LIST OF FIGURES

For stories between the 20th and 10th stories from the top	linear interpolation between 1.0 and 0.8

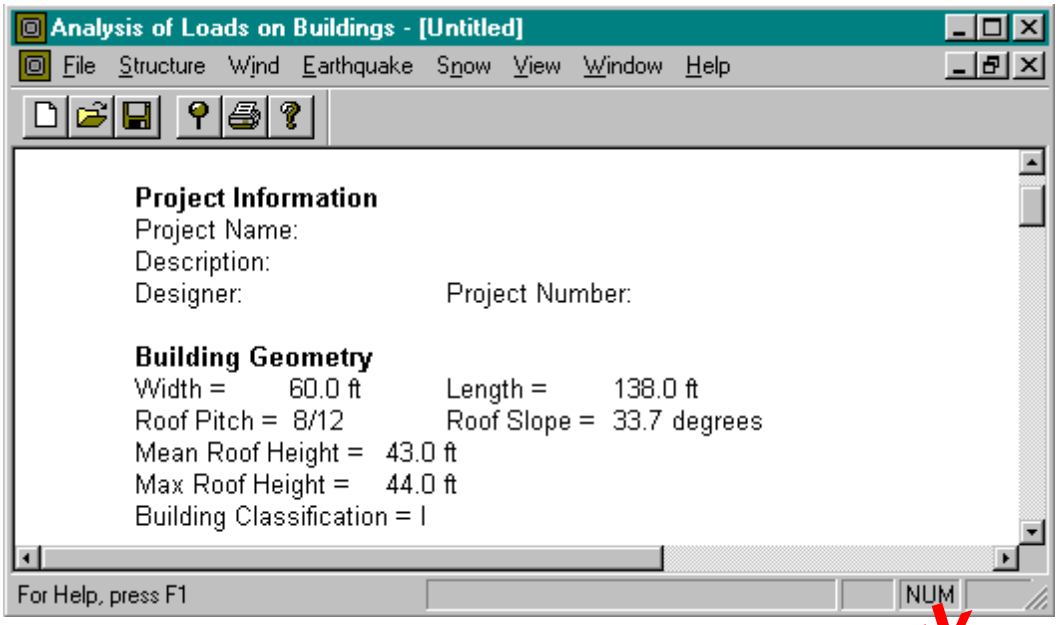

Figure 3-2: Main Window of the Load Analysis Program With an Untitled Project

Once a working project is created, several pull-down menus are displayed on the menu

The check box labeled “Exposure C,” when selected (checked), instructs the program to use the exposure C condition. Recall that in the ASCE 7-93 Standard, components and

tributary areas of 10 and 100. Therefore, those values can be used in fitting the correct equation.

conditional statements to determine the wall pressure coefficient, C_p. Based upon the roof

Initial Data

The Initial Data dialog box is shown in Figure 3-10. Using Figure 9-1 of ASCE 7-93, the effective peak acceleration, A

factor, C_d, are obtained from Table 9.3-2 of ASCE 7-93. The fundamental periods are

