

2. CONTRACT NO.: CPSC-D-11-0001
3. AWARD/EFFECTIVE DATE: 07/12/2011
4. ORDER NUMBER: 0001
5. SOLICITATION NUMBER:
8. SOLICITATION ISSUE DATE:

7. FOR SOLICITATION INFORMATION CALL: Eddie Ahmad
6. TELEPHONE NUMBER (No collect calls): (301) 504-7884
8. OFFER DUE DATE/LOCAL TIME: ET

9. ISSUED BY: CONSUMER PRODUCT SAFETY COMMISSION
DIV OF PROCUREMENT SERVICES
4330 EAST WEST HWY
ROOM 517
BETHESDA MD 20814
CODE: FMPS
10. THIS ACQUISITION IS:
 UNRESTRICTED OR SET ASIDE: % FOR:
 SMALL BUSINESS EMERGING SMALL BUSINESS
NAICS: HUBZONE SMALL BUSINESS SOLE SOURCE
SIZE STANDARD: SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS 8(A)

11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED: SEE SCHEDULE
12. DISCOUNT TERMS: Net 30
13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700):
13b. RATING:
14. METHOD OF SOLICITATION: RFQ IFB RFP

15. DELIVER TO: CONSUMER PRODUCT SAFETY COMMISSION
DIRECTORATE FOR ENGINEERING SCI
4330 EASTWEST HIGHWAY
ROOM 611-16
BETHESDA MD 20814
CODE: ES
16. ADMINISTERED BY: CONSUMER PRODUCT SAFETY COMMISSION
DIV OF PROCUREMENT SERVICES
4330 EAST WEST HWY
ROOM 517
BETHESDA MD 20814
CODE: FMPS

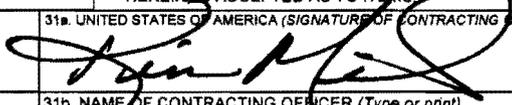
17a. CONTRACTOR/OFFEROR: INTERTEK TESTING SERVICES NA INC
3933 US ROUTE 11
CORTLAND NY 13045-9717
CODE: 03760
FACILITY CODE:
18a. PAYMENT WILL BE MADE BY: CPSC Accounts Payable Branch
AMZ 160
P. O. Box 25710
Oklahoma City OK 73125
CODE: FMFS

17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER
18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED SEE ADDENDUM

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
0001	DUNS Number: [REDACTED] Task order 0001 is issued against contract order CPSC-D-11-0001 for Cigarette Ignition Risk Project Testing in accordance with the attached statement of work, the GS Schedule GS-07F-0158V and attached terms and conditions. Project Manager Continued ... (Use Reverse and/or Attach Additional Sheets as Necessary)	1	HR	146.59	146.59

25. ACCOUNTING AND APPROPRIATION DATA: 0100A11DPS-2011-2163500000-EXHR004400-255C0
26. TOTAL AWARD AMOUNT (For Govt. Use Only): \$54,114.99

27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA ARE ARE NOT ATTACHED.
27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-5 IS ATTACHED. ADDENDA ARE ARE NOT ATTACHED.
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.
29. AWARD OF CONTRACT REF. _____ OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN IS ACCEPTED AS TO ITEMS: _____

30a. SIGNATURE OF OFFEROR/CONTRACTOR: _____
31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER): 
30b. NAME AND TITLE OF SIGNER (Type or print): _____
30c. DATE SIGNED: _____
31b. NAME OF CONTRACTING OFFICER (Type or print): Kim Miles
31c. DATE SIGNED: 7-13-11

Todd Stevenson

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
0002	Supervisory Technician	120	HR	87.95	10,554.00
0003	Testing Technician	168	HR	73.30	12,314.40
0003 A	Miscellaneous items and materials The total amount of award: \$54,114.99. The obligation for this award is shown in box 26.				31,100.00

32a. QUANTITY IN COLUMN 21 HAS BEEN RECEIVED INSPECTED NOTED: _____ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____ 32c. DATE _____ 32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____ 32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____
 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____

33. SHIP NUMBER _____ 34. VOUCHER NUMBER _____ 35. AMOUNT VERIFIED CORRECT FOR _____ 36. PAYMENT COMPLETE PARTIAL FINAL _____ 37. CHECK NUMBER _____
 PARTIAL FINAL

38. S/R ACCOUNT NUMBER _____ 39. S/R VOUCHER NUMBER _____ 40. PAID BY _____

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT _____ 42a. RECEIVED BY (Print) _____
 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER _____ 41c. DATE _____ 42b. RECEIVED AT (Location) _____
 42c. DATE REC'D (YY/MM/DD) _____ 42d. TOTAL CONTAINERS _____

A. BILLING INSTRUCTIONS

Pursuant to the Prompt Payment Act (P.L. 97-177) and the Prompt Payment Act Amendments of 1988 (P.L. 100-496) all Federal agencies are required to pay their bills on time, pay interest penalties when payments are made late, and to take discounts only when payments are made within the discount period. To assure compliance with the Act, vouchers and/or invoices shall be submitted on any acceptable invoice form which meets the criteria listed below. Examples of government vouchers that may be used are the Public Vouchers for Purchase and Services Other Than Personal, SF 1034, and Continuation Sheet, SF 1035. At a minimum, each invoice shall include:

1. The name and address of the business concern (and separate remittance address, if applicable).
2. **Do NOT** include Taxpayer Identification Number (TIN) on invoices sent via e-mail.
3. Invoice date.
4. Invoice number.
5. The contract or purchase order number (see block 2 of OF347 and block 4 of SF1449 on page 1 of this order), or other authorization for delivery of goods or services.
6. Description, price and quantity of goods or services actually delivered or rendered.
7. Shipping cost terms (if applicable).
8. Payment terms.
9. Other substantiating documentation or information as specified in the contract or purchase order.
10. Name, title, phone number and mailing address of responsible official to be notified in the event of a deficient invoice.

ORIGINAL VOUCHERS/INVOICES SHALL BE SENT TO:

U.S. Mail

CPSC Accounts Payable Branch, AMZ-160
PO Box 25710
Oklahoma City, Ok. 73125

FEDEX

CPSC Accounts Payable Branch, AMZ-160
6500 MacArthur Blvd.

Oklahoma City, Ok. 73169

OR

Via email to:

9-AMC-AMZ-CPSC-Accounts-Payable@faa.gov

Invoices not submitted in accordance with the above stated minimum requirements will not be processed for payment. Deficient invoices will be returned to the vendor within seven days or sooner. Standard forms 1034 and 1035 will be furnished by CPSC upon request of the contractor.

Inquiries regarding payment should be directed to the Enterprise Service Center (EXC), Office of Financial Operations, Federal Aviation Administration (FAA) in Oklahoma City, 405-954-7467.

B. PAYMENT

Payment will be made as close as possible to, but not later than, the 30th day after receipt of a proper invoice as defined in "Billing Instructions," except as follows:

When a time discount is taken, payment will be made as close as possible to, but not later than, the discount date. Discounts will be taken whenever economically justified. Otherwise, late payments will include interest penalty payments. Inquiries regarding payment should be directed to Debbie Young at 405-954-7467 or at the U.S Mail and Fedex addresses listed above:

Complaints related to the late payment of an invoice should be directed to Eldona Canterbury at the same the same address (above) or 405-954-5351.

Customer Service inquiries may be directed to Rachelle Coleman @ rcoleman@cpsc.gov

C. INSPECTION & ACCEPTANCE PERIOD

Unless otherwise stated in the Statement of Work or Description, the Commission will ordinarily inspect all materials/services within seven (7) working days after the date of receipt. The CPSC representative responsible for inspecting the materials/services will transmit disapproval, if appropriate, to the contractor and the contract specialist listed below. If other inspection information is provided in the Statement of Work or Description, it is controlling.

D. ALL OTHER INFORMATION RELATING TO THE PURCHASE ORDER

Contact: Contract Specialist –Eddie Ahmad at (301) 504-7884

E. PROCESSING INSTRUCTIONS FOR REQUESTING OFFICES

The Purchase Order/Receiving Report (Optional Form 347 or Standard Form 1449) must be completed at the time the ordered goods or services are received. Upon receipt of the goods or services ordered, each item should be inspected, accepted (partial or final) or rejected. The Purchase Order/Receiving Report must be appropriately completed, signed and dated by the authorized receiving official. In addition, the acceptance block shall be completed (Blocks 32 a, b & c on the SF 1449 and column G and page 2 of the OF 347). The receiving report shall be retained by the requesting office for confirmation when certifying invoices.

F. PROPERTY/EQUIPMENT PURCHASES

In the case of Purchase Orders/Receiving Reports involving the purchase and receipt of property/equipment, a copy of the Purchase Order/Receiving Report must also be immediately forwarded directly to the Property Management Officer (Rey Garcia) in the Facilities Management Support Services Branch (Room 520). The transmittal of Purchase Orders/Receiving Reports to the property management officer is critical to the integrity and operation of CPSC's Property Management System. Receiving officials should also forward copies to their local property officer/property custodian consistent with local office procedures.

Task 1 – Statement of work

Cigarette Ignition Risk Project - Test Plan for Evaluating Cigarettes on Mattresses and Mattress Pads

1. SCOPE

The following task shall be completed per the Consumer Product Safety Commission (CPSC) Contract CPSC-D-11-0001. The purpose of this task is to evaluate the difference, if any, between conventional and Reduced Ignition Propensity (RIP) cigarettes on mattress and mattress pad substrates.

2. SUMMARY

In this test series, cigarettes will be placed on mattress or mattress pad substrates (herein referred to as “substrate”) and allowed to burn to completion or self-extinguishment. Video cameras located above the substrate will record the burning behavior and char development around each cigarette. This test plan describes: the preparation of mattresses, mattress pads, and cigarette samples; cigarette lighting procedures; how and where to place cigarettes; and recordkeeping requirements.

Each test will consist of 18 cigarettes of both RIP and traditional type. The cigarettes will be placed in three locations (as available): on the smooth surface, in a tuft or on the tape edge of the substrate area. Each substrate will be visually divided into six sections or blocks for cigarette placement. The cameras that will be placed above the substrate should correspond approximately to each block, with overlaps. A schematic of the substrate blocking and camera placement is provided in Appendix B.

Below is the general test procedure. The attached sampling plans specify cigarettes and locations for each test.

