

Between us, ideas become reality®



Cradle to Cradle®
– putting sustainability first

Cradle to Cradle® - the way forward

Cradle to Cradle® is an innovative concept that builds on nature's blueprint. It provides manufacturers with a verified rating system for assessing and constantly improving products based on five criteria -



Every ingredient must be safe and not harmful to health or the environment.



Every component must biodegrade naturally to restore the soil or up-cycle into high quality materials for subsequent products.



All energy used in manufacture should be from renewable sources, and must be used efficiently.



Water must be managed and used effectively, with no unhealthy releases into the local ecosystem.



Manufacturers should conduct business responsibly, respecting the health, safety and rights of people and the planet.

Products are measured to achieve five levels of certification from Basic through to Platinum. Progress is transparent as manufacturers embark on the challenging journey to achieve ultimate sustainability for their products.

Product Certification Scorecard

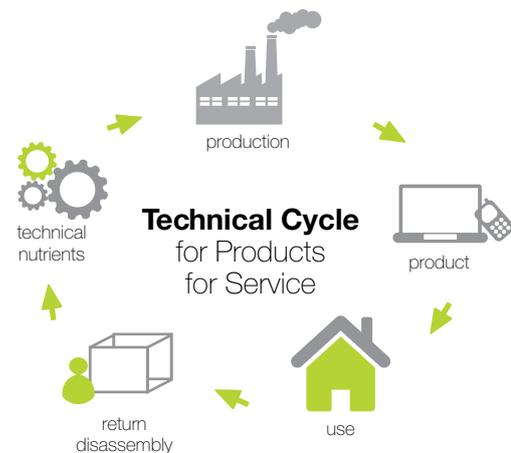
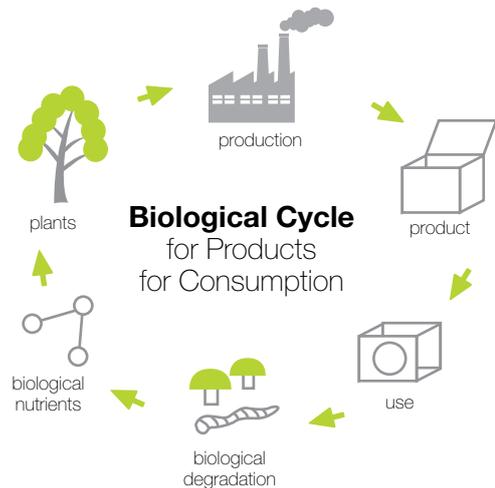
PROGRAMME CATEGORY	CRADLE TO CRADLE CERTIFIED™ PRODUCT SCORECARD				
	BASIC	BRONZE	SILVER	GOLD	PLATINUM
MATERIAL HEALTH			✓		
MATERIAL REUTILIZATION			✓		
RENEWABLE ENERGY & CARBON MANAGEMENT			✓		
WATER STEWARDSHIP			✓		
SOCIAL FAIRNESS			✓		
OVERALL CERTIFICATION LEVEL			✓		

Cradle to Cradle product certification is both comprehensive and rigorous. It requires a paradigm shift in thinking about how it is designed, what's in it and where it goes after use.

Armstrong is the first global ceilings manufacturer, and one of only a relatively small group of companies worldwide, to have accepted the challenge.

Material Reutilization

The C2C blueprint categorises substances as either biological or technical nutrients :



Technical nutrients are materials that can be fully and continuously recycled (up-cycled) for subsequent generations of products, without loss of integrity or quality.

What Cradle to Cradle® means for Armstrong

Cradle to Cradle® (C2C) certification involves a fundamental reassessment and redesign of products and processes in order to achieve predetermined levels of performance against each of the 5 key criteria.

The programme will impact every area of our business, from supply chain to product design and development, operations, testing, and sales and technical support. Armstrong will achieve the challenging objectives, but not overnight. In order to maintain involvement in the C2C programme, we must demonstrate continued progress towards the ultimate goals.

