Altro’s steps to sustainability program
As a family owned business, we’ve always taken our environmental responsibilities very seriously. And to us, sustainability is about so much more than just environmental issues. It covers social and economic dimensions as well as environmental responsibility, something that’s known as the three pillars of sustainability or the “Triple Bottom Line”.

Here at Altro, we recognize that sustainability is a journey. Which is why our sustainability program takes a complete approach to managing sustainability issues, and considers our impact on all three aspects of sustainability – not just the environment. So while we actively reduce the impact we have on the environment and operate in a socially responsible manner, we’re providing long term, sustainable, safe and hygienic solutions too.

We will continue to focus on what we are really good at as we continue to encourage everyone to take responsibility in the broader context. We believe that we are collectively responsible for making the world a safer place. With this in mind, we encourage you, our customers, to put responsibility for safety, hygiene and sustainability at the heart of your decision-making process too. We hope that you will join us in making these principles a part of your way of being as well.

Richard Kahn,
Chief Executive Officer, Altro
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The three pillars of sustainability

We recognize that the three pillars of sustainable development – social, economic and environmental – are closely interdependent. For a product to be truly sustainable it must meet the needs of all three aspects.

Our sustainability program is a holistic approach to managing sustainability issues, considering our impact on all three aspects of sustainability and not just the environment.

Attributes such as underfoot safety, hygiene, ease of maintenance, durability or even aesthetics all work in synergy with the environmental, social, and economic performance of a product. For example, our sheet flooring requires no waxes or polishes to maintain, thereby providing a smaller environmental impact, a lower economic cost and a more positive impact with the people in the building.

Valuing people: being a responsible employer and exerting a positive influence on the people and markets in which we operate.

As a family-run business, our core values, valuing our customers and valuing each other, sit at the heart of our culture and we set the standard through our commitment to performance, partnership and possibilities.

Successful enterprise requires that all businesses practice Corporate Social Responsibility (CSR). In industry, this is about taking responsibility for the physical and environmental well-being of people and as a result, the reputation and financial well-being of our customers’ businesses.

At Altro we employ CSR and aim to make a lasting difference by helping to create more prosperous and healthy communities throughout the world.
Valuing our environment: actively reducing the outward impact we have on the environment.

Altro is dedicated to ensuring that our products and processes minimize environmental impact at every stage and has taken a rigorous approach to achieving our environmental objectives and goals.

Our strategies are to reduce consumption of resources, emissions and waste, improve our product formulation and increase recycling. We apply numerous sustainable practices across our global organization and we are recognized as an environmental leader in our industry.

While we have taken great strides towards creating a sustainable business, we recognize sustainability is an ongoing effort and continue to make improvements to our products and how we operate. Sustainability isn’t just a word for us—it is a core philosophy that is at the heart of everything we do.

At Altro we believe that what is essential for the secure future of our planet is essential for the secure future of all today’s businesses.

Creating economic value: how we create and add value to the marketplace.

Altro creates and adds value to the marketplace with unique, long-lasting, purpose-driven floor and wall products, which reduce the risk of injury or illness and improve the environment in the facilities they are installed.

Our products are designed to last and require less maintenance than competing materials. They continue to provide value long after their installation.

With Altro, you’ll find a partner that has the expertise and experience to deliver a complete solution. Below are some of the ways we do this:

- Experienced and well trained staff
- Information on legislation and litigation
- Industry specific literature and diagrams
- Case studies, reference sites and testimonials
- On and off site technical assistance
- Local warehousing and quick delivery
- Cleaning and maintenance literature / instruction
- Competitively long warranties
Vinyl, a material for life

Vinyl is the world’s most researched and widely used plastic. It can be used to make virtually everything from intravenous tubing to flooring—vinyl is extremely versatile.

Benefits of vinyl

Vinyl is truly one material with infinite uses. All this versatility helps make vinyl the third-largest volume plastic produced in North America. From the vinyl resin producers to those who extrude the resin into pipe, siding, flooring, wall covering, packaging and energy-efficient windows and roofs, the vinyl industry provides over 350,000 jobs in North America and represents $54.5 billion in economic output.

Vinyl will not rot or corrode, making it extremely hygienic. It is inherently flame retardant, slow to burn and will self-extinguish when removed from fire. It is impermeable to water, making it ideal for anything from blood bags to packaging to flooring.

Advantages of vinyl

- Does not rot or corrode
- Inherent flame retardant
- Extremely hygienic
- Minimal off gassing, low VOCs
- Versatility
- Energy efficient production
- Extremely durable and long lasting

Vinyl comes from two simple building blocks: salt (57%) + oil (43%)
Benefits of vinyl flooring

Vinyl flooring is also called “resilient” flooring because it characteristically “bounces back” from the weight of objects that compress its surface. This attribute combined with its impressive durability contribute to a long life expectancy.

Vinyl flooring is frequently used in healthcare facilities because it is impervious to water, offering a significant sanitary advantage over carpeting. These characteristics are particularly important in hospital rooms, extended care facilities, nursing homes and day care centers.

