

PLAYGROUND SAFETY INSPECTION REPORT

U.S. Consumer Product Safety Commission
and
American Society for Testing and Materials

PREPARED FOR
SAN BERNARDINO CCD
CHILD DEVELOPMENT CENTERS



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ALL ENTITIES WITHIN THE STATE OF CALIFORNIA OPERATING A PLAYGROUND OPEN TO THE PUBLIC, ARE REQUIRED BY JANUARY 1, 2003, TO COMPLY WITH THE GUIDELINES FOR PLAYGROUND EQUIPMENT SAFETY, FROM THE CPSC AND ASTM, AND TO UPGRADE THEIR PLAYGROUNDS BY REPLACING OR IMPROVING THE EQUIPMENT AREAS.

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San Bernardino Community College Child Development Center
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ATTACHMENT I

CPSC PUBLICATION NO. 325 - HANDBOOK FOR PUBLIC PLAYGROUND SAFETY,
TIPS FOR PUBLIC PLAYGROUND SAFETY, AND TEN STEPS TOWARD A SAFER
PLAYGROUND

ATTACHMENT II

CPSC DOCUMENT #1005 - PLAYGROUND SURFACING MATERIALS

ATTACHMENT III

ASTM DESIGNATION: F1487-07a--STANDARD CONSUMER SAFETY
PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC
USE

ATTACHMENT IV

NATIONAL PARKS & RECREATION PAMPHLET – THE DIRTY DOZEN

INTRODUCTION

The purpose of this report is to ensure the playgrounds at the Child Development Centers for San Bernardino CCD are in compliance with the current inspection requirement and to improve the overall safety of the playgrounds. The value of creative and challenging play is universally accepted, but it should also be safe.

The inspection was performed as part of the SWACC Property & Liability program to ensure any hazards are identified and corrected.

METHODS

The methods used in preparing this report were:

- Walk-through inspections, which allowed for observations on the general state of the playground – its condition, spacing, relationship to surroundings, landscaping, visibility, and accessibility.
- A closer inspection of the equipment, which entailed looking for sharp points and edges, protrusions and entanglement hazards, trip and fall exposures, pinch points, structural deficiencies, loose attachments, and paint chipping.
- Measurements of equipment, use zones (often referred to as ‘fall zones’), and surfacing depth to check compliance with the CPSC guidelines and ASTM standards. Specific NPSI designed compliance probes, templates, and gauges were used. Only those measurements not in compliance are listed.
- Observation of use patterns, particularly the ages of the children using the equipment, and supervisor monitoring during recess periods.

A copy of the National Recreation and Parks Association Pamphlet: “The Dirty Dozen” is enclosed. It provides well-written descriptions of the hazards referred to by name in the report.

The goal of our playground safety inspection was to (i) promote safety awareness, (ii) assist in the identification of conditions which may pose a risk of injury and/or property damage, and (iii) provide recommendations and/or suggestions to help mitigate the risks identified. Keenan does not guarantee that it has identified every potentially hazardous condition existing on the Client’s premises. Similarly, it does not promise that following the recommendations contained in this report will eliminate all risk of injury or property damage.

Keenan’s services are not a substitute for regular, ongoing inspection and maintenance, or any required service that is to be performed by a licensed or certified service professional. Please keep in mind that changing circumstances can affect your risk exposures and periodic reassessments of your operational environment are recommended.

SITE SPECIFIC RECOMMENDATIONS

SAN BERNARDINO VALLEY COLLEGE

The play areas are separated into age appropriate sections for pre-school (2-3 years old) and infantile (6 months-2 years old). For the pre-school children there are 2-3 classes per session with 17-19 children per session. This would equate to a maximum of 50 children per play session out in the playing areas. For the infantile children, there would be a maximum of 32 children per session. The supervision ratio to children is 1:8 but at the time of the inspection, it was approximately 1:6. The child development center has a formal self inspection program with a checklist utilized for supervisors to use. The checklist is not consistently utilized, but more of a visual inspection is conducted. Any identified hazards are reported to the director, Melissa Thompson, and Melissa in turn, will generate an electronic work order for corrective action with the facilities department. The general condition of the play area is clean and orderly. Specifically, the play equipment is ASTM and CPSC compliant and sufficient shade is available.

Recommend a formal self-inspection program be utilized on a consistent basis. Visual inspections should be conducted daily and equipment inspections weekly.

Main Play Area

photo 1



The surface material is unitary pour in place which meets ASTM and ADA guidelines and compliance. Observed no visible issues with the equipment at the time of the inspection.

Red Bus

photo 2



Observed no visible issues with the equipment at the time of the inspection.

Play Equipment

photo 3



Observed no visible issues with the equipment at the time of the inspection.

Swing set

photo 4



Observed no visible issues with the equipment at the time of the inspection.

Play area at other end

photo 5



The wood chips used to provide fall protection below the play equipment was shallow in areas. The fall cushioning depth should be maintained at least to the level of the marks on the support structure

throughout the entire fall zone. The height of the equipment should determine the type and depth of the fall protection material selected. In order to provide suitable fall protection the District should review Table 1 (Critical Heights of Loose-Fill Materials) in the CPSC *Handbook for Public Playground Safety*.

