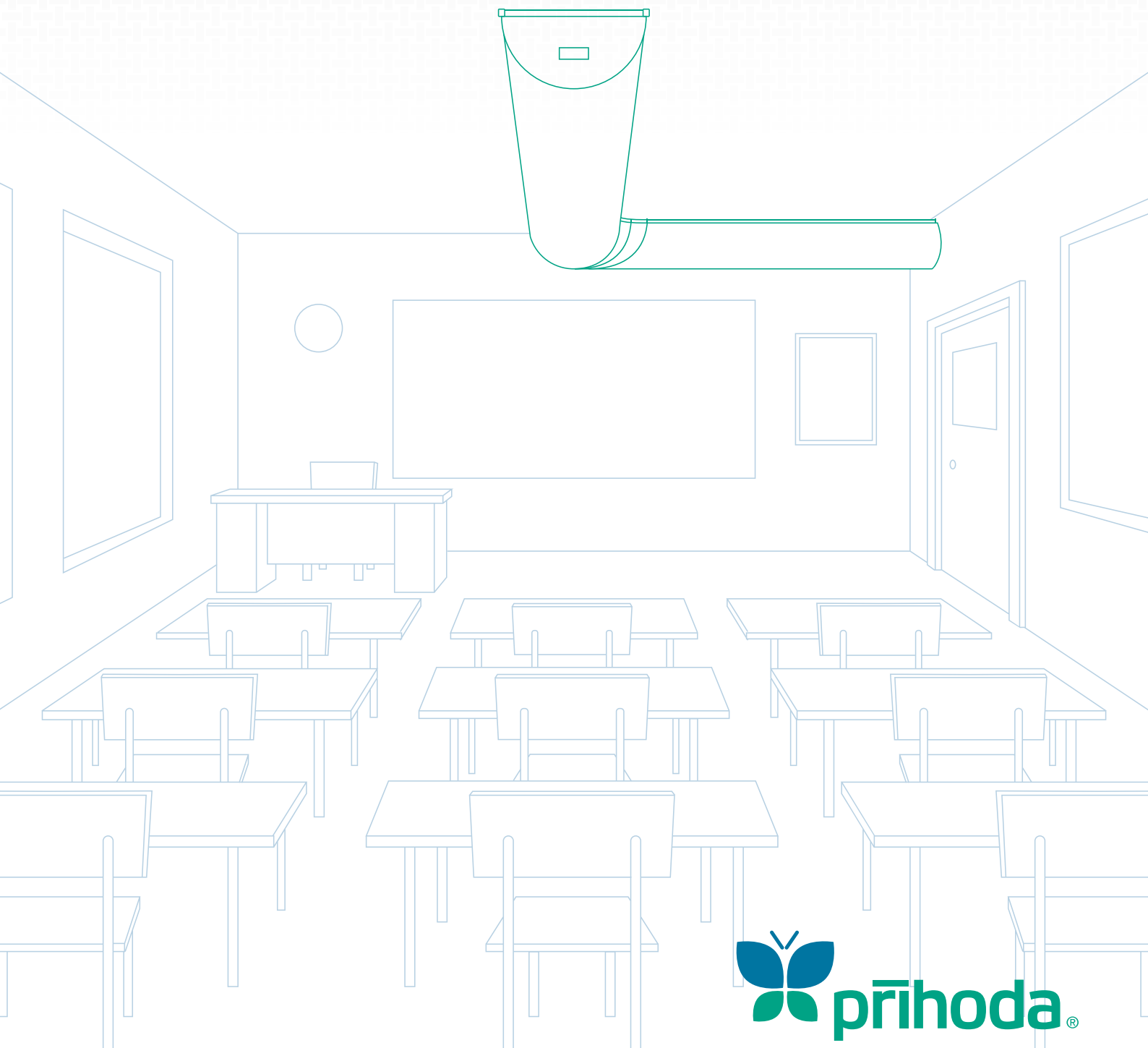


Tailor-made Air Ducting & Diffusers

VENTILATION FOR SCHOOLS

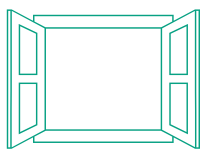


Introduction

Children and adolescents spend more than 20% of their time in the classroom. It is therefore important to ensure that the environment inside schools is of adequate quality. Insufficient ventilation can cause harmful substances to accumulate in the room, which has an adverse impact on performance and health of pupils and teachers. These mainly include carbon dioxide released during metabolic processes, but also volatile organic compounds and formaldehyde from building structures and classroom equipment, as well as radon from the subsoil in some places. The adverse impact of these harmful substances is more pronounced in children, who inhale a larger volume of air in proportion to their body weight than adults!

