

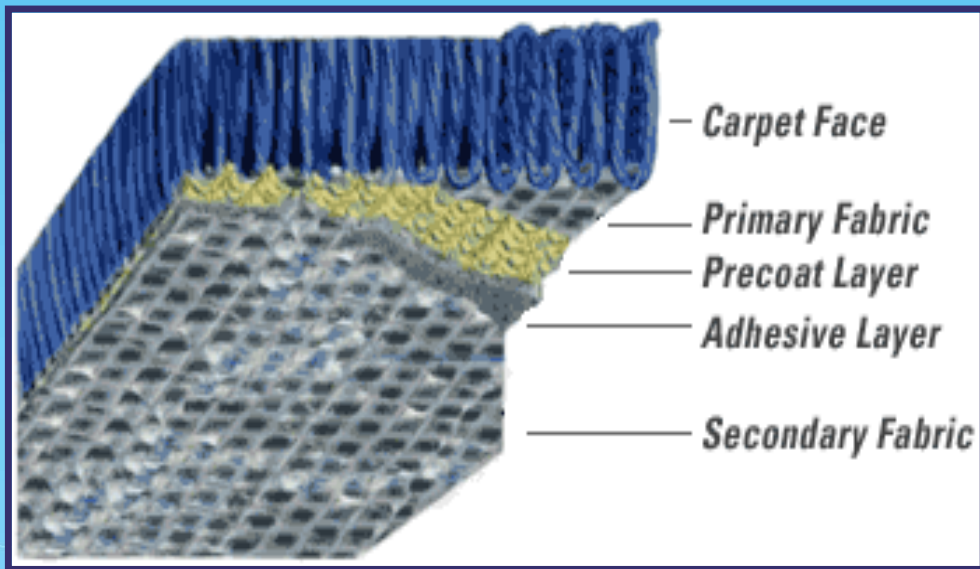
Welcome to



A Brief Introduction of Carpets

What is a carpet?

A carpet is a textile **floor covering** consisting of an upper layer of "**pile**" attached to a **backing**.

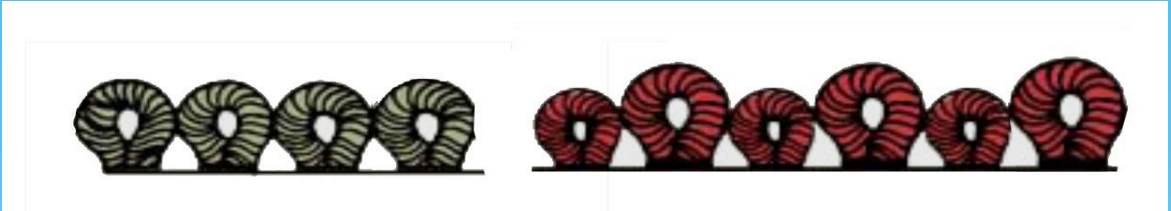


The **pile** is generally either made from wool or a manmade fibre such as polypropylene.

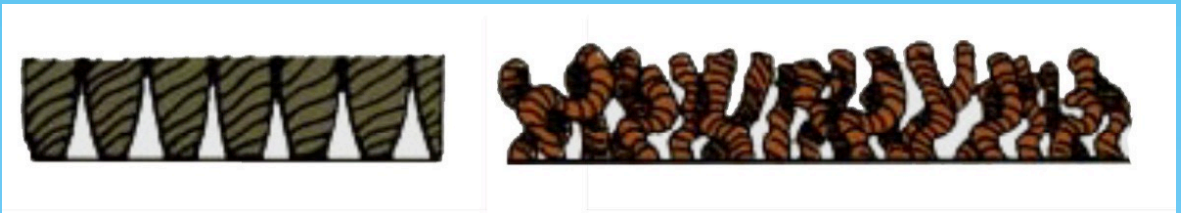
It usually consists of twisted tufts which are often heat-treated to maintain their structure.

What are some of the available carpet textures?

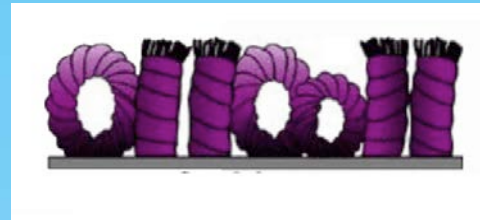
Loop Pile



Cut Pile



Loop Pile & Cut Pile
Combinations



What are the different fibres available for carpets?

