SADS V24 Wind Load Input

SADS 21.0.2.4 has implemented major improvements in the input of Lateral Wind Codes 2004 and 2019.

Lateral Load Marks

You can input Lateral Load Marks to Master Data as previous SADS version. The user can add, change and delete Lateral Load Marks as needed:
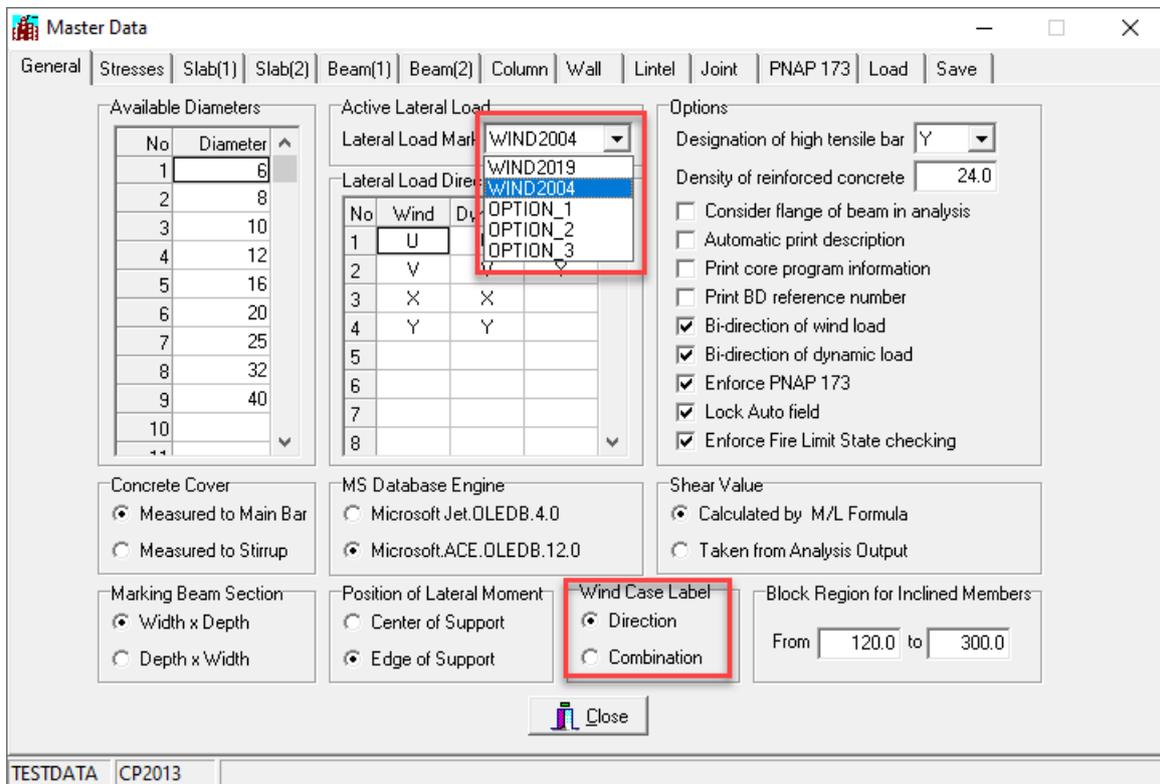
When using the Wind Code 2004, the user should select "Direction" for the Wind Case Label and input as many labels/directions as necessary. This is the same as the earlier versions of SADS.

When using the Wind Code 2019, the user should select "Combination" for the Wind Case Label. The user needs to input 24 Labels to represent these combinations. If the "Bi-direction of wind load" check box is selected, the wind load combinations 1 to 12 are symmetric to wind load combinations 13 to 24. As the result, only 12 labels (instead of 24) are necessary and SADS will compute combinations 13 to 24 accordingly.

Table 2-1 Load combination factors for buildings that may be treated as rectangular

Case	$W_{z,x1}$ $= Max(W_{z,+x1}, W_{z,-x1})$	$W_{z,x2}$ $= Max(W_{z,+x2}, W_{z,-x2})$	ΔT_z
Combination			
1	±1.00	±0.55	±0.55
2	±0.55	±1.00	±0.55
3	±0.55	±0.55	±1.00

Option_1, Option_2, and Option_3 are for the input of user-customized wind load for study or research purposes

The user can then import the results from ETABS associated with these Wind Case Labels for design.