Pound for pound, vinyl is more durable than many competing flooring materials. This allows vinyl flooring to be thinner and lighter while still offering impressive durability. This makes vinyl especially useful in the transit industry and explains why it is used on the majority of buses in North America.

How vinyl flooring measures up

<table>
<thead>
<tr>
<th>Environment</th>
<th>Linoleum</th>
<th>Rubber</th>
<th>Vinyl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total energy (over 20 years)</td>
<td>3.63 kWh</td>
<td>4.17 kWh</td>
<td>2.88 kWh</td>
</tr>
<tr>
<td>Energy Transportation</td>
<td>Highest weight impacts transportation fuel</td>
<td>Medium weight for transportation fuel</td>
<td>Lightest weight for transportation fuel</td>
</tr>
<tr>
<td>Water</td>
<td>Highest water impacts</td>
<td>Unknown</td>
<td>Minimal water impacts</td>
</tr>
</tbody>
</table>

This chart analyzes the impact each product has over our natural resources. Pulling from published EPDs (Environmental Product Declarations) this comparison shows how well vinyl performs in resource efficiency.

Source: Architectural Products Magazine 2017

Advantages of vinyl flooring

- Uses less energy in the manufacturing phase than most competing products
- Boasts a lower carbon footprint than most common consumables
- Can be recycled many times over without compromising performance
- Inherently flame retardant, self-extinguishing once the source of flame is removed
- Lighter, on average, than other flooring materials reducing fuel consumption in transit
Actively reducing resource consumption
Resource efficiency

As a successful business and a sustainable manufacturer, it is important to make efficient use of the resources we consume. Altro continually improves its methods and manufacturing processes to better use our resources and to reduce our impact on the environment. Our recent environmental achievements include:

Waste

• Since 2014 we achieved a zero waste-to-landfill policy.
• By including post-consumer and pre-consumer recycled content into our products, Altro is able to divert 900 tons of glass (wine bottles) and 500 tons of vinyl destined for landfills every year.
• With every sample sent out, Altro includes free shipping labels and instructions for AltroSampleWise, our sample take-back program.

Water

• Rainwater capture systems have been installed on the roof of our manufacturing plant to reduce our use of potable water in our production process.
• We have achieved a 99% reduction in water consumption in our manufacturing process since 2000.

Energy

• Energy efficiency is a key factor in product development and the manufacturing process. We have made significant carbon savings with our energy efficiency program.

Packaging

• All Altro flooring is wrapped using 100% recyclable packaging.
Recycling

Since 2007, Altro has sent zero vinyl waste to landfill and was able to implement this by installing the world’s first in-house safety floor recycling system. The system offers a closed loop recycling process and is capable of recycling over 500 tons of vinyl factory waste each year.

In addition, Altro diverts over 900 tons of post-consumer recycled glass (in the form of wine bottles) destined for landfill each year. After extensive processing, the wine bottles are transformed into aggregate particles for inclusion in our safety and slip-resistant flooring.

All recycled content that Altro uses is sustainably sourced and complies with ISO 14021-1999 for environmental labels and declarations.

Recofloor™

We are one of two founding members of Recofloor™, the industry’s vinyl take-back program. Recofloor collects vinyl off cuts and uplifted vinyl, irrespective of manufacturer, diverting them from landfill. Since its launch in 2009, the program has collected and recycled over 3,400 tons of waste vinyl flooring.

Recowall™

Since its launch in 2010, Recowall has recycled over 100 tons of Altro Whiterock wall panels. Although Recowall is a much smaller program than Recofloor, it is important because it demonstrates that Altro Whiterock can and is being recycled.
Safety and slip-resistant floor recycling

These floors were once thought to be impossible to recycle due to the abrasive nature of the aggregates, which give the flooring its slip-resistant and durable qualities. Altro’s unique system, which began in 2007, provides a closed loop recycling process that eliminates vinyl waste sent to landfill.

1 Factory scrap, edge trimmings and installation waste off cuts are collected.

2 Collected material is mechanically shredded.

3 Shredded material is granulated into three different fractions.

4 Fractions are mixed.

5 Recycate mix is combined with aggregate material.

6 Vinyl chips, aggregates and recycate mix are combined.

7 New flooring is manufactured from mixture.
Purpose driven design

From inventing the world’s first ever safety flooring product in 1947 and the first hygienic wall system over 30 years ago, to our commitment to investing in new technology, our desire to produce the highest quality products means we’re continually setting ever-higher standards for the industry.

Our solutions are used in some of the most demanding built environments possible, where consistent performance is paramount to the success of the spaces they occupy.

