# System performance

## **210** Design of photovoltaic systems

**Used by:** <u>70-65-60/110 Grid connected photovoltaic system</u>.

- **Design:** Complete the design of the photovoltaic system.
- **Standards:** To BS 7671, BS EN 62124 and in accordance with ENA 59/2-1 and To BS 7671, BS EN 62124 and in accordance with ENA G83/1.
- **Testing and commissioning:** Incorporate adequate measures to allow full testing and commissioning of the completed system.

# Execution

### 620 Installing photovoltaic systems generally

**Used by:** <u>70-65-60/110 Grid connected photovoltaic system</u>.

- Standards: To BS 7671; To ENA 59/2-1; and To ENA G83/1-1.
- **Installer:** Microgeneration Certification Scheme accredited.
- Materials: Separate dissimilar metallic materials to prevent bi-metallic corrosion.
- **Fixing equipment:** Fix independently of any other systems installation with zinc electroplated fasteners indoors and stainless steel fasteners outdoors.
- **Orientation:** Accurate and square to vertical and horizontal axes. Align adjacent items of switchgear on the same horizontal axis.
- Cable installation:
  - **Timing:** Complete installation of d.c. cabling before connecting to PV array.
  - **Routes and arrangement:** Minimize length of d.c. cable runs.

### System completion

### 810 Inspection and testing

**Used by:** <u>70-65-60/110 Grid connected photovoltaic system</u>.

- **Standards:** To BS 7671; In accordance with ENA 59/2-1; and In accordance with ENA G83/1-1.
- Notice before commencing tests (minimum): 24 h.
- Witnessing of testing and commissioning: Required.
- **Approval:** Obtain written approval of the Electricity Distributor.
- **Specialist commissioning engineer:** System manufacturer.