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| **A. Insulation Materials Installed** | | |
| 01 | Roof Deck Insulation Material Installed |  |
| 02 | Ceiling Insulation Material Installed |  |
| 03 | Exterior Wall Insulation Material Installed |  |
| 04 | Raised Floor Insulation Material Installed |  |
| 05 | Slab Edge Insulation Material Installed |  |
| 06 | Verification Status |  |
| 07 | Correction Notes |  |

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| **B. All Surfaces** | | |
| 01 | Air barrier installation and preparation for insulation was done and verified prior to insulation being installed. | |
| 02 | All surfaces between conditioned and unconditioned space are sealed and insulated to meet or exceed the levels specified on the Certificate of Compliance. | |
| 03 | All structural framing areas shall be insulated in a manner that resists thermal bridging through the assembly separating conditioned from unconditioned space. Structural bracing, tie-downs, and framing of steel, or specialized framing used to meet structural requirements of the CBC are allowed and must be insulated. These areas shall be called out on the building plans with diagrams and/or specified design drawings indicating the R-value of insulation and fastening method to be used. | |
| 04 | All insulation was installed according to the manufacturer’s installation instructions. | |
| 05 | Labels or specification/data sheets for each insulation material shall be provided to the HERS rater. Loose-fill material includes insulation material bag labels or coverage charts. | |
| 06 | Loose-fill insulation – The installed depth and density of insulation is verified in at least 6 random locations to ensure that the minimum thickness and installed density meet the R-value specified on the Certificate of Compliance, and are consistent with the manufacturer’s coverage chart. | |
| 07 | If kraft paper faced insulation is used, paper is installed on the conditioned (warm in winter) side of surface. Paper must be in contact with air barrier to within 2” framing (stud, joists, etc.). | |
| 08 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 09 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **C. Raised Floor Adjacent to Unconditioned Space** | | |
| 01 | Insulation is in full contact with the subfloor. | |
| 02 | Insulation hangers are spaced at 18 inches or less. Insulation hangers do not compress insulation. | |
| 03 | Netting, or mesh, can be used if the cavity under the floor is filled and in contact with the subfloor. | |
| 04 | When daylight basements are adjacent to crawlspaces, if the basement is conditioned the walls adjacent to the crawlspace are insulated to the R-value listed on the Certificate of Compliance. This includes framed stem walls, and vertical concrete retaining walls. | |
| 05 | If access to the crawlspace is from the conditioned area the raised floor includes an airtight insulated access hatch. Where possible locate crawl space access on the exterior. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **D. Wall Adjacent to Unconditioned Space** | | |
| 01 | Insulation quality was verified prior to the installation of the interior air barrier (typically gypsum board). | |
| 02 | Loose-fill and batt insulation is in contact with all six sides of wall cavities (top, bottom, back, left, right, front [to be installed later]) with no gaps, voids or compression. Exception: Where framing depth is greater than minimum required insulation thickness (e.g., R-19 batts in 2x10 walls). | |
| 03 | Insulation fits snuggly around obstructions (e.g., electrical boxes, plumbing and wiring) with no gaps, voids or compression. | |
| 04 | Structural metal tie-downs and shear panels are insulated between exterior air barrier and metal. | |
| 05 | Hard to access wall stud cavities, such as corner channels or wall intersections, are insulated to the proper R-value prior to the installation of exterior sheathing or exterior stucco lathe. | |
| 06 | Insulation and interior air barrier are installed behind tub, shower, fireplace enclosures and stairwells to the R-value listed on the Certificate of Compliance when located against exterior walls. | |
| 07 | All single-member window and door headers shall be insulated to a minimum of R-3 for a 2x4 framing, or equivalent width, and a minimum of R-5 for all other assemblies. If continuous exterior rigid insulation equal to or greater than R-2 is used, an insulated header is not required. | |
| 08 | After insulation is installed: All insulated walls have interior and exterior air barriers, including kneewalls and walls of skylight wells. Exception: Rim joists. Interior air barrier (typically gypsum board) is sealed to top plate. | |
| 09 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 10 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **E. Ceiling Adjacent to Unconditioned Space** | | |
| 01 | Insulation extends to the outside surface of the exterior wall. | |
| 02 | Insulation is in direct contact with the ceiling air barrier so there are no gaps, voids or compression. | |
| 03 | Chimneys and flues (except zero clearance) have a sheet metal collar at the ceiling level to prevent contact with the insulation. The collar is at least as tall as the depth of the insulation. There is a minimum 1” clearance between the collar and the chimney/flue for double wall vent, and 6” for single wall vent, unless manufacturer’s instructions require otherwise. The collar is sealed to the ceiling with high temperature sealant to prevent air leakage. The insulation is in contact with the sheet metal collar. | |
| 04 | Recessed can lights penetrating the ceiling air barrier are covered with insulation to the depth needed to meet the ceiling R-value specified on the Certificate of Compliance. | |
| 05 | External surfaces of steel studs, steel-framed kneewalls, skylight shafts, and gable ends are covered with insulation. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **F. Ceiling Insulation in Vented Attics** | | |
| 01 | Required eave ventilation shall not be obstructed. The net-free ventilation area of the eave vent is maintained. | |
| 02 | Eave vent baffles and dams are installed to prevent air movement under or into the ceiling insulation. | |
| 03 | Attic access is insulated to the same R-value required by the Certificate of Compliance for ceiling insulation and the insulation is permanently attached using adhesive or mechanical fasteners. | |
| 04 | Attic access must have a dam around the access to at least the same depth as the insulation. | |
| 05 | Attic rulers specified to the installed loose-fill material (brand and type) are installed and evenly distributed throughout the attic to verify depth (one ruler for every 250 ft2). The rulers are clearly readable and scaled to read inches of insulation and the R-value installed. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **G. Insulation in Unvented Attics** | | |
| 01 | The roof sheathing is the air barrier and is sealed to prevent air movement to the outside. | |
| 02 | Insulation is in full contact with the air barrier (roof sheathing). | |
