



Designed for possibilities.
Made for people.



Floor + wall solutions for Education

How interior finishes can make an impact in learning environments

Your guide to floor and wall finishes that enhance the hygiene and durability of educational facilities.





The opportunity to redesign or construct new school buildings is often a once-in-a-lifetime experience for teachers, school boards, and the local community. Because education is constantly changing, school buildings should be designed to allow for flexibility to accommodate for future learning styles and technology. Buildings should allow for simple, low-cost expansion.

Every school plan should incorporate the Department of Education's Space Allocation Guidelines. It is the responsibility of the design team to fit to these guidelines and include the school districts educational specifications and preferred teaching methods.

Designing for education

Schools have many different areas, all with diverse needs. From classrooms and corridors to faculty lounges and science labs, each area demands its own unique requirements but the need for lasting value is always there.

Altro is a perfect fit for these areas because our products offer:

- Long-term durability
- Reduced maintenance
- Impressive value
- Safety and hygiene
- On-trend color palettes

Contents

Designing for those with disabilities	3
Mental health spaces in schools	3
How interior finishes can impact learning	6
STEM's influence on classroom design	7
Indoor air quality	10
Flooring for education	11
AQT: A better alternative	13
Wall cladding for education	15
Floor plan	17
Area overview	19
Dr. Rick DeCristofaro Learning Center	23
University of Maine	25

Designing for those with disabilities

Designing for disability in classrooms is one of the most impactful ways architects can help education. Students with disabilities have just as much right to a quality educational experience as other students. When all students have an accessible and supportive space to learn in, they go on to live happier, healthier lives outside of school.

Architects and designers have to follow a number of strict regulations when they design new school buildings. For example, the ADA requires architects to design schools that provide equal opportunities for able and non-able persons, to ensure the building provides equal access to everyone and allows everyone to experience similar experiences.


By taking a universal design approach we may account for those with disabilities. Universal design allows both able and non-able persons to have similar experiences within a building. This means that students with disabilities aren't excluded, separated or required to use their own entrances. Instead, designers make every area of the school more accessible.

Mental health spaces in schools

Equally important in modern design is accounting for mental health in schools. Creating environments that promote positive mental health is an important design trend that continues to grow in education design. Designers are charged to make spaces that promote mental health well being and that are:

- Inspiring
- Energizing
- Motivating

When creating these environments in education, incorporating three key fundamentals can help facilitate the rehabilitation process for everyone involved – promoting healing, preventing harm and fostering safety and security.

See our **Designing for Behavioral and Mental Health**  brochure for more information.







How interior finishes can impact learning

Color and design

Ask a teacher what influences learning and you'll hear teaching methods, how students learn differently, outside influences and the school's curriculum. Chances are they won't mention classroom finishes, such as the color of the flooring.

Inherent in everything we do and see, color influences everyday life through our productivity, communication and emotion.

Emotions brought about by color can influence a student's work or study habits. Studies show a direct link between color and feelings, certain colors promoting positive and others negative. The right color helps denote a room's purpose - relaxation, studying, collaboration, test-taking and more.

When it comes to flooring color selection, there is no silver bullet. Looking at the effects of color and translating that into the learning space's purpose can serve as a guide on what colors fit where.

- ☒ Promote learning, while not overpowering students with neutrals, by using greens and blues as the base of classrooms and libraries.
- ☒ Add splashes of bright color to areas that demand attention (chalkboard, smart board) or should stand out (doorways, restrooms, stairwells).
- ☒ Incorporate bold colors within a neutral interior design by using it as accents and way-finding.
- ☒ Common areas should be more vibrant than classrooms and libraries. Additional color welcomes conversation and excitement.
- ☒ Welcome visitors by showing school spirit - incorporate school colors and/or logos in front entry.
- ☒ Young children thrive in environments designed with bright colors, so keep students' ages in mind. More color can be used with this demographic than older students - without worry of over-stimulation.



Inherent in everything we do and see, color influences everyday life through our productivity, communication and emotion.



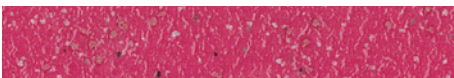
Neutrals – Clean, pure, restful, and noninvasive.