Nylon (Polyamide)

Polypropylene (Olefin)

Polyester

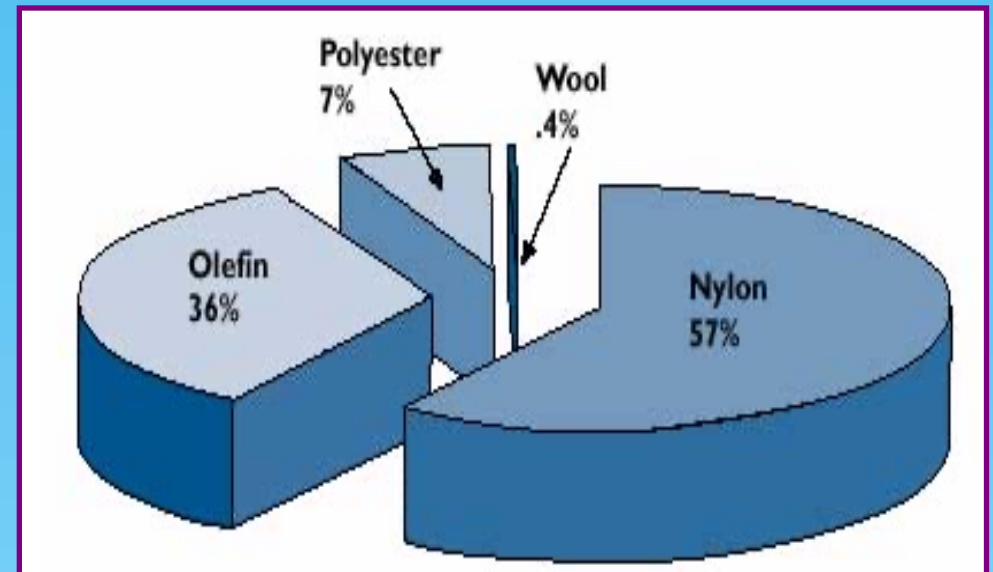
Wool

Acrylic

Viscose (Rayon)

Silk

Cotton



What are their advantages and disadvantages ?

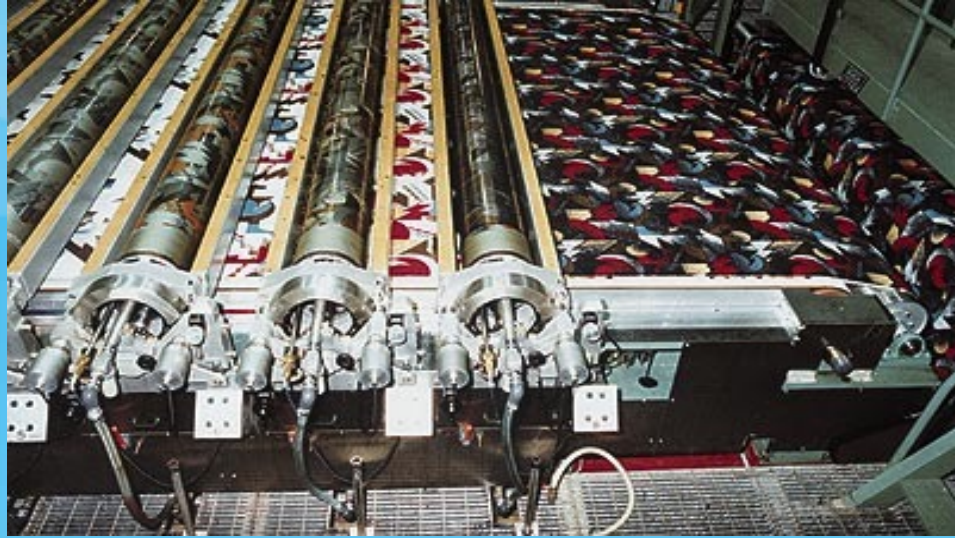
Common Types of Carpet Fibres and their Characteristics

