





Scage is a calculation software dedicated to the **structural analysis of reinforced concrete retaining walls**

Structural analysis of retaining walls

Scage is a design tool for the internal balance of reinforced concrete retaining walls in accordance with **Eurocode 2** (French and Belgian annexes) and the French national application standard of Eurocode 7 (**NF P 94-282**) :

- Verification of existing steel sections and design of new steel sections
- Calculation of the required **longitudinal steel sections** from the diagrams of internal forces N, V, M
- Calculation of the required **transverse steel sections** from the diagrams of internal forces N, V, M
- Hyperbolic behaviour law for concrete and bilinear behaviour law for steel (horizontal or inclined piecewise)
- Parameterisation of **partial factors** for all load combinations





Key features

- Calculation of the **allowable stresses** of the materials
- Exhaustive and automatic generation of the **envelopes** of the internal calculation effort diagrams (from a preliminary calculation under K-Réa for example or imported from an Excel file)
- Exhaustive generation of the envelope of the bending moment diagram from the **offset rule**
- Reinforced concrete calculation for **single bending** and **compound bending**: treatment of partially and fully compressed sections as well as in pure traction
- Calculation of required **minimum steel sections** of steel
- Consideration of different permissible steel stress zones for the SLS over the height of the wall (**cracking control**)
- Integrated and independent reinforced concrete calculator to quickly check individual sections outside of the project being treated

Scage Structural analysis of reinforced concrete retaining walls

Transparent tool for the user

- Graphs and tables can be exported to the clipboard and to Excel
- Possibility to access the intermediate results of any reinforced concrete calculation
- Representation of the ULS deformation diagram and SLS stress diagram of each section
- Detailed printout report after calculation
- Detailed user manual and scientific manual





MINIMUM HARDWARE REQUIREMENTS

Compatible computer with:

- Intel[®] Core Duo CPU
- 4 Gb RAM
- At least 1366x768 resolution
- USB port
- 500 Mb free hard-disk space
- Windows[®] 8.1 SP1/10, 32 or 64 bits





A user-friendly interface

- Flexible management of several scenarios to examine different solutions
- Synchronisation with the results of the K-Réa or Excel calculation
- Possibility to work with **unit length of a wall** or on the **width of a reinforcement cage**
- Integrated data validation system
- Possibility to work in metric system or imperial system

42-52 quai de la Râpée CS 71230 75583 Paris Cedex 12 France Tel: +33 (0)1 82 51 52 00 Fax: +33 (0)1 82 51 52 99 www.terrasol.com software.terrasol@**setec**.com

