



Lindab **Sustainable Construction**

Discover how our ventilation products and solutions can help you with sustainability certifications of buildings.



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Environmental certification of buildings

Lindab is a Good Thinking company and we support sustainability certification of buildings. One of Lindab's goals is to offer top-quality products which helps to build top-quality buildings with comfortable environments to live, work, and play in. Lindab believes that the environmental certification of buildings is an important factor in achieving Goal 11: Sustainable Cities and Communities, which is included in Agenda 2030. Lindab is a partner to rely on, our products and solutions have a strong focus on innovation to create added value for customers and end users while at the same time contribute to more efficient use of resources.

A sustainability certification of a building means that the environmental work and the building's environmental performance are reviewed by self-inspection or by a third party. The objective of environmentally certifying a building is to reduce its environmental impact during its entire life-cycle. Certification helps to reduce the use of resources such as land, water, energy, and building materials. This brochure will be updated with other certification programs continuously.

Good Thinking

BREEAM

BREEAM (BRE Environmental Assessment Method) is an environmental certification system from United Kingdom. A building's environmental performance is assessed in a number of different areas such as energy use, indoor climate and choice of materials. Points for each area are accumulated and then aggregated into an overall score and a rating. The BREEAM ratings are: Outstanding, Excellent, Very Good, Good, Pass and Unclassified.

Lindab's role in BREEAM certification

Lindab can help to accumulate points in a range of different areas. There are no BREEAM-approved products, the choice of a product is based on how the highest number of points can be achieved in the different areas. Higher scores and ratings can be achieved by selecting our products and constructing air-tight, energy-efficient systems. Our complete product portfolio and associated documentation promote the basis for an optimal solution and a complete final system documentation to the end customer.

5.0 Management and control – MAN 04 commissioning and handover

(No. of points available: 4)

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Lindab offers product documentation such as product data sheets, safety data sheets, and performance declarations. Lindab also has decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact.

6.0 Health and wellbeing – HEA 02 Indoor air quality

(No. of points available depends on building type)

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

A good indoor climate has a great impact on how people understand and use information. Indoor air can be five times more polluted than outdoor air. Lindab's motto is "Build tight, ventilate right" which in turn requires FTX-systems; mechanical supply and exhaust air with heat recovery. In this way, the outdoor air can be filtered and cooled or heated while hazardous substances and moisture are removed from the building in an energy-efficient manner. This creates the best conditions for the people using the building. Visit our website to find out more about our wide range of ventilation systems.

„Build tight –
ventilate right”

6.0 Health and wellbeing – HEA 04 Thermal comfort

(No. of points available: 3)

To ensure that appropriate thermal comfort levels are achieved through design, and controls are selected to maintain a thermally comfortable environment for occupants within the building.

Lindab's products, our complete range of product selection, and design software, installation references, and well thought-out designs ensure that the desired performance is achieved. The air temperature and air circulation rate in a room depend entirely on the occupancy rate, the air quality, and air temperature requirements along with the concentration of hazardous gases and particles. Lindab Pascal adjusts the air volume and regulates the temperature of the indoor climate, creating a quiet and draught-free environment.

7.0 Energy - ENE 01 Reduction of energy use and carbon emissions

(No. of points available: 14)

To recognise and encourage buildings designed to minimise operational Energy demand on page 148, Primary energy consumption on page 149 and CO₂ emissions.

A record number of energy-efficient initiatives have been implemented in the area of climate policy in the past five years. Increased requirements for energy saving and a focus on improved indoor climate leads to demands on new technology and innovation to reduce energy consumption in buildings. Lindab offers tailor-made solutions for each room, resulting in optimal energy use.

Lindab Safe and Lindab Safe Click are the first air duct system in the world to receive Eurovent certification. This means that you can feel safe with the products you buy as well as being absolutely sure that they maintain high quality and achieve air tightness class D. Our air duct system provides a circulating flow of energy, where almost all of the supplied energy is fed back to the heat exchanger which in turn heats the new supply air.

Lindab's unique product, UltraLink, takes energy efficiency to a new level. UltraLink is a stable solution that accurately and reliably measures air flow and temperature. It is also easy to read and control the entire ventilation system to maintain an optimal level for both the building and its occupants. Ventilating according to demand is the best option both environmentally and financially, as well as in terms of people's comfort. Lindab Pascal is an intelligent, demand-controlled ventilation system. The system adjusts the indoor climate by itself in relation to the weather outdoors, and is compatible with both airborne climate systems and waterborne chilled beams.



**The first air duct system
in the world to comply with
tightness class D.**

10.0 Materials - Mat 01 Life-cycle impact

(No. of points available depends on building type)

To recognise and encourage the use of robust and appropriate life cycle assessment tools and consequently the specification of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.

Ventilation products are not yet included in the requirements for EPDs in BREEAM.

