

CDS: Concrete Section Design

Installation – Protection

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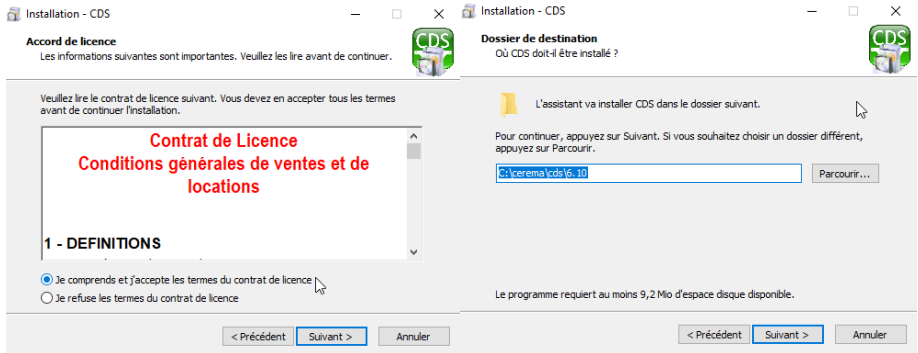
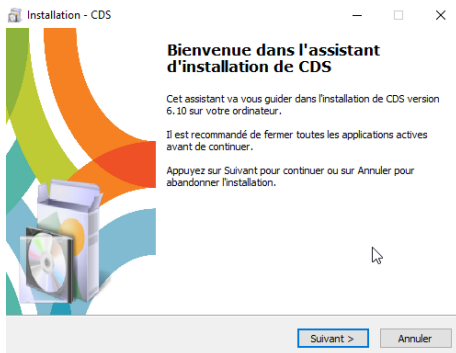
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Installation Procedure

CDS is a software that can exclusively be executed on Windows operating system. The installation procedure consists in running program `setup_CDS_6.exe` downloaded from <http://www.setra.fr/html/logicielsOA/>.

If a window « Windows protected your computer » pops up, click on « more info », and « run anyway ».

The software is installed by default in C:\CEREMA\CDS\6.00.



First examples

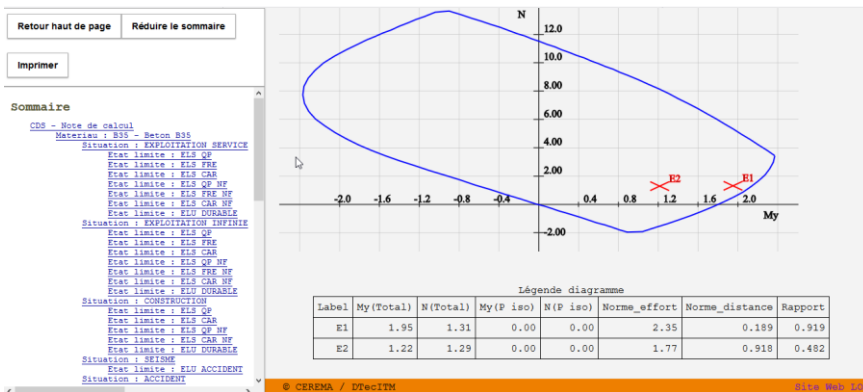
CDS is protected by a USB dongle DinkeyPro of the company Aplika. The USB dongle must be plugged to the computer, its LED continuously ON. To order your USB dongle please fill the online form at

<http://www.setra.fr/html/logicielsOA/LogicielsOA/commander.html>

Sample input file featuring commands to design and justify a reinforced concrete section (`sect_ba.cds`) and a prestressed concrete section (`sect_bp.cds`) are available in folder `C:\CEREMA\CDS\6.00\Exemples`

To test the CDS software drag an drop file « `sect_ba.cds` » **on the shortcut to CDS created on the desktop, or on the executable `CDS_6.00_M.exe` in folder `C:\CEREMA\CDS\6.00`**. After running CDS, the output file « `sect_ba.html` », created in the same folder as the input file, contains the calculation report in html format. A file « `sect_ba.txt` » contains the calculation report using txt format. The folder also contains drawings using svg format.

