



# Versi-Foam<sup>®</sup> systems

*The uses for Versi-Foam<sup>®</sup> are limited only by the imagination ...*



*Versi-Foam<sup>®</sup> is a portable and disposable spray foam insulation system. It is ideal for insulating, air sealing, sound dampening, condensation control, caulking, and void filling. Versi-Foam<sup>®</sup> applies to commercial and residential construction, plant and facility maintenance, HVAC equipment, roofing repair, marine flotation and insulation, pool and spa insulation, stage/film props and special effects, insulation used within trucks, trailers, buses, RVs, and much more.*





## Why use Versi-Foam®?

### High R-Value

The R-value of Versi-Foam® closed-cell foam is significantly higher per inch than other types of insulation. This means that buildings with smaller frame sizes can still be insulated to today's energy efficiency standards.

### Excellent Air Sealant

Closed-cell polyurethane foams like Versi-Foam® provide an airtight barrier by blocking airflow through cracks and fissures in the structure, allowing it to perform closer to its full rated R-value. Independent testing has shown that at 18°F, with a 15 mph wind, the R-value of closed-cell polyurethane foam drops from 19 to 18, whereas batt insulation drops from 19 to 7.

### Energy Efficiency

Air continuously moves through holes, cracks, and fissures in the building envelope. According to the U.S. Department of Energy, about 1/3 of this air infiltrates through openings in ceilings, walls, and floors. Versi-Foam® will seal these areas off, increasing energy efficiency through reduced thermal transfer.

### Pest Resistance

By sealing off holes and cracks in the structure, Versi-Foam® will help block the intrusion of insects and rodents, rendering a cleaner, healthier home or facility environment.

[www.rhhfoamsystems.com](http://www.rhhfoamsystems.com)

### Low Permeance

Versi-Foam® seals against moisture and will not be damaged by minor leaks or condensation. It has very low permeance – or the potential for water vapor to pass through. This reduces condensation within the building envelope and protects against the growth of mold & mildew, which may ultimately extend the life of the structure.

### Personal Comfort

In addition to preventing air infiltration, Versi-Foam® also serves as a barrier to dirt, allergens, pollutants, pests, mold, and moisture – increasing the overall comfort and health of occupants.

### Structural Advantages

Closed-cell foam will add to the structural integrity of a building. High-density foam may be walked on or nailed into.

### Extreme Temperature Tolerance

Many Versi-Foam® systems are tolerant to temperatures from -250°F to +250°F, making them ideal for the insulation of piping systems. See data specification sheets before use to ensure that your particular Versi-Foam® system will be adequate for your application.

### Portability

Manufacturing plants and other industrial facilities often require insulation and sealant in their maintenance and repair schedules; however facility logistics often make

it impossible to use a conventional foam machine. Versi-Foam® can be easily transported to any location where foam is needed – be it a factory job or the crawl space in your home. No outside source of power or pressure is required.

### Versatility

Often used as an artistic medium, Versi-Foam® has been featured in several major motion pictures, theatrical productions, television shows, museums, theme parks, displays, and haunted houses. You can mold it, carve it, sand it, cut it, grind it, shave it, paint it, coat it – even cover it with polyester resins. You can create any surface texture in any shape and color.

### Spray Applied

Versi-Foam® is a spray-applied product – perfect for applications on irregular surfaces and in spaces where traditional insulation would be inadequate, such as corrugated steel buildings, pipes, tanks, and ductwork.







## Versi-Foam® Product Line

Versi-Foam® two-component expandable polyurethane systems are portable, pre-pressurized, and ready to use. Versi-Foam® systems are available in a wide variety of formulations and sizes to suit your specific insulation needs.

Versi-Foam® **Standard Density** (1.75 pcf) Systems are the most commonly utilized in the Versi-Foam® product line. All are available in a standard formula and Class I flame-retardant formula. Systems 15 and 50 are also available in a Slow Rise formula.\*

- System 1: Yields 12 ft<sup>2</sup> at 1" or 1 ft<sup>3</sup>
- System 9: Yields 108 ft<sup>2</sup> at 1" or 9 ft<sup>3</sup>
- System 15: Yields 200 ft<sup>2</sup> at 1" or 16.5 ft<sup>3</sup>
- System 50: Yields 600 ft<sup>2</sup> at 1" or 50 ft<sup>3</sup>

Versi-Foam® **Low Density** (1.0 pcf) Systems are ideal for air-sealing and void filling for moderate temperature applications.

- System 28: Yields 300 ft<sup>2</sup> at 1" or 25 ft<sup>3</sup>
- System 88: Yields 1,000 ft<sup>2</sup> at 1" or 83 ft<sup>3</sup>

Versi-Foam® **High Density** (2.8 pcf) Systems are designed for roof repairs, cryogenic applications and where load-bearing requirements exist.

