



# INTERNATIONAL KORFBALL FEDERATION

## KORF REGULATIONS

IKF  
Postal Box 417  
3700 AK Zeist  
The Netherlands

E-mail: [office@ikf.org](mailto:office@ikf.org)  
Phone: +31 343 499 655

Version: November 2009

## 1. IKF mark of approval

- 1.1. The International Korfball Federation (IKF), with its Headquarters at (3700 AK) Zeist, The Netherlands, Postal Box 417, lays down in these korfbal regulations the use of a mark of approval for synthetic korfs officially approved by the IKF.
- 1.2. This mark of approval pertains to the synthetic korfs mentioned in paragraph 4 of the Official Playing Rules of Korfball.
- 1.3. The uniform quality of korfs in accordance with the IKF rules will thus be assured for all korfbal events.

## 2. Use of IKF Approved Korfs

- 2.1. Only IKF Approved korfs shall be used in any korfbal event under governance of the official playing rules. All other korfs shall not be considered in accordance with the playing rules.
- 2.2. In addition to the mark "IKF Approved", the IKF Council can designate a specific synthetic korf to be used to the exclusion of any other korf in all *official* IKF events.
- 2.3. The list of suppliers that have received the "IKF Approved" mark for their synthetic korf shall be listed on the website of the IKF ([www.ikf.org](http://www.ikf.org)) including the unique serial number(s) of the mould(s) of the supplier.

## 3. Granting of the right to use a mark of approval

- 3.1. The right to use a mark of approval can be granted to any supplier of synthetic korfs provided both the financial requirements mentioned in Article 4 and the technical requirements included in the Appendix are met.
- 3.2. Applications must be sent to the IKF Headquarters for the attention of the Secretary General of the IKF together with five korfs in the same colour, and a deposit of 4,000 EUR (four thousand Euros). The korfs submitted with the application become the property of the IKF. The IKF shall then conduct, within three months, the technical tests of the korfs as described in the Appendix of these rules. The costs of the tests shall be borne in full by the Applicant. The deposit serves as a guarantee towards the payment of the costs of the tests.
- 3.3. The Applicant recognizes the sole authority of the IKF in granting the approval. Any appeal against the decision of the IKF should be in full compliance with the Appeals procedures as laid down in the Statutes of the IKF. This includes the recognition of the Applicant that no legal procedures shall be undertaken against the IKF and that a final appeal is only possible at the Court of Arbitration for Sport in Lausanne, Switzerland.
- 3.4. Upon approval and after receipt of the fee mentioned in Article 4, the IKF grants a unique serial number to the Applicant for each mould. This serial number shall be moulded into the korf, together with the logo of the IKF and the word "IKF Approved". Korfs may only be produced using this mould in the same format, same material and same colour as presented to the IKF.
- 3.5. The right to use the words "IKF Approved" on the korf shall be valid for one mould and one colour. The approval can be granted for any subsequent moulds or other colours with the earlier approved mould if the Applicant pays the fee mentioned in Article 3.2 and 4. The IKF will require tests to be conducted for subsequent moulds if the IKF

deems this to be appropriate. The right is issued specifically to the Applicant and is non-transferable.

- 3.6. In case of bankruptcy of the Applicant, any approval rights granted to the Applicant shall be withdrawn by default.
- 3.7. The IKF reserves the right to withdraw the granting of a korf mark of approval if:
  - 3.7.1. it appears after re-examination and one prior warning that any technical defects have not been eliminated;
  - 3.7.2. or the financial commitments entered into have not been fulfilled.
- 3.8. In the case of a withdrawal of a grant of mark of approval, all korfs of the Applicant lose their mark of approval automatically. The Applicant is solely liable for any consequences, direct and indirect, of the withdrawal of the grant. No legal action can be initiated against any decision taken by the IKF Council as to the withdrawal of mark(s) of approval;
- 3.9. The right to grant an IKF mark of approval comes exclusively within the competence of the International Korfball Federation (IKF) Council and cannot be replaced or amended by any other body.
- 3.10. The users of an IKF mark of approval shall accept without reservations or amendments the provisions set forth in the IKF korf regulations.
- 3.11. The regulations come within the jurisdiction of the Netherlands Law.

