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NS 592:2020

ICS 55.080
ICS 65.080

नेपाल गुणस्तर
NEPAL STANDARD

Textiles-Polypropylene (PP) Woven, Laminated, Stitched Sacks for Packaging of 50 kg Cement - Specification

Government of Nepal
Ministry of Industry, Commerce and Supplies
Nepal Bureau of Standards and Metrology (NBSM)
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Foreword

NBSM (Nepal Bureau of Standards and Metrology) is the National Standard Body involved in the development of standards in the country. The standard development process involves committee consisting of multi-stakeholders both from public and private sectors.

This standard is developed by technical committee having multi-stakeholder participation and approved by Nepal Standard Council as per Nepal Standard (Certification) Act, 1980.

This standard pertains to polypropylene (PP) woven, laminated, stitched sacks for packaging of 50kg of cement.

This standard has been formulated to facilitate the use of stitched sacks for packaging of cement. These bags are believed to protect environment by causing less pollution at the time of packing and transportation. They have additional advantages of reduced loss of cement during handling and improved barrier to moisture.

The standard covers requirement for laminated fabric, lamination, perforation, tests for performance and suitability of use, test methods, dimensions, labelling and criteria for conformity.

This standard contributes towards fulfilment of 9,11, & 12 of the SDG goals.

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Textiles-Polypropylene (PP) Woven, Laminated, Stitched Sacks for Packaging of 50 kg Cement - Specification

1. Scope

This standard prescribes the requirements of stitched sacks made from PP woven laminated fabric for packaging, storage and distribution of 50 kg cement.

2. References

The standards listed in Annex A contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3. General Terms and Definitions

For the purpose of this standard, the following definitions shall apply.

3.1 Air Permeability

Volume of air flowing or passing through the perforated walls of the sack at designated air pressure in unit time.

3.2 BOPP Film

Biaxially oriented polypropylene film.

3.3 Stitching

Joining together of fabric by the method of sewing with nylon or other suitable thread to close the tube at both ends to form a closure.

3.4 Lamination

Extrusion coating of thin film of polymer on woven fabric surface to improve barrier to moisture vapor.

3.5 Open Mouth Sack

Flat tube closed at one end by folding, forming and stitching. It is an intermediate product during stitched sack manufacturing process.

3.6 Overlap

Areas of a fabric tube which are superposed. Bottom or top of the sack are formed in to closure by overlapping areas of the transverse edges of a tube which are superposed and stitched.

3.7 Perforation

Holes pierced through the laminated or coated fabric sack walls to facilitate air release during filling or bagging process.

3.8 Plastic Woven Sack

A flexible container made essentially from tubular woven fabric closed at least at one end with open top or closed at both end with valve for filling, usually at top corner.

3.9 Tube

Circular woven fabric in the form of a flattened cylinder cut into prescribed lengths.

3.10 Valve

A spout in the form of a flattened tube, normally situated at one corner of the top closure of the sack through which the sack is filled, and which, after filling, does not readily allow reverse flow of the filled contents.

3.11 Valved Sack

Tube closed at both ends by folding, forming and stitching the ends and provided with a valve for filling, usually at top corner. It is a finished product of laminated stitched bag manufacturing process.

4. Dimensional Designations of Sack

This part of the standard specifies a method for measuring and expressing the dimensions of empty sacks as shown in Fig. 1.

4.1 Description of Sack Parameters

4.1.1 Sack Length, a

Distance between the transverse edges of the flat sack, measured at the centre, perpendicular to the bottom.

