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Playground and recreational areas — Framework for the competence of playground inspectors and playground maintenance technicians

bsi.

National foreword

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 83, *Sports and other recreational facilities and equipment.*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

Based on a review of many international playground and recreation area standards, it is clear that there is a broad spectrum of competence in inspectors of playground environments that goes beyond just the black and white application of the various performance requirements found in current playground standards. Many maintenance and repair tasks can be easily identified and corrected with some very basic knowledge, experience, and skills. However, with the many elements involved in the playground environment, such as equipment, environment, children, an inspection of a playspace is not solely a "technical" inspection but also requires knowledge of how and why children of all abilities play. Inspectors should understand the way children play, interact, evolve, and develop to be able to make informed, balanced decisions about the safety of the playground environment. There is international consensus among experts to describe the needed competences of playground inspectors and technicians in the public playground environment. For maintenance technicians, this document intends to harmonize the intent of the different levels of inspections commonly being performed around the world.

As stated in EN 1176-1: "Risk taking is an essential feature of play provision and of all environments in which children legitimately spend time playing. Play provision should aim to offer children the chance to encounter acceptable risks as a part of a stimulating, challenging and controlled learning environment. Play provision should aim at managing the balance between the need to offer risk and the need to keep children safe from serious harm." The aim should be to provide as much play value as possible and as little safety as necessary. In this vision on the safety of playground environments it is essential that the inspector and maintenance technicians not only know the technical content of the related standards, but at a certain level of expertise also understand why and how to make risk assessments and/or a benefit-risk analysis.

The way in which children play and the public perception of children's play vary from country to country; with this in mind, it is vital that the inspector and technician be aware of the cultural differences that exist. They should be familiar with what is an acceptable level of risk or challenge for the country in which they are employed or contracted. Cultural and socioeconomic differences cannot and can never be an argument to withhold children from a beneficial risk/challenge while playing in a reasonably safe environment.

This document accepts that there can be variations in working practices in different countries. Irrespective of established systems, inspectors should have necessary competence to undertake the tasks.

The lack of safety knowledge by some product and layout designers cannot be compensated for by the expertise of inspectors or maintenance technicians. Owners/operators of one or more playgrounds have the responsibility for all operational aspects of the playspace and should have or acquire competency and knowledge. Installers should have correct detailed technical documents to work with as well as a basic level of knowledge about safety which can help to solve problems arising during installation. Manufacturers should have a high level of knowledge. In general, safety relates to everything from the inception of a playground project to the end of its lifecycle.

Staff training is vital to the success of a comprehensive program of playground management. The users of this document are encouraged to take this information and share it with everyone involved in the management and day-to-day operation of a public playground. The contents provide a road map for success in achieving well managed public playground environments; but, like any map, one should learn how to read it and understand the various keys and symbols found on the map.

Inspection and maintenance/repair are equally important; when implemented together they create a safer, clean, and functioning playground environment free of hidden dangers and known hazards that only a trained playground safety inspector and playground maintenance technician can identify and one that children deserve.

Timely and thorough inspections coupled with the application of proper routine and preventive maintenance practices should be considered standard operating procedures. This action requires trained persons with knowledge and experience in not just how to do something but also why it

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is required and when it is to be done to meet the manufacture/designer requirements for correct functionality and injury prevention. While knowledge is most important it also requires a certain amount of skill which comes with experience and additional training.

