Floor and wall solutions for commercial kitchens

Safety flooring and durable wall protection to create an integrated kitchen solution

discover altro.com/kitchens
Typical applications include kitchens, bakeries, bars, commissaries, grocery stores, food and beverage manufacturing, serveries, food courts, service corridors, industrial areas.

Whether it’s a commercial kitchen or a workplace cafeteria, a five-star hotel or a chain of restaurants and cafes, safety, hygiene, the ease and speed of installation and cost are all top of mind when working with our customers.

You also need to make sure that everyone from the Executive Chef to the four-year-old sitting down to lunch is safe and, better yet, that the food is safe to eat. Safety flooring engineered for these demanding environments teamed with durable wall protection will provide long-lasting, safe and cleanable surfaces for wet, dusty and greasy conditions.

We have specifically designed our safety flooring and wall protection to address the issues commonly found in kitchens – slips, contamination, cleaning and maintenance.

Our system doesn’t just protect the people who use it; it also protects the environment and those responsible for the health and safety of employees and visitors. We thoroughly test our products, exceeding industry standards for safety and hygiene to ensure you have the best solution for your business.

Altro safety flooring consistently outperforms quarry tile and epoxy floors. It has become the industry standard to help create durable and safe commercial kitchens that last.
Checklist for kitchens

- Meet with Altro rep
- Identify needs and risks; select appropriate products
- Utilize our kitchen detailing guide, CAD, BIM and other helpful tools
- Select qualified installer that has attended an Altro training clinic
- Order flooring, wall protection, accessories, adhesives, etc.
- Conduct pre-installation walkthrough and review
- Complete installation
- Conduct post-installation walkthrough and review cleaning protocols
- Maintain products according to our recommendations
Keep it clean

Keeping people safe isn’t just about slip resistance and cleaning. It’s about preventing contamination.

Our integrated hygienic wall panels and safety flooring system is tank-able. It has impermeable surfaces, which are easy to keep clean. With regular cleaning and maintenance using traditional solutions, Altro floors and walls do not allow a place for bacteria to grow.

It’s so tough, you can power wash all surfaces and not cause surface damage that can lead to bacterial growth. With integrated Altro safety flooring and wall protection, you can reduce contamination risks and improve inspection results.

The beauty of engineering

The US Food and Drug Administration states that floors and walls must be (1) durable and easily cleanable for areas where food establishment operations are conducted and (2) non-absorbent for areas subject to moisture such as food preparation areas. Altro’s safety flooring and wall protection comply with these standards and were designed to meet the rigorous demands of modern commercial kitchens.

Altro products are engineered to be non-porous, non-fibrous and non-shedding, so nothing can get in or out. And because they have high impact resistance, damage that can trap bacteria is unlikely.

Hazard Analysis Critical Control Point

HACCP is an international system for food safety management. HACCP requires a risk assessment for every food preparation area identifying “critical points” where food safety hazards could arise.

Hazards include:

• contamination by staff or poorly maintained fittings or equipment
• chemical, physical or allergenic risks, caused by ingredients, handling, equipment or fittings, including floors and walls

You can reduce hazard risk and keep inspections to a minimum by selecting Altro safety flooring and wall protection, which are all approved by HACCP International.

Did you know?

The World Health Organization states that up to 30% of industrial nations’ populations suffer food poisoning every year, and research shows kitchens to be the chief culprit, while contamination of surfaces is in the top five causes of food poisoning.
Richard Mallett  
European Director of HACCP International

Altro’s products are one of the few worldwide flooring and walling products to have achieved HACCP International certification for non-food services and supplies, which means that they have been assessed by a third party and found to be satisfactory and hygienic for use in a food environment.

Both the flooring and walling products from Altro offer the seamless and impervious solution which means that there is nowhere for bacteria to hide, as well as being easy to clean, both important issues in the food industry.
Protection against everyday spills

A dropped cup of water near the sink, a tipped over bottle of olive oil next to the stove and grease from the freshly-fried onion rings splattering onto the floor: In the heat of the 6:00 p.m. rush, such spills may go unnoticed. But these common kitchen goods can spell danger in any fast-moving food and drink preparation and cooking area.

Altro’s integrated safety flooring and durable wall protection provide a long-lasting safe surface even when wet, dusty and greasy conditions exist.

Pressure created from walking on our flooring causes slip resistant particles to brush against the sole of the shoe, creating friction. It’s this friction that helps prevent slips even on greasy surfaces.

