Children’s play areas

A guide to standards for playground equipment and surfacing (BS EN 1176 series: 2008)
Children’s play areas

Playgrounds provide adventure, exploration and fun and are an important part of childhood, but it is essential that they are managed carefully, so that risks are maintained at an appropriate level.

Playgrounds offer an exciting and challenging environment where children can explore and develop their abilities. Navigating swings, slides, roundabouts, climbing frames and other equipment can teach important problem-solving skills and help to develop physical strength, coordination and balance.

Playgrounds naturally involve some risk-taking, and some bumps and bruises are to be expected during adventurous play. But manufacturers of playground equipment, and organizations that manage public play areas, can help to prevent serious accidents and reduce the risk of permanent injury by following good practice.

Children’s play areas: the basics

BS EN 1176 is a series of standards that spells out good practice in the design, manufacture, installation and maintenance of playground equipment in public spaces. The standards recognize that ‘good risks’ are an important part of children’s play and the main aim is to reduce ‘bad’ risks – which are those that children and their parents (or other carers) cannot realistically foresee or avoid.

Parents have a responsibility to supervise young and less competent children, and provide guidance where necessary.

Standards are developed by committees of relevant stakeholders, e.g. from industry and consumer groups, who use their specialist knowledge to ensure that all of the key issues are addressed. BS EN 1176 was developed by experts from the UK and across Europe and is used in all major European countries.

BS EN 1176 only covers play equipment and surfacing in public play areas, such as local authority parks, schools, pubs, holiday parks and shopping outlets. A separate group of standards (BS EN 71 Safety of Toys) deals with domestic play equipment used in private homes and gardens. It is important that those responsible for play areas use the right equipment, and standards, for the location.

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Manufacturers/Suppliers

All playground equipment should be designed to minimize the risk of falls, lacerations and entrapment.

Structural strength
Equipment should be strong and stable enough to support:
• Children of different ages and abilities
• Large groups of children using an item at the same time
• Adults who may need to gain access to help a child

Protection against falling
Design should minimize the risk of falls by:
• Reducing opportunities for very young or less able children to access equipment with steep or sudden differences in height. For example, by designing ladders with a higher first rung.
• Providing handrails, guardrails, barriers or narrow openings at higher levels.
• Assessing the equipment to remove hazards where possible (such as posts or beams) underneath high risk fall areas.
• Placing an Impact Absorbing Surface (such as synthetic, rubber tiles or tree bark) underneath high or moving equipment.

Protection against entrapment
There should not be any openings, moving parts, or protrusions, which could potentially trap hair, clothing, or body parts.

Protection against lacerations
Equipment should not have:
• Sharp edges
• Rough surfaces that are likely to corrode or splinter
• Hard edges – these should be rounded or appropriately covered.

Give clear instructions
Play equipment should come with clear instructions to operators about how to:
• Install the equipment correctly
• Maintain or service the equipment
• Arrange repairs

Playground operators

Those that manage play areas (such as local authorities and schools) should:

Install equipment correctly
• Install all equipment and surfaces according to the instructions
• Arrange for equipment to be inspected immediately after installation by a member of the Register of Play Inspectors International (RPII)

Carry out regular inspections
Equipment and surfaces may become worn over time, or damaged by misuse or vandalism. To ensure that the play area remains fit for use the operator should:
• Arrange for regular visual inspections to assess the general condition of the site
• Arrange for regular safety inspections to be carried out by a suitably qualified inspector
• Arrange for appropriate repairs to be carried out by a suitably qualified person

Give clear information to consumers
The operator should clearly display the following information at the play area so that users can report incidents and call emergency services if necessary:
• Site maintenance operator telephone number (and website if appropriate)
• Emergency telephone number 999
• Playground name and site address
Frequently asked questions

Q. What is BSI?
A. BSI is the UK’s National Standards Body. It has been developing standards for more than 100 years to make products and services safer and better for consumers. Standards set out good practice and guidelines for organizations to follow. BSI is a member of the European standards body, CEN.

Q. Is there a legal requirement to comply with the standard?
A. No, standards are voluntary and organizations are not legally required to follow them. However, those that choose to comply with the standard are demonstrating a commitment to quality and safety. Adhering to the standard can satisfy insurers, and show that an organization has taken all reasonable steps to reduce the risk of serious injury.

Q. How does BS EN 1176 benefit consumers?
A. BS EN 1176 can help consumers by raising standards in the quality and design of public play areas. If the play area used by your child complies with the standards you can rest assured that judgements, based on Europe wide expertise, have been carried out, to balance the risk of injury with the benefits of exciting play opportunities.

Q. How does compliance with BS EN 1176 benefit the play industry?
A. The standard acts as a checklist to ensure that organizations don’t forget any key safety points. If an accident happens, and the equipment involved carries a label stating that it meets the standard, the insurers and courts should be satisfied that the appropriate measures have been taken to set risks at the appropriate level to protect users. This label will also help operators source replacement parts when needed. Standards can be used in a court of law to provide a benchmark of best practice.

Q. Where can I find a copy of BS EN 1176?
A. BS EN 1176 is available to buy from the BSI website (shop.bsigroup.com). Many libraries and universities can access reference copies of British Standards for you.