

Basic Design Composition

Introduction to Forms , Shapes ,Textures and Lights

FORM

It is also referred as shape, area or mass. Forms are closely related to lines. Forms unite with lines to achieve overall design of a given space. A long rectangular table or sofa helps in creating a line of unity in the room but at the same time too many shapes or forms of furniture create the impression of chaos. Point, line, plane and volume are the primary elements of form.

Point

A point marks a location in the space. Conceptually, it has no length, width or depth. It is static and directionless. A point can mark the ends of a line, the intersection of two lines or the corner or where the lines of a plane or volume meet.

When at the corner of a field or space, a point is stable and at rest. When it is off-centre, it becomes more dynamic. Point-generated forms such as the circle and the sphere, share this self-centering quality of the point.

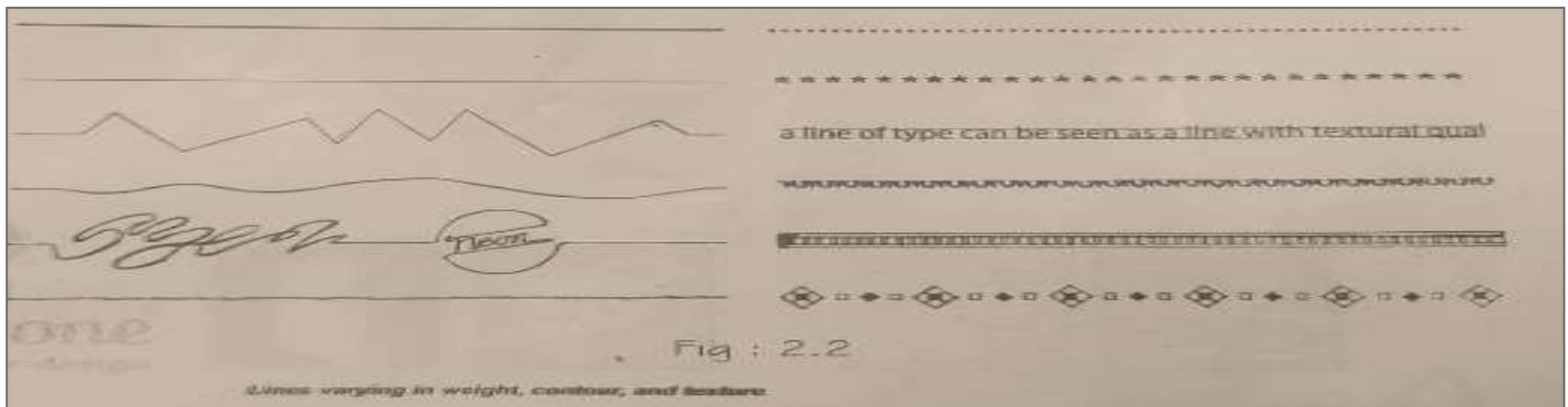
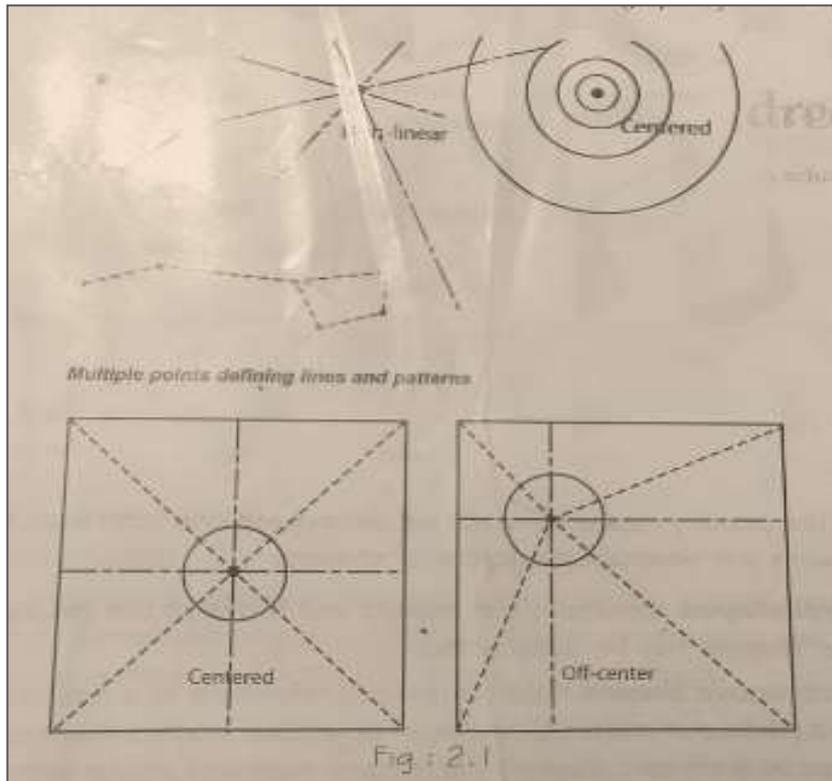
Line

