Government of Canada | Gouvernement du Canada

Canadian General Standards Board | Office des normes générales du Canada

CAN/CGSB-4.2
No. 27.6-2023

Supersedes
CAN/CGSB-4.2 No. 27.6-2015,
CAN/CGSB-4.2 No. 30.2-M90 and
CAN/CGSB-4.155-M88

Textile test methods

Flame resistance of soft floor coverings

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NATIONAL STANDARD OF CANADA

CAN/CGSB-4.2
No. 27.6-2023

Supersedes
CAN/CGSB-4.2 No. 27.6-2015,
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Flame resistance of soft floor coverings

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE.

ICS 97.150

Published November 2023 by the
Canadian General Standards Board
Ottawa, Ontario K1A 0S5

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A special acknowledgement is extended to the non-voting working group members: Justin Rae-Convenor, Cristina Micali, Tannie Mah, and Raina Strachan who provided contributions to the development of this standard.

Translation of this National Standard of Canada was conducted by the Government of Canada.

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Preface

This National Standard of Canada CAN/CGSB-4.2 No. 27.6-2023 supersedes CAN/CGSB-4.2 No. 27.6-2015, CAN/CGSB-4.2 No. 30.2-M90 and CAN/CGSB-4.155-M88.

Changes since the previous edition

- CAN/CGSB-4.2 No. 27.6-2015 *Flame resistance — Methenamine tablet test for textile floor coverings*, CAN/CGSB-4.2 No. 30.2-M90 *Procedure for the removal of non-permanent flame retardants on textile floor coverings* and CAN/CGSB-4.155-M88 *Flammability of soft floor coverings — Sampling plans* were combined into a single standard.
- Editorial, formatting and ordering changes were made throughout to allow integration of the three above-listed standards.
- Definition of “charring/charred” added.
- Definitions for “inspection” and “unacceptable product level” removed.
- Specifications for the roller are explicitly stated, removing reference to CGSB-22.42 *Paint Rollers and Accessories*.
- Section 6 was added to outline how the samples are sampled, prepared and tested.
- A numerical value for still-air conditions was added.
- Conditioning requirements prior to testing are now explicitly stated. Previously, these conditions were referenced in CAN/CGSB-4.2 No. 2 – *Conditioning Textile Materials for Testing*.
- Use of deionized water during washing is now permitted.
- The default desiccant was changed to anhydrous silica gel. Use of other equally effective desiccants is still permitted.

The following definitions apply in understanding how to implement this National Standard of Canada:

- "shall" indicates a **requirement**;
- "should" indicates a **recommendation**;
- "may" is used to indicate that something is **permitted**;
- "can" is used to indicate that something is **possible**, for example, that an organization is able to do something.

Notes accompanying clauses do not include requirements or alternative requirements. The purpose of a note accompanying a clause is to separate explanatory or informative material from the text. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

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Introduction

This National Standard of Canada was developed to provide flammability requirements for soft floor coverings, including textile floor coverings, with the aim to reduce the risk of property damage, burn injuries and deaths from fires associated with these products. The standard determines the flame resistance of a soft floor covering when exposed to an ignition source (a methenamine for timed burning tablet), under defined conditions.

Canada has a regulatory framework in place to protect the Canadian population from product-related hazards and to promote the safe use of products. Flammability requirements for textile floor coverings intended for consumer use are set out in the *Textile Floor Coverings Regulations* under the *Canada Consumer Product Safety Act*. The Regulations incorporate the Canadian General Standards Board standard CAN/CGSB-4.2 No. 27.6 entitled *Flame resistance — Methenamine tablet test for textile floor coverings* as the national test method for determining the flame spread properties of textile floor coverings.

This new edition of CAN/CGSB-4.2 No. 27.6 incorporates CAN/CGSB-4.2 No. 27.6-2015, *Flame resistance — Methenamine tablet test for textile floor coverings*, CAN/CGSB-4.2 No. 30.2-M90, *Procedure for the removal of non-permanent flame retardants on textile floor coverings* and CAN/CGSB-4.155-M88, *Flammability of soft floor coverings — Sampling plans* to provide a single standard covering the sampling, preparation and testing of soft floor coverings required to evaluate their flame resistance.

