

How to use a National Annex in EN1991-1-4

Guide on how to use National Annexes in the calculation of wind pressure, according to EN1991-1-4.

Online version: <https://nextgen.sant-ambrogio.it/KB620062>

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The EN1991-1-4 standard for the calculation of the wind pressure on structures allows the personalization of some parameters and formulas according to the information in National Annexes.

The screenshot shows the 'Item Properties' dialog box for a 'Vessel' design condition. The 'Wind profile calculation method' is set to 'Eurocode 1 EN1991-1-4:2005'. The 'National Annex' is set to 'Germany'. Other parameters include Terrain category (1), Roughness length (z0 = 0.01 m), Minimum height (zmin = 2 m), Fundamental value of the basic wind velocity (vb,0 = 20 m/s), Air density (rho = 1.25 kg/m³), Directional factor (c_dir = 1), Seasonal factor (c_season = 1), Orography factor (co = 1), Turbulence factor (kl = 1), External pressure coefficient (cpe = 1), Altitude (A = 0 m), and Exposure factor (ce = 0). The 'Wind' tab is selected in the bottom toolbar.

You can choose from the following options:

- Generic
- Austria
- Belgium
- Czech Republic
- Finland
- France
- Germany
- Netherlands
- United Kingdom
- Slovakia
- Ireland

- Poland
- Slovenia
- Greece
- Romania

For the National Annexes of United Kingdom and Ireland, it is necessary to unlock and manually input, according to the requirements of the standar, the value of "Exposure factor".