SENTINEL HOLDING
INSTITUT

SHI-PRODUKTPASS

Produkte finden - Gebäude zertifizieren

SHI-Produktpass-Nr.:

1084-10-1003

Spacia

Warengruppe: Vinyl

amtico flooring

Amtico International GmbH
Hammer Straße 17
40219 Düsseldorf

Produktqualitäten:

- SHI-Produkt bewertung 2024
- QNG Qualitätssiegel Nachhaltiges Gebäude
- DGNB NEUBAU 2023.2
- DGNB NEUBAU 2023
- DGNB NEUBAU 2018
- BNB-BN NEUBAU V2015
- EU-TAXONOMIE
- BREEAM DE NEUBAU 2018
- LEED v4.1 (outside US)

GEPRÜFT NACHHALTIGES PRODUKT
SHI PRODUKT PASS
SENTINEL HOLDING INSTITUT
www.sentinel-holding.eu

Köttner

Helmut Köttner
Wissenschaftlicher Leiter
Freiburg, den 07.07.2026

SENTINEL HOLDING
INSTITUT

Produkt:
Spacia

SHI Produktpass-Nr.:
1084-10-1003

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Inhalt

Wir sind stolz darauf, dass die SHI-Datenbank, die erste und einzige Datenbank für Bauprodukte ist, die ihre umfassenden Prozesse sowie die Aktualität regelmäßig von dem unabhängigen Prüfunternehmen SGS-TÜV Saar überprüfen lässt.

SGS TÜV SAAR

SENTINEL HOLDING
INSTITUT

Produkt:
Spacia

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1084-10-1003

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SHI-Produktbewertung 2024

Seit 2008 etabliert die Sentinel Holding Institut GmbH (SHI) einen einzigartigen Standard für schadstoffgeprüfte Produkte. Experten führen unabhängige Produktprüfungen nach klaren und transparenten Kriterien durch. Zusätzlich überprüft das unabhängige Prüfunternehmen SGS-TÜV Saar regelmäßig die Prozesse und Aktualität.

Kriterium	Produktkategorie	Schadstoffgrenzwert	Bewertung
SHI-Produktbewertung	Sonstige Bodenbeläge	TVOC ≤ 160 µg/m^3 Formaldehyd ≤ 10 µg/m^3	Schadstoffgeprüft
Gültig bis: 13.11.2030			

SENTINEL HOLDING
INSTITUT

Produkt:
Spacia

SHI Produktpass-Nr.:
1084-10-1003

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QNG - Qualitätssiegel Nachhaltiges Gebäude

Das Qualitätssiegel Nachhaltiges Gebäude, entwickelt durch das Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen (BMWSB), legt Anforderungen an die ökologische, soziokulturelle und ökonomische Qualität von Gebäuden fest. Das Sentinel Holding Institut prüft Bauprodukte gemäß den QNG-Anforderungen für eine Zertifizierung und vergibt das QNG-ready Siegel. Das Einhalten des QNG-Standards ist Voraussetzung für den KfW-Förderkredit. Für bestimmte Produktgruppen hat das QNG derzeit keine spezifischen Anforderungen definiert. Diese Produkte sind als nicht bewertungsrelevant eingestuft, können jedoch in QNG-Projekten genutzt werden.

Kriterium	Pos. / Bauproduktgruppe	Betrachtete Stoffe	QNG Freigabe
3.1.3 Schadstoffvermeidung in Baumaterialien	2.2 Elastische Bodenbeläge – auch mehrschichtige Systeme	VOC / Emissionen / gefährliche Stoffe / Polyzyklische Aromatische Kohlenwasserstoffe (PAK) / SVHC / Schwermetalle	QNG-ready
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

SENTINEL HOLDING
INSTITUT

Produkt:
Spacia

SHI Produktpass-Nr.:
1084-10-1003

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DGNB Neubau 2023.2

Kriterium	Pos. / Relevante Bauteile / Bau-Materialien / Flächen	Betrachtete Stoffe / Aspekte	Qualitätsstufe
ENV 1.2 Risiken für die lokale Umwelt	7 Elastische Bodenbeläge (innen)		Qualitätsstufe: 3
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

SENTINEL HOLDING
INSTITUT

Produkt:
Spacia

SHI Produktpass-Nr.:
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DGNB Neubau 2023

Das DGNB-System (Deutsche Gesellschaft für Nachhaltiges Bauen) bewertet die Nachhaltigkeit von Gebäuden verschiedener Art. Das System ist sowohl anwendbar für private und gewerbliche Großprojekte als auch für kleinere Wohngebäude. Die Version 2023 setzt hohe Standards für ökologische, ökonomische, soziokulturelle und funktionale Aspekte während des gesamten Lebenszyklus eines Gebäudes.

Kriterium	Pos. / Relevante Bauteile / Bau-Materialien / Flächen	Betrachtete Stoffe / Aspekte	Qualitätsstufe
ENV 1.2 Risiken für die lokale Umwelt, 03.05.2024 (3. Auflage)	7 Bodenbeläge (Elastische Bodenbeläge)	VVOC, VOC, SVOC Emissionen und Gehalt an gefährlichen Stoffen	Qualitätsstufe: 3
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

Kriterium	Pos. / Relevante Bauteile / Bau-Materialien / Flächen	Betrachtete Stoffe / Aspekte	Qualitätsstufe
ENV 1.2 Risiken für die lokale Umwelt, 29.05.2025 (4. Auflage)	7 Bodenbeläge in der Innenanwendung (Elastische Bodenbeläge)	VVOC, VOC, SVOC Emissionen und Gehalt an gefährlichen Stoffen	Qualitätsstufe: 3
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

Kriterium	Bewertung
ENV 1.1 Klimaschutz und Energie (*)	Kann Gesamtbewertung positiv beeinflussen

SENTINEL HOLDING
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Produkt:
Spacia

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DGNB Neubau 2018

Das DGNB-System (Deutsche Gesellschaft für Nachhaltiges Bauen) bewertet die Nachhaltigkeit von Gebäuden verschiedener Art. Das System ist sowohl anwendbar für private und gewerbliche Großprojekte als auch für kleinere Wohngebäude.

Kriterium	Pos. / Relevante Bauteile / Bau-Materialien / Flächen	Betrachtete Stoffe / Aspekte	Qualitätsstufe
ENV 1.2 Risiken für die lokale Umwelt	7 Bodenbeläge (Elastische Bodenbeläge)	VOC / SVOC / gefährliche Stoffe	Qualitätsstufe: 4
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

SENTINEL HOLDING
INSTITUT

Produkt:
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BNB-BN Neubau V2015

Das Bewertungssystem Nachhaltiges Bauen ist ein Instrument zur Bewertung von Büro- und Verwaltungsgebäuden, Unterrichtsgebäuden, Laborgebäuden sowie Außenanlagen in Deutschland. Das BNB wurde vom damaligen Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB) entwickelt und unterliegt heute dem Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen.