3. GOVERNMENT FURNISHED MATERIALS.

- A. All cigarette samples
- B. Six video cameras with trigger mechanisms
- C. Ten cigarette holders
- D. Schematic for video camera placement
- E. External hard drive for videos and photos
- F. Sampling plans

4. CONTRACTOR FURNISHED MATERIALS.

- A. All mattress and mattress pad samples. Contractor shall furnish the following mattress and mattress pad samples. All samples of each product should be ordered from the same vendor in one order.

Product	Brand	Size	Price*	#	Website/Contact
Mattress	Naturepedic, Quilted Organic Cotton Deluxe	Twin	\$699	12	www.naturepedic.com
Mattress Pad	Nirvana Organic cotton mattress pad – double weight	Full	\$259	12	www.nontoxic.com/orgmattresspads/orgquilted.html
Mattress	Vivetique, All organic cotton mattress	Twin	\$552	12	Paul@vivetique.com (will require a letter from CPSC)
Mattress	Futon	Twin	\$530	12	Suzanne@thefutonshop.com (will require a letter from CPSC)

5. TEST PLAN

A. Equipment List

- 6 Cameras
- Dry-erase board for identifying videos and photos
- 19 stop watches
- 10 cigarette holders
- Vacuum and hose
- Candle or alcohol burner or lamp to ignite cigarettes
- Temperature and humidity measuring device
- Anemometer
- Balance, with draft enclosure and a precision of 0.001g.
- Ruler, in mm.

B. Mattress/Pad Sample Preparation

1. Label mattresses and pads using the codes as assigned in Appendix A.
2. Launder mattress pad[†]. Mattresses require no laundering.
3. Condition mattress/pad and sheeting for 48 hours at 70 ± 5°F and 55 ± 5% RH prior to testing.

C. Cigarette Preparation

* Estimated cost; does not include shipping.

[†] Launder per 16 CFR §1632.5(b)(2).

1. Remove cigarettes from cartons per sampling plan, in Appendix G. Record carton and pack number.
2. Make a pencil mark on each cigarette 10 mm from the lighting end.
3. Condition cigarettes for 48 hours at $70 \pm 5^\circ\text{F}$ and $55 \pm 5\% \text{RH}$.
 - a. After conditioning, mark cigarettes with pencil at 10mm from lighting tip.
 - b. Measure the length[†] and mass of each cigarette. Record values on data sheet.
 - c. Measure band width and distance between bands on RIP cigarettes, if possible (bands can often be seen on light tables). Record on data sheet.
4. If cigarettes were removed from conditioning chamber for measurement, re-condition the cigarettes for 48 hours at $70 \pm 5^\circ\text{F}$ and $55 \pm 5\% \text{RH}$ prior to testing.
 - a. Note: In-house testing showed that storing cigarettes in flat trays helped to organize the cigarettes. See Appendix D.

D. Test Setup

1. Set all stop watches to 00:00 (mm:ss)
2. Locate cameras so that there is one in the center of each block of the mattress. See Appendix B for placement.
3. Turn on cameras. The cameras need to be AC adaptor powered.
4. Place placard with test date, number and sample ID, for at least 5seconds in view of each camera for test identification.
5. Turn off cameras until ready to start test.
6. Record temperature and relative humidity in test area.
7. Record the air flow at sample surface, in all four cardinal directions.
8. Place sample mattress or mattress pad on fiberboard. Record time that sample was removed from conditioning.
9. Vacuum any debris or lint from the substrate surface.
10. Photograph any identifying tags or marks on the mattress or mattress pad sample. Make sure that the test number and sample ID are indicated in the photograph for recordkeeping purposes. Cut off any tags that may interfere with char formation. Save the tags for CPSC.
11. Place a label with test and cigarette number in the location where each cigarette will be placed. These labels will need to be in a contrasting color that can be seen in the videos. See Appendix C for instruction on how to place cigarettes in these locations for the different samples. Information on placement of cigarettes using the sheeting fabric is also included in the Appendix.

E. Conduct Tests

1. Turn on cameras. Set up so that the camera takes elapsed photos at 30 second intervals.
2. Light cigarettes with a vacuum hose and candle or other open flame source. Hold cigarette in vacuum hose stream until evenly lit. See Appendix D.
3. Place cigarettes in holders and allow to burn to 10 mm mark before placing on substrate.

[†] The length includes the filter where applicable.

- To allow enough time between cigarettes for placement, it is recommended that cigarettes are lit 30 seconds apart.
4. Place cigarettes on specimen per sampling plan and previously located labels.
 - Ensure that the label near the cigarette for video identification, but not in the char area for identification in photos.
 5. Record time that each cigarette was placed. See Appendix F for a sample data sheet.
 6. If cigarette self-extinguishes within 60 seconds of placement, re-ignite the same cigarette and re-place.
 7. Record time to full length burn of cigarette, if possible.
 - Note: Do not lift sheeting to determine full length burns.
 - For cigarettes with filters: note the time at which both the smoke has ceased and the cigarette has burned past the words/ colored paper over the filter. See Appendix E for more detail.
 8. Record time of cigarette self extinguishment, if possible.
 - Note: Record only in the case that the cigarette extinguishes before burning its full length.
 - Do not lift sheeting to determine self extinguishment.
 9. Record time of substrate self extinguishment, if possible.
 10. Record any excessive smoke or other unusual occurrence per cigarette.
 11. Test for each cigarette will end when all cigarettes and substrate have stopped smoldering or at 60 minutes after cigarette is placed, whichever comes first.

F. Post-test:

1. Turn off video cameras.
2. If it is safe to do so:
 - a. Photograph each location, including the cigarette label and with a ruler in view, if possible.
 - b. Measure the maximum char length in 4 directions from the cigarette, if possible. Record measurement on data sheet.
3. For each cigarette that did not burn its complete length[§]:
 - a. Photograph with a ruler in the picture.
 - b. Measure the mass of each cigarette, if possible. Lightly tap the cigarette to remove any loose ash prior to measurement. Record mass on the data sheet.
 - c. Measure location of band from smoking end, if present. Record length on the data sheet.

6. REPORTING REQUIREMENTS

Per the Original Contract, section H, Reporting Requirements, the contractor will provide the following:

1. A bi-weekly status report during the task period, to be submitted to the CPSC project manager as below.

[§] If it looks like other areas on the substrate may cause extreme smoldering, it is recommended that self-extinguished cigarettes be removed before end of test to ensure that measurements can be made.

- a. Format – The report must be provided in either Microsoft Word or Adobe Acrobat format and must be e-mailed to the CPSC project manager at: SMehta@cpsc.gov.
 - b. Content – The report must contain the following:
 - Status of project and new developments, e.g. how many tests have been completed
 - Problems and proposed solutions
 - Changes in schedule
2. All test results to the CPSC project manager at:
 Shivani Mehta
 U.S. Consumer Product Safety Commission
 5 Research Place
 Rockville, MD 20850
- a. Format – The data results of the Contractor testing will be provided in a Microsoft Excel spreadsheet format (1 electronic copy by email and 1 electronic copy on a CD). A sample data sheet is in Appendix F.
 - b. Videos will be downloaded onto an external hard drive that will be provided by CPSC.
 - c. Content – The results of the Contractor testing will include all data recorded and observations. Specifically, the following information will be provided for each cigarette tested:
 - Date of test
 - Beginning time of test
 - Operator ID (s)
 - Ambient humidity level (% R.H.) at beginning of test
 - Ambient temperature (°F) at beginning of test
 - Air flow (ft/sec) in each of the cardinal directions at beginning of test
 - Cigarette brand (using CPSC identifier)
 - Type of cigarette (non-RIP, RIP)
 - Cigarette number
 - Carton and pack of cigarette
 - Mass and length of cigarette before test
 - Substrate (mattress or pad) tested
 - Location type (tuft, smooth, edge)
 - Cigarette burn to completion (yes/no)
 - Time for cigarette to burn to completion, if possible
 - Cigarette self – extinguishment (yes/no)
 - Time for cigarette self – extinguishment
 - Substrate time to self – extinguishment
 - End time of test

- Ambient humidity level (% R.H.) at end of test
- Ambient temperature (°F) at end of test
- Mass and length of cigarette after test, if possible
- Photographs of the mattress with the cigarettes in place, before and after test.

7. OTHER REQUIREMENTS:

CPSC staff will visit the testing facility once materials are received and testing is in progress. The exact date and time will be determined based on contractor's estimated test schedule and will be discussed with the project officer.

8. DELIVERY INFORMATION

Testing shall be completed and data received at CPSC no later than 60 days after receipt of materials.

Appendices Table of Contents

Appendix A. Codes for Substrate and Cigarettes	2
Appendix B. Substrate Blocking and Camera Placement.....	3
Appendix C. Placement of Cigarettes for Each Substrate Brand.....	4
Table 1. Placement for Nirvana Pad	4
Table 2. Placement for Naturepedic Mattress.....	6
Table 3. Placement for The Futon Shop	9
Table 4. Placement for the Vivetique Mattress.....	11
Appendix D. Cigarette lighting procedure.....	14
Appendix E. Cigarette Full Length Burn Descriptions.....	16
Appendix F: Sample Data Sheet – Side 1	17
Appendix G. Sampling Plans	19

Appendix A. Codes for Substrate and Cigarettes

Substrates

Brand	Type	Size	Code	Quantity
Nirvana	Pad	Full	A	12
Naturepedic	Mattress	Twin	B	12
The Futon Shop	Futon	Twin	C	12
Vivetique	Futon	Twin	D	12

Cigarettes

Brand	Code	RIP/Non	Quantity
Standard Reference #1196	SRM	Non	108
Pall Mall	PMR	RIP	108
Newport Menthol	NMN	Non	108
Newport Menthol	NMR	RIP	108
Marlboro Light	MLN	Non	108
Marlboro Light	MLR	RIP	108
Winston Full Flavor	WFN	Non	108
Winston Full Flavor	WFR	RIP	108