#### **4. Fees for the use of a mark of approval**

- 4.1. The Applicant, after receiving preliminary approval of the IKF for the mould, shall pay into the bank account of the IKF the sum of 6.00 EUR (six Euros) per korf produced, with an immediate minimum fee of 60,000.00 EUR (sixty thousand Euros) per mould in use, of which the IKF shall pay two thirds to the holder of the Intellectual Property Rights of the korf's design<sup>1</sup>.
- 4.2. The Council may partially waive, at its sole discretion, the payment of the immediate minimum fee of 60,000.00 EUR to the Applicant and to the provider to Official IKF Events as mentioned under Clause 2.2, such that a fee per korf is due besides a reduced upfront immediate minimum fee payment .
- 4.3. Any immediate minimum fee payment per mould is due within one month after the Applicant has been notified by the IKF of the approval of the korf. The IKF shall issue the serial number within 21 days of the receipt of the payment.
- 4.4. Any sum per korf is due by the Applicant per quarter for the korfs produced in the most recent quarter. The total sum for the quarterly payment is due within fifteen days after the end of the quarter. Payments by the Applicant must be done in full to the bank account of the IKF.
- 4.5. The Applicant will, at their cost, send to the IKF at the end of each calendar year a formal auditor's report duly signed by a registered accountant. This report will formally state the numbers of korfs produced per mould in that calendar year. This auditor's

---

<sup>1</sup> Korbizz BV, P.O. Box 417, 3700 AK Zeist, The Netherlands / [www.korbizz.nl](http://www.korbizz.nl)

report must arrive annually in the IKF office no later than May 15. If the Applicant exceeds this due date then they will be liable to a fee of 100.00 EUR per week that the Applicant fails to meet this requirement. The maximum fee per calendar year's requirement is 5,000.00 EUR.

- 4.6. At the request of the Council or the Auditing Committee of the IKF, the Applicant shall permit independent representatives of or acting on behalf of the IKF to get insight into the accounts in such detail that the actual number of korfs produced or moulds used can be verified.

## 5. **Additional criteria to be observed**

- 5.1. Advertising on the korfs shall be allowed under the following conditions:

- 5.1.1. Admissible advertising on the korfs may be painted directly on the outside of the korf (or be integrated in their design). Alternatively, it may also be affixed to the outside of the korf by means of a transparent film so that the profile of the korf remains basically unchanged.

- 5.1.2. The advertising must not cover more than two thirds of the circumference, measured from the post.

- 5.1.3. When painted on the korfs (or integrated into their design) the advertising shall be no higher than 15 cm. If the advertising is affixed to the outside of the korf then the background colour of the advertisement must be the same colour as the korf.

- 5.1.4. The lower horizontal axis of the advertising must be parallel to the ground and 5 cm above the lower rim of the basket.

- 5.2. The manufacturer's logo can be moulded into the korf provided that it is in the same colour as the korf and positioned on the interface part of the korf.

## 6. **Conclusions**

- 6.1. These IKF korf regulations have been approved by the IKF Council listed below and became valid on that day.

- 6.2. They are subject to alterations according to necessity, provided notification is given to the existing manufacturers.

- 6.3. All negotiations and correspondence shall be made exclusively through the Secretary General of the IKF. Any other agreement shall not be binding.

Laid down by the Council of the  
INTERNATIONAL KORFBALL FEDERATION  
on 13 November 2009

## **Appendix: Requirements and tests**

## Contents of Appendix

1.	Requirements .....	7
1.1	Requirements .....	7
1.1.1	Geometrical .....	7
1.1.2	Mechanical, see also Section 3 of this appendix.....	7
1.1.3	Optical and surface.....	8
1.1.4	Conditions and durability .....	8
2.	Test matrix.....	9
3.	Tests.....	10
3.1	General .....	10
3.1.1	Load and test geometry .....	10
3.1.2	Test conditions.....	10
3.1.3	Accuracy .....	10
3.2	Test 2.....	11
3.2.1	Load and test geometry .....	11
3.2.2	Test conditions.....	11
3.2.3	Accuracy .....	11
3.3	Test 3.....	12
3.3.1	Load and test geometry .....	12
3.3.2	Test conditions.....	12
3.3.3	Accuracy .....	12
3.4	Test 4.....	13
3.4.1	Load and test geometry .....	13
3.4.2	Test conditions.....	13
3.4.3	Accuracy .....	13
3.5	Test 5.....	14

# 1. Requirements

## 1.1. Requirements

The IKF (International Korfball Federation) can approve a synthetic korf as mentioned in the IKF Korf Regulations, Article 3 Clause 1. To get this approval the korf should meet the following requirements.