Kriterium	Pos. / Bauprodukttyp	Betrachtete Schadstoffgruppe	Qualitätsniveau
1.1.6 Risiken für die lokale Umwelt	2a Elastische Bodenbeläge – mit und ohne ankaschierte Verlege- oder Dämmunterlage	VOC / gefährliche Stoffe / Schwermetalle	Qualitätsniveau 3
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

SENTINEL HOLDING
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Produkt:
Spacia

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EU-Taxonomie

Die EU-Taxonomie klassifiziert wirtschaftliche Aktivitäten und Produkte nach ihren Umweltauswirkungen. Auf der Produktebene gibt es gemäß der EU-Verordnung klare Anforderungen zu Formaldehyd und flüchtigen organischen Verbindungen (VOC). Die Sentinel Holding Institut GmbH kennzeichnet qualifizierte Produkte, die diesen Standard erfüllen.

Kriterium	Produkttyp	Betrachtete Stoffe	Bewertung
DNSH - Vermeidung und Verminderung der Umweltverschmutzung	Bodenbeläge (einschließlich zugehöriger Kleb- und Dichtstoffe)	Stoffe nach Anlage C, Formaldehyd, Karzinogene VOC Kategorie 1A/1B	Erfüllt
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025). Herstellererklärung vom 02.07.2026.			

SENTINEL HOLDING
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BREEAM DE Neubau 2018

BREEAM (Building Research Establishment Environmental Assessment Methodology) ist ein britisches Gebäudebewertungssystem, welches die Nachhaltigkeit von Neubauten, Sanierungsprojekten und Umbauten einstuft. Das Bewertungssystem wurde vom Building Research Establishment (BRE) entwickelt und zielt darauf ab, ökologische, ökonomische und soziale Auswirkungen von Gebäuden zu bewerten und zu verbessern.

Kriterium	Produktkategorie	Betrachtete Stoffe	Qualitätsstufe
Hea 02 Qualität der Innenraumluft	Bodenbeläge (einschließlich Bodenspachtelmassen und Harzböden)	Emissionen: Formaldehyd, TVOC, TSVOC, Krebserregende Stoffe	herausragende Qualität
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025).			

SENTINEL HOLDING
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LEED v4.1

LEED (Leadership in Energy and Environmental Design) ist ein international anerkanntes Gebäudezertifizierungssystem des U.S. Green Building Council. Es zählt zu den weltweit am weitesten verbreiteten Nachhaltigkeitsstandards für Gebäude und wird insbesondere bei international ausgerichteten Projekten eingesetzt. LEED bewertet Gebäude ganzheitlich in Kategorien wie Energieeffizienz, Ressourcenschonung, Materialauswahl, Innenraumqualität und Standortqualität. Je nach erreichter Punktzahl werden die Zertifizierungsstufen LEED Certified, Silver, Gold oder Platinum vergeben.

Kriterium	Produktkategorie	Betrachtete Stoffe	Bewertung
EQ Credit: Low-Emitting Materials	Bodenbeläge	Emissionen: Formaldehyd, VOC, Krebserregende Stoffe	Erfüllt
Nachweis: Eurofins IAC Gold Zertifikat vom 13.11.2025 (Nr. IACG-352-01-12-2025).			

SENTINEL HOLDING
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Produktsiegel

In der Baubranche spielt die Auswahl qualitativ hochwertiger Materialien eine zentrale Rolle für die Gesundheit in Gebäuden und deren Nachhaltigkeit. Produktlabels und Zertifikate bieten Orientierung, um diesen Anforderungen gerecht zu werden. Allerdings besitzt jedes Zertifikat und Label eigene Prüfkriterien, die genau betrachtet werden sollten, um sicherzustellen, dass sie den spezifischen Bedürfnissen eines Bauvorhabens entsprechen.

Das Eurofins-Label Indoor Air Comfort® bestätigt die Einhaltung von Vorgaben zu niedrigen VOC-Emissionen. Die Standard-Stufe deckt die gesetzlichen Anforderungen in der EU ab, während die Gold-Stufe zusätzlich Emissionskriterien freiwilliger Umweltzeichen und Gebäudezertifizierungen berücksichtigt.

Dieses Produkt ist schadstoffgeprüft und wird vom Sentinel Holding Institut empfohlen. Gesundes Bauen, Modernisieren und Betreiben von Immobilien erfolgt dank des Sentinel Holding Konzepts nach transparenten und nachvollziehbaren Kriterien.

Produkte mit dem QNG-ready Siegel des Sentinel Holding Instituts eignen sich für Projekte, für welche das Qualitätssiegel Nachhaltiges Gebäude (QNG) angestrebt wird. QNG-ready Produkte erfüllen die Anforderungen des QNG Anhangdokument 3.1.3 "Schadstoffvermeidung in Baumaterialien". Das KfW-Kreditprogramm Klimafreundlicher Neubau mit QNG kann eine höhere Fördersumme ermöglichen.

Produkt:
Spacia

SHI Produktpass-Nr.:
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Rechtliche Hinweise

(*) Die Kriterien dieses Steckbriefs beziehen sich auf das gesamte Bauobjekt. Die Bewertung erfolgt auf der Ebene des Gebäudes. Im Rahmen einer sachgemäßen Planung und fachgerechten Installation können einzelne Produkte einen positiven Beitrag zum Gesamtergebnis der Bewertung leisten. Das Sentinel Holding Institut stützt sich einzig auf die Angaben des Herstellers.

Alle Kriterien finden Sie unter:
https://www.sentinel-holding.eu/de/Themenwelten/Pr%C3%BCfkriterien%20f%C3%BCr%20Produkte

Wir sind stolz darauf, dass die SHI-Datenbank, die erste und einzige Datenbank für Bauprodukte ist, die ihre umfassenden Prozesse sowie die Aktualität regelmäßig von dem unabhängigen Prüfunternehmen SGS-TÜV Saar überprüfen lässt.

SGS TÜV SAAR

Herausgeber

Sentinel Holding Institut GmbH
Bötzinger Str. 38
79111 Freiburg im Breisgau
Tel.: +49 761 590 481-70
info@sentinel-holding.eu
www.sentinel-holding.eu