Earth tones – Stability, approachable, warm, and soothing.



Red – Bold, releases adrenaline, elevates blood pressure and heart rate.



Pink – Soothing, affectionate, and happiness. Can stimulate energy.



Orange – Energy, warmth, and joy.



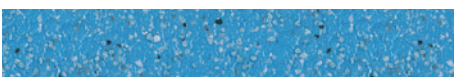
Yellow – Alertness and optimism. Can cause eye fatigue in large areas.



Green – Balance, restful, healing, and nature.



Turquoise – Refreshing, relaxing, and invigorating.



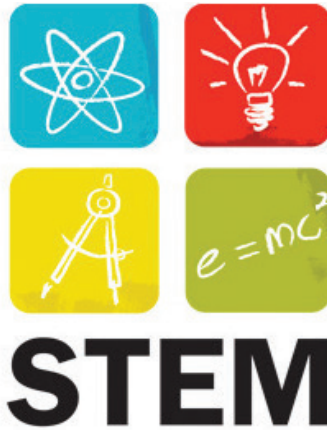
Blue – Calming, lowers blood pressure and heart rate.



Purple – Promotes creativity, spirituality, and perception.

STEM's influence on classroom design

The best architects and designers of K-12 STEM spaces today understand what real-life STEM programs entail. STEM classrooms must be adaptable, flexible, mobile and ergonomic. The same room can be a teaching lab, a team based learning classroom, a computer lab, a lecture classroom and/or a student project workshop.



science • technology
engineering • math

STEM classrooms are used for a changing learning curriculum, the spaces have to be adaptable, durable, easy to maintain and support many activities.

STEM's impact on flooring + wall cladding

- Durability to withstand wheeled furniture
- Resistance to chemicals and staining
- Low maintenance, easy to maintain products
- Impact-resistant walls

"Prepare yourself for noisy, exuberant classrooms where multiple right answers abound and failure is regarded as a positive step toward discovery and successful solutions."

Anne Jolly
STEM by Design





Children are the

most at risk





Indoor air quality

The importance of good indoor air quality cannot be stressed enough. We spend as much as 85-90% of our days indoors, where the concentration of VOCs and other pollutants is many times worse than outdoors.

This is more important for children because they have higher metabolisms than adults and are more susceptible to the effects of indoor pollutants. These can also interfere with learning and have a greater, long lasting effect on kids. Not to mention teachers and staff who spend countless additional hours in the building being affected by this as well.

This is why it is important that only low VOC emitting flooring, wall cladding, and adhesives be used. Products that comply with FloorScore or the CA 01350 standard for low VOC emitting materials are recommended.

Maintenance should be considered as well. Products that require routine toxic sealers and polishes will off-gas after each time they are maintained.

Important considerations

- Use only flooring with FloorScore or CA 01350 certification
- Avoid products that require heavy polish and wax
- Use solvent-free, low VOC adhesives or adhesive-free flooring
- Clean and maintain flooring with low VOC cleaners

“ (Children) are spending as much as **three years** during the most developmental parts of their lives in schools, exposed to **chemicals**. ”

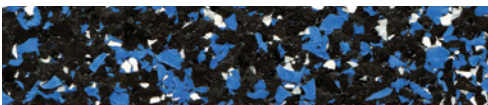
Tile and plank



Altro Quartz Tile



Altro Dolce Tile



Altro Ollero (Rubber tile)



Altro Lavencia LVT/LVP



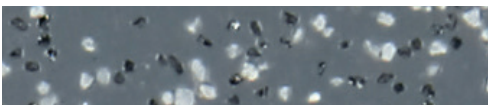
Altro Wood

General use



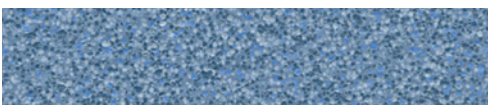
Altro Walkway 20

General use



Altro Classic 25

Kitchens, industrial areas



Altro Aquarius

Showers

Flooring for education

School classrooms go from calm to chaos and back again throughout the day. The floor you choose contends with constant use from trampling feet, activity debris and chair-scraping.

In a time where school budgets are stretched, districts look to create versatile spaces that provide maximum value to the teachers and students. This flexibility is appealing, but is only as good as the floor it's designed with.

