Playground Manual



Oregon School Boards Association in cooperation with Special Districts Association of Oregon

Disclaimer

The contained in this Playground Manual are a collection of best practices and resources, assembled to provide you and your district guidance through the process of developing your own district's unique playground policies and procedures.

All information provided in the training material is general in nature and is not intended to replace professional legal advice.

INTRODUCTION

To serve the unique needs of Oregon's public-school districts, education service districts and community colleges, Oregon School Boards Association in cooperation with Special Districts Association of Oregon created the Property and Casualty Coverage for Education (PACE). PACE's coverage documents, reinsurance policies, underwriting guidelines, claims adjusting services, loss control program and training opportunities are all tailored to fit the risk management needs of Oregon's public education organizations.

Playground Injuries

The National Injury Foundation statistics show playgrounds as the most injury-intensive area in primary schools. Each year, roughly 200,000 kids are treated for injuries associated with playgrounds.

Key contributing factors to playground injuries:

- Inadequate fall surfacing protection
- Defective and improper equipment
- Inadequate supervision
- Lack of written rules
- No teaching of rules
- No enforcement of rules

District Playground Program

Protecting students from injury on the playground requires the following:

- Planning and developing a playground program
- Addressing the proper selection, placement, and maintenance of playground equipment
- Establishing appropriate training and supervision criteria for playground activities.

Central oversight of playgrounds is crucial to reducing injuries and reducing costs. To ensure school district playground equipment meets Consumer Product Safety Commission (CSPC) guidelines and American Society of Testing and Materials (ASTM) standards, develop and implement a playground equipment program and procedure that establishes the protocol through which playground equipment is chosen for a particular school site. Include in this program the following:

- All new equipment must meet CSPC guidelines and ASTM) Standards.
- Obtain prior approval from the Facilities/Maintenance Director for all proposed new playground sites, playground equipment purchases and installation, and any repairs or modifications needed to existing equipment.
- Obtain written approval from the manufacturer prior to modifying any structure, to maintain product warranty and liability insurance.
- Ensure that all vendors certify the playground equipment meets CPSC guidelines and ASTM standards.
- Require vendors be International Playground Equipment Manufacturer's Association (IPEMA) members.
- Prohibit installation of homemade playground equipment.
- Require and document regular preventative maintenance for the playground equipment according to the manufacturer's recommendations.
- Require and document routine playground equipment inspections and maintenance.
- Teach written playground safety rules to all students and instruct students on how to properly play on the playground equipment.

• Provide adequate, trained, and attentive playground supervision. First aid training for all supervisors is recommended.

A sample district policy can be found in the appendices.

Standards and Guidelines

The CPSC provides guidelines for public playground safety including school playgrounds and these guidelines are considered the accepted safety standard.

The recommendations included in the <u>CSPC Handbook</u> address the layout and design of playgrounds, installation and maintenance of equipment, materials of manufacture and construction, general hazards, access and platforms, major types of playground equipment, surfacing, and use zones for equipment. Reference information includes a suggested maintenance checklist, entrapment identification, test methods, and a description of various playground surfacing materials.

Liability on the Playground

Negligence is the unintentional doing or not doing of something which causes injury to another. For negligence to be established, all four of the following elements must be in place.:

- Duty an official or reasonable expectation to meet standard of care.
- Breach of duty failure to meet the standard of care.
- Damages someone was hurt, or something was damaged.
- Proximate cause the breach of duty caused or contributed to the damage.

The school board, superintendent, principals, teachers, and classified employees all have a duty to protect students, eliminate dangerous conditions, and provide emergency medical attention. When these duties are not fulfilled, the district may be held liable for a student's injury.

PLAYGROUND EQUIPMENT SELECTION AND, PLACEMENT, SURFACING, INSTALLATION AND MAINTENANCE

EQUIPMENT SELECTION

Equipment selection should be based on specific criteria established in your school district policy. Many school districts choose three or four vendors that meet these criteria, and only purchase equipment through a bid process, from these vendors. This saves time and money towards the purchase of replacement parts. Of course, any vendor that can meet these criteria should be considered in the selection process. Using approved vendors on a government contract can also be used and does not require the bid process.

The catalogs from selected vendors can be reviewed for appropriate equipment options. PACE loss control is available to assist with equipment review.

1. Selection Criteria

- Request written confirmation all equipment meets CSPC guidelines and ASTM standards.
- Confirm materials and design of equipment are durable and suited for the environment of the location.
- Confirm specifications are included for each piece of equipment and clear instructions, maintenance guides, and special tools are provided if needed.
- Confirm replacement parts are readily available.

- Request and retain copies of all applicable warranties.
- Require manufacturer be IPEMA certified and consider company longevity.
- Require certificate of insurance from manufacturer and installation vendors.
- Only use an IPEMA approved surfacing material under any playground; and require an IPEMA IMPACT Attenuation Report that meets ASTM 1292-18 standards be provided.

2. Play Equipment

Do not allow the installation of homemade or homeowner style (noncommercial) play equipment for the following reasons:

- Equipment is not IPEMA certified.
- Equipment may not meet CPSC guidelines or ASTM standards.
- Product liability insurance protection for injuries caused by defective equipment is not available.

EQUIPMENT PLACEMENT

Playground design is an important factor in preventing or reducing playground accidents and can also be critical in preventing liability. There are several considerations in choosing the best location for a piece of playground equipment:

1. Size of the Play Area

The play area must be large enough to hold the equipment and contain the necessary surfacing. There must be adequate use zones with appropriate surfacing around all equipment and a no encroachment zone beyond this area where children can be expected to gather that is free from hazards.

2. Separation By Age Group

Play equipment for different age groups should be separated. Equipment for 5–12-yearolds and equipment for 2-5 year olds are designed to meet different standards. These structures should be physically separated and not connected in any way.

3. **Proximity to External Hazards**

Protect student from hazards on the playground and the travel path to and from the equipment by either structure placement or physical barriers. The playground should be separated from hazards such as the following:

a. busy streets; water; railroad tracks; ravines; wooded areas; industrial plants; dumpsters and recycle bins; storage of dangerous materials; overhead wires or tree branches less than 84" above the equipment; and excessive noise or noxious odors from nearby sources.

Provide at least eight feet of space between the estimated apparatus use zone and adjacent buildings, paths, fences, and adjoining play areas.

4. **Proximity to Internal Hazards**

a. Separate activities involving high motion from stationary activities. Locate playground away from other activity areas, such as ball fields.

- b. Locate heavily used pieces of equipment away from each other to prevent crowding in any one area.
- c. Place moving equipment such as swings and merry-go-rounds in a corner, away from main traffic areas.
- d. Locate slide exits in uncongested areas. Place slides facing north or in the shade to prevent hot surfaces that can burn a student's skin.
- e. Design obvious circulation patterns around equipment to promote safe movement of people in and about the equipment.
- f. Place equipment so the play apparatus is approached from the desired direction (e.g., not located right at the bottom of a hill where children would run down into the play area too fast).
- g. Keep area free of plants that are toxic.

5. Fences and Barriers

A barrier surrounding the playground is recommended. Fencing keeps students within the area and prevents them from running into the street or other undesirable areas. Fencing also helps keep non-students off the playground and school premises. Install fencing and barriers (such as landscaping) as needed to isolate hazards and to separate, playgrounds from other activity areas. The barriers must comply with ASTM F2049 and CPSC 2.2.

6. Ease of Supervision

Ensure that supervision of the entire play area (including equipment and fields) can be accomplished with a minimum num er of staff, and that police can see the area from patrol vehicles during daylight and nighttime hours. Keep the site free of visual barriers (such as trees and bushes) that hamper supervision and visibility.

7. Drainage Considerations

Locate the playground so the site will dry out quickly. Ensure that there is proper drainage for the play equipment area, its surfacing, and the play fields so that there is no standing water.

SURFACING

The Importance of Surfacing

The CPSC reports that falls are the most frequent cause of playground injuries. Falls to paved surfaces account for a disproportionately high number of injuries and severe injuries relative to the amount of paved surfacing in use. Protective surfaces such as sand, wood chips, or gravel, may have no effect on the frequency of injuries from falling, but may reduce the severity of those injuries.

Surfacing is a major factor in determining the injury-causing potential of a fall. The CPSC has tested the shock absorbency of some frequently used loose-fill surfacing materials and unitary synthetic materials.

1. The <u>CSPC Handbook</u>, outlines the requirements for protective surfacing and the amount of surfacing needed for the tested materials.

Table 2. Minimum compressed loose-fill surfacing depths				
Inches	Of	(Loose-Fill Material)	Protects to	Fall Height (feet)
6*		Shredded/recycled rubber		10
9		Sand		4
9		Pea Gravel		5
9		Wood mulch (non-CCA)		7
9		Wood chips		10
* Shredded/recycled rubber loose-fill surfacing does not compress in the same manner as other loose-fill materials. However, care should be taken to maintain a constant depth as displacement may still occur.				as other loose-fill nt may still occur.

Hard surfaces such as soil, concrete, asphalt and similar materials do not provide adequate protection from fall impact and should not be allowed. Replace hard surfaces under playground equipment with approved, shock absorbent surfacing as soon as possible, and take the equipment out of service in the meantime.

1. Use Zones

To protect students from injury, install protective surfacing under and around the equipment, as well as, beyond the edge of the play equipment, to meet protective surfacing requirements. It is usually a minimum of six feet in all directions from the perimeter of the equipment. (A notable exception to the six-foot fall zone rule is swings which require adequate surfacing twice the distance of the height of the swing cross member.

The IPEMA surfacing guidelines are included in the appendices.

EQUIPMENT INSTALLATION

Require all equipment be installed by a certified playground installer and request a certificate of installation verifying it was installed per manufacturer specifications and meets CSPC guidelines. Check all hardware 30 days after installation and tighten as needed. The district should document and retain:

- Manufacturer's list of all components, including part names and number
- Manufacturer's instructions and necessary drawings or photos for proper assembly and installation.
- Manufacturer's recommended use zones.
- Copy of purchase order.
- Manufacturers certificate of insurance.
- IPEMA Impact Attenuation Report
- Certificate of installation
- Mark equipment posts to indicate surfacing depth requirement.

A sample Certificate of Installation and IPEMA Impact Attenuation Report are included in the appendices.

PLAYGROUND MAINTENANCE

Preventive Maintenance

Preventive maintenance helps ensure that play equipment is maintained in as safe a condition as possible. Perform maintenance periodically according to manufacturer's recommendations. **General Guidelines:**

- Repair equipment according to the manufacturer's specifications.
- Use only equipment parts manufactured and tested by playground equipment manufacturers.
- Perform and document routine preventive maintenance.
- Fix small problems immediately or on the following workday.
- If repairs cannot be completed in a reasonable amount of time, disable, immobilize, or temporarily remove the apparatus. In some cases, openings may need to be boarded up or similarly closed off to prevent falls or other injuries.
- Do not modify equipment without following the manufacturer's recommendations and request written documentation of any recommendations.
- When you remove equipment or parts of equipment, take care not to create a greater hazard in the pieces left behind.

Inspections

Implement a consistent schedule of frequent routine inspections and infrequent detailed inspections and maintain records of all inspections performed.

1. Why Inspect: Protecting Students from Danger

The school has a duty to maintain its premises in a reasonably safe condition and inspections play a critical role in identifying hazards and protecting children from them.

2. Legal Protection: Documenting District Safety Efforts

Regularly documented inspections provide protection for the district in a lawsuit by demonstrating the district's due diligence.

3. Identifying Equipment and Replacement Needs

Regular playground inspections identify any issues with the equipment or needed parts allowing districts to prioritize and budget for repairs.

4. When and Who Inspects

Playground Supervisors

A visual inspection should be performed daily by duty staff prior to the first recess. Any defects should be reported, and an unsafe equipment should be taken out of service.

Maintenance workers or custodians (frequent inspections)

Maintenance or custodial staff should perform a visual inspection of all equipment, check, and redistribute surfacing as needed, and remove litter and graffiti on a regular scheduled interval. This will be determined by use and other factors, but should be performed at least weekly, documented, and performed by individuals familiar with CPSC guidelines.

• Maintenance workers or custodians (infrequent inspections)

A thorough top to bottom inspection of all equipment and site should be performed on a regular scheduled interval. This will be determined by use and other factors, but should be performed at least annually, documented, and performed by individuals familiar with CPSC guidelines.