| 03 | If insulated using air permeable insulation, gable end walls are sealed and insulated the same as exterior walls, including interior air barrier. | |
| 04 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 05 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **H. Insulation in Vented Attics (High Performance Vented Attics)** | | |
| 01 | Insulation is in full contact with roof sheathing and firmly supported to prevent sagging. | |
| 02 | Batt insulation between roof trusses is acceptable with minimal gaps and voids caused by roof truss members. | |
| 03 | Insulation is not required on gable end walls. | |
| 04 | Required roof deck insulation over any conditioned space, or HVAC ducts, is installed on the entire attic roof deck; even over unconditioned spaces (e.g., garage, covered porch). Roof deck of attic over unconditioned space without HVAC ducts and separated from other attics by a sealed air barrier do not need to be insulated. | |
| 05 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 06 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **I. Special Requirements for Skylight Shafts and Attic Knee Walls** | | |
| 01 | Insulation must meet all the requirements for walls and insulation is in contact with the air barrier on all six sides unless SPF is used. | |
| 02 | Insulation shall be in full contact with the interior wall finish. Batt insulation must be cut to fit around 2x4’s that are laid flat. | |
| 03 | Skylight shafts and attic knee walls shall be completely enclosed by vertical and horizontal framing, including horizontal plates at the top and bottom of the insulation. | |
| 04 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 05 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **J. Special Requirements for Floors Above Garages** | | |
| 01 | If the air barrier is at the perimeter of the garage below the conditioned subfloor, then the insulation may be placed on the garage ceiling. The perimeter of the subfloor must also be insulated. | |
| 02 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 03 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **K. Special Requirements for Cantilevered Floors** | | |
| 01 | Sealed blocking shall be installed between joists where the wall rim joist would have been located in the absence of a cantilever. Insulation shall be placed on both sides of the block. | |
| 02 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 03 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **L. Special Requirements for Attached Porches** | | |
| 01 | Exterior wall at the intersection of the porch roof is fully insulated above, below and behind the roof line. | |
| 02 | Where truss framing is used, airtight blocking is used at the top and bottom of each wall/roof section and is insulated. | |
| 03 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 04 | Correction Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **M. Special Requirements for SPF Insulation** | | |
| 01 | Installed product meets the claimed R-value per inch. Non-standard values are supported by an ICC Evaluation Service Report (ESR) number (e.g., ESR-xxxx) and documented on the CF2R-ENV-03. Non-standard values are anything greater than R-5.8/inch for closed cell and R-3.6/inch for open cell. | |
| 02 | Installed thickness meets the required R-value from the Certificate of Compliance. Verified in at least 6 random places for each surface type: floors, walls, and ceilings. | |
| 03 | Insulation is spray applied to fully adhere to structural assembly framing, floor and ceiling joists, and other framing surfaces within the construction cavity. | |
| 04 | If multiple layers are applied, each foam lift (e.g., spray application) adheres to the substrate and foam interfaces. | |
| 05 | Closed cell SPF: In areas where an air barrier is required the foam is at least 2” thick. | |
| 06 | Open cell SPF: In areas where an air barrier is required the foam is at least 5.5” thick. | |
| 07 | Open cell SPF: Depressions in the foam insulation surface are not greater than 1/2” of the required thickness provided these depressions do not exceed 10% of the surface area being insulated. | |
| 08 | Open cell SPF: Insulation completely fills cavities of 2x4 framing. | |
| 09 | SPF insulation is not applied directly to recessed lighting fixtures unless specifically allowed by manufacturer’s instructions. When not allowed, can lights are:   1. Covered with a minimum of 1.5” of mineral fiber insulation; or 2. Enclosed in a manufacturer’s approved box fabricated from an approved material, such as 18 gauge sheet metal or ½” gypsum board. | |
| 10 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 11 | Notes |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **N. Determination of HERS Verification Compliance** | |
| All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. | |
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| **DOCUMENTATION AUTHOR’S DECLARATION STATEMENT** | | | |
| 1. I certify that this Certificate of Verification documentation is accurate and complete. | | | |
| Documentation Author Name: | Documentation Author Signature: | | |
| Company: | Date Signed: | | |
| Address: | CEA/HERS Certification Information (if applicable): | | |
| City/State/Zip: | Phone: | | |
| **Responsible Person's Declaration statement** | | | |
| I certify the following under penalty of perjury, under the laws of the State of California:   1. The information provided on this Certificate of Verification is true and correct. 2. I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater). 3. The installed features, materials, components, manufactured devices, or system performance diagnostic results that require HERS verification identified on this Certificate of Verification comply with the applicable requirements in Reference Appendices RA2, RA3, and the requirements specified on the Certificate of Compliance for the building approved by the enforcement agency. 4. The information reported on applicable sections of the Certificate(s) of Installation (CF2R) signed and submitted by the person(s) responsible for the construction or installation conforms to the requirements specified on the Certificate(s) of Compliance (CF1R) approved by the enforcement agency. 5. I will ensure that a registered copy of this Certificate of Verification shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Verification is required to be included with the documentation the builder provides to the building owner at occupancy. | | | |
| **BUILDER OR INSTALLER INFORMATION AS SHOWN ON THE CERTIFICATE OF INSTALLATION** | | | |
| Company Name (Installing Subcontractor, General Contractor, or Builder/Owner): | | | |
| Responsible Builder or Installer Name: | | CSLB License: | |
| **HERS PROVIDER DATA REGISTRY INFORMATION** | | | |
| Sample Group Number (if applicable): | | | Dwelling Test Status in Sample Group (if applicable): |
| **HERS RATER INFORMATION** | | | |
| HERS Rater Company Name: | | | |
| Responsible Rater Name: | | | Responsible Rater Signature: |
| Responsible Rater Certification Number w/ this HERS Provider: | | | Date Signed: |

