

**CITY OF SACRAMENTO**

**1231 I Street, Sacramento, CA 95814**

**Permit No: 0008502**

**Insp Area: 1**

**Site Address: 1800 K ST SAC**

Parcel No: 007-0082-002

Sub-Type: COM

Housing (Y/N): N

CONTRACTOR

WESTERN FOAM INC  
1465 BARRY RD  
YUBA CITY CA 95993

OWNER

SACRAMENTO WINDSOR COURT  
1000  
SACRAMENTO CA 95814

ARCHITECT

**Nature of Work: REROOF SPF ROOFING SYSTEM**

**CONSTRUCTION LENDING AGENCY :** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class 39 License Number 440672 Date 7-26-00 Contractor Signature Rachel F. [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

\_\_\_\_ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

\_\_\_\_ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

\_\_\_\_ I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_

Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 7-26-00 Applicant/Agent Signature Rachel F. [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:  
I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

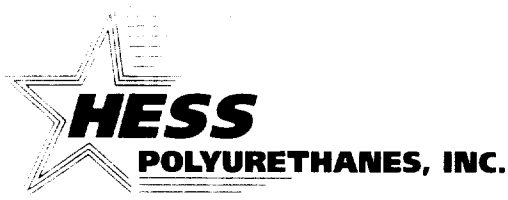
Carrier VILLANOVA INSURANCE CO Policy Number WC20075389 Exp Date 02/01/2000

\_\_\_\_ (This section need not be completed if the permit is for \$100 or less.) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 7-26-00 Applicant Signature Rachel F. [Signature]

**WARNING - FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.**

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**



## HESS A.R.C.

### ELASTOMERIC ACRYLIC WATERPROOFING

#### Technical Data & Application Instructions

#### PRODUCT DESCRIPTION:

HESS A.R.C. is a 50 or 60% solids elastomeric acrylic coating, which provides good weather ability, ultraviolet resistance and fire retardance for the protection of polyurethane foam. HESS A.R.C. is a single-package basecoat/topcoat system designed for easy application with conventional or airless spray equipment, as well as brush or roller.

#### BASIC USES:

HESS A.R.C. was specifically developed for protecting sprayed polyurethane foam insulation from degradation caused by normal weathering, aging and ultraviolet exposure. HESS A.R.C. is used for protection of sprayed-in-place polyurethane foam on sloped roofs, ambient and hot storage tanks and as a topcoat on existing foam roofs previously coated with compatible coating systems.

#### COLORS:

HESS A.R.C. Topcoat is available in standard White or Light Gray. HESS A.R.C. Basecoat is available in Medium Gray, which requires top coating. All other colors are custom matched by Hess Polyurethanes, Inc. for the specific application. Color chips or samples must be furnished to Hess Polyurethanes, Inc. for all custom colors.

#### PACKAGING & MIXING:

HESS A.R.C. is a single comp. ready-to-use material available in 5-gallon pails (19 liters) and 55-gallon drums (209 liters).

HESS A.R.C. may appear well mixed, but upon standing, will settle into a two-stage suspension. Thoroughly mix the contents of all containers using a power mixer for a minimum of five (5) minutes prior to application. For 5-gallon pails, use a 3" minimum diameter-mixing blade; for 55-gallon drums, a 6" minimum diameter blade is recommended.

#### TYPICAL PROPERTIES:

Solids by Weight:	70% (+2)	[ASTM D 2369]
Solids by Volume	60% (+2)	[ASTM D 5201]
Surface Dry Time for Foot Traffic Resistance:	5 hours @ 75°F (24°C), 50% R.H., Pearl White @ 16 wet mils (406 microns) 3 hours @ 75°F (24°C), 50% R.H., Med. Gray @ 16 mils wet (406 microns) Times increase @ higher humidities.	
Tensile Strength:	200 psi (+20)	[ASTM D 412]
Elongation:	180% (+20)	[ASTM D 412]
Hardness:	60-70 Shore A	[ASTM D 2240]
Permeance:	2.7 US perms @ 22 dry mils	[ASTM E 398]
Low Temp. Flexibility:	Passes 180° flex over ½ mandres @ -5°F (-21°C)	[Federal Test Method No. 141a6221]

Temperature limits for Normal Service Conditions: 0°F to 200°F (-18°C to 39°C)  
Fire Resistance: UL 790 Class "A" classified system over  
spray-applied polyurethane foam on non-combustible decks, Class "B" over combustible decks.