Import Lateral Loads

If users would like to import lateral loads based on Wind Codes 2004 or 2019, say calculated using Excel, into SADS for subsequent processing, it can be done using the Input Lateral Load (TAB delimited text file) module:
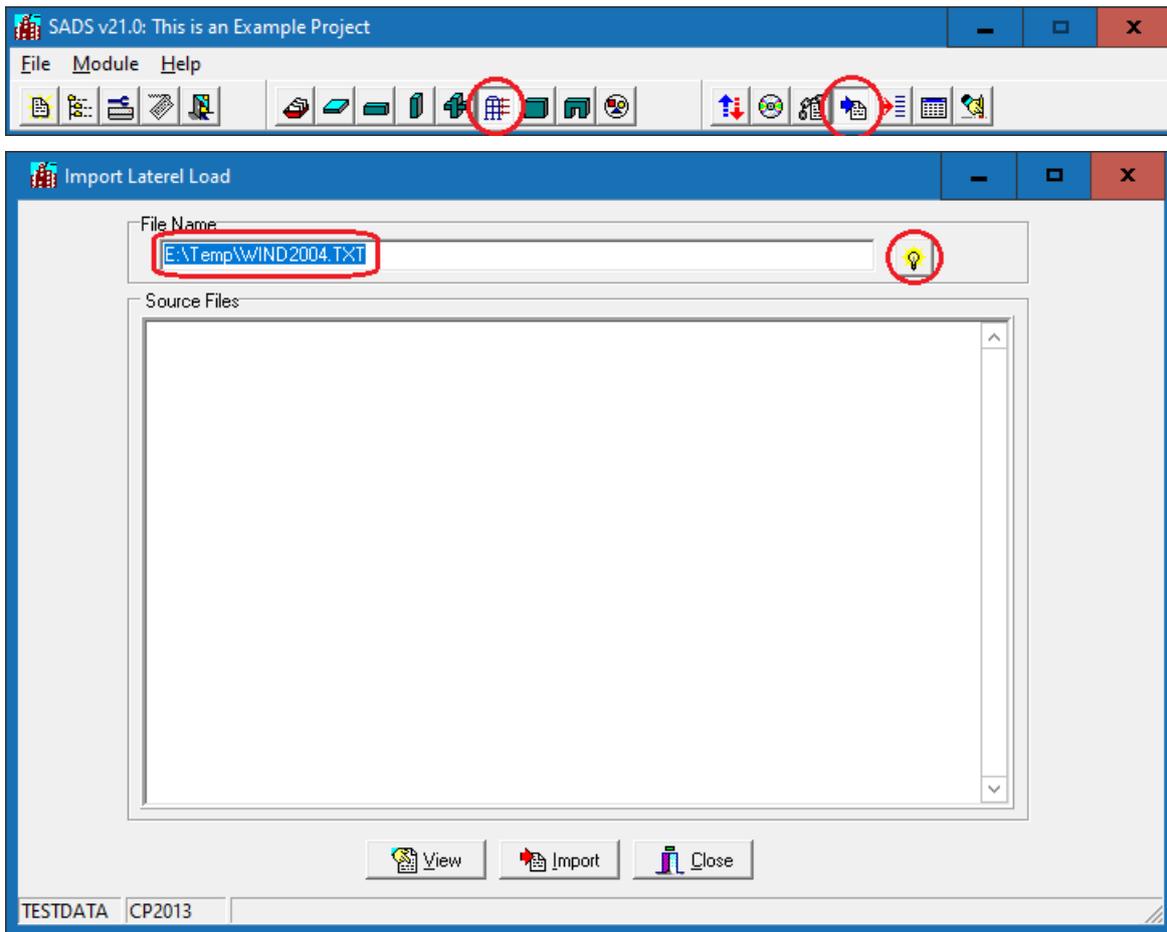
Use the Browse button to locate the text file.
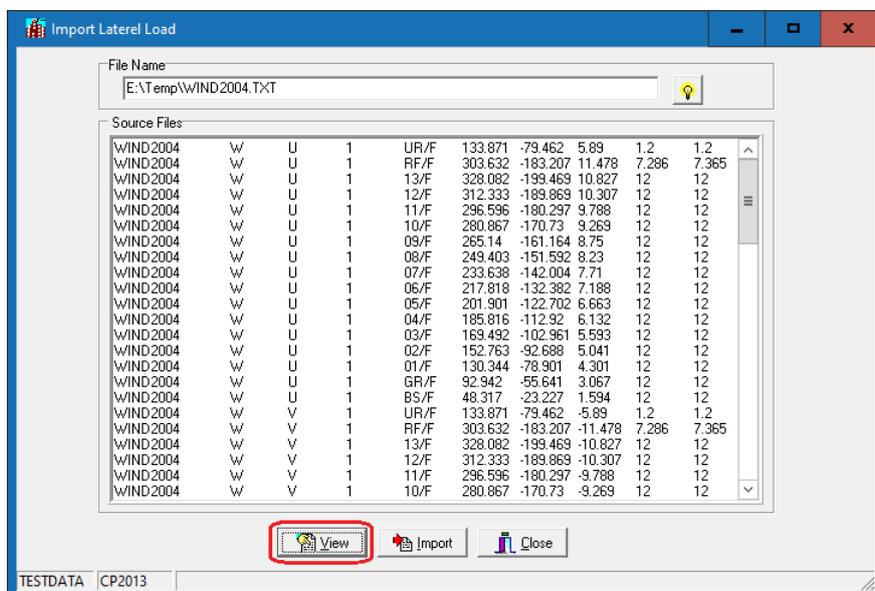
Click the View button to see the format and content of the text file.