### 1.1.1. Geometrical

1. The korf must meet the geometrical requirements as defined in the IGES file (korfdefiges.igs)
2. The angle of the top rim of the korf with the pole should be  $90^\circ$ , the maximum deviation from this angle should be less than  $2^\circ$  (see figure 1).
3. Material LDPE rotation moulding grade.
4. Nominal wall thickness 4mm. ( max filling of mould cavity)
5. Deviation on wall thickness +/- 1 mm through out the part.

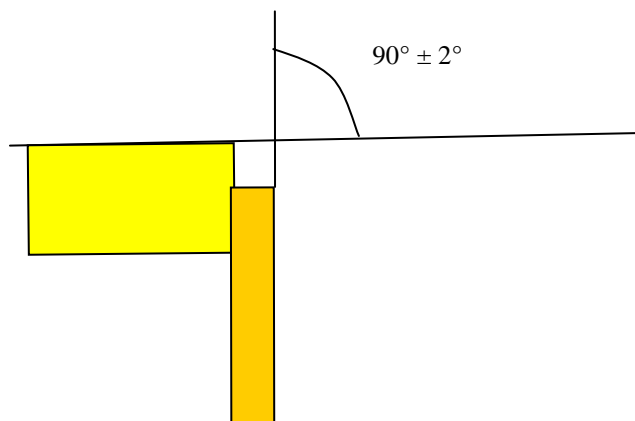


Figure 1. Position of the korf on the pole

### 1.1.2. Mechanical, see also Section 3 of this appendix

#### Stiffness

1. The korf must have a particular stiffness. The stiffness has been defined in 3 loading situations (see test 1, 2, and 3) at  $10^\circ\text{C}$  and  $60^\circ\text{C}$ , the korf should not break in the test.
  - A. In test 1 the stiffness should be between 25 and 40 N/mm.
  - B. In test 2 the stiffness should be between 3.5 and 6.0 N/mm.
  - C. In test 3 the stiffness should be between 5.5 and 12 N/mm.

#### Impact resistance

2. The korf should not break as a result of a fall on a paved underground at  $10^\circ\text{C}$  and  $60^\circ\text{C}$  (see test 4). The korf should not break even after 5 falls.

#### Strength and safety

3. In test 5 the korf is crushed to failure in a crush test at  $10^\circ\text{C}$  and  $60^\circ\text{C}$  (geometry like test 2). The korf should not break into more than 2 pieces. The load at break or at sudden change of integrity should be at least 2000N.

### **1.1.3. Optical and surface**

1. Colour Ral 1023 (Traffic yellow)
2. Colour paste Novocolor ZM1612 or comparable cadmium free colour paste.
3. The surface of the korf should not contain sharp or piercing parts that can damage the korfbal.

### **1.1.4. Conditions and durability**

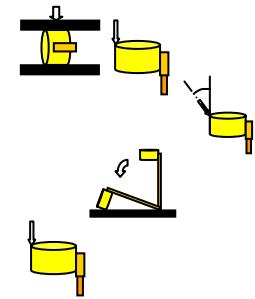
The korf should be suitable for in- and outdoor use therefore:

1. The korf should be UV-resistant for its lifetime
2. The korf should be resistant to standard cleaning products
3. The korf should function for at least 2000 playing hours or 5 years, depending on what requirement is reached first.

The durability does not need to be tested, but a guarantee will need to be provided by the manufacturer.

## 2. Test matrix

Korf →	1	2	3	4	5	6	7	1	2	3	4	5	6	7	Order
Test ↓	10°C	10°C	10°C	10°C	10°C	10°C	10°C	60°C	60°C	60°C	60°C	60°C	60°C	60°C	
1	1	1	1	1	1			1	1	1	1	1			1 4
2	1	1	1	1	1			1	1	1	1	1			2 5
3	1	1	1	1	1			1	1	1	1	1			3 6
4	5	5	5					5	5	5					7 8
5				1	1								1	1	9 10



### Explanation of the matrix:

The numbers in the matrix refer to the number of times one sample should be tested. For example 5 means: in 5-fold.

First (order) test 2 should be performed at 10°C on korfs 1 to 5.

Then test 3 at 10°C, also on korfs 1 to 5.

Following: test 1 at 10°C, also on korfs 1 to 5.

Next test is test 5 at 10°C on korfs 4 and 5.

After that: test 2 at 60°C on korfs 1 to 5, etc. etc.