Flooring that is durable, while also reducing maintenance costs, always gets high marks for creating superior learning environments that meet tight school budgets.

Altro offers a variety of top-notch flooring products designed for schools and colleges. From durable tiles to hygienic sheet goods, we have solutions for every area of the facility.

Benefits of Altro flooring

- Extensive color + pattern palette
- Expansive options, tile, plank, sheet
- Superior durability, up to 3,000 psi
- Wax-free flooring options
- Occupancy-ready flooring options
- Class 1 Fire and Smoke Ratings
- Low VOCs, lead-free and phthalate-free

Vinyl sheet goods

Altro Quartz Tile (AQT): A better alternative

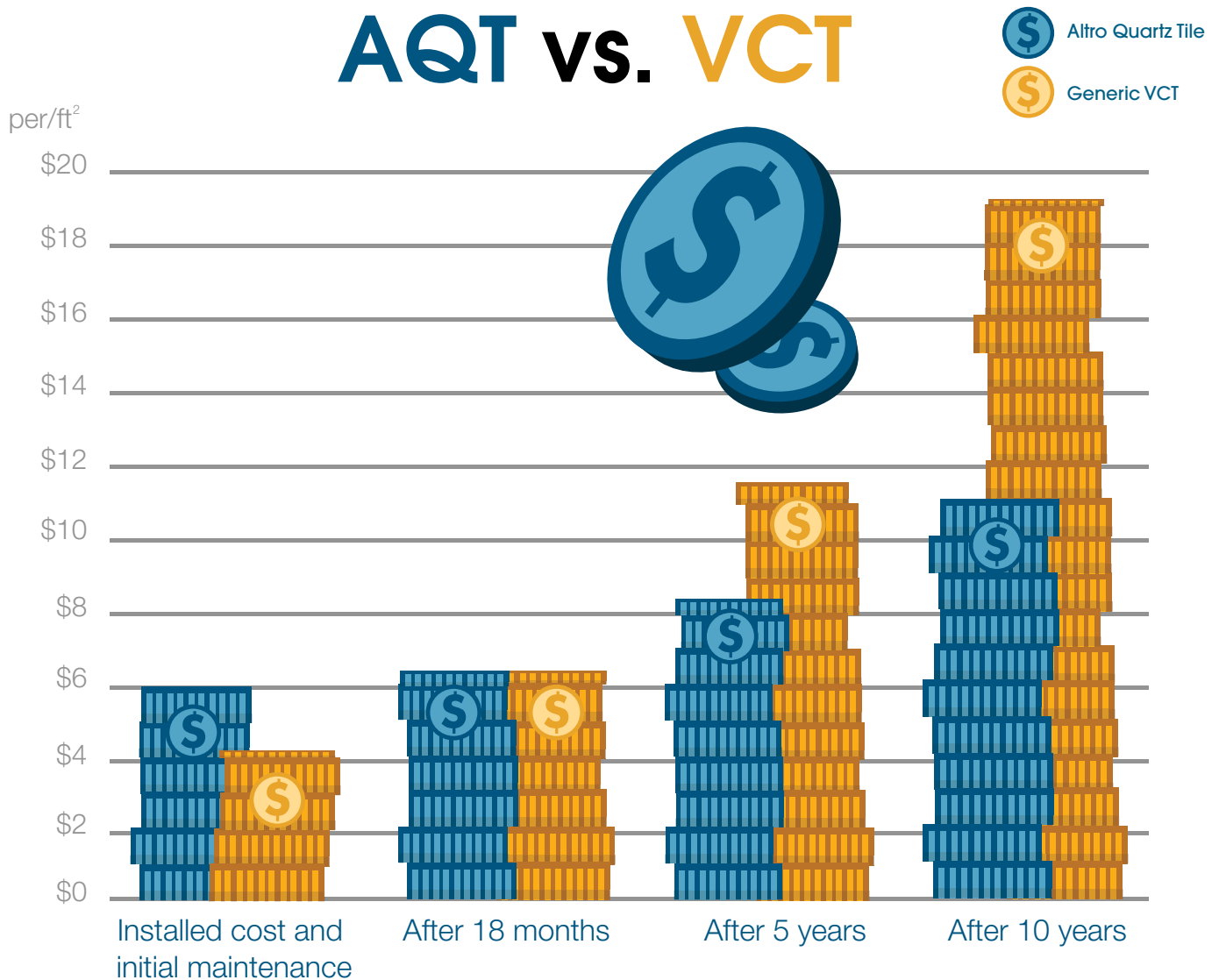
Vinyl Composition Tile (VCT) attempts to lure you in with low installation cost, but don't take the bait. Constant maintenance over VCT's useful life can cause your total costs in under five years to be more than an Altro product's in 10.