A point when extended becomes a line. Conceptually, it has only one dimension, ie, length. Line is capable of expressing movement, direction or growth. Lines may vary in weight and character. Horizontal lines represent stability and repose. Vertical line expresses a state of equilibrium with the force of gravity.

Diagonal lines imply movement and are visually active and dynamic. Curved lines tend to express gentle movement. Lines describe the edges of shape and separate it from the space around it. Lines can articulate the edges of planes and the corners of volumes. Lines can also be used to create texture and patterns on the surface of forms.

Line is the basic design element. Too many lines of different nature in a room create an impression of visual chaos like too many beams, panelling on walls etc., Lines should be restricted to the minimum. Equal heights in furniture bring in the impression of unity in the space. Vertical lines create the impression of height and similarly horizontal lines create the impression of more length. Vertical lines of door ways, draperies, windows, built-in cupboards give strength and height to a room. Similarly horizontal lines are obtained by tables, chairs, book cases etc.,

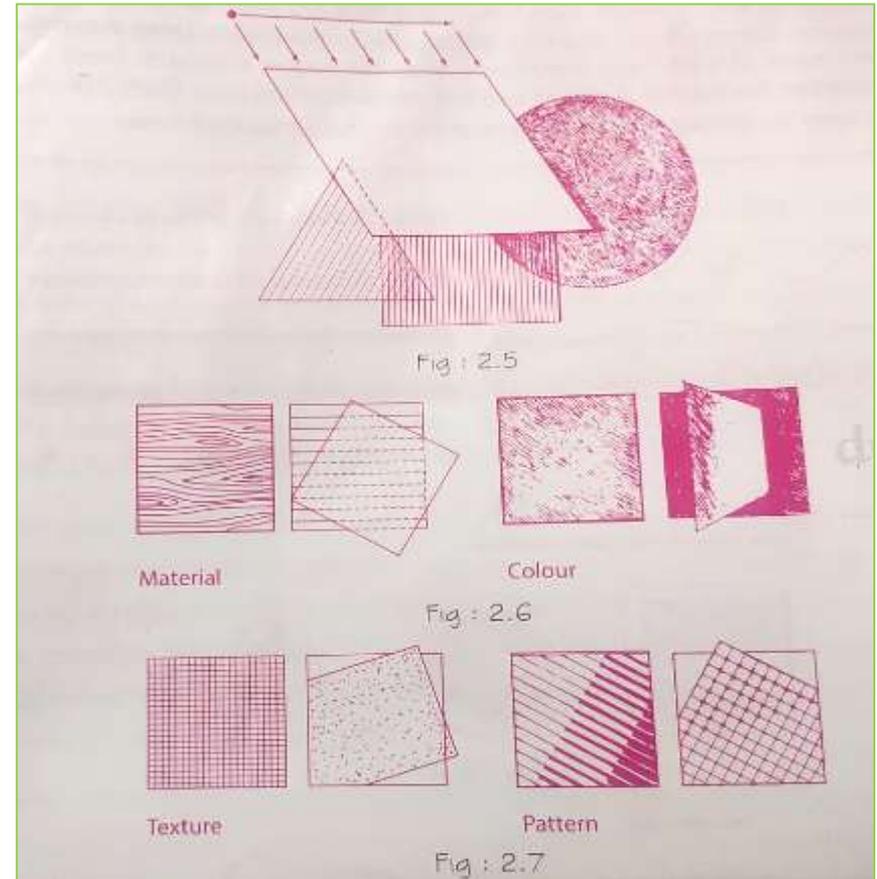
BASIC DESIGN ELEMENTS



PLANE

Plane

A line shifted in a direction other than its intrinsic direction defines a plane. Conceptually, a plane has two dimensions-width and length, but no depth. Shape is the primary characteristics of a plane. Planar forms have significant surface qualities of material, colour, texture and pattern.



Surface characteristics of planar elements

Volume

A plane extended in a direction other than along its surface forms a volume. Conceptually, and in reality, a volume exists in three dimensions. Volume can either be a solid or a void.