4.1.2 Sack Width, b

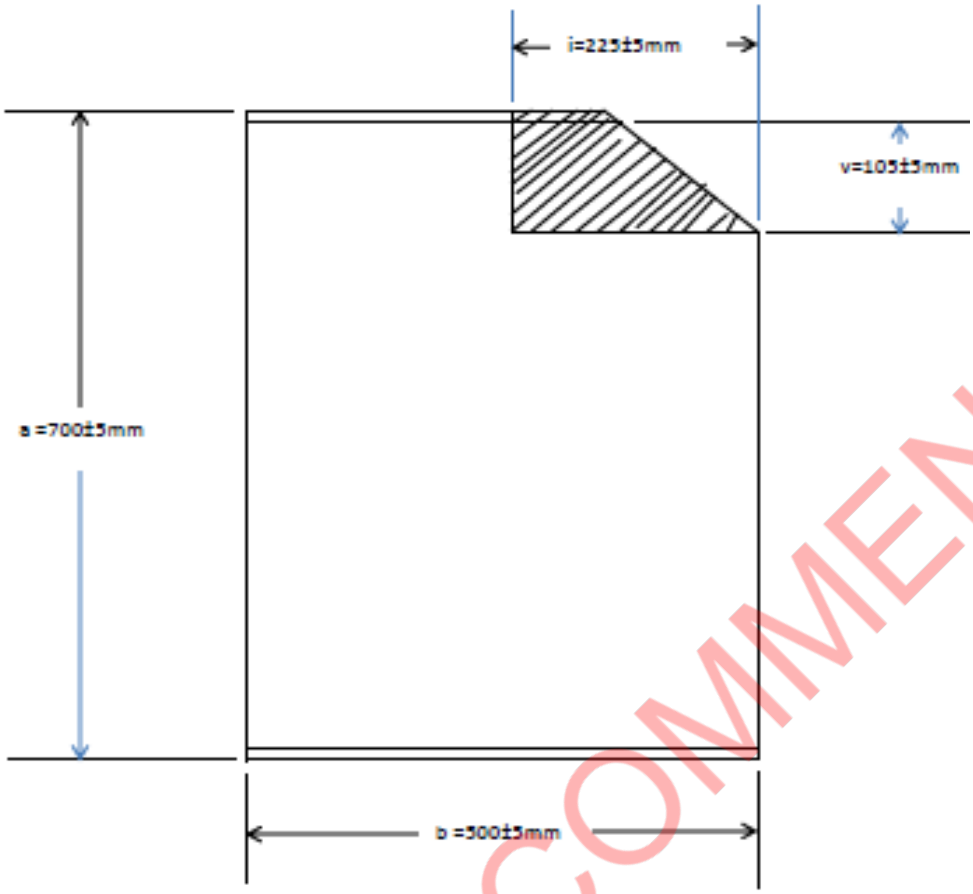
Distance between the longitudinal edges of the flat sack, measured at the centre, parallel to the bottom.

4.1.3 Width of Valve Sleeve, v

Internal dimension of the valve sleeve, measured at the sleeve center, parallel to the sack length.

4.1.4 Length of Valve Sleeve, i

Longitudinal dimension of valve sleeve, parallel to the bottom.



a= bag length, 700±5 mm
b=bag width, 500±5 mm
v= valve sleeve width, 105±5 mm
i=valve sleeve length, 225±5 mm

Figure 1: Dimensional Designations of Sack

4.2 Description of Sack Parts

Following indications help to identify the various parts of the sack:

a) *Filling end* — The open or valved end. Usually top side of sack.
b) *Closed end* — The sealed or non-valved end. Usually bottom side of sack.
c) *Face side* — The side containing the front side print.
d) Back side — The side opposite the front side print.
e) Valve position — With the front-side print upright, when viewed from front, the valve position shall be described as top or bottom, left or right, as shown in Fig. 1.

5. Manufacture

5.1 Raw Material

The plastic raw material, polypropylene used for the manufacturing of tubular sacks shall be virgin and conform to the requirements specified in NS ..... excluding overall migration.

5.2 Fabric

The fabric used in the manufacture of stitched woven sacks shall be woven as a tube on circular loom. The woven fabric weight shall be 63 g/m^2 minimum and of mesh 8 × 8 per inch in accordance with the tape width. The tape shall be of linear density 900 denier and 3.0 mm ± 0.1 mm width, conforming to NS .....

The denier of PP tape used in the manufacture of woven sacks shall be subjected to the following tolerances:

a) ± 10 percent on individual value, and

b) ± 5 percent on average

The construction particulars of fabric shall be as given in Table 1.

5.3 Sack

The sacks shall be produced from tubular woven, laminated and perforated fabric cut to the required length. The sack shall be closed at top and bottom with a filling valve at top as shown in Fig. 1.

5.3.1 Top and Bottom Closures

The top and bottom closures shall be formed by stitching both ends of tube as shown in Fig.1.