Principals/Administrators

The building administrator is responsible for the overall safety of the school facility including its playgrounds. Principals should ensure inspections are conducted at specified intervals, repairs are made in a timely manner and all inspections and repairs are documented and their records retained.

5. How to Inspect

Inspect to CSPC Guidelines.

The CPSC Handbook, provides guidelines for play equipment in public playgrounds, and is the authoritative source on the safety of play equipment. Inspect play equipment at least to these standards.

Tips for Inspections

- a) Train employees charged with the task of inspecting playgrounds in their duties and inspection requirements.
- b) Equip inspectors with appropriate maintenance tools, including a ladder to inspect swing brackets and "S" hooks, a pen knife to probe wood rot, a tape measure, a rake to level loose surfacing material and test probes.
- c) Teach inspectors to visualize the site from a child's perspective to detect potential misuse or dangers.

d) Assign a specific employee to ensure corrective action has been taken and identified hazards have been addressed.

6. What to Inspect

Include all areas where students play in the inspection:

- Fields
- Sheds and covered play areas
- Blacktopped and cemented play areas
- Related hardtop area equipment Basketball hoops, tetherball poles, etc.
- Fencing
- Equipment

7. What to Look for During Inspections

Common hazards that should be identified and assessed include:

- Sharp points, corners, edges, and splinters
- Protrusions and projections
- Protrusions on suspended members or swing assemblies
- Pinch, crush, and shearing points
- Entrapment hazards
- Tripping hazards
- Suspended hazards

8. The Most Common Maintenance Problems

The following are the most common maintenance/safety concerns found on school playgrounds:

- Inadequate protective surfacing (none or not enough)
- Broken equipment
- · Rotting or otherwise deteriorating wood structures
- Finger and string entanglements areas on slides
- Loose, missing or worn hardware
- Pieces of equipment too close to each other or too tall
- Exposed cement footings
- · Chain basketball nets on outdoor basketball hoops

In addition, several other areas of concern can create hazards on playgrounds.

- Exposed rusted metal.
- Hard, suspended equipment that could strike a child.
- Toxic paints, stains, or coatings
- Water puddles or slippery surfaces
- Obstructions or obstacles in the use zone

Pace playground inspection checklists are included in the appendices.

Upgrading Playgrounds/Prioritizing Corrections

1. What to do with old equipment

Districts should retrofit all older (pre-1982) or non-conforming playground apparatus to <u>CSPC</u> <u>guidelines</u> or replace if the apparatus cannot be upgraded. Consider the following improvements when surveying existing sites:

- Remove any apparatus installed on asphalt, concrete or other hard surface or install suitable surfacing under the equipment.
- Remove equipment to eliminate crowding and provide proper spacing.
- Remove pieces of equipment which have resulted in frequent injuries.
- Remove any equipment that does not meet current <u>CSPC guidelines</u>.

2. Prioritize Corrective Actions

When equipment does not meet <u>CSPC guidelines</u>, develop a corrective plan of improvement based on the following criteria:

- First address the areas that pose the greatest threat.
- Next focus on the easy to fix problems.
- Continue to inspect play equipment, documenting areas of concern for administration to address.
- Involve the building principal in the correction process.
- Mark certain hazardous areas "off limit" or take out of service.
- Closely supervise the more hazardous areas.

OTHER CONSIDERATIONS

1. The "Americans with Disabilities Act" (ADA) Requirements

The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination against the disabled in public accommodations, including school playgrounds. To comply ensure that district playgrounds are accessible to students with disabilities.

Individuals with various disabilities must be able to access the playground. Every play activity does not have to e accessible to every child, but every playground must be accessible. Portions of the playground to consider for handicap accessibility include play equipment area access, ramps, surfacing around play equipment and play structures.

Existing sites and structures should be made accessible if the change is "readily achievable," (e.g., if it can be done at a reasonable cost). ASTM 1487 addresses accessibility for routes, ramps, transfer points, platforms and play opportunities. ASTM 1951 provides a systematic and consistent test to evaluate the accessibility of surfacing systems. Surface must be firm, stable and slip resistant. (Copy available from www.astm.org)

2. Visitor/Strangers on or Near the Playground

All visitors should check in at the office before entering the playground area. Strangers should be approached cautiously and questioned politely as to why they are there, and unannounced visitors should be directed to the office. An administrator should be called to assist if this direction is challenged. A call for emergency assistance from the office via the established emergency communication system should be made if a stranger gives evidence of being dangerous or if the supervisor feels uncomfortable. Any suspicious activity such as vehicles parked with occupants watching the playground, or adults loitering outside the play area with no apparent legitimate purpose should be documented and reported to a school administrator.

a. Communications

i.Emergency Communication Systems

A system of communication between playground duty staff and the school's main office is essential. It is important to establish a system of emergency communication which works specifically for the school. This may be accomplished by using two-way radios, portable phones, adult runners, student runners with special cards or whistle signals. All playground supervisors, substitutes and office staff should be trained and familiar with its use and tested regularly.

ii. Once the Emergency has Happened

- 1. Follow school district procedures.
- 2. Promptly offer necessary emergency medical care.
- 3. Never fail to give aid (err on the side of caution).
- 4. Continue aid until relieved by emergency personnel or supervisor.
- 5. Promptly report incidents internally.
- 6. Complete incident reports and other necessary paperwork.
- 7. Never admit liability or discuss who will pay for medical care.

b. Inclement Weather

- Use caution when allowing students to use wet or freezing outdoor equipment. Equipment can become slippery and hard to hang onto making it dangerous.
- Do not allow supervisors or children to use umbrellas. They conduct electricity, can obstruct the line of vision, and pointed tips can be dangerous.
- Use caution when allowing students to use bare or painted metal surfaces that are in the sun. Contact burns may occur.
- Do not use overhead equipment that is slippery or wet.

c. Emergencies

- Devise earthquake emergency procedures to be followed during playground use. Identify potential unsafe areas such as nearby power lines and do not reenter the building.
- Dogs and other unleashed animals should not be permitted on playgrounds. Keep children away from animals and do not allow them to pet animals.
- Lawn mowers can project rocks up to several hundred feet. Ask groundskeepers to wait until children are out of the way before operating equipment.
- Develop a plan on how to respond to a school wide lockdown and get the children back in the building quickly. This should be drilled if possible.

3. Discipline

School officials have the authority to enact reasonable disciplinary action in controlling students to ensure their safety. School district policies should be followed, and discipline should be reasonable and not excessive.

Misbehavior by students should be dealt with in a consistent and predictable way. Work with a system of warning and action that is clearly understood by students. When playground direction and discipline fail, refer to student's teacher and principal.

A Sample List of Consequences

- Verbal reprimand
- Redirection (making a child stop and do it correctly before being allowed to continue)
- Stay where you are (child stands in place for 30-60 seconds)
- Time out to isolate the offending student from the problem. (Not to exceed one minute per year of age)
- Shadowing playground supervisor (child accompanies supervisor for several minutes)
- Referral to teacher, principal, or parent/guardian
- Suspension of playground privilege

a. Bullying and Harassment

Behaviors that constitute bullying form an identifiable constellation of characteristics. These characteristics distinguish bullying from mere disagreement or fighting.

i. Definitions vary among researchers, but there are common areas of agreement on what constitutes bullying.

- 1. Harm or hurt is intended.
- 2. A power imbalance exists.
- 3. The perpetrators enjoys carrying out the action.
- 4. The perpetrator repeats the behavior, often in a systematic way.
- 5. The victim has a sense of being persecuted or oppressed and is hurt physically and/or psychologically.

ii. Staff Can Make Bullying Stop

1. Make it clear to children, from day one, that hurtful, demeaning, and aggressive behavior will not be tolerated because it is against school rules. Offenders will be dealt with according to school discipline procedures.

- 2. Enforce disciplinary action uniformly, consistently, and equitably.
- 3. Warn offenders that retaliation by the bully or their friends on and off the playground will not be tolerated.
- 4. Encourage children to report bullying, physical abuse, aggression, or threats.
- 5. Always document, in writing, acts of bullying and harassment. Let the student's classroom teacher or administrator know about the incident so that they can follow up and prevent retaliation to the victim.
- 6. Follow your district's Board Policy on Harassment.

For more information on bulling in schools refer to the following webinar from PACE:

https://www.youtube.com/watch?v=903MxrIz93U

Please see the appendices on the following pages for sample plans and other valuable resources.

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Appendix A



PLAYGROUND SAFETY QUICK REFERENCE GUIDE

Each year, roughly 200,000 kids are treated for playground-related injuries. Although "kids will be kids," you can take precautions to protect both students from unnecessary injuries and the district from claims and lawsuits. The U.S. Consumer Product Safety Commission publishes the "Handbook for Public Playground Safety" that outlines basic equipment and layout recommendations designed to provide a play environment least likely to cause injuries. These guidelines are based on voluntary <u>ASTM F1487-17</u> standards that govern technical playground design for manufacturers, architects and designers.

GENERAL RECOMMENDATIONS

PROVIDE ADEQUATE SHOCK-ABSORBING MATERIALS – Both unitary (poured in place and other solid, stationary materials) and loose fill materials can provide adequate shock absorbency. Recommended loose fill materials include wood chips, double-shredded bark mulch, engineered wood fibers, fine or coarse sand, fine or medium gravel, and shredded tires. Depending on the height of play equipment, surfaces should have a consistent 9"-12" of shock-absorbing material.

ESTABLISH FALL ZONES – Each piece of stationary equipment should have a radius of six (6) feet around it in all directions that is free of ground hazards and covered with sufficient shock-absorbing materials. When fall zones overlap due to space constraints, there should be a minimum of nine (9) feet between structures over 30" tall. Swing sets are the exception to the six-foot recommendation; their fall zone should extend two times the height of the swing fulcrum in front and behind the swing's center.

MAINTAIN SAFE HARDWARE – Equipment should be checked for extensive wear and tear, protruding bolts and pinch points. Chains should not have open "S" hooks and should be replaced when there is 50-percent wear of the chain's gauge. Nuts, bolts and support bars should be as flush to the play surface as possible.

ELIMINATE ENTAGLEMENT AND ENTRAPMENT – Any protruding item which may be able to catch children's clothing or strings can be an entanglement hazard. These openings or snags should be filled in or made flush with their surrounding surface. Any opening greater than 3½" but less than 9" could entrap a child's head, arm or leg and should also be eliminated.

CONDUCT MONTHLY INSPECTIONS – One of the most effective safeguards is for districts to document monthly equipment inspections. This will assist the district to quickly identify any hazards arising from normal wear and tear, and also document when the hazards are identified and mitigated. A sample monthly checklist is available through the CPSC or by contacting the PACE Risk Management Department at 800-285-5461.

This QUICK REFERENCE provides a very brief overview of public playground safety. The U.S. CPSC's <u>Handbook for Public Playground Safety</u> is available on their website for downloading and printing.

PACE RISK MANAGEMENT

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PLAYGROUND EQUIPMENT RECOMMENDATIONS QUICK REFERENCE GUIDE

Each year, over 200,000 people are treated in U.S. hospital emergency rooms for injuries associated with playground equipment; most of these injuries involve children under the age of 15 years.

School districts can help to prevent student injuries by engineering safety into the design of their playgrounds, choosing approved playground equipment and installing it properly.



EQUIPMENT STANDARDS

All equipment purchased should meet or exceed the following standards and/or guidelines:

AMERICAN SOCIETY OF TESTING AND MATERIALS – <u>ASTM</u> is an independent and world-renowned developer of technical standards used in testing a multitude of products.

INTERNATIONAL PLAYGROUND EQUIPMENT MANUFACTURERS ASSOCIATION – <u>IPEMA</u> provides a thirdparty certification service where an independent laboratory validates an equipment manufacturer's certification of conformance to ASTM F1487-17.

U.S. CONSUMER PRODUCT SAFETY COMMISSION – <u>CPSC</u> is an independent agency within the United States Federal Government with the authority to inform the public of current product performance information and recommended practices.

ON-SITE SAFETY CONSULTANT – The district should always hire the manufacturer's representative to be on-site during the installation. There is usually a charge for an on-site safety consultant, but it is a lot lower than the cost of a student injury if the equipment is not installed properly. The safety consultant should sign off that the equipment was installed according to the manufacturer's recommendations. Before allowing kids to play on the equipment, the playground vendor should also inspect the equipment and sign off that it was installed properly.

