# Mayor's Office on Disability Accessible Play Areas



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#### **Purpose**

The Mayor's Office on Disability has developed this Play Area ADA Inventory Form and Equipment Checklist as an access guideline for architects, landscape architects, community groups, contractors, and playground equipment manufacturers.

The purpose for this checklist is to be transparent and predictable during the plan review and field inspection of all publicly funded playground projects. These projects are reviewed for quality control and assurance by the Mayor's Office on Disability, the Department of Public Works, the San Francisco PORT and others, in order to achieve compliance with the 2010 American's Disabilities Act Accessibility Standards ADAS). Play equipment requirements from the 2010 ADAS have also been incorporated into Section 11B-240 of the 2013 California (2013 CBC) and San Francisco Building Code which went into effect on January 1, 2014.

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   Specific to Play Areas for CCSF projects
- Play Area ADA Inventory Form This form shall be scanned onto the playground construction plans



**COMPOSITE PLAY STRUCTURE** 

### Instructions for Using the San Francisco Play Area ADA Inventory Form and Equipment Checklist

#### How to Use the Inventory Form and Checklist

Step 1: Review the Purpose, Minimum Submittal Requirements, Policy Statements, Definitions, and Referenced Standards found in this document. Note: in some cases, MOD Standard has more restrictive standards than those found in the 2010 ADAS.

Step 2: Complete the Play Area ADA Inventory Form. One form is required for each age group. Provide the following information on each form:

- A. Identify age group served. Fill out one form for each group of equipment.
- B. Provide project information including: project name, location, and responsible party contacts.
- C. Document Path of Travel information based upon the actual features provided on site, and explain whether the project as a whole is new construction versus an alteration (new play equipment) added to an existing site or facility.
- D. Review the definitions of terms used on the inventory.
- E. Provide documentation showing compliance with *ASTM Standards*. Note these compliance sheets must be scanned onto the plans.
- F. Identify the number of required elevated play components on an accessible route.
- G. Identify the number and type of accessible ground level play components.
- H. List the elevated play components and show on the plans which ones are located on an accessible route.
- I. List the ground level play components by name and type. Identify where these can be found on the plans.

Step 3: Use the Minimum Submittal Requirements to prepare your plans. Scan the completed Play Area Inventory Form(s) on the plans.

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#### MINIMUM SUBMITTAL REQUIREMENTS

- Three sets of plans. When plans are ready for approval, two sets will be returned to the project sponsor, and one set retained by MOD.
- The Title sheet of the plans shall reference all applicable standards including the 2010 ADAS, the 2013 CBC, ASTM F-1487, ASTM F-1951, and ASTM F-1292.
- Compliance documents for ASTM F-1292 and ASTM F-1951 shall also be scanned onto the plans.
- The Play Area ADA Inventory Form shall be scanned onto the plans. Note: One form shall be completed for each specific age group.
- Photos or manufacturer cut sheets shall be provided for each play component and scanned onto the plans.
- A key to all the play components shall be provided on the Site Plan, corresponding to Tables H and I
- Path of Travel information showing the accessible route, parking, toilets, telephones etc.

Benches, picnic tables and other kinds of seating are encouraged to be placed around and sometimes in the play area.

Where feasible, provide separate space to park strollers near the play area in order to avoid creating obstructions within the play area or its *use zone*.

#### **City and County of San Francisco Policy Statements**

In addition to the requirements found in Section 240 and 1008 of the 2010 ADAS, the Mayor's Office on Disability and the DPW and Port ADA Coordinators have adopted the following policies for playground projects located at either SF City owned or funded locations. See Appendix A for detailed code language.