	Wool	Nylon	Polyester	Acrylic	Polypropylene
Price	\$\$\$\$\$	\$\$\$\$	\$\$\$	\$\$\$	\$\$
Resilience	Excellent	Excellent	Average	Good	Average
Abrasion Resistance -- Determined by <i>fibre</i> and <i>density</i> of face fiber	Very good	Excellent	Excellent	Average	Good
Soil & Stain Resistance/Cleanability	Very good	Very good / Excellent (with chemical treatments)	Good (oily stains should be promptly treated).	Good	Excellent (oily stains should be promptly treated).
Resistance to Sunlight (color fastness)	Average	Good / Excellent -- special dyes may be used to inhibit sun damage.	Good -- may weaken with prolonged exposure.	Excellent	Excellent -- when chemically modified to resist sunlight damage.
Resistance to Mildew -- Determined by fibre structure and modifications	Poor if damp or soiled.	Excellent -- when fibre is modified	Excellent	Excellent	Excellent
Hand	Warm, soft	Varies from warm and soft to cold and coarse.	Varies -- finer deniers are soft and silky.	Warm, soft	Waxy, soft
Anti -Flammability	Excellent -- Burns slowly indirect flame; considered self-extinguishing; chars rather than melts.	Very Good -- Burns slowly, melts in direct flame; self-extinguishing. Structure may alter what occurs.	Average -- Burns slowly, melts; some are self-extinguishing.	Average - Acrylic burns readily unless modified.	Average -- Melts at low temperatures (170° C); burns and emits heavy, sooty, waxy smoke. Paraffin wax odor. Pulling a heavy object across the carpet surface can cause enough friction to melt the carpet fibres.

What are the different ways of creating patterns, motifs & textures on carpets ?

- Printing
 - Screen printing
 - Chromojet printing
- Tufting with CAD/CAM graphics machines
 - Different types of machines, vast variety of textures and patterns, relatively inexpensive
- Weaving on Axminster looms
 - Slow production, relatively expensive, but infinite number of colors, thicker yarns
- Weaving on Wilton looms
 - Less number of colors, but fast production, velour look
- Hand-tufting, Hand-carving, Hand-weaving

