Innovative Flooring Solutions For Architectural Spaces

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Flooring Products

• Finish materials that are applied over a floor structure:
  • Ceramic tiles
  • Marble
  • Epoxy
  • Terrazzo
  • Gold
  • Vinyl
  • Rubber
  • Hardwood
  • Laminate
  • Granite
Flooring Solutions of Old:

• ‘It was floored and wainscoted with Cedar of Lebanon and its walls and floor were overlaid with gold’ (1 Kings 6:16,20,21,30)
A Flooring Solution:

• Is a finish material that is applied over the floor structure, which meets a particular need(s) and must satisfy building code regulations.
Flooring Solutions:

• Typically offered as a Product and Service combination

• Consists of the sub-floor and the floor covering

• Sub-floors are critical to the success of the flooring solution

• The sub-floor is the support for the flooring solutions
Rooney Bicycle kick

Imagine some of the most iconic moments in history without the appropriate flooring solution.
Usain Bolt Record

Imagine some of the most iconic moments in history without the appropriate flooring solution.

Picture Courtesy: Google images
Micheal Jackson Moonwalk

Imagine some of the most iconic moments in history without the appropriate flooring solution
Technical Specifications and You

Specifications of materials can have real life effects and consequences

You need to ask questions.

Get detailed information on the following:

**Main application**- Your client might not be the end user

**Occasional application** – The end user might have other unspecified uses for the space

**Specialised Codes** – Does the space have additional codes and regulations governing its construction and
Innovative Flooring Solutions

Materials, Challenges and Code
Integrated Aisle and Floor Lighting

Technical Requirements
Wayfinding during scheduled performances or emergencies.

Challenge:
Lighting must be durable, able to withstand rough treatment and perform during emergencies.

Solution:
LED and Cold Cathode lighting can be used to create colour effects
OLED films to create photo luminescent flooring

Picture Courtesy: Gradus
Integrated Aisle and Floor Lighting

Technical Requirements
Branding and information management

Challenge:
Lighting must be durable, able to withstand rough treatment and perform during emergencies.

Solution:
Computer controlled LED Carpet and Vinyl
Centrally programmable messages

Picture Courtesy: Phillips Lighting
Wet Play Areas

Technical Requirements
Extreme Slip resistance
Comfort, Protection and Safety

Challenge:
Make a comfortable, safe floor in wet play areas that is easy to maintain

Solution:
EVA rubber to ensure slip resistance up to 40 degrees when wet
Antimicrobial treatment
Stain resistance to chemicals and food

Picture Courtesy: Lifefloor
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Picture Courtesy: Lifefloor
Sustainable Floors

Technical Requirements
Power for Street Furniture in urban areas

Challenge:
Shade makes Solar and Wind difficult in urban areas

Solution:
Conversion of Kinetic energy from road users into electricity
System generates 7 Watts of power/step i.e. 1 LED streetlamp for 30 seconds

Picture Courtesy: Engineering.com
Sustainability: Kinetic Paver Tiles

System generates 7 Watts of power/step i.e. 1 LED streetlamp for 30 seconds

Picture Courtesy: Pavegen
Temporary Rapid Deployment

Technical Requirements
Lightweight, rapid installation, reusable, durable

Challenge:
Rapid deployment of durable, light weight flooring for temporary installations like forward operating bases, stadia during events, helicopter landing pads, temporary roads.

Solution:
Modular portable heavy duty loading bearing panels.
Interlocking system ensures rapid installation and disassembly.

Picture Courtesy: Portafloor
Temporary Rapid Deployment

For temporary installations like forward operating bases, stadia during events, helicopter landing pads, temporary roads.

Picture Courtesy: Portafloor
Healthcare

Technical Requirements

Challenge:
Create an antibacterial environment that does not require shut down maintenance.

Solution:
Surface coating of products with antibacterial and antifungal solutions.
Inbuilt wax surfaces
Curved corners and coving
Seamless flooring applications
Vinyl and Epoxy are most commonly used

Picture Courtesy: Gerflor
Intense Traffic Flooring

Technical Requirements

Comfortable, rapid deployment, easily maintained, Safety

Able to withstand forklifts, thousands of pedestrian traffic and trolleys

Challenge:

A durable, low maintenance, water proof floor protects merchandise and is not noisy.

Solution:

Modular interlocking panels with internal mesh grid for strength.

Vinyl with Evercare coating.

Video Courtesy: Gerflor
ESD Areas

Technical Requirements
Prevent Electro static discharge that can interfere with sensitive operations and equipment

Challenge:
Low Body Voltage Generation

Solution:
Carbon infused finish materials laid on earthed copper strip

- Dissipative $R < 10^8$
- Conductive $R < 10^6$

Picture Courtesy: Gerflor
ESD Areas

Technical Requirements
 Prevent Electro static discharge that can interfere with sensitive operations and equipment

Challenge:
 Safe Electrical Discharge Elimination

Solution:
 Carbon infused finish materials laid on earthed copper strip

▪ Dissipative $R < 10^8$
  Conductive $R < 10^6$
ESD Areas

Picture Courtesy: Gerflor
Sports

Technical Requirements

Safety and Protection of athletes and users

Challenge:

Durable yet comfortable surface with grip yet does not give ‘rug burn’.

Protection from injury during use and Safety in case of falls

Solution:

Mix of Point and Area Elastic Materials to create Olympic Standard Solutions

Picture Courtesy: Gerflor
Sports

Technical Requirements
Certified Sports Floor installed in basement conditions

Challenge:
Adhesion to areas prone to damp or highly humid conditions.

Solution:
Create a vinyl sports floor with revolutionary backing technology that eases moisture away from the sports surface.

Picture Courtesy: Gerflor
Sports

Picture Courtesy: Gerflor
Raised Access Flooring

Technical Requirements
Durable, Load bearing and Flexible

Challenge:
Retrofit systems to accommodate advancing technology and keep pace with ever evolving advancements.

Solution:
Raised solutions comprising panels, stringers and pedestals

Most Common Panel Types:
• Cement infilled
• Calcium Sulphate
• Wood

Picture Courtesy: Xiangli/Gerflor
You can mix in a single space

Picture Courtesy: Gerflor
Do not be Boring

Picture Courtesy: Gerflor
Techno-Specific is not boring

Picture Courtesy: Gerflor
Techno-Specific can be Aesthetically Pleasing

Picture Courtesy: Gerflor
Thank you