Topically applied slip resistant particles, such as an epoxy paint or resin, can wear away through everyday use. Our safety flooring technology, with its aggregate throughout, will ensure your floor’s slip resistance will remain for the entirety of the product’s life.

Testing methods and floor integrity

As the inventor of safety flooring, we take slip resistance seriously! All of our ranges are rigorously tested for slip resistance values using multiple techniques and tests, such as the PTV Pendulum Test, Ramp Test and James Machine.

Our safety floors offer slip resistance values well above ADA and OSHA guidelines, and retain such values even when wet.

What do you need and why?

Tests prove different contaminants pose different safety challenges. While the risk from vegetable oil may come as no surprise, the other most significant danger comes from greasy water – and what kitchen can avoid that?

Typical contaminants in a kitchen are not water and motor oil, which is what the PTV and Ramp tests use.

The test we used was the PTV pendulum test BS7976, but instead of using only water as the test contaminant, we used a range of other contaminants found in a typical kitchen.

With the proper flooring, you can reduce the risk of slips and falls to as little as 1 in a million.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>1 in a million</td>
<td>1 in a million</td>
<td>1 in a million</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>1 in a million</td>
<td>1 in 100,000</td>
<td>1 in 20</td>
</tr>
<tr>
<td>Greasy water</td>
<td>1 in a million</td>
<td>1 in 100,000</td>
<td>1 in 20</td>
</tr>
<tr>
<td>Milk</td>
<td>1 in a million</td>
<td>1 in a million</td>
<td>1 in a million</td>
</tr>
<tr>
<td>Flour</td>
<td>1 in a million</td>
<td>1 in a million</td>
<td>1 in a million</td>
</tr>
<tr>
<td>Plastic wrapping</td>
<td>1 in a million</td>
<td>1 in a million</td>
<td>1 in a million</td>
</tr>
</tbody>
</table>

These contaminants are generally more viscous or substantial than water, creating a thicker layer between floor and shoe. This squeeze film thickness prevents the foot from making contact with the floor and increases the risk of slipping. This table shows how the performance across floors with different pendulum and R ratings perform with the different contaminants. In commercial kitchens where vegetable oil and greasy water are likely to be present, only Altro Stronghold 30 gives a 1 in a million chance of slipping.
The chance of slipping when Altro Stronghold 30 is on the floor is reduced to less than 1 in a million with common commercial kitchen contaminants.
Covering the competition

We’re confident we’ve taken care of all your needs in demanding commercial kitchens

Walls and surfaces must be kept clean and hygienic to ensure the safety of customers and staff. Tiles and epoxy can look good but there is more to hygiene than meets the eye.

Grout is porous, making tiles more susceptible to harboring bacteria. In fact, quarry tile bacteria counts were ten times higher than Altro in an independent laboratory Halo test.

Epoxy can also chip and crack easily, allowing dirt and bacteria to collect and hide from cleaners.

However, it’s not just floors that need to be durable. FRP, a common kitchen wall covering, can break with the slamming of a rolling cart and send glass fibers into the air – these can then land into food and drinks.

Three times more impact resistant than FRP, Altro Puraguard contains no glass fibers and can withstand damage that would shatter porcelain and ceramic tiles.

Did you know?

Altro safety flooring can be installed over wood and many other types of flexible subfloor including metal walk-in coolers, whereas ceramic tiles would crack or debond.
Top reasons to select Altro over quarry tile flooring

• Provides permanent slip resistance that will not wear off as can happen with quarry tile.

• Impervious surface and welded seams are more hygienic than porous quarry tile and grout.

• Independent Halo test confirms quarry tile bacteria counts are 10 times higher than Altro.

• No regrouting necessary.

• Provides better underfoot comfort that can reduce fatigue related accidents.

• Resilient so it will not crack due to subfloor movement or impact from dropped goods.

• Resilience reduces glass and china breakage.

• Reduces impact noise.

• Can be installed faster and walked on sooner creating less downtime and a cost savings.

• Easier to keep clean.

• More choice of design and color.

• Longer warranties.

Top reasons to select Altro over epoxy flooring

• Peeling and cracking of failing epoxy are eliminated.

• Consistent product quality, thickness and appearance - not mixed and poured on site.

• Provides consistent slip resistance across the floor surface — not manually added on-site.

• Provides permanent slip resistance that will not wear off as the epoxy is worn.