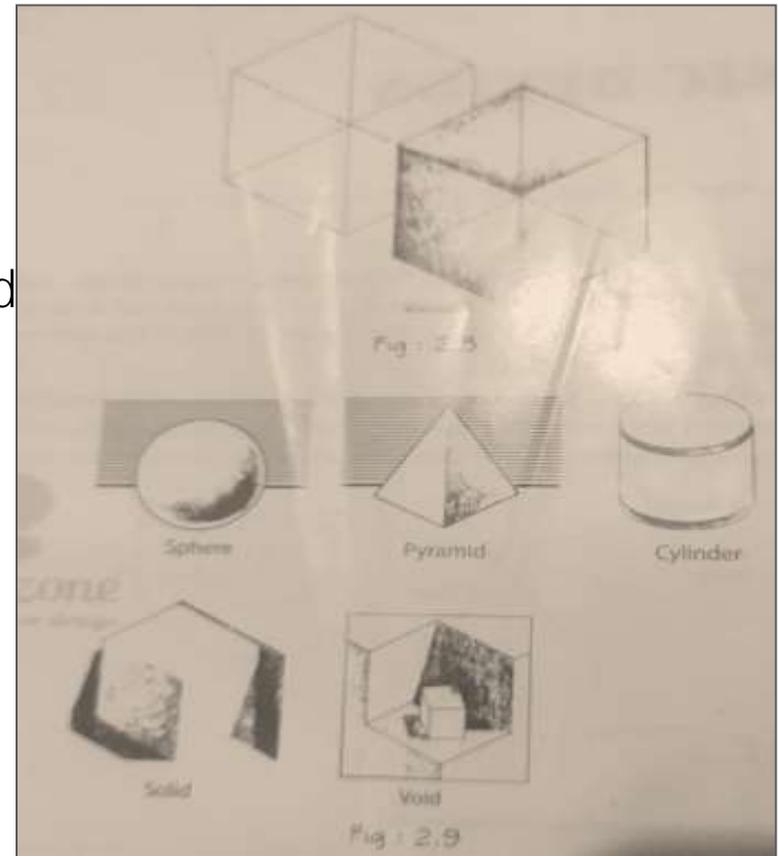
SHAPE

SHAPE

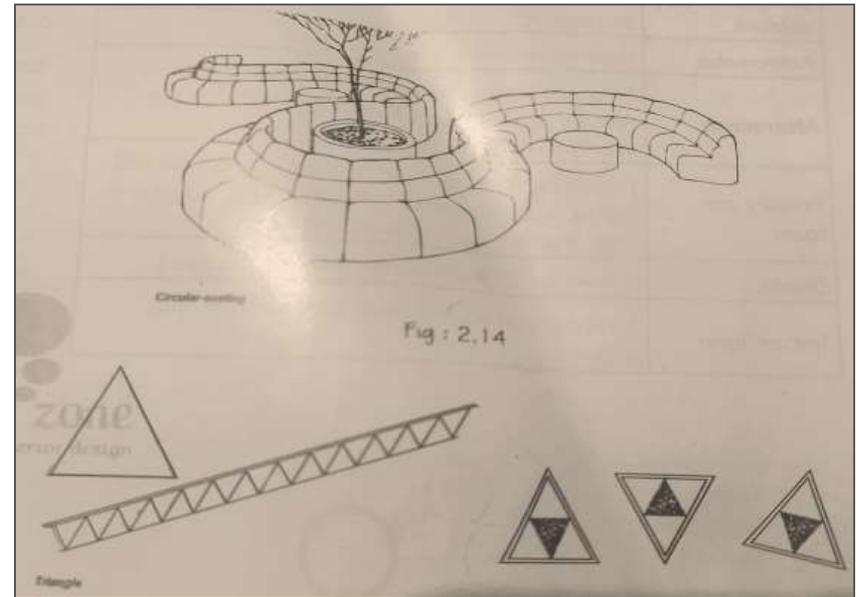
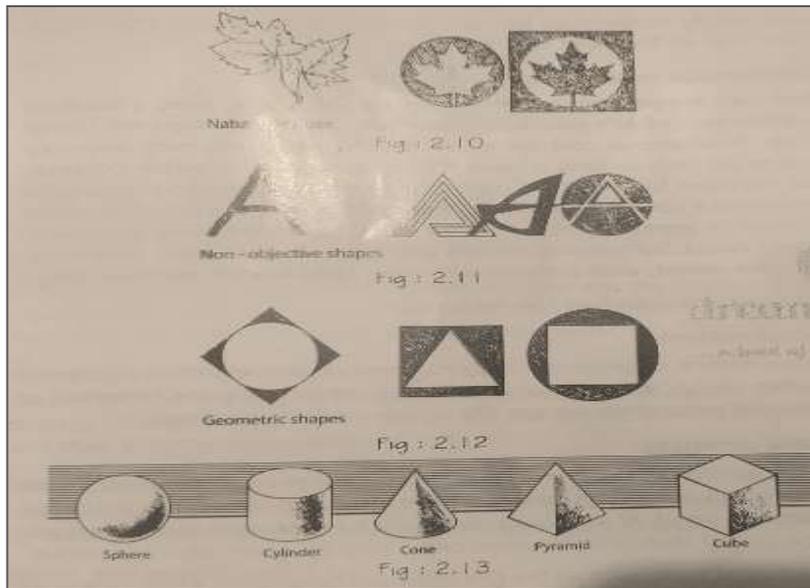
Shape is the primary means by which we distinguish one form from another.

The following are several categories of shapes:

- Natural shapes represent the images and forms of the natural world. These shapes may be abstracted.
- Non-objective shapes make no obvious reference to a specific object or to a particular matter. Some non-objective shapes may result from a process such as calligraphy and carry meaning as symbols.
- Geometric shapes are of two types-rectilinear and curvilinear. Curvilinear shapes are circular while rectilinear shapes include series of polygons which can be inscribed within a circle. Extended into the third dimension, these primary shapes generate the sphere, cylinder, cone, pyramid and the cube.



GEOMETRIC SHAPES



Geometric shapes

Circle is a compact, introverted shape which has its natural focus in its centrepoint. Curvilinear shapes, whether regular or irregular are capable of expressing softness of form and fluidity of movement.

Triangle is stable when resting on one of its sides but when tripped to stand on one of its points, it becomes dynamic. Triangle can be conveniently combined to form any number of square, rectangular and other polygonal shapes.

Square is pure, rational and stable when resting on one of its sides, but becomes dynamic when standing on one of its corner. Rectangle can be considered to be variations of the square with the addition of width or length.