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Textile test methods
Flame resistance of soft floor coverings

1 Scope

This National Standard of Canada:

- determines the flame resistance of soft floor coverings when exposed to an ignition source (methenamine for timed burning tablet) under specified conditions;
- establishes sampling plans and procedures to determine the acceptability with respect to the flame resistance of soft floor coverings using a sequential sampling procedure;
- describes a procedure for the removal, prior to testing for flame resistance, of non-permanent flame-retardant treatments applied to soft floor coverings.

It is applicable to all types of soft floor coverings, regardless of fibre type or method of construction.

The testing and evaluation of a product against this standard may require the use of materials and/or equipment that could be hazardous. This standard does not purport to address all the safety aspects associated with its use. Anyone using this standard has the responsibility to consult the appropriate authorities and to establish appropriate health and safety practices in conjunction with any applicable regulatory requirements prior to its use.

Units of measurement – Quantities and dimensions used in this standard are provided in units from the International System of Units (imperial equivalents may be shown in brackets). Exceptions may be permitted.

2 Normative references

There are no normative references specified in this standard.

3 Terms and definitions

For the purposes of this National Standard of Canada, the following terms and definitions apply.

charring/charred
formation of carbonaceous residue during pyrolysis or incomplete combustion.

failure
performance of any specimen in which the charred area reaches a distance of 25 mm or less, measured radially from the inside edge of the prescribed frame.

production unit or production run
quantity of soft floor covering of a single quality, style and/or type not exceeding 21 000 m^2 of machine-produced soft floor covering, or 8500 m^2 of a single quality, style and/or type of otherwise produced soft floor covering. This may include one or more dye lots of the same quality, style and/or type (see sections 7.1.2.2 and 7.1.3.2).

quality, style and/or type
particular design or construction of soft floor covering which may vary only as to colour or print pattern.

sample
portions of the product, sufficient to provide the number of test specimens required to determine the overall acceptability of the product.

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sequential sampling plan
plan whereby a series of specimens is tested until the results are sufficiently conclusive to justify acceptance or rejection of the product.

soft floor covering
any type of finished product made wholly or in part of fibre, fabric or related material and intended for use as a floor covering, regardless of size, and that may or may not be fastened to the floor by mechanical or adhesive means. Animal skins or hides, whether composed of, or containing, natural fibres or man-made fibres, are also included. Resilient floor coverings such as vinyl and rubber, other than tile form, are not included.

specimen
specified portion of the sample/sub-sample used in an individual flammability measurement.

sub-sample
portion taken from a production unit, production run, quality, style and/or type. In any given instance, the total of the sub-samples taken constitutes the sample.

4 Symbols, acronyms and abbreviated terms

There are no symbols, acronyms or abbreviated terms specified in this standard.

5 Apparatus and reagents

5.1 Test chamber: a box, made from hard, fire-resistant insulation board at least 6 mm thick with similar thermal properties as inorganic-cement board, open at the top with all joints tightly sealed, with inside dimensions of 300 mm ± 10 mm x 300 mm ± 10 mm x 300 mm ± 10 mm. A mirror mounted at an angle above the test chamber will assist in viewing the test specimen.

5.2 Secondary floor: a rigid, removable, hard, fire-resistant insulation board made of the same material as the test chamber, and measuring approximately 280 mm x 280 mm x 3 mm to fit the inside bottom of the test chamber.

5.3 Frame: a steel plate, 230 mm ± 5 mm x 230 mm ± 5 mm x 6 mm ± 1 mm, with a 203 mm ± 0.5 mm diameter hole in the centre.

5.4 Centring device: an instrument used to centre the methenamine for timed burning tablet on the specimen.

Note: A half-circle template fitting the diameter of the frame with a half-circle hole of approximately 7 mm diameter at the centre of the base may be used (see Figure 1).

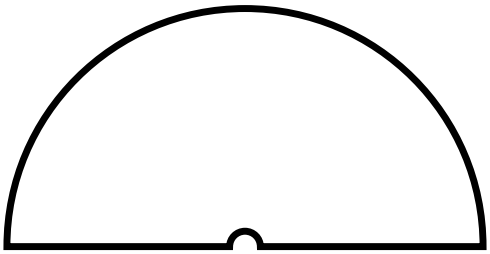

Figure 1 – Example of a centring device

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5.5 Methenamine for timed burning tablet: a white, round, bevelled tablet with a nominal diameter of 6.35 mm, a weight of 149 mg ± 5 mg and a burning time of 130 s ± 13 s.[1]

The tablet shall be stored in a desiccator over a desiccant for at least 24 h prior to use, to prevent cracking on ignition. The tablet shall be handled only by mechanical means.