5.3.2 Filling Valve for Sacks

For forming of a filling valve, a small sleeve or tube usually made of both side laminated fabric shall be integrated to the top closure as shown in Fig. 1, and stitched.

5.4 Lamination

The tubular fabric woven on circular loom before manufacture into sacks shall be laminated on outer side by coating with combination of PP and LDPE film of uniform thickness and mass of minimum 23 g/m^2. The plastic raw material used for the lamination shall be virgin and confirm to NS ..... for PP (excluding overall migration) and confirm to NS ..... for LDPE (excluding overall migration). The overhang trim of lamination at both edges shall not be more than 4 mm. If required by the buyer, woven and laminated tubular fabric before conversion into sacks may be further laminated from outer side with reverse printed Biaxially Oriented Polypropylene (BOPP) film of minimum thickness 15 g/m^2.

5.5 Perforation

The laminated fabric shall be perforated to facilitate release of entrapped air during cement filling. The perforation shall be distributed uniformly on the laminated fabric to ensure smooth and easy release of air during cement filling.

5.6 Capacity

The sack shall have the nominal filling capacity of 50 kg.

6. Requirements

6.1 Mass of Bale

The mass of bale of sacks (excluding packing materials) shall be within ± 3 percent of the mass calculated by multiplying the number of sacks with the mass of sack specified in Table 1.

6.2 Breaking Strength of Fabric and, Top and Bottom Closures

6.2.1 The breaking strength and elongation at break of fabric shall be tested in accordance with NS 228 : 2047 The ravelled strip samples selected for breaking strength test shall be free from any defects in visual inspection, dimensions, ends, picks and mass requirements. The test shall be carried out on fabric samples taken from center portion of the sack. The average breaking strength of fabric at lengthwise and width wise shall not be less than the value specified in Table 1.

6.3 Drop Impact Testing of Filled Sacks

The filled sacks, when tested for drop impact strength, according to the method given in Annex C, shall meet the requirements specified in Table 1.

6.4 Ash Content

The woven sack fabric shall be tested for ash content in accordance with the test procedure given in Annex D, and shall meet the requirements as specified in Table 1.

6.5 Air Permeability

The perforated woven sacks shall be tested for air permeability in accordance with the test procedure given in Annex E. Special test equipment are available to measure rate of air flow, from which the air permeability of sack is determined. The average value shall be reported as air permeability in m^3/h at 50 mbar air pressure and shall meet the requirements specified in Table 1.

6.6 The sacks shall also conform to the requirements specified in Table 1.

Table 1 Requirements of PP stitched Sacks for Packing Cement
(*Clauses* 5.2 *and* 6.1 to 6.6)

S.N.	Characteristic Requirement	Required value	Tolerance	Method of Test, Ref to
1	Dimensions, mm (*see* Notes 1 and 2)			
	a) Sack length (*a*)	700	± 5 mm	
	b) Sack width (*b*)	500	± 5 mm	
	c) Valve length (*i*)	225	± 5 mm	
	d) Valve width (*v*)	105	± 5 mm	
2	Ends per dm	32	± 1	
3	Picks per dm	32	± 1	
4	Stitch per dm, bottom Stich per dm, top	13-14 12-13		
5	Mass of sack, g (*see* Notes 2 and 3)	82	± 6 %	NS ……
6	Average breaking strength of fabric (Ravelled strip method, 325 mm × 70mm[1]) *Min*, N [2] *(* kgf):			NS……..
	a) Lengthwise	650 (66.3)	-	
	b) Width wise	600 (61.2)	-	
7	Elongation at break of fabric (Ravelled strip method), percent		-	NS…..
	a) Lengthwise	15 to 25	-	
	b) Widthwise	15 to 25	-	
8	Drop impact strength	No failure	-	Annex C
9	Ash content, *Max*, percent	4	-	Annex D
10	Air Permeability at 50 mbar, m^3/h	70 – 100	-	Annex E

NOTE:-

1 *The buyer and the seller may agree to dimensions other than those specified above. However, tolerances as specified in Table 1 shall apply.*

2 *The weight per square meter shall be minimum 63 g/m^2 for woven fabric, minimum 23 g/m^2 for coating and minimum 15 g/m^2 for BOPP film. For BOPP film laminated fabrics, the total fabric weight per square meter shall be determined based on the fabric weight, the film weight and the coating weight.*

1) Gauge length = 200 mm, Sample width after ravelling = 50 mm, with minimum 16 complete tapes.
2) 1 N = 0.102 kgf (approximately).

