

Words of Wisdom on LEED based Waterproofing/Roofing

Big picture: LEED is an energy design program which can gain some minor credits if the building materials contain enough recycled matter.

How does LEED really work? An architect works with a building owner to specify a LEED building. This building is designed to have a lower environmental impact than a conventional building. Only once the owner has agreed does the bid to the GC contain the requirement. The owner will pay for a documentation system and a reviewer, and a submittal fee. The owner will be bound to abide by the 7 prerequisites and the architect, GC, and specifier will submit a compliance plan to the owner. This plan will target a Certified, Silver, Gold, or Platinum rating. The GC will work with the reviewer and the architect to develop a LEED sheet for the site which must accumulate to achieve the planned site rating. Affected contractors and subs will have to agree to complete this sheet for each bid.

What are the biggest and most common mistakes? The worst mistakes are not having experienced LEED architects, GC, and LEED Certified plan checker develop a compliant plan before the ground is disturbed. The most common mistake is subs and distributors attempting to gather information for LEED. Typically they waste a bunch of time and money with all their work being tossed out by the auditor. Other common mistakes involve trying to self interpret the LEED criteria. This is much more difficult than it appears. Another common mistake is the assumption that only LEED material can be used on the site. Most material is not LEED material, only material targeting a certain credit and falling in the site plan are needed. Overall at the installation and Mfg level simply understanding you are not a decision maker is paramount.

How to get a credit (particularly a recycled content credit): Mfg supplies documentation as recycled content listed on data sheets or company letters listing recycled content. The recycled content is multiplied times the material cost to determine the contribution to the overall recycled content. Only when the overall building achieves the required percentage is a credit point issued.

Do you have to use a LEED Rated product at a LEED jobsite? NO, most products used are not LEED rated and this will remain the case. LEED points are given only when the job achieves a dollar cost average greater or equal to the requirement. In exterior roofing and waterproof non-LEED products are common on LEED jobs. Since the multitudes of products individually contribute minimal to building material cost they are only counted in the summary cost not the contribution cost. This is very different from Indoor products and some prerequisite products.

Does LEED require low or no VOC? NO, not in exterior roofing and waterproofing. LEED is migrating toward a marriage with SCAQMD; currently the VOC restriction applies to interior space only not exterior applications.

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Green roofs always get LEED credit Not always green roofs can assist in obtaining credits for roof rating as well as storm water runoff, but the site must achieve an overall standards, If the green roof is large enough it will achieve the 7.2 standard, only if it reservoirs enough water will it achieve the storm water standards.

Manufactures must submit the paper work Mfg can not submit the paperwork! Manufactures must document only products contain recycle contain, manufacturing location, resourcing, etc. The sub contractor actually signs the LEED sheets provided by the GC/Architect/checker using the mfg sheet as his documentation. The sub must sign the actual price paid for material and the documentation matches what the sub is applying (not always what the architect specified)

All asphalt is recycled Yes and No, one big problem is who decides if a material qualifies as recycled, and another is what happens if someone signs virgin material as recycled. The intent is to redirect material which would be refuse and use it in a meaning full manner. Good manufactures can only work with the intent. Since asphalt is not usually sent from the refinery to the landfill it does not qualify as recycle by the LEED std.

Manufacturing within 500 mile (300 mile truck or 1000 by train)

Sourcing (extracting)

Renewable This is a group of categories (MR 5, 6, 7) developed to promote the timber industry in the Pacific Northwest. Thus it is a difficult fit for many conventional building materials. The applicable interpretation is if the main volume of raw material is processed with in 500 miles of the jobsite it qualifies to contribute to MR 5 credits. If the product as carried on to the jobsite is processed with in 500 miles of the jobsite it qualifies to contribute to MR 5 credits. Do not use warehouse, distribution, or shipping location. Renewable is based on the type of wood and does not apply to convention building material in true intent.

What FSC, certified and Chain of Custody MR credits 5, 6, 7 were intended to promote the timber industry in the Pacific Northwest. This terminology is used to reward wood from Forrest programs that have selective cutting and reforesting plans.

Ready to Test?

Which is worth more raising the recycled content of Mfg products (MR 4) from 11% to 13% or installing a bicycle racks? Answer -the bicycle racks – the change of MR 4 from 11% to 13% will have no affect on the score, however the bike racks may achieve SS 4.2 credits. Thus you must follow the rules.