Amtico Spacia Und Bio

Technische Daten

SPA-TS-20260507-16-DE

Bezeichnung	Prüfnorm	Symbol	Ergebnis
CE / DOP	EN 14041	CE	CPR/AI/002
Klassifizierung	EN ISO 10874	23 33 42	23, 33, 42
Herstellungsnorm	EN ISO 10582		Bestanden
Gesamtdicke	EN ISO 24346		2,5 mm
Nutzschichtdicke	EN ISO 24340		0,55 mm
Gewicht	EN ISO 23997		3550 - 4310 g/m²
Verschleißfestigkeit	EN ISO 10582		Typ 1
Resteindruck	EN ISO 24343-1		≤ 0,1 mm
Dimensionsstabilität	EN ISO 23999		≤ 0,25 %
Dimensionsstabilität	EN ISO 23999		≤ 2 mm
Rutschhemmstufe	EN 13893	DS	Klasse DS
Rutschhemmstufe	EN 16165 Annex B EN 16165 Annex C		R10* PTV ≥36 Nass
Chemikalienbeständigkeit	EN ISO 26987		Sehr gut
Lichtechtheit der Farbe	EN ISO 105-B02		≥ 6
Brandverhalten	EN 13501-1	B_{fl}-s1 L CS	B_{fl}-s1
Stuhlrollenbeanspruchung (Typ W)	EN ISO 4918		Bestanden
Trittschalldämmung	EN ISO 717-2		3 dB
Wärmedurchlasswiderstand	EN 12667		0,01 - 0,015 m²K/W (geeignet für Fußbodenheizung)
Elektrostatisches Verhalten	EN 1815		≤ 2 kV
Emissionsverhalten	IAC Gold		Zertifikat IACG-352-01-12-2024
Emissionsverhalten	Französische VOC-Verordnung	A+ Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).	A+
Emissionsverhalten	M1	M1	Zertifiziert
UPEC	$U_3P_3E_1C_2$ Bois ou à base de bois $U_3P_3E_2C_2$ Chape ciment ou béton	QB UPEC 3312 QB UPEC 3322 Revêtements de sol résilients 326-002.1 http://evalution.cstb.fr	Zertifikat UPEC 326-002.1
Frei von Orthophthalaten		ORTHO-PHTHALATE FREE	Ja - Amtico Spacia ist frei von Ortho-Phthalaten.
Oberflächenschutz			Quantum Guard Elite - Polyurethan
Antimikrobielle Wirkung (antibakteriell)	ISO 22196:2011	Amtico Spacia wird mit einem antimikrobiellen Additiv von Addmaster® hergestellt - Getestet gegen MRSA und E.Coli	≥ 99,9 % innerhalb von 24 Stunden (verglichen mit unbehandelten Polyethylenoberflächen)
Antimikrobielle Wirkung (antiviral)	ISO 21702:2019	Amtico Spacia wird mit einem antimikrobiellen Additiv von Addmaster® hergestellt - Getestet gegen SARS-CoV-2 (Das Virus, das Covid-19 verursacht)	≥ 85,5 % innerhalb von 24 Stunden (verglichen zu inertem Glas) ≥ 99,9 % innerhalb von 24 Stunden (gegenüber der Erstinokulation)
Falls mit bioattribuierter option gefertigt	ISCC Plus		ISCC-PLUS-Cert-DE100-12801123

*Für Sicherheitsbodenbeläge mit langfristiger Rutschfestigkeit empfehlen wir Amtico Spacia Safety.

Amtico International Germany
Grand Bateau, Hammer Straße 17
40219 Düsseldorf

+49 (0) 211 361 155 0
info@amtico.de
amtico.de

amtico flooring

Amtico International
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Coventry, CV6 5AA
T +44 (0) 24 7686 1400
F +44 (0) 24 7686 1552
amtico.com

AMTICO STATEMENT ON PRODUCT COMPOSITION

Amtico Signature, Spacia, Form, First and Marine luxury vinyl floor tiles are manufactured using ortho-phthalate free and bio-based plasticisers.

Amtico International does not use stabilizers or any other components based on lead, tin, mercury, or cadmium within the construction of its flooring products. In consequence, Amtico flooring contains only trace concentrations of lead, tin, mercury and cadmium i.e., <0.01%wt/wt.

Amtico International does not use any chlorinated paraffins, such as short chain chlorinate paraffins (SCCP), medium-chain chlorinate paraffins or long-chain chlorinate paraffins, per- and polyfluoroalkyl substances (PFAS), halogenated flame retardants (HFR), ortho-phthalates, polychlorinated biphenyls, formaldehyde, asbestos, silicone compounds or any compounds currently present on the ECHA SVHC candidate list, in any of its flooring products. Any such compounds would only be present at trace concentrations i.e.,<0.01%wt/wt.

Furthermore, there are no Carcinogenic, Germ Cell Mutagenic or Reproductive toxic substances (CMR Substances) as defined by (EC) No. 1272/2008 on Classification, Labelling and Packaging of substances and mixtures, present in the above products at concentrations above 0.1%wt/wt.

Gary Wilson

Head of Technical

2nd July 2026

Kingfield Road

Certificate

Indoor Air Comfort Gold

Amtico LVT & Acoustic LVT

Certified Product

Amtico International

Kingfield Road, Coventry CV6 5AA, United Kingdom

Applicant

The above product complies with the Indoor Air Comfort Gold specifications, version 9.0 (2023). These include both inspection of factory production and VOC emissions testing according to EN 16516, at regular intervals. Indoor Air Comfort Gold combines all key European and selected global requirements on VOC product emissions. Additional requirements not related to VOC product emissions, for example content of certain substances or odour are not combined or evaluated. The following VOC emission requirements are combined and the certified product shows compliance with these VOC emission related limit values:

- Belgian VOC regulation
- France VOC class A+
- Germany (AgBB/ABG)
- Italian CAM Edilizia
- EU Taxonomy Regulation
- LEED (ACP)
- BREEAM New Construction
- WELL Building
- DGNB
- SKA Rating
- French HQE certification
- Blue Angel DE-UZ 120
- Austrian Ecolabel UZ 42
- Austrian Baubook
- M1
- Danish Indoor Climate Label (Emission Class 1)
- BVB (Sweden)
- Miljöbyggnad (Sweden)
- Eco Product Norway
- SINTEF (Norway)
- Cradle to Cradle
- very low emitting products according to EN 16798-1
- Singapore Green Label
- Global GreenTag
- Declare 2.0

Issue date: 13 November 2025

Validity date: 13 November 2030

Product type: Resilient Floorings

Certificate number: IACG-352-01-12-2025

This certificate is valid as specified if regular surveillance and testing is done.

Thomas Neuhaus
Head of Certification Body

Eurofins Product Testing A/S
Smedeskovvej 38, Gate 9
8464 Galten
Denmark

DANAK
PROD Reg.no. 7054
Member EA MLA

Appendix to Certificate IACG-352-01-12-2025

Amtico International

receives the Indoor Air Comfort Gold certificate with validity 13 November 2030

for below product group, including subgroups and individual products as listed:

Product group: Amtico LVT & Acoustic LVT

Product type: Resilient Floorings

Products included:

Amitco Form
Amitco Form (Bio-attributed)
Amtico Form Acoustic
Amtico Signature
Amtico Signature (Bio-attributed)
Amtico Signature Acoustic
Amtico Spacia
Amtico Spacia (Bio-attributed)
Amtico Spacia (IRE)
Amtico Spacia Acoustic
Spacia

The products in this group are based on identical or similar recipe and are produced under equivalent conditions. Grouping of the products and inspection of the production process is part of the Indoor Air Comfort Gold certification. A worst-case product, which is representative for the whole group, is being tested frequently.