**CF3R-ENV-22 User Instructions**

Quality Insulation Installation (QII) applies to the entire building (roof/ceiling, walls, and floor) for new construction and requires field verification by a third-party HERS Rater. For alterations to existing buildings, compliance credit can only be taken when the “existing, plus addition, plus alteration” approach is used, but credit will only apply the new surfaces in the new zone.

**A. Insulation Materials Installed**

1. Roof Deck Insulation Material Installed: Using the drop down menu, indicate what type of insulation material is being installed (e.g., Batt and Blanket, Rigid Board, SPF, etc.).
2. Ceiling Insulation Material Installed: Using the drop down menu, indicate what type of insulation material is being installed (e.g., Batt and Blanket, Rigid Board, SPF, etc.).
3. Exterior Wall Insulation Material Installed: Using the drop down menu, indicate what type of insulation material is being installed (e.g., Batt and Blanket, Rigid Board, SPF, etc.).
4. Raised Floor Insulation Material Installed: Using the drop down menu, indicate what type of insulation material is being installed (e.g., Batt and Blanket, Rigid Board, SPF, etc.).
5. Slab Edge Insulation Material Installed: Using the drop down menu, indicate what type of insulation material is being installed (e.g., Batt and Blanket, Rigid Board, SPF, etc.).
6. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
7. Correction Notes: Rater must enter the reason for failure.

