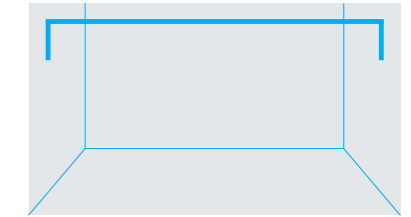
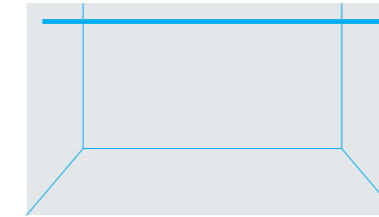
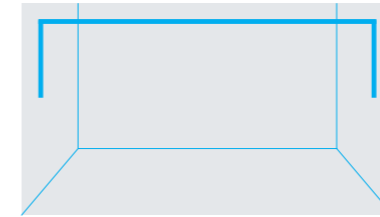
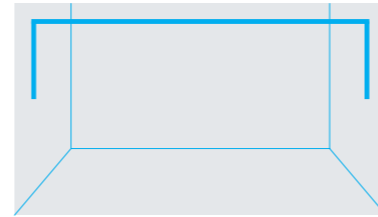
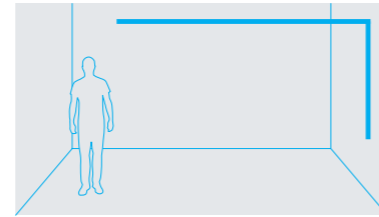
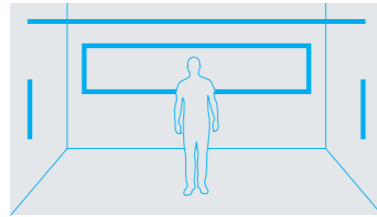


ROOM BY ROOM GUIDE FOR **LEARNING SPACES**

SIMPLY THE RIGHT SOLUTION

Creating a healthy and safe learning environment is a matter of uniting acoustic comfort, fresh air and visual coherence. It's that simple – with the right solution.



ROOM FOR...	INTERACTION	LECTURES	CONCENTRATION	ACTIVITY	SERVICE	SPORTS
	Learning environment for children and students; workplace for teachers; Interaction (ex. Classroom, special education, open space)	Learning environment for students. Work environment for teachers. One-way communication (ex. Auditoriums)	Group work. Study environment. "Privacy". (ex. Group work rooms, meeting rooms, open space, libraries)	Learning environment for students, work environment for teachers. Teaching & learning through activity / by doing. Changing activities (ex. music, workshop, lab)	Working environment for service staff. Hygiene regulation (ex. bathrooms, kitchen)	Bright and comfortable surroundings for sports and games. (ex. gym hall)
ACOUSTIC COMFORT	<ul style="list-style-type: none"> Speech comfort (speak without straining the voice cords) Listen comfort (hear clear speech and rethorics) Optimise daylight (with light diffusing material) Improve air quality with diffuse ventilation 	<ul style="list-style-type: none"> Speech comfort (speak without straining the voice cords) Listen comfort (hear clear speech and rethorics) Improve air quality with diffuse ventilation 	<ul style="list-style-type: none"> Privacy (undistrubed interaction comfort) Reduce noise Optimise daylight (with light diffusing material) Improve air quality with diffuse ventilation 	<ul style="list-style-type: none"> Reduce noise Sound reduction between rooms Optimise daylight (with light diffusing material) Improve air quality with diffuse ventilation 	<ul style="list-style-type: none"> Absorb low frequecy sounds Minimise dust deposits (use dust-repellent ceiling surface) 	<ul style="list-style-type: none"> Reduce noise Impact resistant material
SERVICE LIFE	<ul style="list-style-type: none"> Robust, longlasting material Repaint without acoustic loss Easy access to installations 	<ul style="list-style-type: none"> Robust, longlasting material Repaint without acoustic loss Easy access to installations 	<ul style="list-style-type: none"> Robust, longlasting material Repaint without acoustic loss Easy access to installations 	<ul style="list-style-type: none"> Robust, longlasting material Repaint without acoustic loss Easy access to installations 	<ul style="list-style-type: none"> Hygiene & cleaning Robust, longlasting material Easy access to installations 	<ul style="list-style-type: none"> Robust, longlasting material Cleaning
RECOMMENDED PRODUCTS	Ceiling: Plaza Plus with Unity 3 perforation Walls: DANOloft® Unity Unity 3 perforation	Ceiling: Plaza Plus with Unity 3 perforation Walls: DANOloft® Unity Unity 3 perforation	Ceiling: Plaza Plus with Unity 3 perforation Walls: DANOloft® Unity Unity 3 perforation	Ceiling: Plaza Plus with Unity 3 perforation Walls: DANOloft® Unity Unity 3 perforation	Ceiling: DANOtile as hygiene ceiling	Ceiling & walls: Contrapanel Globe in ceiling and on walls
AMOUNT AND PLACEMENT OF ACOUSTIC MATERIALS	100% ceiling surface 10-20% of ceiling surface on walls Wall linings placed at "ear level" Expected rev. time: 0.5-0.6 sec.	80-90% ceiling surface 10-20% of ceiling surface on walls Acoustic materials placed away from speaker Expected rev. time: 0.9-1 sec.	100% ceiling surface 50% of ceiling surface on walls Wall linings placed in different places Important to create sound barriers for optimal privacy Expected rev. time: 0.4-0.6 sec	100% ceiling surface 50% of ceiling surface on walls Expected rev. time: 0.4-0.6 sec.	100% ceiling surface Expected rev. time: 0.7-0.8 sec.	100% ceiling surface 20% of ceiling surface on walls Priority given to walls in length direction of room to prevent echoes Expected rev. time: 1.5-2.0 sec.