Rotary Screen Printing

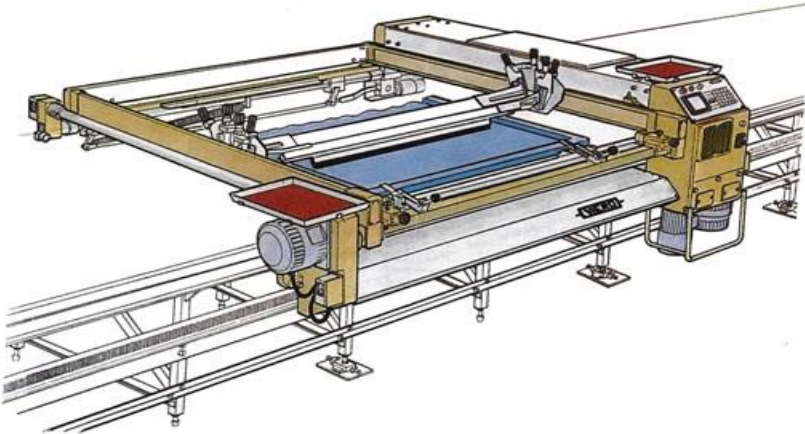


Printing

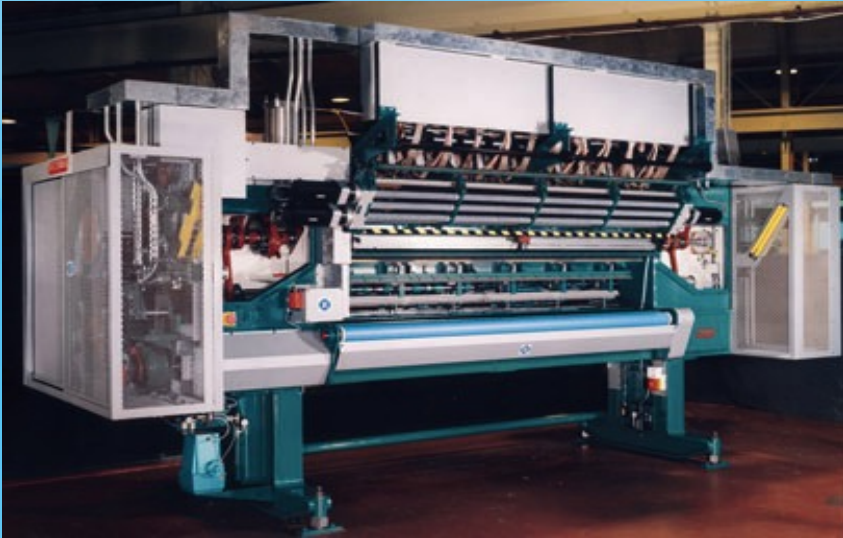
Chromojet Printing



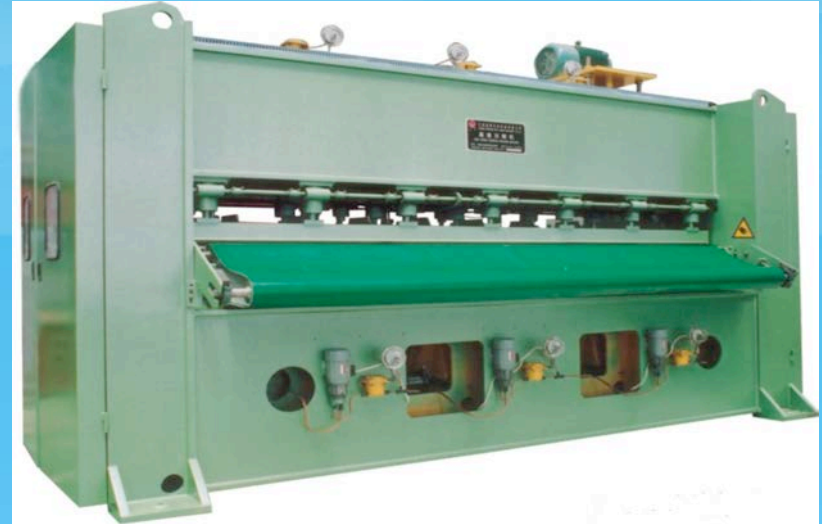
Flat Screen Printing



Graphics **Tufting** Machine



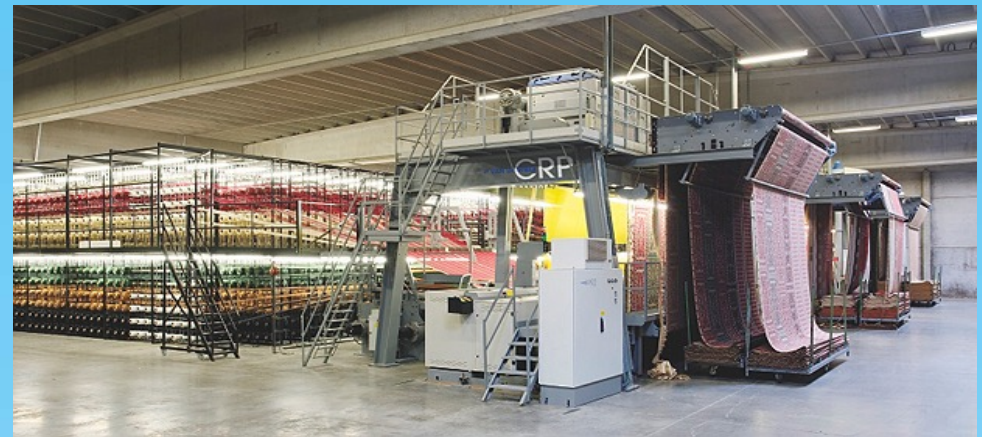
Needle **Punching** Machine



Axminster **Weaving** Machine



Wilton **Weaving** Machine



