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# R-Control® EPS Systems



Product Testing Summary

Using Nationally Recognized Standards

Note: Information deemed reliable at time of printing. Please visit [www.r-control.com](http://www.r-control.com) for latest information. June 2004



# R-Control EPS Systems

|   | ASTM C578 / PHYSICAL PROPERTIES   |   |   |   |   |   | GEOFOAM   |
|---|---|---|---|---|---|---|---|
| TEST TYPE   | ASTM C 518  | ASTM C 165  | ASTM C 203  | ASTM C 303  | ASTM E 96   | ASTM C 272  | ASTM D 6817   |
| TEST TITLE  | STEADY-STATE THERMAL TRANSMISSION   | COMPRESSIVE STRENGTH  | FLEXURAL STRENGTH   | DENSITY   | WATER VAPOR TRANSMISSION  | WATER ABSORPTION  | STANDARD SPECIFICATION FOR GEOFOAM  |
| ALSO KNOWN AS:  | R-Value   |   |   |   | Perm Rating   |   |   |
| <b>R-CONTROL TYPE I, VIII, II and IX EXPANDED POLYSTYRENE (EPS)</b>   | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         |   |
| <b>TERMITE RESISTANT PERFORM GUARD® EPS</b>                           | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>1</sup> Tested Values of Perform Guard Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578     | <sup>2</sup> Tested Values of Perform Guard Geofoam Types Exceed the Minimum Values Stated in ASTM D 6817 |
| <b>WSG® WALL SPECIFICATION GRADE EPS</b>                              | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               | <sup>1</sup> Tested Values of WSG Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578               |   |
| <b>CUSTOM CUT FABRI-TECH® EPS</b>                                     | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        | <sup>1</sup> Tested Values of Fabri-Tech Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578        |   |
| <b>PERFORM® ROOF INSULATIONS</b>                                      | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           | <sup>1</sup> Tested Values of Perform Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578           |   |
| <b>CONTOUR TAPER TILE®</b>  | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 | <sup>1</sup> Tested Values of Contour Tape Tile Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578 |   |
| <b>SPECLAM™ NAILBASE (CORE)</b>                                       | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         | <sup>1</sup> Tested Values of R-Control Type I, VIII, II, IX EPS Exceed the Minimum Values Stated in ASTM C 578         |   |
| <b>ASTM D 6817 GEOFOAM TYPE EPS12, EPS15, EPS19, EPS22, and EPS29</b> |   |   |   |   |   |   | <sup>2</sup> Tested Values of Geofoam Types Exceed the Minimum Values Stated in ASTM D 6817               |

