BUILDING MATERIALS

LECTURE: 03

COURSE NAME: BUILDING MATERIALS





Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment.

These solutions are functional, enhance the quality of life and culture of the occupants and are aesthetically attractive.

Designs are created in response to and coordinated with the building shell and acknowledge the physical location and social context of the project.

Designs must adhere to code and regulatory requirements, and encourage the principles of environmental responsibility.

The interior design process follows a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process, whereby the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals.

START OBSERVING INTERIORS NOW....



90% of our day is spent in interior spaces, Most of us take interiors for granted. How often do you pay close attention to the

Furniture/space planning

Colors

Textures

Lighting

Ceiling

Flooring

CONSIDERTATION FOR CHOOSING MATERIALS



The Topic is divided into five general categories:

- 1 Physical characteristics
- 2 Context
- 3 Experiential qualities
- 4 Cost
- 5 Manufacturing concerns

1 - PHYSICAL CHARACTERISTICS

- Weight
- Porosity
- Density
- Concrete and cement based materials,
- Strength
- Acoustical properties
- Weathering characteristics
- Structural Properties
- Texture
- Color
- Shape
- Gloss
- Maintenance Characteristics

Specification of flooring materials for any environment requires consideration of many factors.

Although product cost is often a driving consideration within the process, it should be evaluated along with other criteria, such as acoustical properties, aesthetics, and respiratory comfort (indoor air quality) in order to make the best and most educated decision.

There are three main categories of flooring products: hard floor coverings, resilient floor coverings and carpet.

CARPET



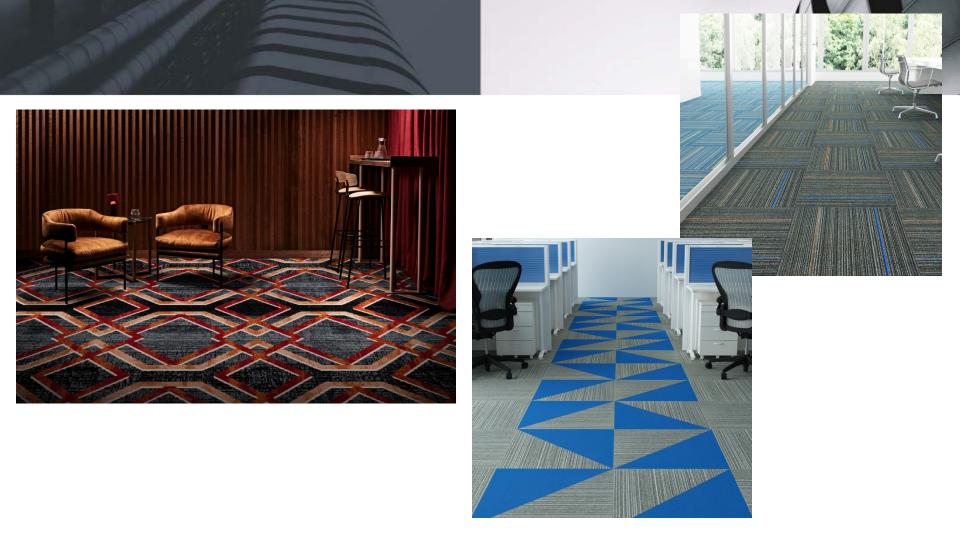
Carpet, as a flooring surface, is a dominant element in any hotel environment.

It is used in many areas including: lobbies, meeting rooms, offices, guest rooms, fitness facilities, hallways, and banquet spaces.

For this reason, as well as the complexities involved in the manufacture of carpet products, there is considerable background information to consider.

The elements of consideration in carpet selection include type of fiber, density of pile, depth of pile, method of construction, pattern and clean ability.

According to the Carpet and Rug Institute (CRI) carpet serves many important functions in any design application. The primary ones include acoustics, beauty, atmosphere, thermal insulation, safety, and comfort.



Acoustical: Carpet absorbs ten times more airborne noise than any other flooring material and as much as most other types of standard acoustical materials. It virtually eliminates floor impact noises at the source.

Beauty: Carpet provides a tremendous choice of colors, textures, and designs to suit every taste. Custom designed carpet for commercial installation is also available at reasonable prices. Carpet has a way of framing the furnishings in a room or office that makes them look more important and distinctive.

Atmosphere: Carpet dramatically enhances the feeling of quality in interior design—a major consideration in hotels and motels.

Carpet also has the ability to "de-institutionalize" especially in psychiatric hospital or other building—a significant factor in improved patient morale in hospitals, and in student attitudes in school.

Thermal Insulation:

Physically, the pile construction of carpet is a highly efficient thermal insulator.

Mechanical demonstrations have shown that over a cold cement slab, carpet's surface temperature is substantially higher than that of hard surface tile. Thus, carpet relieves coldness at foot and ankle levels and lends psychological warmth as well.

Safety:

The National Safety Council reports that falls cause most indoor injuries. Carpets ability to cushion falls and prevent serious injuries means savings in medical costs, and manhours to businessmen.

Carpet tile

Face fibers

Tuft type

Face weight

RESILIENT FLOOR COVERINGS/ VINYL COMPOSITION TILE



Vinyl Composition Tile (VCT) is an inexpensive commonly used general utility floor tile. It consists of binder (organic), filler (inorganic) and pigments.

The organic binder portion of the product contains vinyl resins, plasticizer, additives, and in the case of Mannington, 5% or greater recycled content.

There has been concern expressed by industry leaders that the health impact concerns associated with this byproduct are not currently accounted for in the BEES evaluation system.

Linoleum

Wood-Bamboo (Plyboo)

HARD FLOOR COVERINGS

Ceramic tile

Ceramic tile with recycled content

Stone

Granite

Marble