Lindab have been part of the development for the product-specific rules (PCR) for ventilation products together with EPD Norway and other companies in the ventilation industry. The rules are needed to create comparable EPDs and was published 2021. We are now working to create EPD for the most relevant products. The documents will be available online.

10.0 Materials - MAT 03 Responsible sourcing of construction products

(No. of points available: 4)

To recognise and encourage the specification and procurement of responsibly sourced construction products.

All of Lindab's major production units are certified according to ISO 9001 and ISO 14001. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. Sections 4 and 5 describe where the largest volume of materials are purchased, what volume of the materials are recycled, and the final country of production. Lindab puts a great emphasis on materials selection and wants to promote the purchase of materials that are sustainable and responsibly manufactured and extracted. We document our work with sustainability in accordance with the Global Reporting Initiative, GRI. The report is available for download on our website.

Lindab collaborates with suppliers to ensure that conflict minerals are sourced from certified smelters. Using CMRT reports, Lindab helps customers affected by the US Conflict Minerals Act, the Dodd-Frank Wall Street Reform and the Consumer Protection Act of 2010.

We report our work with sustainability in accordance with the **Global Reporting Initiative**.



10.0 Materials – MAT 06 Material efficiency

(No. of points available: 1)

To recognise and encourage measures to optimise material efficiency in order to minimise the environmental impact of material use and waste without compromising on structural stability, durability or service life of the building.

Lindab offers different products and services that assure the quality of the construction project right from the start of the design phase. Our products and systems are of the highest quality, with a major focus on source and materials selection. Today's functional requirements for modern buildings are always Lindab's reference point, with the aim of always significantly exceeding the requirements. This applies, for instance, to indoor climate, energy, acoustics, fire protection and, not least, sustainability. Our resources, products, and services can help you with your construction projects both before, during, and after, to create the best conditions for a top-quality sustainable building.

We can support you in the planning and design phase by offering advice based on your conditions:

- Environmental certificates along with other assessments and approvals.
- Design assistance to ensure energy-efficient and optimised ventilation.
- Product selection programs such as LindQST for searching, calculating, and simulating indoor climate products as well as BIM objects in MagiCloud, plug-ins for Revit, and AutoCAD for product quantification and other smart functions.

When the project is up and running, deliveries are on their way, and the installation is being carried out, we can support you with:

- Customised products.
- Deliveries to suit your requirements.
- Packaging according to floors, rooms, etc. using goods labelling.
- Deliveries in clearly marked boxes to make it easier to find the right material on site.
- Smart tools that facilitate handling, to streamline installation, and commissioning.
- Option of joint deliveries of all materials from our central distribution center.
- Short delivery times and increased flexibility with local production/hub.

11.0 Waste - WST 01 Construction waste management

(No. of points available: 3)

To promote resource efficiency via the effective and appropriate management of construction waste.

Lindab offers customised products and flexible transportation options to minimise waste. In addition, products are as much as possible packaged in the same boxes, to reduce the amount of packaging materials. All packaging materials are recyclable and Lindab's cardboard boxes contain up to 97.5% recycled material.

Many of our products consist of only a few materials and are often easy to disassemble, which means that each material can be recycled efficiently. Lindab has decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances and facts about the environmental impact. Section 10 describes our recommendations for waste management.

Please contact us if you would like more information about how Lindab can help you with your projects.



LEED

LEED is considered to be the best known, world-wide rating system, developed and administered by the non-profit association U.S. Green Building Council. Performance is assessed for land use, water use, energy use and emissions, materials and building resources, indoor climate and innovative design. New construction and redevelopment projects, as well as existing buildings, can be classified. The latest version of the system is v4, which was launched in 2013. Certification levels: Platinum, Gold, Silver and Certified.

Lindab's role in LEED certification

Lindab can help to accumulate points in a range of different areas. There are no LEED-approved products, but the choice of a product is based on how the highest number of points can be achieved in the different areas. Higher scores and ratings can be achieved by selecting our products and constructing air-tight, energy-efficient systems. Our complete product portfolio and associated documentation promote the basis for an optimal solution and complete final system documentation for handover to the end customer.

Energy and atmosphere – Minimum Energy Performance & Optimise Energy Performance

To reduce the environmental and economic harms of excessive energy use by achieving a minimum level of energy efficiency for the building and its systems.

To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use.

A record number of energy-efficient initiatives have been implemented in the area of climate policy in the past five years. Increased requirements for energy saving and a focus on improved indoor climate leads to demands on new technology and innovation to reduce energy consumption in buildings. Lindab offers tailor-made solutions for each room, resulting in optimal energy use.



The **first air duct system in the world** to comply with **tightness class D**.

Lindab Safe and Lindab Safe Click are the first air duct system in the world to receive Eurovent certification. This means that you can feel safe with the products you buy as well as being absolutely sure that they maintain high quality and achieve air tightness class D. Our air duct system provides a circulating flow of energy, where almost all of the supplied energy is fed back to the heat exchanger which in turn heats the new supply air.

