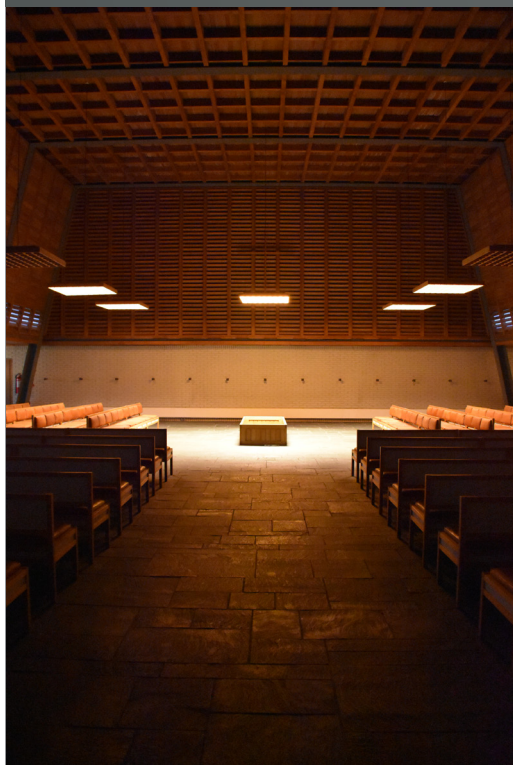




Lyngby Crematorium and Mortuary



Lyngby Crematorium and Mortuary finally finds a custom-made LED luminaire.



Lyngby Crematorium and Mortuary, inaugurated in 1967, was designed by the renowned architects Henrik Iversen and Harald Plum who won an architectural competition – ahead of the Finnish architect Alvar Aalto. The project comprises the crematorium and mortuary as well as a vast burial space intended to relieve the old church yard down town.

Lyngby Crematorium and Mortuary

The large chapel room, seating 300 persons, is built almost entirely in warm pine wood, creating a very serene and calm atmosphere. The lighting consists of 11 large suspended luminaires (1160*1160mm) of a quite elaborate design and of a very sturdy construction. Each luminaire consists of 81 (9*9) frosted 15W light bulbs with a bayonet socket mounted in 81 squares in a wooden frame to complement the all wooden walls and ceiling. Each luminaire consumes 1,2kW. The all steel construction of the luminaires (2mm galvanized steel reflector and socketbase) requires that both suspension and mounting is of a heavy-duty design.

The frosted light bulbs have since gone out of production, and other bulb types have been tested, lately also LED-type light sources. However, the requirement to dim the light and the need to fit the traditional bayonet socket left few options open. The luminaires thus appeared with a variety of light sources of varying colour temperature and intensity. The frequent maintenance and change of light bulbs was also a costly element in operating the building.

For a number of years, the technicians have been working to find suitable solutions to an upgrade of the lighting, and it has also been considered to scrap the original luminaires and instead acquire modern design luminaries for this large chapel room. However, costs seemed to make this option less workable. There were plans to expand the utilisation of

the beautiful location and good acoustic properties to include concerts and cultural events and to open the doors for rehearsal sessions for local music ensembles. This made finding a permanent solution to the lighting more and more critical.

Following a LED iBond presentation at the local Town Hall, one of the architects from the municipal's Buildings and Maintenance Team challenged LED iBond to work on a solution to the lighting at the large chapel room. Requirements included CCT 2300K, CRI Ra90+, zone-based dimming and 200-300 lux on the floor for various events.

LED iBond solution

The LED iBond solution utilised the existing wooden frame mounted on to the LED iBond 6mm ACP sandwich construction, and thus enabled discarding all the 2mm galvanized steel components. A custom vacuum formed diffuser was added to give the illusion of the original frosted light bulb with a full light distribution. The diffuser obviously also minimised the glare from the LEDs. The diffuser elements were sealed against the ACP to avoid insects, which over time would decrease the lumen output of the lamp.

The power source units chosen were set up to a Casambi app (bluetooth dimming controls) and the zones and scenes were set up to the customers wishes with wall mounted manual kinetic push buttons in both ends of the

Facts

CUSTOM LED Upgrade
CCT: 2300K dimmable
CRI: Ra90+
Installation: 2018

For more information
www.ledibond.com

EMPOWER THE FUTURE OF ILLUMINATED IoT

LED iBond empowers the future of illuminated IoT through its intelligent panel system which can transform infrastructure for light, data and electricity – either individually or combined – in one super slim panel.