

What is LEED?

LEED (Leadership in Energy and Environmental Design) is a voluntary, consensus-based national rating system for developing high-performance, sustainable buildings. Developed by USGBC, LEED addresses all building types and emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality. LEED is a practical rating tool for green building design and construction that provides immediate and measurable results for building owners and occupants. LEED is the most widely accepted green building system.

The <u>U.S. Green Building Council (USGBC)</u> is a non-profit organization committed to expanding sustainable building practices.

What are LEED points?

LEED building systems consist of a variety of credits. These credits set requirements for a project to achieve. When achieved a point is awarded. Under LEED for commercial projects, VT Dimensions countertops only assist with LEED credits/points. For LEED for Homes, VT products achieve points when used in a home.

What are LEED Points used for?

Each LEED point earned gets a project closer to becoming LEED Certified. LEED has four certification levels; Certified, Silver, Gold and Platinum. The levels are achieved based on the amount of credits earned by a project. The credits do not change for each level of certification. When specifying LEED assistance, individual credit needs must be stated. Listing LEED Gold or LEED Silver is not specific enough to know what credit assistance is needed.

LEED NC certification levels

Certified - 40–49 points Silver - 50–59 points Gold - 60–79 points Platinum - 80-110 points

LEED for Homes certification levels

Certified - 40–59 points Silver - 60–74 points Gold - 75–89 points Platinum - 90 -136 points

What LEED building systems are available?

The following LEED rating systems are currently available. LEED NC and LEED for Homes are the most frequently specified and used for VT communications. LEED NC, Schools, and CS credit criteria are the same, with a few credit differences.

- New Construction (LEED-NC)
- Existing Buildings (LEED-EB)
- Commercial Interiors (LEED-CI)
- Core & Shell (LEED-CS)
- Schools, Retail, Health Care
- Homes (LEED-H)
- Neighborhood Development (LEED-ND)



LEED for New Construction / LEED for Schools What are the requirements of Materials & Resources (MR) credit 4: Recycled

What are the requirements of Materials & Resources (MR) credit 4: Recycled Content?

Use materials with recycled content such that the sum of post-consumer recycled content, recycled content from consumer waste, plus 1/2 of the pre-consumer content, recycled material from manufacturing waste, constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project.

The minimum percentage materials recycled for each point threshold is as follows:

Recycled Content	Points	
10%	1	
20%	2	

The Total Value of Materials in the Project is calculated using CSI Section 3-10, 31, 32 and excludes mechanical, electrical, and plumbing components and equipment. As default option the project can take the total construction cost by 45%.

How is MR 4 assistance calculated?

The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value. Pre-consumer recycled content is calculated at 1/2 the value.

I.E. VT standard countertops are comprised of 91% pre-consumer recycled material. The cost of the countertops to the project is \$100. \$45.50 or 45.5% (91% X 0.5 % X \$100) would contribute to achieving MR 4 points.

What is post-consumer and pre-consumer recycled material?

Post-consumer – recycled content from consumer waste. The recycled material was generated by a household, commercial, industrial, or institutional end users and can no longer be used for its intended purposes.

Pre-consumer – (post-industrial) – recycled material from manufacturing waste. I.E. wood chips and fiber collected from sawmills and used to manufacture particleboard.

How much recycled content is available for VT countertops?

Standard VT countertops with particleboard substrates contain 91% pre-consumer recycled material by weight. Particleboard is 100% pre-consumer recycled material and constitutes 91% of the countertop assembly by weight. EQcountertop contains 91% pre-consumer recycled weight as well, however the material is FSC® certified so for LEED NC/Schools, the project must choose what LEED credit is preferred, MR 4 or MR 7, as one product can not assist with both of these credits.

By default, VT documentation will list MR 7 compliance. MR 7 assistance is used as a default as the credit is closely related to products manufactured with wood. Also, the recycled content value is very small for commercial projects and other commonly used recycled materials such as concrete and steel will have more influence on the achievement of MR 4.



Countertops with backer materials applied contain 82% pre-consumer recycled materials by weight.

What are the requirements of Materials & Resources (MR) credit 5: Regional Materials?

Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value. The minimum percentage regional materials for each point threshold is as follows:

Regional Materials	Points
10%	1
20%	2

The Total Value of Materials in the Project is calculated using CSI Section 3-10, 31, 32 and excludes mechanical, electrical, and plumbing components and equipment. As default option the project can take the total construction cost by 45%.

Are MR 5 credits available for MR 5?