Regardless of the quantity or quality of these routine visual and operational playground inspections some playground owners can have licensing or legislated inspection requirements for specific types of play areas. Some types of playground inspections can require specific inspector education or certification in order to conduct these inspections. As an example, in Ontario Canada it is a commercial childcare center's licensing requirement to conduct an annual playground inspection including the testing of the impact attenuating surfacing. This type of annual inspection is becoming more common whenever the owner has been determined to have a higher duty of care. As a result, the owner requires a higher level of inspector competency and experience. An annual comprehensive inspection includes a thorough review of the entire playground environment, the playground equipment, the performance of the impact attenuating surfacing, and a discussion with the owner as to the playground's ability to meet the original intended goals and objectives of the owner's initial playground plan. As part of the annual comprehensive inspection report, the inspector should be looking for visual evidence that the owner has been conducting routine safety inspections and has performed regular custodial and preventive maintenance throughout the year. Playground owners are required to retain written records related to the installation, maintenance, repair, and inspections of each playground. To facilitate the record keeping, many equipment and surface system manufacturers provide forms and checklists. The inspector should review the owner's written inspection and maintenance records looking for visual and written evidence of routine playground maintenance practices. The playground owner cannot effectively maintain and repair the playground without access to these records. Therefore, the annual comprehensive inspection should be able to illustrate the playground owner's diligence in meeting emerging trends in usage while still meeting the minimum requirements for written documentation and record keeping as specified in the applicable local standards and guidelines.

Irrespective of how effective the playground inspection and maintenance program are there will likely be an incident that results in a serious injury to a playground user. How a playground accident investigation is addressed can make a big difference in the overall liability exposure of the playground owner or operator. An incident investigation should focus on cause or cascade of causes which can lead to prevention of similar injuries. Sound investigation can aid in litigation defence. Good risk management/loss control practices detail what to do in the event of an accident. The owner/operator should make sure there is an accident/incident procedure in place. If not, one should be prepared with the assistance of the owner's appropriate legal adviser to provide incident management. The policy or procedure should be approved by the appropriate authority and published as part of the standard playground operating procedures. This procedure should include an accident/incident report form and the appropriate staff should be trained on how to complete the form. This staff training should include appropriate content of verbal or written statements taken from witnesses or ones that can be made to the injured party, witnesses, and the media. The last thing the owner/operator needs is for an employee to make a statement that can be perceived as an admission of liability.

By following this document, the playground owner can implement the necessary steps to assure their playground inspectors and maintenance technicians have the necessary competencies required by persons conducting the various levels of inspections and maintenance/repairs previously mentioned and as documented in PD CEN/TR 17207:2018. It is recognized that different countries and jurisdictions have cultural, technical, and legal differences that play an important role in the provision of inspections, maintenance, repairs, replacement, and removal of recreation and play equipment and components.

Users of this document should familiarize themselves with the vocabulary commonly used in the field of playground performance. Without an understanding of the vocabulary, the owners/operators, inspectors, and maintenance technicians will find themselves at a disadvantage when it comes to reading, writing or communicating issues that can have serious consequences to the users of the playspace.

Although the focus of this document is specific to the public playground and the space in which it is situated, the information and principles can be generally applied to other aspects of public play and recreation features such as waterplay (splashpads), skateboarding, outdoor fitness, etc. that are found in public access settings.

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Playground and recreational areas — Framework for the competence of playground inspectors and playground maintenance technicians

1 Scope

This document gives guidance and requirements for the education, examination and evaluation of the inspectors' and maintenance technicians' competence concerning public playground and recreational areas. This document describes the knowledge and competence required for each specific task an inspector or technician performs.

This document is intended primarily for public playgrounds, but the principles are applicable to other recreational areas.

This document does not include benefit/risk assessment methods.

This document does not cover the competence of staff conducting product certification.

NOTE 1 The different types of inspections covered are: routine visual inspection; operational inspection; annual main inspection; post-installation inspection; post-accident inspection; pre-installation consultation; mid-installation surveillance.

NOTE 2 This document can be applicable to: roller-sport infrastructure; multi-sport arenas; outdoor exercise equipment; bouldering walls; portable and permanent socketed goals; parkour facilities; adventure playgrounds; ropes courses; inflatable play equipment.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TR 20183, *Sports and other recreational facilities and equipment — Injury and safety definitions and thresholds — Guidelines for their inclusion in standards*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/TR 20183 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
inspector
competent person (3.3) qualified to undertake inspections of *playground environments* (3.12)

3.2
competence
ability to apply *knowledge* (3.15) and skills to achieve intended results

[SOURCE: IWA 26:2017, 3.9]

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