TEXTURE

Surface characteristics of any object is known as texture. Texture surfaces range from smooth to rough. A rough texture absorbs light and smooth surface reflects light. Small and dark rooms should have smooth texture and large rooms can have rough texture, if needed. Textures can be used for wall finish, woodwork, furniture etc.,

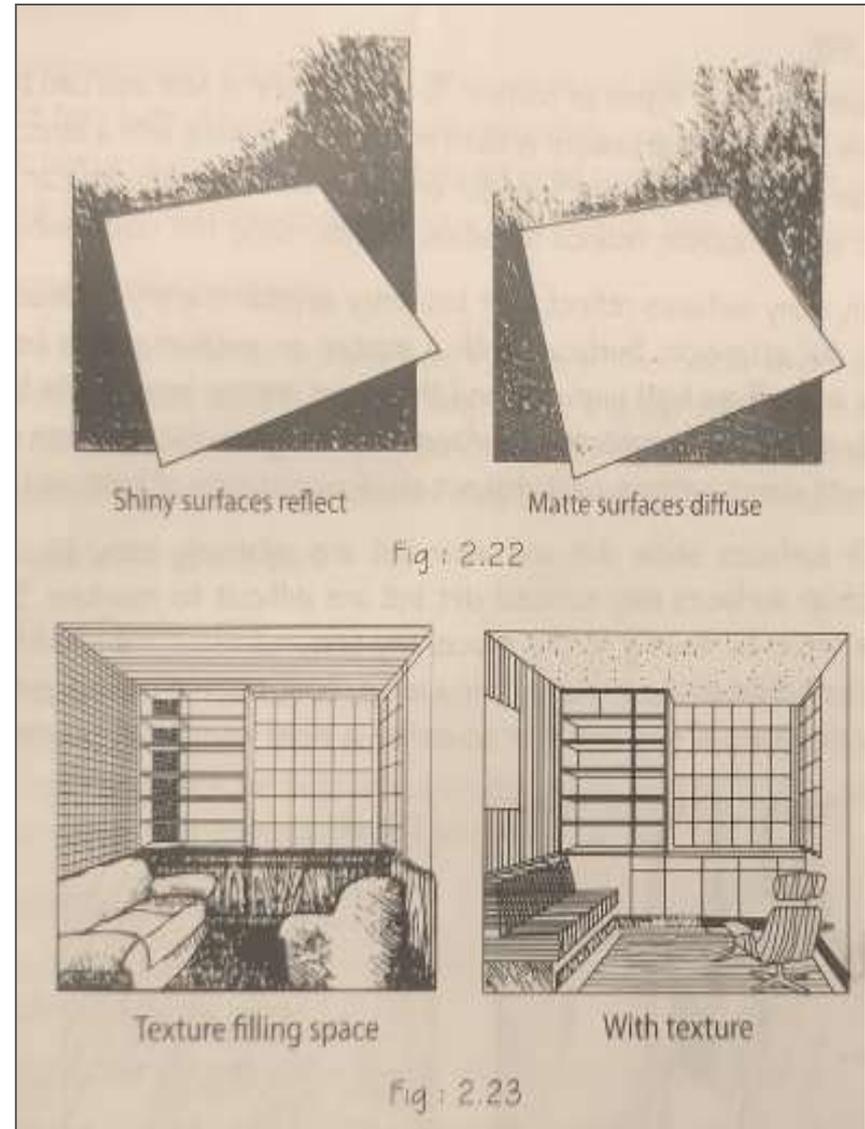
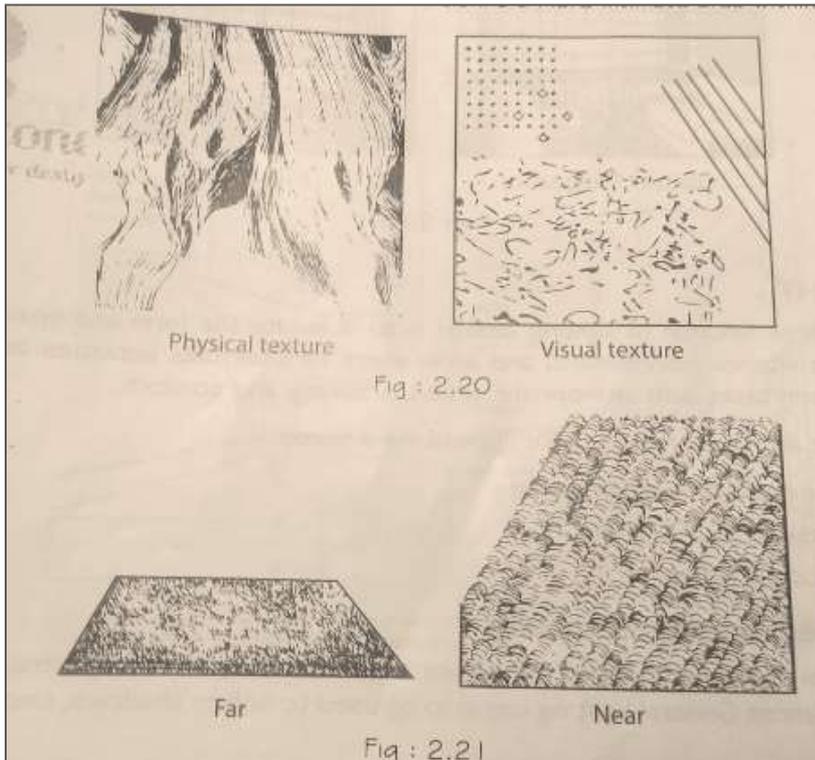
There are two basic types of texture. Tactile texture is real and can be felt by touch whereas visual texture is seen by the eye. Texture with a directional **grain can accentuate a plane's length or width.** Coarse textures can make a plane appear closer, reduce its scale, and increase the visual weight. Smooth ,shiny surfaces reflect light brilliantly, appear sharply in focus, and attract our attention.