Our design and manufacturing processes consider every aspect of every solution. From their safety and hygiene specifications to their sustainability credentials, we ensure the spaces we work with function exactly how people need them to, giving our customers the outcomes they want and complete confidence in their investment.
Low VOCs, up to 20% recycled content, FloorScore Certified, up to 24% rapidly renewable bio-based content
Sustainable attributes of Altro products

- No heavy metals – contains no lead, cadmium, mercury, or hexavalent chromium.
- Ortho-phthalate-free – we do not use ortho-phthalates in the manufacturing of our flooring or wall products.
- Bio-based ingredients – our flooring products now include as much as 24% rapidly renewable, bio-based content.
- Derived from maize and sugar beets, our bio-based plasticizer is responsibly grown in Europe and is not destined for human consumption.
- Recycled content – Altro flooring contains up to 20% recycled material.
- Low VOCs – Altro flooring complies with FloorScore certification as well as the CA 01350 and CDPH test methods.
- Our wall systems are also low-VOC and comply with the CA 01350 standard. In fact, VOC emissions for Altro Whiterock have been found to be below detectable limits.
- Adhesives used to install Altro floor and wall products are also low VOC emitting and comply with federal standards such as SCAQMD Rule 1168.
- Off cuts and scrap Altro flooring can be 100% recycled directly at our manufacturing facility.
- Altro Easyclean technology, built into our products, significantly reduces cleaning costs and reduces their long term impact on the environment.
Environmental product declarations

The goal of an Environmental Product Declaration, EPD®, is to provide relevant, verified and comparable information about the environmental impact of goods and services. This encourages scientifically based, fair choices and stimulates the potential for market driven continuous environmental improvements.

Altro supports the EPD initiative and has collaborated with the European Resilient Flooring Manufacturers' Institute to create an open and transparent EPD representative of our flooring products. Our EPDs are available for download directly from our website at altro.com/eco.

Altro’s EPDs provide transparency about our products and their impact on the environment.
Health product declarations

Ingredient reporting

One of the fundamentals of LEED v4 is product transparency. Specifiers want to know what ingredients are in the products they use and if they are hazardous to human health.

What is a Health Product Declaration (HPD)?

The purpose behind the Health Product Declaration is to provide a public statement of product content and the health hazards associated with exposure to its individual ingredients. It is intended to represent a way to gain greater transparency into the ingredients that make up building products and assess which of those are potentially harmful to people. The intent of this initiative is good but the execution is flawed as there are many problems with HPDs in their current form.

The problem with HPDs: misleading and misinformation

The current version of the HPD requires the disclosure of ingredients listed on one or more of over 30 separate lists, most developed for very different goals than exposure warning.

As an example: one of the lists includes the EPA’s TSCA Work Plan Chemicals List. This is an index of chemicals determined for an EPA evaluation and about the appropriateness for an EPA risk assessment. This risk assessment has not been performed and yet these chemicals are included.

Other HPD lists identify chemicals for ecological impacts (i.e., global warming, ozone depletion) which are not related to human exposures from building materials and are covered in Environmental Product Declarations. Lists conflict with authoritative bodies such as the International Agency for Research on Cancer and the Environmental Protection Agency.

An example of HPD misinformation: Titanium dioxide

An HPD classifies hazardous ingredients regardless of the state in which they are encountered in the finished product.

For example, titanium dioxide is used in linoleum, other flooring and even toothpaste, sunscreens and food. In these cases TiO$_2$ is bound into the product and used as a whitening pigment.

TiO$_2$ in its dry particulate form is listed by the International Agency for Research on Cancer (IARC) as “possibly carcinogenic” to humans. However, in flooring and other products it appears in its bound form, and is perfectly safe.

An HPD does not account for this and lists titanium dioxide as hazardous to human health. If this were true, you would need to recall the majority of the toothpaste in the world!

To request our EPD or HPD please visit altro.com/sustainability
mindful MATERIALS

Adopted by over 50 major design firms, mindful MATERIALS is a design industry initiative that provides a common platform for manufacturers to clearly communicate transparency and sustainability information for their building products.

Altro is a proud participant of this program. At altro.com/sustainability, you’ll find information about our products pertaining to the mindful MATERIALS initiative. If you are a firm participating in the labelling program, you’ll also find pre-filled out labels as well. We do encourage you to contact your local Altro representative to make sure your library is up to date before labelling. If you’re not sure who your rep is, please e-mail us at support@altrofloors.com.

Well Building Standard

Most other green programs, such as LEED, deal with everything from energy efficiency, recycling and the health of occupants. The Well Building Standard focuses exclusively on human health.

While most of the different concepts in the standard don’t apply to floors and walls, Altro does comply to the principles that do.
What is LEED®?

LEED, or Leadership in Energy and Environmental Design, is redefining the way we think about the places where we live, work and learn. As an internationally recognized mark of excellence, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

Projects achieve certification if they earn points according to the following levels: Certified: 40–49 points, Silver: 50–59 points, Gold: 60–79 points and Platinum: 80+ points.

As a manufacturer of floor and wall products, we are able to help projects achieve credits in the categories of Materials and Resources and Indoor Environmental Quality.

LEED facts

LEED v4

This product may help contribute to the following credits

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</tr>
<tr>
<td>Renewable bio-based content</td>
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<td>Environmental product declaration</td>
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<tr>
<td>Health product declaration</td>
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</tr>
<tr>
<td>Low emitting materials, flooring</td>
<td>1</td>
</tr>
<tr>
<td>Low emitting materials, adhesives</td>
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</table>

Discover more of our sustainability story and credentials at altro.com/sustainability
What’s your sustainability story?

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