

## DCBA-method

The DCBA - method is also called the four-variant method as it entails four levels of sustainability:

- D The normal situation, where there is no environmental concern at all
- C Corrected normal consumption, where the environment is taken into account
- B Restrict damage to a minimum, taking the environment as the point of departure
- A The absolute best situation, where maximum sustainability is reached as regards to a particular aspect.

The DCBA-method is a design method that can help the designer in a structured manner to deal with the numerous possibilities he has. In consultation with the whole building team, target levels are laid down per subject. Using the checklist one can verify per phase which measures are applicable in that phase and whether or not the established environmental profile has been observed. In the pre-design, for instance, there are not yet so many measures to take, but the measures that are taken, do have considerable impact on the use of materials and energy in the following phases. By selecting the measures for the pre-design only, one can verify if the project – at that time – has sufficient potential to become a sustainable project. However, this is no guarantee for a good result in the following phases. For instance, one can take into account the compactness of the building in the draft design and, this way, score good marks, but if the final design does not provide for sufficient insulation, one will lose marks there and the level of sustainability will go down.

In the figure below an extract from the checklist is shown.


Description	Input	D	C	B	A	score
<b>ENERGY</b>						
<b>General</b>						
> Energy performance coefficient: enter the EPC	1,00					0,0
> EPC ≤ 0,9			5			
> EPC ≤ 0,8			10			
> EPC ≤ 0,6				20		
> EPC ≤ 0,4					30	
<b>Step 1: Avoid unnecessary use of energy</b>						
<b>Limit transmission losses</b>						
> Insulation building floor, enter Rc-value	3,4					1,8
> Insulation building floor: Rc ≥ 3,0	yes		1			
> Insulation building floor: Rc ≥				2		


From DCBA Checklist

In the first column of the list all measures are listed that are taken into account when giving marks. They are subdivided in three categories:



Measures to be taken in the draft design

 Measures to be taken in the final design

 Measures relevant for the total project.

The second column indicates whether or not a measure is applied in the project. The following entries are possible:

- yes: if the measure is applied
- (empty box): if the measure is not applied
- not relevant: if the measure is not relevant to the project
- r.c.: if the application of the measure depends on the residents' choice
- figure: if a certain value is needed to check to which extent the measure is valid
- percentage: if the measure is but applied to a certain extent (percentage), e.g. with regard to several materials for the outside wall.

In columns three up to six, the marks that can be reached are shown. Based on the column in which the score is indicated, one can check which measures one must take to reach a certain level. If, for instance, one has laid down the target level for the energy subject at the C-level, all measures listed in the D- and C-column will have to be applied, unless not taking certain measures is compensated by carrying out measures of a higher level.

The last column shows the score that the project concerned reaches per measure. The programme automatically calculates the score per subject, which can be compared to the target scores for reaching certain levels. With the levels thus obtained, an environmental profile can be drawn up, from which one can clearly deduce how a project scores on a certain subject and in general.