When choosing flooring, cost to buy and initial installation are important. However, if you don't add maintenance costs over time to the equation, you'll end up spending much more throughout the product's life.

That is why VCT is cheap to buy, yet expensive to own.

Benefits of Altro Quartz Tile

- 7 times more durable than VCT
- Low maintenance
- No finish required
- Occupancy ready
- Faster installation than VCT
- 15 year warranty
- Higher vinyl content



Installing Altro Quartz Tile over traditional VCT can save \$8.75/ft² over a 10 year life cycle. **A total dollar savings of \$9,750***



AQT doesn't require constant stripping and waxing like VCT, resulting in thousands of dollars saved in maintenance costs and staff time.

Wall cladding for education

In education, hygiene and safety are of paramount importance to protect children and teachers alike. It's important that students are able to learn, have fun and enjoy their education without having to worry about health and safety of the built environment.

The Altro walls system was introduced over 40 years ago and has been a market leader ever since. Providing creative freedom to designers, specifiers and end users, our effective, impervious walls systems deliver a safe, hygienic, decorative and fire-compliant walls solution.

With a range of digitally printed and custom etched options available, you're able to personalize our products and make them stand out from the wall. Whether that's using graphic designs, matching a school color, or using a logo, we've got you covered.

Benefits of Altro walls:

Extensive color + pattern palette

- Non-porous, hydrophobic
- Extremely durable and chemical resistant
- Resists bacterial growth
- Class A fire rated + CAN/ULC tested
- Low VOCs, lead-free and phthalate-free
- Custom printed options with quick turn around
- Etched grout lines that maintain hygiene
- Extremely low maintenance

Decorative wall cladding



Altro Whiterock PopArt

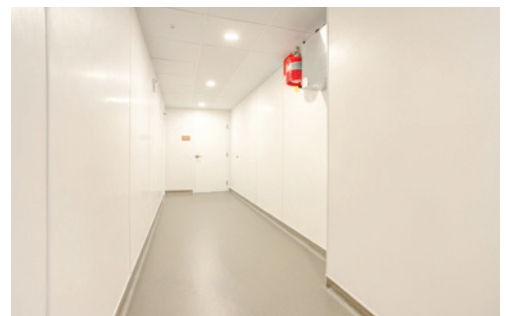


Altro Tegulis

Wall covering and protection



Altro Fortis Titanium 15



Altro Puraguard



Product(s) shown: Altro Whiterock PopArt



Teachers' lounge
Altro Lavencia

To other classrooms
Altro Dolce Tile,
Altro Quartz Tile,
Altro Lavencia



Kitchen
Altro Classic 25,
Altro Puraguard



Cafeteria
Altro Dolce Tile,
Altro Quartz Tile,
Altro Lavencia



Area overview

To ensure your flooring is fit for purpose, we recommend different flooring ranges to meet the diverse needs found within schools, colleges and universities.



Library

Altro Wood Acoustic,
Altro Serenade

To other classrooms

Altro Dolce Tile,
Altro Quartz Tile,
Altro Lavencia



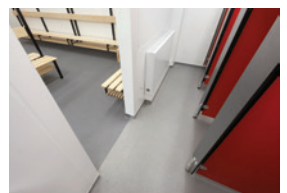
Men's locker room

Altro Aquarius,
Altro Whiterock



Gymnasium

Altro Ollero



Women's locker room

Altro Aquarius,
Altro Tegulis

Computer cafe



Classrooms

Studies have shown that classroom design can impact a child's academic progress by as much as 25% during a school year as well as boost morale, enhance safety and foster student collaboration.