Appendix B. Substrate Blocking and Camera Placement

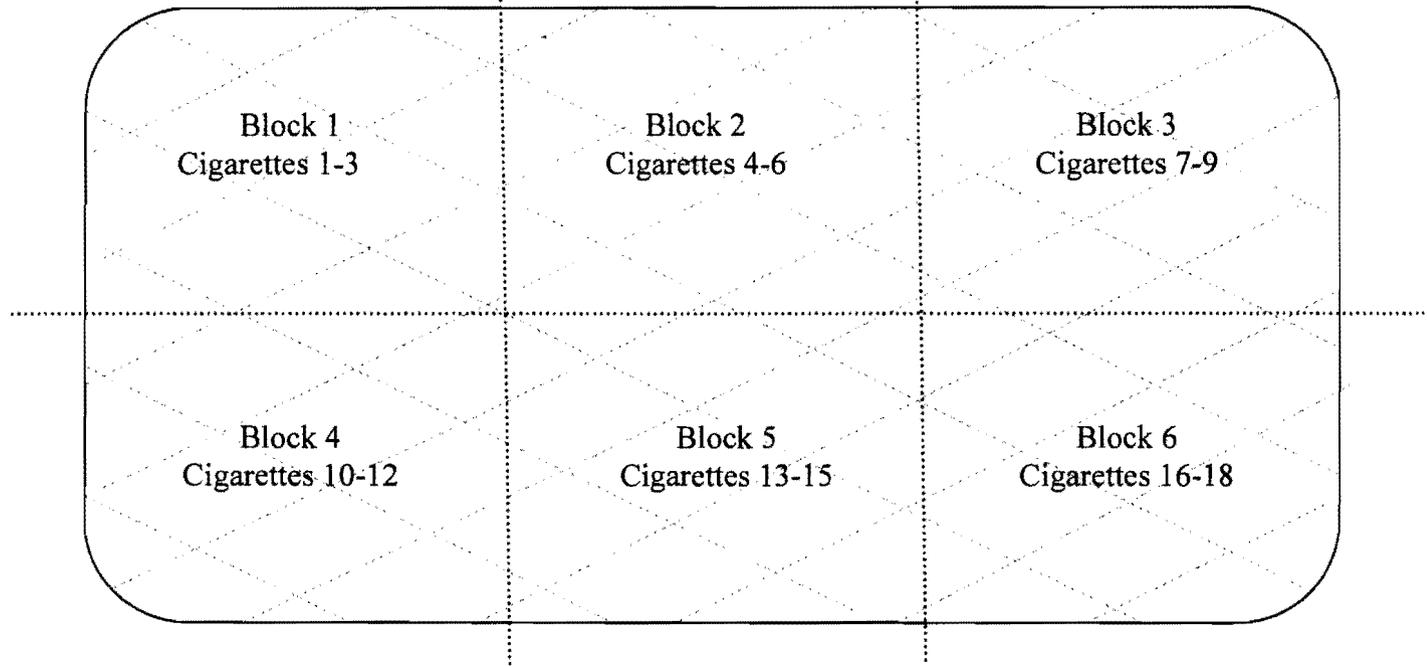
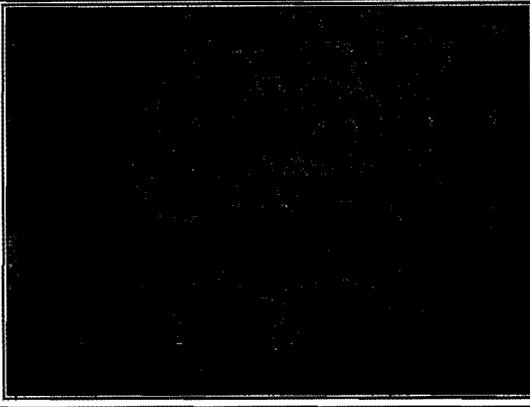
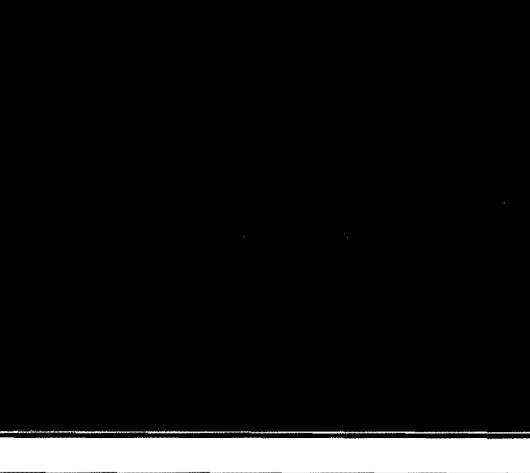


Figure 1. Substrate Blocking

Appendix C. Placement of Cigarettes for Each Substrate Brand

Table 1. Placement for Nirvana Pad

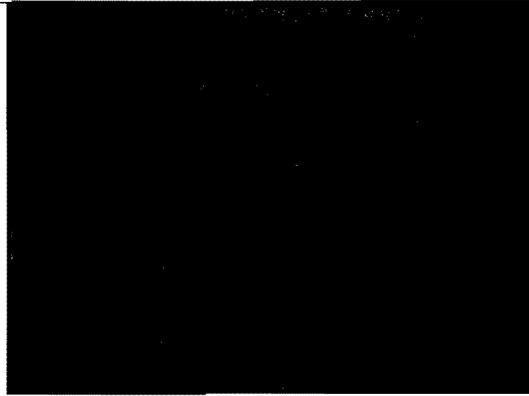
<p>Smooth, No Sheeting The cigarette should start and end on the smooth surface. Cigarettes may also be placed perpendicular to what is shown in picture.</p>	
<p>Tuft, No Sheeting The cigarette should be placed in the crevice made by the quilting. Cigarettes may also be placed perpendicular to what is shown in picture.</p>	
<p>Edge, No Sheeting Cigarettes should be placed in the crevice made by the stitching on the edge. Pins should be used to hold the cigarette in place, as seen in the red circles. The pins should be little lower than the top of the cigarette.</p>	

Smooth, with Sheeting

The cigarette should start and end on the smooth surface. It may be helpful to run a finger along the quilt lines to help define the smooth surface area through the sheeting fabric.

Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette or to cause the cigarette to move/shift locations.

Cigarettes may also be placed perpendicular to what is shown in picture.

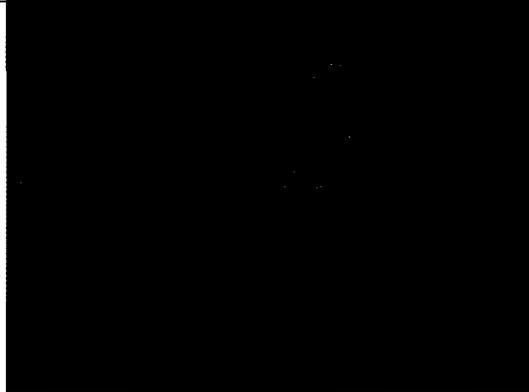


Placement on Tuft, with Sheeting

The cigarette should be placed in the crevice made by the quilting. It may be helpful to run your finger along the crevice so that it is clear where the tuft is under the sheeting for ease of placement.

Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations.

Cigarettes may also be placed perpendicular to what is shown in picture.



Placement on Edge, with Sheeting
Cigarettes should be placed in the crevice made by the stitching on the edge. Pins should be placed through both pieces of sheeting to hold the cigarette in place once the cigarette is covered. The pins should be little lower than the top of the cigarette. This can be done before the lit cigarette is placed on the test surface for ease of placement.

Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations.



Table 2. Placement for Naturepedic Mattress

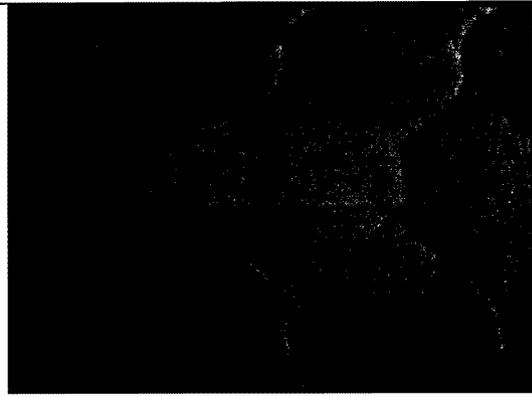
Smooth, No Sheeting

The cigarette should start and end on the smooth surface. Cigarettes may be placed in any direction as long as the entire cigarette is on the smooth surface.



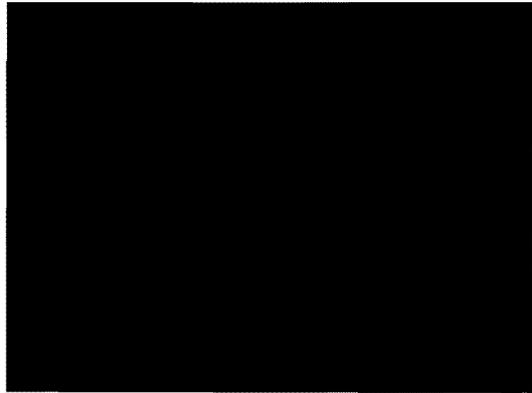
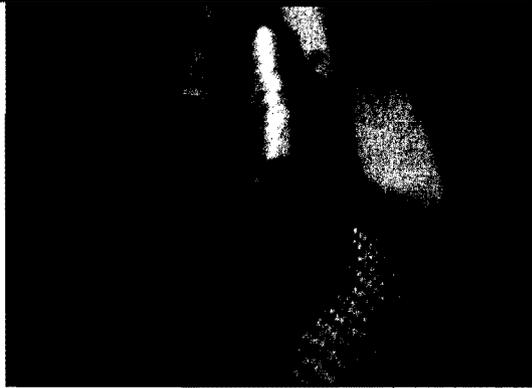
Tuft, No Sheeting

The cigarette should be placed in the crevice made by the quilting. The smoking end of the cigarette should terminate on the tuft line.



Edge, No Sheeting

Cigarettes should be placed in the crevice made by the tape edge. Pins should be used to hold the cigarette in place, as seen in the red circles. The pins should be little lower than the top of the cigarette.



Smooth, with Sheeting

The cigarette should start and end on the smooth surface. It may be helpful to run a finger along the quilt lines to help define the smooth surface area through the sheeting fabric.

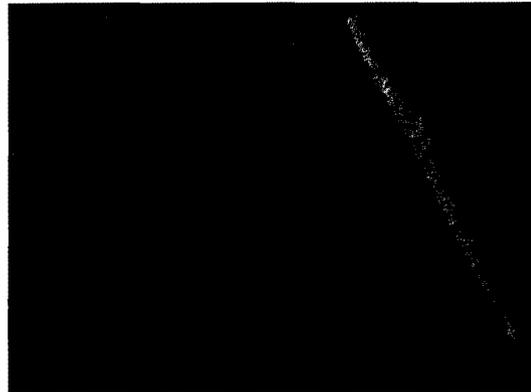
Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette or to cause the cigarette to move/shift locations.



