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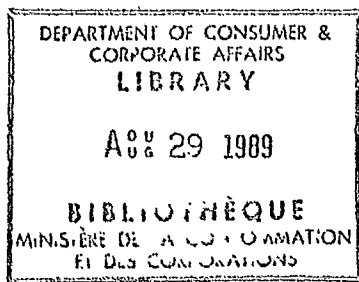
**Analysis of Impacts of Proposed  
Regulation of Tent Flammability**

**FINAL REPORT**



Consommation  
et Corporations  
Canada

Consumer and  
Corporate Affairs  
Canada



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**Analysis of Impacts of Proposed  
Regulation of Tent Flammability**

**FINAL REPORT**

2 Program Evaluation Division  
/ Bureau of Policy Coordination  
Consumer and Corporate  
Affairs Canada

**October 1986**

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## EXECUTIVE SUMMARY

### BACKGROUND AND RATIONALE

The purpose of the tent flammability regulatory proposal is to reduce the incidence and severity of burns from tent fires and thus reduce the number of deaths and serious injuries from this cause.

According to statistics gathered by the Product Safety Branch at CCAC, the annual number of tent fires is estimated at 31, resulting in 3 deaths, 5 injuries and \$28,000 in property damage.

The principal causes of the ignition of tents are open flames from various sources that are either too disparate to regulate or unregulatable. However, once the tent has been ignited, the main factors in the extent and severity of burns have been the speed with which the whole tent burns (less than one minute) and the severe heat which this engenders (between 250°C and 1000°C).

### REGULATORY PROPOSAL

On June 5, 1984, the Minister of Consumer and Corporate Affairs announced that she intended to develop a regulation establishing a flammability standard for tents. At present, there is no flammability standard. The flammability standards described in the draft regulation, presented in the **Appendix**, are scheduled to be introduced in November of 1988. At that time, all tents sold in Canada, regardless of material, would be required to meet the prevalent flame retardancy standards now used in the U.S.A. (CPAI-84).

### INDUSTRIAL FACTORS

About 75% of tents sold in Canada are imported. Regarding tents manufactured in Canada, at present, cotton is the predominant material used mainly because it is the cheapest material available. Unfortunately, it has been the most flammable material used for tents sold in Canada. Because of the expected regulation, industry has been trying to develop a flame-retardant cotton and some members are optimistic about having one available in time for use in tents sold after November 1988. However, the costs of the treated cotton are not now known to us. In particular, it is not known if the costs will be acceptable to industry. Regarding flame retardant materials whose costs are known, polyester is the least expensive and therefore the most likely to be used by Canadian manufacturers once the regulation is in place. Its use has been assumed in order to investigate the costs and benefits of the options considered.

### OPTIONS CONSIDERED

Following work which looked at a wide variety of alternatives, the decision was taken that plausible options all should meet the same flammability standard but differed in terms of implementation timing.

Timing Option 1: Implementation date November 1988

Timing Option 2: Implementation date November 1989

The purpose of the delayed implementation date would be to allow more time for the development of a flame retardant cotton which would be significantly less costly than a flame retardant polyester.

For purposes of analysis, it is assumed that the adoption of the regulation with the earlier implementation date (Option 1), would preclude the development and adoption of flame retardant cotton after the regulation is implemented. It is also assumed that if the implementation date is delayed by one year, (i.e. Option 2), flame retardant cotton will be developed and adopted at a specified economical cost. For these reasons, the analysis may significantly overstate the cost reducing effect of delaying the implementation.

### COSTS AND BENEFITS

The price effects would be different for each option. Prices of Canadian produced tents would increase from 16 to 21% for the earlier implementation option resulting in the use of polyester and from 7 to 9% for the later implementation option, resulting in the use of cotton. The estimated social costs of the new regulation stem largely from the expected price increases for tents. For the first option, the present value of total costs would be \$27 million (1986 dollars) in the first twenty-five years after implementation. For the second option, the present value of total costs would be \$19.4 million plus the costs of developing the flame retardant cotton. Both cost figures include unemployment impacts.