Surfaces with a matter or medium-rough texture absorb and diffuse light unevenly and therefore appear less bright than a similarly coloured but smoother surface. Very rough surfaces,when illuminated with dark lighting, cast distinct shadow patterns of light and dark.

Smooth surfaces show dirt and wear but are relatively easy to clean, while rough surfaces may conceal dirt but are difficult to maintain.

TEXTURE

Since texture tends to visually fill the space, any textures used in a small room should be subtle or used sparingly. In a large room, texture can be used to reduce the scale of the space or to define a more intimate area within it .



LIGHT

Light is an art and utilitarian element. Light is closely related to colour and texture. Daylight is very important in the overall appearance of a room. Artificial lighting has become common in interior design today due to the lack of natural light in the interiors. There are many reasons for this.

Many designers prefer artificial light for dramatic effect of interiors. However a good combination of natural and artificial lighting will save energy consumption. Artistic placement of lights can bring out important areas and keep subordinate areas in shadow. There are several types of artificial lighting appliances available today for interior designers

LIGHT

Ambient or general lighting

General or ambient lighting illuminates a room in a fairly uniform, general diffuse manner. General lighting can also be used to soften shadows, smooth cut and expand the corners of a room, and provide a comfortable level of illumination for safe movement and general maintenance.

Task lighting

Local or task lighting illuminates specific areas of a space for the performance of visual tasks or activities. The light sources are usually placed close to either above or beside the task surface.

Accent lighting

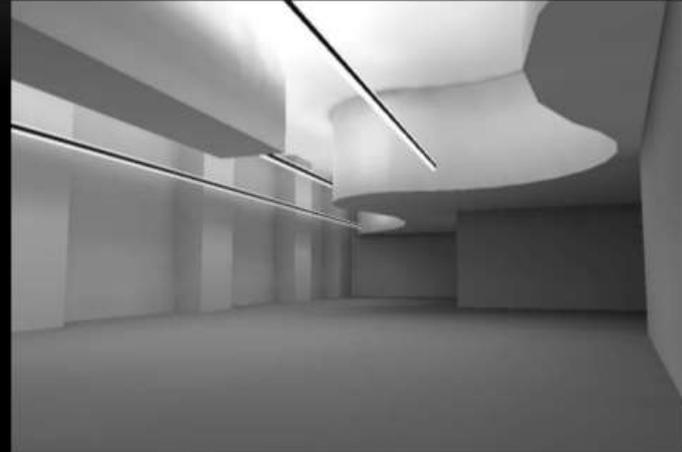
Accent lighting is a form of local lighting, which creates focal points, or rhythmic patterns of light and dark within a space. Accent lighting is used to **emphasize a room's feature, or highlight art objects or prized positions.**