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# R-Control EPS Systems

|   | FIRE  |  |  | ROOFING   |  |  |   | TERMITES  |
|---|---|--|--|---|--|--|---|---|
| TEST TYPE   | ASTM E 84   | UL 1715  | UL 790   | FM 4450   | UL 1897                                    | UL 1256  | ASTM E 119  | ICC ES EG 239   |
| TEST TITLE  | SURFACE BURNING CHARACTERISTICS   | CORNER ROOM BURN   | FIRE TESTS OF ROOF COVERINGS   | CLASS 1 INSULATED STEEL ROOF DECKS  | UPLIFT TESTS FOR ROOF COVERING SYSTEMS     | FIRE TEST OF ROOF DECK CONSTRUCTION                          | FIRE TEST OF BUILDING CONSTRUCTION AND MATERIALS  | TERMITE EXPOSURE  |
| ALSO KNOWN AS:  | UL 723<br>UBC STAN. 8-1<br>NFPA 255   | UBC STAN. 26-3   | ASTM E 108<br>UBC STAN. 15-2<br>NFPA 256   | UL 790<br>UL 580  |  |  | UL 263<br>UBC STAN. 7-1<br>NFPA 251   |   |
| <b>R-CONTROL TYPE I, VIII, II and IX EXPANDED POLYSTYRENE (EPS)</b>   | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness | <sup>4</sup> Acceptable -<br>exposed on the<br>interior of crawl<br>space<br><br><sup>4</sup> Acceptable -<br>exposed on the<br>interior of attics | <sup>5</sup> Class A<br>Combustible and<br>Non-Combustible<br>Decks<br>Unlimited Thickness<br>of R-Control EPS | <sup>6</sup> FM Approved<br>Class 1,<br>I-60 and I-90<br>Type I and VIII<br>R-Control EPS | Uplift resistance of<br>75 psf and 105 psf | <sup>7</sup> UL Roof Deck<br>Const. No.<br>219, 237, 374,458 | <sup>7</sup> Acceptable in<br>numerous UL<br>Designs listed in UL<br>Fire Resistance<br>Directories |   |
| <b>TERMITE RESISTANT PERFORM GUARD® EPS</b>                           | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness | <sup>4</sup> Acceptable -<br>exposed on the<br>interior of crawl<br>space<br><br><sup>4</sup> Acceptable -<br>exposed on the<br>interior of attics |  |   |  |  |   | <sup>4</sup> Recognized by<br>ICC ES to be in<br>compliance with<br>Evaluation Guide<br>239                                 |
| <b>WSG® WALL SPECIFICATION GRADE EPS</b>                              | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness |  |  |   |  |  | <sup>7</sup> Acceptable in<br>numerous UL<br>Designs listed in UL<br>Fire Resistance<br>Directories |   |
| <b>CUSTOM CUT FABRI-TECH® EPS</b>                                     | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness |  |  |   |  |  |   |   |
| <b>PERFORM® ROOF INSULATIONS</b>                                      | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness |  | <sup>5</sup> Class A<br>Combustible and<br>Non-Combustible<br>Decks<br>Unlimited Thickness<br>of R-Control EPS | <sup>6</sup> FM Approved<br>Class 1,<br>I-60 and I-90<br>Type I and VIII<br>R-Control EPS | Uplift resistance of<br>75 psf and 105 psf | <sup>7</sup> UL Roof Deck<br>Const. No.<br>219, 237, 374,458 | <sup>7</sup> Acceptable in<br>numerous UL<br>Designs listed in UL<br>Fire Resistance<br>Directories |   |
| <b>CONTOUR TAPER TILE®</b>  | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness |  | <sup>5</sup> Class A<br>Combustible and<br>Non-Combustible<br>Decks<br>Unlimited Thickness<br>of R-Control EPS | <sup>6</sup> FM Approved<br>Class 1,<br>I-60 and I-90<br>Type I and VIII<br>R-Control EPS | Uplift resistance of<br>75 psf and 105 psf | <sup>7</sup> UL Roof Deck<br>Const. No.<br>219, 237, 374,458 | <sup>7</sup> Acceptable in<br>numerous UL<br>Designs listed in UL<br>Fire Resistance<br>Directories |   |
| <b>SPECLAM™ NAILBASE (CORE)</b>                                       |   |  | <sup>5</sup> Class A<br>Combustible and<br>Non-Combustible<br>Decks<br>Unlimited Thickness<br>of R-Control EPS | <sup>6</sup> FM Approved<br>Class 1,<br>I-60 and I-90<br>Type I and VIII<br>R-Control EPS | Uplift resistance of<br>75 psf and 105 psf | <sup>7</sup> UL Roof Deck<br>Const. No.<br>219, 237, 374,458 | <sup>7</sup> Acceptable in<br>numerous UL<br>Designs listed in UL<br>Fire Resistance<br>Directories |   |
| <b>ASTM D 6817 GEOFOAM TYPE EPS12, EPS15, EPS19, EPS22, and EPS29</b> | <sup>1</sup> Flame Spread - 20<br>Smoke Developed<br>150-300<br><sup>3</sup> Up To 5" Thickness |  |  |   |  |  |   | <sup>4</sup> Perform Guard<br>EPS Geofoam<br>recognized by<br>ICC ES to be in<br>compliance with<br>Evaluation Guide<br>239 |

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# Quality Assurance

R-Control products are made to the standards of an industry leading Quality Control Program monitored by Underwriters Laboratories Inc. and recognized by national codes agencies.

- <sup>1</sup> See R-Control EPS literature for complete details.
- <sup>2</sup> See R-Control EPS Geofoam literature for complete details.
- <sup>3</sup> Maximum sample thickness test apparatus will hold.
- <sup>4</sup> See ICC ES report, contact R-Control for current copy.
- <sup>5</sup> For specific Class A Ratings, see Underwriters Laboratories Building Materials Directory.
- <sup>6</sup> For specific approvals, see FM Building Materials Approval Guide.
- <sup>7</sup> For specific Fire Resistance, see Underwriters Laboratories Fire Resistance Directory.

\* Abbreviations:

ASTM = American Society for Testing and Materials  
FM = Factory Mutual  
ICC ES = International Code Council Evaluation Service  
NFPA = National Fire Protection Association  
UBC = Uniform Building Code  
UL = Underwriters Laboratories Inc.

Industry Affiliations:  
EPSMA, NRCA, SPRI,  
NAHB, AIA, SIPA



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