Once the standard has been adopted for all tents in use, the annual benefit will be the saving of 2 lives, .1 injury and \$17.5 thousand. These figures then represent the difference in benefits between the two options i.e. delaying the implementation date by one year.

Assuming development costs of \$500 thousand for flame retardant cotton, the maximum cost saving effect of the delay would be \$7.08 million. This should be compared with the lost benefit of avoiding 2 deaths and .1 injury. In the decision of whether to regulate at all, the avoidance of 40 deaths, 2.05 injuries and \$358,750 in property loss over a 25 year period would have to be compared with a cost of \$27 million in 1986. The first twenty-five years of regulation do not save 50 lives because it takes time for all tents in use to be replaced by flame retardant ones.

#### FOLLOW-UP ACTION

The regulatory initiative for tent flammability that is being proposed corresponds to Option 1 of this study, a flammability standard with an implementation date of November, 1988. This option was acceptable to most of the industry representatives who provided advice on the study.

In order for the tent flammability regulatory proposal to receive approval, a number of steps must be followed to meet the requirements under the government's new Regulatory Process Action Plan.

A regulatory impact analysis statement (RIAS), a requirement under the new process, is being prepared for submission to the Regulatory Affairs Secretariat for approval. This study constitutes the base analysis of the RIAS, assessing the impact of the tent flammability regulatory proposal. The Secretariat will forward the regulatory proposal to PCO (Justice) for approval. Consultation with affected parties will then take place through prepublication and publication of the RIAS and the proposal in the Canada Gazette as appropriate.

The study itself can be used to provide a common basis for discussion with interested parties. The underlying analysis is based on in-depth consultation with affected parties.

## TENT FLAMMABILITY SEIA

### FINAL REPORT

#### **A. BACKGROUND**

The Product Safety Branch of Consumer and Corporate Affairs Canada (CCAC) proposes to include tents (camping tents, play tents, tent trailers and dining shelters) under the Hazardous Products Act. Tents in these categories would be subject to regulations concerning labelling and construction using flame retardant (FR) materials. These regulations (See **Appendix**) are expected to be introduced in November of 1988. They will have an impact on tents available for sale in the 1989 season.

As in other regulations dealing with the health or safety of the general public or with issues of fairness, the regulations fall under the government's policy on Socio-Economic Impact Analysis (SEIA). This policy calls for an assessment of the effects of the proposed government regulation.

Abt Associates of Canada conducted the first and second phase of the SEIA research under the direction of the Program Evaluation Division of CCAC. Results of this research are available as **Volume 1 - Costs** and **Volume 11 - Benefits**.

#### **B. STUDY METHODOLOGY**

This study provides a Socio-Economic Impact Assessment of the proposed tent flammability regulations. Costs and benefits of the regulations were assessed for a number of periods. For our scenario of the most likely effects presented in this summary we used a 25 year time horizon.

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1. Canopies, awnings, tarpaulins, air supported structures, marquees and public assembly tents are covered under the National Building Code of Canada. These structures are excluded from the definition of tent used throughout this report.

Data sources used in the research for the study are many:

- . In-depth interviews were conducted with domestic tent manufacturers, tent importers, tentage material finishers, retailers and consumer groups. Interviews were also conducted with industry representatives in the United States.
- . Consumers' willingness-to-pay for a flame retardant tent were obtained through a survey of tent campers.
- . Studies estimating the value of life were reviewed.
- . Published and unpublished data from various federal government departments and provincial ministries were gathered.