AMBIENT LIGHT

AMBIENT LIGHTING - EXAMPLE 1



AMBIENT LIGHTING - EXAMPLE 2



AMBIENT LIGHTING - EXAMPLE 3



TASK & ACCENT LIGHT

ACCENT LIGHTING – EXAMPLE 1



Wooden ceiling detail

ACCENT LIGHTING – EXAMPLE 2



Creo Hall, Akira Sakamoto Casa Architect

TASK LIGHTING – EXAMPLE 1



Decorative suspensions.

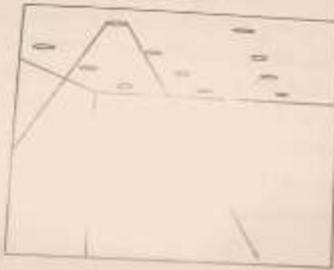
TASK LIGHTING – EXAMPLE 2



Patrick Cox Shop in Tokyo

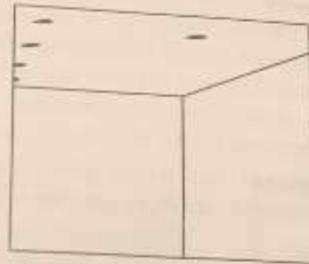
LIGHT

Responsibility



Recessed downlights must have a wide beam spread to provide general lighting effectively

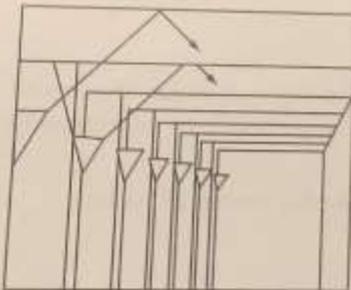
Point sources - direct



Not being visually active, recessed downlights can be spaced evenly or unevenly

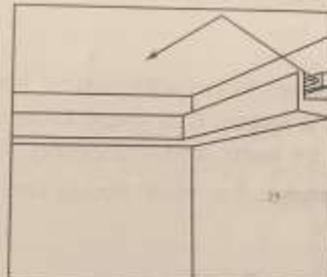
Point sources - direct

Fig : 2.24



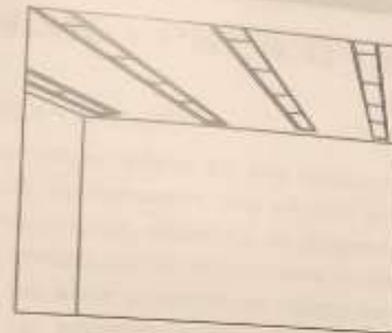
With wide spread beams, indirect lighting fixtures can provide general lighting

Point sources - indirect



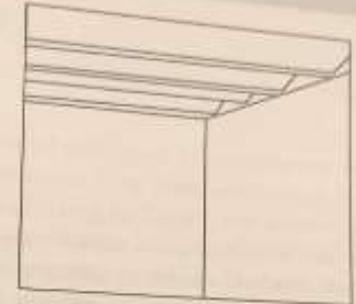
Cove lighting borders a room and uses the ceiling as a reflector to provide general lighting

Linear sources - indirect



Fluorescent luminaires parallel to our line of sight can absorbulate depth

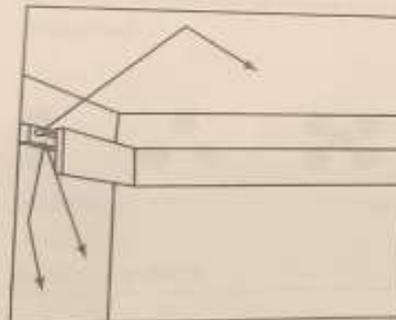
Linear sources - direct



The same fixtures perpendicular to our line of sight can increase apparent width

Linear sources - direct

Fig : 2.26



Similar to cove lighting, valance lighting also illuminates the wall planes below.

