Testing & Certifications

All tests on InfraStop® Insulation products are performed at either national-ly approved independent laboratories or at leading universities. Tests are performed to current American Society of Testing and Materials (ASTM) Standards when a standard exists.

Testing results on our Reflective Insulation (Reflective/Bubble/Bubble/Reflective) product are listed below. For any additional product specifications for this product (or any other), please refer to our website at www.insulationstop.com, or feel free to call our InsulationStop Customer Service at (800) 871-0410.

Nominal Thickness	**5/16" (.312)**
Weight	**0.771 oz./ft^2**
Temperature Range	**-60^O to 180^O F**
Flame Spread	**Less than 25***
Smoke Development	**Less than 50***
Perm. Rating	**0.02****
Puncture Resistance	**60 lb./in.*****
Vapor Transmission	**0.02**
Mold and Mildew	**No Growth**
Emittance	**Less than 0.06**
Tensile Strength	**3.7 N/mm**
Pliability	**No Cracking**
Hot Surface Performance	**Passed (250^O F)**

Note: Not for use in direct contact on surface temperatures that are 180^O F or greater.

* Intertek Testing ASTM Test Method E-84 **ASTM Test E-96 ***FSTM 101 B Method 2031

Product Standards

Resistance to fungi or bacteria: InfraStop® does not promote the growth of fungi or bacteria.

InfraStop® products have been evaluated by the following:

- ☐ **ICC-ES Evaluation Report Number ESR-1362**

Testing and Certification Documents

- ☐ **Thermal Performance ASTM C1363**
- ☐ **Thermal Performance of Wall Systems ASTM C1363**
- ☐ **Thermal Performance ASTM C335**
- ☐ **Thermal Performance of Crawl Space ASTM C1363**
- ☐ **Hot Surface Performance ASTM C411**
- ☐ **Heat Transfer (Heat Flow Up, Down, Horizontal) ASTM C1363**
- ☐ **Thermal Performance of InfraStop® and Fiberglass in Walls ASTM C1363**
- ☐ **Heat Transfer of Air-Handling Ducts with InfraStop®**
- ☐ **Flame Spread and Smoke Density ASTM E84**
- ☐ **Mounting Method ASTM E2599**
- ☐ **Fungus Resistance Mil-Std 810B Method 508**
- ☐ **Pliability Test ASTM C1224**
- ☐ **Sound Absorption Test ASTM C423 and ASTM E795**
- ☐ **Sound Transmission Loss ASTM E90 and ASTM E413**
- ☐ **Water Vapor Transmission ASTM E96**
- ☐ **Tensile Strength ASTM D751**
- ☐ **Emittance Testing ASTM C1371**
- ☐ **Thermal Performance of Water Heater Jackets**
- ☐ **Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Taped Joint Detail) Test Report # 3166908SAT-012**
- ☐ **Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Unslit) Test Report # 3166908SAT-011**
- ☐ **R&D Services: Resistance to the Growth of Fungi ASTM C1338 Test Report # RD072713FR**
- ☐ **State of California**
- ☐ **State of California Licensed Insulation Manufacturer**
- ☐ **State of Minnesota: Filed with Minnesota Insulation Standards Program**
- ☐ **State of Wisconsin: Wisconsin Material Approval, Safety and Buildings Division Approval # 920088-1**
- ☐ **R&D Services Emittance Testing**
- ☐ **R&D Services: Physical Properties Sheet Width, Length, Pliability, Water Vapor Permanence and Aged Water Vapor Permanence**
- ☐ **R&D Services: Water Vapor Transmission Test ASTM-E96 (Dessicant Method)**

Total Design Calculations

Crawl Space

Two layers of product - The first course installed to split the 2"x 10"joist cavity and the second course installed on the bottom of the 2"x 10" joists, 16" OC - Heat Flow Downward

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
Inside Air Film	.92	.92
3/4" Wood Subfloor	.75	.75
5/8" Particle Board Underlayment	.82	.82
2"x 10" Wood Floor Joists 16" OC	10.07	---
9.5" Air Space	---	13.8
InfraStop® Insulation	0.92	0.92
Outside Air Film	4.55	4.55
Total:	18.03	21.76

Total Design "U"=.20/18.03+.80/21.76=.0479
Total Design "R"=1/.0479=20.88

Note: The above assembly R-value of R-21 includes a 4.55 value for the reflective air film.

Wall - Exterior

Product installed on 2"x 6" studs, 16" OC - Inside the cavity compressing the mass insulation R-19 batt 3/4" - Heat Flow Horizontal

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
1/2" Plaster Board	.45	.45
InfraStop® Insulation	---	*3.87
2"x 6" Stud	6.88	---
R-19 Batt	---	15.70
1/2" Plywood	.62	.62
Total:	8.63	21.32

Total Design "U"=.14/8.63+.86/21.32=.0566
Total Design "R"=1/.0566=17.67

*** Includes the thermal resistance for InfraStop® Insulation and the airspace on one side of the product.**

Wall - Masonry

Product installed on 1"x 2" furring strips, 16" OC to block or concrete wall - Heat Flow Horizontal

Construction Components:	R-values At Framing:	At Cavity:
Inside Air Film	.68	.68
1/2" Plaster Board	45	.45
InfraStop® Insulation	---	*3.30
Furring Strips	1.59	---
8" Concrete Block	1.11	1.11
Total:	3.83	7.13

Total Design "U"= .14/3.83+.86/5.54=.1918
Total Design "R"=1/.1918=5.21

*** Includes the thermal resistance for InfraStop® Insulation and the airspace on one side of the product.**