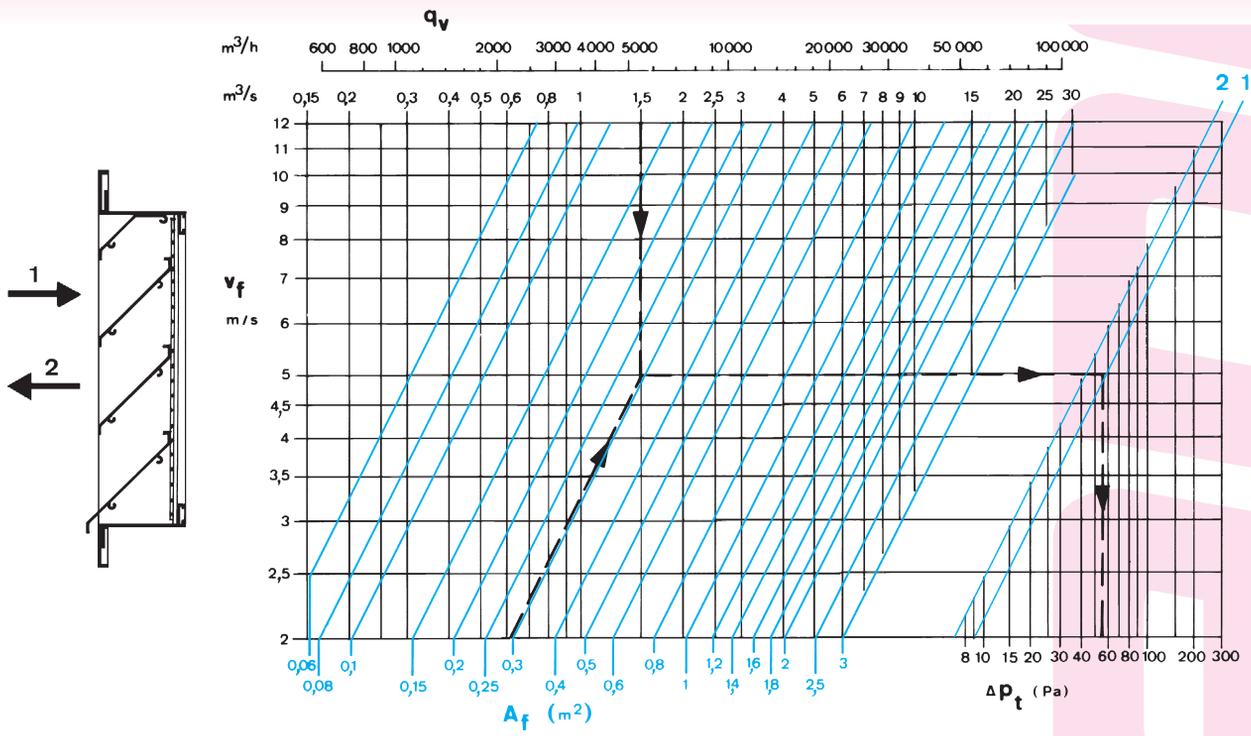
PENTHOUSE WBP

Pressure loss

WBP-3-0-F



Example

- suppose qv = 11000 m³/h
- at vf = 3,2m/s (air velocity between the blades) the necessary surface is: Af = $\frac{11000\ m^3/h}{3{,}2\ m/s \times 3600\ s/h}$ = 0,96 m²
- with table (p. 5 050): nett surface of 1m² gives a surface of 1,6 m² or 1600 mm x 1000 mm or 2 x (L + W) x H = 1,6 m²
- suppose H = 0,6 m
  L + W = $\frac{1{,}6}{2 \times 0{,}6}$ = 1,33 m
- choice: L = 800 mm and B = 500 mm
- with L and B known, the height is calculated the same way
- Δ Pt = 23 Pa at vf = 3,2 m/s for exhaust of air (1)

Remark:
- selection to apply with a regular flow
- with combined penthouses, for supply and exhaust, there is a non-active part with a width of 200 mm