Linear - direct / indirect



Luminous ceilings combine high illumination and diffusion with low brightness

Planar source - direct

Fig : 2.27

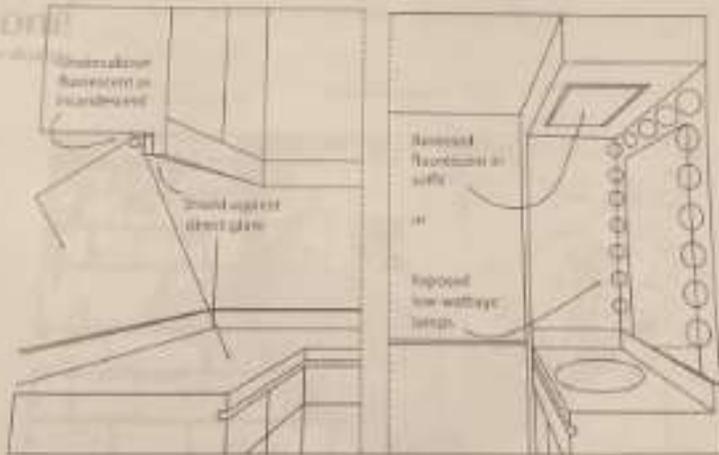
LIGHT



In work spaces, adjustable light fixtures are often desirable to prevent both direct and indirect glare.

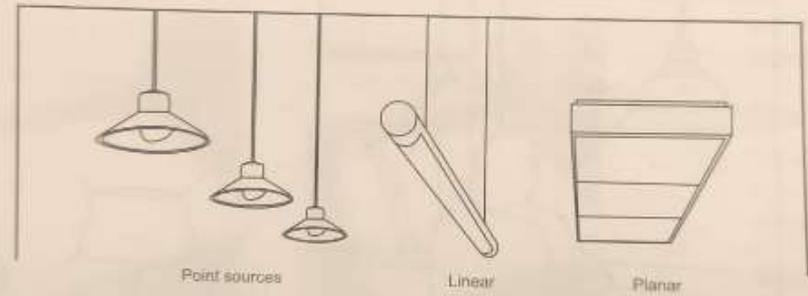
Table and floor lamps are suitable for reading if positioned correctly.

Fig : 2.28



Task lighting is usually built-in and integrated with the cabinetry of kitchens, bedrooms and other special use spaces.

Fig : 2.29



Task lighting may consist of luminaires suspended directly over the visual task surface. For flexibility some luminaires may be track mounted.

Fig : 2.30

Recessed downlights can provide different types of light depending on the type of lamp and internal reflector used.

Cast shadows Frame artwork Emphasize texture

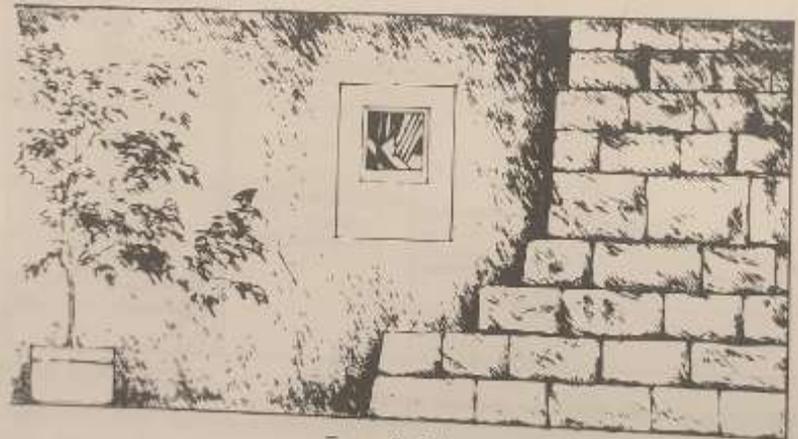


Fig : 2.31