Eurofins Product Testing A/S
Smedeskovvej 38, Gate 9
8464 Galten
Denmark

DANAK
PROD Reg.no. 7054
Member EA MLA

Statement of Verification

BREG EN EPD No.: 000588 Issue 01

This is to verify that the

Environmental Product Declaration

provided by:

Amtico International

is in accordance with the requirements of:

EN 15804:2012+A2:2019

and

BRE Global Scheme Document SD207

This declaration is for:

1m2 Amtico Spacia A (3.55kg/m2)

Company Address

Amtico International
Kingfield Road,
Coventry
UK
CV6 5AA

Signed for BRE Global Ltd	Laura Critien Operator	30 May 2024 Date of this Issue
30 May 2024 Date of First Issue		29 May 2029 Expiry Date

BRE Global Ltd., Garston, Watford WD25 9XX.
T: +44 (0)333 321 8811 F: +44 (0)1923 664603 E: Enquiries@breglobal.com

Environmental Product Declaration

EPD Number: **000588**

General Information

EPD Programme Operator	Applicable Product Category Rules
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE 2023 Product Category Rules (PN 514 Rev 3.1) for Type III environmental product declaration of construction products to EN 15804:2012+A2:2019
Commissioner of LCA study	**LCA consultant/Tool**
Amtico International Kingfield Road, Coventry UK CV6 5AA	John Baggaley/BRE LINA A2
Declared/Functional Unit	**Applicability/Coverage**
1m^2 Amtico Spacia A (3.55kg/m^2)	Product Specific.
EPD Type	**Background database**
Cradle to Gate with module C and D and options	Ecoinvent v3.8 (2021)

Demonstration of Verification
CEN standard EN 15804 serves as the core PCR [a]
Independent verification of the declaration and data according to EN ISO 14025:2010 ☐Internal ☒ External
(Where appropriate [b])Third party verifier: Roger Connick
a: Product category rules b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)

Comparability
Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A2:2019. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A2:2019 for further guidance

Information modules covered

Product			Construction		Use stage							End-of-life					Benefits and loads beyond the system boundary
					Related to the building fabric					Related to the building							
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4		D
Raw materials supply	Transport	Manufacturing	Transport to site	Construction – Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal		Reuse, Recovery and/or Recycling potential
☑	☑	☑	☑	☑	☐	☑	☐	☐	☐	☐	☐	☑	☑	☑	☑		☑

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

Amtico International
Kingfield Road
Coventry
United Kingdom
CV6 5AA

Construction Product:

Product Description

Amtico Spacia A is a LVT Flooring collection, consisting of a range of Wood and Stone designs, available in a range of finishes, sizes and parquet laying patterns.

Amtico Spacia A products have a total thickness of 2.5mm with a 0.55mm wear layer, providing a usage classification (EN ISO 10582) of

1. 23 Heavy Domestic
2. 33 Heavy Commercial
3. 42 General Light Industrial

The Spacia Collection A comes with a 25 year wear out warranty for residential installation and 10 years for commercial use.

Spacia A is manufactured from ortho-phthalate free plasticisers, contains up to 25% recycled pre-consumer content and also includes an antimicrobial additive, for enhanced hygiene and protection from bacteria and viruses such as MRSA, E.coli and SARS-CoV-2.

Spacia A is a low VOC product, certified to Eurofins Indoor Air Comfort Gold and Finnish RTS M1.

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Technical Information

Property	Value, Unit
Manufacturing Standard (EN ISO 10582)	Conforms
Wear Layer Thickness (EN ISO 24340)	0.55mm
Usage Classification (EN ISO 10874)	23,33,42
Total Thickness (EN ISO 24346)	2.5mm
Weight (EN ISO 23997)	3.55kg/m^2
Flammability /Smoke Emissions (EN 13501-1)	B_{fl} s1
Slip Resistance (EN13893)	Class DS
Electrostatic Propensity EN 1815	≤ 2kV
Thermal Resistance EN 12664	0.0148 m^2K/W
VOC Emissions Eurofins Indoor Air Comfort Gold	IACG-352-01-12-2022B
Full TDS can be found at www.amtico.com	

Construction | Multiple Performance System

Total thickness of product: 2.5mm*

A. Quantum Guard Elite

Amtico's patented urethane formula provides superior durability and resistance against abrasions and stains. The reinforced low gloss finish is highly realistic.

B. High density 0.55mm wear layer

Toughened upper layer, giving excellent impact resistance and high clarity, allowing the product designs to shine through.

C. Design layer

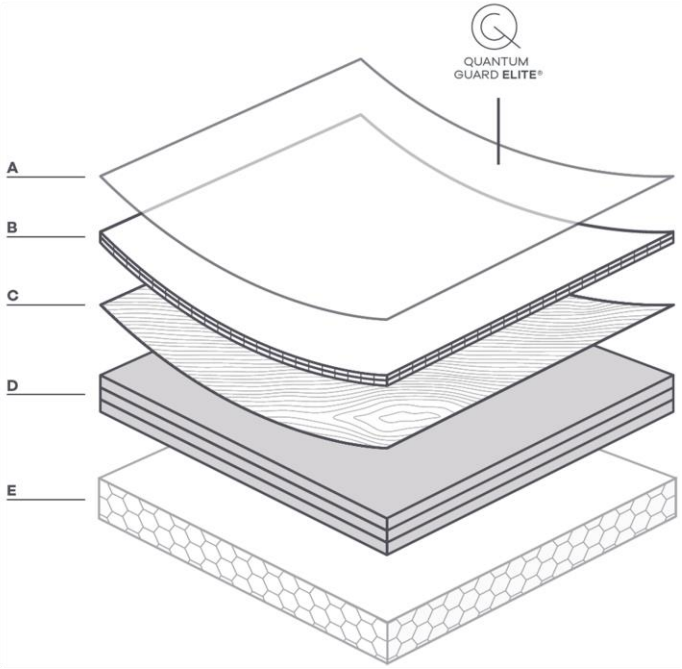
Carefully crafted print films create the distinctive Amtico Wood and Stone product designs.

D. Backing layers

The foundation of the product, providing long lasting stability. Contains up to 32% recycled pre-consumer content.

E. Acoustic backing layer (optional)

Reduces the impact sound by up to 18dB and provides an extra level of comfort underfoot.



* 3.5mm with optional Acoustic backing

Please note, Heritage Oaks are produced with a standard urethane coating, and are not available in Acoustic and does not feature an antimicrobial additive.