- Playgrounds shall be designed for the maximum integration of children with disabilities so they can engage in creative and inclusive play activity with their companions and parents, including those who may also have disabilities.
- In composite play structures, required accessible ground level components shall be integrated with elevated play components, and shall be served by an accessible route.
- 3. The Mayor's Office on Disability has revised the 2010 ADAS Table 240.2.1.2 to increase the number of required accessible ground level play components.
- 4. As used herein, an accessible route shall comply with 2010 ADAS 402.2 and 302 and 2013 CBC equivalent code provisions, and shall consist of walks, ramps, transfer tiers, bridges or other elevated play elements.
- 5. **Stand-alone play elements cannot be a substitute** for the requirement for types or quantities of *accessible ground level play components* in *composite play structures*.
- 6. When transfer systems are used as an accessible route to connect ground level and elevated play components, then the transfer platform shall have a straight edge to facilitate an unobstructed transfer.
- 7. When *transfer systems* are used, they shall **include two transfer support grab bars, handles, or equivalent**. Note: panel cutouts do not typically meet this requirement.
- Poured in place rubber, rubber tile or artificial turf surfaces complying with ASTM F 1292 standard are the only approved ground surfaces and surface materials utilized for impact attenuation and accessible routes within the use zones.
- It is recommended that running slopes along accessible routes shall be less than 5% in order to avoid handrail requirements in the play environment use zones and circulation areas.
- 10. Stairs in play areas and composite play structures shall comply with 2010 ADAS Section 504 Stairways, except handrail heights for children's use in 2010 ADAS Advisory Section 505.4 are permitted within the composite play structure. Reach range to accessible play component operable parts shall comply with 2010 ADAS Advisory Section 308.1.
- 11. Conditionally, sand pits may be permitted. Where sand or water play is provided, a sand or water play table is required and it shall comply with the 2010 ADAS 902.4 Dining & Work Surfaces for Children's Use.
- 12. Where seating or tables are provided for children or adults, at least <u>20%</u> but no less than one shall be accessible.





Composite play structures come in many forms, like metal & fiberglass, wood & timbers and net structures



Ground Level Play Component Physical Activity Element



**Braille Tactile Activity Panel** 



Ground Level Play Component Symbol ~ Search Game



**Standard Transfer Tier** 



**Transfer Tier on Back of Play Truck** 



Ramp providing access into a composite play structure

Accessible Playgrounds are designed and built to provide the maximum integration of children with disabilities, so they can engage in creative and inclusive play activity with their companions and parents, including those who may also have disabilities.

**REFERENCED STANDARDS** 

2010 ADA Standard (2010 ADAS)

2013 California Building Code (2013 CBC)

2013 San Francisco Building Code

Appendix A: Mayor's Office on Disability's Play Area Design Standards Specific to Play Areas Designed and Constructed for or on Behalf of the City and County San Francisco ASTM F 1292-99 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (Refer to 2010 ADAS section 1008.2.6.2).

ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment

(Refer to 2010 ADAS section 1008.2.6.2).

ASTM F 1487-01 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use

(Refer to 2010 ADAS section 106.5).

ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

(Refer to 2010 ADAS section 1008.2.6.1).



Transfer tier into sand pit



Composite structure with many ground level play components

#### **DEFINITIONS**

**Accessible Route**: A continuous unobstructed path connecting accessible elements and spaces of an accessible site, building or facility that can be negotiated by a person with a disability using a wheelchair and that is also safe for and usable by persons with other disabilities.

**Children's Use**: Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

**Composite Play Structure**: Two or more *ground level and elevated* play components attached or functionally linked to create one integral unit that provides more than one play activity.

**Elevated Play Component**: A play component that is approached above or below grade and that is part of a *composite play structure* consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

**Ground Level Play Component**: A play component that is approached and exited at the ground level.

**Operable Part:** A component of an element used to insert or withdraw objects, or to activate, deactivate, operate or adjust the element.

**Play Type:** The central experience provided by the *play component*. Examples of play types include but are not limited to: rocking, swinging, climbing, spinning, sliding, sand play, water play, audible and interactive.

**Play Area**: A portion of a site containing *play components* designed and constructed for children.

**Play Component:** An element intended to generate specific opportunities for play, socialization, or learning. *Play components* are manufactured or natural; and are stand-alone or part of a *composite play structure*.

**Transfer System**: A *transfer system* provides a platform unto which children using wheelchairs can transfer. Transfer steps from the platform provide a means of access from the platform to *elevated* play components. The transfer platform must have a straight edge where the transfer is intended to occur.

Use Zone: The *use zone* is the ground level area beneath and immediately adjacent to a play structure or equipment. The dimensional clearance is determined in ASTM F 1292 for unrestricted circulation around the equipment and on the surface. This is the area that a user would land, either by falling from or exiting from the equipment. If a use zone is part of an accessible route, transfer space or wheelchair turning space, then it must meet ASTM F 1951 – 99.