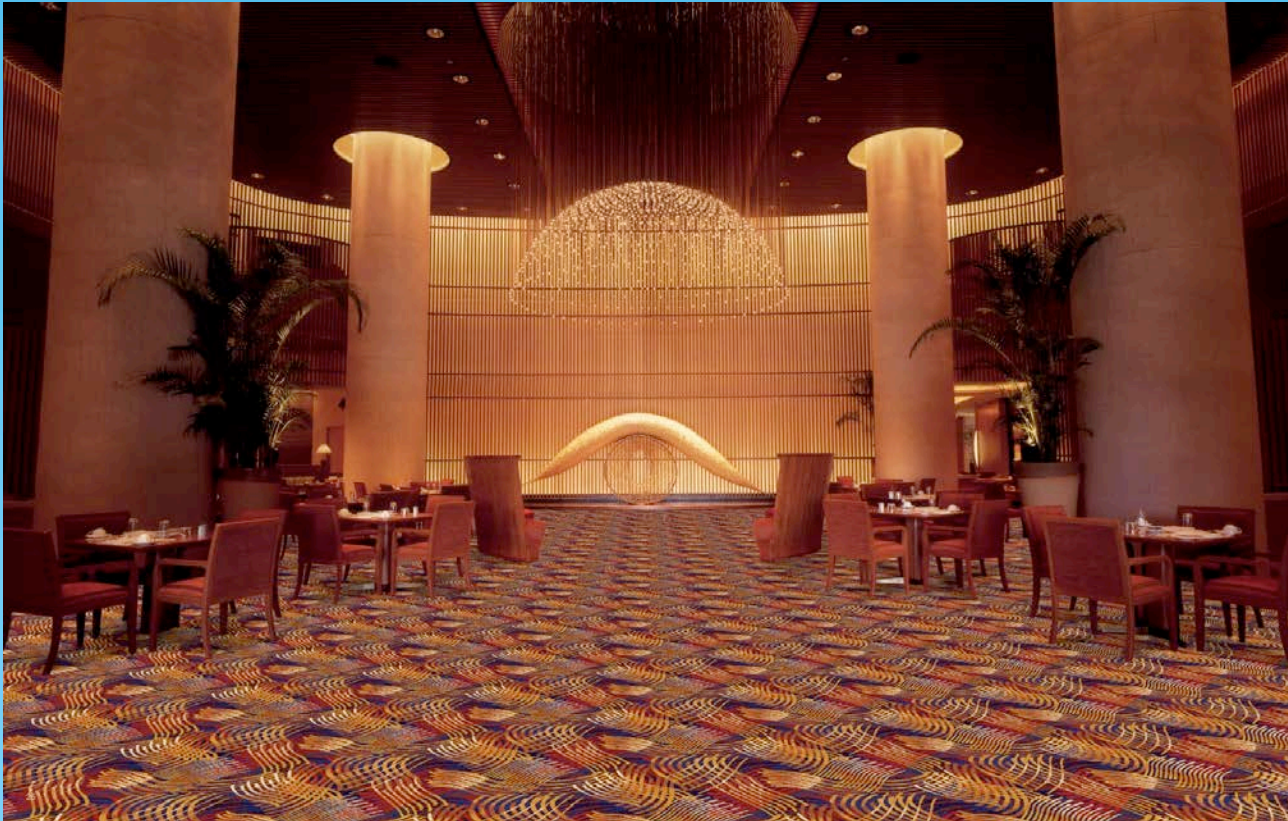
Hand Tufting



What are the categories of carpets ?

- Broadloom Carpet / Wall-to-Wall Carpet
- Carpet Tile / Modular Carpet
- Needle-punched Carpet/P-Pet / Exhibition Carpet
- Grass Carpet / Artificial Turf
- Mat / Doormat / Throw Mat
- Area Rug / Rug / Runner

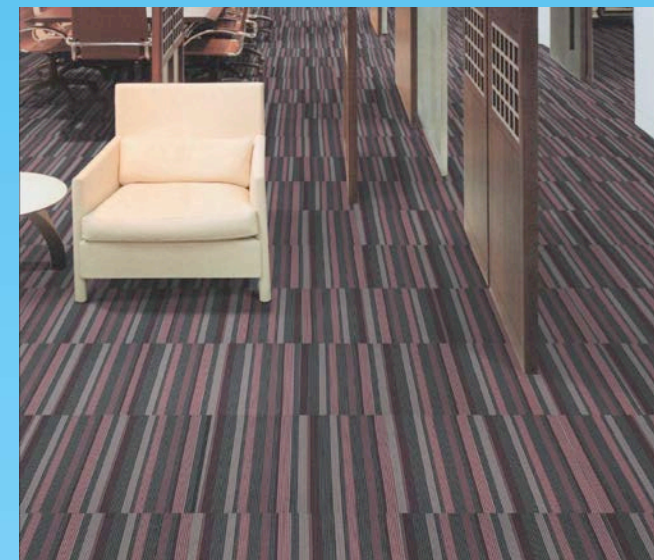
Broadloom Carpet/ Wall To Wall (WTW)