Note: The burning time of the tablet is the duration of the flaming when the tablet is tested on a metal or equivalent burn plate under standard laboratory conditions in a draft-free environment.

5.6 Desiccator: a cabinet with shelves capable of holding specimens separately in a horizontal position.

5.7 Desiccant: anhydrous silica gel or an equally effective desiccant.

5.8 Laboratory drying oven: an oven with a forced draft capable of maintaining a temperature of 105 ºC ± 2 ºC.

5.9 Gloves: Nonhygroscopic gloves (such as polyethylene).

5.10 Steel rule: graduated in millimetres.

5.11 Vacuum cleaner: household, with dust brush attachment.

5.12 Flat-bottom vessel: at least 300 mm x 300 mm, to contain the specimen.

5.13 Clear glass or other impermeable surface: at least as large as the test specimen.

5.14 Cleaning solution (neutral anionic synthetic detergent): a 1% aqueous solution of sodium alkyl sulphate surfactant.

5.15 Roller: Synthetic fabric pile roller with approximately 240 mm core length and approximately 38 mm inside diameter with a pile height of 5 mm – 30 mm.

6 Testing

6.1 Samples of soft floor coverings shall be of sufficient size to provide the number of specimens required by the sampling plan.

6.2 The number of specimens to be tested shall be based on a statistically valid sampling plan. Section 7 represents a statistically valid sampling plan consisting of a minimum of ten specimens.

6.3 The acceptability of the sample is determined by the sampling plan used.

6.4 Specimens shall be prepared according to the procedure in section 8 and tested according to the procedure in section 9.

7 Sampling plan

7.1 Samples

7.1.1 Samples of soft floor coverings for testing purposes according to section 7.2.1 or 7.2.2 shall be taken as specified in section 7.1.2 or 7.1.3.

[1] A tablet that conforms to these specifications is available from Vesta Pharmaceuticals, Inc. Telephone : 317-895-9000 or 1-888-558-3782. Web site: https://www.vestamethenamine.com, or any other equivalent product.

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7.1.2 Machine-made products

7.1.2.1 One sample shall be taken from each production unit, production run, quality, style and/or type of 21 000 m^2 or less. The sample shall be taken by selecting at least four sub-samples within the production unit or production run. Sub-samples shall be chosen so that they are representative of the total production unit or production run. They shall not be taken continuously within any one roll or piece. From each sub-sample, sufficient material shall be taken to provide 12 specimens, making a total of 48 specimens in the sample. Test sets shall be made up by choosing specimens at random (using Annex B Tables B.1 or B.2) from the sub-samples.

7.1.2.2 To determine if different types of dyestuffs, pigments or combinations thereof with the same pile fibre on any quality, style and/or type may be considered to be of the same production unit or production run, the following preliminary flammability testing shall be carried out: at least four sets of eight specimens shall be assembled so that each colour or print pattern is equitably represented. Prepare specimens according to the procedure in section 8 and test specimens according to the procedure in section 9 to determine whether all colours or print patterns behave similarly. Provided there is no appreciable difference between individual specimens, the different colours or print patterns shall be considered to be of the same production unit or production run. Where any colour or print pattern exhibits appreciably different flammability characteristics from the others, it shall be considered a separate production unit or production run. All production units or production runs shall be sampled in accordance with section 7.1.2.1.

7.1.3 Hand-made products, specialty hides and skins

7.1.3.1 One sample shall be taken from each production unit, production run, quality, style and/or type of 8500 m^2 or less. The sample shall be taken by selecting at least four sub-samples within the production unit or production run. Sub-samples shall be chosen so that they are representative of the total production unit or production run. From each sub-sample, sufficient material shall be taken to provide 12 specimens, making a total of 48 specimens in the sample. Test sets shall be made up by choosing specimens at random (using Annex B Tables B.1 or B.2) from the sub-samples.