- System 10: Yields 120 ft<sup>2</sup> at 1" or 10 ft<sup>3</sup>
- System 33: Yields 396 ft<sup>2</sup> at 1" or 33 ft<sup>3</sup>

Versi-Foam® **Hy-Flo** (1.75 pcf) Systems are Class I, constant pressure systems consisting of short-filled chemical tanks that are more heavily pressured – ideal for larger jobs that require a consistent spray pattern from start to finish. The Hy-Flo 700 contains two sets of A and B tanks and necessary accessories. The Hy-Flo 350 contains a single set of A and B tanks and no accessories.

- Hy-Flo 700: Yields 700 ft<sup>2</sup> at 1" or 58 ft<sup>3</sup>
- Hy-Flo 350: Yields 350 ft<sup>2</sup> at 1" or 29 ft<sup>3</sup>

The Versi-Foam **Open Cell** (0.75 pcf) System is a Class I, 92% open cell product. It offers a cost-effective means to insulate, control air movement and reduce sound transmission. It has a lower R-value and higher permeability than Versi-Foam® closed cell systems.

- System 100 Open Cell: Yields 1,200 ft<sup>2</sup> at 1" or 100 ft<sup>3</sup>



\* The Slow Rise systems (available in Systems 15 & 50) have a delayed expansion and cure time of 2-3 minutes. This is useful in applications where the foam needs to flow to distant areas before it solidifies.

\* The Class I systems (available in Systems 1, 9, 15, & 50; and standard in the System 100 OC, Hy-Flo 700, & Hy-Flo 350) contain additional flame retardants in accordance with the ASTM E-84 testing.





## Versi-Foam® Product Properties

	UNIT	TYPE	DENSITY	YIELD (cubic ft)	YIELD (sq ft @ 1")	R-VALUE (per inch)	CLOSED CELL CONTENT	SYSTEM CONTAINS:
SMALL	System 1	Standard	1.75 pcf	1	12	7.7	> 90%	<ul style="list-style-type: none"> <li>- 2 chemicals in aerosol cans</li> <li>- 1 thumb-roll dispenser &amp; hose</li> <li>- 2 nozzles</li> </ul>
	System 1 Class I	Flame Retardant	1.75 pcf	1	12	7.0	> 95%	
	System 9	Standard	1.75 pcf	9	108	7.7	> 90%	
MEDIUM	System 9 Class I	Flame Retardant	1.75 pcf	9	108	7.0	> 95%	<ul style="list-style-type: none"> <li>- 2 chemical components</li> <li>- 10 ft gun/hose assembly</li> <li>- 10 nozzles, 3 fan spray tips</li> <li>- nitrile gloves</li> <li>- wrench &amp; petroleum jelly</li> </ul>
	System 15	Standard	1.75 pcf	16.5	200	7.7	> 90%	
	System 15 SR	Slow Rise	1.75 pcf	16.5	200	7.7	> 90%	
	System 15 Class I	Flame Retardant	1.75 pcf	16.5	200	7.0	> 95%	
	System 10	High Density	2.80 pcf	10	120	7.7	> 90%	
	System 28	Low Density	1.00 pcf	25	300	7.7	> 80%	
	System 50	Standard	1.75 pcf	50	600	7.7	> 90%	
	System 50 SR	Slow Rise	1.75 pcf	50	600	7.7	> 90%	
LARGE	System 50 Class I	Flame Retardant	1.75 pcf	50	600	7.0	> 95%	<ul style="list-style-type: none"> <li>- 2 chemical components</li> <li>- 15 ft gun/hose assembly</li> <li>- 10 nozzles, 3 fan spray tips</li> <li>- nitrile gloves</li> <li>- wrench &amp; petroleum jelly</li> </ul>
	System 33	High Density	2.80 pcf	33	396	7.7	> 90%	
	System 88	Low Density	1.00 pcf	83	1,000	7.7	> 80%	
	System 100 OC	Open Cell, Flame Retardant	0.75 pcf	100	1,200	4.0	8%	
	Hy-Flo 700	Flame Retardant	1.75 pcf	58	700	7.0	> 95%	
	Hy-Flo 350*	Flame Retardant	1.75 pcf	29	350	7.0	> 95%	<ul style="list-style-type: none"> <li>- 2 sets of chemical components</li> <li>- 20 ft gun/hose assembly</li> <li>- 12 fan spray nozzles, 3 nozzles</li> <li>- nitrile gloves</li> <li>- wrench &amp; petroleum jelly</li> </ul>

\*The Hy-Flo 350 is intended for use as a spare set of chemicals for the Hy-Flo 700. It consists of a single set of chemical components and no accessories.

Note: Published yields are theoretical and vary based on several factors, including ambient conditions and specific application.