If it is correct, click the Import button to import the text file to generate lateral load data for SADS.

Run the Lateral Load Sub-command to see the generated lateral loads:

Calculate Wind Loads Based on Wind Codes 2004 and 2019

As in the previous version, SADS can calculate wind loads using the Wind Load 2004 module:
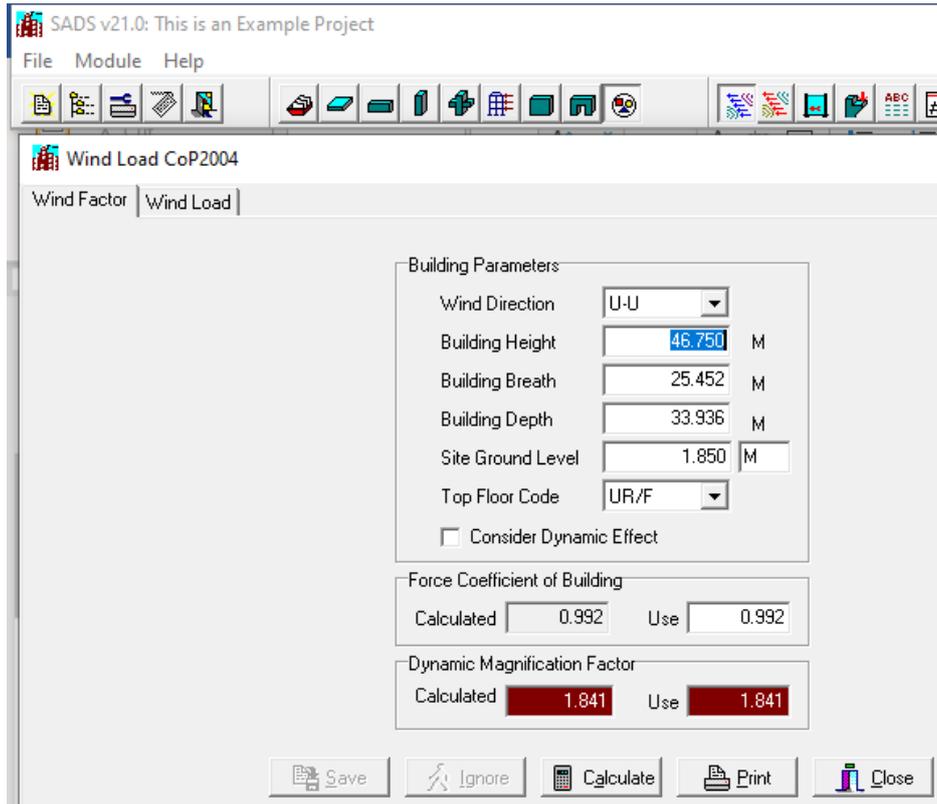
Or the Wind Load 2019 module: