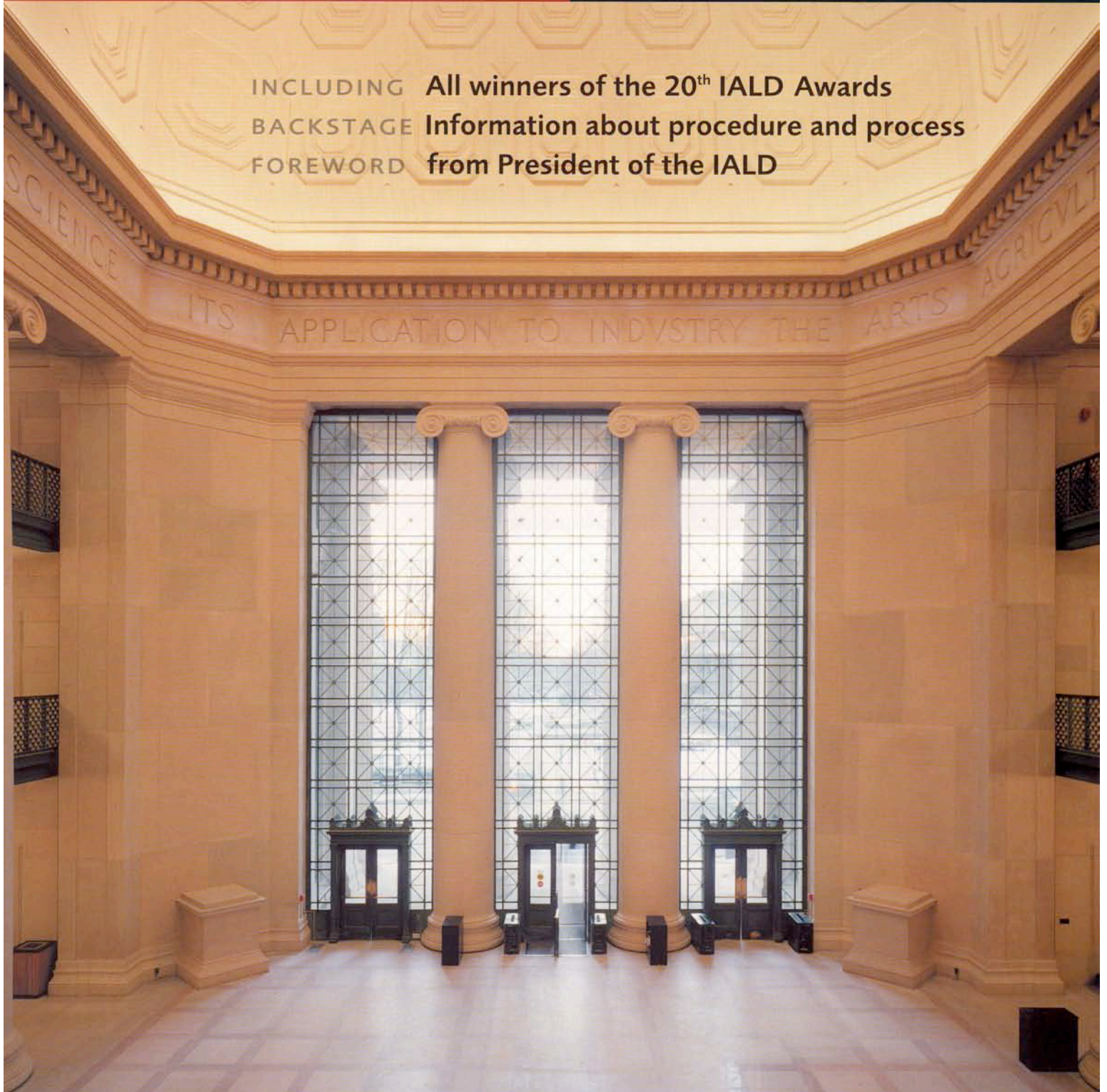


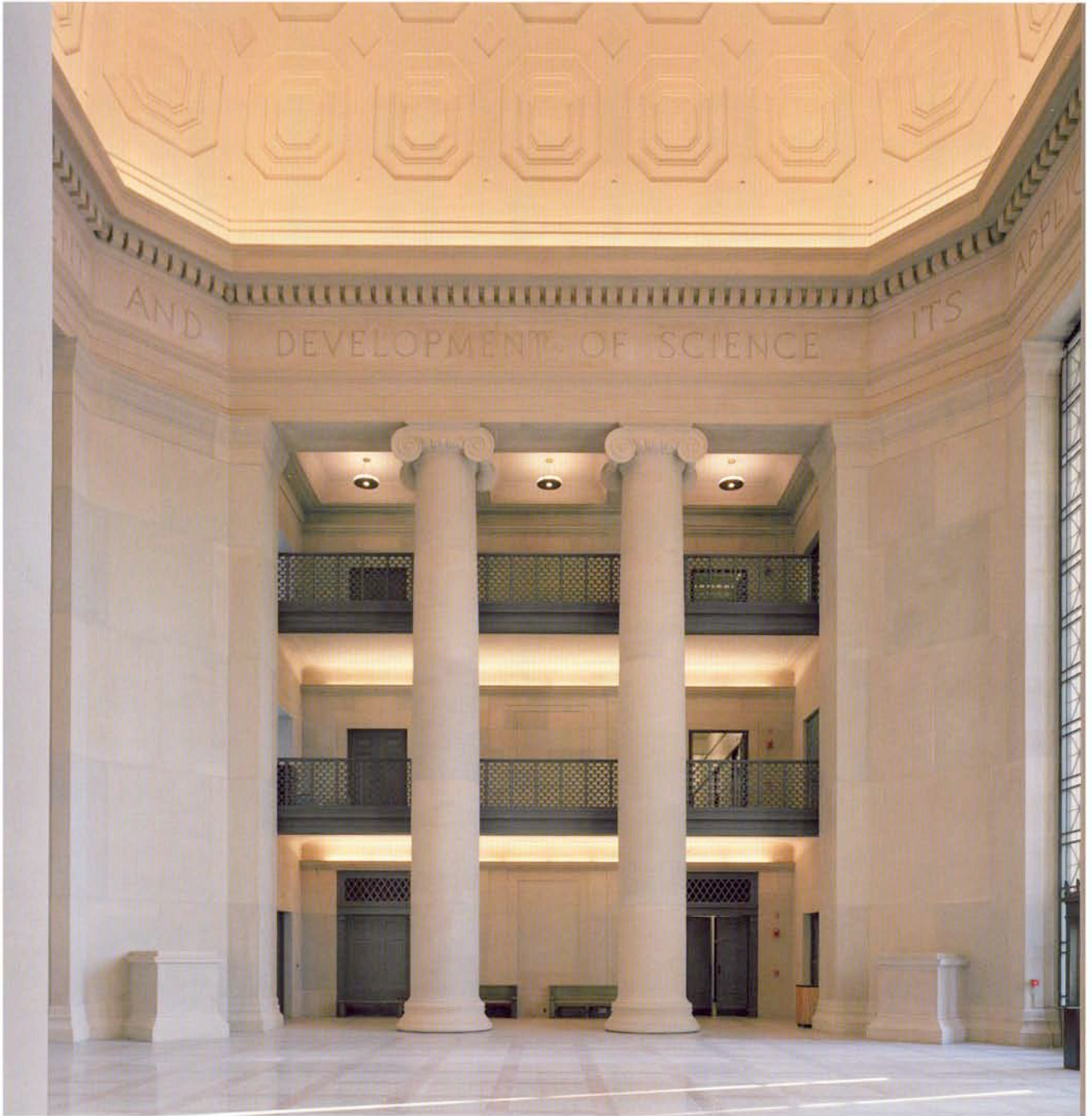
New York 2003

International Association of Lighting Designers, IALD

20th IALD AWARDS

INCLUDING All winners of the 20th IALD Awards
BACKSTAGE Information about procedure and process
FOREWORD from President of the IALD





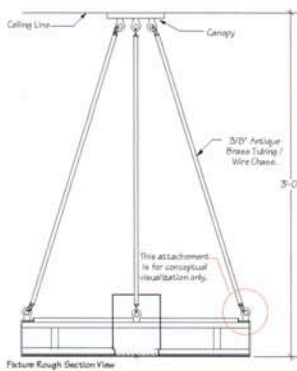
Radiance Award

Perfect from a technical and design viewpoint

MIT Building 7 Renovation

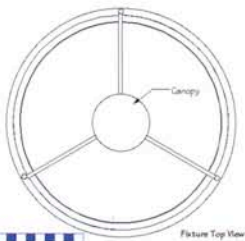


Lighting design office:	Available Light, Salem/USA
Lighting designers:	Steven Rosen, IALD, Katherine Abernathy, LC, IALD
Architect:	David Fixler, AIA
Photos:	Edward Jacoby



Notes:

- This sketch is for conceptual visualization only.
- Use actual RFLD sample for all construction/finishing details.
- This fixture will exist in both Surface/Ceiling Mounted AND Pendant Mounted configurations—actual quantity and pendant stem length of each type TBD.
- Metal finish is Antique Brass, Glass is Antique Gilded Blended.
- Please see drawing LDC-2 for lamp and ballast, space, and placement within the fixture.



The domed portal of Building 7 is an MIT landmark – the literal and symbolic entryway to campus. The interior spaces were badly in need of a lighting system renovation that would celebrate the venerable architecture. Budget was critical, work was to be completed during school downtimes, and illumination sources needed to be concealed from view.

The years had taken their toll on the lighting systems: barely visible mercury vapour floods cast a spotty green glow on the dome, and glaring floodlights were mounted to handrails in an effort to increase floor illumination. The skylight had been blacked out during world war II, and a number of inappropriate luminaires added in circulation corridors.