7.1.3.2 To determine if different types of dyestuffs, pigments or combinations thereof with the same pile or animal fibre on any quality, style and/or type may be considered to be of the same production unit or production run, the flammability testing as outlined in section 7.1.2.2 shall be carried out. All production units or production runs shall be sampled in accordance with section 7.1.3.1.

7.2 Levels of testing – There are two levels of testing: normal sampling and reduced sampling.

7.2.1 Normal sampling: carried out according to the sequential sampling plan shown in Annex A, Table A.1. Annex B, Table B.1 includes random numbers for use with the normal sequential sampling plan.

7.2.2 Reduced sampling: carried out according to the sequential sampling plan shown in Annex A, Table A.2. Annex B, Table B.2 includes random numbers for use with the reduced sequential sampling plan.

7.3 Application of testing levels

7.3.1 Normal sampling shall be used initially to determine if soft floor covering products have an acceptable flammability performance level. If two consecutive nominally equivalent production units or production runs of the same quality, style and/or type have shown a combined total of less than ten failures in normal sampling, then testing of subsequent production units or production runs for that particular quality, style and/or type may be continued by reduced sampling.

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7.3.2 When reduced sampling is in effect, normal sampling shall be resumed if any of the following conditions occur:

a) A production unit, production run, quality, style and/or type is rejected.

b) A production unit, production run, quality, style and/or type is considered unacceptable under the procedures of section 7.4.

c) Production becomes irregular, delayed or interrupted.

d) Other conditions warrant that normal sampling shall be instituted.

7.4 Determination of acceptability

7.4.1 Determination of acceptability – normal sampling plan – Annex A, Table A.1

7.4.1.1 Initial set – Test ten specimens as required by the plan. If the number of failures found in the set is equal to or less than the acceptance number, the production unit or production run shall be considered acceptable. If the number of failures found in the set is greater than the acceptance number, a second set in the series given by the plan shall be tested.

7.4.1.2 Second set – Test three specimens as required by the plan. Add up the number of failures found in the first and second sets. If the number of failures found in the two sets tested is equal to or less than the acceptance number, the production unit or production run shall be considered acceptable. If the cumulative number of failures is greater than the acceptance number, a third set in the series given by the plan shall be tested.

7.4.1.3 Third set – Test three specimens as required by the plan. Add up the number of failures found in the first, second and third sets. If the number of failures found in the three sets tested is equal to or less than the acceptance number, the production unit or production run shall be considered acceptable. If the cumulative number of failures is equal to or greater than the rejection number, the production unit or production run shall be rejected.

7.4.1.4 Continued testing – If necessary, testing shall be continued by the procedure outlined in section 7.4.1.3. Although the number of successive sets required to reach a decision may be more than three, at no time shall the total cumulative number of specimens required to reach a decision be more than 48.

7.4.2 Determination of acceptability – reduced sampling plan – Annex A, Table A.2

7.4.2.1 Initial set – Test four specimens as required by the plan, by the procedure for determining either acceptance or continuation of testing as outlined in section 7.4.1.1.

7.4.2.2 Second set – Test four specimens as required by the plan. Add up the number of failures found in the first and second sets. If the number of failures found in the two sets tested is equal to or less than the acceptance number, the production unit or production run shall be considered acceptable. If the cumulative number of failures is equal to or greater than the rejection number for the set, the production unit or production run shall revert to normal sampling.

7.4.2.3 Continued testing – If necessary, testing shall be continued by the procedure outlined in section 7.4.2.2. Although the number of successive sets required to reach a decision may be more than four, at no time shall the total cumulative number of specimens required to reach a decision be more than 16.

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8 Test specimens

8.1 Where removal of a non-permanent flame-retardant treatment from the sample prior to testing is desired, specimens shall be washed in accordance with section 8.4.

8.2 Cut specimens to the following dimensions, ensuring they are free from creases, delamination, or other distortion:

a) 280 mm x 280 mm for specimens that are to be washed in accordance with section 8.4 and are likely to shrink after washing;

b) 230 mm x 230 mm for all other specimens.

8.3 Use the vacuum cleaner to ensure the surface is free of lint, loose yarns, fibres, etc.

8.4 Removal of non-permanent flame-retardant treatments

8.4.1 Place specimen in the flat-bottom vessel, cover with distilled or deionized water at room temperature and allow it to remain for at least 5 min.

