OEKO - PRIORITY®

INPUT DATA FOR OPTIMUM INSULATION OF THE BUILDING ENVELOPE FROM AN ECOLOGICAL POINT OF VIEW

(standard values and bandwidths: see footnote)

description of object, location	
contact address	

[7] planning horizon, service life of the building [n]		**years**
[8] degree days p.a		**(K·d)**
[9] discounting rate (impairment of benefit) for grey energy		**%**
[10] discounting rate (impairment of benefit) for heating energy		**%**

Structural members with ground effect:

- **floor area with floor heating**		**m^2**
- **U_{00} – value (without insulation and ground)**		**W/m^2K**
- **mean underground level / depth**		**m^1**
- **exterior wall development (- portion)**		**m^1**

- **floor area without floor heating**		**m^2**
- **U_{00} – value (without insulation and ground)**		**W/m^2K**
- **mean underground level / depth**		**m^1**
- **exterior wall development (- portion)**		**m^1**

- **exterior walls with ground effect**		**m^2**
- **U_{00} – value (without insulation and ground)**		**W/m^2K**
- **mean width of wall without insulation**		**m^1**
- **mean height of wall (check result)**		**m^1**
- **wall development (check result)**		**m^1**

<unheated> structural members with outdoor air effect aswell as transfer from page 1 <ground>

description	area [m^2]	U_0 – value [1)] [W/m^2K]	grey energy [2)] J [MJ/m^3]	lambda value [3)] λ [W/mK]	reduktion - factor b [4)] [-]	service life m [5)] [years]	portion of demolition f [6)] [-]

[1)] without insulation; for structural members with ground effect U_0 is calculated from U_{00} and the underground level according to EN ISO 13370 (!)

[2)] standard value insulation materials 2000 MJ/m^3; bandwidth: $1750 \leq J \leq 2750$

[3)] standard value insulation materials 0.040 W/mK; bandwidth: $0.035 \leq \lambda \leq 0.045$

[4)] for structural members with ground effect calculated according to EN ISO 13370: factor b = 1.0 (!)

[5)] standard value above ground: 40 years; bandwidth $30 \leq m \leq 50$.
Under ground: service life m general = planning horizon n

[6)] standard value demolition (- portion of erection) ~ 0.5; bandwidth $0 \leq f \leq 1.0$

[7)] standard value service life of the building 75 years; bandwidth $50 \leq n \leq 100$

[8)] Locatation – dependently (K·d)

[9)] standard value discounting rate (impairment of benefit) for grey energy i_{GE} = 2.5%;

[10)] standard value discounting rate (impairment of benefit) for heating energy i_{HE} = 0.0%;

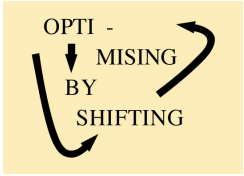
[11)] FORM FOR THESE SPECIFICATIONS: also see
http://www.cellularglassengineering.com/en/cge/formular/oeko_en.pdf

Maximal eight different structural members (inclusive structural members with ground effect) can be classified. The specification of window areas for establishing the mean U – value of the building is also possible, but without influence on the optimum insulation of the opaque building envelope from an ecological point of view.

[11)] printout / fax

delete all inputs!

[11)] elektronic dispatch to
info@cellularglassengineering.com



CELLULAR GLASS ENGINEERING AG / SA; www.cellularglassengineering.com
POSTFACH CH – 8302 KLOTEN; TEL. + 41 44 814 28 18; FAX + 41 44 814 28 27 *rev. Jan. 08*