MR 5 credits are available for all facilities, except Sac City, IA. Projects must be located within 500 miles of the manufacturing facility and extraction points listed below. (91% by weight)

Manufacture Site	Countertop Type	Extraction Location
Sac City, IA	Standard / EQcountertop	Dillard, OR
Roseburg, OR	Standard / EQcountertop	Dillard, OR
Bryan, TX	Standard / EQcountertop	Taylorsville, MS
Rome, GA	Standard / EQcountertop	Taylorsville, MS
Hagerstown, MD	Standard / EQcountertop	Russellville, SC
La Mirada, CA	Standard	Springfield, OR / Dillard, OR
La Mirada, CA	EQcountertop	Springfield, OR
Boucherville, QC	Standard / EQcountertop	Sayabec, QC / Lac-Megantic, QC

How is MR 5 calculated?

The regional material value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

I.E. If a project is located within 500 miles of Roseburg, OR and Dillard, OR, 91% percent of the countertop cost would assist with MR 5. If the cost of the countertop to the project is \$100. \$91 (91% X \$100) would contribute to achieving MR 5 points.

What are the requirements of Materials & Resources (MR) credit 7: Certified Wood?

Use a minimum of 50% (based on cost) of wood-based materials and products that are certified in accordance with the Forest Stewardship Council's principles and criteria, for wood building components. These components include at a minimum, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.



The Total Value of Materials in the Project is calculated using CSI Section 3-10, 31, 32 and excludes mechanical, electrical, and plumbing components and equipment. As default option the project can take the total construction cost by 45%.

What is FSC?

The Forest Stewardship Council (FSC) promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

Environmentally appropriate forest management ensures that the harvest of timber and non-timber products maintains the forest's biodiversity, productivity and ecological processes.

Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans.

Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resources, the ecosystem or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market forest products for their best value.

FSC Website

What is FSC Chain of Custody (COC)?

FSC Chain of Custody (COC) is the path taken by raw materials, processed materials and products, from the forest to the consumer, including all successive stages of processing, transformation, manufacturing and distribution.

The main objective of FSC COC certification is to ensure that FSC certified material is tracked through the supply chain between operations and production processes within operations. Only FSC COC certified operations are allowed to label products with the FSC trademarks.

A certified Chain of Custody up to the final point of sale enables end customers to identify and choose FSC certified products knowing there is a system in place to verify the sources of the wood used to manufacture the products. The FSC label thus provides the link between responsible production and consumption.

VT FSC Chain of Custody Code: SCS-COC-003567

VT FSC License Code: FSC-C103836

FSC COC Information – Select Chain of Custody from the dropdown

What makes EQcountertops FSC certified?

FSC certified countertops are manufactured using FSC certified components. These countertops are sold by FSC COC certified manufacturers. EQcountertops hold an "FSC Mix Credit" claim. These claims are printed on invoices and shipping documentation (Bill



of Lading, Packing Slips) on a line by line basis. An example of a FSC claim for an EQcountertop is 'FSC Mix Credit'.

How is MR 7 Calculated?

MR 7 is calculated using the amount of new wood (non-recycled wood) by weight or volume and the FSC claim for a product. To calculate the percentage, the cost of the product/material invoiced to the project is multiplied by the new wood % times the FSC claim. 'FSC Mix Credit' claims are valued at 100% of the product cost.

I.E. If a countertop cost \$100 and contained 100% new wood with a claim of "FSC Mix Credit". \$100 or 100% would assist with MR 7. (\$100 X 100% X 100%).

What are the requirements of FSC COC requirements for countertop fabricators / distributors for MR 7 under LEED building rating systems?

MR 7 requires the "vendor" of a product to be FSC COC certified and label their invoices with an FSC claim, i.e. FSC Mix Credit. A "vendor" is defined as a company that supplies FSC-certified products to LEED project contractors or subcontractors, but does not itself install the products.

In addition, "Entities that install an FSC-certified product on the project building/site (typically project contractors or subcontractors, but also furniture installers and the like), do not require COC certification as long as they do not modify the product's packaging or form except as is required for installation." The fabrication process required for installing countertops does not go beyond this condition.

This all means, installing fabricators are not required to hold a FSC COC certificate. VT's invoiced FSC claims can be passed on as needed for LEED compliance documentation. Any fabricator or distributor not installing the VT countertops will be required to have a valid FSC COC certificate.

More information is available at the following links: http://us.fsc.org/frequently-asked-questions.296.htm

http://us.fsc.org/newsletter.239.411.htm

http://www.usgbc.org/ShowFile.aspx?DocumentID=4028

How do I get FSC Chain of Custody (COC) Certified?

VT Industries and Scientific Certification Systems (SCS) have collaborated to create a training program for our fabricators and distributors, to assist with achieving FSC Chain of Custody (COC) certification. The goal of the program is to get you fully educated in order to make your audit a quick and pain free process. As a VT customer you will be entitled to a discounted certification price when you use SCS as your third party certifier, have reviewed the entire user guide and FSC standard and submitted your specialized application to SCS.