Placement on Tuft, with Sheeting

The cigarette should be placed in the crevice made by the quilting. It may be helpful to run a finger along the crevice, through the sheeting fabric so that it is clear where the tuft is under the fabric for ease of placement.

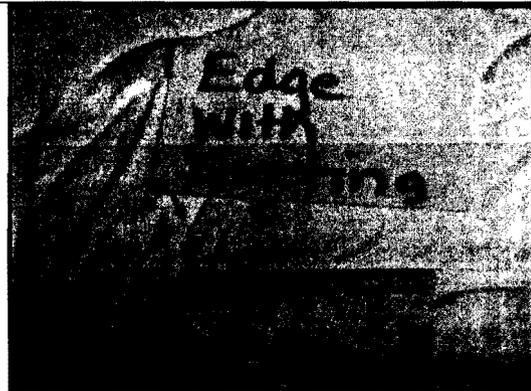
Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations.



Placement on Edge, with Sheeting

Cigarettes should be placed in the crevice made by the tape edge. Pins should be placed through both pieces of sheeting to hold the cigarette in place once the cigarette is covered. The pins should be little lower than the top of the cigarette. This can be done before the lit cigarette is placed on the test surface for ease of placement.

Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to



move/shift locations.

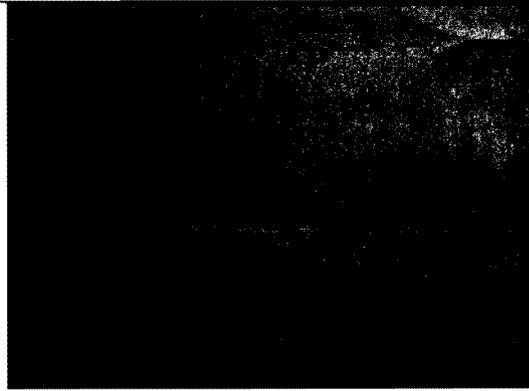
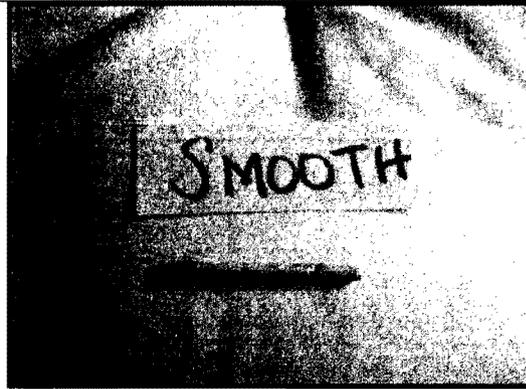


Table 3. Placement for The Futon Shop

Smooth, No Sheeting

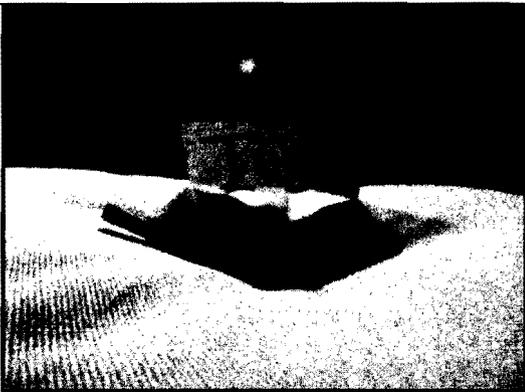
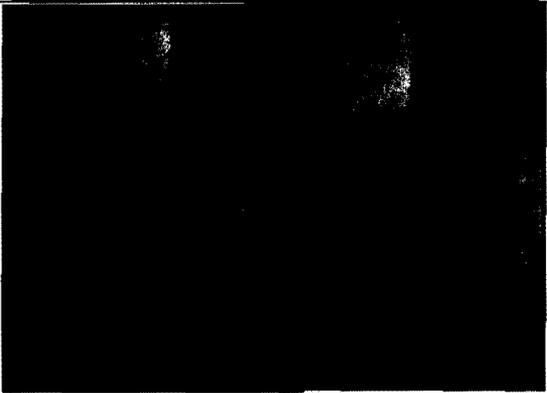
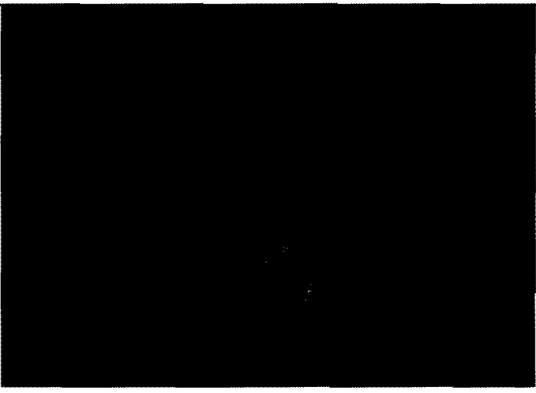
The cigarette should start and end on the smooth surface. Cigarettes may be placed in any direction as long as it stays in the center of the smooth surface.



Tuft, No Sheeting

The cigarette should be placed in the valley made by the tufts. Cigarettes may be placed in any direction out of the tuft. The lit end of the cigarette must be outside the valley, as shown in the picture.



	
<p>Smooth, with Sheeting Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations. Cigarettes may be placed in any direction as long as it stays in the center of the smooth surface.</p>	
<p>Placement on Tuft, with Sheeting The cigarette should be placed in the crevice made by the tufting. Place a sheet centered over the tuft; place a finger into the valley so that the sheeting sits against the futon surface</p> <p>Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations.</p> <p>Cigarettes may be placed in any direction out of the tuft. The lit end of the cigarette must be outside the valley, as shown in the picture.</p>	 

***Note :** If the tuft looks like it has been mistakenly punctured, as seen here, or the tuft area does not look like other tufts on the futon do not use this tuft location.

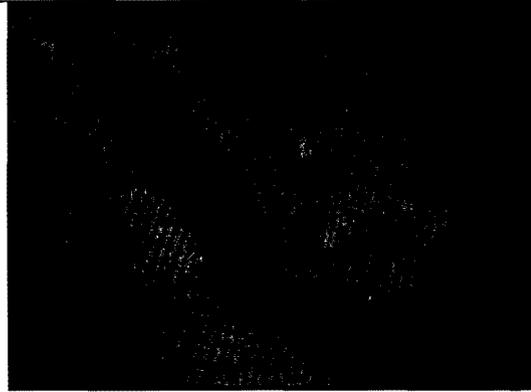
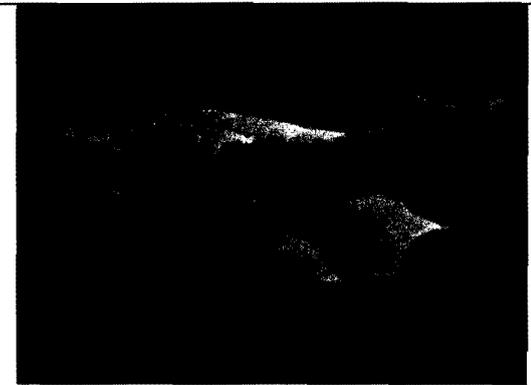


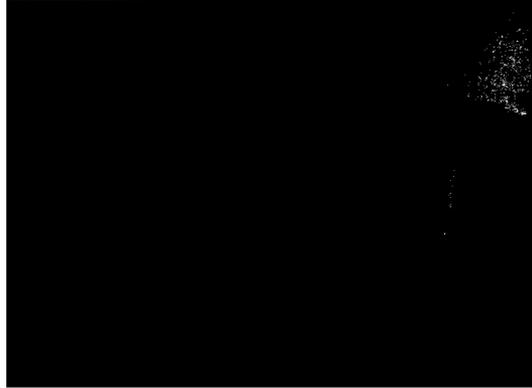
Table 4. Placement for the Vivetique Mattress

Smooth, No Sheeting
The cigarette should start and end on the smooth surface. Cigarettes may be placed in any direction as long as the entire cigarette is on the smooth surface.



Tuft, No Sheeting
The cigarette should be placed in the tuft. The lit end of the cigarette should be facing away from the tuft indentation.



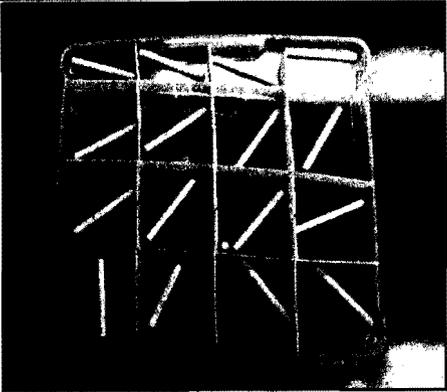
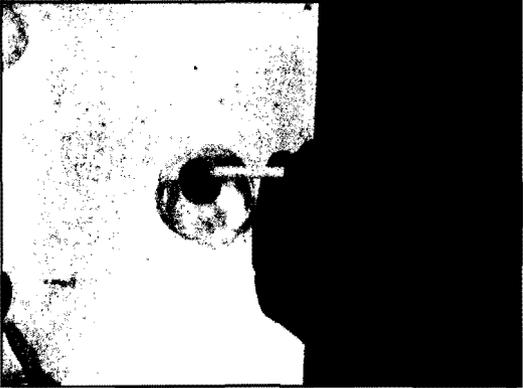
<p>Edge, No Sheeting Cigarettes should be placed in the crevice made by the tape edge. Pins should be use to hold the cigarette in place, as seen in the Table 2.</p>	
<p>Smooth, with Sheeting The cigarette should start and end on the smooth surface. It may be helpful to run a finger along the quilt lines to help define the smooth surface area through the sheeting fabric. Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette or to cause the cigarette to move/shift locations.</p>	<p>See . Placement for The Futon Shop, Smooth, with Sheeting example</p>
<p>Placement on Tuft, with Sheeting The cigarette should be placed in the crevice made by the tufting. Place a sheet centered over the tuft; place a finger into the valley so that the sheeting sits against the futon surface Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette or to cause the cigarette to move/shift locations. Cigarettes may be placed in any direction out of the tuft. The lit end of the cigarette must be outside the valley, as shown in the picture.</p>	 <p>See . Placement for The Futon Shop, Placement on Tuft with Sheeting for more detail.</p>
<p>Placement on Edge, with Sheeting Cigarettes should be placed in the crevice made by the tape edge. Pins</p>	

should be placed through both pieces of sheeting to hold the cigarette in place once the cigarette is covered. The pins should be little lower than the top of the cigarette. This can be done before the lit cigarette is placed on the test surface for ease of placement.