7. Printing, Packing and Marking

7.1 Printing

The sacks shall be printed with identification mark of sack manufacturer along with the information as required by the buyer using suitable inks, by flexography or rotogravure printing.

NOTE — Printing inks based on polyamide resins, found most suitable for this application.

7.2 Packaging

The sacks shall be packed to form a bale using a layer of HDPE/PP woven fabric and suitably secured. The bale shall contain 500 sacks.

7.3 Marking on Sacks

The bales shall be marked with the following information:

a) Name of the manufacturer;
b) Type and size of sacks;
c) Number of sacks;
d) Gross weight;
e) Net weight;
f) Month and year of manufacture;
g) Identification mark;
h) Recycling logo; and
j) Any other information as required by the law in force.

NOTE — Each sack shall be marked with visible recycling logo at a space on bottom of the sack compatible with the art work of the buyer for printing the sack.

7.4 NS Certification Marking

The sacks may also be marked with the Standard mark.

7.4.1 The use of the Standard mark is governed by the provisions of the Nepal Standards (Certification Mark) Act, 2037 and rules and regulations made thereunder. The details of the conditions under which a license for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Nepal Bureau of Standards and Metrology.

8. Atmospheric Conditions for Conditioning and Testing

Prior to test, the specimens shall be conditioned to moisture equilibrium from dry side in the standard atmosphere of 65 ± 2 percent relative humidity and 27 ± 2°C temperature as laid down in NS 215: 2046.

9. Sampling and Criteria for Conformity

9.1 Lot

All the sacks packed in bales of the same construction produced under similar conditions of production and delivered to a buyer shall be grouped together to constitute a lot.

9.2 The conformity of the lot to the requirements of the standard shall be determined on the basis of the test carried out on the samples selected from it.

9.3 The number of samples to be selected depends on the size of the lot and the number of bales to be sampled shall be in accordance with col 2 and col 3 of Table 2. The number of sacks to be selected from the bales sampled shall be in accordance with col 4 of Table 2 for visual inspection, dimensions, ends, picks and mass requirements and shall be in accordance with col 5 of Table 2 for breaking strength of fabric, elongation at break, weld strength of top and bottom closure, drop impact resistance, ash content and air permeability.

9.4 Criteria for Conformity

The lot shall be considered as conforming to the requirements of the standard if the following conditions are satisfied:

a) The number of defective sacks in case of visual inspections, ends, picks and dimensions is up to 10 percent of the sample size subject to rounding off the fraction to next higher integer.

b) None of the sack or bale of 500 sacks weighs less than the respective lower specified limit after allowing tolerance of ± 6 percent on individual sack and ± 3 percent on a bale of 500 sacks, higher weight may be accepted.

c) The average breaking strength in both lengthwise, width wise shall not be less than the value specified in Table 1, and none of the individual sack value shall be more than 10 percent below the specified value. The test samples selected for breaking strength and weld strength shall be free from defects in visual inspection, dimensions, ends, picks and mass requirements. The tests shall be carried out on the fabric sample taken from center portion of the sack.

d) None of the sack shall fail in drop impact test and ash content requirement.

e) None of the sample sacks shall have percentage elongation and air permeability outside the specified range given in Table 1.

