

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION

### R 382 *withdrawn 1980*

GYMNASTIC EQUIPMENT

**iTeh STANDARD PREVIEW**

**(standard)**  
**BALANCING BEAM**

ISO/R 382:1964

<https://standards.iteh.ai/catalog/standards/sist/983a6004-37b5-4f07-bf70-9bd490ec8b19/iso-r-382-1964>

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## BRIEF HISTORY

The ISO Recommendation R 382, *Gymnastic Equipment. Balancing Beam*, was drawn up by Technical Committee ISO/TC 83, *Gymnastics and Sports Equipment*, the Secretariat of which is held by the Deutscher Normenausschuss (DNA).

Work on this question by the Technical Committee began in 1956 and led, in 1961, to the adoption of a Draft ISO Recommendation.

In December 1961, this Draft ISO Recommendation (No. 490) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Austria	India	Spain
Bulgaria	Japan	Switzerland
Denmark	Netherlands	Turkey
France	New Zealand	United Kingdom
Germany	Pakistan	U.S.S.R.
Greece	Poland	

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No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1964, to accept it as an ISO RECOMMENDATION.

## GYMNASTIC EQUIPMENT

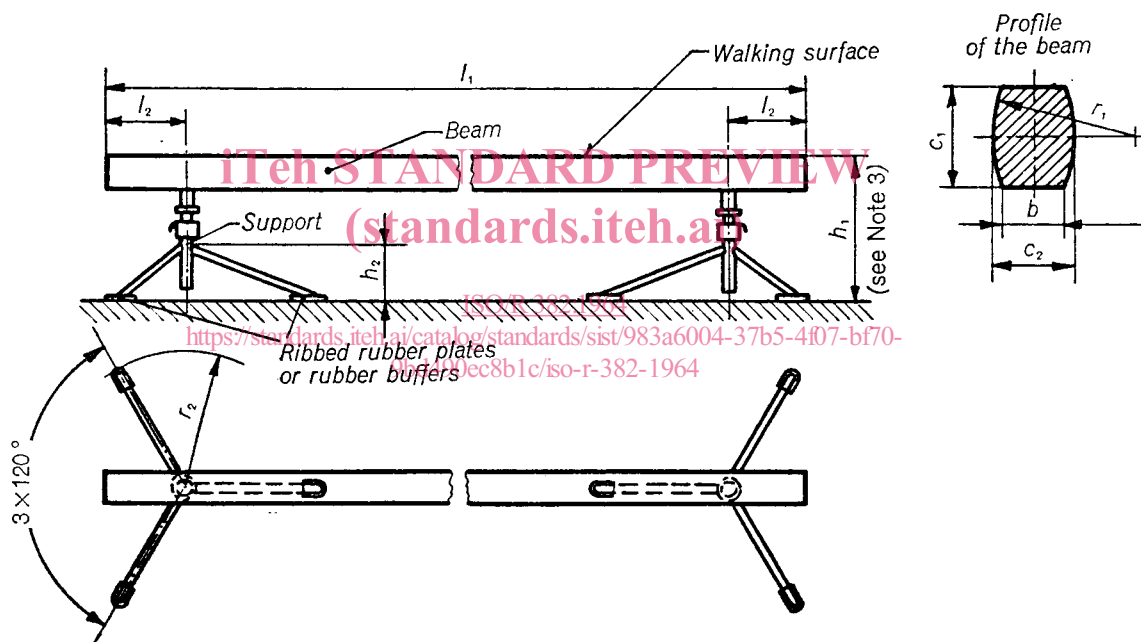
## BALANCING BEAM

## FOREWORD

This ISO Recommendation has been elaborated in co-operation with the International Gymnastic Federation (IGF). It concerns gymnastic equipment the use of which is recommended for international competitions.

## 1. SHAPES AND DIMENSIONS

Shapes and dimensions not specified are left to the discretion of the manufacturer.

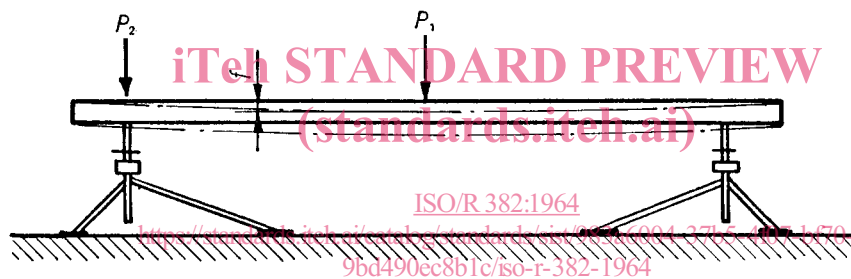


## NOTES

1. Material for the walking surface of the beam: wood which resists the risk of splintering, and for the supports: steel or cast iron.
2. The walking surface should be even and have a matt finish; the remainder of the beam should be clear-lacquered.
3. The height  $h_1$  of the beam should be adjustable in steps of not more than 50 mm = 1.968 in (exact corresponding value) or  $1\frac{15}{16}$  in (permissible rounded value).
4. The height adjustment device should be constructed so that the efficiency of the fixture will not be diminished during use.
5. The balancing beam should not vibrate on its supports during use.
6. The arrangement of the fixed feet and adjustable leg should be such as to ensure stability on uneven ground.

Symbols	Dimensions in millimetres	Corresponding dimensions in inches	
		Exact values	Permissible rounded values
$b$	$100 \pm 1$	$3.937 \pm 0.039$	$4 \pm \frac{1}{32}$
$c_1$	160	6.299	$6 \frac{1}{4}$
$c_2$	130	5.118	5
$h_1$	1000 to 1200	39.37 to 47.244	$39 \frac{3}{8}$ to $47 \frac{1}{4}$
$h_2$	400 max.	15.748 max.	$15 \frac{3}{4}$ max.
$l_1$	$5000 \pm 10$	$196.85 \pm 0.394$	$196 \frac{7}{8} \pm \frac{3}{8}$
$l_2$	400	15.748	$15 \frac{3}{4}$
$r_1$	220	8.661	$8 \frac{5}{8}$
$r_2$	755	29.724	$29 \frac{3}{4}$

## 2. INSPECTION TEST



### 2.1 At a level

$$\begin{aligned}
 h_1 &= 1200 \text{ mm} \\
 &= 47.244 \text{ in (exact corresponding value) or} \\
 &= 47 \frac{1}{4} \text{ in (permissible rounded value) and}
 \end{aligned}$$

a proof stress  $P_1 = 1350 \text{ N}$  (about 135 kgf) in the centre of the beam, the deflection should be not greater than

$$\begin{aligned}
 f &= 8 \text{ mm} \\
 &= 0.315 \text{ in (exact corresponding value).}
 \end{aligned}$$

### 2.2 At a level

$$\begin{aligned}
 h_1 &= 1200 \text{ mm} \\
 &= 47.244 \text{ in (exact corresponding value) or} \\
 &= 47 \frac{1}{4} \text{ in (permissible rounded value) and}
 \end{aligned}$$

a proof stress  $P_2 = 1500 \text{ N}$  (about 150 kgf) acting on the beam in the axis of one of the supports, the compression of the support placed on a firm floor should be not greater than

$$\begin{aligned}
 &= 2 \text{ mm} \\
 &= 0.078 \text{ in (exact corresponding value).}
 \end{aligned}$$