AMERICANS WITH DISABILITIES ACT (<u>ADA</u>) – The Access Board has developed <u>accessibility guidelines for play</u> <u>facilities</u> as set forth in the ADA of 2010.

All children, regardless of age, require adult supervision. Kids will always find new and inventive – but not necessarily safe – ways to play on or around playground equipment. The good news is that while injuries do happen, many can be avoided with appropriate safety surfacing and simple supervision.

Questions? Contact PACE Risk Management

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QUICK REFERENCE GUIDE

STUDENT INCIDENT REPORT



- All student injuries where 911, EMT or other outside medical assistance is called to the scene.
- All student injuries where the student is taken from school or a school event to a physician or hospital either by school staff, EMS or a parent/guardian.
- Student injuries involving the eyes, head, neck or back, other than minor scrapes or bruises.
- Student injuries that occur in the shop (wood, metal, auto), weight room, P.E. classes and athletic events, other than minor scrapes or bruises.
- Playground injuries, other than minor scrapes or bruises.
- Injuries that involve a trip or fall on school premises or from other school equipment, except those that result in minor scrapes or bruises.
- Student injuries that involve burns or electric shock from any source.

WHEN A STUDENT IS INJURED

it is important for a variety of reasons to make sure we have good documentation of the incident. These incident reports can be helpful in the event of a claim. They can also be a good tool to help you identify trends of where incidents are occurring and might shine some light on areas to focus on to prevent them from occurring. Below are some guidelines for when you should complete a student incident report.

- Student injuries involving exposure to, ingestion of, or contact with chemicals.
- Student seizures, whether related to trauma or medical condition. (It is important to specify what action was taken by school personnel in dealing with the seizure.)
- All drug-related incidents, whether overdose or reaction from prescription drugs or illegal substances.
- All student incidents that result in loss of consciousness.
- All student incidents where a student goes into shock.
- Student injuries involving entering, exiting or while riding on a school bus, other than minor scrapes and bruises.
- All injuries or complaints involving significant privacy issues of students.
- When restraint or seclusion incident falls under obligations to report under ORS 339.294.

KEEP IN MIND:

Incident reports must be completed with known facts only, no supposition or personal commentary.

To view a sample Student Incident Report, go to: http://pace.osba.org/Resources/Articles/Safety/IncidentReporting.aspx

PACE RISK MANAGEMENT

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Playground Supervisor Form SAMPLE

Playground Communication to Teacher						
То:						
	Na	me of Te	acher			
The problem ind	The problem indicated below has been occurring frequently on the playground:					
Bul	llying		Aggressive play			
Abı	use of equipment		Overt defiance			
Rac	cial slurs		Fighting			
Cru	iel teasing		Other:			
The consequence	The consequence that has been implemented was:					
Ver	bal reprimand		Redirection			
Tin	ne out		Behavior Improvement Form			
Wa	lk with the supervisor		Office Referral			
Please discuss this problem with the student before the next recess. Communicate your expectations of the student's ability to follow the rules.						

Playground Communication to Teacher

Cut on this line

Playground Supervisor Form

RED CARD – THIS IS AN EMERGENCY

_____ Fighting or out of control. Send help.

_____ Serous Injury! Call 911

Child hurt. Send trained personnel.

Stranger on the playground.

Child left on the grounds.

Abduction! Call 911

_____ Other: _____

RED CARD – EMERGENCY

Cut on this line

Playground Checklist

Playground Layout and Surfacing

Use additional rows for site specific conditions.

Date:	Location:				
Person(s) Conducting the Survey:					
	<i></i>				
Play Area Layout					
Condition		Recommendation/Additional Info			
Is exercise equipment separated from play equipment?	Yes 🗌 No 🗌				
Is the equipment recommended by CPSC?	Yes 🗌 No 🗌				
Is the play area free of tripping hazards?	Yes 🗌 No 🗌				
Does the play area have proper drainage?	Yes No				
Is the area fenced from risks (e.g. parking, streets,etc.)?	Yes No				
Does each piece of equipment have its own 6-foot fall zone on all sides?	Yes 🗌 No 🗌				
Does each swing have a full fall zone equal to double the height of the swing structure front and back?	Yes 🗌 No 🗌				
Are moving equipment and passive activities separated from each other?	Yes 🗌 No 🗌				
Are there age appropriate play areas?	Yes 🗌 No 🗌				
Are provisions in design, layout provided for clear sight lines and supervision?	Yes 🗌 No 🗌				
	Yes 🗌 No 🗌				
	Yes No				
	Yes No				
	Yes No				

Surface and Curbing					
Condition		Recommendation/Additional Info			
Does each piece of equipment have at least 9 inches of shock-absorbing material underneath and 6 feet beyond its outer edges?	Yes 🗌 No 🗌				
Are concrete footings below grade 4 inches or more on equipment and play structures?	Yes 🗌 No 🗌				
Is manufactured surface material in place?	Yes 🗌 No 🗌				
Are no tripping hazards created by separate surfaces' meeting edges?	Yes 🗌 No 🗌				
Is there curbing or containment structure on all sides of loose surface material?	Yes 🗌 No 🗌				
Are curbing or containment structures visible and free of hazards and broken areas?	Yes 🗌 No 🗌				
	Yes 🗌 No				
	Yes 🗌 No				
	Yes 🗌 No				
	Yes 🗌 No				
	Yes No				

Other Playground Hazards				
Condition		Recommendation/Additional Info		
Are cables, wires, and ropes	Yes No			
visible and located out of the				
I a the equipment free of				
excessive rust dry rot or	Yes No			
other wood deterioration?				
Is the play area free of	Yes No			
excessive litter, broken glass,				
sharps?				
Are basketball nets made of	Yes 🗌 No 🗌			
fabric material and in good				
condition? (no metal nets)				
Are basketball and tetherball	Yes 🔄 No 🔄			
poles painted a luminous of				
	Yes No			
	Yes No			
	Yes 🗌 No 🗌			

Playground Equipment

(Use additional rows for site specific conditions.)

Date:	Location:				
Person(s) Conducting the Survey:					
Composite Structures	·				
Condition		Recommendation/Additional Info			
Does the structure have no accessible areas higher than CPSC requirements?	Yes 🗌 No 🗌				
Are platforms designed per CSPC guidelines?	Yes No				
Are all log or timbers secured together tightly and level?	Yes 🗌 No 🗌				
Are structures free from sharp points, abrasive surfaces, sharp or jagged edges?	Yes 🗌 No 🗌				
Are connectors, nuts, bolts, caps and spacers tight and secure?	Yes 🗌 No 🗌				
Do slide beds have 4-inch sides, 30-degree slope and level run out 11 inches long?	Yes 🗌 No 🗌				
Are structures free of string entanglements at entrances to play events and other exposed areas?	Yes No				
Are platforms evenly spaced with no less than 3-foot square surface area?	Yes 🗌 No 🗌				
Do no bolts have two or more threads exposed?	Yes 🗌 No 🗌				
	Yes No				
	Yes No				
	Yes No				
	Yes No				

Climbers		
Condition		Recommendation/Additional Info
Do equipment and connectors not create a protrusion or entanglement hazard?	Yes 🗌 No 🗌	
Are climber rungs or footholds evenly spaced and not more than 12 inches apart?	Yes 🗌 No 🗌	
Climbers are not more than 84 inches above the protective surfacing	Yes 🗌 No 🗌	
	Yes 🗌 No 🗌	
	Yes 🗌 No 🗌	
	Yes No	

Swings		
Condition		Recommendation/Additional Info
Are swing seats 12-24 inches from the surface?	Yes 🗌 No 🗌	
Are swing seats free of splits, cuts and tears?	Yes 🗌 No 🗌	
Are the ends of the S-hooks closed? (thickness of a dime)	Yes 🗌 No 🗌	
Do swings have at least 6 feet of clearance from each end of the framework?	Yes 🗌 No 🗌	
Do swing-to-swing and swing-to-support clearance on 'to-fro' swings equal or exceed 24 inches?	Yes No	
Is the use zone twice the distance of the height of the crossbar in both directions?	Yes 🗌 No 🗌	
Are there only two swings per bay?	Yes 🗌 No 🗌	
Are swings suspended by chains that are in good condition?	Yes 🗌 No 🗌	
Are no links on the chains wore more than 50%?	Yes 🗌 No 🗌	
Are all upper connections properly lubricated and in good condition?	Yes 🗌 No 🗌	
Do tire swings have holes drilled in the bottom for proper drainage and are not worn excessively?	Yes 🗌 No 🗌	
Does clearance between tires and fixed objects equal or exceed 30 inches, plus the arc of the chain?	Yes 🗌 No 🗌	
	Yes 🗌 No 🗌	
	Yes 🗌 No 🗌	

Slides		
Condition		Recommendation/Additional Info
		,
Is every slide equipped with	Yes No	
sides at least 4 inches in		
height the entire length of its		
Sliding surface?		
borizontal entrance platform	Yes 🔄 No 🗌	
at the top of its steps that is at		
least 22 inches in length and		
as wide as its sliding surface?		
Does the entrance platform	Yes No	
have a protective barrier at		
least 38 inches high?		
Do slides over 4 feet high have	Yes 🔄 No 🔄	
least 11 inches long and are		
essentially paralleled to the		
ground?		
Is the height of the exit	Yes No	
between 7 and 15 inches		
above the ground?		
or covered with permanent	Yes No	
slip-resistant finish and are		
greater than 3 inches in depth		
and 16 inches in width?		
Do all ladders (except those	Yes No	
with rungs for hands and feet)		
and all stairs have continuous		
Are all access steps, rungs		
railings and handrails free		
from entrapment openings?		
Do transition areas and	Yes No	
hardware not create		
entanglement or protrusion		
nazaros?		
	Yes No	

(name of play equipment)			
Condition			Recommendation/Additional Info
	Yes	No 🗌	
	Yes	No	
(name of play equipment)			•
(name of play equipment) Condition			Recommendation/Additional Info
(name of play equipment) Condition	Yes 🗌] No 🗌	Recommendation/Additional Info
(name of play equipment) Condition	Yes _ Yes _] No 🗌] No 🗌	Recommendation/Additional Info
(name of play equipment) Condition	Yes _ Yes _ Yes _] No] No] No	Recommendation/Additional Info
(name of play equipment) Condition	Yes Yes Yes Yes	No N	Recommendation/Additional Info

(Use the following tables to create checklists for site specific equipment.)

(name of play equipment)		
Condition		Recommendation/Additional Info
	Yes No	
	Yes 🗌 No 🗌	

PLAYGROUND RULES AND GAMES

A. Establishing Rules

Establish and publish written playground rules, providing students with guidelines for safe, happy, and constructive playground behavior. Rule topics should include general behavior, school specific information, general safety rules, school specific equipment use directions, and acceptable and unacceptable playground games.

Playground rules should be taught at the beginning of the school year and reviewed at least two more times during the year; once after winter break and again after spring break. All supervisory staff should be familiar with the rules and have access to written copies. Copies should also be included in parent student handbooks and sub folders.

B. Enforcing Rules: Rules in Action

Communicate and consistently enforce playground rules with students. Develop a plan that addresses repeated playground rule violators.

C. Example of Playground Rules

There are two types of playground rules: general safety and specific equipment playground rules. The following are an example of rules, and they are general in nature, and should be tailored to each school's specific situation and facilities.

1. General Playground Safety Rules

- Obey directions given by all supervisors.
- Stay within approved and designated areas. Include school specific boundary information.
- Use only school provided equipment; do not bring toys and equipment from home.
- No loose jewelry.
- No clothing with pull string around the neck.
- Do not carry pens or pencils on the playground.
- Leave dirt, sawdust, stones, sticks, snowballs, rocks, or other objects alone. Leave surfacing materials on the ground.
- Stay away from structures such as fences, trees or other structures not intended as playground equipment.
- Respect other people's space. Keep hands and feet to yourself.
- Do not wear bike helmets or back packs on the playground.
- Be courteous. Be a good sport.
- Speak respectfully to each other. Do not use profane or abusive language.
- Stop playing immediately when the signal is given. (List the type of signal, such as a whistle being blown twice.)
- Do not destroy or vandalize school property or the property of others.
- Do not chew gum or eat food on the playground.
- Do not leave the playground unless you get a pass from the playground supervisor.
- Play only approved games.