It's important that the right products and colors are used in these spaces to foster learning while offering the durability to withstand frequent reconfiguration occurring in flexible STEM learning classrooms.

Top product choices

- Altro Quartz Tile
- Altro Dolce Tile
- Altro Lavencia



Cafeterias

The constant presence of food and beverages, as well as moving tables, chairs and plenty of foot traffic requires a unique combination of products to meet the demanding needs of busy cafeterias.

Altro Quartz Tile is a great smooth option, while slip-resistant sheet vinyl can offer enhanced safety and durability around lunch lines and areas of likely spillage. Altro Lavencia LVT may also be used to evoke a high end look, especially important for college and university cafeterias.

Top product choices

- Altro Quartz Tile
- Altro Lavencia
- Altro Wood
- Altro Dolce Tile
- Altro Walkway 20



Gymnasiums and athletic areas

Heavy foot traffic and equipment can erode surfaces, making them susceptible to cracking and chipping, creating space for bacteria to evade maintenance, compromising student and faculty health.

Altro Ollero is a durable rubber flooring solution for heavy-duty environments. Comfort backed products like Altro Wood Acoustic and Altro Serenade can be used in light gym and aerobic areas.

Top product choices

- Altro Ollero
- Altro Wood Acoustic, Altro Serenade for light gym and aerobics
- Altro Fortis Titanium 15 wall covering



Residence halls

Studies have shown that student housing is proven to be a major role in student admission decisions. This requires flooring that not only looks beautiful but will last without costly or even routine maintenance.

Altro Lavencia LVT/LVP is the perfect flooring solution for dorms. Altro Lavencia offers amazingly realistic visuals in an array of sizes and finishes. Great looks aside, Altro Lavencia's outstanding performance is just what you expect from Altro.

Top product choices

- Altro Lavencia
- Altro Tegulis wall cladding



Hallways and corridors

Rigorous foot traffic stampedes through hallways and corridors daily, so flooring must stand up to everyday demands and be easy to clean.

Choosing the right flooring in these high-traffic areas is critical for visual impact and way-finding, as well as controlling long-term maintenance costs.

Top product choices

- Altro Quartz Tile
- Altro Dolce Tile
- Altro Fortis Titanium 15 wall covering



Showers + Bathrooms

When water is around the potential for slips and falls can rise exponentially. Altro Aquarius is the perfect solution for these areas as it provides a slip resistant surface to both shoe and barefoot traffic.

Combine with Altro Whiterock to create a complete solution for wet environments. Together these products form a water-tight, hygienic envelope that has become the industry standard for wet environments.

Top product choices

- Altro Aquarius
- Altro Fortis Titanium 15 wall covering
- Altro Tegulis wall cladding



Kitchens

Commercial kitchens are one of the toughest environments for floors. Constantly exposed to slippery contaminants, floors in a busy kitchen can be a safety hazard. Thankfully our Altro Classic 25 flooring product offers superior slip resistance in greasy or wet conditions.

With over 50 years of experience in commercial kitchens, Altro has products, accessories and knowledge to create a total kitchen solution.

Top product choices

- Altro Classic 25
- Altro Puraguard wall protection



Laboratories

Whether it is a full-scale university medical research lab or an introduction to chemistry class, school laboratories can be a harsh environment for floors and walls.

With resistance to a multitude of chemicals and substances, Altro's high performance flooring and wall cladding products are designed to meet the demanding needs of school labs.

Top product choices

- Altro Reliance 25
- Altro Symphonia
- Altro Quartz Tile
- Altro Whiterock wall cladding

Altro in action: K-12

Dr. Rick DeCristofaro Learning Center

Altro floors make the grade in every shade

Quincy, Massachusetts, USA

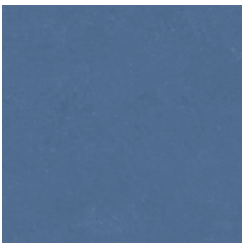
The Dr. Rick DeCristofaro Learning Center is a 57,000-square-foot, three-story facility comprising 30 classrooms. Acquired by the City of Quincy in 2020, the building underwent a comprehensive renovation in collaboration with Wessling Architects to establish a distinctive school for Pre-Kindergarten through Grade 8 students. The Learning Center's educational program caters to students requiring significant support in communication, academics, and social and emotional development within small, specialized classrooms. Wessling Architects working alongside Altro sales representatives, specified approximately 6,100 square yards of Altro Orchestra and Altro Symphonia for the renovation.