Icon	Modifié le	Type	Taille
Svg_sect_ba	06/07/2020 12:58	Dossier de fichiers	
Svg_sect_bp	15/07/2020 11:01	Dossier de fichiers	
sect_ba.cds	03/07/2020 17:27	Planning CDS (.C...	2 Ko
sect_ba.err	06/07/2020 12:58	Fichier ERR	9 Ko
sect_ba.html	06/07/2020 12:58	Firefox Document	65 Ko
sect_ba.tra	06/07/2020 12:58	Fichier TRA	3 940 Ko
sect_ba.txt	06/07/2020 12:58	Document texte	32 Ko
sect_ba2.cds	03/07/2020 17:27	Planning CDS (.C...	2 Ko
sect_bp.cds	14/06/2019 14:56	Planning CDS (.C...	5 Ko
sect_bp.err	09/07/2020 11:24	Fichier ERR	22 Ko
sect_bp.html	09/07/2020 11:24	Firefox Document	32 Ko
sect_bp.tra	09/07/2020 11:24	Fichier TRA	8 002 Ko
sect_bp.txt	09/07/2020 11:24	Document texte	14 Ko

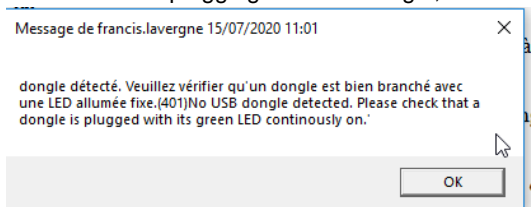


Protection by USB dongle

CDS is protected by a USB dongle DinkeyPro of the company Aplika. The USB dongle must be plugged to the computer, its LED continuously ON. To order your USB dongle please fill the online form at

<http://www.setra.fr/html/logicielsOA/LogicielsOA/commander.html>

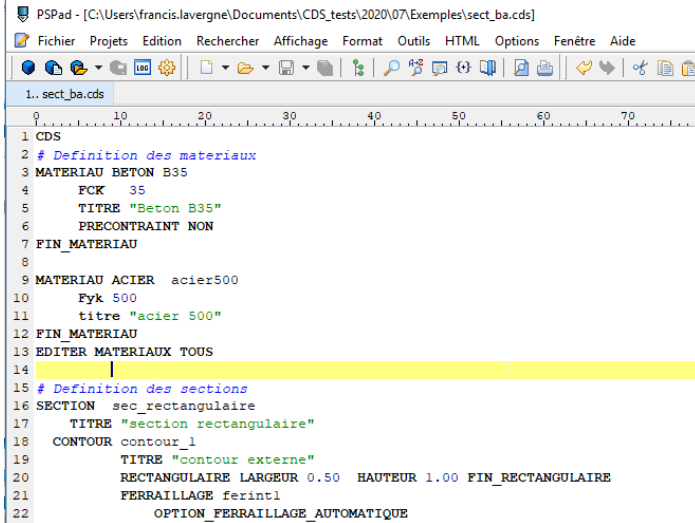
If the software is run without plugging the USB dongle, the following message pops up :



Other error codes could signal the occurrence of a USB dongle that does not protect CDS, that the USB dongle is out of date or faulty. If you do not manage to overcome an issue, please contact our support at logiciels-oa.DTITM@cerema.fr, specifying the error message and the error code.

Configuration of PsPad®

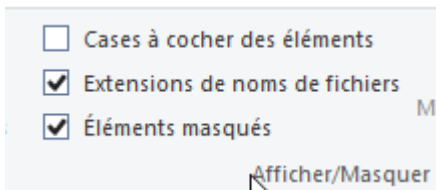
The input file « sect_ba.cds » can be modified to specify other section profile, positions for rebar, materials or loadings. The text editor PsPad can ease the use of CDS by syntax highlighting and providing a shortcut for running CDS.



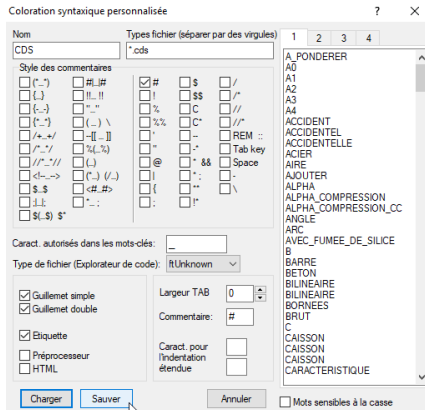
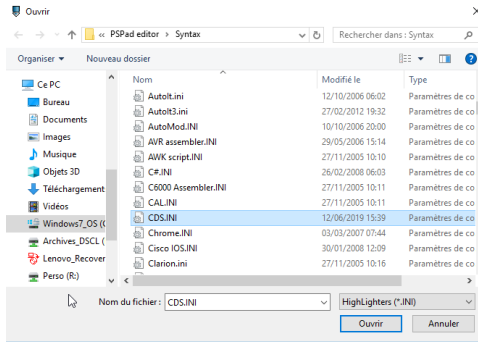
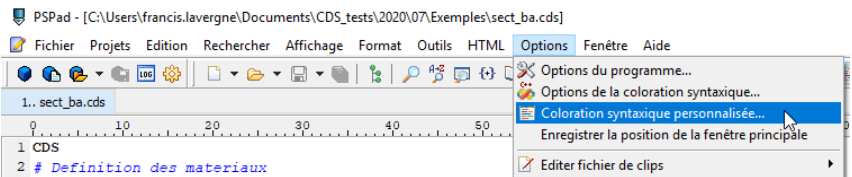
```
1 CDS
2 # Definition des materiaux
3 MATERIAU BETON B35
4     FCK 35
5     TITRE "Beton B35"
6     PRECONTRAIINT NON
7 FIN MATERIAU
8
9 MATERIAU ACIER acier500
10     Fyk 500
11     titre "acier 500"
12 FIN MATERIAU
13 EDITER MATERIAUX TOUS
14
15 # Definition des sections
16 SECTION sec_rectangulaire
17     TITRE "section rectangulaire"
18     CONTOUR contour_1
19     TITRE "contour externe"
20     RECTANGULAIRE LARGEUR 0.50 HAUTEUR 1.00 FIN_RECTANGULAIRE
21     FERRAILLAGE ferintl
22     OPTION_FERRAILLAGE_AUTOMATIQUE
```

