



**CITY OF GLENDALE CALIFORNIA  
REPORT TO  
BUILDING & FIRE BOARD OF APPEALS**

August 15, 2012

**AGENDA ITEM**

**Public Hearing:** To review Ordinance No. 5736 and the associated energy cost effectiveness study precedent to filing same with the California Energy Commission for certification.

**BUILDING & FIRE BOARD OF APPEALS ACTION**

- Public Hearing - Modification to Provisions of the Glendale Building & Safety Code
- Public Hearing - Alternate Material or Method of Construction
- Public Hearing - Review and approval of Ordinance No. 5736 and associated energy cost effectiveness study.
- Report Only

**ADMINISTRATIVE ACTION**

**Signature**

**Submitted**

Stuart Tom, Building Official .....

**Prepared**

Stuart Tom, Building Official .....

**RECOMMENDATION**

To find that Ordinance No. 5736 establishes cost effective local energy standards that will ensure that residential and non-residential buildings in the City of Glendale will consume no more energy than permitted by Title 24, Part-6.

## **GENERAL INFORMATION**

---

Applicant: Stuart Tom, P.E., C.B.O.  
Building Official  
City of Glendale, California

Applicant Address: 633 E. Broadway, Room # 101  
Glendale, CA 91206

## **APPLICANT'S REQUEST**

---

To conduct a public hearing for the purpose of evaluating the energy cost effectiveness of Ordinance No. 5736 and verifying compliance with Title 24, Part-6.

## **APPLICABLE CODE(S)**

---

- 1) 2010 California Green Building Standards Code.
- 2) 2010 California Energy Code.
- 3) Building and Safety Code of the City of Glendale, 2011-Volume IX.

## **SUMMARY**

---

On June 7, 2011, the Glendale City Council adopted Ordinance No. 5736, which established local amendments to the 2010 California Green Building Standards Code. A small number of said amendments establish energy conservation standards which are more stringent than the basic standards contained within Title-24, Part 6 of the California Code of Regulations. Prior to enforcement of local amendments which affect energy consumption, said amendments must be approved and certified by the California Energy Commission.

All of the local amendments relative to energy consumption were modeled after standards contained within the optional "Tier-1" provisions of the California Green Building Standards Code, with the exception of one additional standard related to radiant roof barriers. While the "Tier-1" related amendments have been found to be cost effective by numerous jurisdictions throughout the state of California, the additional amendment related to radiant roof barriers had not been analyzed in terms of specific cost effectiveness. As a required element for consideration by the California Energy Commission, a separate cost effectiveness analysis was required in order to justify the additional standard.

In order to satisfy the cost effectiveness criterion, an additional report was prepared by Gabel Associates, LLC. A copy of such report, titled "*Energy Cost-Effectiveness of Radiant Barrier Roofs in the Glendale Green Building Ordinance*", dated May 18, 2012 is attached hereto as Exhibit "B". The analysis confirms that radiant roof barriers are cost effective, with a simple pay back period ranging from 7 to 16 years, with an average pay back within the 11 to 12 year range within Climate Zone 9. Assuming that the useful life of roof sheathing is 30 years, the analysis confirms that radiant roof barriers are, indeed, cost effective and will result in simple pay back of

investment during the first-half of the useful life of the roof sheathing alone. Assuming the useful life of buildings within Glendale exceeds 30 years, the financial savings related to radiant roof barriers will greatly exceed the installation cost of the radiant barrier.

Due to the need to secure a specific cost effectiveness analysis related to radiant roof barriers, the City of Glendale has not been able to submit the local amendments to the California Energy Commission for approval and certification. Now that the cost effectiveness analysis is complete, the City of Glendale will proceed forward with an application for approval with the CEC. Public review and approval by the Building and Fire Board of Appeals is necessary before said application may be submitted.

## **RECOMMENDATION**

---

It is recommended that the Building and Fire Board of Appeals conduct a public hearing in an open forum in accordance with the Brown Act. It is further recommended that the Board consider all information provided, including testimony which may be presented during such public hearing. After the conclusion of the public hearing, if the Board finds that the local amendments relative to energy consumption are cost effective and ensure that buildings consume no more energy than permitted by Title 24, Part-6, the Building Official will submit an application to the California Energy Commission to request approval and certification.

## **EXHIBITS**

---

- A) Ordinance No. 5736.
- B) "Energy cost-effectiveness of radiant barrier roofs in the Glendale Green Building Ordinance" by Gabel Associates, LLC, dated May 18, 2012.