Main Product Contents

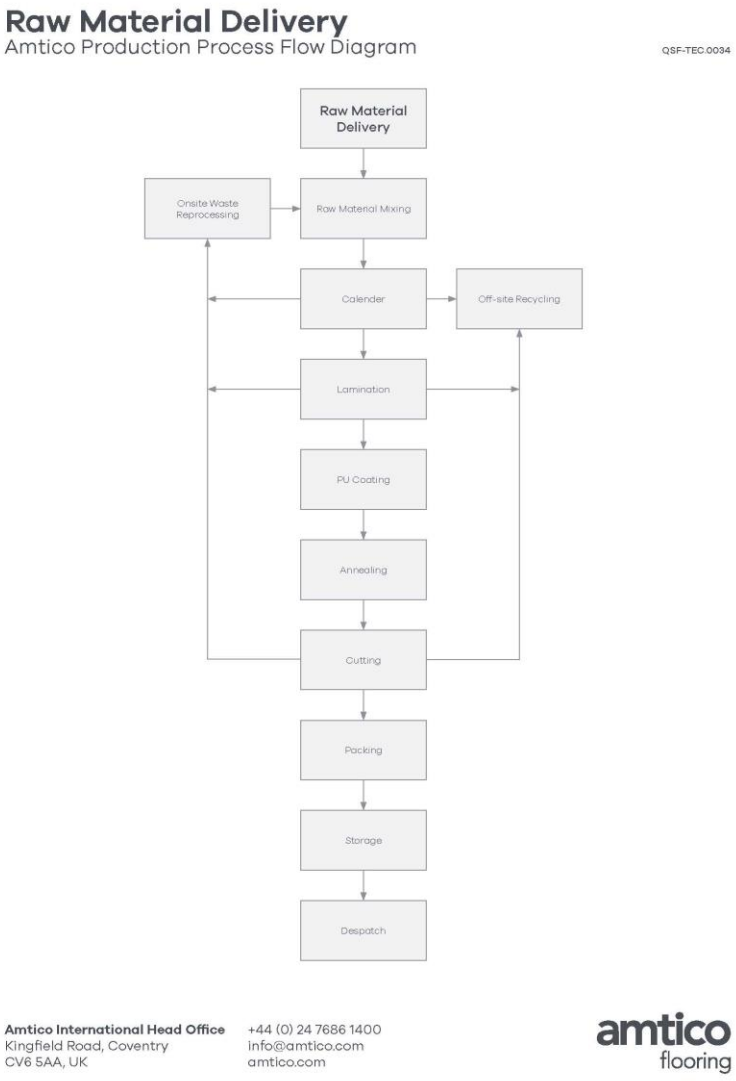
Material/Chemical Input	%
Polyurethane Lacquer	<0.5
Polyvinyl Chloride	43
Plasticisers	13
Print Film	3
Calcium Carbonate	40
Stabiliser, Process Aids & Pigments	<2

Manufacturing Process

The product is constructed by the thermal lamination of the wear layer, print film and backing plies. The wear layer and backing plies are all manufactured as follows

1. Required ply raw materials are initially blended
2. The ply blend is then heated and calendered on a mill to produce a ply of the required thickness.
3. The plies required to form the end product, along with the print film, are then thermally laminated together under pressure, to form the final product.
4. The product is then coated with polyurethane, before being cut to size, boxed and dispatched to the customer.
5. Cutting waste is reground on-site and reused in the production of further backing plies.

Process flow diagram



Construction Installation

Amtico Spacia A should be bonded with a suitably low emissions adhesive to an appropriately prepared subfloor as detailed in BS8302.
Details for Amtico Spacia A installation can be found at www.amtico.com

Use Information

All Amtico Spacia A manufacturing sites are all certificated to ISO 9001 and ISO 14001.

Amtico Spacia A adheres to the emission requirements of Indoor Air Comfort Gold, German AgBB/DIBt, Belgium, and is rated as A+ in the French “Emissions dans l’air interieur” scheme.

End of Life

At the end of the product's life, the flooring is mechanically removed from the subfloor and disposed of by landfill, incineration/energy recovery or recycling. It is assumed that no energy required to remove the floor.

It is assumed that 87% of the product will go to landfill, 12% to incineration/energy recovery schemes and 1% to recycling. The distance travelled from the demolition site to a disposal site will be no more than 200km.

Life Cycle Assessment Calculation Rules

Declared / Functional unit description

1m^2 Amtico Spacia A (3.55kg/m^2)

System boundary

This is a cradle-to-gate with module C and D and options LCA study that follows the modular design defined in EN15804:2012+A2:2019 and BRE 2023 Product Category Rules (PN 514 Rev 3.1) and includes the processes covered in the manufacturing site and product stage A1 to A3, A4, A5, B2, C1-C4 and D.

Data sources, quality and allocation

Specific primary data derived from Amtico's production process in the Coventry factory, have been modelled using the BRE LINA A2 software and the Ecoinvent v3.8 (2021) database. In accordance with the requirements of EN15804:2012+A2:2019, the most current available data has been used. The manufacturer-specific data from Amtico covers a period of one year (01/01/2021 – 31/12/2021). Secondary data has been obtained for all other upstream and downstream processes that are beyond the control of the manufacturer (i.e. raw material production) from the Ecoinvent v3.8 (2021) database. All Ecoinvent v3.8 (2021) datasets are complete within the context used and conform to the system boundary and the criteria for the exclusion of inputs and outputs, according to the requirements specified in EN15804:2012+A2:2019.

Amtico manufactures other LVT products at its production site, in addition to the product covered by this EPD. Calculations were performed to enable allocation of total site energy use, water and waste to the Amtico Spacia A product. Allocation procedures were by mass allocation and are according to EN 15804 and are based on the ISO14044 guidance. All the input and output materials such as packaging, transportation, energy, water use and wastes are included. Only exceptions are outputs to air, water or soil as these are not measured at the site.

Products manufactured in Coventry are then disturbed in the UK, across Europe, Scandinavia, the Middle and Far East. The average distance transported for each geographical market was calculated by multiplying the distance travelled by the percentage sales volume by square meter. Regions where sales were less than 1% were not considered.

The electricity supply was determined by the electricity supplier's meters. The assumed electricity generation GWP was 0.312 kg CO_2 eq./kWh (Electricity, GB).
Natural gas is used for heat generation and steam production. The assumed GWP was 0.232 kg CO_2 eq./kWh (Natural gas, at industrial furnace, GB).
Wastewater to sewer was determined by a water meter.

Module C4 end of life assumes that 1% of the PVC flooring is recycled, 12% is used in energy recovery/incineration, with the remainder going to landfill. This ratio is based on a study performed by BRE.

Quality Level	Geographical representativeness	Technical representativeness	Time representativeness
Very Good	Data from area under study.	Data from processes and products under study. Same state of technology applied as defined in goal and scope (i.e. identical technology).	There is less than 5 years between the Ecoinvent v3.8 (2021) LCI reference year, and the time period for which the LCA was undertaken.

Specific UK datasets have been selected from the Ecoinvent v3.8 (2021) LCI for this LCA. The quality level of geographical and technical representativeness is therefore Very Good. The quality level of time representativeness is Very Good as the background LCI datasets are based on Ecoinvent v3.8 (2021) which was compiled in 2021. Therefore, there is less than 5 years between the Ecoinvent v3.8 (2021) LCI reference year and the time period for which the LCA was undertaken.

Cut-off criteria

All stages of the manufacturing process have been included. Transport distances to site were not calculated for Sales Business Units with <1% of product sales. The product life was based on the residential 25-year warranty. All inputs or outputs have been included and all raw materials, packaging and transport, energy, water use and wastes, are included, except for direct emissions to air, water and soil, which are not measured. Upstream extraction and/or processing of inputs are included within the use of the background datasets within LINA. The pre-existing recycled content of raw materials can be omitted in module D since it is less than 1 %, which is in line with the cut-off rule provisions of EN15804:2012+A2:2019.