• Less floor preparation required.

• No recoating necessary.

• Can be installed faster and walked on sooner creating less downtime and a cost savings.

• Provides better underfoot comfort that can reduce fatigue related accidents.

• Will not crack due to subfloor movement or impact from dropped goods.

• Resilience reduces glass and china breakage.

• Reduces impact noise.

• May be installed over wood and many other types of flexible subfloors including metal walk-in coolers

• More choice of design and color.

• Longer warranties.
Walk in coolers and freezers

Altro safety flooring may be installed in new or existing freezers and coolers. Altro Stronghold 30 is recommended to be installed in freezers that chill down to -22°F (-30°C). Our other flooring ranges are suitable in temperatures at -4°F (-20°C) or above.

Altro Stronghold 30
Our safest flooring, achieving an R12 slip resistance rating.

Stainless steel protection
Altro recommends stainless steel panels for behind cooking lines and for equipment with excessive heat. Heat deflector plates are also available to protect Altro flooring from extreme conditions.
Safety and hygiene are paramount in the main kitchen – but there are safety hazards throughout the back of house too. From the time a kitchen assistant walks through with the food delivery until they leave at the end of their shift, they are walking throughout the kitchen and coming into contact with contaminants and slip hazards. No area is safe. So the best way to ensure hazards are avoided is to have the whole environment, not just the main kitchen, secure. Altro gives you the security you need and the peace of mind you deserve.

**Altro Puraguard**
Wall protection for your entire kitchen and subsequent back of house areas.

**Add some color**
Create a feature wall to impress guests or up the aesthetic of your kitchen design. Altro Whiterock and Altro Whiterock Chameleon come in an array of colors.

**Drains and cleanouts**
In new construction or when replacing drains during renovations, clamping ring style drains should be utilized, similar to what is shown. For existing drains and cleanouts, Altro recommends strainers and tops to be modified in the field by the flooring installer to create a clamping style transition.

---

**Your safe kitchen solution**
Safety and hygiene are paramount in the main kitchen – but there are safety hazards throughout the back of house too. From the time a kitchen assistant walks through with the food delivery until they leave at the end of their shift, they are walking throughout the kitchen and coming into contact with contaminants and slip hazards. No area is safe. So the best way to ensure hazards are avoided is to have the whole environment, not just the main kitchen, secure. Altro gives you the security you need and the peace of mind you deserve.
For full technical data and specifications please consult product specific datasheets located on our website, sample books or ask your Altro representative.
Altro Stronghold 30

Water underfoot is treacherous enough – add grease, oils and fats, and you’ve got a dangerous environment. So, for commercial kitchens, food preparation and back of house service areas, it’s essential to select flooring that will help staff continue their job safely.

Altro Stronghold 30 achieves Altro’s highest slip resistance rating and is designed to minimize risk in wet and greasy conditions for the lifetime of the flooring. As well as helping to keep staff safe from slips, it also helps reduce their fatigue thanks to its 3mm thickness, providing ample noise reduction and comfort underfoot.

Altro Stronghold 30 is frequently specified with Altro Puraguard wall protection to create safe and durable environments in commercial and industrial kitchens.
Altro Classic™ 25

Classic by name, classic by nature. Altro Classic 25 was the first ever safety flooring; it has been tried and trusted for over 60 years, and its traditional, industrial look is still popular today.

Altro Classic 25 provides lasting slip resistance, durability and abrasion resistance, making it ideal for heavy traffic areas – particularly in kitchens.

Altro Classic 25 is easy to clean and maintain and is available in practical, dirt-hiding shades. It achieves an R11 slip resistance rating. Altro Stronghold 30 and Altro Atlas 40 are also great flooring options for commercial kitchens depending on your individual needs.
Machinery and chemicals beware: Altro Atlas 40 is our most robust, damage-resistant flooring. Built for the most demanding industrial kitchens, this 4mm thick sheet flooring is able to withstand whatever is spilled and the heaviest of equipment.
Altro Puraguard has become the in-demand, economically priced wall protection product for commercial kitchens and back of house. Its easy maintenance, smooth PVC surface will help you assure that your kitchen is clean, food is safe for consumption and, better yet, your back of house service areas meet an exceptional durability mark.

Altro Puraguard is extremely durable and can prevent damage to walls from moving carts, bumps and dings. Rest assured knowing that the homogeneous construction means any superficial scratches will be camouflaged, keeping your walls looking new longer.