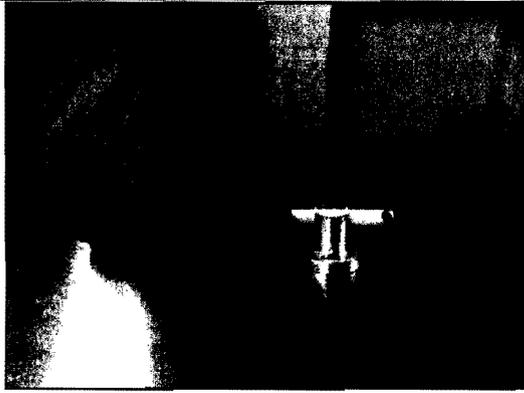
Once the cigarette is covered with the sheeting fabric, flatten the sheeting around the cigarette so that there is contact between the sheeting and cigarette. Be careful not to squeeze the cigarette. Or to cause the cigarette to move/shift locations.

See . Placement for The Futon Shop, Placement on Edge, with Sheeting for more detail.

Appendix D. Cigarette lighting procedure.

Action	Photo/Description
Lay cigarettes out in tray	
<ul style="list-style-type: none"> • Start stopwatch • Ignite candle or lamp • Turn on vacuum hose 	<div style="display: flex; justify-content: space-around;">   </div> <div style="text-align: center; margin-top: 20px;">  </div>
Hold cigarette with smoking end about a half inch into the hose and the lighting tip over the flame. Hold there until the cigarette is ignited.	

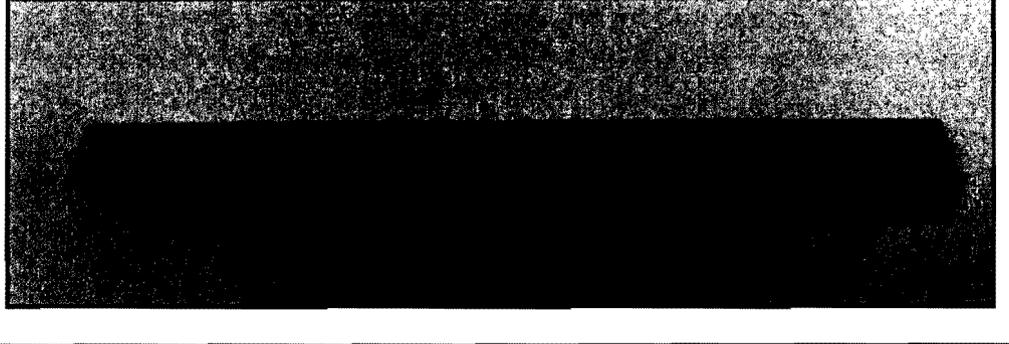
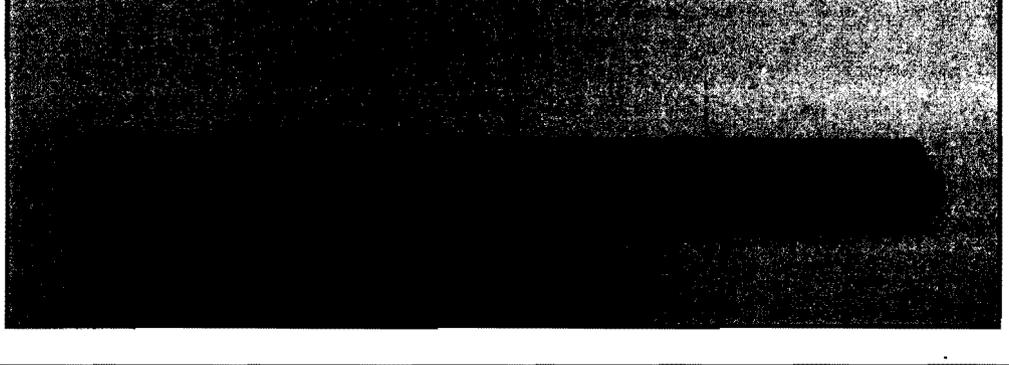
Place cigarette in holder.



Wait 30 seconds until
lighting next cigarette



Appendix E. Cigarette Full Length Burn Descriptions

Newport Menthol	
Winston Full Flavor	
Marlboro Light	

The red dashed lines indicate the approximate location of the filter end.

Appendix G. Sampling Plans

In this test plan, 48 mattresses will be tested with 864 cigarettes in the following order:

Test Number	Mattress	Cigarette							
		MLN	MLR	NMN	NMR	PMR	SRM	WFN	WFR
1	B	1	2	5	3	2	2	2	1
2	B	2	3	0	3	4	3	1	2
3	D	2	1	2	5	3	2	2	1
4	B	1	2	1	1	5	3	5	0
5	A	2	0	3	0	4	1	4	4
6	B	6	5	0	1	0	1	2	3
7	B	3	5	2	1	2	1	2	2
8	D	3	2	4	0	2	4	3	0
9	B	1	2	5	3	3	1	1	2
10	C	1	4	1	3	2	2	4	1
11	A	3	3	3	1	1	0	4	3
12	D	3	3	1	3	1	4	0	3
13	B	2	3	1	3	1	4	1	3
14	A	4	3	1	1	1	2	3	3
15	D	4	4	1	1	1	3	3	1
16	C	4	2	2	3	0	1	2	4
17	C	2	0	5	2	3	0	3	3
18	D	0	3	2	1	3	2	2	5
19	A	1	2	1	3	2	4	2	3
20	C	4	0	1	2	2	4	3	2
21	C	3	3	3	3	1	2	3	0
22	D	2	2	3	2	2	2	3	2
23	A	2	2	1	4	3	0	3	3
24	D	4	4	1	0	2	3	2	2
25	D	0	2	2	2	6	3	1	2
26	D	5	2	1	1	5	1	0	3
27	C	4	2	2	2	1	2	2	3
28	A	3	4	2	2	1	0	3	3
29	A	2	0	0	7	0	5	2	2
30	C	1	3	2	3	2	3	2	2
31	A	3	1	1	2	1	4	3	3
32	B	1	0	1	1	4	6	2	3
33	D	2	2	3	4	0	5	1	1
34	C	1	3	6	0	3	2	1	2
35	D	2	3	1	4	1	2	4	1
36	A	0	2	7	3	1	2	1	2

Test Number	Mattress	Cigarette							
		MLN	MLR	NMN	NMR	PMR	SRM	WFN	WFR
37	B	2	1	2	2	5	0	4	2
38	A	3	2	3	1	1	1	3	4
39	B	1	1	3	3	2	4	1	3
40	B	3	1	5	3	2	1	3	0
41	C	4	4	3	1	2	0	2	2
42	A	2	0	3	2	3	1	3	4
43	D	1	2	3	3	3	3	0	3
44	C	2	1	2	0	5	5	1	2
45	B	3	2	2	3	0	2	3	3
46	A	1	5	3	2	3	1	2	1
47	C	2	3	0	2	5	3	2	1
48	C	0	2	2	6	3	0	2	3
Total		108							

The sampling plans for each test are as follows:

Test 1 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	SRM	NON	E	N
2	1	NMN	NON	S	Y
3	1	NMN	NON	T	N
4	2	MLR	RIP	T	Y
5	2	PMR	RIP	T	N
6	2	PMR	RIP	T	Y
7	3	NMN	NON	S	Y
8	3	NMR	RIP	T	N
9	3	NMN	NON	E	N
10	4	SRM	NON	E	Y
11	4	NMR	RIP	T	N
12	4	WFN	NON	S	Y
13	5	MLR	RIP	T	N
14	5	NMN	NON	S	Y
15	5	NMR	RIP	E	N
16	6	MLN	NON	T	N
17	6	WFR	RIP	S	N
18	6	WFN	NON	E	Y

Test 2 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	E	N
2	1	NMR	RIP	E	N
3	1	SRM	NON	E	N
4	2	MLR	RIP	S	N
5	2	MLN	NON	T	N
6	2	NMR	RIP	T	Y
7	3	SRM	NON	E	N
8	3	WFN	NON	S	N
9	3	SRM	NON	E	Y
10	4	MLR	RIP	S	N
11	4	WFR	RIP	T	Y
12	4	NMR	RIP	E	N
13	5	WFR	RIP	S	Y
14	5	PMR	RIP	E	N
15	5	PMR	RIP	E	N
16	6	MLR	RIP	E	N
17	6	PMR	RIP	S	Y
18	6	MLN	NON	E	N

Test 3 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	T	N
2	1	WFN	NON	T	Y
3	1	WFN	NON	E	N
4	2	PMR	RIP	S	N
5	2	NMR	RIP	T	N
6	2	MLN	NON	T	Y
7	3	NMR	RIP	S	Y
8	3	SRM	NON	T	Y
9	3	NMN	NON	E	N
10	4	NMR	RIP	T	N
11	4	NMR	RIP	S	Y
12	4	SRM	NON	T	N
13	5	NMN	NON	E	Y
14	5	MLR	RIP	S	N
15	5	WFR	RIP	E	Y
16	6	PMR	RIP	T	Y
17	6	MLN	NON	E	N
18	6	SRM	NON	T	Y

Test 4 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLR	RIP	S	Y
2	1	SRM	NON	E	N
3	1	MLR	RIP	T	Y
4	2	WFN	NON	S	Y
5	2	SRM	NON	E	Y
6	2	WFN	NON	T	N
7	3	PMR	RIP	S	Y
8	3	WFN	NON	E	Y
9	3	PMR	RIP	T	N
10	4	MLN	NON	T	Y
11	4	PMR	RIP	S	Y
12	4	PMR	RIP	E	N
13	5	SRM	NON	T	N
14	5	WFN	NON	S	Y
15	5	NMR	RIP	T	Y
16	6	PMR	RIP	S	Y
17	6	NMN	NON	E	N
18	6	WFN	NON	E	Y