Carpet Tile





Needle punched Carpet / P-Pet



Artificial Grass Carpet



Indoor / Outdoor / UV Treatment



Rugs

Decoration



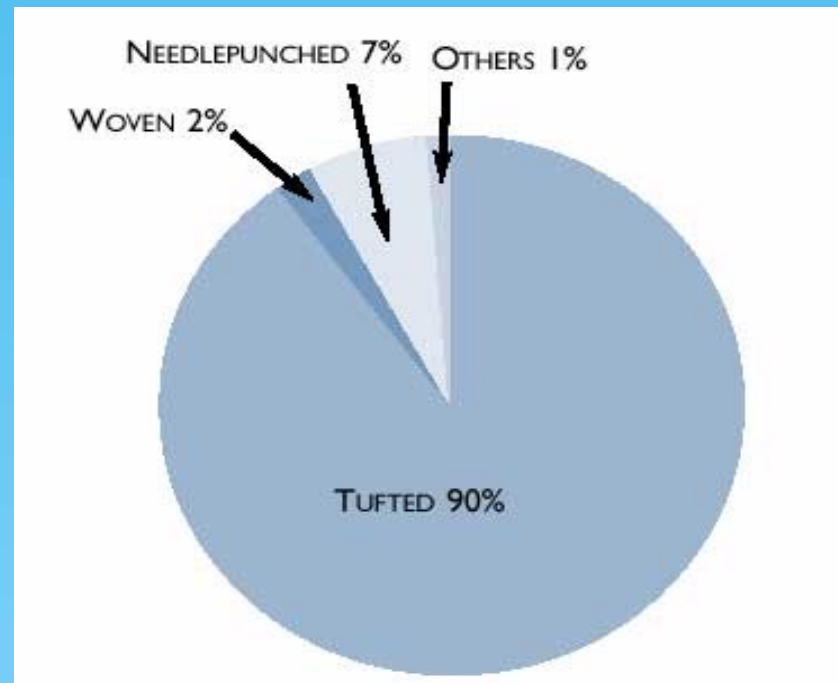
Doormat / Entrance Mat

Indoor / Outdoor / Washable

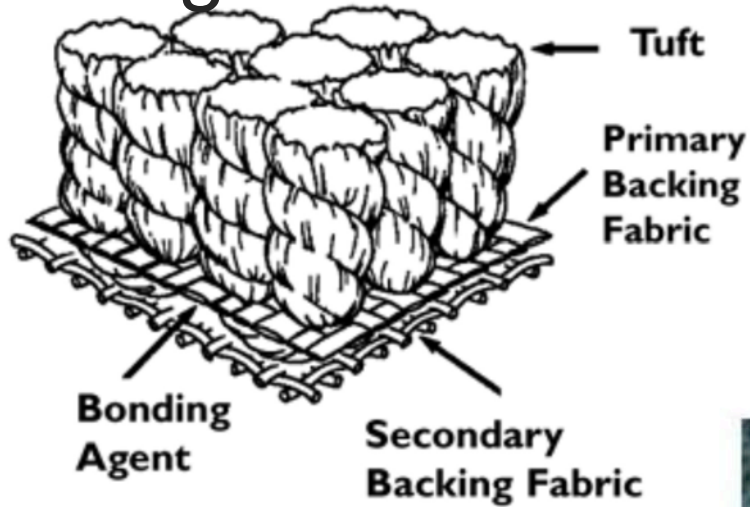


What are some of the different ways of producing carpets?

- Tufting
- Weaving
- Needle Punching

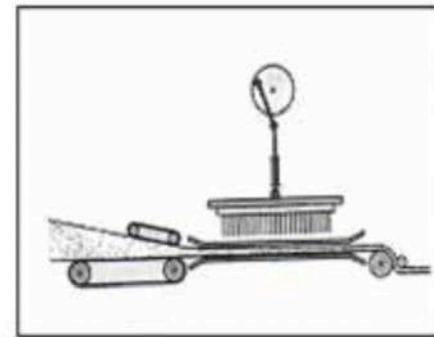
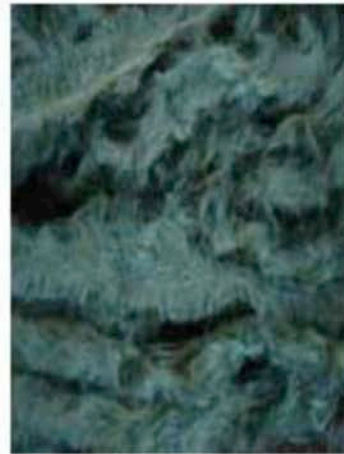


Tufting



What are some of the different ways of producing carpets?

