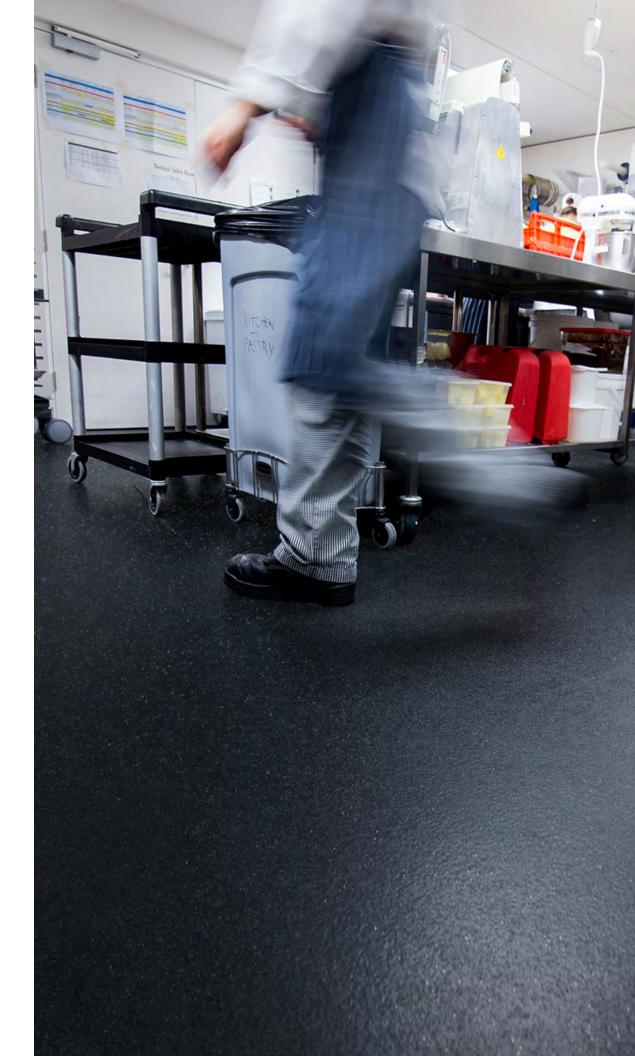


Commercial kitchens Safety flooring and durable wall protection to create an integrated solution



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Only Altro has over 60 years' experience in delivering floors and walls for commercial 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 cladding 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, nonfibrous 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.

i 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. Wisit altro.com/cleaning for our new cleaning guides and read our top tips for cleaning.

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.

Oil, grease, flour? Stay safe with Altro floors

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 freshlyfried 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.

	Altro Stronghold 30 R12 PTV ≥55	Altro Classic R11 PTV ≥45	Altro R10 PTV ≥36
Water	1 in a million	1 in a million	1 in a million
Vegetable oil	1 in a million	1 in 100,000	1 in 20
Greasy water	1 in a million	1 in 100,000	1 in 20
Milk	1 in a million	1 in a million	1 in a million
Flour	1 in a million	1 in a million	1 in a million
astic wrapping	1 in a million	1 in a million	1 in a million

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.

in a

101



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.





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.

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.



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 $-22^{\circ}F$ ($-30^{\circ}C$). Our other flooring ranges are suitable in temperatures at $-4^{\circ}F$ ($-20^{\circ}C$) or above.

Altro Puraguard

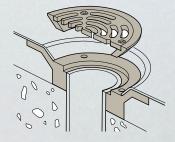
Wall protection for your entire kitchen and subsequent back of house areas.

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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.



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.

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 Altre representative. ===

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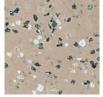
Altro Stronghold 30

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.







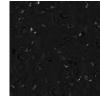




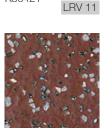








WR100 AM100 LRV 7



WR72

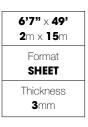
AM72

Russet K30262

Midnight

K30421

Tundra K30500





WR153

AM239

LRV 17



Abyss

K3001

Altro Stronghold¹30

Altro Classic¹¹ 25





Anvil WR101 AM72 X2594R11 LRV 11



Quarry Red WR42 X2560R11

AM42 X2586R11 LRV 13



AM62

LRV 10

Pewter Grey WR81 AM81 X2539R11 LRV 26



WR24

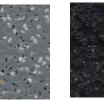
AM27

LRV 32

Truffle AM239 X2545R11

WR153





WR86 Graphite AM86 X2546R11 LRV 21

Blackberry WR100 AM100 X2547R11 LRV 7

	_
6'7" × 66'	
2 m x 20 m	
Format	1
SHEET	
Thickness	1
2.5 mm	

Altro Classic 25

Classic by name, classic by nature. Altro Classic 25 was the first ever safety flooring; it's 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 use in heavy traffic areas - particularly in commercial 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 individuals needs.



