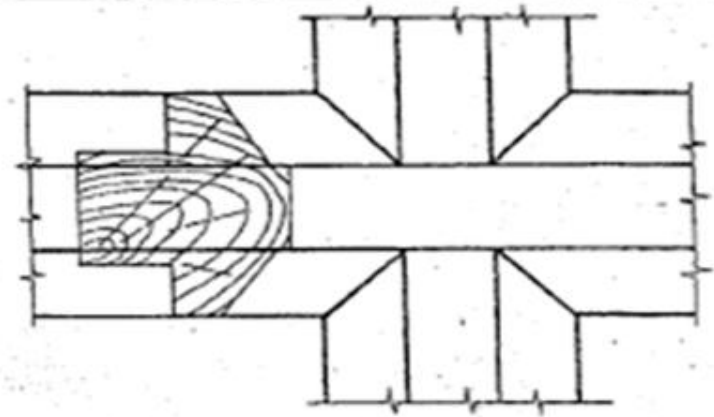
## DIFFERENT SECTIONS



Exit section

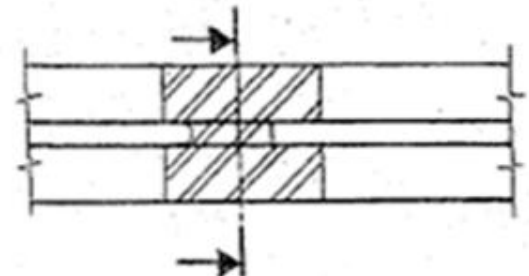
The outline of the section is represented in reinforced line.

The identification of the section and its designation are identical to those used for the cuts (see § 4).



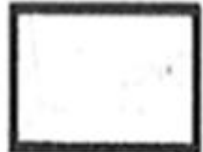

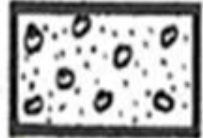









Section folded down on site

The outline of the section is represented in a thin continuous line. Any other indication is useless unless there are ambiguous-tee (fig. below).



# Hatch

	Natural soil		Acoustic insulation
	Concrete		Wood in section longitudinal
	Mass concrete or cleanliness		Wood in section cross-sectional
	Hollow masonry, metals, light alloys		Hard plastic and toppings
	Dubbing complex		Cement plaster Plasterboard coating
	Thermal insulation		Multi-layer waterproofing

Hatching is used to highlight the parts cut in a cut or a section.

- **Inclination of hatching :**

- > Fine lines regularly spaced
- > Inclined at 45° with respect to the faces main features of the room

- **Orientation of hatching :**

- > Change the orientation of the hatching by 2 joined parts

- **Large-scale drawing :**

- > Replace the hatching at 45° by the conventional hatching