Needle Punching



Raw material



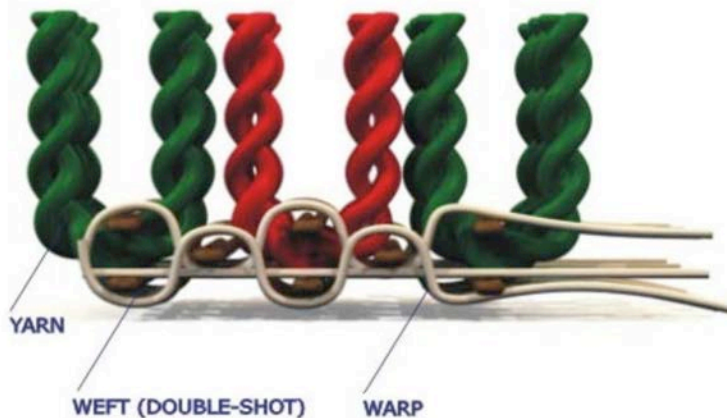
Needle punching

Fig. 1 Needle punching



Non-woven fabric

Weaving



Where Are Carpets Normally Used ?

Commercial uses

Offices

Banks

Schools, Hospitals

Theatres/Cineplexes

Airports

Hospitality uses

Hotels => Guest Rooms, Corridors,

Function Rooms, Ballrooms, Lobby and other public areas

Cruise Ships

Restaurants, Lounges, Bars, Discos

Boutique Shops, Department Stores,

Retail Showrooms

Residential / Domestic uses:

Homes => Living Room, Bedroom,

Family Room/Den, TV Room

Apartment Buildings / Service Apartments



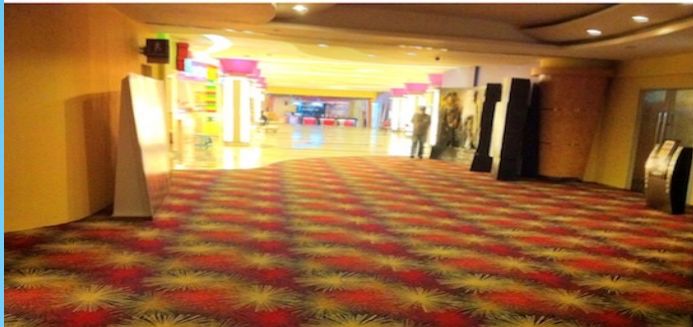
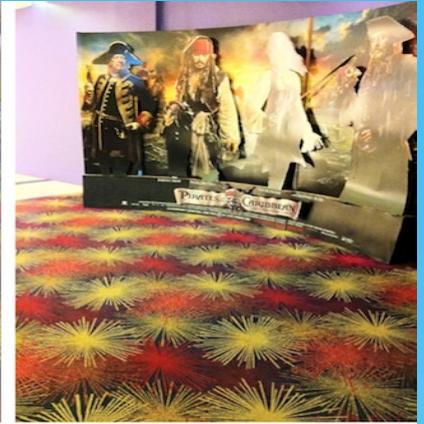
Commercial carpets



Commercial carpets - Cinema Project



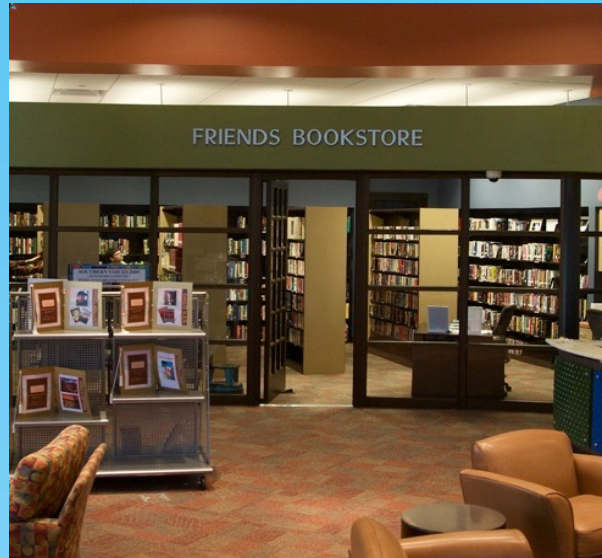
Eastwood Cinema (Lobby)
Libis, Quezon City Philippines