The situation in schools

Paradoxically, air quality in schools is severely impaired by insulation and the installation of airtight windows, as this also prevents air from entering the room. Ventilating the room by opening the windows is often not possible for safety reasons, but it is also uncomfortable, as the classroom is disrupted by noise from the surrounding area and there are unpleasant draughts in the winter. Most of all, however, opening the window is completely inadequate and unreliable, as proven by an experiment at a secondary school. The carbon dioxide concentration in the classrooms was measured for 3 months and it was shown that the windows were opened just twice a day, sometimes only once. The CO₂ concentration regularly exceeded 6000 ppm, with the acceptable limit being less than 1200 ppm. This is the threshold at which symptoms of fatigue, reduced attention span and headaches occur. It is recommended that people do not remain for any length of time in rooms with concentrations higher than 5000 ppm.



OPEN WINDOW



AMBIENT
DISRUPTIVE NOISE



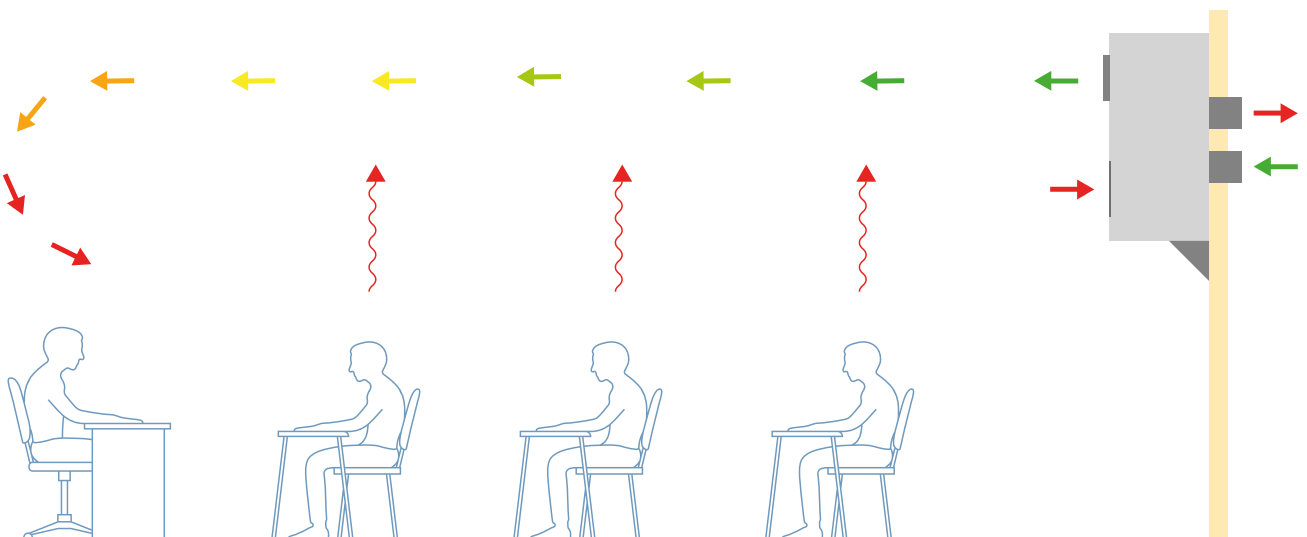
DANGER
OF FALLING



UNPLEASANT
WINTER DRAUGHT

Unit without air distribution

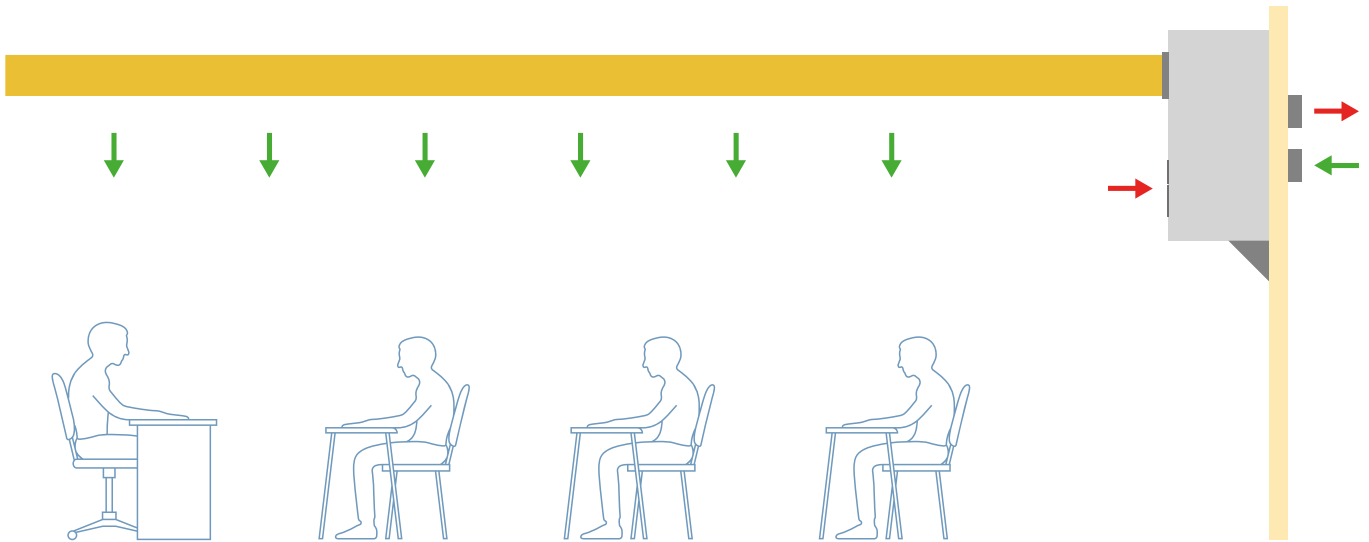
