

## **ABeam**

### **Quick dimensioning program version 2.1**

### **Installation instructions**

#### **1.0 Installing program**

##### **1.1 Downloading the program on the internet**

Program can be downloaded from Anstar home page. Program can be saved anywhere on your computer.

##### **1.2 Installing the program**

There are following phases when installing the program:

*User information:* The program will require user information. The same information will be printed on the calculation printing. Insert user name and your company name.

*Installation folder:* The program will request installation folder. User can choose the folder or use programs default folder (C:\Anstar\Abeam\).

Do not install the program into the windows C:\Program Files folder, because your operating system might prevent the use of this program.

*Start-up menu:* The program will request to choose the location in your start-up menu where the program is installed.

*Accepting installation:* The program will request accepting the installation and after that the installation begins.

*Version updates:* The program will display any changes made on this version

*Installing complete:* Installation is complete and the program is ready to use.

User manual contains necessary information from starting the program. Manual will explained the definition of calculation code to use and how the calculation folder will be done.

#### **2.0 ABeam quick dimensioning program**

##### **2.1 Purpose of the program**

With ABeam quick dimensioning program civil engineer can perform the preliminary strength calculation of ABeam. Program cannot perform the final strength calculation of ABeam, because the program will not display all details about the structure and its variables.

The program will also perform the shear resistance calculation of the vertical web of the of hollow core slab working in composite action with ABeam.

##### **2.2 Calculation code used by the program**

The program calculates ABeam in accordance with the following codes:

- Finland national RakMK B4,concrete code 2004, BY 50
- Finland eurocode SFS-EN 1992-1-1:2005(+NA 2007)
- General eurocode EN 1992-1-1:2004 (Eurocode 2)

Program can calculate the head of hollow core slab in accordance with Finnish concrete standard no BY18 (1.8.2007).

When calculating in accordance with eurocode composite action is calculated with VTT-S-06422-08 New Kcd values for BNK 18.

### **3.0 Discharge of responsibility**

*Anstar will not be responsible for any damages caused by ABeam quick dimensioning program. ABeam program is intended only for preliminary calculation of Anstar ABeam. Program is not meant for calculating any other beams. Anstar will always perform and be responsible for the final strength calculation of ABeam. The Program will not display the internal structure or materials of the beam. It will only display the main dimensions of the beam. The preliminary strength calculation of the head of hollow core slab is performed with a hollow core slab that is manufactured in accordance with Finnish concrete standard no. 18. The supplier of the hollow core slab will always be responsible for the final dimension of the slab. Information calculated by the ABeam program can only be used to create contract inquiry material for turnkey contract. Information given by the program is not allowed to be used in manufacturing any other beam structures.*