8.4.2 Remove the specimen and suspend it vertically until excess water has drained off (approximately 3 min to 5 min).

8.4.3 Place the specimen, pile or traffic side up, on a glass or other impermeable surface. Pour the cleaning solution, heated to 40 °C ± 2 °C, over the specimen in the following amounts:

a) 25 mL ± 1 mL for 280 mm x 280 mm specimens;

b) 16.5 mL ± 1 mL for 230 mm x 230 mm specimens.

8.4.4 With the roller dampened with distilled or deionized water at room temperature, move it backwards and forwards over the surface of the specimen, approximately 25 times, to work the solution into the pile or surface. Allow the suds to remain on the specimen for approximately 3 min.

8.4.5 Rinse the specimen thoroughly in distilled or deionized water, either by hosing or by immersing in several changes of water. Suspend the specimen vertically until excess water has drained off (approximately 3 min to 5 min).

8.4.6 Repeat the cleaning treatment (see sections 8.4.3 to 8.4.5) twice.

8.4.7 Dry the specimen at room temperature. If the pile is matted after drying, vacuum it lightly to raise the pile.

9 Procedure – Methenamine for timed burning tablet test

9.1 If the specimen has been recently exposed to a relative humidity (RH) greater than 50% or has been washed, precondition by freely exposing specimen in a laboratory drying oven at 50 °C ± 2 °C for 1 h to 2 h.

9.2 Condition specimen at 20 °C ± 2 °C and 65% ± 5% RH for a minimum of 12 h prior to testing.

Note: Standard conditioning before drying is specified because storage conditions may cause some materials to be moist, and thus require considerably more than 2 h of drying time.

9.3 Place the conditioned specimen in a laboratory drying oven at 105 °C ± 2 °C for 2 h ± 5 min, ensuring free access of air on all sides.

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9.4 Remove the specimen from the oven and immediately place it in the desiccator with the desiccant for a minimum of 1 h or until it reaches room temperature, ensuring that the specimen is horizontal with the pile side (or traffic surface) up. If more than one specimen is placed in the desiccator at a time, ensure specimens do not overlap.

9.5 Place the test chamber in a draft-free location (air velocity <0.3 m/s). Use of a laboratory fume hood, with all exhausts turned off and the door/sash closed, is recommended.

9.6 Remove the specimen from the desiccator. If applicable, ensure the pile is in an upright position by gently brushing against the lay with a gloved hand. Place the specimen horizontally on the secondary floor of the test chamber with the pile side (or traffic surface) up. Centre the steel frame on top of the specimen.

9.7 Using the centring device, place a methenamine for timed burning tablet horizontally on the centre point of the specimen. Care should be taken to not disturb or flatten the pile when using the centring device to place the tablet. For a specimen with an irregular, high pile, ensure the tablet does not fall between the yarns.

9.8 Ignite the tablet by carefully bringing an ignited lighter, match, or equivalent in contact with the top of the tablet; do not allow the ignition flame to come in contact with the specimen. If more than 2 min elapse between removal of the specimen from the desiccator and ignition of the tablet, repeat steps 9.2 to 9.7. If a major fracture of the tablet occurs, consider the test result void and repeat steps 9.2 to 9.8 with a new specimen.

9.9 Terminate the test when flaming and glowing cease, or when combustion reaches any point on the inside edge of the frame. Evacuate fumes from the test chamber. Without shifting the frame on the specimen, remove the secondary floor, frame, and specimen from the test chamber.

9.10 Measure the shortest distance between the charred area and the inside edge of the steel frame (see Figure 2), to the nearest millimetre using the steel rule. The charred area includes blackened or burned fibres; melted areas are not considered.