Design choice priorities respected the stature of the building and the architectural envelope. The design team opted for long-life, energy-efficient and excellent color rendering state-of-the-art luminaires and sources throughout the scope of the project.

A series of mock-ups helped lead the way towards ultimate solutions. A dynamic lighting system balances dome-to-skylight contrast ratios over the arc of the day, with a photo sensor feeding illuminance data to a

dimming/control system. At certain thresholds of daylight, predetermined lighting scenes are activated causing concealed asymmetric distribution T8 fluorescent luminaires to gradually and subtly change intensity.

Multiple zones of control allow for subtle architectural balance, i.e. corner luminaires dim to slightly different intensities than longer linear side runs. Efficient ceramic metal halide floodlights are mounted between skylight and laylight. Dual le-



vel switching – programmed into the lighting presets – also allows balanced day to night illumination levels and there is no nighttime black hole effect.

An astronomical time clock switches specific lighting zones off from 1.00 to 6.00 a.m., realizing additional energy savings for a building open to the public 24/7.

Original ceiling-mounted luminaires were reconfigured as indirect pendants, employing two stacked circular T5 lamps to articulate the vaulted ceiling of adjacent corridors. A new PAR 30 metal halide downlight component creates sparkle on the floor.

Energy codes were reviewed and addressed and budget targets were achieved. Long-life, low power LED strips, filtered to a warm hue and hidden below the entablature, softly accent engraved quotes. Lighting positions are easily accessible to maintenance staff. Glare produced by electric light is non-existent.

The unique auto-adjust dome lighting contrast/ratio system successfully makes this magnificent interior at once compelling and easy to navigate.