

INTERNATIONAL TIRE CONFERENCE
BORDER-TIRE MANAGEMENT PARTNERSHIP

San Diego, California | May 3-9, 2008

Selection and Use of Raw Materials
Equates to
Value Added Material

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Playground Surfacing

Otherwise known as:

Synthetic

Poured In Place

Insitu

Wet Pour

Cast in Place

Bonded

Poll the Group

- Builders, Contractors, Installers
- Material Supplier, Manufacturers
- Owners, Architects, Consultants

What is the Common Goal?

Protecting the Children

Class on Urethane 101:

Urethanes are single component urethane:

- Needs moisture to cure
- Humidity is typically enough moisture
- Temperature effects cure time

You as the field installer have to make the call as to whether or not to pour rubber today and how much.

Binders / aka: Glue

- Aromatic versus Aliphatic Binder
- Binder Color (Does color indicate anything?)
- Binder Viscosity (Temperature effects)
- Cure Profiles (What effects it?)
- Physical Properties (Tensile, Elongation)
- Adhesion to the rubber (Clean, Dry)

- What happens to binders as they age???

Cushion Layer: Rubber Discussion



- SBR Tire Buffings (Shred): Sizing in Mesh
- Large Rubber Granule Systems
- Pre-Fab Foam Underlayments / Foam Granules
- Considerations: Too Dry / Wet of Mix, Yield
- Common Mixtures: Binder to Rubber

Wearing Course Rubber



- Rubber Granule Discussion: Sizing (MM), Seive Analysis, Dust Content
- Colored EPDM: Virgin Product
- Quality Black Granule: Raw Material Origin
- Other Products: TPV (Thermo-Plastic Vulcanizates)
- Considerations: UV Stability, Color, Durometer, Granule Size, Dust Content, Yield, Binder Stripping
- Common Mixtures: Binder to Rubber

Sourcing and Selecting a Qualified Material Supplier

- Identify potential Material Supplier
- Qualify the Material Company
- Identify the material for quality and consistency
- Ensure the supplier can supply adequate volumes with satisfactory locations
- Customer Service "easy to do business with"
- Finally! Negotiate price and terms

Installation Procedures / Techniques

- Single-layered Systems
- Two-layered Systems
- Multi-layered Systems





Binder and Rubber is usually mixed in a Mechanical Mixer (Motar Mixer)

Mixed products are then leveled



Then smoothed using varied techniques: Troweled, rolled, or even sprayed

How do surfacing materials affect performance?

- Good Rubber / Poor Binder
- Good Binder / Poor Rubber

*** DO YOUR OWN TESTING ***

- How to ensure consistent drop testing results
- Warranties: Longevity of the surface
- Continued protection for the users
- Providing owners "ROI"



25/04/2003



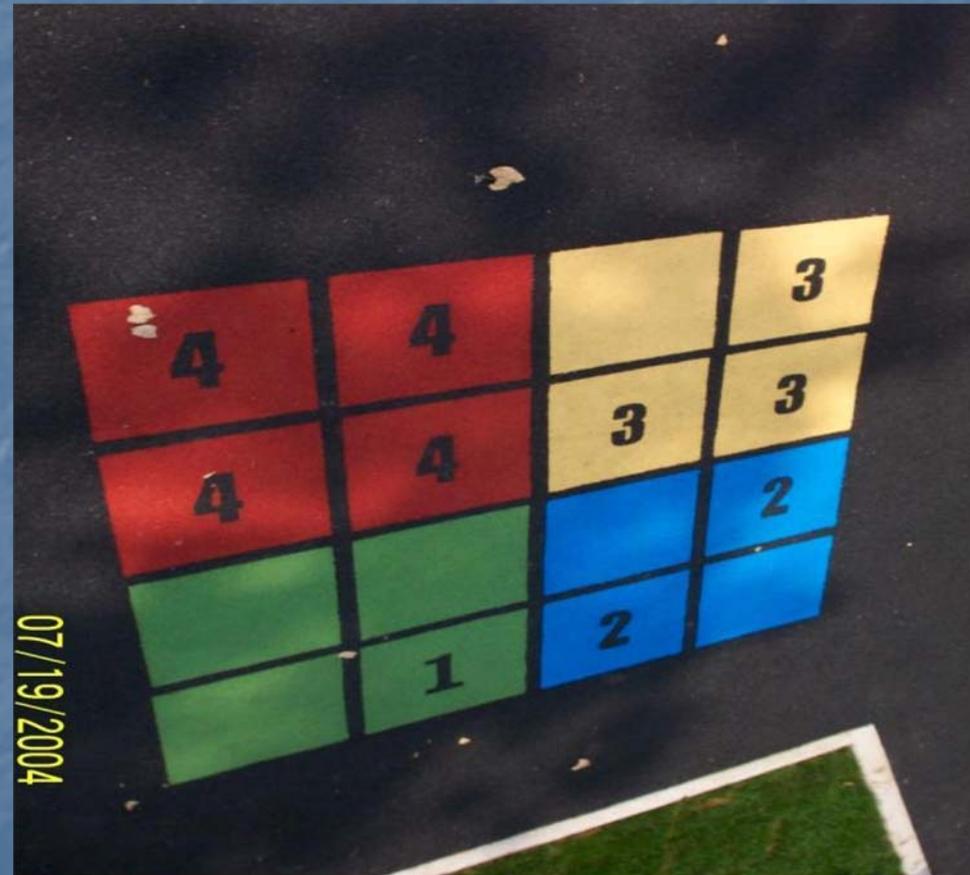


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Maintenance /Upkeep

- Routine Cleaning: Power washing, vacuuming
- Maintenance Binder Re-coats

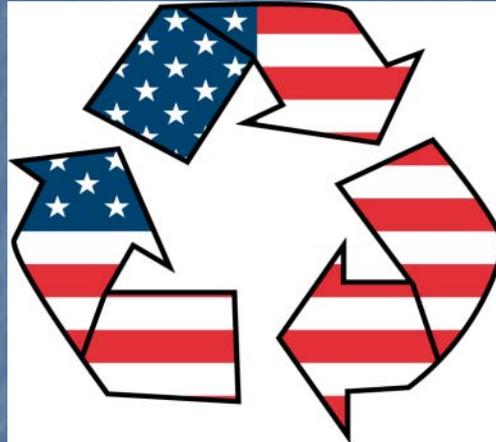
Surface Repairs



Be creative, use your imagination

Thank you

- Q & A



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