2. Rules for Playground Equipment Use

a. Climbing Apparatus

- When holding onto equipment, use firm grip by hooking the thumb around the equipment to meet opposing fingers the "thumb opposed grip."
- Hold on with both hands.
- Do not sit on the apparatus.
- Do not play under the apparatus.
- Do not carry anything when climbing on the apparatus.
- Do not jump off the climber.

b. Hanging Rings

- When holding onto equipment, use firm grip by hooking the thumb around the equipment to meet the opposing finger the "thumb opposed grip."
- Allow only one person at a time on the rings.
- Travel in the same direction.
- Do not crawl through the rings.
- Do not hang by the legs.
- Do not perform stunts.

c. Horizontal ladders and bars

- When holding onto equipment, use firm grip by hooking the thumb around the equipment to meet the opposing finger the "thumb opposed grip."
- Allow only one person at a time on the ladder.
- Start at one end of the apparatus and move in one direction.
- Stay well behind the person in front and watch out for swinging feet.
- Avoid speed contests and do not try to cover too large a distance in one move.
- Do not hang by legs.
- Do not stand or sit on top bar.
- Do not lift others up to equipment. If they cannot reach it, then equipment is probably not age appropriate.

d. Ropes and Fire Poles

- Wait until the pole is clear.
- Allow only one person at a time on the rope or pole.
- Do not hang out at the bottom of the pole.
- Climb down from ropes and poles; do not jump.

e. Seesaws

- Sit facing each other and do not lean backwards.
- Keep a firm hold with both hands.
- Do not walk on the seesaws.
- Keep feet out from underneath the board.
- · Have both partners keep their feet on the ground before one steps off.

f. Slides

- Allow only one person at a time on the sliding surface.
- When climbing, hold on with both hands.
- Climb one step at a time.
- Do not go up the sliding surface or the frame.
- Slide down feet first, sitting up.
- Be sure no one is in front of the slide before sliding down.

- Avoid pushing or shoving.
- Do not slide, stand, or sit on the top side of tube slides.

g. Swings - Regular

- When holding onto equipment, use firm grip by hooking the thumb around the equipment to meet the opposing finger the "thumb opposed grip."
- Allow only one person at a time on the swing.
- Sit in the center of the swing; do not stand or kneel.
- Hold on with both hands.
- Come to a complete stop before getting off the swing.
- Walk around the swing keeping a safe distance between yourself and the swings.
- Do not push anyone in a swing or allow others to push you.
- Avoid swinging or twisting empty swings.
- Do not touch other swings or the swing frame when swinging.
- Do not twist or turn on the swing.
- Do not "bail out" of swings that are in motion.

h. Tire Swings

- Place legs inside of the tire and remain seated while using.
- When holding onto equipment, use firm grip by hooking the thumb around the equipment to meet the opposing finger the "thumb opposed grip." Hang onto the swing chain with both hands. Don't touch the connecting joint.
- Allow a maximum of two people on tire swings at a time.
- Stop the swing before getting on or off.
- Do not flip the tire upside down.

i. Track Rides

- Hold onto the ring tightly.
- Make sure the gliding and landing areas are clear of people and obstructions.
- Do not start when someone is in the way.
- Do not hang by your legs.
- Do not lift others up to the equipment. If they cannot reach it, then the equipment is probably not age appropriate.

j. Turning Bars

- Keep a firm grip on the bar.
- To dismount, hang from hands and then release grip.
- Do not tie clothing to the bar.

Other Equipment

There are other types of play equipment found on school playgrounds which do not have rules listed in this section. Establish rules for all play equipment on the school grounds. Manufacturers often include information about safe play in their product use manuals. Staff should refer to these equipment-specific rules.

3. Weather Considerations

Establish a policy prohibiting the use of outside playground equipment during extreme weather conditions.

- Playground equipment should not be used when the outside temperature is at or below freezing.
- Ensure that Playground equipment is used with caution when it is wet.
- To avoid the risk of contact burns use caution with bare or painted metal surfaces on platforms and slide beds located in direct sun.
- Take shelter from thunder and lightning. Shelter is any space with four walls. A covered play structure is not considered shelter.

D. Games on the Playground

1. District-Approved Games

To help ensure that safe games are played during recess, establish approved games, and encourage students to pursue these games in free play. Make these pre-approved games a part of the established school curriculum and provide appropriate equipment for these games.

Include the following information about district-approved games in the playground supervisors' handbook: how to play the games, game rules and equipment and set-ups required. Physical education texts are a good source of game-playing information.

Do not allow competitive team sports such as baseball, soccer, or football to be played during recess unless they are supervised by certificated P.E. teachers and protective equipment is provided and used.

Do not allow roller games or scooters on playgrounds due to their high injury potential.

2. How to Make Game Playing Safer

To make play safer, consider these three areas: the space in which the games are played, the skill level of the participants and the supervision of the playground.

a. Space

Ensure that there is ample and appropriate space to play games. Check the play area for dangerous objects and hazards. Identify boundaries for games. Ensure that activities don't interfere with or encroach on one another.

b. Age and Skill

Ensure that playground supervisors are aware of the different developmental levels of students. In evaluating skill levels, consider the variety of activities present, the ages of the children, their mental and physical capabilities, and the equipment and facilities that they are using in games. Group children with similar skill levels together for game playing.

Beware of allowing younger children to play on equipment that offers an easy way up, but no easy way down such as an arch climber. A child beginning such an activity is forced to complete it whether they want to or not, especially if other children are waiting. Children in "descension limbo" will ascend quickly but will pause when they cannot see or feel readily available hand or foot holds. Age differential between children on climbing equipment has been an injury factor. Younger children may attempt and fail to duplicate activities by older children, who are more adept at certain skills. Older children may push younger children aside in the pursuit of their own play agenda, creating a fall hazard. It is important to watch for this situation to develop and control it when necessary.

F. Indoor Games

When recess moves inside, the following should be considered. Stored items such as tables, chairs, equipment, and other apparatus can become hazards when a high-speed game is underway, so these items should not be stored near boundaries. Relocate them away from the play areas or sufficiently pad them to prevent student injury and secure stored items to prevent tipping (cafeteria tables). For games that involve a goal line, draw zones or place cones 10 feet from any wall or barriers to allow for deceleration, to prevent students from running into walls. Do not play games indoors involving high-speed balls without protecting students from injury, and the facilities from damage. Maintain a safe area for staff and students not involved in the activity and keep "heads on a swivel" to avoid injuries. Require appropriate footwear to be worn.

Choosing

PERFACTOR SURFACING

TO MEET ADA REQUIREMENTS

A RESOURCE

Installation and Maintenance Guide for ADA Compliance in Playground Surfacing



The Americans with Disabilities Act (ADA) outlines regulations for new construction and maintenance of playgrounds. As of March 15, 2011, all new playgrounds and play areas should be in compliance with the Department of Justice's 2010 ADA Standards for Accessible Design.

As a third-party product certification provider for play equipment and surfacing materials, the International Play Equipment Manufacturers Association (IPEMA) saw a need for a trusted source to outline the proper installation and maintenance for surfacing materials, to ensure compliance with these Accessibility Regulations.

Through research, consultation and collaboration with those on the frontline of the playground industry, IPEMA and the Voice of Play bring you this guide as an easy reference point concerning different surfacing types as it relates to ADA accessibility compliance.

This resource is also available online through ipema.org. Visit our social media outlets to keep up-to-date on playground and surfacing compliance, as well as news related to the play industry.



Facebook.com/VoiceofPlay @Voice_of_Play



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INSTALLATION FOR ENGINEERED WOOD FIBER (EWF)

IO MEET ADA REQUIREMENTS

IPEMA BELIEVES THAT following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for EWF accessible surfacing under and around playground equipment. EWF accessible surfacing should meet the ASTM F1951 surface accessibility standard. Request a copy of the manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

INSTALLATION:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the engineered wood fiber (EWF) is IPEMA certified for ASTM F1292 for impact attenuation within the use zone of the playground equipment, and ASTM F2075 - sieve analysis, tramp metals and hazardous metals.

2. Prepare the site in accordance with the project engineer's directions and project specifications.

3. Install drainage as recommended by the manufacturer of the engineered wood fiber. Drainage installation is recommended to increase the life of EWF, reduce mold and fungus issues and help retain resiliency during cold temperatures. Different drainage systems are available.

4. Installing one or more compliant ADA ramps into the play area is recommended to allow an accessible entrance to and from the play area.

5. Once drainage is installed, proceed to install the EWF at the recommended thickness per the equipment manufacturer's recommendations. Be sure the surface is level & compacted.

OPTIONAL:

To speed up the natural compaction process, once drainage is installed, install the EWF in layers, 6-8" at a time. Rake, level and wet the surface before compacting with a mechanical compactor after each layer is installed. Change direction 90 degrees between each layer. Repeat these steps until the desired surface thickness is achieved.

6. In kick out areas, such as swings and slides, install wear mats on top of the EWF to prevent holes and to maintain a level surface. Be sure these mats are installed in such a way as they do not have an edge above the surface that will create an accessibility issue. Tapered edges are recommended.

MAINTENANCE FOR ENGINEERED WOOD FIBER (EWF)

MAINTENANCE:

Maintaining your EWF surface is critical to keeping your surfacing ADA compliant. The frequency of the maintenance information below should be conducted in accordance with the manufacturers' recommendations.

1. Visually inspect the entire playground area. Remove all foreign material (i.e. trash, tree branches, etc.).

2. Rake the EWF to keep the surface level and the thickness to the original recommended depth. A level surface is necessary for wheelchair access and compliance with ADA requirements. Wear mats can reduce or eliminate the need to rake the EWF in high traffic areas such as swings and slide exits. Be sure the transition between the wear mats and the EWF is level.

3. At accessible entrances onto the playground surface, ensure that the surface material, accessible route or the top of the access ramp is within 1/4 inch of the top of the play area border. An ADA compliant access ramp into the play area will help reduce maintenance in this area.





Note: This is a technical document and in no way is an endorsement for any particular surfacing. It is intended to assist the playground owner in making their playground a well-maintained and accessible area. It does not imply that an injury cannot occur. For more information about the IPEMA certification program, go to www.ipema.org.

H xibneqqA

IO MEET ADA REQUIREMENTS

4. In the highest use areas and around equipment footers, dig down to the subsurface or drain system and measure the depth of the EWF. Ensure that the depth is sufficient for the fall height of the structure or at the manufacturer's original recommended depth, whichever one is greater. Add EWF as necessary, level, wet and compact. The use of markings on the play structure supports or on the containment barriers is also recommended as a means to ensure depth of surface is kept to original thickness.

5. Visually inspect all wear mats for tears, cracks and general wear. Add EWF around the wear mat to ensure a smooth transition from wear mat to surface. Turn wear mats over periodically and add EWF beneath them to bring wear mats up to original grade.

6. Check the performance of the drain system by ensuring that water is flowing from a drain system outflow pipe immediately after rain. Also, make sure there is no standing water on the playground surface. It is important to have a functioning drainage system to improve EWF life expectancy and the resilience of the surfacing.

INSTALLATION FOR POURED IN PLACE (PIP)

IO MEET ADA REQUIREMENTS

IPEMA BELIEVES THAT following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for poured in place (PIP) accessible surfacing under and around playground equipment. PIP accessible surfacing should meet the ASTM F1951 surface accessibility standard. Request a copy of the manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

INSTALLATION:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the poured in place is IPEMA certified for ASTM F1292 for impact attenuation within the use zone of the playground equipment and ASTM 1951 throughout required areas of the play environment.

2. The playground equipment manufacturer or designer must identify the ground-level accessible routes to and within the play area. Ground-level accessible routes must have a clear width of at least 60 inches in most cases, a vertical clear height of 80 inches and surfacing must be accessible (according to the Department of Justice 2010 ADA Standards for Accessible Design at the time of this publication). Other requirements for the layout of the playground to meet 2010 ADA Standards for Accessible *Design* are detailed and should be designated by the playground equipment manufacturer or designer prior to installation.

3. Install and prepare the sub-base for the poured in place surfacing in accordance with the project engineer's directions and project specifications. In cases of a compacted stone/aggregate sub-base, correct compaction is required. Request documentation indicating the degree of compaction (usually measured as a percentage) and confirm that the compaction meets the PIP manufacturer's recommendation. The grade of the completed sub-base must be in compliance with the project specifications. In most cases, the installation of the poured in place surfacing will follow the slope of the sub-base, so subgrade slope accuracy is critical for compliant accessibility of the finished surface.