Lindab's unique product, UltraLink, takes energy efficiency to a new level. UltraLink is a stable solution that accurately and reliably measures air flow and temperature. It is also easy to read and control the entire ventilation system to maintain an optimal level for both the building and its occupants. Ventilating according to demand is the best option both environmentally and financially, as well as in terms of people's comfort. Lindab Pascal is an intelligent, demand-controlled ventilation system. The system adjusts the indoor climate by itself in relation to the weather outdoors, and is compatible with both airborne climate systems and waterborne chilled beams.

Materials and resources – Building life-cycle impact reduction

(No. of points available: 2 to 6)

To encourage adaptive reuse and optimize the environmental performance of products and materials.

Lindab offers different products and services that assure the quality of the construction project right from the start of the design phase. Our products and systems are of the highest quality, with a major focus on source and materials selection. Today's functional requirements for modern buildings are always Lindab's reference point, with the aim of always significantly exceeding the requirements. This applies, for instance, to indoor climate, energy, acoustics, fire protection and, not least, sustainability. Our resources, products, and services can help you with your construction projects both before, during, and after, to create the best conditions for a top-quality sustainable building.

We can support you in the planning and design phase by offering advice based on your conditions:

- Environmental certificates along with other assessments and approvals.
- Design assistance to ensure energy-efficient and optimised ventilation.
- Product selection programs such as LindQST for searching, calculating, and simulating indoor climate products as well as BIM objects in MagiCloud, plug-ins for Revit, and AutoCAD for product quantification and other smart functions.

When the project is up and running, deliveries are on their way, and the installation is being carried out, we can support you with:

- Customised products.
- Deliveries to suit your requirements.
- Packaging according to floors, rooms, etc. using goods labelling.
- Deliveries in clearly marked boxes to make it easier to find the right material on site.
- Smart tools that facilitate handling, to streamline installation, and commissioning.
- Option of joint deliveries of all materials from our central distribution center.
- Short delivery times and increased flexibility with local production/hub.

Materials and resources – Building product disclosure and optimisation - EPD

(No. of points available: 1 to 2)

To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified improved environmental life-cycle impacts.

Lindab have been part of the development for the product-specific rules (PCR) for ventilation products together with EPD Norway and other companies in the ventilation industry. The rules are needed to create comparable EPDs and was published 2021. We are now working to create EPD for the most relevant products. The documents will be available online.

Materials and resources – Building products disclosure and optimisation – sourcing of raw materials

(No. of points available: 1 to 2)

To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.

All of Lindab's major production units are certified according to ISO 9001 and ISO 14001. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. Sections 4 and 5 describe where the largest volume of materials are purchased, what volume of the materials are recycled, and the final country of production. Lindab puts a great emphasis on materials selection and wants to promote the purchase of materials that are sustainable and responsibly manufactured and extracted. We document our work with sustainability in accordance with the Global Reporting Initiative, GRI. The report is available for download on our website.

Lindab collaborates with suppliers to ensure that conflict minerals are sourced from certified smelters. Using CMRT reports, Lindab helps customers affected by the US Conflict Minerals Act, the Dodd-Frank Wall Street Reform and the Consumer Protection Act of 2010.

Materials and resources – Building products disclosure and optimisation – Material ingredients

(No. of points available: 1 to 2)

To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.

It is a matter of course for Lindab to provide our customers with information about the content and environmental impact of our products. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. The information contributes to more conscious product selections, which in turn lead to a better climate both indoors and outdoors. The work on preparing the declarations for our products and registering them is ongoing.

All products with a BPD are assessed by Byggarbedömningen and SundaHus and are registered in the BASTA database and the Nordic Ecolabel's Building Materials Database. This verifies that Lindab's products meet the requirements and guidelines in REACH, the European chemicals regulation.

Byggarbedömningen and SundaHus performs assessments of products based on chemical content, life cycle, and social responsibility. BASTA is a scientifically based self-declaration system with the purpose to phase out substances of concern from building and construction products.

Materials and resources – Construction and demolition waste management

(No. of points available: 1 to 2)

To reduce construction and demolition waste disposed of in landfills and incineration facilities by recovering, reusing, and recycling materials.

Lindab offers customised products and flexible transportation options to minimise waste. In addition, products are as much as possible packaged in the same boxes, to reduce the amount of packaging materials. All packaging materials are recyclable and Lindab's cardboard boxes contain up to 97.5% recycled material.

Many of our products consist of only a few materials and are often easy to disassemble, which means that each material can be recycled efficiently. Lindab has decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances and facts about the environmental impact. Section 10 describes our recommendations for waste management.

Indoor environmental quality – Minimum indoor air quality performance

To contribute to the comfort and wellbeing of those using the building by setting minimum indoor climate levels.