Total amount of korfs needed for the tests: 7

### 3. Tests

#### 3.1. General

Tests 1, 2 and 3 have been designed to determine the stiffness of the korf. The difference between the tests is the angle and position on what the load is applied on the korf.

In tests 4 and 5 the toughness, strength and breaking behavior is tested.

##### 3.1.1. Load and test geometry

In test 1 the korf is tested without a pole, see figure 2

Applied load is 250 N and the deformation is measured after 1 minute. The stiffness (N/mm) is the applied load (250N) divided to the deformation in mm.

The tests should be carried out on 5 korfs.

##### 3.1.2. Test conditions

The test should be performed at 10°C and at 60°C.

##### 3.1.3. Accuracy

The accuracy of the measured stiffness should be  $\pm 10\%$ .

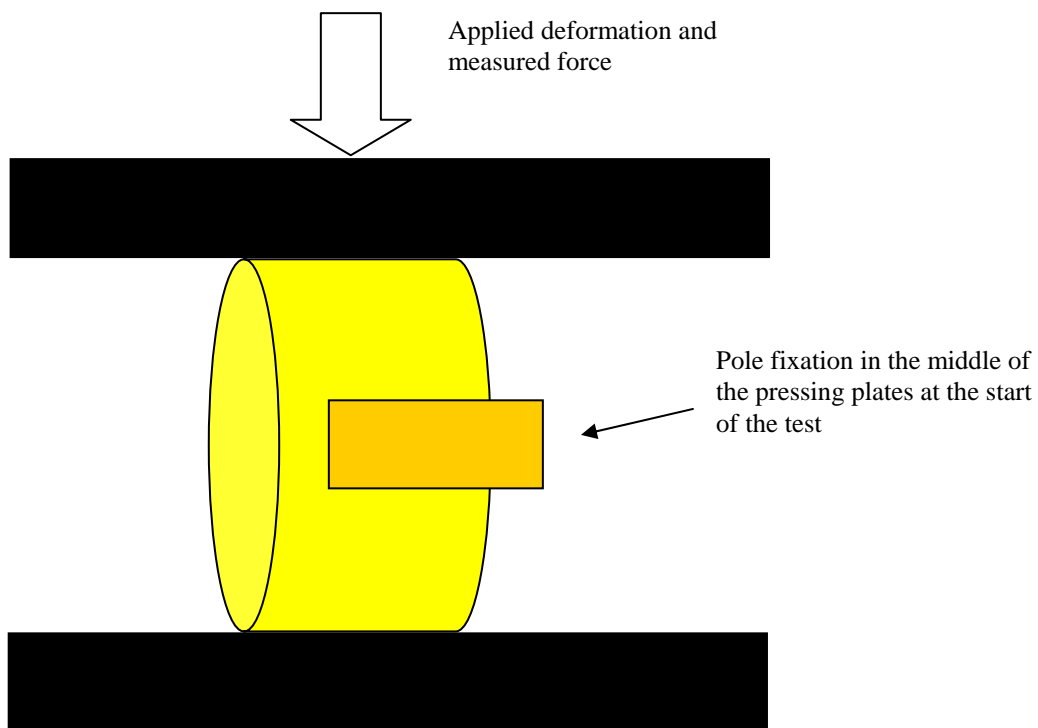


Figure 2. Test geometry for test 1. The direction of the applied force is shown with the arrow.

## 3.2. Test 2

### 3.2.1. Load and test geometry

In test 2 the korf is tested with the pole. A rigid dummy pole is used to position the korf. The korf is fixed with the dummy pole, see figure 3.

Applied load is 250 N and the deformation is measured after 1 minute. The stiffness (N/mm) is the applied load (250N) divided to the deformation in mm.

The test should be carried out on 5 korfs.

### 3.2.2. Test conditions

The test should be performed at 10°C and at 60°C.

### 3.2.3. Accuracy

The accuracy of the measured stiffness should be  $\pm 10\%$ .

