

## **PlaySafe and Live Well!**

Welcome to PlaySafe, LLC's informational column. Every month we will work hard to provide you with up-to-date information on topics related to parks, recreation, health, wellness, and physical education. Our hope is that by providing you with detailed information, you will go forward and positively change the world. If you have questions or comments, or if you would like to share your thoughts, please contact us through this web site. Thanks. Now PlaySafe and live well!

### **Some Important Considerations for Designing and Purchasing a New Playground**

By Butch DeFillippo

With Special Guest Duke DeFillippo – Creative Recreational Designs, Inc

We have been designing playground sites for over 30 years, and it is one of the most exciting and rewarding aspects of our jobs. We wanted to share with you some thoughts on key items to consider when you are designing a play area and purchasing new playground equipment. Often there are opportunities to make your day easier by working with a trusted playground company and expert consultant. With minimal direction these professionals can design a playground to meet your guests' needs while maintaining a budget. In this article we will discuss important considerations that should be addressed by your staff, playground supervisors, the management team, and even your local police.

How do you design and build something if you don't know what you want? Often this simple question is forgotten in our constant rush to complete projects on time. Failure to identify your goals can lead to frustration, arguments, and disappointment in the playground when it is completed. A key initial action is to define your goals for a playground. We have to ask ourselves many questions and find the answers about the reasons why we are building a playground. Questions and answers such as: Is the new playground to cater to children with special needs? If so, there are many types of equipment that can create an inclusive area; there are types of equipment that provides musical tones, visual play, or different textures. Do we have supervision? We need to discover how many supervisors we need and how many are available. Are there other playgrounds in the area (maybe at the same site) that we do not want to duplicate? This could be the age group (2-5 or 5-12) that is served, or the activity (upper body, imaginative, or balance).

We also have to educate the members of the community that are helping us with the playground project. Typically, when non playground professionals think of a playground area, they picture a big climbing structure (often called by them - Monkey Bars) and swings. Many times the volunteers do not have knowledge of new playground equipment designs/components, the owner's maintenance abilities, or the abilities of children. They often choose what they remember enjoying as a child or what they think looks cool.

Another consideration is the location of the playground to be installed. Since the Americans with Disabilities Act (ADA) was approved, pathways to the playground, entry into the play area, safety surfacing, and the play equipment must all be ADA compliant. Typically, Civil Drawings are not needed for the physical play area, but they may be required for ADA access to the area from the parking lot or entrance into the property. Within the play area there are ADA considerations as well. Did you know that most playground manufacturers state that the ground under the play equipment should not have more than a 2% difference in grade? Generally speaking, if you can see a change in grade then you have exceeded the manufacturer's maximum difference. If an area has a grade issue, it should be addressed in the design, which will save both time and money. The solution to a grade issues may be something as simple as designing and creating a retaining wall to maintain loose-fill materials such as; sand, wood chips, rubber mulch or gravel. Mistakes can increase quickly, for example: if the area is 100 feet long at a 3% slope the height difference is 3 feet. This type of change in grade greatly affects the installation (and the costs for the installation) and makes it difficult for the play equipment to be compliant to ASTM, CPSC and ADA requirements. Equipment such as ADA transfer decks, slide exits, and overhead climbers have to be within specific height ranges and a 3% grade can make the installation of the equipment difficult or even impossible to achieve.

These types of questions and answers must be discussed, debated, and solutions found during early planning. There are real world examples of groups failing to plan that have had terrible consequences. A discussion near the beginning of the planning process about the entire play area may lead a group to talk about fencing around the playground and that may prevent a child from being struck by a passing car after excitedly running out of a play area.

In addition to physical goals of our playground we must also define our supervision goals. There are two types of supervision that we will discuss; first is the parent/caregiver supervision of children playing on a site and the other is after-hours viewing of the playground. The ASTM F1487 Section 14 defines what type and the wording of signs and labels on playgrounds. All quality manufacturers provide signs and labels that meet the ASTM requirements. One ASTM requirement is that the playground safety signs state a message communicating supervision recommendations. We believe the supervision message is extremely important and should be visible when arriving at the playground. Envision a mother taking her two children (age 3 and 10) to the park. Our experience has shown that most likely the mother will be paying more attention to the younger child (they often need more assistance) which leaves the older child unsupervised for much of the time. Ideally we want both children supervised, however in the real world this does not occur. A design consideration to assist the adult would be to provide equipment with "open lines of sight." This type of design allows the supervisor to watch children while they are playing on the equipment. Equipment such as: crawl tubes, solid play panels, below deck panels, tube slides, and large climbing walls would restrict the supervisor's view and would not be used. An open design can be a ground level play design for example; Landscape Structures' Evos, Kompan's Galaxy or GameTime's Xscape. Almost every manufacturer of playground equipment has an open line of equipment that allows for easy supervision of children. The open lines of sight design leads us to the second type of site supervision, the police. These men and women must patrol areas that have playgrounds after dark and during inclement weather. Playgrounds with open lines of sight would make

their difficult job a little easier by allowing an officer to utilize their patrol car's spotlight to view the entire area and can make it more difficult for delinquents to hide and vandalize your equipment.

It is imperative that the designer of a playground have in-depth knowledge of playground safety requirements, the ADA, child development, and current trends of playground designs. If the owner or operator of a playground doesn't communicate their goals, we can guarantee that most of them will not be met. Informed, caring playground sales representatives can be a tremendous resource, and those that don't understand what they are doing can be a great distraction.

Additional design areas that owners may wish to think about when designing or purchasing a playground are:

Vandalism - Most manufacturers offer a more durable materials options. Rather than offering a plastic slide (which is expensive to replace) vendor can use a metal slide or banister rails (banister rails are angled metal railings that provide a sliding activity, but are far less likely to be damaged). Another option that can be used in play areas where vandalism may occur is either precast concrete or Glass Fiber Reinforced Concrete (GFRC). This material is often seen with natural or themed playgrounds. Providers of both materials offer touch up paint with their designs to quickly cover any graffiti with very little effort or experience in playground repairs from the maintenance crew. Additionally, the strength of precast concrete, or GFRC, is greater than plastic components and may reduce equipment damage.

Graffiti - Some manufacturers offer a hot dipped galvanized post system, rather than a powder coated item. This design feature allows graffiti to be easily removed without having to provide touch up paint on your posts.

However, if these types of considerations are not passed along to the designer, then we will get traditional designs which may cost far more for the owner in the long run.

In today's workforce it is easy to get overwhelmed and sometimes we just pass a project to someone else (in house or a vendor). Projects that include playground designs should keep in mind that we are building something for children to play on. We cannot, and should not, jeopardize a child's life or safety because it is easier to pass along a project. We cannot stress enough the importance of designing and purchasing playground that will last, be fiscally responsible, and help our children grow. Our consulting practice has had the unforgettable opportunity to be involved with injuries, fatalities, and lawsuits involving playgrounds and children and would not wish any of you to experience them. With your help and commitment to being informed consumers we can create playgrounds that delight families and enrich children's lives.