



guide to Aalberts products and services which support

LEED certification



Aalberts and LEED

LEED v5 for building design and construction (BD+C)

Released in 2025 by the U.S. Green Building Council (USGBC), LEED v5 emphasizes performance-based outcomes, prioritizing decarbonization, quality of life, and ecosystem health.

“Apollo”® Valves and Shurjoint products support these goals across multiple credit categories by enabling water savings, energy efficiency, resilient systems, product transparency, and innovation.

This guide summarizes how Aalberts Integrated Piping Systems products and services can contribute to LEED v5 BD+C certification in the U.S. and Canada, supporting both U.S. Green Building Council (USGBC) and Canada Green Building Council (CaGBC) project pathways.

LEED points are awarded to the project, not individual products. The following sections describe how Aalberts products and services support credit achievement opportunities.



integrative process (IP)

up to
1 point

The integrative process, planning, and assessments (IP) credit category emphasizes the importance of early-stage collaboration and holistic, iterative planning to arrive at optimized solutions. By using systems thinking to identify synergies among building systems and components before the design phase begins, projects prioritize the value of integrated design processes and optimize outcomes.

how we support the integrative process

- Aalberts Revit plug-in and BIM-compatible design tools assist engineers with system modeling, flow analysis, and coordination.
- digital twin and performance modeling capabilities align with LEED v5 IP Credit intent to optimize energy and water strategies during schematic design.

sustainable sites (SS)

up to
11 points

The sustainable sites (SS) category recognizes projects that protect and restore natural hydrology and site ecology. Aalberts products enable rainwater management systems that align with USGBC and CaGBC standards.

rainwater management (3)

intent: to reduce runoff volume and improve water quality by replicating natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region, to avoid contributing to flooding downstream in frontline communities.

how we support the rainwater management:

- Shurjoint couplings and “Apollo”® valves support non-potable conveyance, rainwater harvesting, and reuse systems.
- “Apollo”® Press flameless connection technology minimizes on-site hot work, improving safety and compliance.
- compatible with CSA B128.3 rainwater harvesting systems and provincial stormwater reuse regulations in Canada.

water efficiency (WE)

up to
9 points

The water efficiency (WE) category encourages reduced potable water use and improved system resilience. Aalberts IPS products provide precise control and leak-tight performance, reducing waste and preserving resources.

water efficiency (8)

minimum water efficiency (prerequisite) and enhanced water efficiency

intent: to reduce potable water consumption and the associated energy consumption and carbon emissions required to treat and distribute water, to preserve potable water resources through an efficiency-first approach, and to reward use of alternative water sources that preserve potable water resources.

how we support water efficiency:

- “Apollo”® “water pressure reducing valves (WPRVs) and thermostatic mixing valves (TMVs) stabilize system pressures and temperatures, reducing fixture and process water demand
- “Apollo”® Press and “Apollo”® PowerPress® piping assemblies deliver leak-tight, flame-free installations that minimize water loss.
- “Apollo”® backflow prevention devices integrate with metering and leak detection for ongoing monitoring and compliance.
- applicable to LEED v5 WE Prerequisite: Minimum Water Efficiency, and WE Credit: Enhanced Water Efficiency (USGBC/CaGBC).

water metering & leak detection (1)

intent: to conserve potable water resources, support water management, limit potential material waste due to water leak damages, and identify opportunities for additional water savings by tracking water consumption.

how we support leak detection:

- “Apollo”® backflow prevention products integrate with water metering and leak detection.

energy & atmosphere (EA)

up to
33 points

LEED v5's energy & atmosphere (EA) credits promote low-carbon design, grid integration, and renewable energy use. Aalberts products enable hydronic control, efficient energy transfer, and automation within building systems.

enhanced energy efficiency (10)

intent: to design buildings that minimize energy use to reduce the environmental damage caused by resource extraction, air pollution, and greenhouse gas emissions and to facilitate the transition to a clean energy future.

how we support energy efficiency:

- “Apollo”® v-port ball valves and high-performance or resilient seated butterfly valves improve coil control and hydronic balancing – reducing pumping energy.

reduce peak thermal loads (5)

intent: to minimize demand on grid resources and improve the resilience of buildings.

how we support the reduction of peak loads:

- “Apollo”® WPRVs and balancing valves regulate flow and pressure, limiting over-circulation and reducing equipment strain.
- “Apollo”® 34 series mixing valves and 36 series WPRVs stabilize downstream temperature and pressure, minimizing system cycling and helping flatten heating and cooling peaks.
- electric actuators integrate with Building Automation Systems (BAS/BMS) for peak load management and demand-response capability.
- ball valves and butterfly valves provide tight shutoff and smooth control for heat pump and low-temp hydronic systems, optimizing efficiency during high-load periods.

electrification (5)

intent: to encourage buildings to be designed so they do not depend on burning fuel on-site, leading to better indoor and outdoor air quality and to low carbon operations as the grid decarbonizes.

how we support electrification:

- electric actuated control valves enable automation, “smart buildings,” & integration with BMS.
- efficient piping and valves reduce losses and support advanced HVAC and hydronic systems.

renewable energy (5)

intent: to encourage and recognize the use of renewable energy to reduce environmental and economic impacts associated with fossil fuel energy use and increase the supply of new renewable energy within the electrical grid, fostering a just transition to a green economy.