### **C. MAIN FINDINGS**

If the regulations are introduced, tents produced domestically and imported will be required to meet flame retardant standards for materials. At the retail level, the regulations will affect tents sold in the 1989 season. A number of tentage material options are open to the domestic tent industry. We have analyzed costs and benefits of the regulations based on these potential tentage materials. This section presents our main findings on the costs and benefits to Canadian society of the most likely scenario. This scenario uses a flame retardant polyester tentage fabric as the principal material used by the domestic industry after the regulations are implemented. It also uses a most likely quantity response by consumers to the domestic and foreign price changes which result from the regulations.

#### **1. Costs of the Regulations**

If the domestic industry adopts polyester as the main tentage material costs are estimated at \$27 million. This figure represents the present value of the costs to Canadian society in the first twenty-five years after introduction of the regulations.

Other impacts of the most likely scenario are:

- . Prices rise by 19.4% to 21.3% for the major product lines of domestic tents; 5.8% on average for tents imported after the regulations. At present, 74% of tents are imported.



- . Some adverse effects occur for domestic manufacturers and importers of tents. Treatment of cotton tentage fabric in Canada would be severely reduced.
- . Domestic production falls to 87,277 units from its 1985 level of 105,000 units. Imports represent 77.0% of the tent market or 285,580 tents. This represents a reduction in the total number of tents imported (from approximately 300,000 in 1985) but a rise in market share for imports (from 74.0% in 1985).
- . Employment in the industry drops by 32 person-years from its level of 225 person-years in 1985. For domestic manufacturers, employment drops to 122 person-years -- down from 150 in 1985. Employment from tent imports drops to 71 person-years -- down from 75 in 1985. Six jobs are also lost in the domestic treating of cotton. Most employment impacts occur in the industrial regions surrounding Toronto. The higher than average job prospects in this region suggest that employment impacts will be short-lived.
- . One or more domestic manufacturers may be forced out of business. Few cotton tents, and none from present foreign sources, would be imported. Impacts might result for consumers through a lessening of competition. However, competition from other importers would remain strong and may increase if consumers see nylon and domestic polyester tents as close substitutes or if polyester tents are also imported after the regulations. This foreign competition might be able to check the potential influence of fewer domestic manufacturers.
- . Other impacts were deemed to be minor and were not assessed.

Costs are higher and impacts more severe if a tariff is applied to imports of the polyester tentage material. Under such a scenario costs to society in the first twenty-five years after the introduction of the regulations are \$30 million.

Costs to society are reduced if the domestic industry is able to adopt a flame retardant cotton tentage material. Costs in the first twenty-five years after the introduction of the regulations are \$20 million. Employment losses are

estimated at six person-years. These lower costs assume that a method to flame retard the present cotton tentage fabric, used by domestic tent manufacturers, is developed at a 50% increase in treatment cost.

## **2. Benefits of the regulations**

We estimated the benefits of the flame retardant regulations in terms of lives saved, injuries avoided and property loss averted. Estimates were based on:

- . Tent fire statistics and estimates of the resulting annual losses.
- . Details on 17 tent fire incidents for which there was enough information to assess the likely impact if there had been a flame retardant tent.
- . Tent camping statistics which were used to adjust benefits based on more recent tenting activity.

We determined that if all tents were flame retardant an annual benefit would result of:

- . 2.0 lives saved.
- . 0.1 injuries avoided (1 injury avoided approximately every 10 years).
- . \$17,500 (in 1986 dollars) of property loss averted.

Assuming it would take a full ten years before all tents used were flame retardant, the first year of full benefits will depend on the number of flame retardant tents used. In 1989, the first year after implementation, benefits are estimated at 0.2 lives saved, 0.01 injuries averted and \$1,750 (in 1986 dollars) fewer losses of property.

## **3. Effects of the regulations**

For our most likely scenario, which uses polyester as the main tentage material in the construction of domestic tents the effects of the regulations are:

- . A cost to society of \$27 million (in 1986 dollars) in the first twenty-five years after implementation. This includes a reduction of 32 person-years of employment in the tent industry.

- . A benefit which rises, based on the number of flame retardant tents in use, to an annual maximum in 1998 of 2.0 lives saved, 0.1 injury avoided and \$17,500 (in 1986 dollars) of property loss avoided.