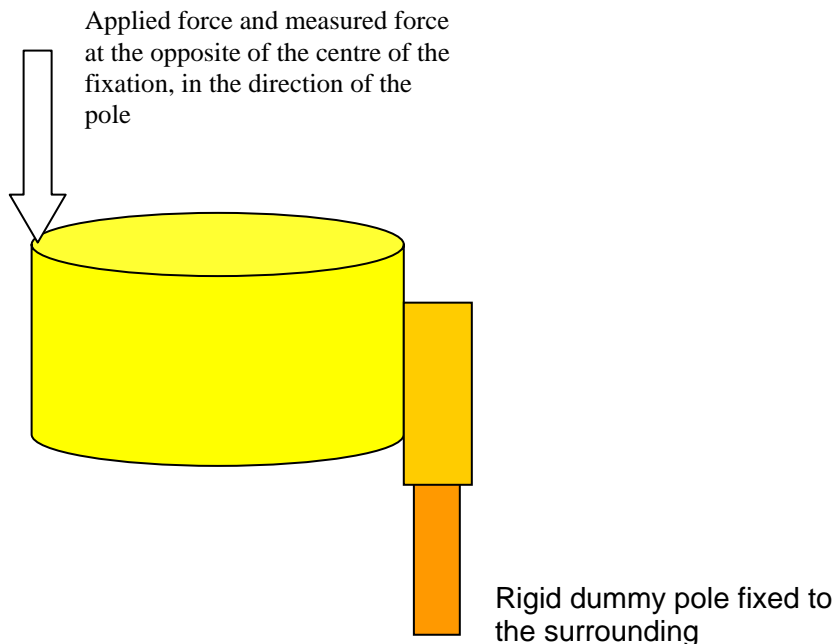


Figure 3. Test geometry for test 2. The direction of the applied force is shown with the arrow.

### 3.3. Test 3

#### 3.3.1. Load and test geometry

In test 3 the korf is tested with the pole fixation. A rigid dummy pole is used to position the korf. The korf is fixed with the dummy pole, see figure 4.

Applied load is 250 N and the deformation is measured after 1 minute. The stiffness (N/mm) is the applied load (250N) divided to the deformation in mm.

The test should be carried out on 5 korfs.

#### 3.3.2. Test conditions

The test should be performed at 10°C and at 60°C.

#### 3.3.3. Accuracy

The accuracy of the measured stiffness should be  $\pm 10\%$ .

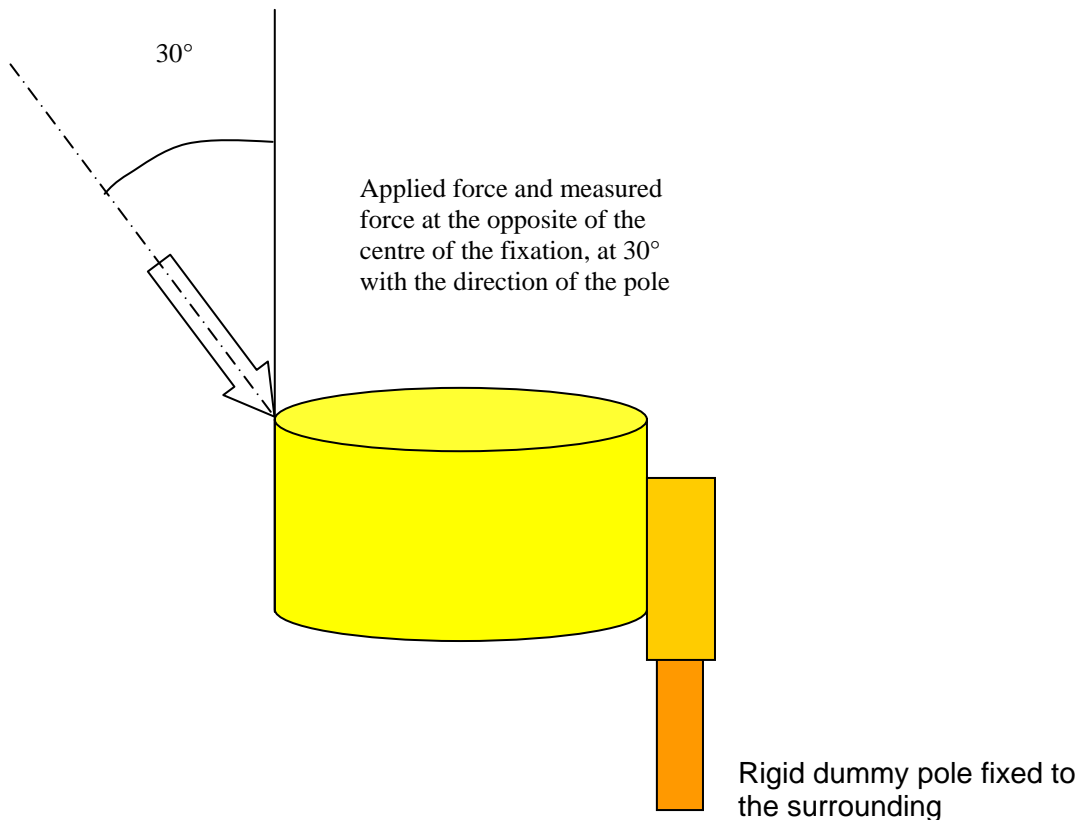


Figure 4: Test geometry of test 3. The direction of the applied force is shown with the arrow