Test 5 – Nirvana

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMN	NON	E	N
2	1	WFN	NON	S	Y
3	1	WFR	RIP	E	N
4	2	WFN	NON	T	Y
5	2	MLN	NON	E	Y
6	2	MLN	NON	E	N
7	3	NMN	NON	E	N
8	3	PMR	RIP	E	N
9	3	WFN	NON	S	Y
10	4	PMR	RIP	S	N
11	4	WFN	NON	S	Y
12	4	PMR	RIP	S	N
13	5	SRM	NON	T	N
14	5	WFR	RIP	E	Y
15	5	PMR	RIP	T	Y
16	6	WFR	RIP	T	N
17	6	NMN	NON	T	Y
18	6	WFR	RIP	S	Y

Test 6 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	Y
2	1	MLN	NON	T	Y
3	1	WFR	RIP	E	N
4	2	WFN	NON	S	Y
5	2	MLR	RIP	E	Y
6	2	MLN	NON	T	N
7	3	WFR	RIP	T	Y
8	3	MLN	NON	T	N
9	3	MLR	RIP	E	Y
10	4	MLR	RIP	S	Y
11	4	MLN	NON	T	N
12	4	SRM	NON	E	Y
13	5	WFR	RIP	S	Y
14	5	WFN	NON	S	N
15	5	MLN	NON	E	N
16	6	MLR	RIP	E	N
17	6	MLR	RIP	E	Y
18	6	MLN	NON	S	Y

Test 7 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	N
2	1	NMN	NON	S	Y
3	1	MLR	RIP	T	Y
4	2	MLR	RIP	S	N
5	2	MLN	NON	T	Y
6	2	MLR	RIP	T	Y
7	3	NMN	NON	T	N
8	3	MLR	RIP	E	Y
9	3	PMR	RIP	T	Y
10	4	MLR	RIP	S	N
11	4	NMR	RIP	T	N
12	4	WFN	NON	S	Y
13	5	SRM	NON	T	N
14	5	MLN	NON	T	Y
15	5	MLN	NON	T	N
16	6	WFN	NON	E	Y
17	6	WFR	RIP	T	Y
18	6	WFR	RIP	E	N

Test 8 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFN	NON	E	N
2	1	WFN	NON	E	N
3	1	SRM	NON	T	N
4	2	NMN	NON	E	Y
5	2	NMN	NON	T	N
6	2	NMN	NON	E	N
7	3	WFN	NON	S	N
8	3	SRM	NON	E	N
9	3	MLR	RIP	S	Y
10	4	MLN	NON	T	Y
11	4	NMN	NON	E	N
12	4	PMR	RIP	T	N
13	5	MLR	RIP	E	Y
14	5	MLN	NON	E	N
15	5	SRM	NON	S	Y
16	6	SRM	NON	E	N
17	6	PMR	RIP	E	N
18	6	MLN	NON	T	Y

Test 9 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	S	Y
2	1	WFN	NON	S	N
3	1	SRM	NON	T	N
4	2	NMN	NON	T	Y
5	2	PMR	RIP	E	N
6	2	NMN	NON	T	N
7	3	WFR	RIP	E	N
8	3	PMR	RIP	E	N
9	3	NMN	NON	T	N
10	4	MLN	NON	E	N
11	4	NMR	RIP	S	Y
12	4	PMR	RIP	E	N
13	5	NMN	NON	E	N
14	5	NMR	RIP	S	Y
15	5	NMN	NON	E	N
16	6	MLR	RIP	T	Y
17	6	MLR	RIP	S	N
18	6	NMR	RIP	S	Y

Test 10 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	N
2	1	MLR	RIP	S	Y
3	1	MLR	RIP	S	Y
4	2	NMR	RIP	S	Y
5	2	SRM	NON	S	N
6	2	SRM	NON	T	Y
7	3	WFN	NON	S	N
8	3	MLR	RIP	S	N
9	3	WFN	NON	T	Y
10	4	WFR	RIP	T	N
11	4	NMR	RIP	T	Y
12	4	MLN	NON	T	N
13	5	WFN	NON	T	Y
14	5	NMN	NON	T	N
15	5	NMR	RIP	S	Y
16	6	PMR	RIP	T	N
17	6	MLR	RIP	T	N
18	6	WFN	NON	S	Y

Test 11 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFN	NON	S	N
2	1	NMR	RIP	T	Y
3	1	WFR	RIP	T	Y
4	2	WFN	NON	E	Y
5	2	MLR	RIP	S	Y
6	2	MLR	RIP	E	N
7	3	WFN	NON	T	Y
8	3	NMN	NON	S	N
9	3	NMN	NON	E	Y
10	4	NMN	NON	E	N
11	4	MLR	RIP	E	N
12	4	PMR	RIP	E	N
13	5	WFR	RIP	S	N
14	5	MLN	NON	S	N
15	5	MLN	NON	T	N
16	6	WFN	NON	T	Y
17	6	MLN	NON	E	Y
18	6	WFR	RIP	S	N

Test 12 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	T	Y
2	1	NMN	NON	T	N
3	1	SRM	NON	T	Y
4	2	MLN	NON	T	Y
5	2	PMR	RIP	E	N
6	2	NMR	RIP	S	Y
7	3	MLR	RIP	T	N
8	3	SRM	NON	T	N
9	3	MLR	RIP	S	N
10	4	WFR	RIP	T	N
11	4	WFR	RIP	E	Y
12	4	NMR	RIP	T	N
13	5	WFR	RIP	T	N
14	5	SRM	NON	T	Y
15	5	MLN	NON	T	Y
16	6	NMR	RIP	T	N
17	6	MLR	RIP	S	Y
18	6	SRM	NON	T	N

Test 13 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	S	N
2	1	MLN	NON	T	Y
3	1	MLR	RIP	T	Y
4	2	SRM	NON	S	Y
5	2	NMR	RIP	T	N
6	2	WFN	NON	S	Y
7	3	NMN	NON	E	N
8	3	PMR	RIP	S	Y
9	3	MLR	RIP	E	Y
10	4	WFR	RIP	E	N
11	4	WFR	RIP	S	N
12	4	SRM	NON	E	Y
13	5	SRM	NON	E	N
14	5	MLN	NON	E	N
15	5	WFR	RIP	T	Y
16	6	SRM	NON	T	N
17	6	NMR	RIP	S	Y
18	6	MLR	RIP	T	Y

Test 14 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	SRM	NON	T	N
2	1	MLN	NON	S	Y
3	1	WFR	RIP	E	N
4	2	MLN	NON	S	N
5	2	WFR	RIP	E	Y
6	2	MLR	RIP	T	Y
7	3	MLR	RIP	E	N
8	3	MLN	NON	E	N
9	3	WFN	NON	T	N
10	4	WFR	RIP	S	Y
11	4	MLN	NON	E	Y
12	4	WFN	NON	E	N
13	5	NMR	RIP	S	N
14	5	MLR	RIP	S	N
15	5	NMN	NON	T	Y
16	6	PMR	RIP	E	N
17	6	WFN	NON	S	Y
18	6	SRM	NON	S	N

Test 15- Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	T	Y
2	1	MLN	NON	E	N
3	1	MLR	RIP	E	Y
4	2	SRM	NON	E	N
5	2	MLN	NON	T	Y
6	2	MLR	RIP	S	N
7	3	NMN	NON	E	Y
8	3	WFN	NON	S	N
9	3	PMR	RIP	S	N
10	4	WFN	NON	S	N
11	4	MLN	NON	T	Y
12	4	WFN	NON	T	Y
13	5	MLR	RIP	S	Y
14	5	MLR	RIP	T	N
15	5	SRM	NON	E	N
16	6	WFR	RIP	E	Y
17	6	NMR	RIP	T	N
18	6	SRM	NON	S	Y

Test 16 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	Y
2	1	NMN	NON	T	N
3	1	SRM	NON	S	Y
4	2	MLN	NON	T	Y
5	2	WFR	RIP	S	Y
6	2	NMR	RIP	T	N
7	3	MLN	NON	T	N
8	3	NMN	NON	T	N
9	3	WFR	RIP	T	Y
10	4	WFR	RIP	T	Y
11	4	MLR	RIP	S	Y
12	4	WFR	RIP	T	N
13	5	WFN	NON	S	Y
14	5	MLN	NON	S	Y
15	5	MLN	NON	S	Y
16	6	NMR	RIP	S	N
17	6	MLR	RIP	T	N
18	6	WFN	NON	T	Y

Test 17 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	Y
2	1	WFR	RIP	S	N
3	1	NMN	NON	T	N
4	2	NMN	NON	S	Y
5	2	NMN	NON	T	N
6	2	MLN	NON	S	N
7	3	NMR	RIP	S	N
8	3	WFN	NON	T	Y
9	3	WFR	RIP	S	Y
10	4	NMN	NON	T	N
11	4	MLN	NON	T	Y
12	4	NMN	NON	S	Y
13	5	WFN	NON	S	Y
14	5	WFR	RIP	S	N
15	5	NMR	RIP	S	N
16	6	WFN	NON	T	N
17	6	PMR	RIP	S	N
18	6	PMR	RIP	S	Y

Test 18 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	S	N
2	1	MLR	RIP	E	Y
3	1	WFN	NON	S	N
4	2	WFN	NON	E	N
5	2	NMN	NON	T	N
6	2	WFR	RIP	T	N
7	3	PMR	RIP	T	Y
8	3	NMN	NON	E	N
9	3	PMR	RIP	E	N
10	4	WFR	RIP	E	Y
11	4	MLR	RIP	S	N
12	4	SRM	NON	T	Y
13	5	NMR	RIP	T	N
14	5	WFR	RIP	E	Y
15	5	SRM	NON	E	N
16	6	WFR	RIP	E	Y
17	6	WFR	RIP	T	N
18	6	MLR	RIP	S	N

Test 19 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	N
2	1	WFR	RIP	T	Y
3	1	NMN	NON	E	Y
4	2	SRM	NON	T	Y
5	2	WFR	RIP	E	N
6	2	MLR	RIP	T	Y
7	3	SRM	NON	T	Y
8	3	WFR	RIP	S	N
9	3	MLR	RIP	T	Y
10	4	SRM	NON	T	Y
11	4	PMR	RIP	E	N
12	4	SRM	NON	S	N
13	5	WFN	NON	S	N
14	5	NMR	RIP	T	Y
15	5	PMR	RIP	E	N
16	6	MLN	NON	S	N
17	6	NMR	RIP	T	Y
18	6	WFN	NON	E	Y