Costs to society if the domestic industry is able to adopt flame retardant cotton are less.

Exhibit I-1 presents the annual costs and benefits of the regulations to the year 2000 for the polyester and cotton tentage fabric options.

#### **D. OPTIONS AND ALTERNATIVES**

We assessed a number of options or alternatives to the present regulations. These are summarized in this section.

##### **1. Delay implementation dates to investigate feasibility of flame retardant cotton**

Costs to the industry and to society as a whole will be less if the industry is able to use inexpensive, flame retardant cotton instead of polyester after the regulation. Assuming that the industry would otherwise adopt polyester and not revert to cotton at a later date, this option assesses the impact of a one year delay which allows the industry to develop a cost effective method to flame retard cotton tentage fabric. If this method could be developed at zero cost, the savings to society of such a delay would be \$7.6 million of reduced costs. The delay would also reduce benefits. Over a ten year period the delay is expected to result in 2 deaths, 0.1 injuries and \$17,500 (in 1986 dollars) of property loss which would not occur without the delay.

If flame retardant cotton were available before the proposed implementation date there would, of course, be no benefit to this option. Also, if manufacturers were to switch to cotton at a later date, then the benefits of this option, as shown here, would be overstated.

##### **2. Develop a treatment process for cotton**

This option considers the funding of a study which is able to develop a viable process to flame retard cotton before the proposed implementation date. It assumes that without such a study the industry would be forced to adopt polyester as a tentage fabric. Given this assumption, the resulting saving to society of a treatment process would be \$5.7 million. We have estimated the probability of success

**EXHIBIT I-1    Benefits and costs of the Tent Flammability Regulations to  
the year 2000**

Year	Benefits			Costs	
	Lives Saved	Injuries Avoided	Property Loss Avoided (\$1986)	Polyester Option (\$1986)	Cotton Option (\$1986)
1985				19,000	19,000
1986				57,000	57,000
1987				15,000	15,000
1988				59,000	59,000
1989	0.2	0.01	1,750	2,996,000	2,367,000
1990	0.4	0.02	3,500	2,437,000	1,738,000
1991	0.6	0.03	5,250	2,215,000	1,580,000
1992	0.8	0.04	7,000	2,014,000	1,437,000
1993	1.0	0.05	8,750	1,831,000	1,306,000
1994	1.2	0.06	10,500	1,664,000	1,187,000
1995	1.4	0.07	12,250	1,513,000	1,079,000
1996	1.6	0.08	14,000	1,375,000	981,000
1997	1.8	0.09	15,750	1,250,000	892,000
1998	2.0	0.1	17,500	1,137,000	811,000
1999	2.0	0.1	17,500	1,033,000	737,000
2000	2.0	0.1	17,500	939,000	670,000

needed to make the research effort socially worthwhile for various research costs. For a cost of \$0.5 million the probability must exceed 10%. For a research cost of \$2.5 million the probability of success must exceed 78%.

If flame retardant cotton could be developed by the industry prior to the implementation date, there would be no benefit to this option.

### **3. Development of a Canadian standard**

A slightly lower Canadian flame retardant standard may allow the domestic industry to adopt a flame retardant cotton instead of polyester tentage material. This will result in less impact to domestic manufacturers and lower costs to society. However, against this must be weighed the reduced benefits of a lower Canadian standard. It is impossible to present this trade-off without knowing how much lower the standard would need to be set to allow adoption of a flame retardant cotton.

### **4. Remove quotas and tariffs on imports of nylon**

Nylon might be used by the domestic industry if tariffs were removed from its importation and if quotas for its import were granted. We have assessed the likely impacts of a switch to nylon by the domestic industry but find such a change unlikely. The costs to the domestic industry and to the Canadian society exceed those of other tentage material options.