**B. All Surfaces**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**C. Raised Floor Adjacent to Unconditioned Space**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**D. Wall Adjacent to Unconditioned Space**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**E. Ceiling Adjacent to Unconditioned Space**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**F. Ceiling Insulation in Vented Attics**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**G. Insulation in Unvented Attics**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**H. Insulation in Vented Attics (High Performance Vented Attics)**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**I. Special Requirements for Skylight Shafts and Attic Knee Walls**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**J. Special Requirements for Floors Above Garage**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**K. Special Requirements for Cantilevered Floors**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**L. Special Requirements for Attached Porches**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

**M. Special requirements for SPF Insulation**

1. Verification Status: HERS Rater to select from list:
   1. Pass – all applicable requirements are met.
   2. Fail – one or more applicable requirements are not met. Rater must enter reason for failure in correction notes field below.
   3. All N/A – This entire table is not applicable.
2. Correction Notes: Rater must enter the reason for failure.

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| **A. Insulation Materials Installed** | | |
| 01 | Roof Deck Insulation Material Installed | <<user select one from list:  \*Batt and Blanket;  \*Loose-fill;  \*Rigid Board;  \*Spray Polyurethane Foam (SPF);  \*Structural Insulated Panel (SIP);  \*Insulated Concrete Form (ICF); or  \*NA>> |
| 02 | Ceiling Insulation Material Installed | <<user select one from list:  \*Batt and Blanket;  \*Loose-fill;  \*Rigid Board;  \*Spray Polyurethane Foam (SPF);  \*Structural Insulated Panel (SIP);  \*Insulated Concrete Form (ICF); or  \*NA>> |
| 03 | Exterior Wall Insulation Material Installed | <<user select one from list:  \*Batt and Blanket;  \*Loose-fill;  \*Rigid Board;  \*Spray Polyurethane Foam (SPF);  \*Structural Insulated Panel (SIP); or  \*Insulated Concrete Form (ICF)>> |
| 04 | Raised Floor Insulation Material Installed | <<user select one from list:  \*Batt and Blanket;  \*Loose-fill;  \*Rigid Board;  \*Spray Polyurethane Foam (SPF);  \*Structural Insulated Panel (SIP);  \*Insulated Concrete Form (ICF); or  \*NA>> |
| 05 | Slab Edge Insulation Material Installed | <<user select one from list:  \*Batt and Blanket;  \*Loose-fill;  \*Rigid Board;  \*Spray Polyurethane Foam (SPF);  \*Structural Insulated Panel (SIP);  \*Insulated Concrete Form (ICF); or  \*NA>> |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |

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| **B. All Surfaces** | | |
| 01 | Air barrier installation and preparation for insulation was done and verified prior to insulation being installed. | |
| 02 | All surfaces between conditioned and unconditioned space are sealed and insulated to meet or exceed the levels specified on the Certificate of Compliance. | |
| 03 | All structural framing areas shall be insulated in a manner that resists thermal bridging through the assembly separating conditioned from unconditioned space. Structural bracing, tie-downs, and framing of steel, or specialized framing used to meet structural requirements of the CBC are allowed and must be insulated. These areas shall be called out on the building plans with diagrams and/or specified design drawings indicating the R-value of insulation and fastening method to be used. | |
| 04 | All insulation was installed according to the manufacturer’s installation instructions. | |
| 05 | Labels or specification/data sheets for each insulation material shall be provided to the HERS rater. Loose-fill material includes insulation material bag labels or coverage charts. | |
| 06 | Loose-fill insulation – The installed depth and density of insulation is verified in at least 6 random locations to ensure that the minimum thickness and installed density meet the R-value specified on the Certificate of Compliance, and are consistent with the manufacturer’s coverage chart. | |
| 07 | If kraft paper faced insulation is used, paper is installed on the conditioned (warm in winter) side of surface. Paper must be in contact with air barrier to within 2” framing (stud, joists, etc.). | |
| 08 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 09 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **C. Raised Floor Adjacent to Unconditioned Space** | | |
| 01 | Insulation is in full contact with the subfloor. | |
| 02 | Insulation hangers are spaced at 18 inches or less. Insulation hangers do not compress insulation. | |
| 03 | Netting, or mesh, can be used if the cavity under the floor is filled and in contact with the subfloor. | |
| 04 | When daylight basements are adjacent to crawlspaces, if the basement is conditioned the walls adjacent to the crawlspace are insulated to the R-value listed on the Certificate of Compliance. This includes framed stem walls, and vertical concrete retaining walls. | |
| 05 | If access to the crawlspace is from the conditioned area the raised floor includes an airtight insulated access hatch. Where possible locate crawl space access on the exterior. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.** | | |