Test 20 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	S	Y
2	1	SRM	NON	T	N
3	1	NMR	RIP	S	Y
4	2	PMR	RIP	S	N
5	2	SRM	NON	T	Y
6	2	PMR	RIP	T	Y
7	3	WFN	NON	S	N
8	3	MLN	NON	S	N
9	3	WFR	RIP	S	Y
10	4	WFN	NON	S	N
11	4	WFN	NON	T	Y
12	4	WFR	RIP	S	Y
13	5	SRM	NON	T	Y
14	5	SRM	NON	S	Y
15	5	NMR	RIP	S	N
16	6	MLN	NON	T	Y
17	6	MLN	NON	S	Y
18	6	NMN	NON	T	N

Test 21 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFN	NON	T	N
2	1	SRM	NON	S	Y
3	1	WFN	NON	S	N
4	2	MLN	NON	T	N
5	2	PMR	RIP	T	Y
6	2	MLR	RIP	T	Y
7	3	NMR	RIP	T	N
8	3	MLR	RIP	T	N
9	3	WFN	NON	S	N
10	4	NMN	NON	S	N
11	4	NMN	NON	T	Y
12	4	MLN	NON	T	N
13	5	NMR	RIP	S	N
14	5	NMN	NON	T	N
15	5	NMR	RIP	S	Y
16	6	SRM	NON	S	N
17	6	MLR	RIP	T	Y
18	6	MLN	NON	T	N

Test 22 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	SRM	NON	S	Y
2	1	NMN	NON	T	N
3	1	MLR	RIP	E	Y
4	2	WFR	RIP	E	Y
5	2	MLN	NON	S	N
6	2	MLR	RIP	S	Y
7	3	SRM	NON	E	N
8	3	NMR	RIP	S	Y
9	3	NMR	RIP	S	Y
10	4	PMR	RIP	T	Y
11	4	NMN	NON	E	N
12	4	MLN	NON	T	Y
13	5	WFN	NON	T	Y
14	5	PMR	RIP	T	N
15	5	NMN	NON	E	Y
16	6	WFN	NON	S	N
17	6	WFN	NON	T	Y
18	6	WFR	RIP	S	Y

Test 23 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	E	Y
2	1	NMR	RIP	S	N
3	1	WFN	NON	T	Y
4	2	MLN	NON	S	Y
5	2	NMR	RIP	T	Y
6	2	WFR	RIP	T	N
7	3	MLR	RIP	S	Y
8	3	WFR	RIP	E	N
9	3	WFN	NON	S	Y
10	4	WFN	NON	E	Y
11	4	PMR	RIP	S	N
12	4	NMR	RIP	S	N
13	5	NMN	NON	T	Y
14	5	NMR	RIP	T	Y
15	5	WFR	RIP	T	N
16	6	PMR	RIP	S	N
17	6	PMR	RIP	S	N
18	6	MLR	RIP	E	N

Test 24 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMN	NON	E	Y
2	1	MLR	RIP	T	N
3	1	WFN	NON	E	N
4	2	MLR	RIP	S	N
5	2	WFR	RIP	T	N
6	2	MLN	NON	S	N
7	3	PMR	RIP	T	Y
8	3	SRM	NON	E	N
9	3	SRM	NON	T	Y
10	4	SRM	NON	E	N
11	4	MLN	NON	S	N
12	4	WFN	NON	T	Y
13	5	PMR	RIP	E	N
14	5	MLN	NON	T	Y
15	5	MLN	NON	T	Y
16	6	MLR	RIP	T	N
17	6	WFR	RIP	E	Y
18	6	MLR	RIP	E	Y

Test 25 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	S	Y
2	1	SRM	NON	S	Y
3	1	NMR	RIP	T	N
4	2	PMR	RIP	T	Y
5	2	PMR	RIP	S	N
6	2	WFN	NON	T	Y
7	3	PMR	RIP	T	N
8	3	NMR	RIP	S	Y
9	3	SRM	NON	S	Y
10	4	NMM	NON	E	N
11	4	MLR	RIP	S	Y
12	4	PMR	RIP	S	N
13	5	MLR	RIP	S	Y
14	5	PMR	RIP	T	N
15	5	WFR	RIP	S	Y
16	6	PMR	RIP	T	Y
17	6	NMN	NON	T	N
18	6	SRM	NON	E	N

Test 26 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	E	Y
2	1	PMR	RIP	E	N
3	1	MLN	NON	S	N
4	2	NMN	NON	E	N
5	2	PMR	RIP	T	N
6	2	SRM	NON	E	N
7	3	MLR	RIP	T	N
8	3	WFR	RIP	E	Y
9	3	MLN	NON	S	N
10	4	PMR	RIP	S	N
11	4	WFR	RIP	E	Y
12	4	PMR	RIP	E	N
13	5	NMR	RIP	T	N
14	5	MLN	NON	E	N
15	5	MLR	RIP	E	Y
16	6	PMR	RIP	E	N
17	6	MLN	NON	E	N
18	6	MLN	NON	T	Y

Test 27 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	SRM	NON	S	N
2	1	NMR	RIP	T	Y
3	1	MLN	NON	T	Y
4	2	NMN	NON	S	Y
5	2	NMN	NON	T	N
6	2	WFN	NON	S	Y
7	3	MLR	RIP	T	N
8	3	WFR	RIP	T	N
9	3	SRM	NON	S	Y
10	4	MLN	NON	S	N
11	4	MLN	NON	T	Y
12	4	WFR	RIP	T	N
13	5	MLN	NON	S	Y
14	5	NMR	RIP	T	Y
15	5	WFN	NON	T	N
16	6	WFR	RIP	T	N
17	6	PMR	RIP	S	Y
18	6	MLR	RIP	S	Y

Test 28 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	S	Y
2	1	NMN	NON	E	N
3	1	WFR	RIP	E	Y
4	2	WFN	NON	S	Y
5	2	NMN	NON	S	N
6	2	WFR	RIP	E	N
7	3	MLN	NON	S	N
8	3	MLR	RIP	T	Y
9	3	WFR	RIP	T	Y
10	4	NMR	RIP	T	Y
11	4	WFN	NON	T	Y
12	4	MLN	NON	E	N
13	5	PMR	RIP	S	N
14	5	MLR	RIP	T	Y
15	5	NMR	RIP	S	N
16	6	MLR	RIP	T	Y
17	6	MLR	RIP	S	N
18	6	WFN	NON	T	Y

Test 29 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	T	Y
2	1	MLN	NON	S	Y
3	1	WFR	RIP	E	N
4	2	SRM	NON	T	N
5	2	SRM	NON	T	Y
6	2	MLN	NON	T	N
7	3	NMR	RIP	E	N
8	3	WFR	RIP	E	Y
9	3	SRM	NON	T	Y
10	4	NMR	RIP	S	N
11	4	SRM	NON	T	Y
12	4	SRM	NON	T	N
13	5	NMR	RIP	T	Y
14	5	WFN	NON	S	Y
15	5	NMR	RIP	E	N
16	6	NMR	RIP	E	N
17	6	WFN	NON	S	N
18	6	NMR	RIP	E	N

Test 30 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	T	Y
2	1	PMR	RIP	T	N
3	1	SRM	NON	S	Y
4	2	SRM	NON	S	N
5	2	MLN	NON	S	N
6	2	SRM	NON	S	Y
7	3	MLR	RIP	T	N
8	3	NMR	RIP	S	Y
9	3	MLR	RIP	T	Y
10	4	NMN	NON	T	N
11	4	NMR	RIP	S	Y
12	4	NMN	NON	T	Y
13	5	WFR	RIP	T	N
14	5	WFN	NON	T	N
15	5	PMR	RIP	T	Y
16	6	WFN	NON	T	N
17	6	MLR	RIP	T	N
18	6	NMR	RIP	S	Y

Test 31 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	T	Y
2	1	WFN	NON	S	Y
3	1	NMR	RIP	E	N
4	2	SRM	NON	T	N
5	2	SRM	NON	T	N
6	2	MLN	NON	E	Y
7	3	SRM	NON	S	N
8	3	PMR	RIP	S	N
9	3	WFR	RIP	E	N
10	4	WFR	RIP	E	N
11	4	MLR	RIP	S	Y
12	4	WFR	RIP	S	N
13	5	WFN	NON	T	Y
14	5	WFN	NON	E	N
15	5	MLN	NON	S	Y
16	6	SRM	NON	S	N
17	6	MLN	NON	S	N
18	6	NMN	NON	S	N

Test 32 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFN	NON	S	Y
2	1	SRM	NON	T	N
3	1	WFN	NON	S	N
4	2	SRM	NON	S	Y
5	2	SRM	NON	E	N
6	2	WFR	RIP	E	N
7	3	PMR	RIP	E	N
8	3	SRM	NON	S	Y
9	3	SRM	NON	S	Y
10	4	MLN	NON	S	Y
11	4	PMR	RIP	S	Y
12	4	PMR	RIP	E	N
13	5	NMR	RIP	E	N
14	5	NMN	NON	S	Y
15	5	SRM	NON	E	Y
16	6	WFR	RIP	T	Y
17	6	PMR	RIP	E	N
18	6	WFR	RIP	S	Y

Teat 33 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	Y
2	1	SRM	NON	E	N
3	1	SRM	NON	T	Y
4	2	MLR	RIP	T	N
5	2	MLN	NON	S	N
6	2	NMR	RIP	S	Y
7	3	MLN	NON	E	N
8	3	WFN	NON	S	N
9	3	NMN	NON	T	N
10	4	NMN	NON	E	Y
11	4	NMR	RIP	T	N
12	4	MLR	RIP	E	Y
13	5	SRM	NON	E	N
14	5	SRM	NON	T	N
15	5	NMR	RIP	S	Y
16	6	NMN	NON	E	Y
17	6	SRM	NON	T	N
18	6	WFR	RIP	E	Y

Test 34 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFN	NON	S	Y
2	1	SRM	NON	T	N
3	1	MLR	RIP	T	N
4	2	NMN	NON	T	Y
5	2	NMN	NON	T	N
6	2	PMR	RIP	S	N
7	3	NMN	NON	T	N
8	3	MLR	RIP	S	N
9	3	NMN	NON	T	N
10	4	SRM	NON	T	Y
11	4	WFR	RIP	T	N
12	4	MLN	NON	S	N
13	5	PMR	RIP	T	Y
14	5	WFR	RIP	T	Y
15	5	PMR	RIP	S	N
16	6	MLR	RIP	T	Y
17	6	NMN	NON	T	N
18	6	NMN	NON	T	N