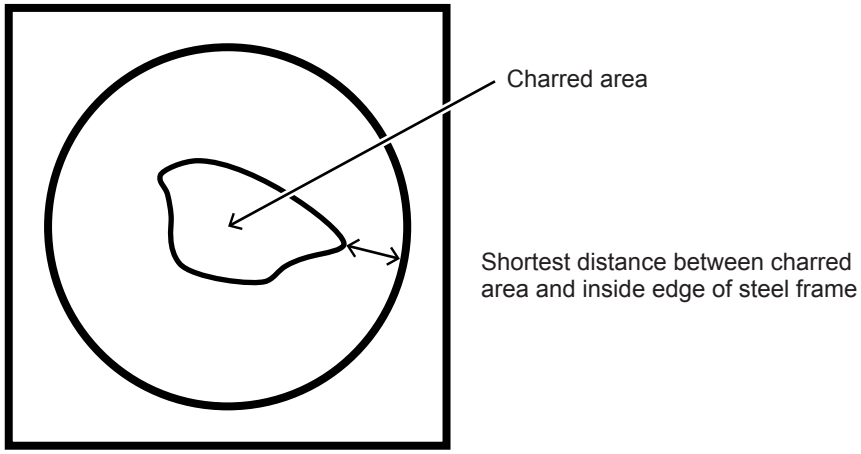

Figure 2 – Shortest distance measurement

9.11 Remove any residue from the secondary floor that would prevent the next specimen from being tested in a horizontal plane.

9.12 Allow sufficient time between tests for the secondary floor and test chamber to cool to room temperature.

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10 Report

Report the following information.

10.1 The sampling plan used and the number of specimens tested.

10.2 Whether the specimens were washed prior to testing.

10.3 The shortest distance between the charred area and the inside edge of the steel frame for each specimen tested, reported to the nearest millimetre.

10.4 The cumulative number of failures.

10.5 The number of this method: CAN/CGSB-4.2 No. 27.6.

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Annex A
(normative)

Sequential sampling plans

A.1 Normal sequential sampling plan

This sampling plan provides approximately 99% certainty that the soft floor covering has an acceptable flammability performance level.

See Table B.1 for random numbers for use with the normal sequential sampling plan.

Table A.1 – Normal sequential sampling plan

Set	Number of specimens tested	Cumulative number of specimens tested	Acceptance number (accept if cumulative number of failures equals or is less than)	Continue testing if cumulative number of failures is in this range	Rejection number (reject if cumulative number of failures equals or exceeds)
1	10	10	0	1 – 10	—
2	3	13	1	2 – 13	—
3	3	16	2	3 – 15	16
4	3	19	3	4 – 15	16
5	3	22	4	5 – 15	16
6	3	25	5	6 – 15	16
7	3	28	6	7 – 15	16
8	3	31	7	8 – 15	16
9	3	34	8	9 – 15	16
10	3	37	9	10 – 15	16
11	3	40	10	11 – 15	16
12	3	43	11	12 – 15	16
13	3	46	12	13 – 15	16
14	2	48	15	—	16

Note: The 14th set of specimens is tested only if the cumulative number of failures upon the completion of testing the 13th set equals 14 or 15.

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A.2 Reduced sequential sampling plan

This sampling plan provides approximately 90% certainty that the soft floor covering has an acceptable flammability performance level.

See Table B.2 for random numbers for use with the reduced sequential sampling plan.

Table A.2 – Reduced sequential sampling plan

Set	Number of specimens tested	Cumulative number of specimens tested	Acceptance number (accept if cumulative number of failures equals or is less than)	Continue testing if cumulative number of failures is in this range	Rejection number (reject if cumulative number of failures equals or exceeds)
1	4	4	0	1 – 4	—
2	4	8	1	2 – 4	5
3	4	12	2	3 – 4	5
4	3	15	3	4	5
5	1	16	4	—	5

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Annex B
(normative)

Random number tables

B.1 Random numbers for use with normal sequential sampling plan

Each of the twelve columns in Table B.1 represents a different randomization of the numbers 1 to 48.

When testing a series of production units or production runs, an operator should not use the same column of random numbers all the time. The simplest plan for making full use of all twelve columns is to use column A for the first sample to be tested, column B for the second sample, and so on to column L, after which, return to column A for the thirteenth sample and repeat sequence.

