Atir Software Development LTD

STRAP - Convert std file (STAAD) to STRAP

Step by step

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1. Abstract

Any STRAP system allows the option to import std file (STAAD) and convert it to a STRAP model. This step by step tutorial will explain the process in detail.

2. Preparation

In order to import and convert the std file correctly, some preparation work is needed.

2.1 Mapping beam properties

Before importing the std file into STRAP, the user must check if the sections in the std file are correctly mapped to STRAP's sections. If needed, the user must define the mapping.

The files that contain the mapping assignments are located within STRAP's root folder (By default C:\STRAP1). The file name is STDSTR.XXX, while XXX represents the steel table. (For example, STDSTR.ENG is the mapping assignments file for England. STDSTR.EUR is the mapping assignments file for Europe.)
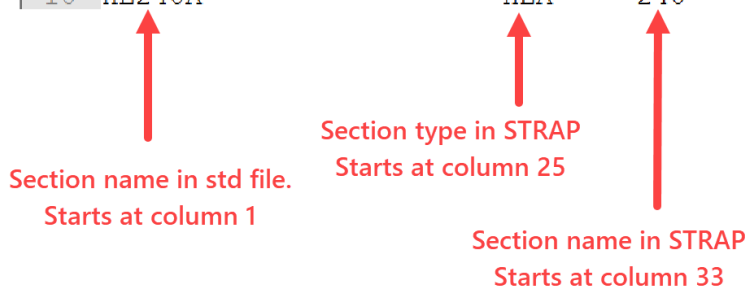
2.1.1 STDSTR file structure

The STDSTR file must be opened with a professional editor such as Notepad++ or similar.

The std file contains 3 parameters –

1. The section name as it appears in the std file (STAAD). This name should be positioned at the beginning of each line (starts at column 1).
2. The section type in STRAP, starting at column 25.
3. The section name in STRAP, starting at column 33.

For example –

```
 1   European sections
 2
 3   HE100A               HEA      100
 4   HE120A               HEA      120
 5   HE140A               HEA      140
 6   HE160A               HEA      160
 7   HE180A               HEA      180
 8   HE200A               HEA      200
 9   HE220A               HEA      220
10   HE240A               HEA      240
```

Section name in std file.
Starts at column 1

Section type in STRAP
Starts at column 25

Section name in STRAP
Starts at column 33

2.1.2 STRAP.ini

In the file STRAP.ini (located in STRAP's root folder), under the chapter [STDSTR], the user must check the assignments as follows –

```
[STDSTR]
TABLE1=B,D,STDSTR.ENG
TABLE2=A,U,STDSTR.USA
TABLE3=E,E,STDSTR.EUR
```
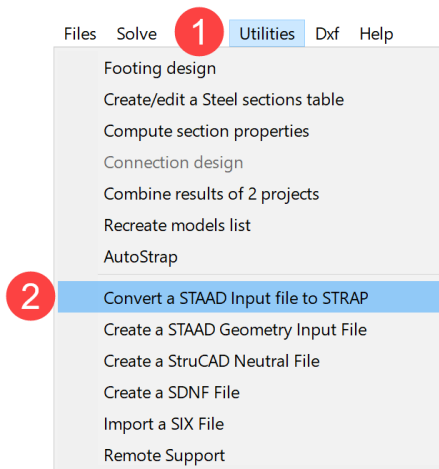
Table number. Max number of tables is 4.

Table in the std file.
B - British
A - American
E - European
The table type can be found in the std file.

Steel table in STRAP.
D - British
U - American
E - European
This notation can be changed depended on the region.

STDSTR file name.

3. Import and convert std file to STRAP

- From the models tab, Go to utilities > Convert a STAAD input file to STRAP.

- Select the std file and click open.