

Swimming pool equipment

Part 4: Additional specific safety requirements and test methods for starting platforms

PUBLIC REVIEW DRAFT JANUARY 2019

PUBLIC REVIEW DRAFT

TECHNICAL COMMITTEE REPRESENTATION

The following organizations will be represented on the Technical Committee:

Kenya Life Saving Federation
Ministry of Health
Architectural Association of Kenya
National Environmental Management Authority
Intro Networks – Africa
Kenyatta University – Department of Physical and Health Education
Sports Stadia Management Board
Swimming Pool Contractors Association
Ministry of East African Affairs Commerce and Tourism
Kenya Swimming Coaches Association
Henkel Chemical East Africa
Kenya Red Cross
Kenya Bureau of Standards — Secretariat

REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

© Kenya Bureau of Standards, 2018

Copyright. Users are reminded that by virtue of Section 25 of the Copyright Act, Cap. 12 of 2001 of the Laws of Kenya, copyright subsists in all Kenya Standards and except as provided under Section 26 of this Act, no Kenya Standard produced by Kenya Bureau of Standards may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from the Managing Director.

Swimming pool equipment

Part 4: Additional specific safety requirements and test methods for starting platforms

KENYA BUREAU OF STANDARDS (KEBS)

Head Office: P.O. Box 54974, Nairobi-00200, Tel.: (+254 020) 605490, 602350, Fax: (+254 020) 604031
E-Mail: info@kebs.org, Web: <http://www.kebs.org>

Coast Region

P.O. Box 99376, Mombasa-80100
Nakuru-20110
Tel.: (+254 041) 229563, 230939/40
210555
Fax: (+254 041) 229448

Lake Region

P.O. Box 2949, Kisumu-40100
Tel.: (+254 057) 23549, 22396
Fax: (+254 057) 218

Rift Valley Region

P.O. Box 2138,
Tel.: (+254 051) 210553,

Foreword

This draft Kenya Standard has been prepared by the Aquatic Facilities Subcommittee in accordance with the standard development procedures.

There is need to ensure safety of pool users in aquatic facilities when using pool equipment. The draft standard outlines general safety requirements, test methods, instruction, information and marking with regard to swimming pool equipment.

This draft standard is Part 4 of a series of standards on swimming pool equipment.

In the development of this draft standard the following document was referred to:

BS EN 13451-4:2014 Swimming pool equipment Part 4: Additional specific safety requirements and test methods for starting platforms

Acknowledgement is hereby made for the assistance derived from this source.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a Kenya Standard does not of itself confer immunity from legal obligations.

PUBLIC REVIEW DRAFT

1 Scope

This draft Kenya Standard specifies safety requirements for lane lines and dividing line in addition to the general safety requirements of KS 2793-1:2018 and should be read in conjunction with it.

The requirements of this specific standard take priority over those in KS 2793-1:2018

This part of KS 2793 is applicable to manufactured lane lines for use in competition and training and dividing line for use in classified swimming pools.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

KS 2793-1:2018, Swimming pool equipment- Part 1: General safety requirements and test methods

3 Terms and definitions

For the purposes of this document, the terms and definitions given in KS 2793-1:2018 and the following apply.

3.1

starting platform

raised platform, located on the pool edge, for elevated entry into the water from a stationary start in a racing dive