## APPENDIX A: DESIGN STANDARDS SPECIFIC TO PLAY AREAS DESIGNED AND CONSTRUCTED FOR OR ON BEHALF OF THE CITY AND COUNTY OF SAN FRANCISCO

Play areas are now included in the requirements of the 2010 Americans with Disabilities Act Standards (2010 ADAS) and the 2013 California Building Code (2013 CBC), and building permits are required for play area design and construction. All building permit applications for new construction, alteration and additions to buildings and facilities that are publicly funded, in whole or in part, by or on behalf of the City and County of San Francisco must first be approved by the Mayor's Office on Disability (MOD) or by a Department of Public Works (DPW) ADA Coordinator before submittal for permit application intake to the San Francisco Department for Building Inspection (DBI). This process was established by the Mayor of San Francisco, through executive order dated June 22, 1998, to ensure that all construction projects undertaken by the City's Departments are accessible to and usable by persons with disabilities.

The City and County of SF Design Standards Specific to Play Areas is intended to ensure that opportunities for inclusive and creative play experiences are available to children with disabilities and their play companions and parents, including those who may also have disabilities.

Instructions, Project Intake Form,
Project Sign-Off Form, Play Area ADA
Inventory Form and fee schedule are
included on the Mayor's Office on
Disability Web site at:

http://www.sfgov2.org/index.aspx?pag e=422 .

Upon request, MOD or DPW's ADA Coordinators are available to provide assistance in filling out and completing these applications.



#### St. Mary's Recreation Center Playground

The following are scoping and technical requirements that are required for play areas designed and built for, by or on behalf of the City and County of San Francisco. The numbering system is related to that of the 2010 ADAS. Additional requirements are highlighted in bold and underlines text or italicized and strike out for deleted or replaced text. Other 2010 ADAS scoping and technical requirements are not shown in the following. A fully integrated scoping and technical standard is available from MOD by request at 415-554-6789, 415-554-6159 fax, 415-554-6799 TTY or via email at MOD@SFGOV.org

#### **201.1 SCOPE**

201.1.1 PLAY AREAS. The following are scoping and technical requirements that are required for play areas designed and built for, by or on behalf of the City and County of San Francisco.

MOD-SF 201.1.1.1 DESIGN AND CONSTRUCTION PLANS. The applicant shall fill out and complete a play area inventory form for each play area and specifically for a separate form for age group served. The form shall be scanned into the design and construction documents for the play area site and equipment construction documents. Additional instructions for document to be placed in drawings are included in the form.

MOD-SF 201.1.1.2 APPEAL. In order to acknowledge the need for inclusive and creative play experiences, MOD or DPW may consider and accept applicant's appeal of specific technical requirements included in the following additional scoping and technical standards applicable to the 2010 ADAS. Regardless the play area shall comply with the minimum requirements of the 2010 ADAS and 2013 CBC.

**240.2 PLAY COMPONENTS.** Where provided, play components shall comply with 240.2.

**240.2.1 GROUND LEVEL PLAY COMPONENTS.** Ground level play components shall be provided in the number and types required by 240.2.1. Ground level play components that are provided to comply with 240.2.1.1 shall be permitted to satisfy the additional number required by 240.2.1.2 if the minimum required types of play components are satisfied. Where two or more required ground level play components are provided, they shall be dispersed throughout the play area and integrated with other play components.

MOD-SF 240.2.1.1 Where elevated components are located on composite play structures, the ground level accessible play component shall be located on or within the composite structure. Free standing play components do not substitute the requirement for integration of play components on or with a composite structure.

## MOD-SF TABLE 240.2.1.2 NUMBER AND TYPES OF GROUND LEVEL PLAY COMPONENTS REQUIRED TO BE ON ACCESSIBLE ROUTES

| Number of<br>Elevated<br>Play<br>Components<br>Provided | Minimum Number of Ground level Play Components to be on an Accessible Route     | Minimum Number of Different Types of Ground Level Play Components to be on an Accessible Route |
|---|---|--|
| 1   | <u>1</u> Not<br>Applicable  | <u>1</u> Not<br>applicable   |
| 2 to 4  | <u>2</u>  | <u>2</u>   |
| 5 to 7  | <u>3</u> 2  | <u>3</u> 2   |
| 8 to 10   | <u>4</u> 3  | 3  |
| 11 to 13  | <u>5</u> 4  | 3  |
| 14 to 16  | <u>6</u> 5  | 3  |
| 17 to 19  | <u>7</u> 6  | 3  |
| 20 to 22  | <u>8</u> 7  | 4  |
| 23 to 25  | <u>9</u> 8  | 4  |
| 26 and<br>over  | 8, plus 1<br>for each<br>additional<br>3, or<br>fraction<br>thereof,<br>over 25 | 5  |