Hospitality carpets



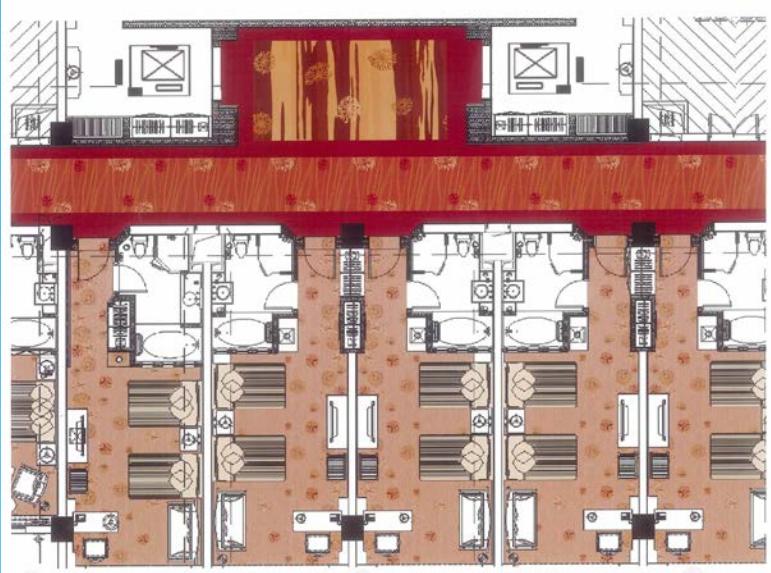
Hospitality carpets



Hospitality Carpets – Hotel Project



Hospitality Carpets



Residential carpets/ Rugs



Broadloom Carpet vs. Carpet Tiles

Advantages of Using Carpet Tiles:

- Easy to store and transport
- Easy to work out estimated project quantities
- Easy to work out installation laying plan
- Easily mix & match patterns, colors, textures
- Easily replace damaged carpet portions

Drawbacks of Using Carpet Tiles:

- Much more expensive than equivalent broadloom carpet
- More visible joints (seams) than broadloom carpet
- Cannot install underlay for extra comfort
- Less versatility in styling and textures

How to decide which quality of carpet is to be used in your project ?

Factor 1:

Performance vs. Comfort

Performance

High density (stitch, gauge)

Low pile height

Harder Wearing fibres (e.g. nylon)

Comfort / Luxury

High pile, shaggy pile

Low density (stitch, gauge)

Softer / thinner fibre

Factor 2:

Cost / Affordability

Relative Cost of Fibres

Polypropylene vs. Nylon Acrylic vs. Wool

Method of Carpet Production

e.g.: Tufted carpet vs. Axminster carpet

Factor 3:

Color and Design

Carpet Installation - some considerations

Basic methods of installation:

- Direct glue down

- Using underlay and grippers

- Double stick installation (Durafit System)

Seaming of joints nailing of grippers

Installation costs

Where to find out more
information on carpets?

www.heritagecarpets.sg

www.carpet-rug.org

Recap

1. What is a carpet ?
A: Textile floor covering with pile and backing
2. What are the different broad categories of carpets ?
A: Broadloom, Tiles, Needle punch, Grass, Mats, Rugs
3. What are some of the different ways of producing carpets ?
A: Tufting, Weaving, Needle punching
4. Where are carpets normally used ?
A: Commercial, Hospitality, Residential
5. What are some of the available carpet textures ?
A: Loop pile, Cut pile, Cut & Loop pile
6. What are the different fibres used in making carpets ?
A: Wool, Nylon, Polypropylene, Polyester, Acrylic
7. What are some of their advantages and disadvantages ?
8. What are some ways of getting patterns & motifs on carpets ?
9. Which carpets should be used where?
10. Broadloom Carpet vs. Carpet Tiles
11. Carpet installation
12. Web resources

OUR COMMITMENT TO PROTECTION OF OUR ENVIRONMENT

HERITAGE CARPETS is committed to ensure that our products meet top standards of quality and also have a positive impact on environment. Our carpets are tested and certified by various agencies including ITTS (USA), Carpets and Rugs Institute (USA), The Singapore Environment Council (Singapore) and GUT (Europe).

Our major carpet manufacturers are also accredited with the ISO 14001 standards of excellence.



Thank you !
(^.^)