how we support renewable energy generation:

- “Apollo”® PowerPress® enables the construction of closed-loop hydronic systems used in renewable energy applications such as electric heat pumps, geothermal, and solar thermal systems. Its flame-free installation and leak-free performance help reduce onsite emissions while supporting long-term system efficiency in low-carbon buildings.
- “Apollo”® balancing valves precisely regulate flow in hydronic heating and cooling loops powered by renewable sources. By optimizing heat transfer and reducing pump energy, they improve overall system efficiency and ensure stable performance from renewable-driven HVAC systems.

enhanced commissioning (4)

intent: to further ensure that the building systems function as designed, and that they continue to maintain energy performance over time.

how we support renewable energy generation:

- “Apollo”® ISO 5211 actuator mounts and integrated commissioning ports support functional testing and enhanced commissioning in alignment with LEED v5 Energy & Atmosphere (EA) credits for both USGBC and CaGBC projects.

grid-interactive (2)

intent: to enhance power resilience and position buildings as active partners contributing to grid decarbonization, reliability, and power affordability through integrated management of building loads in response to variable grid conditions.

how we support grid interactivity

- “Apollo”® electric actuators enable valves to respond to grid or building automation signals, enabling demand-response and load-shifting capabilities.

materials & resources (MR)

up to
18 points

the materials and resources (MR) category focuses on embodied carbon reduction, product transparency, and circular economy principles. Aalberts supports these goals with verified Environmental Product Declarations (EPDs).

reduce embodied carbon (6)

intent: to track and reduce embodied carbon of major structural, enclosure, and hardscape materials from construction processes on new construction and renovation projects.

how we support the reduction of embodied carbon:

- Type III EPDs (EN 15804 + A2 compliant) are available for select Apollo and Shurjoint products. EPDs and transparency documentation can be referenced in the LEED v5 MR Credit: Reduce Embodied Carbon. Compatible with U.S. and Canadian carbon reporting frameworks, including USGBC’s EC3 database and CaGBC’s lifecycle assessment pathways.

indoor environmental quality (EQ)

up to
13 points

LEED v5’s Indoor environmental quality (EQ) category emphasizes indoor air quality, comfort, and occupant well-being. Aalberts IPS supports these goals through installation methods and product design that minimize contaminants and improve maintainability.

enhanced air quality (10)

intent: to promote the well-being of construction workers and building occupants by minimizing environmental quality problems associated with construction and renovation.

how we support air quality in construction management:

- “Apollo”® Press and “Apollo”® PowerPress® technologies eliminate fumes and particulates associated with soldering or welding.
- leak-tight connections prevent moisture accumulation and mold risks, supporting long-term IAQ performance.
- products can contribute to LEED v5 EQ Credit: Enhanced Air Quality during Construction.

Innovation (IN) and Regional Priority (RP)

up to
10 points

our products and services can support innovation (IN) credits by advancing hydronic optimization and digital integration strategies. regional priority (RP) opportunities vary by location and may include water efficiency and low-carbon system design.

how we support innovation and regional priority:

- “Apollo”® Press technology and verified transparency documentation may support Innovation in construction practices.
- regional priority alignment: water efficiency in arid or cold Canadian regions, and decarbonization initiatives under USGBC and CaGBC regional frameworks.

summary table

LEED v5 category	relevant credits	product/service support
IP (1)	<ul style="list-style-type: none"> • integrative design process 	<ul style="list-style-type: none"> • Revit plug-in • digital design services for early coordination and performance modeling
SS (11)	<ul style="list-style-type: none"> • rainwater management 	<ul style="list-style-type: none"> • Shurjoint rainwater conveyance and reuse piping
WE (9)	<ul style="list-style-type: none"> • minimum water efficiency (prereq) • enhanced water efficiency • water metering & leak detection 	<ul style="list-style-type: none"> • “Apollo”® WPRVs/TMVs for demand reduction • leak-tight “Apollo”® Press “Apollo”® PowerPress® assemblies • valves with ports to integrate meters/sensors
EA (33)	<ul style="list-style-type: none"> • enhanced energy efficiency • reduce peak thermal loads • electrification • renewable energy • enhanced commissioning • grid-interactive 	<ul style="list-style-type: none"> • “Apollo”® v-port ball valves and butterfly valves for coil control and ΔT • hydronic balancing to lower peaks • compatibility with heat-pumps/LTHW • isolation for solar/geo/thermal storage • ISO-mount actuators & O&M docs for commissioning • valve/control strategies to shift loads
MR (18)	<ul style="list-style-type: none"> • reduce embodied carbon 	<ul style="list-style-type: none"> • type III EPDs (where available)
EQ (13)	<ul style="list-style-type: none"> • enhanced air quality 	<ul style="list-style-type: none"> • flameless installs reduce fumes/particulates • leak-tight hydronics support IAQ testing
IN (10)	<ul style="list-style-type: none"> • innovation • regional priority 	<ul style="list-style-type: none"> • press technology and transparency documentation can support applicable innovation and regional water/carbon priorities

Note: LEED points are awarded to the project, not individual products; the items above show credible areas of support.



Aalberts integrated piping systems

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