

Complaint

101 F.T.C.

IN THE MATTER OF

HEATCOOL, INCORPORATED

CONSENT ORDER, ETC., IN REGARD TO ALLEGED VIOLATION OF SEC. 5 OF
THE FEDERAL TRADE COMMISSION ACT*Docket C-3102. Complaint, Feb. 1, 1983—Decision, Feb. 1, 1983*

This consent order requires a Eugene, Oregon manufacturer and seller of plastic storm windows, among other things, to cease making false or unsubstantiated representations concerning the insulating properties of Heatcool plastic storm windows or any insulating or energy savings device. Further, the company must: (1) notify its distributors that Heatcool plastic storm windows do not insulate better than comparable glass windows and that the window's insulating value is R-1.93; and, (2) include this information in all advertising and promotional literature for a period of one year. The company must also recall promotional and advertising materials which misrepresent the insulating value of Heatcool storm window systems.

Appearances

For the Commission: *Donald Cooper* and *Randall Brook*.

For the respondent: *T.R. Russell, Butler, Hush, Gleaves & Swearingin*, Eugene, Ore.

COMPLAINT

The Federal Trade Commission, having reason to believe that Heatcool, Incorporated ("Heatcool") violated Section 5 of the Federal Trade Commission Act, as amended, issues this complaint and alleges:

PARAGRAPH 1. This action is brought in the public interest.

PAR. 2. Heatcool is an Oregon corporation with its principal office and place of business located at Box 2196, Eugene, Oregon.

PAR. 3. Heatcool manufactures and sells storm windows made from a plastic film, LLumar. Sales of the windows are either made directly or through distributors. Heatcool's business is in and affects interstate commerce.

PAR. 4. Heatcool sells its storm windows based on their thermal insulating value, or "R-value." The R-value is a measure of resistance to heat flows, with higher R-values indicating greater insulating power. A value of R-1 means that the material insulates as well as one inch of wood. A value of R-9 means that the material insulates as well as 9 inches of wood. Standard scientific references indicate that a system of a glass window together with a glass storm window has an insulating value of R-1.93.

COUNT I—*Misrepresentations*

PAR. 5. From October of 1979 until the present, Heatcool has advertised its storm windows as a superior energy saving device. Heatcool has claimed: that its magnetic sealing windows have an insulating value of R-9.17; that its storm windows are approximately four times more effective than glass storm windows; and that its storm windows can reduce heat loss of single glaze windows by a factor of 10.

PAR. 6. Heatcool's representations concerning the insulation value and effectiveness of its storm windows are false. In April 1981, Dynatherm Engineering tested Heatcool's storm windows. Dynatherm is an independent testing laboratory which is accredited for the purpose of testing the insulating value of plastic storm windows. 45 FR 75542, 75544-47 (1980). It found the insulating value of the system consisting of a window and a Heatcool storm window to be R-1.93. A copy of Dynatherm's test result is attached to this complaint as Exhibit A.

PAR. 7. Respondents' false claims have the capacity and tendency to mislead members of the public into believing the claims are true and into purchasing substantial quantities of Heatcool products. The claims are false and deceptive and violate Section 5 of the Federal Trade Commission Act.

COUNT II—*Lack of Substantial Basis*

PAR. 8. Heatcool purchases the basic component of its storm windows—LLumar—from Martin Processing, Incorporated. Martin Processing makes LLumar by impregnating plastic film with an ultraviolet resisting substance. It rates the insulating value of LLumar at R-0.9. By a letter dated June 27, 1979, Martin Processing informed Heatcool that its tests found the insulating value of LLumar to be R-0.9. By applying standard engineering formulae, the expected value for a LLumar storm window plus a regular window would be less than R-2.

PAR. 9. Heatcool refused to accept Martin Processing's insulating value or standard engineering formulae. Instead, it determined to conduct its own tests. For this purpose, Heatcool contracted with Northwest Testing Laboratories, an independent testing lab located in Portland, Oregon. Northwest Testing Laboratories is not accredited for purposes of testing the thermal insulation value of storm windows. See 45 FR 75542, 75544-47 (1980).

