

CI-0703

TAB 7: TECHNICAL DISCIPLINES

Electrical

> Reduction of light pollution of flood lights and wall washers (spill off into surrounding canopies) is to be considered.

Station locations with a high probability of vandalism shall have extra bright illumination, if required and viable in terms of adjacent neighbourhoods.

Uniformity Ratio

Maximum to minimum: 4:1 or better

Average to minimum: 3:1 or better.

Dimmable Illumination

Photocells, motion and occupancy sensors are to be used within multi-level parking structures, tunnels and pedestrian bridges.

Occupancy sensors are to be placed to allow no blind spots.

Refer to Illumination Levels table on page 478 - 479 TAB 7: ELECTRICAL for minimum lighting levels within multi-level parking structures, tunnels and pedestrian bridges as recommended by IESNA:

The lighting control shall be flexible i.e. programmable controlled per circuit complete with IP addressable and remote access and control.

Methods of reducing energy usage and maintenance shall be considered in design. LED Lighting shall be continuous dimmable (0 to 10 V DC). The design shall consider occupied and a 50 % reduction in light levels when unoccupied. Light harvesting systems shall also be considered.

LIGHT SOURCES AND CONTROLS

| INTERIOR LIGHTING SOURCES AND CONTROLS | | |
|--|---|--|
| Location | Light Source | Control and Backup |
| Waiting | LED down lighting LED sconce lights | Time-of-day controller, 100% station open hours, 10% minimum station closed, 10% on Generator. Day light harvesting were possible. |
| Station Attendant | LED, continuous task lights over counters with parabolic lenses for glare-free illumination (no visible light source) | Local switches. One fixture UPS + Generator backed-up over service counter, one over cash area and safe, or 10% minimum station closed |
| Staff Washroom | Mirror task light or surface | Occupancy sensor switch. One |