#### WARRANTY:

Hess Polyurethanes, Inc.'s 5 & 10-year Standard Warranty is a guarantee that the HESS A.R.C. coating, when properly applied over sprayed-in-place polyurethane foam, will not leak water over a 5 or 10-year period. Hess provides this Standard Warranty at no cost. 10 + 5 year warranty requires a \$500 inspection fee and corrections, if any, paid for by the owner prior to the additional 5 year warranty. Refer to Application Instructions for minimum dry film thickness required for each type of warranty.

#### SPRAY EQUIPMENT:

HESS A.R.C. has been applied utilizing different brands, types and sizes of airless or conventional spray equipment. Airless spray equipment is best suited with the following minimum recommendations:

Pump: 1 gallon per minute output and 2,000 psi pressure capability.

Gun: Any airless handgun compatible with pumps used.

Screen Size: Filter screens should be 60 mesh or larger.

Tip size: A reversible self-cleaning tip with orifice size of .027" to .039" and fan angle of 40° to 50°.

Fluid Hose: Use 3/8" minimum inside diameter nylon high-pressure hose for lengths up to 100 ft. from pump. From 100 ft. to 200 ft., use 1/2" inside diameter hose added to pump side of existing 3/8" hose to maintain pressure and delivery. Over 200 ft. use 5/8" to 3/4" inside diameter hose.

#### APPLICATION INSTRUCTIONS:

Either conventional or airless spray equipment may apply HESS A.R.C. Brush or roller may be used for touch-up and edging work, or for small areas, which are not practical for spray application.

HESS A.R.C. should be applied to polyurethane foam surfaces between 24-72 hours following final application of the polyurethane foam.

Polyurethane foam and adjacent surfaces to be coated shall be free of any degraded foam, grease, oil, dirt or other contaminants, which will interfere with proper adhesion. Polyurethane foam shall be completely dry and frost-free before coating.

Any physical damage to the polyurethane foam shall be repaired before coating application commences. Any oxidized polyurethane foam shall be repaired or replaced. Do not coat directly over polyurethane foam, which has been mechanically scarified or sanded.

HESS A.R.C. applied at the rate of one gallon per 100 sq. ft. (.41/m<sup>2</sup>) will theoretically yield 9.6 dry mils (244 microns) in the 60% solids version or 8 dry mils in the 50% version.

The theoretical thickness given for coverage per gallon is based on smooth, non-porous surfaces. Actual gallons required in the field to achieve the minimum dry film thickness will depend upon the surface texture, method of application and weather conditions at the time of application. It is the responsibility of the applicator to apply sufficient material to achieve the minimum dry film thickness required.

To qualify for Hess's 5-Year Standard Warranty Program, HESS A.R.C. shall be applied in two (2) or three (3) separate coats at a minimum total rate of 2 1/2 to 3 gallons per 100 sq. ft. (1.0 to 1.2 l/m<sup>2</sup>). Depending upon weather conditions at the time of application, three (3) separate coats may be necessary. This coverage rate will theoretically result in 24-29 dry mils (610 to 732 microns). The actual minimum total dry film thickness required at any location to qualify for Hess's 5-year Standard Warranty program shall be 22 mils (559 microns).

To qualify for Hess's 10-Year Standard Warranty Program, HESS A.R.C. shall be applied in three (3) separate passes at minimum total gallons of 3.5 per square. This coverage rate will theoretically result in 33 mils. The actual minimum total dry mil thickness for the 10-year warranty program must be 28 dry mils.

To qualify for the Hess 10 + 5 year warranty, the minimum dry mils required are 35 mils. The application requires 3 passes at .75 gallons per square and one pass (1) at 1.5 gallons per square with granules broadcast at 35# per square in the wet top coat. An inspection of the base coat thickness is required prior to the topcoat application. The base coat shall be a minimum of 22 dry mils.

Each coat of HESS A.R.C. shall be applied in a direction perpendicular to the previous coat to assure positive coverage. Each coat must be dry and cured before an additional coat is applied. All surfaces must be uniformly coated and be free from all voids, pinholes and blisters.

If any form of dirt, sand or pollution fallout is detected on the surface of HESS A.R.C., it is necessary to remove this material before applying an additional coat.

