

PMC 2.21 ENVIRONMENTAL EXPOSURE

Table of contents:

2.21.1 Introduction	almost final draft
2.21.2 Concrete	
2.21.2.1 Corrosion of the reinforcement / General	almost final draft
2.21.2.2 Carbonation induced corrosion, initiation	almost final draft
2.21.2.3 Chloride induced corrosion, initiation	almost final draft
2.21.2.4 Corrosion propagation	note for discussion
2.21.3 Steel	<i>To be completed</i>
2.21.4 Aluminum	<i>To be completed</i>
2.21.5 Timber	<i>To be completed</i>

2.21-1 Introduction to environmental exposure

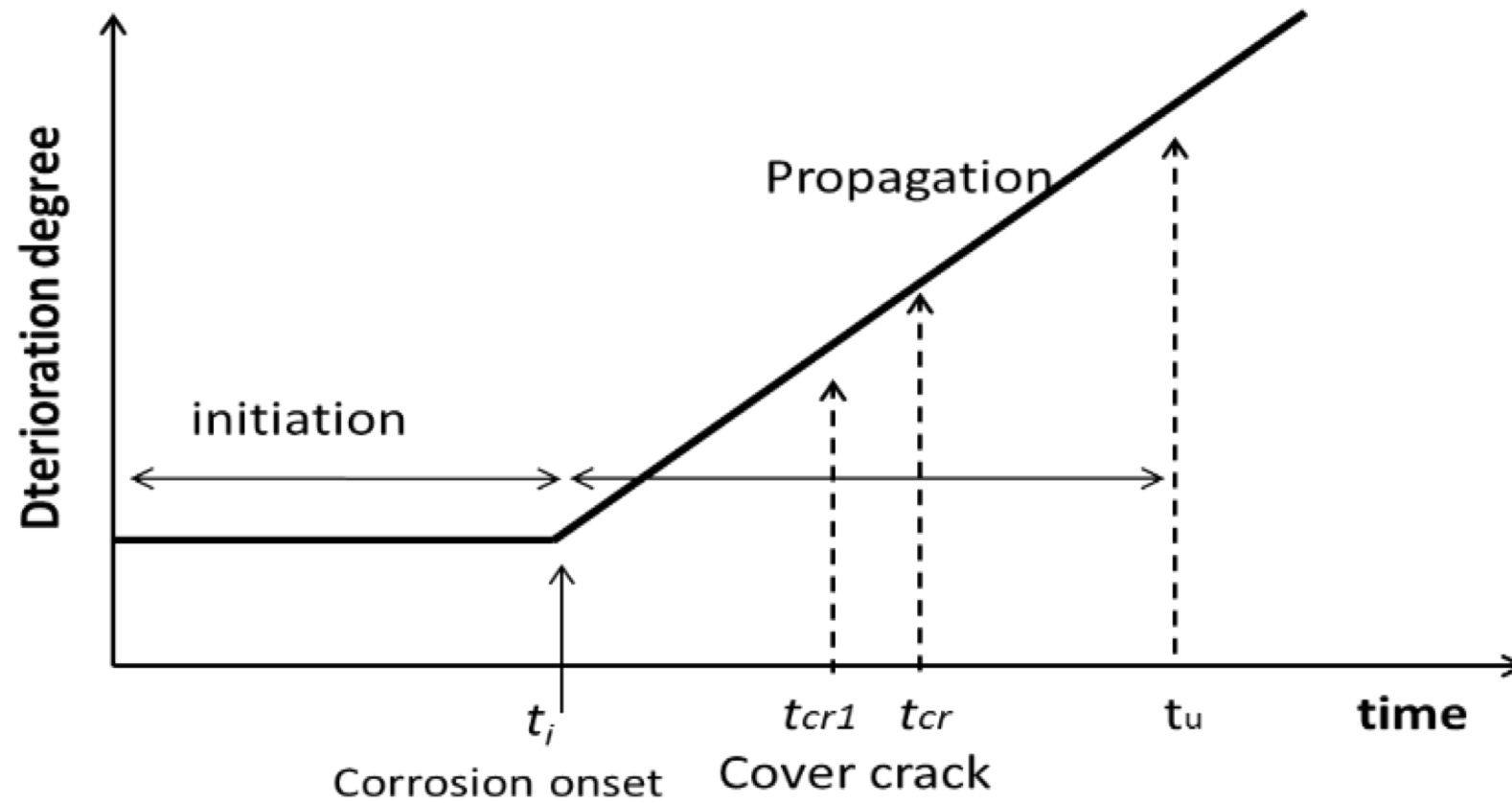
Definition:

Effects of physical, chemical, biological and long term mechanical actions on the appearance, stiffness and strength of the structure.

So SLS and ULS limit state functions may depend on mechanical actions, environmental actions or combinations

Condition limit states may be introduced for convenience

2.21-2.1 Introduction to concrete



2.21-2.2 Carbonation initiation model

2.21-2.3 Chloride initiation model

- Definition of limit state
- Model of mechanism
- Random variables
- Notes, simplifications

**In accordance
with
fib MC 2020**

2.21-2.2 Carbonation initiation model

2.21-2.3 Chloride initiation model

- Definition of limit state
- Model of mechanism
- Random variables
- Notes, simplifications

In accordance
with
fib MC 2020

**Almost ready for publication.
Can we agree on procedure?**

2.21-2.4 Corrosion propagation (set up)

- Rate of propagation / corrosion accumulation
- CLS of initial hair crack
- SLS of cracking
- SLS loss of bond
- ULS (interaction with mechanical actions)