4 Safety requirements

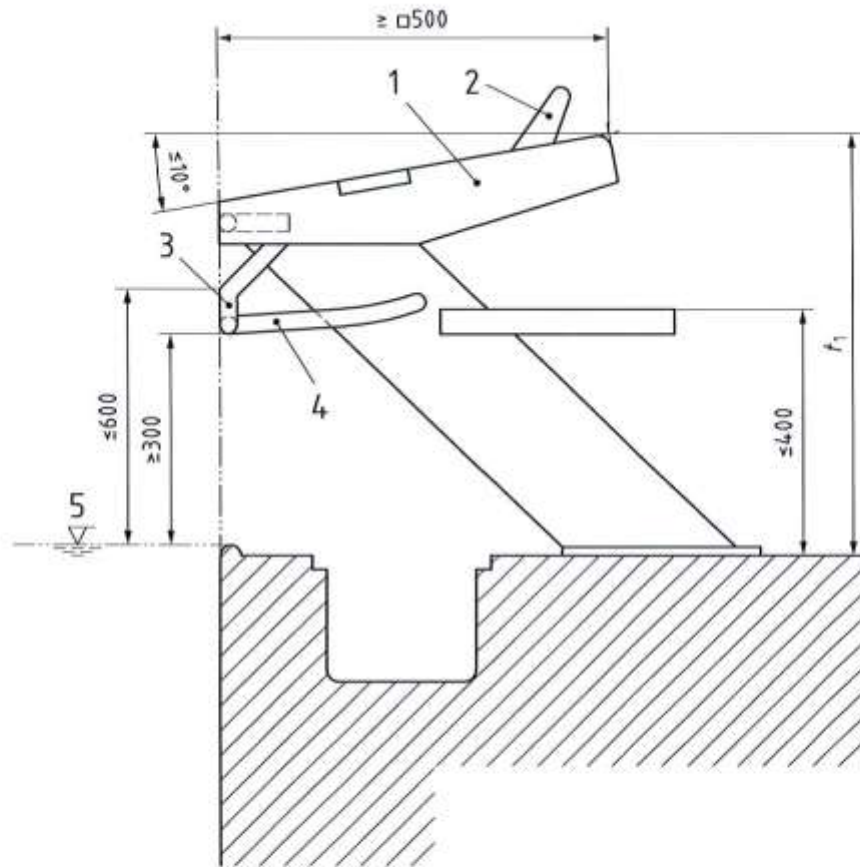
4.1 Design and manufacture

4.1.1 Dimensions

The dimensions indicated in the Figures 1 and 2 shall be complied with. The design of the equipment does not need to comply with the examples given.

If the height of the starting platform t_1 is ≥ 500 mm, a step shall be provided at a height ≤ 400 mm.

Dimensions in millimetres



Key

- 1 top platform
- 2 adjustable setting back plate
- 3 backstroke swimmer handgrips
- 4 forward swimmer handgrips (if needed, see 4.1.3)
- 5 water level

Figure 1 — Starting platform

NOTE Dimensional requirements for competitive use, stipulated by the governing body FINA (Federation Internationale de Natation Amateur), are given in [1].

4.1.2 Top platform

The dimension of the top platform shall be $\geq 500 \text{ mm} \times 500 \text{ mm}$.

The top platform shall be constructed so as to permit grasping at the front for a length $\geq 400 \text{ mm}$ and at both sides for a length $\geq 100 \text{ mm}$ (see Figure 2).

In the zones designed to be grasped, the dimension between the top of the platform and the top of the recess shall be between 30 mm and 40 mm.