Among the most important design criteria are air flow, draughts, CO₂ levels, particle levels, temperature and noise. Lindab offers several products that measure air flow with a high degree of accuracy. Visit our website to read, for instance, about: FTCU, VRU and MBB. With the right air flow, draughts, noise levels and particle and CO₂ levels are kept to a minimum. The noise level from fans can be further reduced with Lindab's wide range of quality-assured silencers. We also offer Lindab Pascal, which is an intelligent demand-controlled ventilation system that provides the best possible indoor climate.

Indoor environmental quality – Enhanced Indoor Air Quality Strategies

(No. of points available: 1 to 2)

To promote occupants' comfort, well-being, and productivity by improving indoor air quality.

A good indoor climate has a great impact on how people understand and use information. Indoor air can be five times more polluted than outdoor air. Lindab's motto is "Build tight, ventilate right" which in turn requires FTX-systems; mechanical supply and exhaust air with heat recovery. In this way, the outdoor air can be filtered and cooled or heated while hazardous substances and moisture are removed from the building in an energy- efficient manner. This creates the best conditions for the people using the building.

Studies have shown that increased air flows reduce sick leave. Our complete ventilation system optimises air flow in an energy-efficient way and means that the people in the building can always breathe fresh air. Visit our website to find out more about our wide range of ventilation systems.

Indoor environmental quality – Thermal comfort

(No. of points available: 1)

To promote occupants' productivity, comfort, and well-being by providing quality thermal comfort.

Lindab's products, our complete range of product selection, and design software, installation references, and well thought-out designs ensure that the desired performance is achieved. The air temperature and air circulation rate in a room depend entirely on the occupancy rate, the air quality, and air temperature requirements along with the concentration of hazardous gases and particles. Lindab Pascal adjusts the air volume and regulates the temperature of the indoor climate, creating a quiet and draught-free environment. Lindab offers complete ventilation systems for all types of buildings. Healthy buildings mean healthy people.

Please contact us if you would like more information about how Lindab can help you with your projects.

Indoor air can be up to **five times more polluted** than outdoor air.





Miljöbyggnad 3.0

Miljöbyggnad, Environmental Building, is an environmental certification system used in Sweden and is based on the Swedish building regulations and regulatory requirements. Miljöbyggnad ensures that the building you are using is good for both you and the environment by carefully inspecting the building on the basis of sixteen different indicators for energy use, indoor environment, and materials. The system is owned and developed by Sweden's largest organisation for sustainable community building, the Sweden Green Building Council, which also carries out the certifications. Certification levels: Gold, Silver and Bronze.

Lindab's role in Miljöbyggnad

Lindab can help to accumulate points in a range of different areas. There are no products with Miljöbyggnad approval, the choice of a product is based on which level is aimed for in the different areas. Higher ratings can be achieved by selecting our products and constructing air-tight and energy-efficient systems. Our complete product portfolio and associated documentation promote the basis for an optimal solution and complete final system documentation for handover to the end customer.

1. Heating output requirements

Reward buildings that are designed and built to require low heating output when it is coldest during a normal year.

Lindab Safe and Lindab Safe Click are the first air duct system in the world to receive Eurovent certification. This means that you can feel safe with the products you buy as well as being absolutely sure that they maintain high quality and achieve air tightness class D. Our air duct system provides a circulating flow of energy, where almost all of the supplied energy is fed back to the heat exchanger which in turn heats the new supply air.



The **first air duct system in the world** to comply with **tightness class D**.



3. Energy use

Reward buildings that are designed, built, and managed to achieve low energy use.

A record number of energy-efficient initiatives have been implemented in the area of climate policy in the past five years. Increased requirements for energy saving and a focus on improved indoor climate leads to demands on new technology and innovation to reduce energy consumption in buildings. Lindab offers tailor-made solutions for each room, resulting in optimal energy use.

Lindab Safe and Lindab Safe Click are the first air duct system in the world to receive Eurovent certification. This means that you can feel safe with the products you buy as well as being absolutely sure that they maintain high quality and achieve air tightness class D. Our air duct system provides a circulating flow of energy, where almost all of the supplied energy is fed back to the heat exchanger which in turn heats the new supply air.

Lindab's unique product, UltraLink, takes energy efficiency to a new level. UltraLink is a stable solution that accurately and reliably measures air flow and temperature. It is also easy to read and control the entire ventilation system to maintain an optimal level for both the building and its occupants. Ventilating according to demand is the best option both environmentally and financially, as well as in terms of people's comfort. Lindab Pascal is an intelligent, demand-controlled ventilation system. The system adjusts the indoor climate by itself in relation to the weather outdoors, and is compatible with both airborne climate systems and waterborne chilled beams.

6. Radon

Reward buildings that are designed, built, and managed to achieve low indoor radon levels.

Lindab's systems ventilate hazardous emissions from radon. Studies have shown that increased air flows reduce sick leave. Our complete ventilation system optimises air flow in an energy-efficient way and means that the people in the building can always breathe fresh air.

7. Ventilation

Reward buildings that are designed, built, and managed to achieve proper ventilation.

