

## lighting narrative

### University of Oregon Student Recreation Center

The University of Oregon Student Recreation Center project, an expansive renovation and addition to the existing facilities to adapt a modern, energetic design, strives to capture the attention of students and make the accessibility to wellness and life style changes available to the entire university campus community. Lighting will be creatively used to accentuate the architectural design and enhance the overall experience within the Recreation Center facilities.

Some of the lighting issues considered when developing the lighting design:

- Light levels will be designed to meet the recommended guidelines for all occupants as stated in the new, 10<sup>th</sup> Edition of the IESNA Handbook. Light levels shall also comply with local codes and ordinances.
- The luminaire style shall correspond with the architectural design and finishes.
- Indirect lighting will be used in many spaces to enhance the volume of the spaces and eliminate potential glare issues.
- Luminaires shall be energy efficient and easily maintained/relamped.
- Light sources shall have a long lamp life and good color rendition.
  - LED or fluorescent lamping sources, unless otherwise noted below
  - Minimize lamp types
- Daylighting will be used in many spaces throughout the facility based upon ongoing work by the ESBL.
- Daylight and occupancy sensors will be used whenever possible to assist with sustainable design.
- Attention to the design of the dimming system and luminaire zone groupings will allow for flexible lighting levels appropriate to the corresponding activities held in the area.
- Dimmable luminaires shall have Lutron H–Series or Hi–Lume ballasts and shall be compatible with the Lutron Grafik Eye system, as specified by the Electrical Engineer.
- The architectural program statement fully defines the lighting solution for each program space, while the following narrative describes the overall common objectives:

#### **Gymnasium**

Provide indirect/direct luminaires to achieve a minimum light level of 50 FC at the floor. Light source may include fluorescent, LED, or HID lamping. Areas shall be controlled through a Building Automation System / Dimmable or Multi—Switched / Manual Override. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy. Floor finish, aiming angles, and damage resistant luminaire construction shall also be addressed in the design.

#### Fitness / Cardio / Weight Rooms

Provide indirect/direct luminaires to achieve a minimum light level of 30 FC at the floor. Areas shall be controlled through a Manual Switch / Occupancy Sensor. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy. Additional task lighting as desired. Direct lighting will be avoided in free weight areas, where users are prone to exercise while looking up into light fixtures.



#### **Natatorium (Pool)**

Provide indirect or remote source luminaires to achieve a minimum light level of 50 FC at the floor level. Light source may include fluorescent, LED, or HID lamping. Areas shall be controlled through a Building Automation System / Time Clock / Photocell. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy. Aiming angles (particularly with relation to glare on the water surface) / pool basin / underwater lighting shall also be addressed in the design. Luminaires shall be UL rated for natatorium installations, with no luminaire sources located directly above the pool water.

#### Multi-Purpose / Group Ex Rooms

Provide direct / indirect / cove luminaires to achieve a minimum light level of 30 FC at the floor. Areas shall be controlled through a Building Automation System / Occupancy Sensor / multi—switched. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy. Additional considerations shall be floor finish / aiming angles / use of mirrors on the walls / and damage resistant design related to the activities to be held in the space. Color changing RGB luminaires may also be considered to enhance the design and participants' experience.

#### **Lockers / Restrooms**

Provide direct / lensed / cove luminaires to achieve a minimum light level of 10 FC at the floor. Areas shall be controlled through a Building Automation System / Occupancy Sensor. Luminaires located in wet and / or humid environments shall be sealed and UL rated for wet—location installation.

#### **Circulation / Lobby Areas**

Provide direct decorative luminaires and indirect ambient luminaires to achieve a minimum light level of 10 FC at the floor. Additional task lighting at the control desk shall also be used to achieve 30 FC at 2'-6" a.f.f. Areas shall be controlled through a Building Automation System / Preset Dimming System / Occupancy Sensor / Manual Override as appropriate to the space. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy. Color changing RGB luminaires may also be considered to enhance the design and participants' experience.

# <u>Back of House (B0H)</u> – Administration, offices, marketing, duplication, mail room, and technology / server room areas, etc.

Provide indirect/direct recessed luminaires to achieve a minimum light level of 30 FC at 2'-6" a.f.f. Additional task lighting as desired. BOH areas shall be controlled through a Building Automation System / Occupancy Sensor / Dual—Level Switching as appropriate to the space. Additional Daylight Sensor may be used in areas with sufficient daylighting contribution to conserve energy.

#### **Exterior**

Provide direct luminaires to achieve a minimum light level of 1FC at the ground at night to illuminate the pathway. In—grade fixtures to highlight the building façade. Building mounted lights will only be considered with the Owner's approval. Light sources may include fluorescent, LED, or HID lamping. Areas will be controlled through a Building Automation System / Photocell.