

| ROOF ASSEMBLIES                        |   |                        | 90.1-2007 & 2010<br><small>Table A2.3</small> |         | 90.1-2013, 2016, 2019<br>& 2022 - <small>Table A2.3.3</small> |
|--|---|------------------------|---|---------|---|
| DESCRIPTION                            | MATERIAL                                  | INSTALLATION           | U-FACTOR <sup>1</sup>                         | R-VALUE | U-FACTOR <sup>2</sup>   |
| Over the Purlin                        | R-19 + thermal spacer block               | Over the purlin        | 0.065   | 15.38   | 0.082   |
| Double Layer                           | R-13 + R-13 + thermal spacer block        | Sag 'N Bag             | 0.055   | 18.18   | 0.075   |
| Double Layer                           | R-13 + R-19 + thermal spacer block        | Sag 'N Bag             | 0.049   | 20.41   | 0.068   |
| Liner System (Screw down roof)         | R-19 + R-11 w/o thermal spacer block      | Between & over purlins | 0.044   | 22.73   | 0.044   |
| Long Tab Banded / Filled Cavity System | R-19 + R-10 + R-5 thermal spacer block    | Between & over purlins | 0.041   | 24.39   | 0.041   |
| Liner System (Standing Seam Roof)      | R-19 + R-11 w/o thermal spacer block      | Between & over purlins | 0.040   | 25.00   | 0.040   |
| Liner System                           | R-25 + R-8 + thermal spacer block         | Between & over purlins | —   | —       | 0.037   |
| Liner System                           | R-19 + R-11 + thermal spacer block        | Between & over purlins | 0.035   | 28.57   | 0.037   |
| Long Tab Banded / Filled Cavity System | R-19 + R-11 R-5 thermal block             | Between & over purlins |   |         | 0.037   |
| Long Tab Banded / Filled Cavity System | R-25 + R-11 R-5 thermal block             | Between & over purlins |   |         | 0.035   |
| Liner System                           | R-25 + R-11 + thermal spacer block        | Between & over purlins | 0.031   | 32.30   | 0.031   |
| Long Tab Banded / Filled Cavity System | R-25 + R-19 R-5 thermal block             | Between & over purlins |   |         | 0.029   |
| Liner System                           | R-30 + R-11 + thermal spacer block        | Between & over purlins | 0.029   | 34.48   | 0.029   |
| Liner System                           | R-25 + R-11 + R-11 + thermal spacer block | Between & over purlins | 0.026   | 38.50   | 0.026   |

1. unless otherwise stated, 90.1-2007 requires R-5 thermal spacer block, 90.1-2010 requires R-3.5 thermal spacer block  
2. unless otherwise stated, requires R-3 thermal spacer block

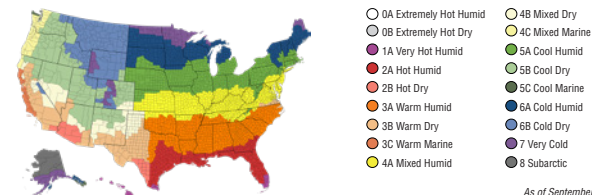
| WALL ASSEMBLIES  |   |                              | 90.1-2007 & 2010<br><small>Table A3.2</small> |         | 90.1-2013, 2016, 2019<br>& 2022 - <small>Table A3.2.3</small> |
|------------------|---|------------------------------|---|---------|---|
| DESCRIPTION      | MATERIAL                                | INSTALLATION                 | U-FACTOR                                      | R-VALUE | U-FACTOR  |
| Single Layer MBI | R-13                                    | Between girt and panel       | 0.113   | 8.85    | 0.162   |
| Single Layer MBI | R-16                                    | Between girt and panel       | 0.093   | 10.75   | 0.155   |
| Single Layer MBI | R-19                                    | Between girt and panel       | 0.084   | 11.90   | 0.147   |
| Double Layer MBI | R-6 + R-13                              | Inside girt and outside girt | 0.070   | 14.28   | Removed 2013  |
| Double Layer MBI | R-10 + R-13                             | Inside girt and outside girt | 0.061   | 16.39   | Removed 2013  |
| Filled Cavity    | R-25 w/ 1/8" Foam Tape (8" girts)       | Between the girts            | 0.059   | 17.10   | 0.059   |
| Double Layer MBI | R-13 + R-13                             | Inside girt and outside girt | 0.057   | 17.54   | Removed 2013  |
| Filled Cavity    | R-30 w/ 1/8" Foam Tape (8" girts)       | Between the girts            | 0.052   | 20.41   | 0.052   |
| Double Layer MBI | R-19 + R-13                             | Inside girt and outside girt | 0.048   | 20.83   | Removed 2013  |
| Double Layer MBI | R-25 + R-10                             | Inside girt and outside girt | —   | —       | 0.047   |
| Double Layer MBI | R-25 + R-16                             | Inside girt and outside girt | —   | —       | 0.042   |
| Double Layer MBI | R-25 + R-10 w/ R-3 thermal spacer block | Inside girt and outside girt | —   | —       | 0.039   |
| Double Layer MBI | R-30 + R-16 (8" girts)                  | Between the girts            | —   | —       | 0.039   |

### ELAMINATOR 300 Series Thermal Performance

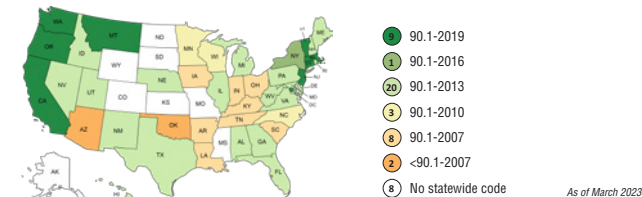
| INSULATION <sup>1</sup> | THERMAL BREAK <sup>2</sup> | U-FACTOR <sup>3</sup> |
|-------------------------|----------------------------|-----------------------|
| R-19                    | R-5                        | 0.065                 |
| R-10/R-10               | R-5                        | 0.063                 |
| R-10/R-11               | R-5                        | 0.061                 |
| R-10/R-13               | R-5                        | 0.058                 |
| R-11/R-13               | R-5                        | 0.058                 |
| R-13/R-13               | R-5                        | 0.055                 |
| R-10/R-19               | R-5                        | 0.052                 |
| R-11/R-19               | R-5                        | 0.052                 |
| R-13/R-19               | R-5                        | 0.050                 |
| R-16/R-19               | R-5                        | 0.049                 |
| R-19/R-19               | R-5                        | 0.048                 |

Note: Units on U-values are Btu/(hr.ft<sup>2</sup> °F), R-Values are hr.ft<sup>2</sup> °F/Btu.  
1. Owens Corning® EcoTouch® MBI Plus Filler Blanket Insulation.  
2. 1" x 3" block of FOAMULAR XPS Foam by Owens Corning  
3. Calculation based on standing seam roof (SSR) system

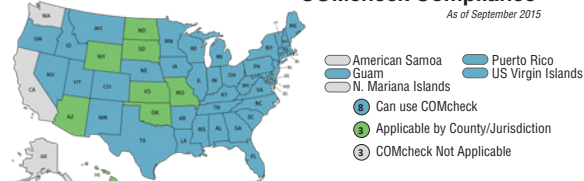
## Climate Zone & Code Maps



Note: Consistent climate zones used for ASHRAE Standards 90.1, 90.2 and IECC



### COMcheck Compliance



COMcheck Applicable by County/Jurisdiction:  
 Arizona, Kansas, Missouri, North Dakota, Oklahoma, South Dakota, Wyoming

States Not Accepting COMcheck:  
 Alaska, California, Washington