



LEED GUIDE



INTUS Windows supports the use of the LEED certification process to create greener buildings. <u>The LEED rating system</u> evaluates the environmental performance of a building through a point-based system, and encourages market transformation toward sustainable design. INTUS windows and doors create <u>immense opportunities</u> to increase a building's LEED points.

LEED Rating System

LEED is the most widely used green building rating system in the world with four levels: Certified, Silver, Gold, and Platinum.

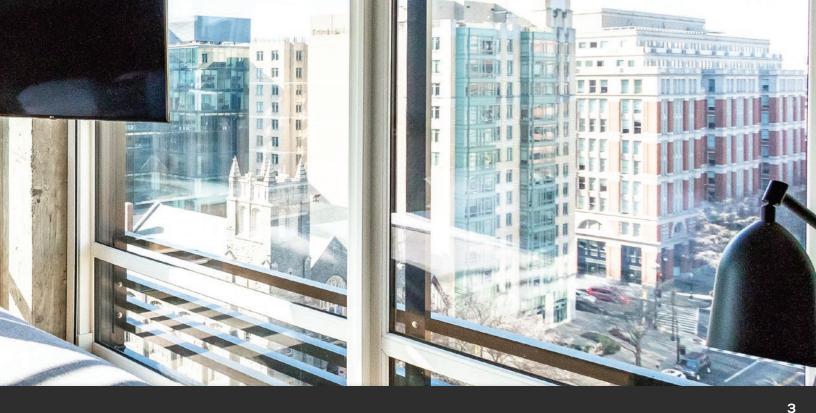




LEED stands for Leadership in Energy and Environmental Design and is managed by the <u>United States Green Building Council</u> (<u>USGBC</u>). The system works for buildings at any life cycle - from new construction to retrofits, and for any type of building project. LEED v4.1 is the newest version with a focus on materials, performance, water efficiency, and smart grid.

INTUS is proud to be a member of the USGBC and offer USGBC continuing education (CE) credits through our presentations.



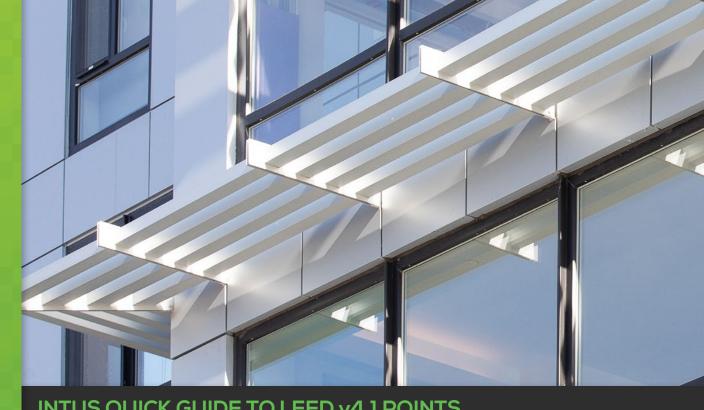


Through INTUS's commitment to green building and the environment, our windows and doors have been used in numerous projects across the United States, many of which are award-winning or among the greenest in the region.









LEED Category	LEED Credit	Possible Points
Sustainable Sites	Heat Island Reduction	2
Integrative Process	Integrative Process	1
Energy & Almosphere	Minimum Energy Performance	Required
	Optimize Energy Performance	20
Materials & Resources	Building Product Disclosure & Optimization: Environmental Product Declarations	2
	Building Product Disclosure & Optimization: Sourcing of Raw Materials	2
Indoor Environmental Quality	Minimum Indoor Air Quality (IAQ) Performance	Required
	Low-Emitting Materials	3
	Thermal Comfort	1
	Daylight	3
	Quality Views	3
	Acoustic Performance	2
Innovation	Innovation	5

Grand Total



LEED v4.1 POINTS BREAKDOWN

LEED Category: Sustainable Sites

LEED Credit: Heat Island Reduction, SSc5

Points: 1-2 points

Intent: To minimize effects on microclimates and human and wildlife habitats by reducing islands.

Description: Through INTUS' energy efficient product offering, a building will conserve a considerable amount of energy thus decreasing its heat island effect. Our low-E coated glass provides superb thermal insulation and can further reduce heat gain or loss. In turn, this contributes to reduced heating and cooling needs.

Through INTUS' One Window, One Tree program, we plant a tree for every window or door sold. Trees are natural heat island reducers. For instance, we plant in parks along walkways and open areas to reduce heat for park users and urban wildlife. We plant in rural or deep country habitats to provide shaded areas for animals, to assist in forest rehabilitation, and a healthier environment all in all.