Features + benefits

☑ Highly stain and chemical resistant
☑ Durable system accessories
☑ Fully bonded to substrate
☑ No glass fibers - for safety and to eliminate telescoping of strands
☑ Impervious to water ingress
☑ Withstands robust cleaning procedures including pressure washing
☑ Resists mold and fungi growth
☑ Meets USDA, FDA and CFIA standards
☑ Non-porous, hydrophobic
☑ Non-shedding
☑ No VOCs
☑ Lead-free

System accessories

Altro Puraguard is a complete wall protection system with a full range of accessories. Please refer to our product datasheet for a full listing of Altro Puraguard accessories.

- One-part joint strip
- Start + edge trim
- Internal / external corner
- External cover
- Cap strips
- Altrotite gaskets
- Stainless steel corners
- Adhesive
- Sealant
- Cleaners
- Anti-static
Did you know?

Altro Puraguard is USDA, FDA and CFIA compliant. That makes it perfect for commercial kitchens anywhere, including:

- Restaurants and fast food
- Hotels
- Hospitals
- Stadiums
- Schools
- Supermarket cafés
- Food preparation facilities
- Sandwich shops
Better together

Combine Altro safety flooring and Altro Puraguard with other products from our portfolio for a total practical solution.

Why stop in the kitchen? Altro provides flooring and wall coverings in attractive designs and in many designer shades. Install smooth flooring in the dining room and public areas. Add slip resistant flooring behind the bar and in restrooms. Utilize our glossy and vibrant wall system, or customize something with your own graphics and images!

You will rest easy knowing that patrons will have an exquisite experience while the most dangerous areas in your facility are well equipped to handle the tolls of the day.

Recommended smooth flooring for front of house areas where aesthetics are key
- Altro Symphonia - modern smooth sheet vinyl in 41 colors
- Altro Wood - realistic wood-look sheet vinyl
- Altro Lavencia - trendy LVT in wood, stone and fabric visuals

Recommended slip resistant flooring for behind the bars, bathrooms, path to kitchens, service corridors, etc.
- Altro Walkway 20 - 2.0mm durable flooring
- Altro Reliance 25 - 2.5mm heavy duty flooring

Recommended wall products
- Altro Whiterock - seamless, heat welded wall surface
- Altro Whiterock Chameleon - make a splash with bold, vibrant and glossy colors
- Altro Whiterock Whiteboard - keep the kitchen staff organized with a writable wall surface
- Altro Whiterock Digiclad - impress guests with custom, digitally printed wall panels with your choice of graphics, images, or text
Drains and cleanouts

In new construction or when replacing drains during renovations, clamping ring style drains must be utilized. This style drain facilitates a watertight transition with flooring.

For existing drains and cleanouts, Altro recommends strainers and tops to be modified in the field by the flooring installer to create a custom clamping transition.

Coolers and freezers

Altro safety flooring may be installed in new or existing freezers and coolers.

Lowest temperature rating;
- Altro Stronghold 30  |  -22F / -30C
- Altro Classic 25  |  -4F / -20C
- Altro Atlas 40  |  -4F / -20C

Stainless steel and heat deflector plates

Altro recommends the use of stainless steel panels behind high heat cooking lines and for equipment with excessive heat, adding heat deflector plates under the appliance is highly recommended. Failure to use these items could result in material defects and void the product warranty.

Cleaning and maintenance

Proper care of Altro safety flooring is critical. For up to date cleaning and maintenance information please consult our website www.altro.com

Staining

Certain chemicals may cause staining of vinyl flooring. Traffic stains may be caused by asphalt and rubber products like rubber mats. Please conduct a stain test prior to installation.

Transitions

When joining Altro Puraguard to Altro flooring, we recommend the use of the C4 cap strip method, followed by the Overlap method. If wall protection has not been selected for installation, your Altro flooring can terminate with a C7 cap strip.

For additional line diagrams and CAD files please refer to altro.com/downloads

Technical assistance can be obtained by dialing 800.377.5597 and asking to speak with a member of Technical Services.

Only installers who have successfully taken an Altro training course specified for kitchens and wet environments should be trusted with commercial kitchen installations. Failure to use a qualified installer could result in a faulty installation and will void the product warranty.

Please utilize the knowledge of your Altro Sales Representative and our Technical Services department for commercial kitchen installations. We are here to ensure a job well done.