4. Prior to installation of the rubber surface, request documentation identifying the ground-level accessible routes and written confirmation that the subgrade meets this criteria. A diagram with elevations or identified slopes should be provided. In addition to obtaining written documentation, check the grade of the subsurface throughout the play environment using a six foot laser level.

5. When installing the poured in place rubber, the installer continually checks the grade of the installation and records with photos.

6. Ensure edging and transitions to adjacent surfaces do not inhibit accessibility. Transitions between surfaces are usually accomplished by tapering the poured in place under the grade of the other surface or "turning down" the PIP to appear flush with the other surface. If adjacent surfaces include Engineered Wood Fiber or other loose fill material, ensure the material is installed to avoid a ramp or step that does not meet ADA Standards. Check all transitions to ensure there are no openings greater than 1/2 inch (per the 2010 ADA Standards for Accessible Design).

OPTIONAL:

In high traffic areas, such as swings and slides, imbed wear mats in the PIP surfacing to help prevent wear and tear, which can inhibit accessibility. As with other adjacent surfaces, ensure that wear mats are installed with accessible transitions from the PIP. This can be accomplished by choosing a wear mat with an ADA accessible beveled edge or installing the mat flush with the surface of the PIP.

MAINTENANCE FOR POURED IN PLACE (PIP)

MAINTENANCE:

accordance with the manufacturers' recommendations.





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Appendix H

TO MEET ADA REQUIREMENTS

preventative maintenance may be required. Repairs Vandalism or other causes may create these conditions.

slide exits, etc.

Note: This is a technical document and in no way is an endorsement for any particular surfacing. It is intended the playground owner in making their playground a well-maintained and accessible area. It does not imply the cannot occur. For more information about the IPEMA certification program, go to www.ipema.org.
INSTALLATION FOR RUBBER MULCH

TO MEET ADA REQUIREMENTS

IPEMA BELIEVES THAT following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for rubber mulch surfacing under and around playground equipment. Rubber mulch accessible surfacing should meet the ASTM F1951 surface accessibility standard. Request a copy of the rubber mulch manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

INSTALLATION:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the rubber mulch is IPEMA certified for ASTM F1292 for impact attenuation within the use zone of the playground equipment.

2. Prepare the site in accordance with the project engineer's directions and project specifications.

3. Install drainage if needed as detailed by the manufacturer of the rubber mulch. Install borders around the perimeter to contain the rubber mulch.

4. Installing one or more compliant ADA ramps into the play area is recommended to allow an accessible entrance to and from the play area.

5. Once drainage is installed, proceed to install the rubber mulch at the recommended thickness per the equipment manufacturer's recommendations. Be sure the surface is level & compacted.

OPTIONAL:

To speed up the natural compaction process, once drainage is installed, install the rubber mulch in layers, 3 inches at a time. Rake and level the surface before compacting with a mechanical compactor or sod roller after each layer is installed. Change direction 90 degrees between each layer. Repeat these steps until the desired surface thickness is achieved.

6. In kick-out areas, such as swings and slides, install wear mats on top of the rubber mulch to prevent holes and to maintain a level surface. Be sure these mats are installed in such a way as they do not have an edge above the surface that will create an accessibility issue. Tapered edges are recommended.

MAINTENANCE FOR RUBBER MULCH

MAINTENANCE:

Maintaining your rubber mulch surface is critical to keeping your surfacing ADA compliant. The frequency of the maintenance information below should be conducted in accordance with the manufacturers' recommendations.

1. Visually inspect the entire playground area. Remove all foreign material (i.e. trash, tree branches, etc.).

2. Rake the rubber mulch to keep the surface level and the thickness to the original recommended depth. A level surface is necessary for wheelchair access and compliance with ADA requirements. Wear mats can reduce or eliminate the need to rake the rubber mulch in high traffic areas such as swings and slide exits. Be sure the transition between the wear mats and the rubber mulch is level.

3. At accessible entrances onto the playground surface, ensure that the surface material, accessible route or the top of the access ramp is within 1/4 inch of the top of the play area border. An ADA compliant access ramp into the play area will help reduce maintenance in this area.





4. In the highest use areas and around equipment footers, dig down to the subsurface or drain system and measure the depth of the rubber mulch. Ensure that the depth is sufficient for the fall height of the structure or at the manufacturer's original recommended depth, whichever one is greater. Add rubber mulch as necessary, level and compact. The use of markings on the play structure supports or on the containment barriers is also recommended as a means to ensure depth of surface is kept to original thickness.

5. Visually inspect all wear mats for tears, cracks and general wear. Add rubber mulch around the wear mats to ensure a smooth transition from the wear mats to the safety surface. Turn wear mats over periodically and add rubber mulch beneath them to bring wear mats up to original grade.

6. Check the performance of the drain system by ensuring that water is flowing from a drain system outflow pipe immediately after rain. Also, make sure there is no standing water on the playground surface. It is important to have a functioning drainage system if needed, to improve rubber mulch life expectancy and the resilience of the surfacing.

Note: This is a technical document and in no way is an endorsement for any particular surfacing. It is intended to assist the playground owner in making their playground a well-maintained and accessible area. It does not imply that an injury cannot occur. For more information about the IPEMA certification program, go to www.ipema.org.



"CHILDREN LEARN AS THEY PLAY. MOST IMPORTANTLY, IN PLAY. CHILDREN LEARN HOW TO LEARN" – O. FRED DONALDSON

INSTALLATION FOR INTERLOCKING TILE

TO MEET ADA REQUIREMENTS

IPEMA BELIEVES THAT following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for interlocking tile surfacing under and around playground equipment. Interlocking tile accessible surfacing should meet the ASTM F1951 surface accessibility standard. Request a copy of the tile manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

INSTALLATION:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the interlocking tile is IPEMA certified for ASTM F1292 for impact attenuation within the use zone of the playground equipment.

2. Prepare the site in accordance with the project engineer's directions and project specifications.

3. Install drainage if needed as detailed by the manufacturer of the tile. If installation site is elevated, then additional storm water management may not be necessary. It is important that the sub-surface be sloped approximately 1 percent toward the water collection drains.

4. Choose suitable sub-surface (properly cured and installed concrete, properly aged and prepared asphalt or properly leveled and compacted sub-base) and prep sub-surface, making sure it is clean, dry and free of oils. Sub-surface preparation is a critical step towards a longterm successful installation.

5. Prior to installation, work with the manufacturer to assure correct non-encroachment zones, fall heights and fall zone clearances. This is important information for selecting and installing correct tile impact attenuation properties.

6. Review adhesive process, taking note of optimal temperatures, and application procedures. Tiles are glued to sub-surface with a roll on tile-to-base adhesive.

7. Follow manufacturer's specific instructions for tile application, including tile-to-tile adhesion, and install the tile surface. Typical process includes:

- Place the alignment foot on the bottom of the tile inside the predetermined 90 degree corner.
- Apply 1/4 inch bead of glue along the wall in the base of male U-shaped locking sides before placing next tile in position.
- Place alignment foot in top left corner in space provided on each tile locking the female lock on top of the male lock and press in to position.
- Once all four locks have been secured, align the seams with all of the adjacent seams.
- Adjust the tiles so they are tight and snug.

MAINTENANCE FOR INTERLOCKING TILE

MAINTENANCE:

IPEMA

Like any surface, a good routine maintenance program will enhance the longevity and appearance of an interlocking tile surface.

ROUTINE MAINTENANCE

1. Blowing/sweeping: using a leaf blower is the best way to remove any loose debris from tile surface and seams of connecting tile. Not all play areas will accommodate a leaf blower. Sweeping the surface is also acceptable, sweeping alone.

2. Vacuum: periodic vacuuming is recommended in areas where sand is frequently tracked onto the surface.

3. Water hose: use a water hose with a pressure spray tip to remove contaminants from porous top surface.

> "THE CREATION OF SOME THING NEW IS NOT ACCOMPLISHED BY THE INTELLECT BUT BY THE PLAY INSTINCT" - CARL JUNG

> > cannot occur. For more informa



Note: This is a technical document and in no way is an endorsement for any particular surfacing. It is intended to assist the playground owner in making their playground a well-maintained and accessible area. It does not imply that an injury cannot occur. For more information about the IPEMA certification program, go to www.ipema.org.

Appendix H

IO MEET ADA REQUIREMENTS

4. Cleaning agents: Interlocking tile can typically accommodate moderate use of most household or bio-degradable detergent that contain both odor suppressants and disinfectants. Dilute this cleaning agent as recommended by the manufacturer.

ADVANCED MAINTENANCE

Depending on frequency of use, tile will occasionally need a deeper clean to remove accumulated dirt and

5. Steam vacuum: a steam vacuum with or without cleaning agents is ideal for advanced cleaning and

6. Power washing: in areas that can accommodate power washing, use a power washer with a wand tip.



the playground owner in making their playground a well-ma tained a rea. It does not imply that an injury ion about the IPEMA certification program, go t

INSTALLATION FOR ARTIFICIAL TURF

IO MEEI ADA REQUIREMENTS

IPEMA BELIEVES THAT following the installation and maintenance recommendations below will result in greater accessibility and compliance with ADA requirements for artificial turf accessible surfacing under and around playground equipment. Artificial turf accessible surfacing should meet the ASTM F1951 surface accessibility standard. Request a copy of the manufacturer's ASTM F1951 surface testing report to confirm that the product meets the maneuverability performance requirements of the accessibility standard.

INSTALLATION:

1. Please visit the IPEMA website (www.ipema.org) to print a certificate showing the turf product you are purchasing is certified per ASTM F1292 for impact attenuation within the use zone of a playground.

2. Prepare the site in accordance with the project engineer's directions and project specifications.

3. Install borders as necessary if recommended by installation specifications.

4. Install a drainage layer per the manufacturer's recommendations. If gravel is used, compact for a level sub-surface. A drainage layer helps to extend the life of the turf and keep it resilient during colder months.

5. If recommended by the turf manufacturer, install impact attenuating sub-base over the drainage base. This could be foam panels or rubber buffings for example.

6. Install turf layer. This should be installed per the manufacturer's instructions and by a qualified turf installer.

7. Stretch and anchor turf around borders as recommended.

8. If the turf system requires it, install infill as recommended by turf manufacturer. This could be rubber granular, synthetic infill, various types of sand or a combination of infill materials.

MAINTENANCE FOR ARTIFICIAL TURF

IO MEEI A

MAINTENANCE:

1. Keep surface clean by blowing, sweeping or hosing off loose dirt and foreign material.

2. Use a stiff broom to brush fibers to keep fibers upright and infill from compacting. Keeping fibers upright will extend the life of the turf. Sweeping the infill layer will keep the infill from compacting, which could affect the resiliency of the surface. Add infill as necessary, paying close attention to high use areas such as swings and slides.

3. If spills occur, blot with a clean towel and clean area with mild detergent, followed by flushing area with clean water. If turf contains infill, use a vacuum to suck the infill out of the area before cleaning. Replace infill as needed.





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DA REQUIREMENTS

4. If turf area is used for pets, there are infill products that absorb urine odor. Ask your turf manufacturer for availability.

5. Inspect seams for separation as well as around the border of the play area to ensure that the turf remains properly anchored. Catching these problems early can eliminate major problems down the road.

6. There may be other maintenance required by your turf manufacturer so ask for a maintenance document from the supplier/installer. Proper maintenance will give you a long lasting surface!

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MHES Playground and Cafeteria Supervision Guidelines





- 1. Recess Mustang Manners and Playground Rules
- 2. Playground Supervisor Responsibilities
- 3. Common Playground Games and their Rules
- 4. Map of Playground
- 5. Playground Discipline, Resolving Conflicts, Positive Supervision
- 6. Playground Reporting of Emergencies
- 7. Cafeteria Duty Responsibilities

1. Recess Mustang Manners and Playground Rules

Other recess expectations:

- When the bell rings or whistle blows you stop playing and line up.
- Put all recess equipment away appropriately.
- Games, toys, or equipment from home are not allowed.
- Slide: Go down sitting on your bottom facing forward. No pushing or jumping off the slide.
- Swings: swing back and forth, not side to side. No jumping out of the swings. Do not roll up the



seats on the swings. No running between the swings. No 'underdogs.'