### **5. Increase consumer awareness**

An alternative to the proposed regulations is to increase consumer awareness of the dangers of a tent fire. If consumers were made more aware, and if they valued increased tent safety at more than the increased cost of a safer tent, the market mechanism would bring about increased tent safety. Consumers would demand flame retardant tents and importers and manufacturers would be willing to supply them.

However, increased consumer awareness will not be as effective as the proposed regulations in bringing about the movement to flame retardant tents. This will result in fewer lives saved, injuries avoided and property loss averted. These reduced benefits should be assessed against the costs of such an awareness program and costs to the tent industry and retailers of a partial shift to flame retardant tents.

#### **E. FOLLOW-UP ACTION**

The implementation date is planned for November, 1988. This regulatory initiative represents option 1 of this study. It seems to be acceptable to most of the industry representatives who provided advice on the study.

In order for the tent flammability regulatory proposal to receive approval, a number of steps must be followed to meet the requirements under the government's new Regulatory Process Action Plan.

A regulatory impact analysis statement (RIAS), a requirement under the new process, is being prepared for submission to the Regulatory Affairs Secretariat for approval. This study constitutes the base analysis of the RIAS, assessing the impact of the tent flammability regulatory proposal. The Secretariat will forward the regulatory proposal to PCO (Justice) for approval. Consultation with affected parties will then take place through prepublication and publication of the RIAS and the proposal in the Canada Gazette as appropriate.

The study itself can be used to provide a common basis for discussion with interested parties. The underlying analysis is based on in-depth consultation with affected parties.

**APPENDIX**

**THE PROPOSED REGULATION**



SCHEDULE

1. Part II<sup>1</sup> of the schedule to the Hazardous Products Act is amended by adding thereto, immediately after item 30 thereof, the following item:

"31. Tents that are made in whole or in part of fabric or other pliable materials, including

- (a) camping tents,
- (b) play tents,
- (c) tent trailers, and
- (d) dining shelters,

but not including canopies, awnings, tarpaulins, air-supported structures or tents to which the National Building Code of Canada, 1985, issued by the Associate Committee on the National Building Code, National Research Council of Canada, dated 1985, applies."

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<sup>1</sup> SOR/85-378, 1985 Canada Gazette Part II, p. 2056



REGULATIONS RESPECTING THE ADVERTISING, SALE  
AND IMPORTATION INTO CANADA OF TENTS

Short Title

1. These Regulations may be cited as the Hazardous Products (Tents) Regulations.

Interpretation

2. In these Regulations,

"after-flame time" means the length of time a material tested in accordance with the procedure described in section 7 of CPAI-84 continues to flame after the ignition source has been removed; (durée de combustion résiduelle)

"CPAI-84" means A Specification for Flame Resistant Materials used in Camping Tentage, being specification CPAI-84, 1980, established by the Industrial Fabrics Association International (formerly the Canvas Products Association International) originally published in 1972, as amended in 1980; (norme CPAI-84)

"flame-retardant tent" means a product made of flooring material that meets the performance requirements as described in section 8 and of wall and top material that successfully meets the performance requirements as described in section 9; (tente ignifugée)

"flooring material", with respect to a product, means the fabric or other pliable material that constitutes the floor of the product; (matériau de sol)

"product" means a tent that is included in item 31 of Part II of the schedule to the Hazardous Products Act; (produit)

"sample unit" means

(a) in respect of flooring material, four specimens of the material of a product that meet all the requirements for test specimens as described in Schedule II; and

(b) in respect of wall and top material, eight specimens of the material of a product that meet all the requirements for test specimens described in Schedule II; (unité d'échantillonnage)



"wall and top material", with respect to a product, means the fabric or other pliable material that constitutes a wall, roof, top, door, window, screen or awning of the product. (matériau pour murs et toits)

#### General

3. For the purposes of subsection 3(2) of the Hazardous Products Act, a person may advertise, sell or import into Canada a product on or after (effective date), where the product is

(a) not a flame-retardant tent, if it meets the information requirements set out in sections 5 and 6; or

(b) a flame-retardant tent, if it meets the information requirements set out in section 7 and the performance requirements described in sections 8 and 9.