A good indoor climate has a great impact on how people understand and use information. Indoor air can be five times more polluted than outdoor air. Lindab's motto is "Build tight, ventilate right" which in turn requires FTX-systems; mechanical supply and exhaust air with heat recovery. In this way, the outdoor air can be filtered and cooled or heated while hazardous substances and moisture are removed from the building in an energy-efficient manner. This creates the best conditions for the people using the building.

Studies have shown that increased air flows reduce sick leave. Our complete ventilation system optimises air flow in an energy-efficient way and means that the people in the building can always breathe fresh air. Visit our website to find out more about our wide range of ventilation systems.

8. Damp proofing

Reward buildings that are designed, built, and managed to reduce to a minimum the risk of future damage caused by damp and water.

Water vapour, particles and gases such as CO₂, generated by occupants, are continuously fed into the indoor air. In regards to moisture problems in buildings and buildings in general, the choice of ventilation system is of great importance. Lindab offers complete ventilation systems for all types of buildings. Healthy buildings mean healthy people.

9. Thermal climate - winter

10. Thermal climate - summer

Reward buildings that are designed, built, and managed to achieve a good thermal indoor climate during the winter. Reward buildings that are designed, built, and managed to achieve a good thermal indoor climate during the summer.

Lindab's products, our complete range of product selection, and design software, installation references, and well thought-out designs ensure that the desired performance is achieved. The air temperature and air circulation rate in a room depend entirely on the occupancy rate, the air quality, and air temperature requirements along with the concentration of hazardous gases and particles. Lindab Pascal adjusts the air volume and regulates the temperature of the indoor climate, creating a quiet and draught-free environment.



13. Log book with building materials

Reward buildings with documentation of what inbuilt building products and building materials contain.

It is a matter of course for Lindab to provide our customers with information about the content and environmental impact of our products. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product and facts about the environmental impact. The information contributes to more conscious product, selections, which in turn lead to a better climate both indoors and outdoors. The work on preparing the declarations for our products and registering them is ongoing. In order to facilitate documentation, Lindab's products are registered in several systems that offer a digital logbook service.

14. Phasing out of hazardous substances

Reward buildings that are designed, built, and managed using the minimum number of hazardous substances in materials and building products.

All products with a building product declaration (BPD) are assessed by Byggvarubedömningen and SundaHus and are registered in the BASTA database and the Nordic Ecolabel's Building Materials Database. This verifies that Lindab's products meet the requirements and guidelines in REACH, the European chemicals regulation. Almost all of Lindab's products achieves the gold level according to Miljöbyggnad.

BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. Byggvarubedömningen and SundaHus performs assessments of products based on chemical content, life cycle, and social responsibility. BASTA is a scientifically based self-declaration system with the purpose to phase out substances of concern from building and construction products.

15. Climate impact of frame and foundation

Increase knowledge of the climate impact of the frame and foundation, increase the demand for and availability of EPDs and reward measures that reduce the climate impact of the frame and foundation.

Lindab has decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances and how to recycle the product. Section 5 describes the product's environmental impact. The products' life-cycle impact is then assessed by Byggvarubedömningen, a Swedish non-profit organization owned by large constructors and property owners in Sweden. We work continuously to reduce our climate impact, for instance by offering customised products and flexible transportation options to minimise waste. In addition, products are as much as possible packaged in the same boxes, to reduce the amount of packaging materials. All packaging materials are recyclable and Lindab's cardboard boxes contain up to 97.5% recycled material. Many of our products consist of only a few materials and are often easy to disassemble, which means that each material can be recycled efficiently. Section 10 describes our recommendations for waste management. We document our work with sustainability in accordance with the Global Reporting Initiative, GRI. The report is available for download on our website.

Lindab have been part of the development for the product-specific rules (PCR) for ventilation products together with EPD Norway and other companies in the ventilation industry. The rules are needed to create comparable EPDs and was published 2021. We are now working to create EPD for the most relevant products. The documents will be available online.

Lindab's cardboard boxes contain up to **97.5% recycled material.**



DGNB

The DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen (German Sustainable Building Council)) assesses buildings and urban districts. The DGNB Certification System is developed in Germany but can be applied internationally; there are certified buildings or districts in around 30 countries. Up to 50 sustainability criteria from the quality sections ecology, economy, socio-cultural aspects, technology, process work flows and site are certified. Up to 10 evaluation points are awarded for reaching the target specifications. The DGNB ratings are: Bronze, Silver, Gold and Platinum.

Lindab's role in DGNB certification

Lindab can help to accumulate points in a range of different areas. There are no “DGNB certified” or “DGNB compliant” building products, the choice of a product is based on how the highest number of points can be achieved in the different areas. Higher scores and ratings can be achieved by selecting our products and constructing air-tight, energy- efficient systems. Our complete product portfolio and associated documentation promote the basis for an optimal solution and a complete final system documentation to the end customer.