PAR. 10. Northwest Testing Laboratories tested Heatcool's storm windows in October 1979. It found the insulating value of a window and a Heatcool storm window to be R-9.17. Although Northwest Testing Laboratories released this result to Heatcool, it advised the

company that the result could not be used to advertise the storm windows under normal conditions because the test conditions were abnormal.

PAR. 11. The test result of R-9.17 obtained by Northwest Testing conflicted with earlier studies of plastic storm windows conducted by the Department of Energy. The DOE studies found the insulating value of glass window together with a storm window similar to Heatcool's could not be greater than R-2. These test results were published and were available to the general public as of October 1, 1979.

PAR. 12. By March of 1980, Heatcool possessed persuasive evidence that its LLumar storm windows were not superior to comparable glass storm windows. As part of an attempt to sell Heatcool storm windows to the Salt Lake School District, Heatcool had its windows tested by a second testing laboratory, Terralab. Terralab found Heatcool's storm windows did *not* insulate better than comparable glass storm windows. It released the test result to Heatcool in March 1980.

PAR. 13. Heatcool's representations concerning the insulating value and effectiveness of its storm windows were made without a reasonable basis in competent scientific tests. Moreover, respondents knew that the single Northwest Testing Laboratories' test was unreliable, for the reasons stated in Paragraphs 10-12. The practice of making energy savings claims without a reasonable basis in competent scientific tests is unfair and deceptive and violates Section 5 of the Federal Trade Commission Act.

COUNT III—*False Demonstrations*

PAR. 14. In conjunction with its false and unsubstantiated claims, Heatcool put on, or encouraged its distributors to put on, phony demonstrations ostensibly showing that its plastic storm windows were superior to conventional glass storm windows. Appearing at home shows throughout the United States, Heatcool's representatives covered one-half of an open refrigerator with LLumar and the other half with glass. They then invited potential purchasers to touch both the glass and the LLumar. When potential customers found the glass colder to the touch, Heatcool's representatives claimed that this proved that LLumar insulated better than glass. In actuality, the demonstration illustrated that glass has a higher specific heat than LLumar but does not prove anything about the insulating properties of the two materials. Therefore, Heatcool's practice of using, or encouraging the use of, this demonstration is false and deceptive in violation of Section 5 of the Federal Trade Commission Act.

HEATCOOL, INC.

Complaint

DYNATHERM ENGINEERING

595 MARSHAN LANE LINO LAKES, MINNESOTA 55014 612 / 786-1853



Accredited by the Department of Commerce, National Voluntary
Laboratory Accreditation Program for Performance of ASTM C-236 Guarded
Hotbox Tests



PROJECT: 5 mil Clear Film and
2x2 Aluminum Window

DATE: April 9, 1981

LABORATORY NO. 412

REPORTED TO: Metropolitan Denver DA
Consumer and Economic Clime
625 South Broadway
Denver, Colorado 80209
Attention: Energy Fraud Project

COPIES TO:

THERMAL TRANSMITTANCE TEST OF WINDOW WITH INTERIOR FILM

GENERAL:

This report presents the results of one thermal transmittance test made upon nominal 2'x2' single glazed aluminum window unit with 5 mil clear film installed about 4 1/4" interior to the window. It was the purpose of the testing to measure the thermal resistance ("R" value) of the entire system. The window unit and film materials were submitted to the laboratory by CFH Enterprises of Denver, Colorado.

TEST PANEL DESCRIPTION:

Window unit - Nominal 2'x2' single glazed aluminum window unit which was actually about 23-7/16" wide and 23-7/8" high. The unit was manufactured by Croft Metals, Inc. and was Series 10 horizontal sliding window with 2020 mill finish. As seen from the window interior, the left sash was single glazed and fixed, with the right sash also single glazed and moveable horizontally. The sash contained sashlock which was kept in the locked position during the testing. A screen was present on the exterior side of the moveable sash only. The moveable sash was weatherstripped. Both fixed and moveable sash were single glazed, and the frame appeared not to contain any thermal break.

Interior film - The film used was identified as 5 mil clear film by HeatCool Weather Windows of General Purpose Dyed and Weatherized Polyester Films. The actual thickness of a typical section was measured as 4.9 mil and the film had a very slight smoky color. The film was mounted 4 1/4" away from the interior face of the aluminum window unit. Magnetic tape was used to secure the film in place. The film was installed by representative of CFH Enterprises.