**206 ACCESSIBLE ROUTES.** 

**206.2.17 PLAY AREAS** 

MOD-SF 206.2.17.3 ACCESSIBLE ROUTES
THROUGH PLAY AREAS. Accessible routes
intended for use general site circulation
that may pass adjacent or through the play
area or play equipment shall comply with
11B-307 Protruding Objects and 11BChapter 4 Accessible Routes.

#### CCSF 1008.3.1.1 TRANSFER PLATFORMS,

SIZE. Transfer platforms shall have level surfaces 14 inches (355 mm) deep minimum and 24 inches (610 mm) wide minimum.

The 24" shall be straight for its full length.

CCSF EXCEPTION: A nominal variation in curvature or other shaped edge and riser is permitted on MOD or DPW's approval, on a case by case basis to accommodate use of themed materials and creative designs.

MOD-SF 1008.3.1.4 TRANSFER SUPPORTS. At least one means of support for transferring shall be provided. The support shall be a vertical element positioned above the transfer platform. A 15 degree variation in vertical positioning is permitted.

MOD-CSF 1008.3.1.4.1 The transfer support shall be .95 inches to 1.55 inches in nominal diameter or cross section. Non-circular cross sections are permitted. It shall provide 4 inches minimum clear and unobstructed space for finger and hand grasping and gripping. The gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges. It shall be firm and stable, and not flexible.

CCSF 1008.3.1.4.2 The full length of the gripping surface shall be within the reach ranges listed in 1008.4.2.2.

CCSF 1008.3.1.4.3 The support is permitted to be an integral component of another element of the composite play structure, or a part of a thematic element.

1008.4 Play Components.

MOD-SF 1008.4.2.1 REACH RANGE. A play components' operable parts are a component of an element used to insert or withdraw objects, or to activate, deactivate or adjust an element, or with manipulative or interactive features. An accessible play component for children seated in wheelchairs or on seated or crawling position on transfer systems or elevated platforms or decks shall be mounted so that its operable parts and transfer supports are within the reach ranges listed in Table 1008.4.2.1 and 1008.4.2.2.

MOD-CSF 1008.4.2.1.1. Where a clear floor or ground space allows a parallel approach to an element and the high reach range is over an obstruction, the height of the obstruction shall be 18" maximum and the depth 12 inches maximum. Table 1008.4.2.1 and 1008.4.2.2 high reach range shall be reduced 6 inches minimum.

MOD-CSF 1008.4.2.1.2. Reach ranges for other elements are recommended in the 2010 ADA Standard's Advisory 1008.4.2 Clear Floor or Ground Space.

## MOD-CSF TABLE 1008.4.2.1 CHILDREN'S REACH RANGES ABOVE THE WHEELCHAIR ACCESSIBLE PLAY SURFACE UNDER, AROUND OR ADJACENT PLAY EQUIPMENT OR COMPONENTS

| Forward or side reach range <b>from:</b> | Ages 3 and 4 | Ages 5 thru 8 | Ages 9 thru 12 |
|--|--------------|---------------|----------------|
| High (maximum)                           | 36 inches    | 40 inches     | 44 inches      |
| Low (minimum)                            | 20 inches    | 18 inches     | 16 inches      |

MOD-CSF TABLE 1008.4.2.2 CHILDREN'S REACH RANGES FROM A SEATED POSITION ON TRANSFER PLATFORMS, TRANSFER STEPS AND THE TRANSFER ACCESSIBLE DECKS OR PLATFORMS WHERE ACCESSIBLE ELEVATED PLAY COMPONENT ARE LOCATED, INCLUDING REACH RANGE TO TRANSFER SUPPORTS.

| Forward or side reach range from: | Ages 3 and 4                                    | Ages 5 thru 8 | Ages 9 thru 12 |
|-----------------------------------|---|---------------|----------------|
| High (maximum)                    | <u>24"</u>                                      | <u>25"</u>    | 28"            |
| Low (minimum)                     | The surface upon which the child may be seated. |               |                |