LEED Category: Integrative Process

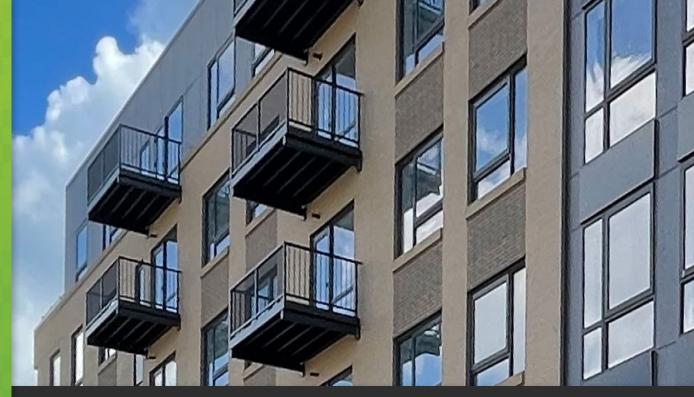
LEED Credit: Integrative Process, IPc1

Points: 1 point

Intent: To support high performance, cost-effective project outcome through an early analysis of the interrelationships among systems.

Description: Through INTUS' trained tradespersons and fenestration experience we can assist in choosing the best fenestration products for the project and thus balancing energy efficiency with the project's needs and budget. We also employ dozens of Passive House Tradespersons throughout the nation which can assist to ensure the project's passive house certification or usage of passive house principles, via fenestration usage.

LEED v4.1 POINTS



LEED v4.1 POINTS BREAKDOWN (CONT.)

LEED Category: Energy & Atmosphere

LEED Credit: Minimum Energy Performance, EAp2

Points: Required for LEED Certification (no points)

Intent: 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.

Description: Energy efficient fenestrations are one of the top principles to achieve excellent energy performance, and INTUS offers some of the highest performing options that can be customized, paired with a multitude of glazing and hardware options.

LEED Credit: Optimize Energy Performance, EAc2

Points: 1-20 points

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

Description: Whether choosing option 1 or 2 under this category, INTUS products can contribute points. INTUS performs in-depth product testing and can supply project-specific testing as needed to assist in analyzing efficiency. Our fenestrations contribute to exceeding ASHRAE standards by creating an energy efficient building envelope, reduce cooling and heating, and providing daylight.



LEED Category: Materials & Resources (MR)

LEED Credit: Building Product Disclosure and Optimization – Environmental Product Declarations, MRc2

Points: 1-2 points

Intent: 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.

Description: INTUS can supply Environmental Product Declarations (EPD) for our glass and profile to contribute to your 20 EPD minimum for one method of getting points. Our products also show life cycle improvements for another method of points. INTUS products have a 50+ year service life and a 350+ year life cycle.

LEED Credit: Building Product Disclosure and Optimization – Sourcing of Raw Materials, MRc3

Points: 1-2 points

Intent: 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.

Description: INTUS products are 100% recyclable up to seven times! We also use recycled content in our glass, profiles, and packaging.



LEED v4.1 POINTS BREAKDOWN (CONT.)

LEED Category: Indoor Environmental Quality (IEQ)

LEED Credit: Minimum Indoor Air Quality (IAQ) Performance, Eqp1

Points: Required for LEED Certification (no points)

Intent: To contribute to the comfort and well-being of building occupants by establishing minimum standards for indoor air quality (IAQ).

Description: INTUS products are free of phthalates, lead, BPA and have no off-gassing which contributes to quality air. Operable windows and doors allow for natural ventilated spaces.

LEED Credit: Low-Emitting Materials, EQc2

Points: 1-3 points

Intent: To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.

Description: INTUS products are made with low-emitting materials, are free of phthalates, lead, BPA, and have no off-gassing. Instead of using paint, we use high-quality laminates with low VOC emissions. This all contributes to quality air and improved health for humans and our environment alike.



LEED Credit: Daylight, EQc7

Points: 1-3 points

Intent: To connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of electrical lighting by introducing daylight into the space.

Description: INTUS products offer large openings in a multitude of styles and operation types for high levels of daylight which contribute to all aspects of this category.

LEED Credit: Quality Views, EQc8

Points: 1-3 points

Intent: To give building occupants a connection to the natural outdoor environment by providing quality views.

Description: Achieve quality views with INTUS products and large window sizes. Our customizable products provide options for all building types and locations.

LEED v4.1 POINTS



LEED v4.1 POINTS BREAKDOWN (CONT.)

LEED Category: Indoor Environmental Quality (Cont.)

LEED Credit: Acoustic Performance, EQc9

Points: 1-2 points

Intent: To provide workspaces and classrooms that promote occupants' well-being, productivity, and communications through effective acoustic design.

Description: INTUS provides excellent OITC/STC sound ratings that dramatically contribute to a building's acoustic performance. Our products offer sound insulation up to OITC 38/STC 44.

LEED Category: Innovation

LEED Credit: Innovation, INc1

Points: 1-5 Points

Intent: To encourage projects to achieve exceptional or innovative performance.

Description: INTUS energy efficient products contribute to the building's environmental performance, and our products performance is measurable per this category's requirements.



BUILT TO BE THE MOST ENERGY EFFICIENT

See how INTUS windows and doors can be built around your project by visiting us at INTUSwindows.com. Browse through our building projects, and learn more about our window and door solutions. Access CAD drawings, BIM models, architectural manuals, and more through our Knowledge Center. Find the best solution for your project by contacting your local INTUS office through our Contact Us page. Let us help you make your next project become energy efficient!

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