FAQs

1. **What is Daylight?**
   Daylight, or **the light of day**, is the combination of all direct and indirect sunlight during the daytime. This includes direct sunlight, diffuse sky radiation, and (often) both of these reflected from the Earth and terrestrial objects. Sunlight scattered or reflected from objects in outer space (that is, beyond the Earth's atmosphere) is not generally considered daylight.

2. **What is daylight factor? How is it calculated?**
   The ratio, in percent, of work plane illuminance (at a given point) to the outdoor illuminance on a horizontal plane. Evaluated under cloudy sky conditions only (no direct solar beam).
   The daylight factor is defined as
   $DF = (E_i/E_o) \times 100\%$
   Where,

   E_i = illuminance due to daylight at a point on the indoor's working plane

   E_o = simultaneous outdoor illuminance on a horizontal plane from an unobstructed hemisphere of overcast sky

3. **What are the three components of Daylight Factor?**

   The sum of the three components gives the daylight factor:

   DF = SC + ERC + IRC

   - SC – Sky Component
   - ERC – Exterior Reflectance Component
   - IRC – Interior Reflectance Component

4. **What are the standard Types of sky used for DF analysis?**

DATE DEPENDANT :

- Clear sky
- Intermediate Sky

NOT DATE DEPENDANT:

- Overcast sky
- Uniform sky

5. Discuss briefly about shading devices?

The devices can be classified into three types.

1. Moveable opaque can be highly effective in reducing solar gains but eliminates view and impedes air movement, e.g., roller blinds, curtain, etc.
2. Louvres May be removable, adjustable, or fixed-affect view and air movement to some degree. Can also provide security.
3. Fixed overhangs Easy to provide with an overhanging roof or balcony. Also gives protection to walls and openings from rain. Little or no effect on view and air movement.