4. Where, pursuant to sections 5, 6 or 7, information is required to be displayed, it shall be displayed in both official languages.

#### Information Requirements for Products That Are Not Flame-retardant

5. A product that is not a flame-retardant tent shall have a label that is permanently affixed to the product at a prominent location and that displays in a clear and legible manner

(a) the following words in upper case letters not less than 3 mm in height:

- (i) "WARNING/MISE EN GARDE",
- (ii) "WARNING/AVERTISSEMENT", or
- (iii) "WARNING/ATTENTION"; and

(b) the following statements or other information to the same effect:

"Tent will ignite and may burn when exposed to open flame or other ignition sources./La tente peut s'enflammer et brûler si elle est exposée à une flamme nue ou à d'autres sources d'inflammation."

6. A set of written precautions containing the information set out in Schedule I or other information to the same effect shall be included with a product.



Information Requirements for Flame-retardant Tents

7. A product that is a flame-retardant tent shall have a label that is permanently affixed to the product at a prominent location and that displays in a clear and legible manner

(a) the following statements in upper case letters not less than 3 mm in height:

"WARNING: KEEP ALL FLAME AND HEAT SOURCES AWAY FROM THIS TENT FABRIC/ MISE EN GARDE: TENIR LE TISSU DE CETTE TENTE LOIN DE TOUTE FLAMME ET DE TOUTE SOURCE DE CHALEUR"..

(b) the following statements:

"This tent is made with flame resistant fabric. It is not fireproof. The fabric will burn if left in continuous contact with any flame source./Cette tente est fabriquée d'un tissu résistant au feu, mais qui n'est pas ininflammable. Ce tissu brûlera s'il est laissé en contact continu avec une source d'inflammation."; and

(c) the information set out in Schedule I or other information to the same effect.

Performance Requirements for Flame-retardant Tents

8. When prepared and tested in accordance with the procedures set out in Schedule II, no individual specimen of a sample unit of flooring material of a product that is a flame-retardant tent shall be damaged within 2.5 cm of the edge of the hole in the flattening frame.

9. When prepared and tested in accordance with the procedures set out in Schedule II,

(a) no individual specimen of a sample unit of wall and top material of a product that is a flame-retardant tent shall have an after-flame time of more than 4.0 seconds and the average after-flame time for all specimens of the sample unit shall not exceed 2.0 seconds;

(b) the maximum damaged length of an individual specimen of a sample unit of wall and top material of a product that is a flame-retardant tent and the maximum average damaged length for all specimens of the sample unit shall be as follows:



Mass per Unit Area of Specimen Being Tested (g/m <sup>2</sup> )	Maximum Average Damaged Length for Sample Unit (cm)	Maximum Damaged Length for Individual Specimen (cm)
greater than 340	11.5	25.5
271 to 340	14.0	25.5
201 to 270	16.5	25.5
136 to 200	19.0	25.5
51 to 135	21.5	25.5
less than 51 and	23.0	25.5

(c) no individual specimen of a sample unit of wall and top material of a product that is a flame-retardant tent shall have portions that break or residues that drip from the specimen and continue to flame after they reach the floor of the test cabinet.



## SCHEDULE I

(Sections 6 and 7)

The following precautions should be followed when camping.

- . Never use candles, matches or open flames of any kind in or near a tent.
- . Cooking inside the tent is dangerous.
- . Build campfires downwind and several meters away from the tent. Always be sure to fully extinguish campfires before leaving camp or before retiring for the night.
- . Practise extreme caution when using fuel-powered lanterns and heaters inside the tent. Use battery-operated equipment whenever possible.
- . Never refuel lamps, heaters or stoves inside the tent.
- . Extinguish or turn off all lanterns before going to sleep.
- . Avoid smoking in the tent.
- . Never store flammable liquids inside the tent.