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients and our written authorization is necessary to publish any statements, conclusions or extracts from or regarding our reports.
This laboratory is accredited by NVLAP of the U.S. Department of Commerce as having the competence to perform ASTM C-236 guarded hotbox tests in accordance with prescribed test methods and accreditation criteria.

FEDERAL TRADE COMMISSION DECISIONS

Complaint

101 F.T.C.

DYNATHERM ENGINEERING

395 MARSHAN LANE
LINO LAKE, MINNESOTA 55014
612 / 786-1853



page 2 (2x2 alum. window w/interior film)
April 9, 1981
Laboratory No. 412

TEST METHOD:

The thermal transmittance testing was performed using the ASTM C-236 guarded hotbox equipment. The equipment can accept test assemblies up to 7'-2" high and 6'-0" wide and has a centrally located metered area with dimensions of 48" wide and 60" high. Since the test window was smaller than the metered area it was necessary to perform a preliminary test upon a nominal 5" thick expanded polystyrene filler board. The preliminary testing was made under about the same temperature conditions as the testing of the window. The preliminary test was necessary to determine the thermal transmission properties of the filler board. After completion of the preliminary test, a hole was cut in the board just sufficient to install the aluminum window into the opening. Caulking was used to seal the window to the exterior face of the board, and duct tape was also applied to further assure an airtight installation. Representative of CFH Enterprises then installed the magnetic tape and film to the interior face of the filler at the opening. A 4 1/4" space existed between the film and interior face of the window unit.

The testing was performed with the above described test assembly in the vertical orientation, with heat flow horizontal. Very slow moving airflow was used on the interior side with the velocity being about 60 fpm and applied in a downward direction as would occur with natural convection conditions. A nominal 15 mph wind was applied to the exterior side of the window, in an upward direction.

30 gage copper-constantan thermocouples were affixed to various sections on the exterior side of the window, and to various sections of the interior surface of the window. Airspace thermocouples were also used to measure the airspace temperature during test. Surface thermocouples were also installed on the interior side of the film.

After construction of the assembly and attachment of the thermocouples, the assembly was allowed to condition under selected warm and cold air temperatures until steady state heat flow and temperature conditions were achieved. Test data were then taken.

Thermocouple locations were those agreed upon by laboratory personnel and representatives of CFH Enterprises.

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients and our written authorization is necessary to publish any statements, conclusions or extracts from or regarding our reports.

This laboratory is accredited by NVLAP of the U.S. Department of Commerce as having the competence to perform ASTM C-236 guarded hotbox tests in accordance with prescribed test methods and accreditation criteria.

HEATCOOL, INC.

Complaint

DYNATHERM
ENGINEERING595 MARSHAN LANE
LINO LAKES, MINNESOTA 55014
612 / 786-1853page 3 (2x2 alum. window w/interior film)
April 9, 1981
Laboratory No. 412TEST RESULTS:

Following is a summary of the test results obtained:

<u>Item</u>	<u>Test Results</u>
Heat flow rate, Btu/hr.-sq. ft.	33.78
Warm air temperature, F	102.1
Cold air temperature, F	47.8
Thermal transmittance, U as tested, Btu/hr.-sq. ft.-F	0.622
Overall thermal resistance $R_t = 1/U$ as tested	1.61
Average warm surface temperature, F (film)	86.2
Average cold surface temperature, F	50.7
Mean temperature, F	68.45
Inside surface conductance coefficient, f_i	2.12
Outside surface conductance coefficient, f_o	11.6
Panel conductance, C, Btu/hr.-sq. ft.-F	0.952
Panel resistance, R = 1/C (window-airspace-film only)	1.05
Thermal transmittance corrected to ASHRAE design with 15 mph wind outside, still air inside	0.526
Overall thermal resistance corrected to above ASHRAE conditions	1.9

Sketches showing the locations of surface thermocouples, and the airspace thermocouples are attached. The average measured temperature at each location is also presented.