## How To Use Versi-Foam®

To operate the medium and large size Versi-Foam® systems, open the tank valves, click a nozzle into place, disengage the safety, and point the dispensing gun at your application target. Pull the trigger. It's that easy!

Temperature is an important factor in producing good quality foam. For best performance, both the chemical temperature and target surface temperatures should be between 60° F and 80° F. Warmer or cooler temperatures may result in yield, adhesion, and foam quality issues. Consult the temperature strip located on all medium and large size Versi-Foam® systems to ensure that the chemicals are in the recommended temperature range before beginning your application.

For the best spray pattern, stand 18 to 24 inches away from your target. You will control the velocity of the chemical flow by how far you pull the trigger of our patented U-Control dispensing gun. As you dispense the foam, adjust your grasp to the level that best suits your needs.

Spray a strip around the perimeter of the area you wish to cover. With a back-and-forth motion of your wrist, fill in the area from top to bottom. The faster you move your wrist, the thinner the layer of foam. The foam will expand up to six times its original volume, so be careful not to apply too much in one pass. The foam will be fully

expanded and tack-free to the touch in 30 to 40 seconds.

If you see that you need heavier coverage after the first layer has fully cured, you may apply additional foam on top of previous layers. If your application requires a thickness in excess of 2 inches, we recommend applying it in multiple passes. Applying too much foam in one pass may result in an uneven surface, and the foam may sag before curing completely.

If you pause during your application for more than 30-40 seconds, foam may cure in the dispensing gun nozzle, clogging it. Should this happen, simply replace the nozzle with one of the multiple spare nozzles included with your Versi-Foam® system.

Personal Protective Equipment (PPE) is required when applying spray foam. Recommended PPE includes a fit-tested respirator, chemical resistant clothing and gloves, and safety goggles. Nitrile gloves are included with every Versi-Foam® system. Consult the product MSDS and operating instructions for PPE guidelines. Contact RHH Foam Systems or your distributor for details and information on where to purchase.







## Versi-Foam® Coverage

### APPROXIMATE SQUARE-FOOT COVERAGE BASED ON THICKNESS

UNIT	DENSITY	YIELD (ft <sup>3</sup> )	YIELD (ft <sup>2</sup> @ 1")	INSULATION THICKNESS								
				1"	1.5"	2"	2.5"	3"	3.5"	4"	4.5"	5"
System 1	1.75 pcf	1	12	12	8	6	4.8	4	3.4	3	2.7	2.4
System 9	1.75 pcf	9	108	108	72	54	43	36	31	27	24	22
System 15	1.75 pcf	16.5	200	200	133	100	80	67	57	50	45	40
System 10	2.80 pcf	10	120	120	80	60	48	40	34	30	27	24
System 28	1.00 pcf	25	300	300	200	150	120	100	86	75	67	60
System 50	1.75 pcf	50	600	600	400	300	240	200	171	150	133	120
System 33	2.80 pcf	33	396	396	264	198	158	132	113	99	88	79
System 88	1.00 pcf	83	1,000	1,000	667	500	400	333	286	250	222	200
System 100 OC	0.75 pcf	100	1,200	1,200	800	600	480	400	343	300	267	240
Hy-Flo 700	1.75 pcf	58	700	700	467	350	280	233	200	175	156	140
Hy-Flo 350	1.75 pcf	29	350	350	233	175	140	117	100	88	78	70

Note: Published yields are theoretical and vary based on several factors, including ambient conditions and specific application.







## Versi-Foam® FAQs

### How does closed cell Versi-Foam® compare to fiberglass & cellulose?

More "traditional" insulating materials such as fiberglass and cellulose are less expensive upfront; however Versi-Foam® offers the better value in the long run.

Versi-Foam® has approximately twice the R value, provides an airtight thermal seal, resists moisture and mold, seals hard to insulate areas, adds structural stability, and more – leading to significant energy savings and an overall better return on investment.

### What sets Versi-Foam® apart from other spray foam kits?

Our patented U-Control dispensing gun provides the user complete control of how much foam to dispense by how hard you pull the trigger on the applicator.

The gun allows you to spray foam at a rate of approximately 5 pounds per minute, or so slowly that you can write your name with it. It is the key to a consistent spray pattern and surface texture. The metered spray pattern saves material and clean-up time.

### Can I inject Versi-Foam® into a closed wall cavity?

Application to existing closed walls is not recommended due to the pressure created by expansion. Damage to drywall and plaster will occur if the cavities are overfilled.

### Are the tanks recyclable or refillable?

The Department of Transportation forbids refilling or recycling of tanks. Once completely emptied, the tanks should be disposed of as normal industrial waste, in accordance with the operating instructions and local regulations. A sanitary land fill is recommended.