Table 2 Sample Size
(*Clause* 9.3)

Sl No	No. of Sacks in a Lot	No. of Bales to be Sampled	Sample Size for Visual Inspection, Dimensions, Ends, Picks and Mass Requirements	Sample Size for Breaking Strength of Fabric, Elongation at Break, Drop Impact Resistance, Ash Content and Air Permeability Requirements
(1)	(2)	(3)	(4)	(5)
i)	Up to 2 5000	3	12	8
ii)	25 001 to 50 000	5	20	10
iii)	50 001 to 100 000	8	32	13
iv)	100 001 to 250 000	12	48	18

Annex A

(Clause 2)

List of Referred Nepal Standards

S.N.	NS No	Title
1	……	Textiles — Methods for determination of mass per unit length and mass per area of fabrics (second revision)
2	NS 228:2047	Textiles - Determination of elongation and breaking strength of woven fabrics
3	NS 215:2046	Textile - Standard atmospheres for conditioning and testing
4	……..	Method for determination of seam strength of jute fabrics including their laminates
5	……	Specification of polyethylene for its safe use in contact to foodstuffs, pharmaceuticals and drinking water
6	……	Polypropylene and its copolymer for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
7	……	Specification for monoaxially oriented polypropylene tapes

Annex B

[Table 1, Sl No. (i) to (iii)]

Method of Test for Sack Dimensions, Ends and Picks Per Decimetre

B-1 Method of Test for Sack Dimensions

Lay each sack as selected in Table 2, flat on a table. Render it free from creases and wrinkles and measure the sack length (*a*), sack width (*b*), valve sleeve length (*f*), valve sleeve width (*v*) and valve sleeve length (*i*) as shown in Fig. 1, about the middle to the nearest 1 mm.

B-2 Method of Test for Ends and Picks Per Decimetre

Count the ends and picks at two places of each sack as selected in Table 2, with a suitable gauge measuring 50 mm. Care shall be taken to avoid counting same set of warp or weft threads more than once. Determine the average ends/dm and picks/dm of each sack under test.

Annex C

[Clause 6.3, Table 1, Sl No. (viii)]

Drop Impact Test for Filled Sacks

C-1 Principle

The test procedure is used to determine the drop impact performance of filled sack. This test simulates the sack performance in end-use application such as repeated handing and drop impacting of sack undergoing during loading, unloading and stacking operations.

C-2 Filling of Sack for Testing

Sacks shall be filled with material with which they are intended to be used or, if this is not possible, with a similar material to provide the same degree of filling. The bulk density and mass of this similar filling material, if used, shall be within ± 2 percent of the values of the material with which the sack is actually intended to be used.

C-3 Drop Impact Testing of Sacks

C-3.1 Drop test shall be carried out using suitable sack drop mechanism. Each sack shall be dropped from a height of 1.8 m for the test requirements as specified below:

a) Height of drop = 1.8 m (two times for face side and two times for back side)
b) Height of drop = 1.8 m (one time for left edge and one time for right edge)
c) Height of drop = 1.8 m (one time for bottom edge and one time for top edge)

C-3.2 As given in Fig. 3, place the sack under test centrally on the platform which is within ± 2 percent of the predetermined drop height as defined by the distance between the lowest point of the sack at the time of drop release and the nearest point of the impact surface.

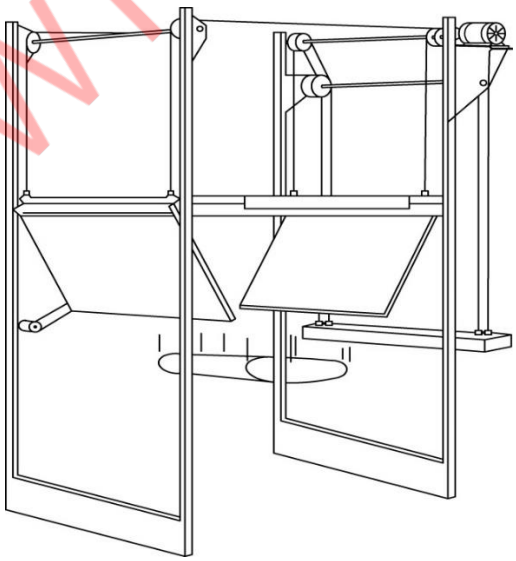


Fig. 3 Apparatus for Drop Impact Test

C-4 Criteria for Passing the Test

After each drop there shall be no rupture or loss of contents. A slight discharge, for example, from closures or from micro perforations, upon impact shall not be considered a failure of the sack provided that no further leakage occurs after the sack has been raised clear of the ground.