Environmental quality – Building life cycle assessment (ENV1.1)

The objective is to ensure a consistent life cycle approach to the planning of buildings in order to reduce emissions-related impacts on the environment and consumption of non-renewable resources to a minimum across all stages in the life of a building.

Lindab have been part of the development for the product-specific rules (PCR) for ventilation products together with EPD Norway and other companies in the ventilation industry. The rules are needed to create comparable EPDs and was published 2021. We are now working to create EPD for the most relevant products. The documents will be available online.



Environmental quality – Local environmental impact (ENV1.2)

The objective is to reduce, avoid or substitute all dangerous or damaging materials, (construction) products or preparations that can adversely affect or cause short, medium or long-term damage to people, flora and fauna.

It is a matter of course for Lindab to provide our customers with information about the content and environmental impact of our products. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. The information contributes to more conscious product selections, which in turn lead to a better climate both indoors and outdoors. The work on preparing the declarations for our products and registering them is ongoing.

All products with a BPD are assessed by Byggarbedömningen and SundaHus and are registered in the BASTA database and the Nordic Ecolabel's Building Materials Database. This verifies that Lindab's products does not contain any hazardous substances and meet the requirements and guidelines in REACH, the European chemicals regulation. Byggarbedömningen and SundaHus performs assessments of products based on chemical content, life cycle, and social responsibility. BASTA is a scientifically based self-declaration system with the purpose to phase out substances of concern from building and construction products.

Environmental quality – Sustainable resource extraction (ENV1.3)

The objective is to promote the use of products in buildings and their external installations that are transparent with regard to their environmental and social impacts throughout the value chain and utilise raw materials extraction and processing methods that comply with recognised environmental and social standards.

All of Lindab's major production units are certified according to ISO 9001 and ISO 14001. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. Sections 4 and 5 describe where the largest volume of materials are purchased, what volume of the materials are recycled, and the final country of production. Lindab puts a great emphasis on materials selection and wants to promote the purchase of materials that are sustainable and responsibly manufactured and extracted. We document our work with sustainability in accordance with the Global Reporting Initiative, GRI. The report is available for download on our website.

Lindab collaborates with suppliers to ensure that conflict minerals are sourced from certified smelters. Using CMRT reports, Lindab helps customers affected by the US Conflict Minerals Act, the Dodd-Frank Wall Street Reform and the Consumer Protection Act of 2010.

We report our work with sustainability in accordance with the **Global Reporting Initiative**.

Economic quality – Life cycle cost (ECO1.1)

Our objective is sensible and conscious use of economic resources throughout the entire life cycle of a building. In the conception and planning phases of implementation of a building, there are areas of significant optimisation potential for later economic management. The parties involved in the planning process should regularly focus on possible follow-up costs associated with their design and implementation variants from an early stage in the planning phases.

Lindab offers different products and services that assure the quality of the construction project right from the start of the design phase. Our products and systems are of the highest quality, with a major focus on source and materials selection. Today's functional requirements for modern buildings are always Lindab's reference point, with the aim of always significantly exceeding the requirements. This applies, for instance, to indoor climate, energy, acoustics, fire protection and, not least, sustainability. Our resources, products, and services can help you with your construction projects both before, during, and after, to create the best conditions for a top-quality sustainable building.

We can support you in the planning and design phase by offering advice based on your conditions:

- Environmental certificates along with other assessments and approvals.
- Design assistance to ensure energy-efficient and optimised ventilation.
- Product selection programs such as LindQST for searching, calculating, and simulating indoor climate products as well as BIM objects in MagiCloud, plug-ins for Revit, and AutoCAD for product quantification and other smart functions.

When the project is up and running, deliveries are on their way, and the installation is being carried out, we can support you with:

- Customised products.
- Deliveries to suit your requirements.
- Packaging according to floors, rooms, etc. using goods labelling.
- Deliveries in clearly marked boxes to make it easier to find the right material on site.
- Smart tools that facilitate handling, to streamline installation, and commissioning.
- Option of joint deliveries of all materials from our central distribution center.
- Short delivery times and increased flexibility with local production/hub.

Sociocultural and functional quality – Thermal comfort (SOC1.1)

The objective is to guarantee thermal comfort throughout winter and summer that is appropriate to the intended use of the building and provides proper comfort to users.

Lindab's products, our complete range of product selection, and design software, installation references, and well thought-out designs ensure that the desired performance is achieved. The air temperature and air circulation rate in a room depend entirely on the occupancy rate, the air quality, and air temperature requirements along with the concentration of hazardous gases and particles. Lindab Pascal adjusts the air volume and regulates the temperature of the indoor climate, creating a quiet and draught-free environment.

Good indoor climate has a great impact on how people understand and use information



Sociocultural and functional quality – Indoor air quality (SOC1.2)

Our aim is to ensure that indoor air is of sufficient quality not to adversely affect users' health and well-being.