"Considering the unique needs of this population, great care was taken to ensure that the flooring was environmentally friendly and easily maintained with a maximum life expectancy. Of additional importance was the reduction of sound and increased protection from vibration resulting from the movements of furniture and activities of young children. Altro vinyl sheet was selected as the flooring for all classrooms, corridors, therapy and staff rooms for meeting these criteria as well as providing a smooth, comfortable and slip-resistant surface."

Altro Orchestra is engineered to create the ideal environment to heal, learn and live while making life easier on the feet of students. Wessling Architects also opted for Altro Symphonia due to its sustained slip resistance and industry-leading durability.

The Quincy Public School Department asked that each of the five floors of classrooms have a different themed "neighborhood" that the children could identify with. These neighborhoods - Storybook, Seasons, Rainforest, Garden, and Waterworld are defined through use of color, materials and pattern in classrooms and corridors. Altro's wide range of colors and design flexibility ensured that each neighborhood would have its own identity.

From concept to construction, this project spanned four years. Progress was impacted by the transition from in-person to virtual meetings, supply chain issues and increased material costs during the Covid-19 pandemic. Despite numerous changes and adjustments to the project scope, Altro remained the standard for classroom and corridor flooring due to Altro Orchestra and Altro Symphonia's wide range of colors and design flexibility, as well as their smooth, comfortable and slip-resistant surface.



Altro Orchestra



Altro in action: Higher education

University of Maine at Augusta Medical Laboratory

A formula for flooring success

Augusta, Maine, USA

Established in 1965, the University of Maine at Augusta (UMA) is the third largest public university in Maine and serves over 5,600 students. UMA offers top-quality, career-focused degree programs designed for today's workplace.

One of the pathways offered is Medical Laboratory Technology. This program was created through a collaborative effort between the University of Maine at Presque Isle and the University of Maine at Augusta due to the significant demand for medical laboratory technicians, with approximately 40% of the current laboratory workforce being within five to ten years of retirement.

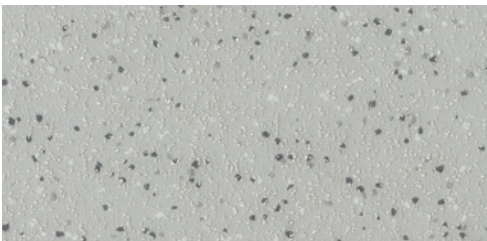
In the final semester of this program, students will gain hands-on experience while participating in a supervised clinical practicum at an affiliated hospital laboratory. Lavallee Brensinger Architects worked alongside the University of Maine at Augusta to design a medical laboratory that would prioritize safety for students and staff, without sacrificing aesthetics.

To maintain high standards of cleanliness, laboratory floors require a smooth surface that's easy to clean and to keep dust-free. They must also withstand

chemical spillages and be stain-resistant to avoid lasting damage. Lavallee Brensinger Architects specified Altro Symphonia due to its stain and chemical resistance features, as well as its extensive color palette.

Altro Symphonia has been re-engineered with Altro ShieldTec and Altro Easyclean for revolutionary stain, chemical and abrasion resistance. Additionally, its palette features a range of stylish colors reflecting contemporary trends and diverse interior design needs from across the globe.

With 330 square yards of Altro Symphonia installed, the University of Maine at Augusta can confidently provide its students and staff with a safe, durable, and visually appealing flooring solution that meets the rigorous demands of laboratory settings.



Altro Symphonia



Cleaning

Proper cleaning is essential to keeping a facility hygienic no matter which interior finishes are selected. We highly recommend that a cleaning and sanitizing program is created specific to your facility that utilizes the resources and products as recommend by individual manufacturers.

Our cleaning guidelines are available at [altro.com](https://www.altro.com)

Samples

Altro recommends that color selection is never made through printed or digital materials. Please order a physical sample for color and pattern approval before placing your order with us.

Order samples 24 hours a day at [altro.com](https://www.altro.com) or find us on Material Bank.



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