LCA Results

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts									
			GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc	ODP	AP	EP-freshwater
			kg CO_2 eq	kg CO_2 eq	kg CO_2 eq	kg CO_2 eq	kg CFC11 eq	mol H^+ eq	kg $(PO_4)^{3-}$ eq
Product stage	Raw material supply	A1	5.34E+00	4.39E+00	4.54E-01	4.89E-01	8.62E-06	1.94E-02	3.77E-03
	Transport	A2	1.78E-01	1.78E-01	1.10E-04	8.55E-05	4.02E-08	2.35E-03	9.45E-06
	Manufacturing	A3	1.74E+00	2.01E+00	-2.69E-01	2.96E-03	1.56E-07	5.28E-03	3.00E-04
	Total (of product stage)	A1-3	7.26E+00	6.58E+00	1.85E-01	4.92E-01	8.82E-06	2.71E-02	4.08E-03
Construction process stage	Transport	A4	9.90E-01	9.87E-01	2.25E-03	6.26E-04	2.07E-07	5.51E-03	1.47E-04
	Construction	A5	1.20E+00	7.57E-01	3.57E-01	8.21E-02	3.48E-07	3.94E-03	6.76E-04
Use stage	Use	B1	MND	MND	MND	MND	MND	MND	MND
	Maintenance	B2	1.27E+00	1.22E+00	4.76E-02	1.12E-03	1.21E-07	9.03E-03	5.25E-04
	Repair	B3	MND	MND	MND	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled									
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	1.18E-01	1.18E-01	1.01E-04	4.63E-05	2.73E-08	4.79E-04	7.60E-06
	Waste processing	C3	9.13E-01	9.11E-01	1.91E-03	1.33E-04	2.92E-08	7.05E-04	4.11E-05
	Disposal	C4	2.61E-01	2.60E-01	3.27E-04	3.41E-05	9.91E-09	2.84E-04	4.76E-06
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-3.34E-01	-3.30E-01	-3.58E-03	-3.41E-04	-5.78E-08	-1.81E-03	-1.58E-04

GWP-total = Global warming potential, total;
GWP-fossil = Global warming potential, fossil;
GWP-biogenic = Global warming potential, biogenic;
GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
AP = Acidification potential, accumulated exceedance; and
EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment

LCA Results (continued)

Parameters describing environmental impacts									
			EP-marine	EP-terrestrial	POCP	ADP-mineral& metals	ADP-fossil	WDP	PM
			kg N eq	mol N eq	kg NMVOC eq	kg Sb eq	MJ, net calorific value	m^3 world eq deprived	disease incidence
Product stage	Raw material supply	A1	5.12E-03	3.61E-02	1.31E-02	7.24E-05	1.12E+02	3.83E+00	1.61E-07
	Transport	A2	6.07E-04	6.72E-03	1.84E-03	3.70E-07	2.61E+00	1.08E-02	1.57E-08
	Manufacturing	A3	1.62E-03	1.49E-02	3.82E-03	4.96E-06	4.52E+01	4.06E-01	4.35E-08
	Total (of product stage)	A1-3	7.35E-03	5.77E-02	1.88E-02	7.77E-05	1.60E+02	4.25E+00	2.21E-07
Construction process stage	Transport	A4	1.67E-03	1.83E-02	5.96E-03	1.49E-05	1.46E+01	1.08E-01	1.07E-07
	Construction	A5	1.27E-03	8.42E-03	2.82E-03	1.08E-05	1.76E+01	9.09E-01	4.01E-08
Use stage	Use	B1	MND	MND	MND	MND	MND	MND	MND
	Maintenance	B2	5.20E-03	1.60E-02	5.22E-03	1.74E-05	3.55E+01	1.55E+00	1.05E-07
	Repair	B3	MND	MND	MND	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled									
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	1.44E-04	1.58E-03	4.83E-04	4.10E-07	1.78E+00	8.03E-03	1.02E-08
	Waste processing	C3	2.08E-04	1.89E-03	5.32E-04	1.03E-06	1.52E+00	1.70E+00	6.09E-09
	Disposal	C4	1.22E-03	1.04E-03	3.54E-04	1.08E-07	7.71E-01	3.45E-02	5.61E-09
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-2.85E-04	-2.83E-03	-8.33E-04	-1.47E-06	-5.72E+00	-1.52E-01	-1.36E-08

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
EP-terrestrial = Eutrophication potential, accumulated exceedance;
POCP = Formation potential of tropospheric ozone;
ADP-mineral & metals = Abiotic depletion potential for non-fossil resources;
ADP-fossil = Depletion potential of the stratospheric ozone layer;
WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
PM = Particulate matter.

LCA Results (continued)

Parameters describing environmental impacts							
			IRP	ETP-fw	HTP-c	HTP-nc	SQP
			kBq U^{235} eq	CTUe	CTUh	CTUh	dimensionless
Product stage	Raw material supply	A1	5.87E-01	9.03E+01	4.33E-09	9.88E-08	3.48E+01
	Transport	A2	1.28E-02	1.92E+00	7.56E-11	1.90E-09	2.18E+00
	Manufacturing	A3	1.16E+00	2.16E+01	8.71E-10	1.31E-08	4.34E+01
	Total (of product stage)	A1-3	1.76E+00	1.14E+02	5.28E-09	1.14E-07	8.03E+01
Construction process stage	Transport	A4	9.29E-02	1.48E+01	1.61E-09	1.90E-08	6.99E+00
	Construction	A5	1.21E-01	1.98E+01	5.71E-10	1.44E-08	8.54E+00
Use stage	Use	B1	MND	MND	MND	MND	MND
	Maintenance	B2	7.26E-02	1.01E+02	3.35E-09	6.36E-08	5.56E+00
	Repair	B3	MND	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled							
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	9.17E-03	1.39E+00	4.51E-11	1.46E-09	1.23E+00
	Waste processing	C3	1.01E-02	5.02E+01	1.98E-10	1.41E-08	8.89E-01
	Disposal	C4	3.64E-03	1.19E+01	2.63E-11	2.31E-09	1.83E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-6.79E-02	-5.22E+00	-1.13E-10	-3.32E-09	-1.39E+00

IRP = Potential human exposure efficiency relative to U235;
ETP-fw = Potential comparative toxic unit for ecosystems;
HTP-c = Potential comparative toxic unit for humans;
HTP-nc = Potential comparative toxic unit for humans; and
SQP = Potential soil quality index.