HESS A.R.C. is very cohesive and difficult to spray at material temperature below 60°F (16°C). Store product in a warm area prior to application to bring material temperature to 70°F (21°C) or greater.

Use water and detergent to thoroughly flush equipment. Purge the water from the system using mineral spirits. Leave the solvent in the lines and equipment until next use. It is not recommended practice to leave HESS A.R.C. in the pump or hoses.

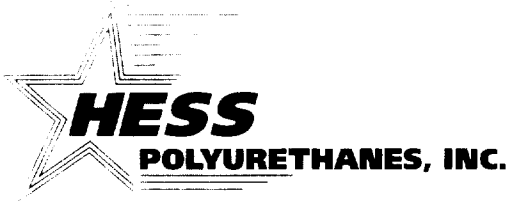
#### LIMITATION & PRECAUTIONS:

HESS A.R.C. should not generally be used over cold storage tanks or buildings where a vapor barrier coating is required. HESS A.R.C. shall not be used for interior applications in place of a thermal barrier.

HESS A.R.C. will freeze and become unusable at temperatures below 32°F (0°C). Do not ship or store unless protection from freezing is available.

Do not apply HESS A.R.C. at temperatures below 50°F (10°C), or when there is a possibility of temperatures falling below 2°F (0°C) within 24-hour period after application. HESS A.R.C. requires complete evaporation of water to cure. Cool temperatures and high humidity retard cure. Do not apply if weather conditions will not permit complete cure before rain, dew, fog or freezing temperatures occur. Do not apply in the late afternoon if heavy moisture condensation can appear during the night.

For specific information on safety requirements, refer to OSHA guidelines and HESS A.R.C. Material Safety Data Sheet.



## HPS - 5100 SPRAY FOAM

### PRODUCT INFORMATION:

HPS 5100 is a two component, HCFC blown, polyurethane spray foam system. It is available in 1.8 - 3.0 pcf densities. Low viscosity and 1:1 by volume ratio provide for easy processing.

### USES:

HPS 5100 is used for the thermal insulation of building walls, roofs, tanks, vessels and pipes. In roofing systems uses, HPS 5100 meets the requirements of UL 790 (ASTM E-108) in Class A and Class B configurations on combustible and non-combustible decks when covered with approved coatings. Refer to Hess Polyurethane's' UL ratings for exact information. A minimum of 2.5 pcf density foam is recommended for roofing applications.

### REACTIVITY PROFILES:\*

The following reactivity guidelines have been developed to assist in ordering the proper speed for a range of ambient temperatures.

	SUMMER S	SPRING FS	REGULAR F	FALL FF	WINTER W
<b>Ambient Temp. Range</b>	85°F - 100°F	75°F - 90°F	70°F - 85°F	60°F - 75°F	50° - 65°F
<b>Reactivity (Rise Time)</b>	4.0 - 5.0 sec.	3.5 - 4.0 sec.	2.5 - 3.5 sec.	2.0 - 2.5 sec.	1.0 - 2.0 sec.

\*NOTE: ARCTIC SPRAY available for temperatures between 35°F to 50°F. Skin texture will vary above 55°F.

LIQUID COMPONENTS	TEST METHOD	COMPONENT A	COMPONENT B
Viscosity, cps @ 74°F cps	ASTM D-2196 Spindle #2 @ 300 rpm	200 - 300	300 - 500
Specific Gravity @ 74°F	ASTM D-1638	1.24	1.17
Color	Visual	dark brown	dark brown
Weight per gallon	From Specific Gravity	10.33	9.60

**CURED FOAMS TYPICAL PHYSICAL PROPERTIES**

(DATA DERIVED FROM LABORATORY SAMPLES)

PROPERTY	TEST METHOD	RESULTS			
Density	ASTM D-1622	1.8 pcf	2.0 pcf	2.5 pcf	3.0 pcf
Compressive strength, parallel	ASTM D-1621	22 psi	28 psi	40 psi	50 psi
K Factor Initial Aged	ASTM C-177 ASTM C-177	0.125 0.16	0.125 0.16	0.125 0.16	0.125 0.16
Tensile Strength	ASTM D-1623	40 psi	45 psi	58 psi	75 psi
Closed cell content	ASTM D-1940	90% min.	90% min.	92% min.	95% min.
Dimensional stability	ASTM D-2126	+8%	+8%	+8%	+8%
Moisture (Perm/Inch)	ASTM C-355	1.4	1.4	1.4	1.4
(28 days @ 158°F, ambient RH, values are % volume change)					

**PROCESSING GUIDE**

**STORAGE/SHELF LIFE.** Components "A" and "B" should be stored in their original, unopened containers at temperatures between 65°F and 75°F. Shelf life of unopened, sealed containers is approximately six months under those storage conditions.

