The following information shall be provided for City review and approval prior to issuing a Building Permit for Re-Roofing.

**Project Address:**

<table>
<thead>
<tr>
<th>Owner Name:</th>
<th>Telephone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant/Contractor:</td>
<td>[ ] Owner/Builder</td>
</tr>
<tr>
<td>Authorized Agent Name:</td>
<td>Telephone:</td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
</tbody>
</table>

**Type of Building Occupancy:**

- [ ] SFD
- [ ] Multi-Family
- [ ] Commercial
- [ ] Other

**Roof Slope:**

Rise inches in 12 inches horizontally

**New Roof Type:**

- [ ] Comp Shingles
- [ ] Tile
- [ ] Built-up Roofing
- [ ] Other (please specify):

**Type of Existing Roof:**

- [ ] Comp Shingles
- [ ] Tile
- [ ] Built-up Roofing
- [ ] Other (please specify):

**Type of Sheathing:**

- [ ] Solid
- [ ] Spaced
- [ ] Replace Sheathing?
- [ ] Yes
- [ ] No

**CRRC Product ID or Exemption:**

**Will Existing Roof Covering Be Removed?**

- [ ] Yes
- [ ] No

**If "NO", How Many Layers of Existing Roof Covering Exist?**

- [ ] One (1)
- [ ] Two (2)

**For Clay and Tile Reroofs, The Following Information Must Also Be Provided**

- **New Roof Tile Trade Name and Manufacturer:**
- **ICC Eval. Service Report # of Proprietary:**
- **Information New Roof Tile Weight Per Square Foot:**
- **Weight of the proposed new roof:**
  - [ ] 6 lbs. or lighter: *No structural justification is required*
  - [ ] Over 6 lbs.: *Structural Calculation is required by a licensed California State, Civil, structural, or Architect and shall reflect vertical load analysis. Provide a complete basic framing plan to include structural sections and details.*

**All Roof Types**

<table>
<thead>
<tr>
<th>Square Feet/Number Squares to be Installed:</th>
<th>Valuation of Job:</th>
</tr>
</thead>
</table>

**I certify that all information on this form is true and correct. I agree to perform all work in accordance with the State Building Code and Moreno Valley City Ordinance requirements.**

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Name</td>
<td>State License Class/Number</td>
</tr>
<tr>
<td>(if applicable)</td>
<td></td>
</tr>
</tbody>
</table>

**For Office Use Only**

<table>
<thead>
<tr>
<th>Planning Approval</th>
<th>Date</th>
<th>Signature/Initials</th>
</tr>
</thead>
</table>
## GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Address</th>
<th>Building Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORENO VALLEY</td>
<td>N/A</td>
</tr>
<tr>
<td>City: MORENO VALLEY</td>
<td>Number of Units: N/A</td>
</tr>
<tr>
<td>Zip:</td>
<td>Fuel Type: N/A</td>
</tr>
<tr>
<td>Climate Zone: 10</td>
<td>Floor Area# of SQ: N/A</td>
</tr>
<tr>
<td>Building Type: RE-ROOF</td>
<td>Slab Area: N/A</td>
</tr>
<tr>
<td>Project Scope:</td>
<td># of Stories: N/A</td>
</tr>
</tbody>
</table>

## ROOF REPLACEMENT DETAILS

**[Section 150.2(b)1]**

<table>
<thead>
<tr>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of Compliance</td>
<td>Roof Pitch</td>
<td>Exception</td>
<td>CRRC Product ID #</td>
<td>Product Type</td>
<td>R-Value Deck Insulation</td>
<td>Initial Solar Reflectance</td>
<td>Aged Solar Reflectance</td>
<td>Thermal Emittance</td>
<td>SRI</td>
<td>Aged Solar Reflectance</td>
<td>Thermal Emittance</td>
<td>SRI</td>
</tr>
<tr>
<td>Proposed</td>
<td>Minimum Required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>.20</td>
<td>.75</td>
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</tbody>
</table>

### NOTES:
- Roof area covered by building integrated photovoltaic and solar thermal panels are exempt from the above Cool Roof Requirements.
- Liquid field applied coatings must comply with installation criteria from section 110.8(i)4.

**ROOF REPLACEMENT (Prescriptive Alteration, Section 150.2(b)1H)**

When 50% or more of the roof is being replaced, the roofing requirements are triggered. Any areas of roof covered by building integrated photovoltaic panels and solar thermal panels (the area of roof not covered by photovoltaic panels would still need to meet any applicable cool roof requirements). Additionally, there are many alternatives/exceptions when a cool roof is required.