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| **D. Wall Adjacent to Unconditioned Space** | | |
| 01 | Insulation quality was verified prior to the installation of the interior air barrier (typically gypsum board). | |
| 02 | Loose-fill and batt insulation is in contact with all six sides of wall cavities (top, bottom, back, left, right, front [to be installed later]) with no gaps, voids or compression. Exception: Where framing depth is greater than minimum required insulation thickness (e.g., R-19 batts in 2x10 walls). | |
| 03 | Insulation fits snuggly around obstructions (e.g., electrical boxes, plumbing and wiring) with no gaps, voids or compression. | |
| 04 | Structural metal tie-downs and shear panels are insulated between exterior air barrier and metal. | |
| 05 | Hard to access wall stud cavities, such as corner channels or wall intersections, are insulated to the proper R-value prior to the installation of exterior sheathing or exterior stucco lathe. | |
| 06 | Insulation and interior air barrier are installed behind tub, shower, fireplace enclosures and stairwells to the R-value listed on the Certificate of Compliance when located against exterior walls. | |
| 07 | All single-member window and door headers shall be insulated to a minimum of R-3 for a 2x4 framing, or equivalent width, and a minimum of R-5 for all other assemblies. If continuous exterior rigid insulation equal to or greater than R-2 is used, an insulated header is not required. | |
| 08 | After insulation is installed: All insulated walls have interior and exterior air barriers, including kneewalls and walls of skylight wells. Exception: Rim joists. Interior air barrier (typically gypsum board) is sealed to top plate. | |
| 09 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 10 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **E. Ceiling Adjacent to Unconditioned Space** | | |
| 01 | Insulation extends to the outside surface of the exterior wall. | |
| 02 | Insulation is in direct contact with the ceiling air barrier so there are no gaps, voids or compression. | |
| 03 | Chimneys and flues (except zero clearance) have a sheet metal collar at the ceiling level to prevent contact with the insulation. The collar is at least as tall as the depth of the insulation. There is a minimum 1” clearance between the collar and the chimney/flue for double wall vent, and 6” for single wall vent, unless manufacturer’s instructions require otherwise. The collar is sealed to the ceiling with high temperature sealant to prevent air leakage. The insulation is in contact with the sheet metal collar. | |
| 04 | Recessed can lights penetrating the ceiling air barrier are covered with insulation to the depth needed to meet the ceiling R-value specified on the Certificate of Compliance. | |
| 05 | External surfaces of steel studs, steel-framed kneewalls, skylight shafts, and gable ends are covered with insulation. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **F. Ceiling Insulation in Vented Attics** | | |
| 01 | Required eave ventilation shall not be obstructed. The net-free ventilation area of the eave vent is maintained. | |
| 02 | Eave vent baffles and dams are installed to prevent air movement under or into the ceiling insulation. | |
| 03 | Attic access is insulated to the same R-value required by the Certificate of Compliance for ceiling insulation and the insulation is permanently attached using adhesive or mechanical fasteners. | |
| 04 | Attic access must have a dam around the access to at least the same depth as the insulation. | |
| 05 | Attic rulers specified to the installed loose-fill material (brand and type) are installed and evenly distributed throughout the attic to verify depth (one ruler for every 250 ft2). The rulers are clearly readable and scaled to read inches of insulation and the R-value installed. | |
| 06 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 07 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **G. Insulation in Unvented Attics** | | |
| 01 | The roof sheathing is the air barrier and is sealed to prevent air movement to the outside. | |
| 02 | Insulation is in full contact with the air barrier (roof sheathing). | |
| 03 | If insulated using air permeable insulation, gable end walls are sealed and insulated the same as exterior walls, including interior air barrier. | |
| 04 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 05 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **H. Insulation in Vented Attics (High Performance Vented Attics)** | | |
| 01 | Insulation is in full contact with roof sheathing and firmly supported to prevent sagging. | |
| 02 | Batt insulation between roof trusses is acceptable with minimal gaps and voids caused by roof truss members. | |
| 03 | Insulation is not required on gable end walls. | |