Annex D

[*Clause* 6.4, *Table* 1, *Sl No.* (ix)

Determination of Ash Content

D-1 Principle

The procedure is used to find out the inorganic residue in raffia tape/fabric sample by ashing it in a muffle furnace. A weighed amount of tape/fabric sample is heated to 590°C. The polymer sample (organic portion) is burnt at 590°C until constant mass of inorganic matter is obtained. The residue (inorganic matter) is reported in terms of percentage ash content in a given sample.

D-2 Apparatus

D-2.1 Weighing Balance, accurate to 0.001 g.
D-2.2 Silica Crucibles, sufficient volume to accommodate 3 g of sample in such a way that level of the sample after filling the crucible does not cross half the height of crucible.
D-2.3 Bunsen burner
D-2.4 Silica Triangle and Tripod
D-2.5 Muffle Furnace, capable of being controlled thermostatically at 590 ± 10°C.
D-2.6 Desicator, containing an effective drying agent (for example silica gel) that does not react chemically with ash components.
D-2.7 Gloves and Crucible Holder

D-3 Safety

D-3.1 Burn the sample in an effectively ventilated hood.
D-3.2 Keep the hood closed and do not inhale the fumes of combustion.
D-3.3 Wear gloves and use sample (crucible) holder, to introduce crucible in the furnace.
D-3.4 Sample should be folded properly to accommodate it in silica crucible.

D-4 Procedure

D-4.1 Heat the clean crucible at 590 ± 10°C for 10 to 15 min and cool it in a desicator.
D-4.2 Weigh the empty crucible to nearest 0.001 g.
D-4.3 Weigh about 3 g of raffia tape/fabric sample in the crucible (nearest to 0.001 g).
D-4.4 Heat the crucible directly on bunsen burner so that the sample burns slowly and loss of ash is avoided. Continue burning until no more smoke is evolved.
D-4.5 Transfer the crucible in the muffle furnace, which is already maintained at approximately 590°C and keeps the crucible inside for about 2h.
D-4.6 Remove the crucible from the furnace and cool it to the room temperature in a desicator. Weigh it and record the weight to accuracy of 0.001 g.
D-4.7 Keep the crucible in the muffle furnace for another 30 min, cool in a desicator and weigh again. Repeat the procedure until constant mass is obtained.

D-5 Calculations

$$Percent\ ash\ content = \frac{Weight\ of\ ash}{Weight\ of\ raffia\ fabric\ of\ tape\ sample} \times 100\%$$

Annex E

[Clause 6.5, Table 1, Sl No. (x)]

Determination of Air Permeability

E-1 Principle

This test method covers the determination of the air permeability by measuring the rate of air flow passing perpendicularly through the perforated walls of a woven sack under a prescribed air pressure differential between the two surfaces. From this rate of air flow, the air permeability of the fabric is determined.

E-2 Test Apparatus

The testing apparatus as shown in Fig. 4, shall be connected with an air pressure generating system and shall have air flow regulating valve, air quantity measuring device and spout with inflatable (swell) tube suitable for testing of woven sacks with valve size 90- 120 mm. The pressure shall be adjustable up to a minimum of 50 mbar with a tolerance ± 0.1 mbar.

E-3 Test Procedure

E-3.1 Prior to test, the specimen sacks shall be conditioned to moisture equilibrium from dry side in the standard atmosphere of 65 ± 2 percent relative humidity and 27 ± 2°C temperature.

E-3.2 For testing air permeability the empty sack shall be placed by hand to the spout of the testing unit as shown in Fig. 4.

E-3.3 Tighten the sack on the spout using the swell tube, so that there is no loss of air at the valve.

E-3.4 The test air pressure shall be reached within 15 s after the beginning of the test. The test measurements shall be taken within 10 s after reaching the desired test pressure.

E-3.5 The temperature and pressure of test air shall be 27 ± 2°C and 50 mbar, respectively.

E-4 Test Reporting

Air permeability in m^3 per hour at 50 mbar air pressure shall be reported.

