

ENERGY AND THE ENVIRONMENT

MOTION

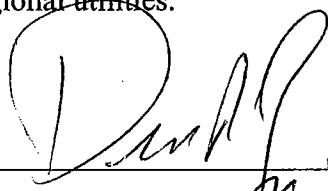
Energy-efficient roofing materials, which are also called cool roofs, can reduce roof temperature by as much as 60°F during the summer, which in turn significantly reduces air conditioning use in the home. Cool roofs, which are made of metal, tile, reflective coatings and shingles, reflect the sun's radiant energy before it penetrates into the interior of the home. Aside from reducing home energy costs, a cool roof installation generally has lower maintenance costs than a standard roof and a longer life cycle.

Roofing materials must meet certain requirements, and have energy efficiency design elements, to be considered a certified cool roof. Specific requirements include level of solar reflectance, thermal emittance and the slope of a roof (low slope/steep slope). Solar reflectance is the fraction of the solar energy that is reflected by a roof, expressed as a number between zero and one. The higher the value, the better the roof reflects solar energy. Thermal emittance is the amount of absorbed heat that is radiated from a roof, expressed as a number between zero and one. The higher the value, the better the roof radiates heat. The slope of a roof also determines the amount of solar reflection that is derived from a site.

Southern California Edison (SCE) provides rebates to its utility customers that install cool roofs. For a low slope roof, with roofing materials having a solar reflectance greater than or equal to 0.70 and a thermal emittance greater than or equal to 0.75, SCE offers a \$0.20 per square foot rebate for cool roof installation. For steep roofs, it offers a \$0.10 to \$0.20 per square foot rebate for cool roof installation depending on the level of solar reflection and steepness of the roof.

The Department of Water and Power doesn't currently have a cool roofs program in place. In an attempt to increase energy conservation efforts Citywide and to mitigate the effects of future heatstorms, the DWP should explore the possibility of instituting a program and provide cool roof installation rebates to its customers.

I THEREFORE MOVE that the Department of Water and Power report to the City Council in 45 days on the feasibility of implementing a cool roofs installation rebate program for its customers, similar to rebate programs of other regional utilities.

PRESENTED BY: 
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SECONDED BY: 

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