- New Big Toy and Kinder Toy: No tag or chicken fighting. No jumping off of the high tier. No climbing on the outside. Ladders are for climbing up, then go down the slide. Stairs can be used to go up or down (no running).
- Balls: Use appropriate balls for games (use soccer balls for soccer, basketballs for basketball, etc.) No bouncing or kicking balls against the school walls, windows, or onto the roof.
- Speak respectfully to adults
- Be safe!
- No tackle football or soccer
- No play fighting
- Don't hang on the soccer nets

- Stay away from the fence. Don't pick our neighbors' flowers, trees, or bushes. Please leave their pets alone.
- Wear appropriate clothing for the weather, so you can have recess!
- Include others
- Food/Candy is not allowed on the playground
- No throwing sticks, sand, rocks, snowballs, or other objects.
- No bullying, intimidating behavior, or harassment. Report bullying right away to an adult.

2. Playground Supervisor Responsibilities

Supervision of students on the playground is crucial to their safety. Inadequate supervision is often alleged as a contributing cause to a student's injury. Parents have the expectation that their children will be returned to them in the same condition as when they left for school that morning. Through the concept of "*in loco parentis*" (in place of parents), district staff is charged with the responsibility of keeping all students safe during school activities. Providing reasonable supervision and facilities is a duty owed to students in a district's care, custody, and control.

Each playground supervisor, including teachers, are expected to cover all areas of the playground using the figure eight formation to avoid standing in one place. Being visible and circulating around the play areas increases supervision to help keep students safe.

Interact with students in a positive manner, keep your tone positive. If students break a guideline, address it right away. Remember, connect before correct. Make a connection with a student and then correct the behavior.

We do not make students run a lap as a consequence nor owe laps for poor behavior in class.

Playground Supervisors at MHES:

- Have a positive attitude :)
- Know and consistently enforce Mustang Manners (school rules)
- Be on time to your duties (be on the playground before the students)
- Bring appropriate tools (walkie talkie, first aid pack, whistle, appropriate clothing, etc.)
- Encourage students to make good choices to keep them safe
- Watch students at all times. Move around the playground in a figure eight pattern.
- Refrain from engaging in unnecessary conversation with other adults as it takes your focus away from the students.
- Be diligent in restricting unsafe behavior.
- Report any hazards or unsafe materials immediately.
- Respond appropriately to emergencies.
- No cell phone use; texting or talking (ok to have on your person for clock/emergencies).

3. Common Playground Games and their Rules

Soccer and Football or other field games

There are no field markings for the field games so many of the fouls and out of bounds issues are loosely held in play.

Student's play these games on the honor system as well as class informal leaders will take charge to direct the games.

- It is important for students to help divide up the teams evenly as much as possible.
- Teams should choose a captain for their side and have that person help direct their team.
- Rough play as observed by the supervisor should be stopped if the following occurs:

✓ Watch for physical grabbing of clothes, tripping, kicking or unfair use of the ball.

✓ Also watch for students kicking and tripping others that do not even have the ball.

✓ Listen for voices of cooperation, arguing or anger.

Bump (Basketball Court)

Setup and Equipment: 2 Basketballs, Basketball Court – Free Line marked

Objective: The object of the game is to "bump" the other players out of the game by making a shot before the person in back of you in the line does.

- Order is established by forming a line at the free throw line.
- All players must attempt their first shot from this point.
- The first and second players in the line get a basketball. Play begins with the first person in line taking the first shot.
- After the 1st player shoots, the 2nd player may shoot.
- If the first shot by a player is missed they must follow their rebound and try to make a basket from anywhere on the court.
- The game at this point is between player #1 and #2
- If player #2 makes a shot before the first player, then player #1 is "bumped" from the game.
- If Player #1 makes a shot, the ball should be rebounded and immediately passed to the third player in line. The contest is now between players #2 and #3.
- Players may only touch their own ball. There is no basketball skill involved in hitting a basketball with another basketball, so this is not allowed in the official rules of "Bump". MHES students do play this way, but they are only allowed to bump the ball with their ball ONE time.

Four Square

A diagonal is in the corner of the one (1) box.1 serves by bouncing the ball into any of the three boxes, trying to prevent that player from bouncing it back in his



box. If the player returns the ball, he stays and the 1 player is out. If not, that player is out. The next player moves into the 4 box and the players move up. The object of the game is to move up to the 1 box, and stay there.

Tetherball

The game is won when one player has wrapped the rope as far as it can go in her/his own direction. One player serves, then the other player can strike the ball or the ball has wrapped four times before the server can strike the ball again. This actually gives the receiver the advantage, because he gets the first chance at unrestricted control of the ball. Given the disadvantage of serving the server may choose in which direction to hit for each game. Each new game the server may choose a different direction.

Violations – may result in the loss of a game match

Unintentional violations may include

- ✓ Touching the rope
- ✓ Carrying or throwing the ball
- ✓ Double hitting
- Intentional violation:
 - ✓ Grabbing the pole

Gaga Ball

- The line starts outside, on the corner of the left side of the entrance.
- The first **20 players** enter the Gaga pit after everyone has exited.
- Enter and Exit the Gaga pit through the cutaway.
- The first two players who are waiting to play next are the judges.
- Judges use their best manners and are honest.
- All players start with one hand touching the wall.
- The first person to enter the pit throws the ball in the air.
- Players yell "Ga," "Ga," "Ball" as the ball bounces on the ground.
- Once "Ball" is shouted everyone may leave the wall, and the game starts.
- Players hit the ball with an open hand.
- Players may not hit or scoop the ball.
- Players hit the ball once unless it hits the wall or another player.
- If the ball hits a person below the knee, even off another person or the wall, the person is out.
- If a player hits the ball twice in a row, then they are out.
- If a player hits the ball with two hands, they are out.
- If a player hits the ball out of the pit, then they are out.
- Players cannot use the wall to protect themselves.
- When five players are left, players may hit the ball up to three times in a row.
- When two players are left, everyone counts up to 10 and the game is done at that time.
- To ensure that more students can play during a recess period, the adult supervising the game will set a timer for 5 minutes. At the end of 5 minutes, everyone counts to 10 and the game is done at that time.

Safe Use of other Playground Equipment

Slides

Students must go down the slide from the top down feet first.

Unsafe acts on the slide that need to be corrected include: trying to climb up the slide not using the steps, not sitting down and going feet first, two going down the slide at the same time, touching, grabbing, or pushing another person using the slide.

Swings

One child is allowed to use a swing at a time. Watch for the area around the swing and call for any students to move away from the safety of the swing moving.

No twisting of the swing around and around. Swing back and forth, not side to side.

Climbing Toys

Several students at a time may use these toys. Watch for unsafe acts which include kicking or pushing (king of the mountain type of games). Playing tag is NOT allowed on these toys.

4. Map of Playground



5. Playground Discipline, Resolving Conflicts, Positive

Supervision

When a student breaks a guideline, remind them of the proper conduct. For example: A student runs up the slide. Go over to the student and remind them of the guideline, "Remember, we go down the slide on our bottom." You can also ask them to tell you what the guideline for the slide is. If the student continues the behavior you can give them an alternate activity for a period of time (ex. swings) or for the rest of that recess. If the student repeats the behavior (ex. Climbing up the slide) after you have addressed it three or more times, you may write the student an office referral.

Office referrals should be limited to physically dangerous offenses, continued insubordinate behavior, or continued disregard for guidelines/rules.

When a student has a conflict with another student, we need to help them problem solve and talk through the problem together using their words. Many times after each student is given an opportunity to present their thoughts/feelings they are able to come up with a solution that works for both parties and is also kind.

Bullying

How can you tell if someone is being bullied? Is it bullying or a peer conflict? Bullying is usually three parts, repeated, intentional, and there is a real or perceived power imbalance.

 Joking Around Everyone is having fun. No one is getting hurt. Everyone is participating equally. 	 <u>One Time Thing</u> Someone is being mean on purpose. It's a reaction to a strong emotion or feeling. It happens once and does not repeat.
 <u>Conflict</u> Two people with a balance of power that have a fight, argument, or disagreement. A Solution can usually be found. 	 <u>Bullying</u> Repeated, unwanted aggressive behavior towards someone. Someone is being hurt on purpose. Can be social, verbal, physical, or cyber.

Appendix I

<u>Reporting</u>	Vs. Tattling
You are reporting to keep yourself or someone else safe.	You are tattling to get someone else in trouble or avoid the blame.
The problem is important or urgent.	The problem does not need to be solved right now.
An adult is needed to help solve the problem.	It is not an important problem and an adult does not need to step in.
You are reporting to help someone else.	You are tattling to control someone else.

6. Playground Reporting of Emergencies

Communications:

Walkie talkies are used to communicate with the office. Be sure that you or your recess supervision partner has the recess walkie talkie located in the office. The first team to have recess duty for the day will get it from the office and the last team will return it to the office after the last lunch recess of the day. To operate: be sure that the volume is turned up all the way and that it is set to channel 1. Depress the button, wait a second and then speak into the walkie talkie. To listen for a response: take your fingers off of the button and listen. Identify yourself by person and your location, then state your needs. Walkie talkies are turned on in the office and are operated by secretaries and administrators. It is important to keep your conversations professional.

Playground Intruders:

Intruders may include adults that:

- Have not checked into the office yet to get a VISITOR pass
- Have no business being on the school grounds and do not have children in our school
- Intend to commit unsafe acts

If you see a person on the playground without a visitor pass, kindly approach them, say "hello," and ask them to check in at the office or at the gate to obtain a visitor pass. Checking in at the office and wearing the visitor pass helps us keep students safe. Do not allow an adult to remove a student from the playground without office approval.

If you see a person that through visual weapons screening may have a weapon, or makes you feel uncomfortable, report to the office via radio and request assistance. Be prepared to give a detailed description to admin.

Evacuation signal (fire alarm):

The traditional bell signal will sound to evacuate the building. Students on the playground will stop playing and line up in their designated spot. If their designated grade level spot is not on the playground, find a safe place in the field for them to line up and listen for further instructions.

Administration will determine if the building will evacuate and say so over the intercom, "Evacuate for fire, this is a drill" two times. Or in the case of fire, "Evacuate for fire," two times.

In the event of an earthquake, first, drop, cover, and hold on. When safe to do so, proceed to designated evacuation area outside.

Listen for directions that the drill or threat is over, then proceed with activity as normal.

Lockdown or Secure:

In the event that SECURE (threat outside the building) is called, you will hear, "Secure! Get Inside. Lock outside doors" two times. Unless otherwise instructed, you would bring kids inside from the playground. The school would lock the perimeter doors, have indoor recess, and may limit travel between buildings. Inside the building it can be business as usual.

In the event of a lockdown (threat inside the building), you will hear, "Lockdown! Locks, lights, out of sight!" two times. If you are on the playground, you will get all of the students to the North Gate as quickly and quietly as possible. There is a CX key on the first aid pack that will open the gates. Get students to safety.



Weather Conditions

Be sure to wear appropriate clothing so you are prepared for outside duties.

If recess has to be indoors, refer to the indoor recess plan.

Appendix I For rainy days, please limit certain areas. No slides, for example. If the field becomes too muddy, administration may call for a blacktop only recess, please adjust supervision accordingly. Keep students from jumping in puddles. We have a very limited amount of children's clothing.

Ice and Snow Days: It is important to be aware of slippery areas and have students use caution or stay away from those areas. If you see areas of ice that do not look like they have been addressed, please call the office on your walkie talkie so they can inform the custodians. If students are properly dressed, it's possible to still have outdoor recess and administration will let you know if there are changes to the recess schedule or location for the day as soon as they can. If weather changes while on duty, please radio the office.

7. Cafeteria Supervision Guidelines

Students

- Be friendly and say, "thank you," to our kitchen staff
- Use serving tongs or spoons to select your food
- Walk to assigned table and move all the way down until a side fills up, then go to the other side. No saving seats.
- Sit on your bottom and face the table. Feet on the floor/to yourself
- Touch only your tray and food
- If you drop something, pick it up and throw it away
- Carry your tray with two hands
- After you finish your food, you may visit the sharing box
- Only put unopened food in the sharing box



Cafeteria Duty Guidelines

- Be on time to your duty
- Help students fill in tables appropriately by going as far down the bench as they can, then to the other side when the bench is full.
- Walk around and monitor students. Voice levels should be at inside level 2 or lower.
- To correct behavior, make a connection, then correct.
- Remind students to be responsible for their tables and garbage. They can pick it up and throw it away.