LCA Results (continued)

Parameters describing resource use, primary energy								
			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	6.63E+00	3.37E+00	1.00E+01	6.56E+01	4.60E+01	1.12E+02
	Transport	A2	2.91E-02	0.00E+00	2.91E-02	2.56E+00	0.00E+00	2.56E+00
	Manufacturing	A3	6.41E+00	5.41E+00	1.18E+01	3.97E+01	5.69E+00	4.54E+01
	Total (of product stage)	A1-3	1.31E+01	8.78E+00	2.18E+01	1.08E+02	5.17E+01	1.59E+02
Construction process stage	Transport	A4	4.02E-01	0.00E+00	4.02E-01	1.44E+01	0.00E+00	1.44E+01
	Construction	A5	-1.99E+00	5.17E+00	3.19E+00	7.03E+00	8.70E+00	1.57E+01
Use stage	Use	B1	MND	MND	MND	MND	MND	MND
	Maintenance	B2	1.59E+00	0.00E+00	1.59E+00	1.30E+01	2.09E+01	3.39E+01
	Repair	B3	MND	MND	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled								
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	2.51E-02	0.00E+00	2.51E-02	1.75E+00	0.00E+00	1.75E+00
	Waste processing	C3	1.29E-01	0.00E+00	1.29E-01	-9.28E+00	1.07E+01	1.39E+00
	Disposal	C4	1.38E-02	0.00E+00	1.38E-02	-6.57E+01	6.64E+01	7.58E-01
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-4.93E-01	0.00E+00	-4.93E-01	-2.72E+00	7.63E-01	-1.96E+00

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
PERM = Use of renewable primary energy resources used as raw materials;
PERT = Total use of renewable primary energy resources;
PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
PENRM = Use of non-renewable primary energy resources used as raw materials;
PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

Parameters describing resource use, secondary materials and fuels, use of water						
			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m^3
Product stage	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	9.11E-02
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	2.66E-04
	Manufacturing	A3	1.26E-02	4.09E-07	0.00E+00	1.01E-02
	Total (of product stage)	A1-3	1.26E-02	4.09E-07	0.00E+00	1.01E-01
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	2.68E-03
	Construction	A5	4.21E-04	1.23E-08	0.00E+00	2.15E-02
Use stage	Use	B1	MND	MND	MND	MND
	Maintenance	B2	3.95E-03	0.00E+00	0.00E+00	3.66E-02
	Repair	B3	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled						
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	1.99E-04
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	3.96E-02
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	8.11E-04
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	-3.74E-03

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;
NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water

LCA Results (continued)

Other environmental information describing waste categories					
			HWD	NHWD	RWD
			kg	kg	kg
Product stage	Raw material supply	A1	2.85E-01	6.53E+00	1.95E-04
	Transport	A2	2.97E-03	4.27E-02	1.15E+01
	Manufacturing	A3	8.20E-02	1.31E+00	3.18E-04
	Total (of product stage)	A1-3	3.70E-01	7.89E+00	1.15E+01
Construction process stage	Transport	A4	3.09E-02	6.33E-01	9.47E+01
	Construction	A5	5.32E-02	1.23E+00	3.45E-01
Use stage	Use	B1	MND	MND	MND
	Maintenance	B2	9.13E-02	1.61E+00	2.37E-01
	Repair	B3	MND	MND	MND
	Replacement	B4	MND	MND	MND
	Refurbishment	B5	MND	MND	MND
	Operational energy use	B6	MND	MND	MND
	Operational water use	B7	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled					
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	1.97E-03	3.49E-02	1.21E-05
	Waste processing	C3	2.36E-01	5.81E-01	6.94E-06
	Disposal	C4	1.53E-03	3.12E+00	4.57E-06
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-9.39E-03	-7.19E-01	-1.64E-05

HWD = Hazardous waste disposed;
NHWD = Non-hazardous waste disposed;
RWD = Radioactive waste disposed

LCA Results (continued)

Other environmental information describing output flows – at end of life								
			CRU	MFR	MER	EE	Biogenic carbon (product)	Biogenic carbon (packaging)
			kg	kg	kg	MJ per energy carrier	kg C	kg C
Product stage	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.74E-02	0.00E+00
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Manufacturing	A3	0.00E+00	1.80E-01	2.64E-08	8.07E-04	8.86E-03	-6.08E-02
	Total (of product stage)	A1-3	0.00E+00	1.80E-01	2.64E-08	8.07E-04	-5.86E-02	-6.08E-02
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	0.00E+00	3.27E-01	6.12E-09	2.42E-05	1.13E-02	7.00E-02
Use stage	Use	B1	MND	MND	MND	MND	MND	MND
	Maintenance	B2	0.00E+00	5.65E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	MND	MND	MND	MND	MND	MND
	Replacement	B4	MND	MND	MND	MND	MND	MND
	Refurbishment	B5	MND	MND	MND	MND	MND	MND
	Operational energy use	B6	MND	MND	MND	MND	MND	MND
	Operational water use	B7	MND	MND	MND	MND	MND	MND
87% Landfill, 12% Incineration/Energy Recovery, 1% Recycled								
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	0.00E+00	3.55E-02	4.26E-01	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy

Scenarios and additional technical information

Scenarios and additional technical information			
Scenario	Parameter	Units	Results
A4 – Transport to the building site	Products manufactured at Coventry are disturbed in the UK, across Europe, Scandinavia, the Middle and Far East. The average distance transported for each geographical market was calculated by multiplying the distance travelled by the percentage sales volume by square meter. Regions where sales were less than 1% of the total sales were not considered. The sales volumes were those in 2021. The transportation data is taken from Ecoinvent v3.8 (2021) datasets		
	UK Direct Delivery:	Diesel / Van	0.32l/km
	Distance:	km	222
	Capacity utilisation (incl. empty returns)	%	61
	Bulk density of transported products	kg/m^3	1420
	Worldwide: Road	Diesel / 16-32 tonne Lorry	0.032l/km
	Distance:	km	269
	Capacity utilisation (incl. empty returns)	%	61
	Bulk density of transported productskg/m3	kg/m^3	1420
	Worldwide: Sea	Marine Bunker Oil / Container Ship	0.21tonnes/km
	Distance:	km	60
	Capacity utilisation (incl. empty returns)	%	65
	Bulk density of transported productskg/m3	kg/m^3	1420
A5 – Installation in the building	Amtico Spacia A should be bonded with a suitable, low emissions adhesive to an appropriately prepared subfloor as detailed in BS8302. Full details on installation can be found at www.amtico.com		
	Installation Wastage Rate	%	3
	Post installation Cleaning	l/m^2	0.02
	Ancillary Materials	Mass per unit area of product installed kg/m^2	0.288
	Material Waste	Installation off cuts mass per unit area of product installed kg/m^2	0.1065
	Cardboard Packaging	Mass per unit area of product installed kg/m^2	0.162

