

# FUSION

**INTERNATIONAL TIRE CONFERENCE**  
**BORDER-TIRE MANAGEMENT PARTNERSHIP**  
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## The Law, The Standards, The Specification and The Warranty

Presented by  
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# YOU

**Owner/Operators**

**Manufacturer/Supplier/Installer**

**Designer/Consultant**

**Laboratories/Inspectors**

**Regulators**

# Protective Surfacing

- ▣ Unitary
  - Poured- In-Place
  - Tiles or Mats
  - Hybrids systems
  
- ▣ Loose Fill
  - Rubber Chunks
  - Rubber Crumb
  - Engineer Wood Fiber
  - Sand
  - Pea Gravel

# The Law

## California Health & Safety Code ss. 115725-115735

- ▣ To whom does it apply
- ▣ What is required
- ▣ Where does surfacing come into play
- ▣ What are the consequences

## ADA & ABA July 23, 2004

- ▣ ASTM Standards
- ▣ What is required
- ▣ What are the tests
- ▣ What are the standards
- ▣ What is required

# California Health & Safety

ss.115725-115732





# To Whom does it apply?

- ❑ Public access playgrounds - state agencies, city, county, school district.
- ❑ Includes, church, subdivision, hotel, motel, resort, camp, office, hospital, shopping center, and restaurant.





# What is required?

- ❑ Compliance is required to the playground related standards as set forth by ASTM and Guidelines as set by the CPSC
- ❑ ASTM F1292 Impact Attenuation
- ❑ ASTM F1487 Play Structures & Layout
- ❑ ASTM F1951 Wheelchair Work Method
- ❑ ASTM F2075 Engineered Wood Fiber
- ❑ ASTM F2223 Guide to Surfacing Standards
- ❑ ASTM F2479 Guide to Poured-in Place



U.S. Consumer Product  
Safety Commission

# CPSC Document 325

- ▣ Handbook for Public Playground Safety
- ▣ Requires  $G_{max} < 200$
- ▣ Requires  $HIC < 1000$
- ▣ Requires testing to ASTM F1292





# What about Surfacing

- ▣ F1292 – Requires compliance to  $G_{max} < 200$  &  $HIC < 1000$
- ▣ F1487 – requires installation and maintenance of surfacing to F1292
- ▣ F1951 – requires compliance to F1292
- ▣ F2075 – requires compliance to F1292
- ▣ F2479 – requires compliance to F1292



# What are the consequences

- ▣ No State funding shall be available for the planning, development, or redevelopment of any playground, unless the playground, after completion of the state-funded project, will conform to the requirements or subdivision (a) or (b).



# ADA & ABA Guidelines

- ▣ ASTM Standards must be met in the Field
  - ▣ ASTM F1292 – Impact Attenuation
  - ▣ ASTM F1487 – Playground Layout
  - ▣ ASTM F1951-99 – Wheelchair Work Method



# ADA & ABA Ground Surfaces

## 302.1 Firm, Stable and Slip Resistant

- ❑ This measure may currently be ASTM F1951
- ❑ This measure may be the Rotational Penetrometer
- ❑ This measure may be determined by a judge during an ADA complaint





# ADA & ABA Ground Surfaces

## Physical Measurements

- ❑ No opening shall allow passage of a  $\frac{1}{2}$ " sphere
- ❑ No change in vertical height greater than  $\frac{1}{4}$ "
- ❑ Change in vertical height greater than  $\frac{1}{4}$ ", may have the an upper  $\frac{1}{4}$ " provided it is bevelled at a 1:2 slope
- ❑ Running slope  $< 1:16$
- ❑ Cross slope  $< 1:48$



# Who is Responsible Under the Laws

▣ Designer/Consultant	No
▣ Manufacturer	No
▣ Suppliers	No
▣ Installers	No
▣ Laboratories/Inspectors	No
▣ Regulators	Maybe
▣ Owner/Operator	YES YES YES YES