The ideal solution is forced ventilation, which maintains a constant supply of fresh air. For both basic variants (a central system for the entire school and local ventilation for each classroom separately), proper air distribution is important. Omitting air distribution means the need to ventilate with a secondary air flow that may already be contaminated.



Local unit in classroom without air distribution - risk of fresh air being contaminated!

Uniform air distribution

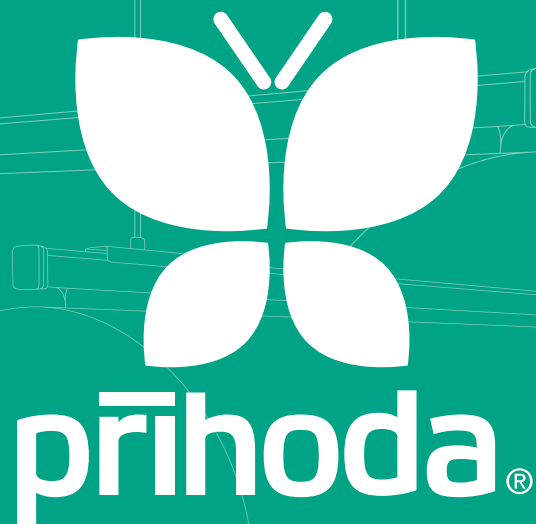
Fabric diffusers provide a sufficient amount of completely fresh air to each pupil without bothering them with high-velocity air dispersion. Their distribution elements are chosen to suit the situation in the classroom, in order to guarantee the necessary flow. The immense flexibility offered by the infinite number of combinations of small nozzles, perforations and micro-perforations ensures excellent results. The option to have any colour scheme or to use patterns or images that do not look overly technical and disrupt the interior but actually complement it nicely, is a very useful advantage.



Local unit in the classroom with fabric diffusers - controlled supply of fresh air



ENG



PŘÍHODA s.r.o.

 Za Radnicí 476, 539 01 Hlinsko, EU-Czechia

 +420 469 311 856  info@prijoda.com

 www.prijoda.com