## ANNEXE I

(articles 6 et 7)

Les précautions suivantes doivent être prises en camping:

- . Ne jamais utiliser de bougies, d'allumettes, ni aucune autre flamme nue à l'intérieur ou à proximité de la tente.
- . Éviter de faire de la cuisson à l'intérieur de la tente.
- . Faire les feux de camp sous le vent et à quelques mètres de la tente; s'assurer de toujours bien éteindre les feux de camp avant de quitter le terrain ou de se coucher.
- . Être extrêmement prudent lorsque des lanternes ou des appareils de chauffage sont utilisés sous la tente et se servir autant que possible d'appareils fonctionnant à piles.
- . Ne jamais remplir le réservoir des lampes, des appareils de chauffage ou des poêles à l'intérieur de la tente.
- . Éteindre toutes les lanternes avant de se coucher.
- . Éviter de fumer à l'intérieur de la tente.
- . Ne jamais ranger des liquides inflammables à l'intérieur de la tente.



## SCHEDULE II

(Section 8 and 9)

### Conditioning and Testing Procedures

1. Cut 12 individual specimens from the flooring material of the product to be tested. The individual specimens shall meet the requirements for test specimens set out in subsection 6.1 of CPAI-84. Divide the individual specimens into 3 sample units. Where the flooring material is woven, none of the specimens within a sample unit shall contain the same warp, weft yarns or filaments as any other specimen in that sample unit. Prepare one sample unit according to the leaching requirements specified in subsections 5.2.2 and 5.2.3 of CPAI-84. Prepare a second sample unit according to the accelerated weathering requirements specified in subsections 5.3.2 and 5.3.3 of CPAI-84. Condition all 3 sample units according to the procedures set out in sections 5.1.1 and 5.1.2 of CPAI-84.

2. Cut 24 individual specimens from the wall and top material of the product to be tested. The individual specimens shall meet the requirements for test specimens set out in subsection 7.1 of CPAI-84. Divide the individual specimens into 3 sample units. Where the wall and top material is woven, each sample unit shall contain 4 specimens from the warp direction and 4 specimens from the weft direction of the wall and top material; none of the specimens from the warp direction shall contain the same warp yarns or filaments as any other specimen from the warp direction and none of the specimens from the weft direction shall contain the same weft yarns or filaments as any other specimen from the weft direction. Condition the specimens according to the procedures set out in sections 5.1.1 and 5.1.2 of CPAI-84. Determine the mass per unit area of the specimens to be tested to the nearest  $\text{g/m}^2$ . Prepare one sample unit according to the leaching requirements specified in subsections 5.2.2 and 5.2.3 of CPAI 84. Prepare a second sample unit according to the accelerated weathering requirements specified in subsections 5.3.2 and 5.3.3 of CPAI-84. Condition all three sample units according to the procedures set out in sections 5.1.1 and 5.1.2 of CPAI-84.

3. Flame tests shall be performed under or on immediate removal of the specimens from the standard atmospheric conditions specified in subsection 5.1.1 of CPAI-84 and, on specimens in moisture equilibrium, at standard atmospheric conditions, as specified in subsection 5.1.2 of CPAI-84.

4. The sample units of flooring material prepared in accordance with section 1 shall be tested according to the procedures set out in section 6 of CPAI-84.



## SCHEDULE II

### Conditioning and Testing Procedures - Conc.

5. The sample units of wall and top material prepared in accordance with section 2 shall be tested according to the procedures set out in section 7 of CPAI-84 except that, with respect to subsection 7.3.6.1, the loads for determining the damaged length shall be as follows:

Mass per Unit Area of Specimen being Tested (g/m <sup>2</sup> )	Loads for Determining Damaged Length (g)
100 or less	50
101 to 200	100
201 to 340	200
greater than 340	300