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Altro Atlas 40

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.



WR101

LRV 11

AM72

Anvil X4094

X4039

Pewter Grey WR81 X4039 AM81 LRV 26



WR42 AM42 Quarry Red X4060 LRV 13



Walnut X4086

WR62 AM62

2m x 12.5m Format SHEET Thickness 4mm

6'7" × 41'

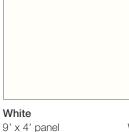






Altro Puraguard









W140/300

W141/300



Pepper 9' x 4' panel

10' x 4' panel

W140 / 301 W141 / 301



Altro Puraguard

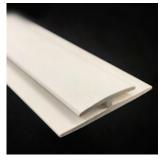
Altro Puraguard wall panels are smooth, durable, cleanable, and easy to install. Altro Puraguard is impact resistant, making it a top choice for wall protection in commercial kitchens and food service areas.

Altro Puraguard is available in 4'x9' and 4'x10' panel sizes and includes a variety of connectors, reducers, and corner accessories. This makes Altro Puraguard extremely efficient and easy to install. This greatly minimizes downtime — a must for busy commercial kitchens!

Create a complete floor and wall kitchen solution by combining Altro Puraguard wall panels and accessories with Altro safety flooring. The easy maintenance, hygienic PVC surface will help you ensure that your kitchen is clean and that food is safe for consumption.

Key advantages over FRP

- No glass fibers to become airborne if punctured
- Class 1A fire and smoke rated
- 3x the impact resistance of FRP
- Smooth surface facilitates ease of cleaning

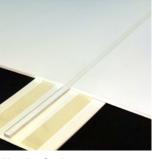


 One-part Joint Strip 10'

 White
 G731 / 30

 Barley
 G731 / 300

 Pepper
 G731 / 301



Altrotite Gasket White Barley Pepper



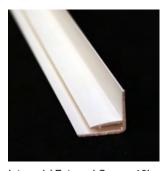


 Start + Edge Trim 10'

 White
 G733 / 30

 Barley
 G733 / 30 / 300

 Pepper
 G733 / 30 / 301

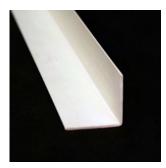


 Internal / External Corner 10'

 White
 A826 / 30

 Barley
 A826 / 30 / 300

 Pepper
 A826 / 30 / 301

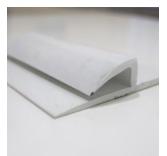


 External cover 10'

 White
 A839 / 30

 Barley
 A839 / 30 / 300

 Pepper
 A839 / 30 / 301



C8 Cap strip White ASF C8 CAP



Stainless steel corner A861 protector 4'



i 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 cladding, 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

Technical details

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

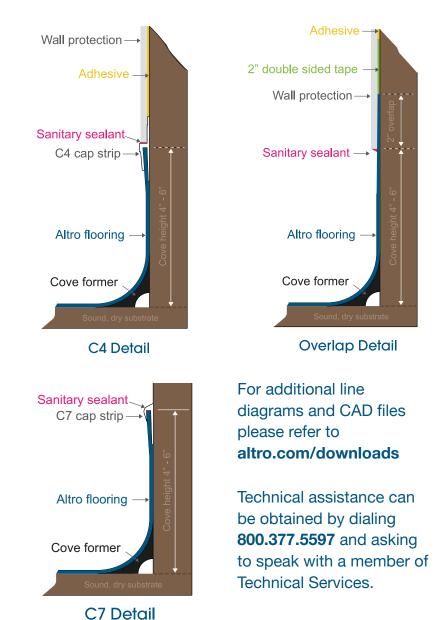
Proper care of Altro safety flooring is critical. For up to date cleaning and maintenance information please consult our website www.altro.com

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.



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.

Altro in action

University of Vermont

Looks, safety, slip and stain resistance – we know how much our Altro Stronghold 30 helps protect any commercial kitchen, but it's our readily available support that keeps them coming back.

Scott + Partners Architects has used Altro for years, but not just because our products perform well. The dependability of Altro and our customer service makes the choice an easy one.

Altro Stronghold 30



Time, Inc. Test Kitchens

Home to 28 test kitchens, 13 photo and two video studios and a private dining area, Time, Inc. Food Studios celebrated its grand opening with Southern Living Magazine's 50th anniversary party.

Test kitchens see a lot of abuse, and rigorous food testing around-the-clock requires a robust, slip resistant flooring solution. Altro Atlas 40 was chosen for its resistance to wear, staining and slips.

Altro Atlas 40





♥ USA 800 377 5597

- ♥ CANADA 800 565 4658
- support@altrofloors.com
- www.altro.com

Content correct at time of going to print. Altro reserves the right to change any detail. Please consult www.altro.com or your local Sales Representative for the latest product range information.