When the roof is steep slope (pitch greater than 2:12), the roof requirements include a cool roof in climate zones 10-15. The minimum requirement is 0.20-aged solar reflectance, 0.75 thermal emittance, or a minimum SRI of 16.

### NOTES:
- 01. Method of Compliance: Indicate if the method of compliance is going to be based on Aged Solar Reflectance and Thermal emittance, the Solar Reflectance Index (SRI), or an Exception.
- 02. Roof Pitch: Expressed as 4:12, for example, which means the roof rises 4 foot within a span of 12 feet. When roofs have multiple pitches, the requirements are based on the pitch of 50% or more of the roof.
- 03. Exception: If meeting one of the exceptions. Indicate which exception is, or will be, met.

### EXCEPTIONS AND ALTERNATIVES FOR STEEP SLOPE ROOFS:
- A. Mass roof 25 lbs. / ft. ² or greater (uncommon situation such as sod roof);
- B. Air space 1” from top of roof deck to bottom of roofing;
- C. Roofing product has a profile ratio of rise to width of 1 to 5 for 50 percent or greater of the width of the roofing product;
- D. Ducts already meet Section 150.1(c) insulation and duct leakage requirements;
- E. Roof has R-38 insulation;
- F. Roof has a radiant barrier;
- G. No ducts are installed in the attic or;
- H. R-4 insulation above the roof deck.

In climate zones 13-15, when there is a low slope roof (pitch 2:12 or less) the cool roof requirements are for a minimum aged solar reflectance of 0.63, a minimum 0.75 thermal emittance, or a minimum SRI of 75.
EXCEPTIONS AND ALTERNATIVES FOR LOW SLOPE ROOFS:

a) Mass roof 25 lbs. / ft.² or greater (uncommon situation such as sod roof);
b) No ducts are installed in the attic; or
c) Roof deck installation – by installing roof deck insulation, a lower aged solar reflectance is required: R-2 (0.62-0.60), R-4 (0.59-0.55), R-6 (0.54-0.50), R-8 (0.49-0.45), R-12 (0.44-0.40), R-16 (0.39-0.35), R-20 (0.34-0.30), R-24 (0.29-0.25).

NOTE: If one of the exceptions above has been selected, then the rest of Columns 04-13 is not required.

04. The CRRC Product ID Number is obtained from the Cool Roof Rating Council's Rated Product Directory at www.coolroofs.org/products/results. Products are listed by manufacturer, brand, type of installation, roofing material, and color, as well as product performance.

05. Product type: See Cool Roof Rating Council's directory. Generally, product types include single-ply roof, wood shingles, asphalt roof, metal roof, and tile roof.

06. R-value Deck Insulation: If one of the exceptions selected includes adding roof deck insulation, indicate the R-value of insulation.

07. Proposed Initial Solar reflectance: base on the product chosen from the Cool Roof Rating Council's Rated Product Directory. If using default assumption indicate NA since the Aged solar reflectance is available.

08. Proposed Aged Solar Reflectance: Value is from the Cool Roof Rating Council's Rated Product Directory. If the aged value is not available, calculate the calculated Aged Solar reflectance using the Solar Reflectance Index (SRI) Calculation worksheet located on the California Energy Commission website or the aging equation paged = \[ 0.2 + \beta (\rho_{\text{initial}} - 0.2) \], where \( \rho_{\text{initial}} \) = the initial solar reflectance and soiling resistance \( \beta \) is listed by product type below.

VALUES OF SOILING RESISTANCE \( \beta \) BY PRODUCT TYPE

<table>
<thead>
<tr>
<th>Product Type</th>
<th>CRRC Product Category</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field-Applied Coating</td>
<td>Field-Applied Coating</td>
<td>0.65</td>
</tr>
<tr>
<td>Other</td>
<td>Not A Field-Applied Coating</td>
<td>0.70</td>
</tr>
</tbody>
</table>

09. Proposed Thermal Emittance: From the product specification default value. If using a calculated SRI place the thermal emittance used to calculate SRI.

10. Proposed SRI: It is optional to meet either the SRI but if chosen to do so, use the Solar Reflectance Index (SRI) Calculation Worksheet found on the California Energy Commission website http://www.energy.ca.gov/title24/.

11. Minimum Required Aged Solar Reflectance: Based on climate zone and roof slope.

12. Minimum Required Thermal Emittance: Based on climate zone and roof slope.

13. Minimum SRI: Based on climate zone and roofslope.

NOTE: If the cool roofing requirements will be met by a liquid field applied coating, Section 110.8(i)4 requires the coating be applied across the entire roof surface and meet the dry mil thickness or coverage recommended by the manufacturer.