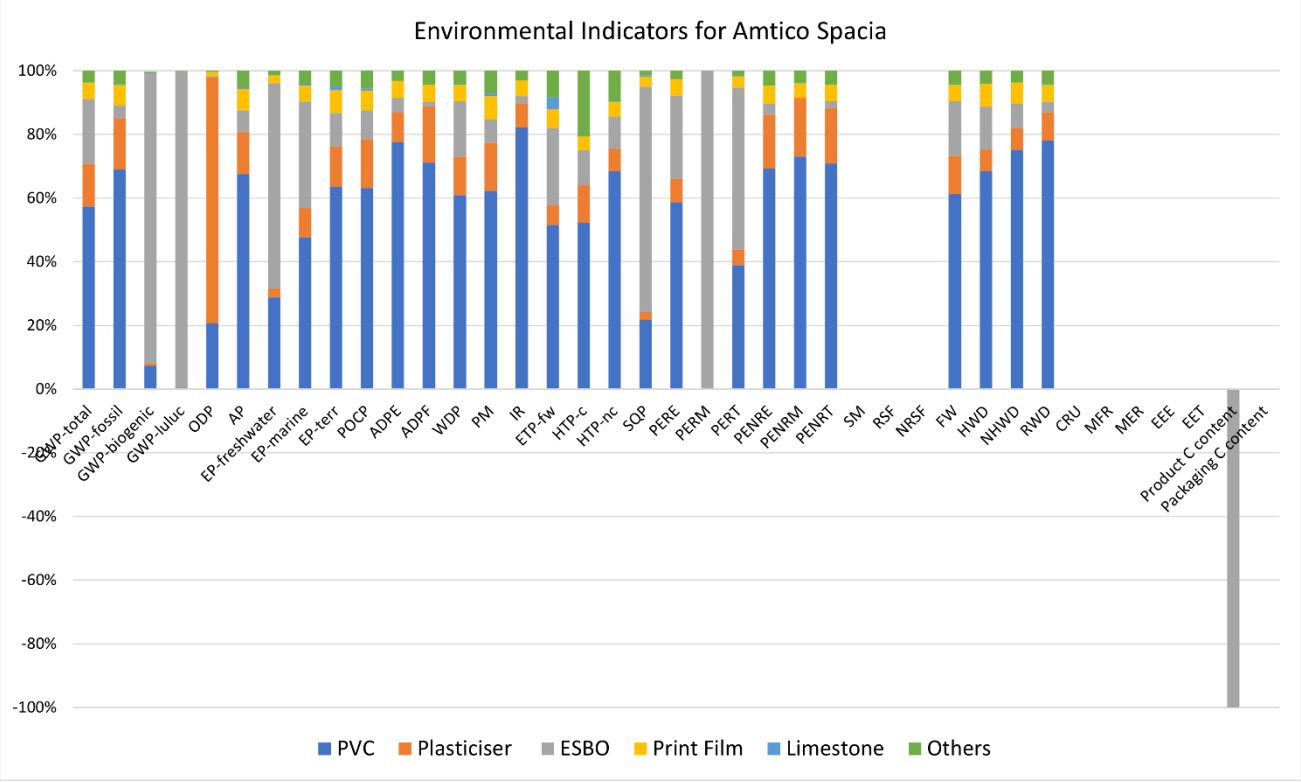
Scenarios and additional technical information			
Scenario	Parameter	Units	Results
	Wood Packaging	Mass per unit area of product installed kg/m^2	0.215
	Shrink Wrap	Mass per unit area of product installed kg/m^2	0.007
B2 – Maintenance	The required recommended cleaning and maintenance regime is dependent on the place of installation and the foot traffic over the floor. High traffic areas will generally require more cleaning and maintenance than low traffic situations. Dry cleaning may be performed with a dust mop or with a vacuum cleaner. Wet cleaning can be performed with a mop, detergent and water. Power cleaning is also a possibility with scrubber driers etc. The calculations are assumed for 1m^2 per year.		
	52 Wet Cleans per year (Water use)	l/yr./m^2	3.224
	Detergent usage	kg/yr./m^2	0.0416
Reference service life	Amtico International guarantees that in the event of the Amtico Spacia A flooring supplied to the original purchaser under their agreement, requiring replacement due to 'Wear-out' from normal foot traffic within twenty-five years from the date of purchase, the floor will be repaired or replaced with the same or similar material free of charge. 'Wear-out' means the removal of the pattern and colour from the Amtico Spacia A floor caused by the removal of the protective wear layer. Reference service life used in LCA was the residential warranty.		
	Residential Product Warranty.	Years	25
C1 to C4 End of life,	Data for post-consumer end of life for PVC flooring scenarios is limited. BRE BREEAM PEP scheme (2008) assumed 87% went to landfill, 12% for incineration/energy recovery and 1% was recycled. An Axion report "Post-Zero Avoidable Waste in Flooring-Towards a Circular Economy", published February 2022, also has a figure of 1%. The 87:12:1 ratio was used in this study.		
C1 Deconstruction	At the product's end of life that the product is manually mechanically removed from the sub-floor. No ancillary materials, energy or water was required for the process.	kg/m^2	3.55
C2 Transport	It has been assumed that the disposal facility will be within 200km of the demolition site.		
	Disposal from demolition site to landfill	km	174
	Disposal from demolition site to incinerator/energy recovery plant	km	24
	Disposal from demolition site to recycling plant	km	2
C3 Waste Processing	Minimal waste processing was considered necessary with no further ancillary materials, energy or water required.		
	1% is recycled	kg/m^2	0.0355
	12% is incinerated /energy recovery	kg/m^2	0.426
C4 Disposal	87% of the material is assumed to go to landfill	kg/m^2	3.0885

Scenarios and additional technical information			
Scenario	Parameter	Units	Results
Module D	BRE BREEAM PEP scheme used a recycling figure of 1% in its calculations. (2008). An Axion report "Post-Zero Avoidable Waste in Flooring-Towards a Circular Economy", published February 2022, also has a figure of 1%. The pre-existing recycled content in the raw material can be omitted since it is less than 1 %.	kg/m^2	0.0355
	Data for post-consumer recycling rates for vinyl flooring is limited. BRE BREEAM PEP scheme used an energy recovery figure of 12% in its calculations. (2008)	Kg/m^2	0.426

Interpretation

Out of the total mass of input materials, PVC makes up 43%, followed by limestone of 40%, plasticiser makes up 11%, ESBO 2%, print film 3%, other additives make up the remaining of 1%. The bulk of the environmental impacts and primary energy demand are attributed to the manufacturing phase, covered by information modules A1-A3 of EN15804:2012+A2:2019.

As a result, PVC ranks first in terms of overall environmental impacts and is responsible for the greatest impact on all environmental impact indicators except GWP-bio, GWP-luluc, ODP, EP-freshwater, SQP, PERM, PERT, biogenic carbon content. ESBO and plasticiser rank second and third in terms of overall environmental impacts. Limestone has negligible impacts on all indicators.



Summary, comments and additional information

Front Cover Image

About Amtico:

LVT is in our DNA.

Amtico is a British manufacturer of industry-leading flooring. A joint venture between American Biltrite and manufacturing giant Courtaulds, we began designing and making luxury vinyl tiles (LVT) in 1964. We're located in Coventry, a historic city, globally recognised for its continued contribution to British design, craft and engineering.

Today, we sell our floors in over 130 countries, but we are the only manufacturer who can proudly say we still make a large proportion of our LVT flooring from scratch, here in the UK.

A passion for brilliance

We've been setting the standard for creative expression in floor design for a long time. And we've become pretty good at it. The formula is simple. We combine relentless dedication with top-of-class expertise. Then we add that to every single floor we make. Our people stop at nothing to ensure every one of our products delivers what's required of it – excellence.

And if you need something completely unique, our in-house design team are ready to provide advice on product choice, laying patterns and finishes. Plus, we have a team of CAD experts who will work with you to draw up your design ready for manufacture.

Where we stand on sustainability

When you choose an Amtico floor, we want you to be sure it's built on foundations that protect our planet and empower our people.

So, we are working on our strategy – a plan for tackling the major challenges, not in the next 20 years, but right now.

To read more about our strategy on sustainability, please visit https://www.amtico.com/commercial/sustainability/.

References

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