A good indoor climate has a great impact on how people understand and use information. Indoor air can be five times more polluted than outdoor air. Among the most important design criteria are air flow, draughts, CO₂ levels, particle levels, temperature and noise. Lindab's motto is "Build tight, ventilate right" which in turn requires FTX-systems; mechanical supply and exhaust air with heat recovery. In this way, the outdoor air can be filtered and cooled or heated while hazardous substances and moisture are removed from the building in an energy-efficient manner. Lindab offers several products that measure air flow with a high degree of accuracy. Visit our website to read, for instance, about: FTCU, VRU and MBB. With the right air flow, draughts, noise levels and particles and CO₂ levels are kept to a minimum. The noise level from fans can be further reduced with Lindab's wide range of quality-assured silencers. This creates the best conditions for the people using the building. Studies have shown that increased air flows reduce sick leave. Our complete ventilation system optimises air flow in an energy-efficient way and means that the people in the building can always breathe fresh air.

Sociocultural and functional quality – User control (SOC1.5)

The objective is to achieve a high level of user satisfaction in the indoor areas within property building. This is why occupants should be provided with the best possible options to control the indoor climate. Aside from the actual conditions in the building, users' satisfaction also depends on the ability to adjust themselves ventilation, sun and anti-glare protection, temperature and lighting to their individual preferences even beyond the standard settings.

Lindab's ventilation system is designed to give the building occupants the best experience. For instance, the temperature can be adjusted in every room as well as turned on and off. The ventilation system can be design in different ways to give a lot of different control options in order to suit all types of buildings.

Technical quality – Quality of the building envelope (TEC1.3)

The objective is to minimise the energy demand for room conditioning of buildings while at the same time ensuring high thermal comfort and preventing building damage.

A record number of energy-efficient initiatives have been implemented in the area of climate policy in the past five years. Increased requirements for energy saving and a focus on improved indoor climate leads to demands on new technology and innovation to reduce energy consumption in buildings. Lindab offers tailor-made solutions for each room, resulting in optimal energy use.

Lindab Safe and Lindab Safe Click are the first air duct system in the world to receive Eurovent certification. This means that you can feel safe with the products you buy as well as being absolutely sure that they maintain high quality and achieve air tightness class D. Our air duct system provides a circulating flow of energy, where almost all of the supplied energy is fed back to the heat exchanger which in turn heats the new supply air.



The **first air duct system in the world**
DUCT-MC to comply with **tightness class D.**

Lindab's unique product, UltraLink, takes energy efficiency to a new level. UltraLink is a stable solution that accurately and reliably measures air flow and temperature. It is also easy to read and control the entire ventilation system to maintain an optimal level for both the building and its occupants. Ventilating according to demand is the best option both environmentally and financially, as well as in terms of people's comfort. Lindab Pascal is an intelligent, demand-controlled ventilation system. The system adjusts the indoor climate by itself in relation to the weather outdoors, and is compatible with both airborne climate systems and waterborne chilled beams.

Technical quality – Use and integration of building technology (TEC1.4)


The objective is to create a building concept with the best possible use of passive systems and incorporation of renewable energy sources for the required technical systems. In addition, the concept intends to ensure that the building can be adjusted to suit changing conditions of use or technical developments with the lowest possible effort, and that the technical systems used are integrated into the district.

Lindab Safe and Safe Click system is easy to rebuild and change, as long as new products follows the same dimension standard; EN 1506. CADvent, a plug-in for MagiCAD, helps the constructor to recalculate the airflows for the new system in an easy and effective way. Lindab's control system, UltraLink and Pascal, is easy to update and reprogram to suit new technology or a new design of the building.

Technical quality – Ease of cleaning building components (TEC1.5)

The objective is to implement structural and technical measures to reduce the cost and effort required for cleaning.

To maintain the high performance and quality of the system it's important to inspect and clean regularly. Lindab has a wide range of duct access doors for both circular and rectangular systems. The standard EN 12097 Ventilation for buildings - Requirements for ductwork components to facilitate maintenance of ductwork systems guides you how to design the system in the best way.



Steel is one of the most recycled material in the world.

Technical quality – Ease of recovery and recycling (TEC1.6)

The objective is to ensure highly economical and efficient use of natural resources. Accordingly, we promote solutions that enable pre-existing value to be made reusable with a minimum of loss. In accordance with our goal of reducing the amount of primary resources required for construction and maintenance of buildings to virtually nothing, we strive to create a strategy to increase the current level of material efficiency – the purpose of which is to enable materials to be recycled with effectively no losses, in conjunction with a significant reduction in the materials used.

Lindab offers customised products and flexible transportation options to minimise waste. In addition, products are as much as possible packaged in the same boxes, to reduce the amount of packaging materials. All packaging materials are recyclable and Lindab's cardboard boxes contain up to 97.5% recycled material. Of the steel that Lindab uses, around 20 percent comes from recycled sources and this is increasing all the time.

