

Experience from a renovation project



Powerhouse, Kjørbo

Short about myself

- Morten Olav Berg, 48 years old, works as project-leader, technical installations at Itech AS – special areas are lighting solutions and energy saving potential in lighting systems.
- Formal education as electrician, had my own installation company for 8 years (1987-1995).
- Worked 17 years with lighting and lighting solutions at Fagerhult (from 1995-2012).
 - Project leader for projects as:
 - Nytt Rikshospital (1995-2000)
 - St-Olavs Hospital fase II (2006-2010)
 - Nye Ahus (2004-2008)
 - Nydalen VGS (2009-2011)
- Member of NLK (Norwegian Lighting Council)
- Co-writer for several Lyskultur publications and some standards, about lighting and energy savings
 - NS EN 3701 – Passivhusstandarden for yrkesbygg
 - Lyskulturs publikasjon 1B – Planleggingskriterier og veileder til NS EN 12464-1
 - Lyskulturs publikasjon 23 – Belysning i Helseinstitusjoner
 - Lyskulturs publikasjon 19 – Lys og energibruk
 - Lyskulturs publikasjon 12 – Kontorbelysning (pågår nå)

Agenda

- Pre-projctet fase – the important choice of system and installer
- Take action through the project
- When the users are taking over – the most important periode
- About Powerhouse



Pre-project fase – the important choice of system and installer

- Be clear!
 - It's very important that the main project «targets» is described clearly when we are sending it to the market!
- Hold on to decisions!
 - It's too easy to skip good solutions only for saving «short» money.
- Check out installers real knowledge!
 - Too many say they can, but they can't!
- Just because it's energy-efficient, it doesn't have to be bad or ugly!



Action through the project

- Everyone involved have to be interested in what we are buliding
 - Important that the installer have genuine interest for doing a good job!
- Make cheklists for the hole solution
 - Check out from time to time that everone is «on track»
 - The way to «shortcuts» is unfortunately really short.



When the users are taking over...

- If you dont know what you are taking over.....
 - It`s your responsibility that the users understand why it is like it is



About Powerhouse Kjørbo

- Bulidt in 1980
- 2 «small» buildings, together aproxm. 5000sqm.
- Exposed concrete walls and roof in all areas.
- Covered with absorbents in roof and inside walls (for sound)
- Solar-panels can give aproxm 41kWh/sqm per year
- Lighting installations is mesured to 42% of total energy consumption.