| 04 | Required roof deck insulation over any conditioned space, or HVAC ducts, is installed on the entire attic roof deck; even over unconditioned spaces (e.g., garage, covered porch). Roof deck of attic over unconditioned space without HVAC ducts and separated from other attics by a sealed air barrier do not need to be insulated. | |
| 05 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 06 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **I. Special Requirements for Skylight Shafts and Attic Knee Walls** | | |
| 01 | Insulation must meet all the requirements for walls and insulation is in contact with the air barrier on all six sides unless SPF is used. | |
| 02 | Insulation shall be in full contact with the interior wall finish. Batt insulation must be cut to fit around 2x4’s that are laid flat. | |
| 03 | Skylight shafts and attic knee walls shall be completely enclosed by vertical and horizontal framing, including horizontal plates at the top and bottom of the insulation. | |
| 04 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 05 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **J. Special Requirements for Floors Above Garages** | | |
| 01 | If the air barrier is at the perimeter of the garage below the conditioned subfloor, then the insulation may be placed on the garage ceiling. The perimeter of the subfloor must also be insulated. | |
| 02 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 03 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **K. Special Requirements for Cantilevered Floors** | | |
| 01 | Sealed blocking shall be installed between joists where the wall rim joist would have been located in the absence of a cantilever. Insulation shall be placed on both sides of the block. | |
| 02 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 03 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **L. Special Requirements for Attached Porches** | | |
| 01 | Exterior wall at the intersection of the porch roof is fully insulated above, below and behind the roof line. | |
| 02 | Where truss framing is used, airtight blocking is used at the top and bottom of each wall/roof section and is insulated. | |
| 03 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 04 | Correction Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **M. Special Requirements for SPF Insulation** | | |
| 01 | Installed product meets the claimed R-value per inch. Non-standard values are supported by an ICC Evaluation Service Report (ESR) number (e.g., ESR-xxxx) and documented on the CF2R-ENV-03. Non-standard values are anything greater than R-5.8/inch for closed cell and R-3.6/inch for open cell. | |
| 02 | Installed thickness meets the required R-value from the Certificate of Compliance. Verified in at least 6 random places for each surface type: floors, walls, and ceilings. | |
| 03 | Insulation is spray applied to fully adhere to structural assembly framing, floor and ceiling joists, and other framing surfaces within the construction cavity. | |
| 04 | If multiple layers are applied, each foam lift (e.g., spray application) adheres to the substrate and foam interfaces. | |
| 05 | Closed cell SPF: In areas where an air barrier is required the foam is at least 2” thick. | |
| 06 | Open cell SPF: In areas where an air barrier is required the foam is at least 5.5” thick. | |
| 07 | Open cell SPF: Depressions in the foam insulation surface are not greater than 1/2” of the required thickness provided these depressions do not exceed 10% of the surface area being insulated. | |
| 08 | Open cell SPF: Insulation completely fills cavities of 2x4 framing. | |
| 09 | SPF insulation is not applied directly to recessed lighting fixtures unless specifically allowed by manufacturer’s instructions. When not allowed, can lights are:   1. Covered with a minimum of 1.5” of mineral fiber insulation; or 2. Enclosed in a manufacturer’s approved box fabricated from an approved material, such as 18 gauge sheet metal or ½” gypsum board. | |
| 10 | Verification Status | * Pass - all applicable requirements are met; or * Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or * All N/A - This entire table is not applicable. |
| 11 | Notes | <<if Verification Status= Fail, then text entry in this Corrections Notes field is required; user input text>> |
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| **N. Determination of HERS Verification Compliance** | |
| All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. | |
| 01 | <<if A06, B08, C06, D09, E06, F06, G04, H05, I04, J02, K02, L03 or M10 = Fail, then display: Does not comply: One or more specified verification protocol requirements on this document are not met; else display: Complies: All specified verification protocol requirements on this document are met>> |