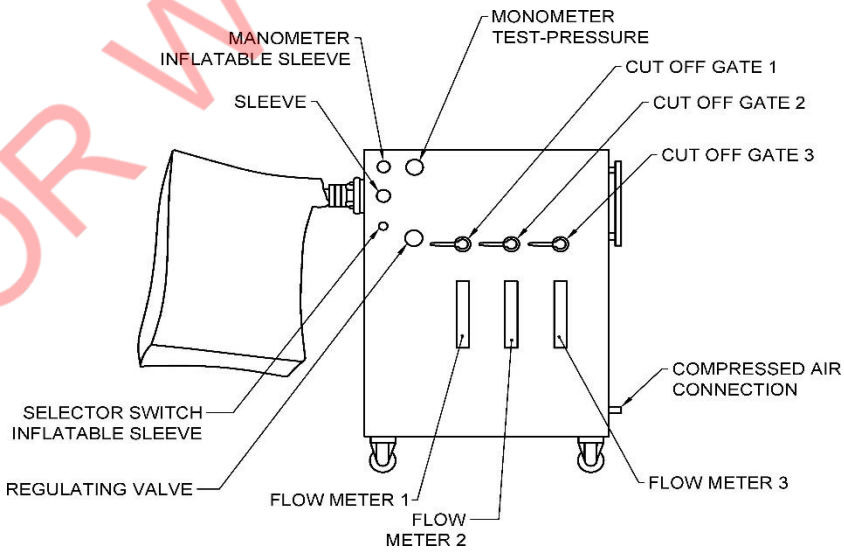


Fig. 4: Apparatus for Air Permeability Testing

नेपाल गुणस्तर परिषद्
Nepal Council for Standardization (NCS)

NS 592:2077 Textiles-PolyPropylene (PP) Woven, Laminated, Block Bottom Valve Sacks for Packaging of 50 Kg Cement-Specification

अध्यक्ष : माननीय लेखराज भट्ट, मन्त्री, उद्योग, वाणिज्य तथा आपूर्ति मन्त्रालय

उपाध्यक्ष : श्री चन्द्र प्रसाद घिमिरे, सचिव, उद्योग, बाणिज्य तथा आपूर्ति मन्त्रालय

आमन्त्रित : डा. बैकुण्ठ अर्याल, सचिव, उद्योग, वाणिज्य तथा आपूर्ति मन्त्रालय

सदस्यहरु

सि.न.	नाम	पद	संस्था
१.	श्री बलराम रिजाल	सह सचिव	उद्योग, वाणिज्य तथा आपूर्ति मन्त्रालय
२.	श्री प्रेम कुमार श्रेष्ठ	सह-सचिव	उद्योग, वाणिज्य तथा आपूर्ति मन्त्रालय
३.	श्री उपेन्द्र राय	महानिर्देशक	खाद्य प्रविधि तथा गुण नियन्त्रण विभाग
४.	श्री निर्मला अधिकारी भट्टराई	सह-सचिव	कानून न्या. तथा संसदीय मा. मन्त्रालय
५.	श्री सुरेन्द्र सुवेदी	सह-सचिव	शिक्षा विज्ञान तथा प्रविधि मन्त्रालय
६.	श्री सुमन लाल श्रेष्ठ	प्राध्यापक	त्रिभुवन विश्वविद्यालय
७.	प्रा.डा. दिपक प्रसाद सुवेदी	प्राध्यापक	काठमाडौं विश्वविद्यालय
८.	श्री दिपक श्रेष्ठ	उद्योग सभापति	नेपाल चेम्बर अफ कमर्श, कान्तिपथ

सदस्य सचिव

श्री विश्व वावु पुडासैनी, महानिर्देशक, नेपाल गुणस्तर तथा नापतौल विभाग

आमन्त्रित सदस्यहरुः

सि.न.	नाम	पद	संस्था
१.	श्री दिनानाथ मिश्र	उप-महानिर्देशक	ने. गु. तथा ना. वि.
२.	श्री कुमारी ज्योती जोशी	उप महानिर्देशक	ने. गु. तथा ना. वि.
३.	श्री प्रभात कुमार सिंह	उप महानिर्देशक	ने. गु. तथा ना. वि.
४.	श्री आलोक कुमार मिश्र	निर्देशक	ने. गु. तथा ना. वि.
५.	श्री शुक्रराज अधिकारी	केमिष्ट	ने. गु. तथा ना. वि.
६.	श्री सुनिल कुमार यादव	केमिकल ईञ्जिनियर	ने. गु. तथा ना. वि.
७.	श्री अम्बिका गैह्रे	केमिष्ट	ने. गु. तथा ना. वि.
८.	श्री गणेश प्रसाद पाठक	विज्ञ	
९.	श्री प्रभाकर एस. थापा	विज्ञ	
१०.	श्री हितेश ओझा	विज्ञ	