Wood chip playground area photo 6



The wood chip surface material should be replenished specifically near the asphalt border. There is an approximate 8" drop into the play area.

Asphalt border photo 7



The asphalt border is cracked and broken. This should be repaired.

Classrooms

photo 8



The unsecured items are in the area of children's play and could present an inadvertent tip-over. The items should be properly stored or removed.

Classrooms

photo 9



This area is between the 2 classroom buildings and is accessible to the children. Housekeeping needs to improve and the items either properly stored or removed.

Infant Area

photo 10



The bolts pose potential eye protrusions and impalement hazards and should be cut to a length less than 2 threads (CPSC 9.2). **This hazard was observed throughout the perimeter of the chain link fence.**

Infant Area

photo 11



Observed no visible issues with the equipment and surrounding area at the time of the inspection.

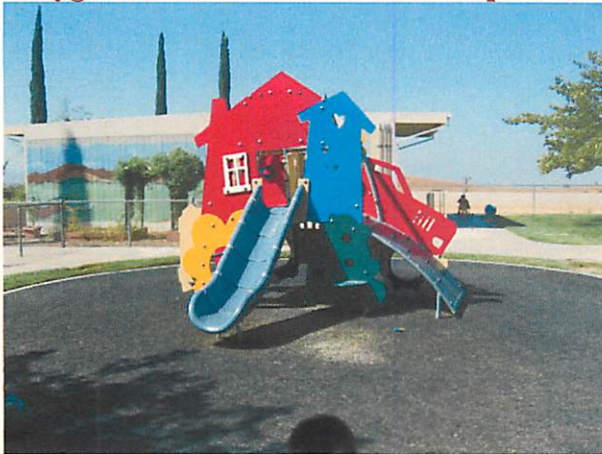
SITE SPECIFIC RECOMMENDATIONS

CRAFTON HILLS COLLEGE

The play areas are designed by age appropriateness for infants (6 months-2 yrs. old) and toddlers (2-5 yrs. old). There are a total of 96 children enrolled in the CDC with each session holding 48. The infant section is not being utilized for its design, but for overflow or lunch time for the toddlers. The ratio of supervisor to child is 1:8, but appeared to be a lesser ratio at the time of the inspection. Within the last year, the CDC has had a new play equipment composite structure installed by "Design for Play". The surface material for the play equipment is unitary pour in place which meets ASTM and ADA requirements.

Playground Area

photo 12



Observed no visible issues with the equipment and surrounding area at the time of the inspection.

Infant area

photo 13



The bolts pose potential eye protrusions and impalement hazards and should be cut to a length less than 2 threads (CPSC 9.2). **This hazard was observed throughout the perimeter of the chain link fence.**

Infant area

photo 14



Observed no visible issues with the equipment and surrounding area at the time of the inspection.

GENERAL RECOMMENDATIONS

Table: Critical Heights (In Feet) of Tested Materials

Material	Uncompressed depth			Compressed Depth
	6 INCH	9 INCH	12 INCH	9 INCH
Wood Mulch	7	10	11	10
Double Shredded Bark Mulch	6	10	11	7
Uniform Wood Chips	6	7	12	6
Fine Sand	5	5	9	5
Coarse Sand	5	5	6	4
Fine Gravel	6	7	10	6
Medium Gravel	5	5	6	5

The Critical Heights shown in the above table may be used as a guide in selecting the type and depth of loose-fill materials that will provide the necessary safety for equipment of various heights. There may be other loose-fill materials such as bark nuggets or shredded tires that have shock absorbing properties equivalent to those in the above table. However, no tests have been conducted on these materials by CPSC staff.

The depth of any loose-fill material could be reduced during use resulting in different shock-absorbing properties. For this reason, a margin of safety should be considered in selecting a type and depth of material for a specific use.

The table should be read as follows: If, for example, uncompressed wood mulch is used at a minimum depth of 6-inches, the Critical Height is 7-feet. If 9-inches of uncompressed wood mulch are used, the Critical Height is 10-feet. It should be noted that, for some materials, the Critical Height decreases when the material is compressed.

The EWF was probed to a depth of 4-inches before compaction was evident. A depth of 6-inches (for wood mulch and double shredded bark mulch) is recommended for playground equipment of 6 or 7-feet in height.

The sand below the equipment is compacted and/or shallow. The height of the equipment determines the required depth of the fall protection material. Additional sand or another type of material may be needed in order to provide appropriate fall protection. If the sand under the equipment has sufficient depth it should be turned over, or tilled when it packs down as to increase its cushioning properties, and reduce the chance of injury should a fall occur. We recommend that sand be raked at regular periodic intervals to ensure safe and level fall zone material.

During the inspection there was sufficient supervision of children using the play equipment and play areas. Playgrounds that are designed, installed and maintained in accordance with safety guidelines can still present hazards to children in the absence of adequate supervision.