### Is Versi-Foam® waterproof?

All Versi-Foam® systems except for the System 100 Open Cell (OC) are water-resistant, but not waterproof. Minimal exposure to moisture will not affect these closed-cell foams, however, the foam may be compromised if submerged under water for a period of time. The System 100 OC is an open cell foam and thus will absorb and retain water if exposed. Therefore the System 100 OC should not be used in areas where moisture may be present.

### Is Versi-Foam® temperature sensitive?

Temperature is key in producing good quality foam. For the majority of the closed-cell Versi-Foam® systems, ideal yield/expansion and adhesion will result when the substrate and chemical temperatures range between 60°F and 80°F. Medium and large sized Versi-Foam® systems come complete with temperature strips indicating chemical temperature. Consult the operating instructions for specific temperature requirements.

### Do I still need to install a vapor barrier?

A vapor retarder of some degree is required on the warm side of the building assembly. A vapor barrier is defined as a Class I vapor retarder (perm rating less than 0.1) and can be achieved with sheet polyethylene (Visqueen).

Versi-Foam® closed cell foams will achieve a Class II (0.1 < perm rating < 1) or Class III (1 < perm rating < 10) vapor retarder rating, depending on the specific product type as well as the applied thickness. Building codes call out for different vapor retarder requirements (Class I, II or III) depending on the region of the country. Consult your local codes to determine which level of vapor retarder is required in your area.

### Can I leave Versi-Foam® uncovered?

By code, you are required to cover polyurethane foam with a 15 minute thermal barrier. A ½ inch of drywall is most commonly used. For uninhabited areas, such as attics and crawlspaces that are accessed for maintenance only (not used for storage) you may use an ignition barrier in lieu of a thermal barrier. Contact RHH Foam Systems for recommended thermal and ignition barrier products.

### Do I have to use the kit the same day it's opened?

Only the System I kits need to be used same day. All larger systems may be shut down and re-used again.

If the kit will be used infrequently, a weekly maintenance routine is needed to prevent gun and hose blockage. See the operating instructions for weekly maintenance instructions.

### Can I paint Versi-Foam®?

Yes, once the foam is fully cured it can be painted with any product that is not heavily saturated in MEK (Methyl Ethyl Ketone). This should not be an issue in products made for interior/household applications.

Other than the MEK concentration, the type of paint you use should be determined by the easiest method of application (paint, spray, etc) and the desired finish.

### Are there any health hazards associated with Versi-Foam®?

Versi-Foam® does not contain any urea formaldehyde, VOCs, CFCs or Penta-BDEs. The use of proper Personal Protective Equipment (PPE) is required during application. Please see the MSDS and operating instructions for PPE guidelines.





## Versi-Tite®

Versi-Tite® is a one-component polyurethane foam used to seal small gaps and cavities. It dispenses from the can in a caulking bead for easy use in sealing around doors, windows, pipes, outlets or any other penetrations.

Versi-Tite® is a moisture-cured product and should not be used to fill voids larger than 1 inch. For large voids, Versi-Foam® should be used.

The minimal expansion of Versi-Tite® (200%) allows for use around door and window framing. For this application, Versi-Tite should be dispensed as a caulking bead, filling approximately 35% to 50% of the

cavity. The foam will expand to fill the entire cavity.

By sealing off air leaks with Versi-Tite®, you will deter drafts, evenly distribute room temperatures, inhibit mold and mildew, eliminate excess humidity, and prevent pests from entering your home.

Versi-Tite® is a UL Classified – File #R13919 Caulking and Sealant. The foam is considered flame retardant, with an ASTM E-84 Flame Spread Rating of 25 and a Smoke Developed of 50. Versi-Tite® has an R-value of 4-5 per inch. It can be trimmed in as little as one hour and

is fully cured 12-24 hours.

Versi-Tite® is available in consumer sizes of 12 oz. and 24 oz. cans that come complete with a straw applicator. The 24 oz. size is also available for use with a dispensing gun. A 16 lb. industrial-size cylinder is also available for large-scale applications.

Optional accessories include a metal dispensing gun and Versi-Solv® gun cleaning solvent.

YIELD:	12 oz.	24 oz.	16 lb.
1/4" bead	2,201 linear ft	4,403 linear ft	31,347 linear ft
3/8" bead	978 linear ft	1,957 linear ft	13,914 linear ft
1/2" bead	550 linear ft	1,101 linear ft	7,827 linear ft



Seal window and door sills, frames, jambs, headers.



Close leaky gaps in attics and roofs.



Seal air conditioning penetrations.



Stop air infiltration through windows, electrical outlets.



Seal radon gas entry routes.



Positive air sealing in asbestos removal areas.



Seal utility penetrations.



Prevent dust and moisture entry through plate lines.