| v1 - LEED 1.0 pilot

Low-emitting materials, adhesives and sealants

EQc4 | Possible 4 points

Glossary

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants.

Requirements

Option A. Adhesives & sealants: (1 Point)

All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards:

- Adhesives, Sealants and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits are listed in the table below and correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.
- Aerosol Adhesives: Green Seal Standard for Commercial Adhesives GS-36 requirements in effect on October 19, 2000.

OR

All adhesives and sealants will meet the testing and product requirements of the California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

Option B. Paints & coatings: (1 Point)

Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria:

- Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
  - Flats: 50 g/L
  - Non-Flats: 150 g/L
- Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
- Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.
  - Clear wood finishes: varnish 350 g/L; lacquer 550 g/L
  - Floor coatings: 100 g/L
  - Sealers: waterproofing sealers 250 g/L; sanding sealers 275 g/L; all other sealers 200 g/L
  - Shellacs: Clear 730 g/L; pigmented 550 g/L
  - Stains: 250 g/L

All paints and coatings will meet the testing and product requirements of the California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

Option C. Flooring: (1 Point)

All flooring must comply with the following as applicable to the project scope:

All carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program.

All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.

All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L.

AND

All of the resilient flooring in must be certified as compliant with the FloorScore standard (current as of the date of this Rating System, or more stringent version) by an independent third-party.

AND

Concrete, wood, bamboo, and cork floor finishes such as sealer, stain and finish must meet the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004. VOC limits are listed below.

- Clear wood finishes: varnish 350 g/L; lacquer 550 g/L

- Floor coatings: 100 g/L
- Sealers: waterproofing sealers 250 g/L; sanding sealers 275 g/L; all other sealers 200 g/L
- Shellacs: Clear 730 g/L; pigmented 550 g/L
- Stains: 250 g/L

AND

Tile setting adhesives and grout must meet South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits are listed below and correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.

- Ceramic tile adhesive: 65 g/L
- Grout and mortar: 250 g/L

OR

All flooring products will meet the testing and product requirements of the California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

Option D. Composite wood & agrifiber products: (1 Point)

Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde resins. Products covered by EQ Credit 4.5, Low-Emitting Materials, System Furniture and Seating shall be excluded from these requirements.

OR

All composite wood and agrifiber products will meet the testing and product requirements of the California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.
Composite wood and agrifiber products are defined as: particleboard, medium density fiberboard (MDF), plywood, wheatboard, strawboard, panel substrates and door cores. Materials considered fit-out, furniture, and equipment (FF&E) are not considered base building elements and are not considered under this credit.

Option E. Furniture: (1 Point)

For custom manufactured furniture components of furniture and their assembly must meet the requirements of EQ Credit 4.1 Adhesives and Sealants, EQ Credit 4.2 Paints and Coatings, and EQ Credit 4.4 Composite Wood & Agrifiber Products.

Furniture is defined as either retail display/shelving that is purchased as a unit from a manufacturer(regardless of where the assembly takes place) or as modular/freestanding furniture.

AND

Any systems furniture and seating* introduced into the project space that has been manufactured, refurbished or refinished within one year prior to occupancy must meet one of the requirements below.

Option A: Greenguard Indoor Air Quality Certified

OR

Option B: Calculated indoor air concentrations that are less than or equal to those established in Table 1 for furniture systems and seating determined by a procedure based on the U.S. Environmental Protection Agency's Environmental Technology Verification (ETV) Large Chamber Test Protocol for Measuring Emissions of VOCs and Aldehydes (September 1999) testing protocol conducted in an independent air quality testing laboratory.

OR

Option C: Calculated indoor air concentrations that are less than or equal to those established in Table 1* for furniture systems and seating determined by a procedure based on BIFMA M7.1-2005 and X7.1-2005 testing protocol conducted in an independent third party air quality testing laboratory. The requirement in section 5 of BIFMA standard X7.1-2005 is waived for LEED purposes. Section 5 requires that laboratories used to perform the emissions testing and/or provide analytical results shall be independently accredited to ISO/IEC 17025, "General requirements for the competence of testing and calibration laboratories."

Systems furniture is defined as either a panel-based workstation comprised of modular interconnecting panels, hang-on components and drawer/filing components or a freestanding grouping of furniture items and their components that have been designed to work in concert.
Seating is defined as task and guest chairs used with systems furniture.

*Furniture other than systems furniture and task and guest chairs used with systems furniture is defined as occasional furniture and is excluded from the credit requirements.

Salvaged and used furniture that is more than one year old at time of occupancy is excluded from the credit requirements.

Option F. Ceiling & wall systems: (1 point)

All gypsum board, insulation, acoustical ceiling systems and wall coverings installed in the building interior shall meet the testing and product requirements of the California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.