CECS (2007)

Sun et al. [**?**] explained the model from CECS (2007), which describes the course of the carbonation depth $x_c(t)$ as follows:

$$x_c(t) = 3K_{CO_2}K_{kl}K_{kt}K_{ks}K_F T^{0,25} RH^{1,5}(1-RH)\left(\frac{58}{f_{cuk}} - 0,76\right) * \sqrt{t}$$

K_{CO_2}:	CO_2 density factor: [-]	$K_{CO_2} = \sqrt{\frac{c_{Co_2}}{0,03}}$
c_{CO_2}:	CO_2 density [%]	
K_{kl}:	location factor: [-]	$K_{kl} = 1,4$ for the corner of the component
		$K_{kl} = 1,0$ for other areas
K_{kt}:	curing factor: [-]	$K_{kt} = 1,2$
K_{ks}:	stress factor: [-]	$K_{ks} = 1,0$ for compression condition
		$K_{ks} = 1,1$ for tension condition
K_F:	fly ash factor: [-]	$K_F = 1,0 + 13,34 * F^{3,3}$
F:	fly ash content [weight ratio]	
T:	annual temperature [°C]	
RH:	annual relative humidity [-]	
f_{cuk}:	charasteristic strength [MPa]	