# Owner/Operator

- ▣ The installed playground must comply with all Standards and Laws
- ▣ Required to comply with various Standards in the field
- ▣ Could be subject to fines and high replacement costs
- ▣ Could mean liability costs in the case of an injury
- ▣ **WHAT TO DO?**
- ▣ **Pass the hot potato on**

# Consultant Contracts

- ▣ Consultants are paid professionals used to bring specialized knowledge in specialized situations.
- ▣ Consultants have professional liability for errors and omissions.
- ▣ **Ensure that the consultant takes responsibility for a review of all current laws and standards**

# Supplier Signed Commitments

- ▣ Suppliers of components of playground surfacing are integral to the final product
- ▣ Suppliers make claims for compliance in literature and web sites
- ▣ Suppliers provide purchasers use and procedure guides
- ▣ **Require that the supplier of major and significant components sign commitments to compatibility with the final product.**

# Manufacturers

- ▣ These are the people bringing the components (labour, material & machines) together to make a product they insist complies with laws and standards
- ▣ **Require certificates of compliance from suppliers**
- ▣ **Require hold harmless from law suits related to compliance to Laws & Standards**



# Installers

- ▣ Installers are the link between the physical project and the products to be installed
- ▣ Installers are responsible for the combining of materials, supplies, labor and machinery to provide a product for a successful project
- ▣ Installers take certifications and training from associations, suppliers and manufacturers to learn installation techniques for surfaces

# Installers

- ▣ **Require the installer to review all site circumstances and provide a written statement that products being supplied and installed will not cause non-compliance with the Laws and Standards related to the project.**
- ▣ **Require hold harmless from law suits related to compliance to Laws & Standards**

# Laboratories

- ❑ Test methods and procedures are very specific and certificates relate to very specific samples.
- ❑ Test samples do not always reflect the performance of an installed playground.
- ❑ The greater the degree of assembly at the playground site, the greater the opportunity for the installed product not to reflect the tested product.

# Inspectors

- ▣ The owner/operator is required to perform a prior to use inspection at the time of installation and ensure that the play structure meets ASTM F1487 and the surface meets ASTM F1292 as per ASTM F1487 section 9.1 and maintained to ASTM F1292 and ASTM F1951 as per ASTM F1487 section 13.2
- ▣ The inspector fills this role

# Inspectors

- ▣ An inspector must be properly trained and have the tools, instruments and devices to perform testing to all required standards
- ▣ The inspector can be an independent 3<sup>rd</sup> party or related to the project. The key is the competence & honesty of the inspector
- ▣ **The inspector must have errors and omissions insurance to protect the owner.**



# Regulator

- ▣ Regulations consist of requirements and consequences. The California Health & Safety Code requires that owners who have playgrounds that are non-compliant will not receive further State funds. Should funding continue and an injury occur, there will be liability accrued to the Regulator.
- ▣ **Regulators are attractive deep pockets**

# Specifications

- ▣ Require each contributor to the playground to inspect the site and related aspects
- ▣ Require compliance to California Health & Safety Code and ADA & ABA Guidelines
- ▣ Require the supplier arrange and pay for field testing to ASTM F1292 & F1951
- ▣ Require complete maintenance procedures for continued compliance to ASTM F1292 & F1951

# Specifications

- ▣ Require physical measurements for ADA & ABA Guidelines
- ▣ Require consultants, suppliers, manufacturers and installers to hold owner/operator harmless for non-compliance to California Health & Safety Code and ADA & ABA guidelines
- ▣ Do not pay until all compliance is established

# Warranties

- ▣ Require a minimum warranty for 5 years
- ▣ Require compliance to specifications for entire warranty period
- ▣ All warranties shall name the owner/operator even if the work is not directly to the owner
- ▣ Warranties must state the remedies and maximum response time allowed.

# Quality Control Summary

- ▣ A comprehensive group of actions and document that link the consultants, suppliers, manufactures, installers and inspectors to the final product during the functional life of the playground.



# Thanks



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