To configure synthax highlighting, please :

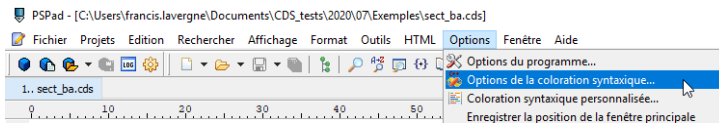
1. Install PSPad software (Copyright 2001-2015 Jan Fiala).
<http://www.pspad.com/fr/download.php>
2. Copy file CDS.INI from folder C:\CEREMA\CDS\6.00 to the installation software of PsPad, folder Syntax C:\Program Files (x86)\PSPad editor\Syntax. The shortcut CTRL+J enables automatic completion of commands.
3. Copy fileCDS.DEF dfrom folder C:\CEREMA\CDS\6.00 to the installation software of PsPad, folder Context C:\Program Files (x86)\PSPad editor\Context. The shortcut CTRL+space enables . automatic suggestion of commands.
4. Place or replace **with another text editor** (such as Notepad) the contents of file C:\CEREMA\CDS\6.00_pour_pspad.ini in file C:\Users\xxx.yyy\AppData\Roaming\PSPad\PSPad.INI
The AppData folder may be hidden. In the file explorer, on the dispaly tab, please tick « hidden elements »



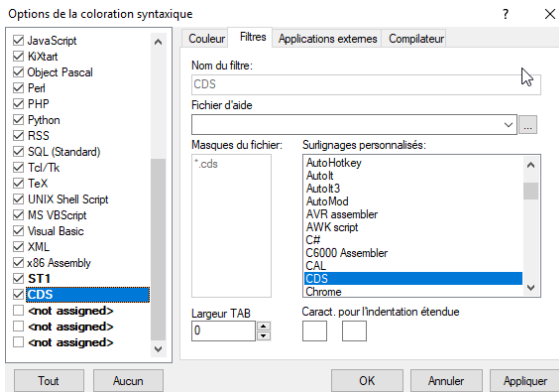
5. Open Pspad, select Option/custom synthax highlighting, select file cds.ini et click on « save »



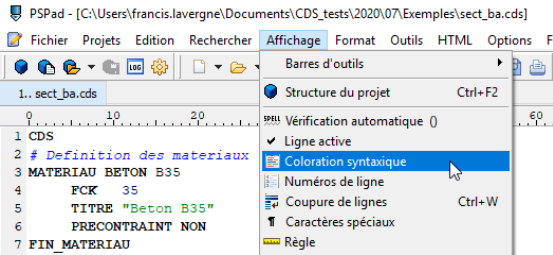
6. Get back to the main menu of Pspad and select option/options of syntax highlighting
Select Filter tab



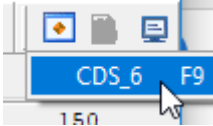
Select a « not assigned » `<not assigned>` line, and choose CDS in box "custom overlining". Tick the box on the left of CDS to activate CDS langage in Pspad.



7. Syntax highlighting is to be activated by the display tab of PSpad



8. CDS can be run by using shortcut F9 in Pspad or clicking on the corresponding icon.



Running configuration can be customized in tab « external application » of syntax highlighting.

Configuration/operating system

- Operating system : Compatible with Windows 10, 32 and 64bits, Langages : French
- A USB dongle protecting the software is required.

Contacts

The protected version of CDS and the related documentation can be downloaded at :

<http://www.setra.fr/html/logicielsOA/LogicielsOA/CDS/cds.html>

Prices are available at :

<http://www.setra.fr/html/logicielsOA/LogicielsOA/tarifs.html>

Orders can be placed by filling the form available at :

<http://www.setra.fr/html/logicielsOA/LogicielsOA/commander.html>

If you have any questions, please contact :

logiciels-oa.dtitm@cerema.fr