We have developed our C2C roadmap and embarked on a journey that includes sincere milestones and smart goals for 2015 and 2020, and have committed to communicate transparently to all stakeholders on our progress.

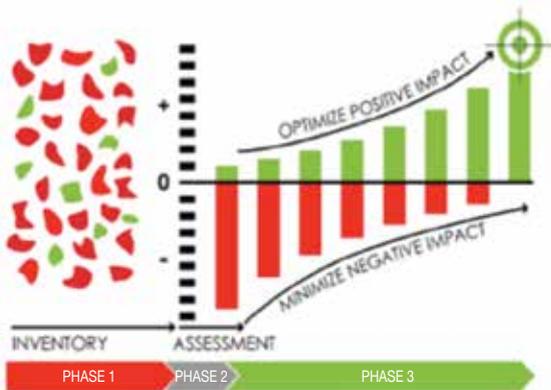
Perla OP 0.95 first with C2C certification

Armstrong's Perla OP 0.95 is the first mineral fibre laminated ceiling tile to be granted C2C Silver certification.

This is now driving our C2C development programme, and will provide a blueprint for sustainability improvements across all Armstrong ceiling product ranges.

100% Good Goal:

Biological nutrients in safe carbon cycle.
 Technical nutrients in continuous reuse periods.



The C2C continuous improvement roadmap.

Perla OP 0.95



Sustainability performance (August 2013)

Recycled content	53%
Rapidly renewable content	5%
Recyclability	100%
Acoustical comfort	Class A absorber
Light reflectance	85%
Included in the Armstrong Recycling Programme:	✓

Armstrong and the environment

Armstrong has long recognised the importance of protecting the environment and using resources responsibly. We have developed ceiling systems that improve space illumination, reduce noise and enable the use of thermal mass design for more efficient heating and cooling of the building environment.

And we have been systematically reducing our environmental footprint and reducing the environmental impact of our products through:

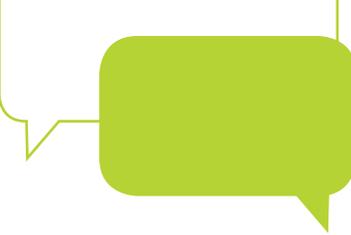
- Careful raw material selection and reformulation, and improved closed loop manufacturing technologies.
- Use of recognised life cycle assessment methodology to continually improve product environmental performance.
- Reducing production waste; introducing take back schemes and increasing the amount of recycled content in all of our tiles.
- Increased use of renewable energy and rebalancing of existing supplies to lower carbon alternatives.
- Membership of technical committees and Green Building Councils in Europe, Asia and the United States, actively promoting the environmental agenda.
- Support for groundbreaking projects designed to demonstrate the viability of very low energy and C2C construction.

Recycling



A unique take-back scheme is helping to increase the recycled content of Armstrong's mineral fibre tile range.





What Cradle to Cradle® means for our stakeholders

The Cradle to Cradle® programme has been developed to meet growing customer demand for sustainable products, with C2C certification already becoming a requirement for building projects in the United States and Europe.

It:

- Helps specifiers and clients through the maze of environmental claims, providing a transparent mechanism to compare the sustainability performance of competitive products.
- Helps future-proof developments, by meeting tomorrow's sustainability standards, today.
- Provides transparency regarding material safety.
- Provides a safer environment for building users.
- Adds value to a project and provides a mechanism for up-cycling at the end of life.
- Helps protect and sustain our environment for future generations.

C2C in Action

Park 20|20, Amsterdam



Built alongside Schiphol airport, Park 20|20 is the world's first mixed use Cradle to Cradle® inspired working environment. It includes the 20|20 Experience Center, a meeting point of C2C know-how and skills that acts as a showcase for the new way of working and its practical application.



Armstrong is proud to be a participant of the Pavilions at Park 20|20.



Want **to learn more** ?

Find out more at
www.armstrong-ceilings.co.uk/greenbuilding
www.armstrong-ceilings.ie/greenbuilding



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