### 3.4. Test 4

#### 3.4.1. Load and test geometry

In test 4 the strength and breaking behavior of the korf is tested. The korf is tested together with the pole. The korf with the pole is thrown, by letting the pole loose, on a paved underground, see figure 5.

Test should be carried out in 5-fold on 3 korfs.

#### 3.4.2. Test conditions

Test 4 should be performed at 10°C and at 60°C (total 30 tests).

#### 3.4.3. Accuracy

The accuracy of the fall-height should be  $\pm 5\%$ .

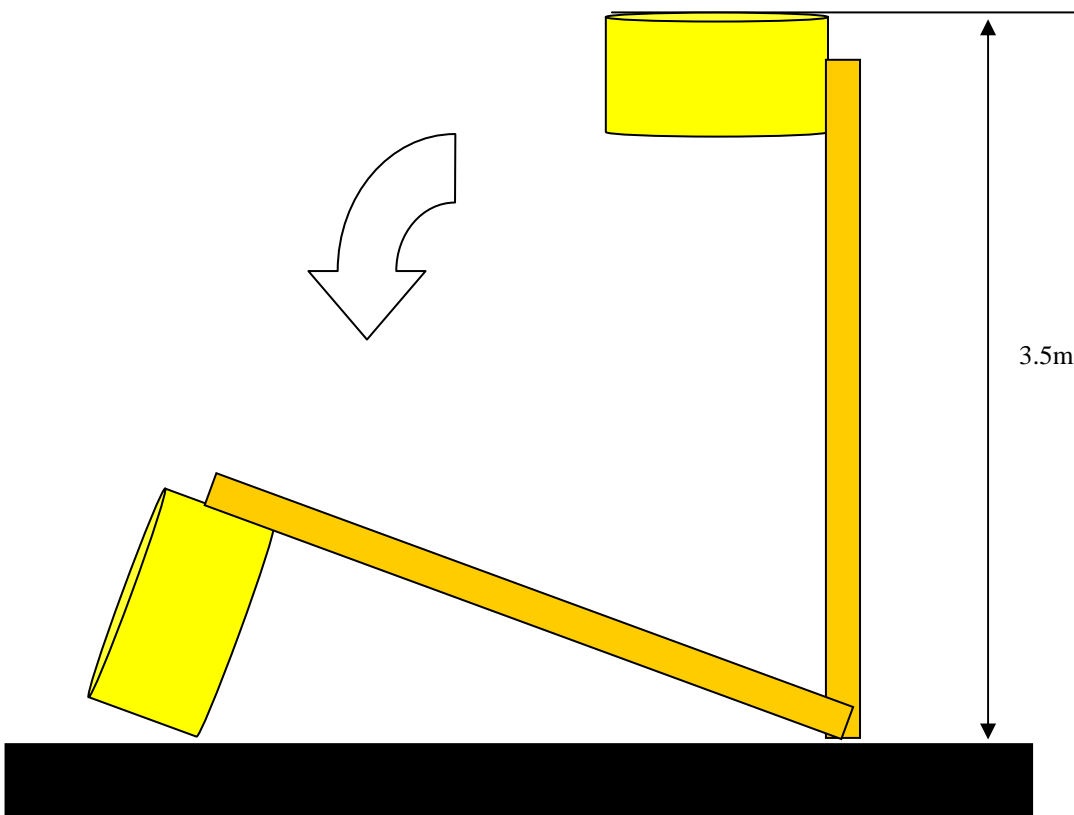


Figure 5: Test geometry of test 4.

### **3.5. Test 5**

In test 5 the strength and breaking behaviour of the korf is tested.

The geometry of test 5 is the same as that of test 1. The difference is the load. In test 5 the load is increased until the korf fails. The korf should not break and the structural integrity should not change suddenly until a load of 2000N is reached. Permanent deformation is allowed.

The test should be carried out on 2 korfs at 10°C and 60°C.