

DESIGN PROCESS FOR LIGHTING THE HOME THEATER

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- ① Determine the important tasks and task locations
 - Develop a floor plan that shows the locations of important tasks
 - Location of screen?
 - Any live performances? Karaoke?
 - Any reading taking place?
 - Importance of social interactions? Gaming?
 - Any safety or egress concerns?
 - Document the other technologies planned
 - Type of projection & screen
 - Any built-in lighting effects
 - Sound system; curtains (stage & window); remotes
 - Document the footcandle levels needed
 - Use IESNA recommendations where appropriate
 - Consider the visual needs of users
 - If over age 50, may need much higher light levels
 - If any visual impairments, may need special consideration

- ② Determine the requirements for lighting quality
 - Define the desired mood & atmosphere
 - Possibly different moods for different uses
 - Determine areas where visual comfort may be a concern
 - Viewing angles and glare potential: direct & reflected
 - Special considerations for windows & daylight
 - Visual fatigue from high contrasts
 - Document the locations where social interaction may occur
 - Color rendering
 - Facial modeling & non-verbal cues
 - Consider any interesting architectural features of the space

③ Develop strategies for each of the important lighting layers

- Ambient
- Task areas
 - Seating
 - Screen background
 - Egress
 - Reading, social, gaming if needed
- Decorative & accent lighting

④ Establish a controls strategy

- Switching, Dimming?
- Manual, Remote, Automatic?
- Simple, Sophisticated?
- Lighting-only or other systems?

⑤ Consider sustainable design practices

- Does the design use more energy than necessary?
 - Efficient lamps, fixtures, controls
- Does the design satisfy the qualitative needs of the users?
- Does the design address other environmental impacts?
 - Recycled materials, local materials, etc.
 - “Green” product certifications