नेपाल गुणस्तर
NEPAL STANDARD

ने. गुण. ५९२:२०७७ Textiles-PolyPropylene (PP) Woven, Laminated, Block Bottom Valve Sacks for Packaging of 50 Kg Cement-Specification
बिषयक प्राविधिक समितिका सदस्यहरु

सि .न.	नाम	पद	संस्था
१.	श्री विश्व वावु पुडासैनी	महानिर्देशक	ने. गुण. तथा ना. वि.
२.	श्री कुमारी ज्योती जोशी	उप महानिर्देशक	ने. गुण. तथा ना. वि.
३.	श्री प्रभात कुमार सिंह	उप महानिर्देशक	ने. गुण. तथा ना. वि.
४.	श्री चण्डिका भट्ट	सि. डि. के. ई.	ने. गुण. तथा ना. वि.
५.	श्री भरत मण्डल	प्राध्यापक	पूल्चोक ईञ्जिनियरिङ्ग क्याम्पस
६.	श्री प्रचण्डमान प्रधान	प्राध्यापक	काठमाडौं विश्वविद्यालय
७.	श्री किरण सुवेदी	निर्देशक	ने. गुण. तथा ना. वि.
८.	श्री आलोक कुमार मिश्र	निर्देशक	ने. गुण. तथा ना. वि.
९.	श्री किशु मानन्धर	निर्देशक	ने. गुण. तथा ना. वि.
१०.	श्री सुवर्ण प्रसाद उपाध्याय	निर्देशक	ने. गुण. तथा ना. वि.
११.	श्री दिपक ज्ञवाली	निर्देशक	वातावरण विभाग
१२.	डा. तारा प्रसाद पोखरेल	प्रतिनिधि	सिमेन्ट उत्पादक संघ
१३.	श्री विष्णु बहादुर अधिकारी	प्रतिनिधि	नेपाल उद्योग वाणिज्य महासंघ
१४.	श्री निखिल अग्रवाल	प्रतिनिधि	शिवम सिमेन्ट
१५.	श्री डि. एन. खण्डेलवाल	प्रतिनिधि	त्रिवेणी सिनप्याक्स प्रा. लि.
१६.	श्री आनन्द नेपाल	प्रतिनिधि	जगदम्बा सिन्थेटिक
१७.	श्री माधव तिमिल्सिना	अध्यक्ष	उपभोक्ता अधिकार अनु. मञ्च
१८.	श्री शुक्रराज अधिकारी	केमिष्ट	ने. गुण. तथा ना. वि.

नेपाल गुणस्तर तथा नापतौल विभाग राष्ट्रिय गुणस्तर निर्धारण गर्ने विभाग हो ।

नेपाल सरकारले यस विभागलाई निम्न जिम्मेवारीहरु सुम्पेको छ :

- नेपाल गुणस्तर कायम गर्नु संशोधन गर्नु वा रद्द ,गर्नु ।
- नेपाल गुणस्तर कार्यन्वयन गर्नु ।
- गुणस्तर प्रमाण चिन्ह प्रयोग गर्न इजाजत दिने वा प्रमाण पत्र दिने प्रयोजनको निमित्त सरकारी वा गैर सरकारी प्रयोगशालाहरुलाई मान्यता दिनु वा दिईएको मान्यतालाई निलम्बन वा रद्द गर्नु ।
- गुणस्तर प्रयोग गर्न वा इजाजत वा प्रमाणपत्र दिनु ।
- परिक्षण उपकरणहरुको मापांकन गर्नु तथा कानूनी नापतौल कार्यन्वयन गराउनु ।

नेपाल गुणस्तर तथा नापतौल विभाग
बालाजुनेपाल ,काठमाडौं ,
फोन नं४३५०७२९ ,४३५०४४५ ,४३५०४४७ ,४३५०८१८ ,४३५०६८९ .
फ्याक्स नं४३५०६८९-१-९७७+ .
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