The training program consists of a recorded online presentation provided by SCS and a "user guide", which includes a template and guide for writing your COC procedures, as well as the FSC COC Standard, FSC-STD-40-004 (Version 2-0), the main document in your COC process. Also included is in-depth information on SCS, FSC COC, and LEED.



Contact your Territory Sales Manager for more details.

What are the requirements of Indoor Environmental Quality (EQ) credit 4.4: Low-Emitting Materials—Composite Wood and Agrifiber Products?

Composite wood and agrifiber products used on the interior of the building (i.e., inside the weatherproofing system) must contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies must not contain added urea-formaldehyde resins.

Note: If one composite wood/agrifiber product or laminating adhesive contains added urea-formaldehyde, the entire point will be lost for the project.

EQcountertops contain no added urea-formaldehyde.

What does NAUF mean?

NAUF is short for "No Added Urea Formaldehyde"

Is NAUF board available?

Yes. Particleboard, MDF, and plywood is available as NAUF. Contact Purchasing at each facility for availability.

How much LEED credit assistance is available with VT Dimensions countertops? Standard countertops and EQcountertops assist with multiple LEED NC/Schools credits.

Countertop	MR 4: Recycled	MR 5: Regional	MR 7: Certified	EQ 4.4: Low
Туре	Content	Materials*	Wood	Emitting
				Materials
Standard	91% pre-	91%	Not available	Not available
	consumer			
EQcountertop	0%	91%	FSC Mix Credit	Yes, NAUF

^{*}Project must be located within 500 miles of manufacture and extraction site

LEED for Homes

What are the requirements for MR 2.2: Environmentally Preferable Products? Use building component materials that meet one or more of the criteria listed below. Except as noted in Table 24 of the the LEED for Home Rating System, a material must make up 90% of the component by weight or volume. A single component that meets each criterion (environmentally preferable, low emissions, and local sourcing) can earn points for each.

A) Environmentally preferable products (0.5 point per component). Use products that meet specification of Table 24.

Note: Recycled content products must contain a minimum of 25% post-consumer content. Post-consumer (post-industrial) recycled content must be counted as half the rate of post-consumer content AND/OR

B) Low emissions (0.5 per component). Use products that meet specification of Table 24.

AND/OR



C) Local production (0.5 pre component). Use products that were extracted, processed, and manufactured with in 500 miles of the home.

Table 24 requirements for countertops

Assembly	Component	EPP Specification (0.5 point per component)	Emission Specification	Local Production
Other	Counters (kitchen & bathroom)	Recycled content, FSC-certified, or reclaimed AND composite materials must contain no added urea- formaldehyde	N/A	Eligible

Do VT countertops achieve MR 2.2 credit?

EQcountertops are meet MR 2.2 requirements. These countertops are recycled (91% preconsumer recycled materials), FSC certified (FSC Mix Credit), contain no added ureaformaldehyde, and available for local production credits in some areas, for a possibility of 1 point. Under LEED for Homes, VT countertops achieve points rather than assist with points, unlike the commercial LEED systems.

Standard countertops meet MR 2.2 requirements. These countertops are available for local production credits in some areas, for a possibility of 0.5 point.

What makes a product green? Are VT products classified as "green"?

Everyone has their own definition of "green". VT products have several green/sustainable attributes. If you are using LEED to as your guideline, VT countertops meet several credit criteria. Standard VT Dimensions countertops are manufactured with pre-consumer recycled materials, low emitting adhesives and materials, and are GREENGUARD Indoor Air Quality Certified[®]. EQcountertops are FSC certified (FSC Mix Credit), manufactured with no added urea formaldehyde materials and adhesives, and are GREENGUARD Children & Schools[™] Certified.

What is GREENGUARD Certification?

GREENGUARD certifies products that meet stringent VOC emission criteria. Products are tested on a quarterly basis to confirm they meet the certification requirements. VOCs are irritants and can cause headaches, eye, nose and throat irritation, and dizziness. Long-term exposure to certain VOCs may lead to chronic diseases or cancer. At high concentrations, some VOCs are toxic.

GREENGUARD has two certification levels, GREENGUARD Indoor Air Quality Certified and GREENGUARD Children & Schools Certified. GREENGUARD C&S accounts for inhalation exposure to young children with greater sensitivities and applies increased allowable emission levels.

Are MDF and plywood countertops Green?

MDF and plywood are available as FSC and NAUF for EQcountertops and assist with the same LEED credits. Standard MDF would have the same LEED assistance as standard particleboard countertops. Standard plywood would not assist with any LEED credits.



What is the difference between FSC and Green?

FSC certification is a green attribute of EQcountertop. FSC certified products are eligible to assist with LEED credits for both residential and commercial rating systems.