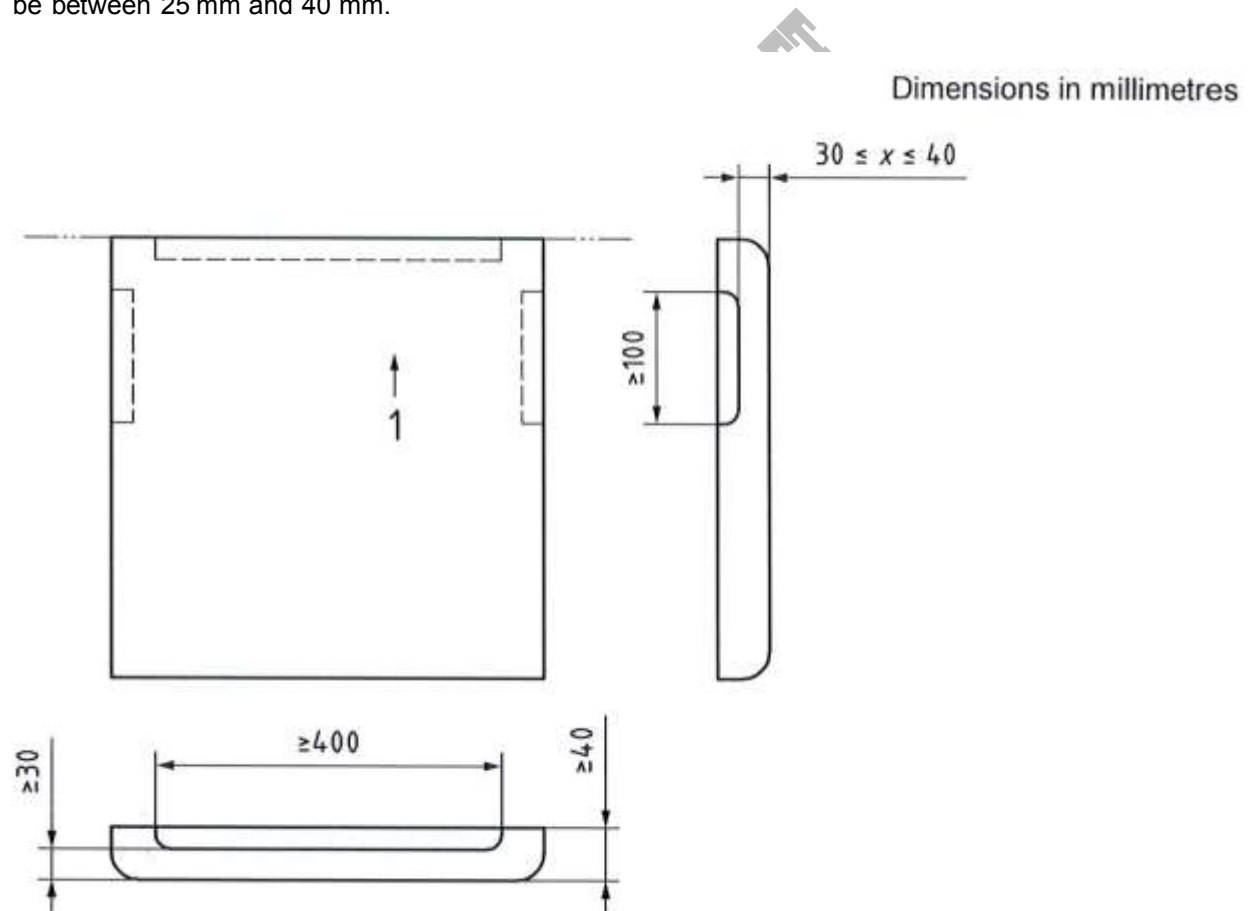
The top platform shall be horizontal or have a maximum slope of 10° in the direction of start.

The front edge shall be installed in the same plane as the pool wall.

4.1.3 Handgrips

Handgrips for backstroke starts shall be placed within 300 mm to 600 mm above the water surface both horizontally and vertically, in the same plane as the pool wall.

Cross section can be round, oval, a rounded rectangular or elliptical; the dimension shall be between 25 mm and 40 mm.



Key
1 direction of start

Figure 2 – Grasping zones

Handgrips for the forward start may be installed on the sides of the starting platforms. When the pool is not being used for competition, its starting should be covered, removed or used under close supervision.

4.2 Structural integrity

The starting platform shall be firm and give no springing effect. Starting platforms shall be designed to withstand:

- a) a vertical load as stated in KS 2793-1:2018, Annex A;
- b) a horizontal load, applied at 90° on the front edge of the platform in the opposite direction of start, equivalent to 100 % of the vertical load stated in KS 2793-1:2018, Annex A.
- c) a horizontal load, applied at 90° on the upper part of backstroke handgrips in direction of starting equivalent to 100 % of the vertical load stated in KS 2793-1:2018, Annex A.

Backstroke handgrips shall be designed to withstand a horizontal pulling force in direction of starting equivalent to the load specified in b), applied in the position of maximum leverage.

Removable starting platforms shall be fitted with devices for securing them. The fixing method and its fixing devices shall comply with the requirements of the manufacturer/supplier and shall be tamper proof.

4.3 Slip resistance

The surface of the top platform and of the intermediate step shall comply with the requirements of rating group 24° according to KS 2793-1:2018, Table 1.

The slip resistant surface on the top platform shall extend over the front edge of the platform itself, where the user's toes grasp.

5 Test methods

The requirements of Clause 4 shall be verified by the most appropriate method:

- measurement;
- visual examination; or
- practical tests,
- laboratory test for coefficient of friction

6 Manufacturer's instructions

The manufacturer shall at least provide the following information:

- a) warning that the starting platform shall only be used by people trained in its safe use (e. g. warning sign);
- b) warning, that diving can cause serious injury.

Racing dive from a starting platform should only be carried out under supervision or by people trained in its safe use. The FINA regulation ^[1] requires a minimum water depth of 1,35 m for a distance of 1,0 m to 6,0 m from starting wall. For competitive swimming and training the guidance and regulations of the national governing bodies of swimming should be followed at all times.

[1] FINA Facilities Rules 2009-2013

PUBLIC REVIEW DRAFT