**EQUIPMENT.** Recommended proportioning equipment is manufactured by Gusmer, Binks, Graco, or Glas-Craft. Mixing and ratio by volume is 50 parts A to 50 parts B (1:1). Equipment shall be of the heated, airless type, capable of maintaining 100°F to 120°F at the spray gun. Optimum spraying temperature will vary with type of equipment used, substrate, ambient temperature, and humidity.

**WARNING.** Polyurethane foam may present a fire risk in certain applications if exposed to fire or excessive heat, e.g. welding and cutting torches. The use of polyurethane in interior applications on walls or ceilings presents an unreasonable fire risk, unless the foam is protected by an approved fire-resistive fifteen-minute thermal barrier.

**GENERAL INSTRUCTIONS.** Before the containers are opened, all safety instructions should be read and understood by all personnel who will come into contact with the materials. If the safety instructions are lost or otherwise not available, please contact Hess Polyurethanes, Inc. for a replacement.

A Hess Polyurethanes, Inc. Material Safety Data Sheet (MSDS) is sent with the original shipment and available upon request. All personnel who come in contact with the product should read and understand the MSDS.

**PROTECTIVE EQUIPMENT.** The "A" component is a polymeric isocyanate and may be sensitizing, particularly from the standpoint of *VAPOR INHALATION*. The best form of protection against sensitizing vapors in the workplace is a *FRESH AIR SUPPLY*. Several manufacturers, including 3M company and MSA make full face fresh air masks. For minimum protection, organic vapor canister style respirators shall be worn. To prevent contact with the product, wear fabric coveralls and fabric gloves, full-face mask and OSHA approved protective goggles.

#### **HEALTH AND SAFETY**

**VAPOR INHALATION** problems are characterized by coughing, shortness of breath or tightness of the chest. Anyone exhibiting these symptoms shall be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, *SUMMON "EMERGENCY TRAINED" MEDICAL ATTENTION IMMEDIATELY.*

**SKIN CONTACT** with liquid components can result in a rash or other irritation. Wash the affected area with water. Wipe residual liquid with a clean soft cloth followed by washing with soap and water. If a rash or other irritation develops, *SEE A PHYSICIAN.*

**EYE CONTACT** with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. *SUMMON "EMERGENCY TRAINED" MEDICAL ATTENTION IMMEDIATELY.*

#### **WARNING:**

Polyurethane products manufactured or produced from these chemicals may present a serious fire hazard if improperly used or allowed to remain exposed or unprotected. The character and magnitude of any such hazard will depend on a broad range of factors which are controlled or influenced by the manufacturer, applicator or production process. Each person, firm, or corporation engaged in the manufacture, production, application, installation or use of any polyurethane materials should carefully determine whether there is a potential fire hazard associated with such specified usage, and utilize all appropriate precautionary and safety measures as outlined in Local, State and Federal regulations governing the manufacture of products or the construction and/or renovation of commercial or residential structures.

THE INFORMATION HEREIN IS BELIEVED TO BE RELIABLE, BUT UNKNOWN RISKS MAY BE PRESENT. HESS POLYURETHANES, INC. WARRANTS ONLY THAT THE MATERIALS SHALL BE OF MERCHANTABLE QUALITY; THIS WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR UNWRITTEN EXPRESSED OR IMPLIED WARRANTIES AND HESS POLYURETHANES, INC. EXPRESSLY DISCLAIMS ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM PATENT INFRINGEMENT. ACCORDINGLY, BUYER ASSUMES ALL RISKS WHATSOEVER AS TO THE USE OF THESE MATERIALS. BUYER'S EXCLUSIVE REMEDY AS TO ANY BREACH OF WARRANTY OR NEGLIGENCE CLAIM SHALL BE LIMITED TO THE PURCHASE PRICE OF THE MATERIALS. FAILURE TO STRICTLY ADHERE TO RECOMMENDED PROCEDURES SHALL RELIEVE HESS POLYURETHANES, INC. OF ALL LIABILITY WITH RESPECT TO THE MATERIALS OR THE USE THEREOF.