Table B.1 – Random numbers for use with normal sequential sampling plan

Set	A	B	C	D	E	F	G	H	I	J	K	L
	Specimen numbers											
1	12	43	42	22	39	19	29	9	4	18	39	46
	48	12	36	2	14	38	35	38	40	20	23	41
	35	15	30	44	38	48	9	28	29	19	26	35
	23	24	45	40	8	29	7	1	31	12	6	2
	17	32	10	30	44	35	11	7	7	35	35	24
	18	26	31	5	4	43	6	4	36	31	43	42
	21	31	34	41	13	12	43	12	13	44	8	36
	1	16	23	48	41	15	15	47	44	9	36	21
	27	3	15	25	17	22	23	42	5	3	41	16
	8	1	3	21	9	45	36	6	33	30	21	39
2	2	11	6	19	23	23	8	48	24	29	40	15
	15	46	11	9	10	16	4	27	18	45	15	3
	24	6	2	15	15	26	32	46	23	34	20	13
3	22	17	37	4	43	25	22	14	46	47	10	33
	39	19	4	11	11	20	5	21	3	21	27	38
	4	40	8	3	27	30	31	45	43	41	28	34
4	42	48	19	12	40	7	10	19	19	23	42	8
	45	27	32	37	12	36	25	30	30	22	25	1
	14	29	16	16	42	11	26	37	39	11	11	26

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Set	A	B	C	D	E	F	G	H	I	J	K	L
	Specimen numbers											
5	30	28	7	18	34	17	13	15	34	14	13	14
	11	45	38	32	7	27	16	40	35	37	31	20
	46	38	43	10	21	40	48	31	27	17	46	22
6	26	25	39	34	1	24	34	8	12	42	48	43
	10	20	27	28	35	33	42	26	16	1	29	11
	40	30	5	38	47	32	14	11	28	46	17	18
7	7	14	1	20	5	6	47	25	11	32	47	48
	34	5	46	39	48	4	33	13	15	7	14	40
	28	41	22	24	46	46	1	16	20	6	7	23
8	33	2	28	36	20	13	39	44	47	16	9	28
	37	35	9	31	22	1	45	36	26	39	4	4
	43	23	44	1	33	18	2	32	32	10	37	29
9	16	4	29	27	28	14	38	24	38	28	5	45
	9	9	33	8	29	3	19	18	41	25	45	32
	38	21	35	35	19	47	46	29	14	33	16	30
10	6	34	20	43	26	31	41	39	25	36	18	47
	31	22	24	13	24	5	20	23	48	27	38	5
	44	42	13	45	31	10	27	33	6	26	24	27
11	19	44	14	29	37	34	18	20	1	24	44	37
	20	8	12	46	30	39	3	35	17	48	19	44
	3	33	18	47	2	37	24	41	45	4	1	17
12	32	13	47	14	18	28	21	34	2	2	12	7
	25	7	21	7	32	2	37	22	9	38	3	9
	36	10	48	17	45	8	30	3	8	13	22	12
13	47	39	40	23	16	9	44	43	10	40	30	25
	41	36	26	42	36	42	12	10	21	5	2	10
	29	37	41	33	3	21	40	17	42	8	32	19
14	13	18	25	26	25	41	17	5	37	43	34	31
	5	47	17	6	6	44	28	2	22	15	33	6

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B.2 Random numbers for use with reduced sequential sampling plan

Each of the twelve columns in Table B.2 represents a different randomization of the numbers 1 to 16.

When testing a series of production units or production runs, an operator should not use the same column of random numbers all the time. The simplest plan for making full use of all twelve columns is to use column A for the first sample to be tested, column B for the second sample and so on to column L, after which, return to column A for the thirteenth sample and repeat sequence.

Table B.2 – Random numbers for use with reduced sequential sampling plan

Set	A	B	C	D	E	F	G	H	I	J	K	L
	Specimen number											
1	4	15	14	8	13	7	10	3	2	6	13	16
	16	4	12	1	5	13	12	12	13	7	8	14
	11	5	9	14	12	6	3	9	9	16	15	11
	7	7	13	12	3	9	2	1	14	4	2	1
2	5	9	3	9	14	10	14	2	16	10	10	7
	12	13	8	2	1	11	13	13	10	8	11	15
	14	8	11	10	16	3	11	16	4	9	16	9
	1	16	5	5	9	4	4	14	12	2	14	5
3	6	1	15	13	4	5	5	10	1	1	9	4
	2	10	1	4	2	14	7	11	6	14	4	12
	9	2	7	3	8	15	16	15	11	5	6	3
	13	3	2	11	7	12	1	4	3	12	12	13
4	3	11	6	16	15	8	9	5	5	13	3	2
	10	6	4	15	11	16	6	6	7	15	1	6
	8	14	10	6	10	2	8	8	8	3	5	10
5	15	12	16	7	6	1	15	7	15	11	7	8

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