Many of our products consist of only a few materials and are often easy to disassemble, which means that each material can be recycled efficiently. Lindab has decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances and facts about the environmental impact. Section 10 describes our recommendations for waste management. The products are mainly made of steel, which can be recycled and is currently one of the most recycled materials in the world.



The Nordic Swan Ecolabel

The Nordic Swan Ecolabel provides a trustworthy and effective tool, for both producers and consumers. Producers may, assisted by Nordic Ecolabelling's check lists and know-how, build high-quality and energy efficient houses without unnecessary chemicals – the kind of houses people want to live in. House buyers can, thanks to the Nordic Swan Ecolabel, be sure that they will be moving to a resource-efficient house with a good indoor climate. Small houses, apartment buildings and buildings for pre-schools and schools may be awarded a Nordic Swan Ecolabel. The Nordic Swan Ecolabel imposes stringent requirements on, for example: materials, good ventilation, the building process, energy-efficiency and good indoor climate. The licence applicant must receive at least a certain number of points in order to be granted a Nordic Swan Ecolabel licence.

Lindab's role in Nordic Swan Ecolabel certification

Lindab can help to accumulate points in a range of different areas. There are no Nordic Swan Ecolabelled building products within our branch. Materials used in a Nordic Swan Ecolabel building must be listed in the Building Material Database, read more here. Our complete product portfolio and associated documentation promote the basis for an optimal solution and a complete final system documentation to the end customer.





2 Resource efficiency

2.1 Energy and climate

04 Energy consumption of the building

A record number of energy-efficient initiatives have been implemented in the area of climate policy in the past five years. Increased requirements for energy saving and a focus on improved indoor climate leads to demands on new technology and innovation to reduce energy consumption in buildings. Lindab offers tailor-made solutions for each room, resulting in optimal energy use.

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3 Indoor environment

O11 Ventilation

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A good indoor climate has a great impact on how people understand and use information. Indoor air can be five times more polluted than outdoor air. Among the most important design criteria are air flow, draughts, CO2 levels, particle levels, temperature and noise. Lindab's motto is "Build tight, ventilate right" which in turn requires FTX-systems; mechanical supply and exhaust air with heat recovery. In this way, the outdoor air can be filtered and cooled or heated while hazardous substances and moisture are removed from the building in an energy-efficient manner. Lindab offers several products that measure air flow with a high degree of accuracy. Visit our website to read, for instance, about: FTCU, VRU and MBB. With the right air flow, draughts, noise levels and particles and CO2 levels are kept to a minimum. The noise level from fans can be further reduced with Lindab's wide range of quality-assured silencers.

This creates the best conditions for the people using the building. Studies have shown that increased air flows reduce sick leave. Our complete ventilation system optimises air flow in an energy-efficient way and means that the people in the building can always breathe fresh air.

„Build tight –
ventilate right”

4 Chemical products, construction products, construction goods and materials

4.1 General

O15 Product list and logbook of the building

In order to simplify documentation, Lindab's products are registered in several systems that offers digital logbook service. It is a matter of course for Lindab to provide our customers with information about the content and environmental impact of our products. We have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product and facts about the environmental impact. The information contributes to more conscious product selections, which in turn lead to a better climate both indoors and outdoors. The work on preparing the declarations for our products and registering them is ongoing.

4.2 Chemical products

The term chemical products concern a chemical substance or a mix of different chemical substances, in liquid, gaseous or solid form, used in construction work at the building site or by manufacturers of prefabricated construction elements. Goods, which form, surface or design is of significance for the function of the good, rather than its chemical composition, is not chemical products.

O16 Classification of chemical products, O17 CMR substances, O19 Preservatives in other chemical products for indoor use, O20 Other substances excluded from use and O21 Nanoparticles in chemical products

Lindab Mastic Acryl and Lindab Flex Sealer is listed in the Nordic Swan ecolabel Material Database. Lindab is primarily only a reseller of other chemical products. It's the manufacturer's responsibility to list the products in the Material Database, but of course we will assist in any possible way to help customer find the right products that fulfils the criteria.

4.3 Construction products, construction goods and materials

O22 Excluded substances in construction products, construction goods and materials, O23 Nanoparticles and antibacterial additives in construction products and construction goods

We have many listed products and are part of the Nordic Ecolabel Building Material Database. The Product Matrix can be helpful when it comes to finding out what information must be reported when the products are declared. Do not hesitate to contact us if you wish to use a product that you cannot find in the database.

Lindab have decided to issue building product declarations (BPD) for all key products sold to customers. BPD is a Swedish form for reporting environmental information for construction products. This includes, for example, a detailed list of all ingoing materials and substances, how to recycle the product, and facts about the environmental impact. The information contributes to more conscious product selections, which in turn lead to a better climate both indoors and outdoors. The work on preparing the declarations for our products and registering them is ongoing. All products with a BPD are listed in the Nordic Ecolabel Building Materials Database.





Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab | For a better climate](#)