- Ensure that students are raising their hand and asking to get out of their seat for water, sharing box, napkins, bathroom, etc.
- Use appropriate attention getters if the cafeteria is getting too loud. Clapping a rhythm, then reminding them of voice levels works well. No whistles in the cafeteria.
- Be sure that you are helping with garbage, spills, and cleaning tables when students leave to be ready for the next grade level. Cleaning rags and cleaning solutions are located on the cart with garbage bags.



Playground Equipment Safety Standards



Instructions for Acquisition of New Playground Equipment

Risk Management (503) 356-4560

District Goal: All students will show continuous progress toward their personal learning goals, developed in collaboration with teachers and parents, and will be prepared for post-secondary education and career success.

The Beaverton School District recognizes the diversity and worth of all individuals and groups. It is the policy of the Beaverton School District that there will be no discrimination or harassment of individuals or groups based on race, color, religion, gender, sexual orientation, gender identity, gender expression, national origin, marital status, age, veterans' status, genetic information or disability in any educational programs, activities or employment.

Playground Equipment Safety Standards Instructions for Acquisition of New Playground Equipment

The following information is provided to identify the kinds of equipment that is allowed to be installed on school playgrounds and provide guidelines which must be followed when a school principal formulates plans for acquiring new playground equipment. Prior to installation of new equipment on a playground, the principal or an appropriate designee is expected to analyze its use, establish rules for its use, instruct teachers on how the equipment should be used safely, and see that children are informed about any rules for use of the equipment. Three times per year, after Summer, Winter and Spring breaks, safety practices on the playgrounds and playground equipment should be addressed in staff meetings and in homerooms. Inspection of the playground should be performed on a regular basis by the custodian. Although playgrounds and school safety are a continuous part of the educational program, special attention is required when new equipment is added. If you have questions about installation of equipment, please contact the Risk Management Office at (503) 356-4560.

PROCEDURES FOR NEW PLAYGROUND EQUIPMENT

- Step 1The principal will communicate to the Risk Management Office the school's intention to
develop a plan for a playground which includes the acquisition of new equipment.
- Step 2Risk Management will provide catalogues from recommended vendors, noting approved
and disallowed equipment features offered by the various vendors.
- Step 3Risk Management will be available to meet and explain criteria for deciding which vendors
and equipment are recommended, and share information on general safety guidelines to
consider when selecting play equipment.
- **Step 4** After a vendor and equipment are selected, a scale drawing of the proposed structure and plan is to be submitted as a *Capital Improvement Plan* to Facilities and to Risk Management for review and approval. The vendor will also submit with the drawing a Certificate of Insurance for the vendor's company and the manufacturer, along with a letter from the manufacturer, which states the proposed equipment meets all current U.S. Consumer Product Safety Commission Guidelines for Public Playground Safety.
- Step 5The installed structure should be secured, posted with appropriate signage, barrier
taped/snow fenced off during the time the concrete footings cure. Steps should be taken
to assure no one accesses the equipment during this time.
- Step 6The Vendor, Principal and Risk Management will inspect the installed structure together
and a certified playground inspector will complete a District form, confirming satisfactory
installation. The Vendor will then warrant that all equipment conforms to all current U.S.
Consumer Product Safety Commission (CPSC) guidelines.
- **Step 7** Equipment is then released to the school for active play.

FACTORS TO BE CONSIDERED

A. <u>Planning and Development</u>

Parent and staff involvement in the planning and development of school playground is both desirable and constructive. Involvement by parents and staff will be directed by the school principal. e.g. school playground committee, parent clubs, etc. Planning and development of school playgrounds are subject at all times to guidelines which govern the safety and welfare of students.

B. Installation

Independent contractors may be hired to install equipment with the following conditions met prior to final approval of a project.

- 1. Submission of a hold harmless agreement.
- 2. Submission of a certificate of insurance with liability limits of at least
 - \$1,000,000 with a reputable carrier rated A+ or better. (by A.M. Best Co.)
- 3. Submission of proof of workers' compensation insurance coverage.
- 4. Approval of the selected contractor by the vendor.

C. <u>Americans with Disabilities Act</u>

All new playground projects will comply with the Americans with Disabilities Act. Access and like play will be goals included in all new projects.

D. <u>Safety Standards</u>

All playground equipment installed on school grounds must be as free of hazards as possible. The following minimum criteria must be met for each piece of equipment. The requirement is to meet all current Consumer Product Safety Commission (CPSC) guidelines.

- 1. Construction shall be free of points, sharp edges, tight angles, and protrusions that can cut or puncture.
- 2. Equipment shall be free of pinch and crush points.
- 3. Equipment shall be free of openings or angles that can entrap body parts.
- 4. Equipment must be fastened securely to the ground so that it cannot be moved by older children.
- 5. Ladders with treads in place of rungs shall have handrails.
- Equipment shall be arranged to minimize the chance of children striking other parts of the equipment or adjacent equipment if they should fall from elevated levels such as platforms. Platforms must also be equipped with standard guard rails or the equivalent.
- 7. Provision for adequate free zones between pieces of equipment to assure children can exit equipment safely without risk of colliding with another piece of equipment or children exiting other equipment.
- 8. 5 inch poles, larger decks, 6 ft deck height on 5-12 yr old, 4 ft deck height on 3-5 years.

9. Don't over crowd play areas with too much equipment. Don't functionally connect equipment which waives the encroachment zones.

Metal Modular Structures are the District's first choice for new play equipment. Due to safety, maintenance, and supervision requirements, the following features in a structure are:

Preferred:	Slides - see standard	
	Spiral slides	
	Curved slides	
	Double slides	
	Horizontal ladders	
	Clatter bridges	
	C & S Horizontal ladders	
	Rings	
	Turning bars	
	Fireman's pole	
	Large decks (4ft x 4ft min)	
	Talk tubes	
	Parallel bars	
Acceptable Features:	Corkscrew	
	Chain ladder	
	Belt swings - see standard	
	Cargo nets	
Discouraged:	Track rides	
	Tunnel slides	
	Roller slides - see standards	
	Ribbon/banister slides - see standards	
	C & S pipe tunnel climbers - see standard	
	Crawl tunnels more than 28" long	
	Arch climbers	
	Jungle gyms	
	Log rolls	
	Space net climbers	
	Climbing walls that block line of sight supervision	
	Tire Swings	
	Tire Climbers	

Other features are subject to approval by Risk Management.

SAFETY STANDARDS

The District is required to meet all relevant safety measures recommended in the U.S. Consumer Product Safety Commission's guidelines. The following are our safety standards:

UNDERLAYMENT:

Minimum of 12" of woodchips under all play areas according to current U.S. Consumer Safety Commission guidelines. (Minimum 12" of woodchips after settlement.)

Maintenance:

Wood chips will be inspected daily by the building custodian for broken glass and foreign material. All such material should be removed on a daily basis. Depth of wood chips should be noted daily and leveled to maintain minimum cushion depth of 12" under all active play areas. When it is no longer possible to maintain the minimum 12" depth, a work order will be issued requesting a delivery of additional chips to bring a sufficient amount to restore the minimum 12" or other appropriate depth.

Structure supports:

Footings for structure supports shall be excavated to a minimum of 34" in depth below the natural compacted soil and 12" in diameter. A minimum of 28" of cement mix is to be poured as the footing, leaving 6" of open excavation to be backfilled with gravel after the concrete has cured.







HEIGHTS:

Maximum height for any climbing or standing surface not protected by a protective barrier or guardrail is 20". A barrier shall completely surround surfaces higher than 30" except for necessary entrance and exit openings, which must have protective side railings and/or hand grips. Barriers shall have infill of solid panels or vertical members to prevent higher climbing. No climbing or standing surface will be more than six feet above the ground level. Platform surfaces elevated 30" or more above the underlying surface require a protective barrier at least 38" in height. Tops of barriers shall not provide a walking or sitting surface.

Maintenance:

Weekly inspections should look for loose or damaged rails or supports which should be repaired, reinstalled or replaced immediately.

SHARP POINTS, CORNERS, EDGES, PROTRUSIONS, PROJECTIONS:

Play equipment shall present no sharp edges, protruding points or ends that could cut, puncture skin or catch clothing. Finishes and surfaces shall not abrade children's skin or catch upon clothing.

Recommendations:

All metal edges shall be hemmed, eased, rolled, curled or capped. Shield exposed ends of tubing, rods, and threaded bolts with fixed protective caps which do not extend more than 1/2 their diameter. Caps shall require special tools for removal.

Maintenance:

Check wood parts regularly for potential slivers and splinters. Sand or refinish as needed. Check metal seams so that no sharp edges have been exposed. Check that all bolt and pipe end protective caps are in place. Replace as needed.



Example of a hazardous protrusion that increases in diameter from plane of initial surface and forms an entanglement hazard and may also be an impalement hazard.

> Example of a hazardous protrusion the extends more than 2 threads beyond the and forms an impalement/laceration hazard and may also be an entanglement hazard.

PINCH AND CRUSH POINTS:

Play equipment shall have no accessible pinch, crush or scissors-like areas caused by adjacent moving components.

Recommendations:

Shield or enclose moving parts of equipment so body parts cannot be pinched, crushed or caught during normal use or reasonably foreseeable abuse.

Maintenance:

Check regularly that shields enclosing moving parts are in place and all parts are in good working order.

ENTRAPMENT: OPENINGS/ANGLES

Play spaces shall have no angles or openings which can trap and injure part of the body, nor spaces where someone can be trapped by another person.

Recommendations:

No component should form angles or openings that could trap any part of the body.

Crawl spaces such as pipes and tunnels must be designed to permit easy access by adults and visibility for supervision.



All angles on equipment more than 10 degrees above the horizontal should exceed 55 degrees. Cover equipment angles less than 55 degrees. Distance between two opposing interior surfaces shall not be less than 9 inches when measured perpendicular to each surface, unless the accessible openings are completely unbound at the bottom or less than 24 inches above the ground. To guard against strangulations, equipment openings must be less than 3.5 inches or more than 9 inches inside diameter.



Vertical infill, for handrails, barriers and the like, must be 3.5 inches apart, or less, to prevent entrapment. In general, accessible parts of moving apparatus and components next to moving children, should be designed so they cannot catch a child's clothing.

Maintenance:

Check regularly that breakage's, vandalism or objects brought into the play area do not present hazards which could catch or constrain parts of the body or clothing. The most appropriate way to inspect for hazardous openings is through use of test fixtures.

SWINGS:

Recommendations:

Swing seats shall be slash-proof, reinforced rubber sling on frames. Limit opening between swing seat and triangular support system where the seat is attached to the chain to 2 inches or less. Space regular swings a minimum of 24 inches apart and with a minimum clearance of 30 inches from end supports.



D1 = 30" Min.
D2 = 24" Min.
D3 = 12" Min. for Preschool-Age 16" Min. for School-Age 24" Min. for Tot Swings
D4 = 20" Min.

Figure 23. Minimum Clearances for Single-Axis Swings

Suspension chains shall be electro-galvanized ¼" grade 30 chain. The entire fall zone for swings must have a resilient surfacing of impact absorbing material to a minimum depth of 12" per CPSC guidelines.

Maintenance:

Check swings to ensure that all bearings are secure with all bolts in place; show no sign of wear and are well lubricated.

Replace worn swing seats, seat yokes, "S" hooks and chain links as well as top swing hangers and their attendant hardware.

Ensure all "S" hooks are securely closed and show no signs of excessive wear. Replace lightweight "S" hook with 3/8" x 2" models.

RINGS:

Recommendations:

The first hand hold on either end of the support structure should not be placed directly above the platform or climbing rung used for mount or dismount. Swinging rings should be installed at an appropriate height for access by intended age group using the area. Avoid long length of chain which can be flung around the top rail. Rings should have 3/8" diameter and heavy-duty S-hooks. The size of ring should meet entrapment guidelines. All other conditions related to swings, apply.

Maintenance:

Inspect chains and "S" hooks to ensure links are closed and securely fastened, and show no signs of excessive



SLIDES:

Sliding is a beneficial play activity for balance, excitement and a feeling of accomplishment.