REMARKS:

The average warm and cold surface temperatures reported above were calculated by "weighting" the measured surface temperatures with the area each represented. The average outside temperature is the outside of the window, and the average warm surface temperature is that of the film interior surface. The mean temperature, inside and outside surface conductance, panel conductance and resistance values were calculated using these average surface temperatures. The overall thermal resistance as tested is the overall thermal resistance, including air films actually developed during testing. The panel resistance is the measured thermal resistance only of the window, airspace, and film without any air films included. The overall thermal resistance corrected to ASHRAE conditions with still air inside and 15 mph wind outside is calculated using the above reported and measured panel

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients and our written authorization is necessary to publish any statements, conclusions or extracts from or regarding our reports.

This laboratory is accredited by NVLAP of the U.S. Department of Commerce as having the competence to perform ASTM C 226 guarded hotbox tests in accordance with prescribed test methods and accreditation criteria.

FEDERAL TRADE COMMISSION DECISIONS

Complaint

101 F.T.C.

DYNATHERM
ENGINEERING

895 MARSHAN LANE
LINO LAKES, MINNESOTA 55014
612 / 786-1893



page 4 (2x2 alum. window w/interior film)
April 9, 1981
Laboratory No. 412

REMARKS (cont'd):

conductance (resistance) and published surface resistances for a vertical, nonreflective surface with heat flow horizontal. A surface resistance of 0.17 was used for the 15 mph wind condition, and a surface resistance of 0.68 was used for the still air condition. The actual surface conductances were higher than the nominal ASHRAE values resulting in a lower overall measured thermal resistance.

The warm and cold air temperatures used in testing, and the application of the exterior 15 mph wind were specified to be used in testing. A nominal 3½" airspace between film and window was desired, but a space of 4½" was used due to availability of 5" beadboard material in the laboratory and to the lack of immediate availability of a 4" filler which would have provided the requested airspace. From various published sources, the difference in thermal resistance between a 3½" airspace and a 4½" airspace would be negligible.

The test results presented are for the window-airspace-film combination, with allowance already made for heat loss through the filler from the results of the preliminary testing. Heat loss through the window alone was calculated as the difference between the total measured with window and that calculated as passing through the filler.

DYNATHERM ENGINEERING

by James E. J. [signature]

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients and our written authorization is necessary to publish any statements, conclusions or extracts from or regarding our reports.
This laboratory is accredited by NVLAP of the U.S. Department of Commerce as having the competence to perform ASTM C-236 guarded hotbox tests in accordance with prescribed test methods and accreditation criteria.

DECISION AND ORDER

The Federal Trade Commission initiated an investigation of certain acts and practices of the respondent named in the caption above. The Seattle Regional Office furnished the respondent with a draft complaint that, if issued by the Commission, would charge respondent with violation of the Federal Trade Commission Act.

The respondent, its attorney, and counsel for the Commission then signed an agreement containing a consent order. In this agreement, respondent admitted all the jurisdictional facts set forth in the draft complaint described above. The agreement states that its signing is for settlement purposes only and does not constitute an admission that the law has been violated as alleged in the complaint. The agreement also contains waivers and other provisions required by the Commission's Rules.

The Commission determined that it has reason to believe that the respondent has violated the Federal Trade Commission Act and that the complaint should be issued. The Commission then accepted the consent agreement and placed it on the public record for 60 days. Pursuant to Section 2.34 of its Rules, the Commission now issues its complaint, makes the following jurisdictional findings, and enters the following order:

1. Respondent Heatcool, Inc. is an Oregon corporation with its office and principal business address at P.O. Box 2196, Eugene, Oregon.
2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondent. The proceeding is in the public interest.

ORDER

Applicability of the Order

References in this order to Heatcool apply to any of Heatcool's successors, assigns, officers, agents or employees. The order applies to any subsidiary, division, or other entity related to Heatcool and to Heatcool's advertising, displaying, offering for sale, sale or distribution of Heatcool plastic storm windows or other insulating or energy saving device.

Order Provisions

- I. *It is ordered*, That Heatcool cease and desist from representing, directly or by implication, that:

A. Heatcool's plastic storm windows have an insulating value of R-9.17.

B. Heatcool's plastic storm windows insulate approximately four times better than comparable glass storm windows.

C. Demonstrations relating to specific heats show relative insulating values.

II. *It is further ordered*, That Heatcool cease and desist from: making any representation, directly or by implication, regarding the insulating properties of its plastic storm windows or other insulating or energy saving device, unless, at the time the representation is made, it has a reasonable basis in competent scientific tests to believe that the representation is true. For purposes of testing storm windows, a reasonable basis shall consist of tests performed by an accredited lab and shall take into account any information that contradicts or qualifies the tests.

