

Comments on Title 24 Residential Lighting



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June 2006

DOCKET	
07-BSTD-1	
DATE	_____
RECD.	APR 29 2008

Today's Comments

- Eliminate dimming option in selected rooms
- Fast track work on hotel room – “master shut-off” switch
- Hotel room loophole

Current Title 24 Res. Lighting Code

For many room types:

A. Use efficient luminaire

OR

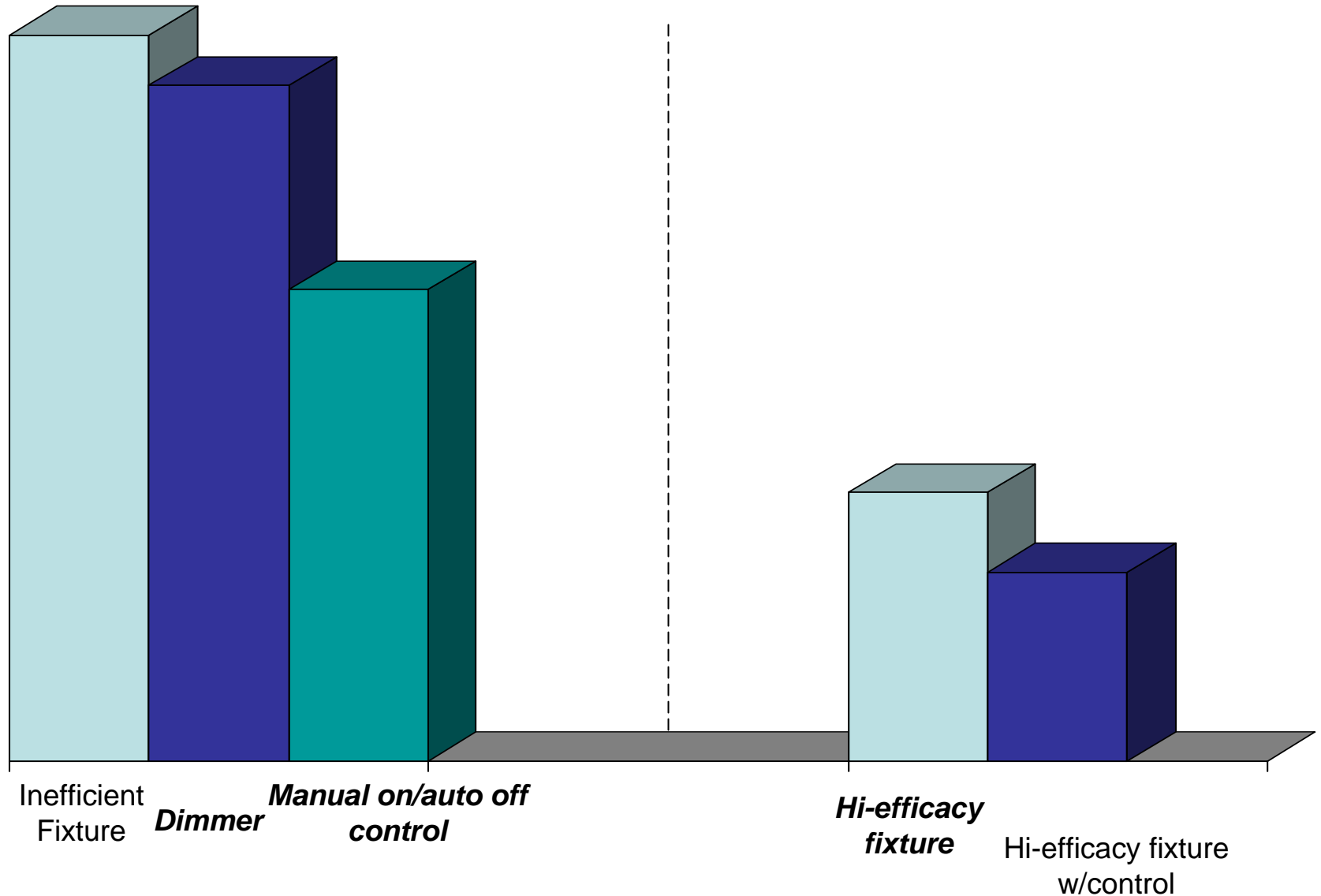
B. Install dimmer **or** manual on/auto off sensor

As dimmer is much lower cost option, it will be used most frequently.

Concerns About Installing An Inefficient Fixture and Dimming It

- Dimming seldom used. Results in very little savings compared to occupancy sensor or hi-efficacy fixture.
- “Regular” screw-based CFLs not compatible with dimmers. Will result in shorter CFL life and bad consumer experience.
- Potential Nightmare – will turn consumer off from screw-based CFLs in other sockets and huge lost savings opportunities.

Qualitative Energy Use Comparison



Potential Fixes

- Proposed Section 10 allows dimmers as compliance path for bedroom, living room, hallway, stairway, den, family room, etc.
 - **Option A - Remove dimming option for bedroom and hallways. Wide range of efficient luminaires available for these applications.**
 - Bedroom savings (assume base case of 2 sockets with 75 W lamps vs. 2 @ 18 W), up to 170 kWh/yr per bedroom

Savings from Moving to Hi-efficacy Bedroom Fixture

	2 hours/day	3 hours/day	4 hours/day
Energy savings (kWh/yr)	85	127	170
1 year electric bill savings	\$11.9	\$17.8	\$23.8
10 year electric bill savings	\$119	\$178	\$238

Option B – Dimmers w/CFLs

- Continue to allow inefficient screw-base fixture with dimmers in all these rooms but require builder to install screw-based dimmable CFL.

This will:

- Ensure savings are achieved until 1st CFL dies and hope they come back for more
- Prevent owner from having bad experience with screw based (single wattage) CFLs
- Provides another option to occupancy sensor or high efficacy luminaire.

Option C – One Inefficient Fixture Per Room

- Limit number of “inefficient” luminaires to one per room
 - This will discourage current trend of multiple inefficient cans in hallways, living rooms, etc.

FastTrack Hotel Master Shut-Off Switch

- Around the world (Europe, China, Australia) hotels have master shut-off switch for lights and selected outlets.
- Why? – Guests/maids frequently fail to turn off lights when they leave the room.
- Could provide dramatic energy savings
- System often use key as switching device (take key out, lights go off after X minute delay).

Remove Hotel Lighting Loophole

- Remove current 130(b) exception from high-rise residential living and hotel/motel room

“Up to 10% of the guest rooms in a hotel/motel need not comply”