Recommendations:

Location and size:

Orient slide beds between northwest and northeast compass points to minimize heat build-up on the slide bed. Free standing slides should have a horizontal access platform at least 22" long between ladder and slide bed to provide a safe transition from standing to a seated posture. The platform should have a width at least equal to the width of the slide and should have no spaces or gaps between the platform and the start of the slide bed. The slide bed should be approximately twice as long as it is high, not exceeding 30 degrees to the horizontal. Separate all return stairs from slides to prevent falling from the slide onto a tread. Slides should never be more than 8 feet above the ground.



Types:

Consider alternatives to the straight slide, like bump, spiral, slides and fire poles.

Locate access ladder and support away from both sides and end of spiral slide to prevent injury to dangling arms and legs.

Access:

Slide support structures should not have side bracing which can be climbed. Design for single file access on ladders to entrances of single slides of 8 feet in length located above grade. Enclose the risers of steps and ladders to free-standing slides to prevent children falling through or being pulled off.



Minimum Side Height for Slide with Circular Cross Section

Provide an enclosed debarkation platform for slides over 4 feet above grade to prevent falls.

Limit slide entries to no wider than the width of the sliding surface. Provide protection at the top of a slide with a top rail and guard rails or a tunnel to prevent accidental falls. Install the slide bed flush with the entry platform or with a smooth transition between platform and slide entry.

Slide Bed:

Slide beds should be 16 gauge, minimum, stainless steel or vandal resistant plastic.

Design slide sides to a minimum height of 4" along the entire length, with a profile which makes comfortable hand grips.

Exits:

Provide slide exits with a smooth out-run parallel to the ground for a minimum distance of 12", but no longer than 16". Raise the slide out-run no more than 15" above the ground. Slide exit edges should be rounded a minimum of 1/4" diameter.

Maintenance:

Test that steps up to slide are not wobbly. Check that slide bed is free of protrusions, rough surfaces, clothing catch points. Check that all structures, bolt fittings and hardware shall be tight and secure. Check metal components for rust or sharp edges. Refinish as necessary.

MODULAR PLAY STRUCTURES:

Modular or component play structures with combinations of play equipment provide opportunities for uninterrupted, continuous and flowing play. These structures should have component units which are easily maintained or replaced without dismantling the entire structure. We require 5 inch poles and large decks (4ft x 4ft min) that cycle through a lot of kids.

Recommendations:

Locate slides and ladders separate from one another to prevent jumping from steps to slide midway. Structures with fire poles should situate the pole to have a minimum distance from the access platform of 18" and a maximum distance of 20". The pole should extend at least 38" above the top of the access platform. Structure should provide multiple access points and the design should satisfy all entrapment, guardrail and barrier criteria.

USE ZONE:

The use zone for each piece of equipment is made up of two parts:

1. **The fall zone**: an area under and around the equipment where protective surfacing is required and should not overlap the end.

2. **The NO-Encroachment zone**: an additional area beyond the fall zone where children using the equipment can be expected to move about and should have no encroaching obstacles.

The fall zone should extend a minimum of six feet in all directions from the perimeter of the equipment.

Slides:

The fall zones in front of the access end to the sides of a slide shall extend a minimum of 6 feet from the perimeter of the equipment. The fall zone in front of the exit of a slide shall extend a minimum distance of 6 feet from the end of the slide chute or for a distance of height plus 4 feet whichever is the greater.



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Swings:

Because children may deliberately attempt to exit from a swing while it is in motion, the fall zone in front of and behind the swing should be greater than to the sides of the swing. It is recommended that where possible, the fall zone extend to the front and rear of a swing a minimum distance of 2 times the height of the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The fall zone for the sides of a swing should follow the general recommendation and extend a minimum of 6 feet from the perimeter of the swing structure in accordance with the general recommendation for all zones. This 6 foot zone may overlap that of an adjacent swing structure.

Swings need to be located at the far end of the play structure so kids running do not run in from of the swings. We recommend the Tri-pod swings unless space is limited. If space is limited, we require 5' poles that are buried deeper in the ground.

RECOMMENDED VENDORS QUALIFICATIONS FOR PLAYGROUND EQUIPMENT

Qualifications vendors must meet before selling equipment to the Beaverton School District:

- 1. Quality of products.
- 2. Liability Insurance limits for manufacturer and sales company of at least\$1,000,000 with a reputable A+ rated carrier. (A. M. Best Co.)
- 3. Commitment to safety.
- 4. Warranty
- 5. Reputation in industry.
- 6. Assurance that all equipment complies with current U.S. Consumer Product Safety Commission guidelines. IPEMA Certification is preferred.
- 7. Authorization by manufacturer for vendor to inspect completed installation and certify equipment is properly installed according to manufacturer's intent.
- 8. All play structure designs must meet ADA requirements.

BSD puts an emphasis on multiple access and departure points. Priority should be given to move a large number of kids through the structure.

PRINCIPAL'S CHECKLIST OF ADMINISTRATIVE PROCEDURES FOR IMPLEMENTING A PLAYGROUND PLAN WHICH INCLUDES THE ACQUISITION OF NEW EQUIPMENT

(NOTE: Photocopy this chart. It should be used as an aid in preparing your plan.)

School _____ Date _____

Anticipated Completion Date _____

Check Box □ As Each Item Is Completed.

Parent-Teacher Group/Principal

Communication of intention to develop a plan:

- 1. D Principal to contact Risk Management.
- 2.
 ☐ Reference catalogues received from Risk Management.
- 3.
 Risk Management meetings to discuss safety related issues. Observe piece or pieces of equipment being considered in catalogues or on site. Contact Risk Management for assistance.
- 4. D Submit a *Capital Improvement Plan* to Facilities. Include, from the vendor, a Certificate of Insurance naming the Beaverton School District as Additional Insured, as well as, a letter stating the equipment meets CSPC Guidelines.

Principal/Risk Management

- 5.
 Install Equipment
- 6.
 ☐ Equipment inspected by a Certified Playground Inspector for satisfactory installation.
- 7. **D** Equipment released for active play.

See pages 1 and 2 for further details concerning the above steps.



PLAYGROUND MATERIAL CERTIFICATION

Vendor is required to submit signed and certified affidavit station that the equipment/material supplied meets or exceeds the ADA Accessibility Guidelines for Play Areas (ADAAG), American Society of Testing Materials (ASTM) standards for public playgrounds, and the Consumer Product Safety Commission (CPSC) guidelines.

 Signed this ______ day of ______, 20 _____

 By: ______

Title: _____

Address:

Subscribed & Sworn to before me this _____ day of _____, 20____

Notary Public

c: <u>risk@beaverton.k12.or.us</u> (Risk Management) District Office School Property File (Facilities Department)

PLAYGROUND EQUIPMENT
INSTALLATION INSPECTION
CERTIFICATION

Date: To Whom It May Concern, I, , am authorized by to inspect the installation of the playground equipment sold to the ______ School District at ______Elementary School and installed during calendar year ______. _, 20___, I inspected the installation of the playground at On equipment Elementary School and hereby warrant that the equipment has been installed according to the manufacturer's design and specifications. No defect in the installation was found. I further warrant that all the equipment inspected complies with all current U.S. Consumer Product Safety Commission Guidelines for Public Playground Safety. Signed this ______ day of ______, 20 _____ By: _____ Title: Address: Subscribed & Sworn to before me this _____day of _____, 20____

c: (Risk Management) District Office School Property File (Facilities Department)

Notary Public



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TÜV SÜD America Inc. **Product Safety Services**

1755 Atlantic Blvd. Auburn Hills, MI 48326

Phone: (616) 546-4600

IPEMA IMPACT ATTENUATION REPORT - ASTM F1292-17A		
Participant: Soil Express, Ltd. Main Office Address: 733 Marilee Road Gunter, TX 75058 Phone: 972- 347 - 2994 Manufacturing Location ID: Gunter, TX Commercial Name of product: EcoKid Express Date of Manufacture: Unknown No. of samples submitted: Approx. 8 Cu. Feet Test	TUV Report No.: 72145164-3 Report Date: 1/21/2019 Test Date: 1/18/2019 Selection: Initial: Follow up Ref Job: Sample Receipt Date: 1/15/2019 Ambient Air Temperature: 22.1 °C Humidity: 14 %	
Alpha Automation. Triax. TUV System 5:	Environmental Chamber No.: PLYP00101	
Alpha Automation, Triax, TUV System 4:	Calibration Due Date: 9/13/2019	
Accelerometer ID: PLYP00144	Environmental Chamber No.: PLYP00069	
Accelerometer Calibration Date: 4/10/2018	Calibration Due Date: 9/13/2019	
Loose Fill Mate	rial Sample Description:	
Engineered Wood Fiber:	Un-compacted Depth: 15 Inches	
Rubber Nuggets: Rubber Buffings: Sand: Gravel:	Compacted Depth: <u>12</u> Inches	
Other:		
Unitary Sa	ample Description:	
Tiles:	Total Thickness:	
Poured in Place:	Top Layer:	
Other:	Base Layer:	
Turf System	Sample Description:	
Turf:	Turf Pile Height: Inches	
Pad:	Pad Thickness: Inches	
Aggregate:	Aggregate: Inches	
Infill:	Infill Amount: Lbs./Sq. Ft.	
<u>Comments:</u>	Infill Type:	
The above described sample was tested at : 12 Ft. The results reported herein reflect the performance of the above described samples at the time of testing and at the temperature(s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently. The following data sheet provides an accurate representation of the test results.		
Sample in compliance with ASTM F1292-17a at the temperature and ratin	g specified? Yes 🗹 No 🗌	
Signature: Reviewed by: Title: Project Coordinator Date: 1/21/2019 Reviewed by: D Title: Reviewed Manager Date: 1/29/2019		
Reference Temperature -6°C, (21.2°F) Reference Temperature 23°C, (73.4°F) Reference Temperature 49°C, (120.2°F) Specified Theoretical Theoretical Impact Height Velocity Velocity HIC HIC G-Max Drop Height G-Max Drop Height G-Max HIC (Ft.) (ft/s)(ft/s) (ft.) (ft.)

Manufacturing Location ID: Gunter, TX

Drop

TUV Report No: 72145164-3

Participant: Soil Express, Ltd.

Test Date: 1/18/2019

Appendix M

Velocity

(ft/s)

Theoretical

Drop Height

	()			(π/s)	(ft.)			(π/s)	(ft.)			(π/s)	(ft.)
1	12	76	276	27.8	44265149:	71	300	28.0	791779373	78	366	27.8	442651493
2	12	88	450	27.9	101669620	83	385	28.1	512980754	98	527	28.0	791779373
3	12	91	447	28.0	79177937:	99	520	28.1	512980754	109	604	28.1	512980754
Aver	age	89.5	448.5			91	452.5			103.5	565.5		
Measured Surface Temperature		-6°C	$C \qquad Max. Change from reference + 5°C, (5°F)$			23°C	23°C Max. Change from reference $\pm 3^{\circ}$ C, (5°F)			49°C Max. Change from reference -3°C, (-5°F)			
Sample Condition:		Frozen				Damp				Dry			
		Reference Temperature -6°C, (21.2°F)				Reference Temperature 23°C, (73.4°F)			Reference Temperature 49°C, (120.2°F)				
Drop	One foot over (Ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)
1					0				0				0
2					0				0				0
3					0				0				0
Aver	age	0	0			0	0			0	0		
Measured Surface Temperature		$^{\circ}C$ Max. Change from reference + 5°C, (5°F)			°C	Max. Change from reference \pm 3°C, (5°F)			°C Max. Change from reference -3°C, (-5°F)				
Sample Condition:													
		D.C.	T		(21.205)	D.C		2200	(72.405)	Defe	T		120.295)
	One foot under	Reference Temperature -6°C, (21.2°F)				Reference Temperature 23°C, (73.4°F)			Reference Temperature 49°C, (120.2°F)				
Drop	(Ft.)	G-Max	HIC	Velocity (ft/s)	Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Drop Height (ft.)
1					0				0				0
2					0				0				0
3					0				0				0
Aver	age	0	0			0	0			0	0		
Measured Surface Temperature		$^{\circ}C \qquad Max. Change from reference + 5^{\circ}C, (5^{\circ}F)$			°C	Max. Change from reference $\pm 3^{\circ}$ C, (5°F)			°C Max. Change from reference -3°C, (-5°F)				
Sample Condition:													
					A	SUD meri	ca						