Test 35 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	T	N
2	1	WFN	NON	E	N
3	1	MLN	NON	T	Y
4	2	PMR	RIP	T	N
5	2	MLR	RIP	S	Y
6	2	MLR	RIP	S	Y
7	3	WFN	NON	E	N
8	3	SRM	NON	E	N
9	3	NMR	RIP	S	Y
10	4	NMR	RIP	T	N
11	4	MLR	RIP	T	N
12	4	SRM	NON	S	Y
13	5	WFR	RIP	T	N
14	5	NMR	RIP	S	Y
15	5	WFN	NON	S	N
16	6	MLN	NON	S	N
17	6	NMN	NON	T	N
18	6	WFN	NON	T	Y

Test 36 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	SRM	NON	S	N
2	1	NMN	NON	T	Y
3	1	NMR	RIP	T	Y
4	2	PMR	RIP	T	Y
5	2	WFR	RIP	E	N
6	2	NMN	NON	E	Y
7	3	SRM	NON	S	N
8	3	NMN	NON	T	Y
9	3	NMR	RIP	T	Y
10	4	NMN	NON	T	Y
11	4	NMN	NON	E	N
12	4	WFN	NON	S	Y
13	5	WFR	RIP	S	Y
14	5	NMN	NON	S	N
15	5	MLR	RIP	S	Y
16	6	MLR	RIP	S	Y
17	6	NMR	RIP	E	N
18	6	NMN	NON	E	N

Test 37 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	N
2	1	WFN	NON	E	Y
3	1	MLN	NON	S	Y
4	2	PMR	RIP	E	N
5	2	WFR	RIP	T	Y
6	2	NMR	RIP	E	N
7	3	NMN	NON	T	N
8	3	WFN	NON	E	Y
9	3	MLN	NON	S	Y
10	4	MLR	RIP	S	N
11	4	NMN	NON	T	Y
12	4	WFN	NON	T	N
13	5	PMR	RIP	E	N
14	5	WFN	NON	S	Y
15	5	NMR	RIP	T	N
16	6	PMR	RIP	T	N
17	6	WFR	RIP	E	N
18	6	PMR	RIP	T	Y

Test 38 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	E	N
2	1	NMN	NON	T	Y
3	1	MLN	NON	E	N
4	2	MLR	RIP	E	N
5	2	MLR	RIP	S	N
6	2	SRM	NON	S	N
7	3	WFR	RIP	T	N
8	3	WFN	NON	T	N
9	3	WFN	NON	E	Y
10	4	WFN	NON	E	Y
11	4	NMN	NON	S	N
12	4	MLN	NON	E	Y
13	5	WFR	RIP	E	N
14	5	NMN	NON	E	N
15	5	WFR	RIP	T	N
16	6	WFR	RIP	E	N
17	6	MLN	NON	E	Y
18	6	NMR	RIP	T	Y

Test 39 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	E	N
2	1	MLR	RIP	E	Y
3	1	WFR	RIP	S	Y
4	2	NMR	RIP	T	Y
5	2	PMR	RIP	E	N
6	2	NMN	NON	T	Y
7	3	NMR	RIP	T	N
8	3	SRM	NON	E	Y
9	3	NMN	NON	S	Y
10	4	WFR	RIP	S	Y
11	4	NMN	NON	T	N
12	4	WFN	NON	E	Y
13	5	MLN	NON	E	N
14	5	SRM	NON	S	Y
15	5	SRM	NON	S	Y
16	6	WFR	RIP	S	N
17	6	SRM	NON	S	Y
18	6	PMR	RIP	T	Y

Test 40 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMN	NON	T	Y
2	1	NMR	RIP	S	Y
3	1	PMR	RIP	E	N
4	2	NMN	NON	E	N
5	2	PMR	RIP	S	Y
6	2	MLN	NON	S	Y
7	3	MLN	NON	E	N
8	3	NMR	RIP	T	Y
9	3	NMN	NON	E	N
10	4	MLN	NON	S	Y
11	4	MLR	RIP	S	N
12	4	WFN	NON	T	N
13	5	NMR	RIP	S	Y
14	5	WFN	NON	S	N
15	5	WFN	NON	S	N
16	6	SRM	NON	E	N
17	6	NMN	NON	T	Y
18	6	NMN	NON	S	Y

Test 41 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLR	RIP	T	Y
2	1	NMN	NON	T	Y
3	1	MLN	NON	S	N
4	2	WFN	NON	S	N
5	2	WFN	NON	S	N
6	2	MLR	RIP	T	Y
7	3	NMN	NON	S	N
8	3	PMR	RIP	S	Y
9	3	MLN	NON	T	N
10	4	PMR	RIP	S	N
11	4	MLN	NON	T	Y
12	4	WFR	RIP	S	N
13	5	WFR	RIP	S	Y
14	5	MLN	NON	T	N
15	5	NMN	NON	S	Y
16	6	NMR	RIP	T	N
17	6	MLR	RIP	S	N
18	6	MLR	RIP	S	N

Test 42 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	Y
2	1	WFN	NON	T	Y
3	1	NMR	RIP	E	N
4	2	WFR	RIP	E	N
5	2	WFN	NON	S	Y
6	2	WFR	RIP	T	Y
7	3	NMN	NON	E	Y
8	3	NMN	NON	S	N
9	3	SRM	NON	T	Y
10	4	PMR	RIP	E	N
11	4	MLN	NON	S	Y
12	4	NMN	NON	E	Y
13	5	WFN	NON	T	Y
14	5	MLN	NON	E	N
15	5	NMR	RIP	T	Y
16	6	WFR	RIP	E	N
17	6	PMR	RIP	T	Y
18	6	WFR	RIP	E	Y

Test 43 – Vivetique

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	PMR	RIP	T	Y
2	1	SRM	NON	S	Y
3	1	SRM	NON	E	N
4	2	WFR	RIP	E	Y
5	2	NMR	RIP	S	Y
6	2	PMR	RIP	T	N
7	3	NMR	RIP	T	N
8	3	NMN	NON	S	Y
9	3	WFR	RIP	T	N
10	4	SRM	NON	T	N
11	4	PMR	RIP	S	N
12	4	MLN	NON	E	N
13	5	WFR	RIP	E	Y
14	5	NMN	NON	S	Y
15	5	NMR	RIP	T	N
16	6	NMN	NON	S	Y
17	6	MLR	RIP	S	Y
18	6	MLR	RIP	S	N

Test 44 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLN	NON	T	Y
2	1	PMR	RIP	T	N
3	1	WFR	RIP	S	Y
4	2	PMR	RIP	T	Y
5	2	SRM	NON	T	Y
6	2	NMN	NON	S	N
7	3	PMR	RIP	T	Y
8	3	WFR	NON	S	Y
9	3	SRM	NON	S	N
10	4	SRM	NON	T	Y
11	4	NMN	NON	S	N
12	4	PMR	RIP	S	Y
13	5	SRM	NON	S	N
14	5	PMR	RIP	T	Y
15	5	MLN	NON	S	Y
16	6	WFR	RIP	T	Y
17	6	MLR	RIP	S	Y
18	6	SRM	NON	T	N

Test 45 – Naturepedic

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	WFR	RIP	S	Y
2	1	MLN	NON	E	N
3	1	WFN	NON	S	Y
4	2	NMN	NON	T	N
5	2	MLR	RIP	E	Y
6	2	WFN	NON	T	N
7	3	WFN	NON	S	N
8	3	MLN	NON	S	Y
9	3	MLR	RIP	T	Y
10	4	NMR	RIP	T	Y
11	4	WFR	RIP	E	N
12	4	NMR	RIP	E	N
13	5	SRM	NON	T	N
14	5	SRM	NON	T	N
15	5	WFR	RIP	S	N
16	6	MLN	NON	T	N
17	6	NMR	RIP	T	N
18	6	NMN	NON	T	Y

Test 46 – Nirvana Pad

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	N
2	1	PMR	RIP	T	Y
3	1	WFN	NON	S	Y
4	2	SRM	NON	T	N
5	2	MLN	NON	S	Y
6	2	PMR	RIP	T	Y
7	3	WFN	NON	T	Y
8	3	MLR	RIP	S	Y
9	3	MLR	RIP	E	N
10	4	MLR	RIP	E	N
11	4	NMN	NON	E	Y
12	4	MLR	RIP	T	Y
13	5	NMN	NON	E	Y
14	5	WFR	RIP	S	N
15	5	NMR	RIP	T	Y
16	6	NMN	NON	S	N
17	6	PMR	RIP	T	Y
18	6	MLR	RIP	S	Y

Test 47 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	NMR	RIP	S	N
2	1	NMR	RIP	S	Y
3	1	WFN	NON	S	Y
4	2	PMR	RIP	T	N
5	2	MLR	RIP	S	Y
6	2	PMR	RIP	S	Y
7	3	PMR	RIP	S	Y
8	3	MLN	NON	S	N
9	3	PMR	RIP	S	Y
10	4	PMR	RIP	T	Y
11	4	MLR	RIP	S	N
12	4	WFN	NON	T	Y
13	5	WFR	RIP	S	Y
14	5	SRM	NON	S	Y
15	5	MLR	RIP	S	N
16	6	MLN	NON	S	Y
17	6	SRM	NON	T	Y
18	6	SRM	NON	S	N

Test 48 – The Futon Shop

Cig #	Block	Cig	RIP/NON	Location	Sheeting
1	1	MLR	RIP	T	Y
2	1	MLR	RIP	S	N
3	1	MLR	RIP	S	N
4	2	WFR	RIP	S	Y
5	2	NMN	NON	T	N
6	2	WFR	RIP	T	Y
7	3	WFN	NON	T	N
8	3	NMR	RIP	S	N
9	3	PMR	RIP	T	N
10	4	NMR	RIP	T	Y
11	4	NMR	RIP	T	N
12	4	NMR	RIP	S	N
13	5	NMR	RIP	T	N
14	5	WFR	RIP	S	Y
15	5	PMR	RIP	S	Y
16	6	NMN	NON	T	N
17	6	WFN	NON	T	N
18	6	PMR	RIP	S	Y

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