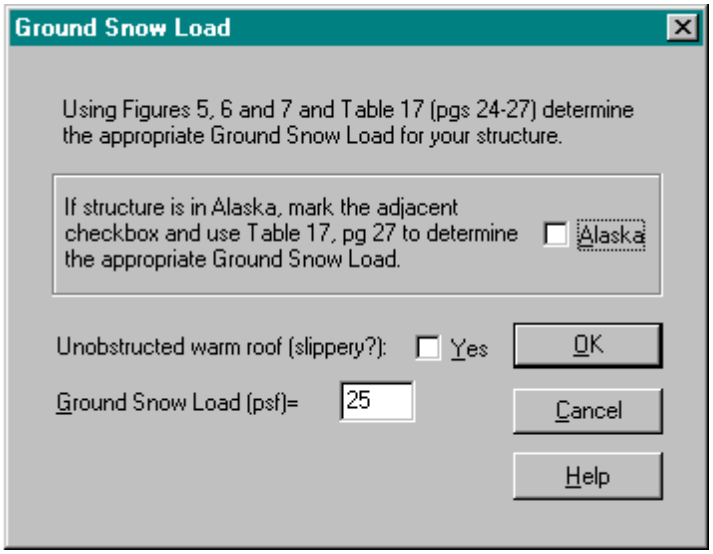

Figure 3-13: Ground Snow Load Dialog Box

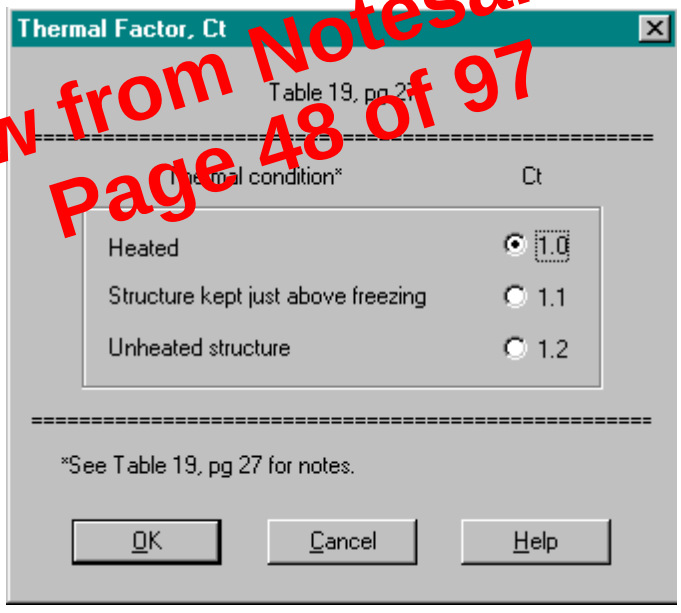

Figure 3-14: Thermal Factor Dialog Box

these calculations were also the same. Output from the Excel spreadsheet for Example 1 is in Appendix B.

Figure A-1: Taskbar Properties adding a program.

A.2 Using Standard Controls

A.4 Example 1-Two Story Residential Building

This step-by-step example is a rectangular, 2 story residential building (house) for which

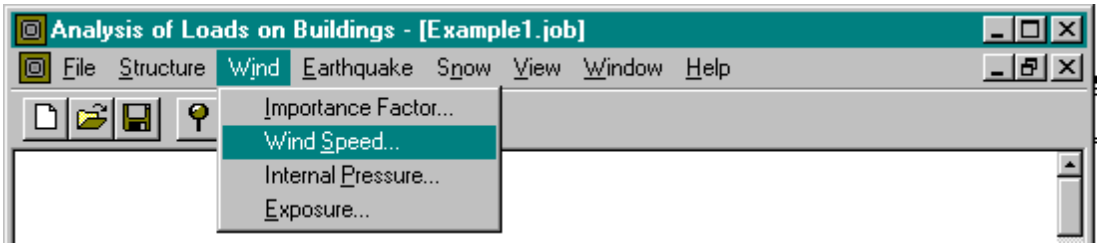

Figure A-14: Wind Speed Command

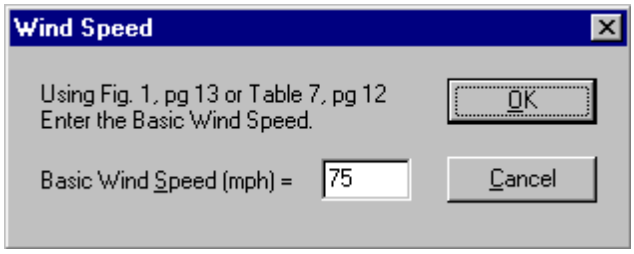

Figure A-15: Example 1 Wind Speed Input

3. Select the Internal Pressure Command from the Wind pull-down menu (See Figure A-

Main Wind Force Resisting System Design Pressures

Roof Design Values (Parallel to Ridge)
Winward Roof(s) = -22.1 psf
Leeward Roof(s) = -22.1 psf

Roof Design Values (Normal to Ridge)
Winward Roof(s) = -24.5 psf
Leeward Roof(s) = -22.1 psf

Wall Design Values
Leeward Wall(s) = -16.4 psf
Side Wall(s) = -22.1 psf
Winward Wall(s)

Story	Elevation	Design Pressure
Roof	82.0 ft	26.4 psf
7	72.0 ft.	25.1 psf
6	62.0 ft.	23.8 psf
5	52.0 ft.	22.4 psf
4	42.0 ft.	20.8 psf
3	32.0 ft.	18.9 psf
2	22.0 ft.	16.7 psf
At 15'	15.0 ft.	14.8 psf

Figure B-8: Example 2 Wind Load Calculations (Continued)

Table B-2: Components and Cladding Manual Wall Calculation Results

Velocity pressure, q = q_h (evaluated at mean roof height)

q_h = 0.613 K_z K_{zt} K_d V^2 (N/m^2)