

Testovací Projekt

Vítr – EN 1991-1-4 · CZ – ČSN EN 1991-1-4

Testy
Date: 24.06.2026

Wind zone Oblast IV	$v_{b,0}$ 30 m/s	$v_b = c_{dir} \cdot c_{season} \cdot v_{b,0}$ 30 m/s	$q_b = \frac{1}{2} \cdot \rho \cdot v_b^2$ 0,563 kN/m²
Terrain category Cat. III	z_0 (roughness length) 0.3 m	z_{min} 5 m	$k_r = 0,19 \cdot (z_0/0,05)^{0,07}$ 0,2154
c_0 (orografie) 1	C_{pe} 0,8	c_{dir} 1	c_{season} 1

z [m]	ce(z) [-]	qp(z) [kN/m ²]	we = qp · Cpe [kN/m ²]	Width b [m]	qlin = we · b [kN/m]	Height h [m]	F = qlin · h [kN]
21	2,22	1,247	0,998	4	3,991	4	15,963
24	2,31	1,302	1,041	4	4,165	4	16,66
27	2,4	1,35	1,08	4	4,321	4	17,285
30	2,48	1,395	1,116	4	4,463	4	17,852

Wind pressure on roof – Flat roof · href = 30 m

$$q_p(h_{ref}) = 1.395 \text{ kN/m}^2$$

Edge / parapet type	F		G		H		I (-)		I (+)	
	cpe	we [kN/m ²]	cpe	we [kN/m ²]	cpe	we [kN/m ²]	cpe	we [kN/m ²]	cpe	we [kN/m ²]
Sharp eaves	-1.80	-2.510	-1.20	-1.674	-0.70	-0.976	-0.20	-0.279	+0.20	+0.279
Parapet hp/h = 0.025	-1.60	-2.231	-1.10	-1.534	-0.70	-0.976	-0.20	-0.279	+0.20	+0.279
Parapet hp/h = 0.10	-1.40	-1.953	-1.10	-1.534	-0.70	-0.976	-0.20	-0.279	+0.20	+0.279
Curved eave r/h = 0.05	-1.00	-1.395	-1.00	-1.395	-0.30	-0.418	-0.20	-0.279	+0.20	+0.279
Mansard α = 30°	-1.00	-1.395	-1.00	-1.395	-0.30	-0.418	-0.20	-0.279	+0.20	+0.279