

Application of Factor Method to Estimate Service Life of Building Component

Case 1 : Building exposed to severe weather

Case 2 : Effect of coating on service life of concrete façade

Case 3 : Toward general application of factor method

Factor Method

- The Factor Method as used in ISO 15686-1 is used to modify an RSL to obtain an estimated service life (ESL) of the components of a design object.
- $ESL = RSL * A * B * C * D * E * F * G$
where:

A. Quality of component

B. Design level

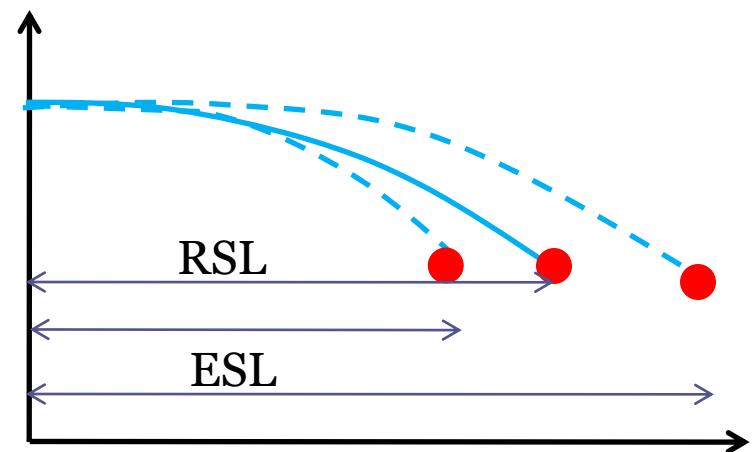
C. Work execution level

D. Indoor environment

E. Outdoor environment

F. In use condition

G. Maintenance level



Requirements for application

- **Determining RSL:**
asumption, accelerated test, data base, experiences, manufacture data sheet, etc
- **Determining the values of factor A-G.**
identification of exposure condition dan material deterioration

Examples the Use of Factor Method

- Case 1 [Building exposed to severe weather.pdf](#)
- Case 2 [Effect of coating on service life concrete facade.pdf](#)
- Case 3 [Toward general application of factor method.pdf](#)