



Figure 22.42 Canopy at the eaves of a roof. 6.2 kWp PV system at an office building in Gouda (NL). Reproduced with permission by BEAR Architecten T. Reijenga



Figure 22.43 This building, at ECN in Petten (NL) has a 43 kWp PV system integrated into the conservatory roof. The conservatory acts as a parasol in front of the offices, thus eliminating the need for air-conditioning in a moderate climate. The building on the right side has a PV shading system (see caption on Figure 22.11). Reproduced with permission by BEAR Architecten T. Reijenga

appearance: monocrystalline cells are uniform while polycrystalline cells have hundreds of reflective facets, of sizes 0.1–1 cm. Each facet is a separate small crystalline region. Both mono and poly cells have metal grids on the front in a rectangular pattern to collect the electricity and to connect to the next cell. These grids are typically not visible from beyond a few meters away.

Amorphous silicon cells (a-Si) are composed of silicon atoms that are in a thin ($\sim 1 \mu\text{m}$) layer and lack crystalline properties. They are commonly referred to as thin film Si PV technology. Amorphous silicon cells are deposited onto substrates like glass window