III. *It is further ordered*, That Heatcool immediately recall from all persons or entities that have engaged in advertising, promotion, sale or distribution of its storm windows in the last six months all advertising and promotional materials which represent that Heatcool storm window systems have a total insulating value in excess of R-1.93 or that represent that Heatcool storm windows insulate better than comparable glass storm windows.

IV. *It is further ordered*, That Heatcool prepare and send to all distributors who may reasonably be expected to have purchased Heatcool storm windows within the last six months a clear statement that Heatcool storm windows have an insulating value of R-1.93 and that the windows do not insulate better than comparable glass storm windows.

V. *It is further ordered*, That Heatcool include in its advertising and promotional materials, for the twelve month period after the order becomes effective, a clear and conspicuous statement that Heatcool storm window systems have an insulating value of R-1.93 and do not insulate better than comparable glass storm windows.

VI. *It is further ordered*, That Heatcool maintain complete business records of its compliance with this order. Heatcool shall retain each record for at least three years. Records which provide a reasonable basis for representations of the insulating or energy saving properties of Heatcool products shall be retained for at least two years after the last dissemination of any representation which relies on the records. Heatcool shall make these records, or a photocopy of these records, available to any authorized representative of the Federal Trade Commission within fourteen days after the representative requests the documents.

VII. *It is further ordered*, That Heatcool deliver a copy of this order

to each of its distributors, operating divisions, and affiliated businesses.

VIII. *It is further ordered*, That Heatcool notify the Commission at least thirty days prior to any change in its corporate structure or in its ownership which may affect compliance obligations under this order.

IX. *It is further ordered*, That Heatcool, within 60 days after service of this order, file with the Commission written reports setting forth in detail the manner of its compliance with this order.

IN THE MATTER OF
AMERICAN DENTAL ASSOCIATION

MODIFYING ORDER, ETC., IN REGARD TO ALLEGED VIOLATION OF SEC. 5
OF THE FEDERAL TRADE COMMISSION ACT

Docket 9093. Final Order, Sept. 6, 1979—Modifying Order, Feb. 7, 1983

This order reopens the proceeding and modifies the Commission order issued on Sept. 6, 1979 (94 F.T.C. 403), *modified* Aug. 3, 1982 (100 F.T.C. 448), by relieving respondent of its obligation under Paragraph III(A) of the order, to send by first-class mail a copy of Appendix A to the Final Order to each of its current members, and by reducing the number of years that Paragraphs III(A), IV(C), and IV(D) require the association to provide new members with notice of the order; make particular records available to the Commission; and file compliance reports.

MODIFICATION OF DECISION AND ORDER

The American Dental Association ("ADA") has requested that the Commission modify its Final Order in Docket No. 9093 to (1) relieve ADA of its obligation under Paragraph III(A) of the order to send by first-class mail a copy of a letter, Appendix A to the Final Order, to each of its present members, and (2) reduce the number of years ADA is required by Paragraphs III(B), IV(C), and IV(D) to provide new members with notice of the Final Order, make certain records available to Commission staff, and file reports of compliance.

As an alternative to the requirement of Paragraph III(A) that it send separate notice of the Final Order to each of its present members, ADA has proposed that it include an explanatory article when, as required by Paragraph IV(A) of the Final Order, it publishes a copy of the Final Order in the *Journal of the American Dental Association* and *ADA News*. Because under a temporary order ADA provided separate notice to each of its members that it was subject to a Commission order that, except under certain circumstances, prohibited ADA from restricting the advertising of dentists' services, and because with respect to individual members of ADA the Final Order prohibits essentially the same conduct, the Commission has determined that the alternative to separate notice ADA has proposed is in the public interest. The Commission has also determined that it is in the public interest to modify the Final Order to reduce the number of years ADA is required to provide new members with notice of the Final Order, make records available to the Commission, and file compliance reports. Accordingly,

It is ordered, That the proceeding be, and it hereby is, reopened.

It is further ordered, That the Final Order be, and it hereby is,