# SECTION 01352 – SUSTAINABLE CONSTRUCTION STANDARDS

## PART 1 GENERAL

### 1.1 SUMMARY

A. This section includes definitions and VOC levels pertaining to the sustainable construction standards for this project.

### 1.2 RELATED SECTIONS

A. Related sections include the following:

1. Section 01505 – Construction Waste Management
2. Section 01440 – Construction IAQ Management
3. Divisions 1 through 12 for sustainable construction standards specific to the Work of each of these Sections.

### 1.3 DEFINITIONS

A. Reused Material: Salvaged, refurbished or reused materials, products and furnishings that have been returned to active use in the same or related capacity as their original use.

B. Recycled Content: The percentage by weight of constituents that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer or post-industrial), or after consumer use (post-consumer).

1. Scraps, spills or other waste from the original manufacturing process that are combined with other constituents after a minimal amount of reprocessing for use in the further production of the same product are not recycled materials.
2. Discarded materials from one manufacturing process that are used as constituents in another manufacturing process are pre-consumer recycled materials.

C. Regionally Manufactured Materials: Materials that are manufactured within a radius of 500 miles from the Project location. Manufacturing refers to the final assembly of components into the building product that is delivered and installed at the Project location.

D. Regionally Extracted Materials: Constituent materials that are extracted, harvested or recovered (from salvage or recycling) and manufactured within a radius of 500 miles from the Project location.

E. Rapidly Renewable Materials: Materials made from agricultural products that are typically harvested within a ten-year or shorter cycle. Rapidly renewable materials include products made from straw, jute, flax, bamboo, cotton, vegetable oil, wool or sunflower seed hulls.

F. Chain-of-Custody Certificate: A certificate signed by a manufacturer certifying a wood product was obtained from forests certified by a Forest Stewardship Council (FSC) accredited certification body to comply with FSC 1.2, "Principals and Criteria." Certificates shall include evidence that the mill and distributor are certified for chain-of-custody by a FSC-accredited certification body.

G. Composite Wood and Agri-fiber Board: Manufactured materials made from wood or agricultural fibers manufactured with bonding agents. Composite wood materials include particle board, OSB, MDF, strawboard, plywood and wheat board. Composite wood components used in assemblies are also controlled (e.g. door cores, panel substrates, plywood section of I-beams, etc.). Adhesive used in wood/agrifiber assemblies (veneered panels, composite wood products contained in engineered lumber, door assemblies, etc.) is not controlled in version LEED-NC (v2.1).

## PART 2 PRODUCTS

### 2.1 LOW-EMITTING MATERIALS

A. For interior applications use adhesives and sealants that comply with the following limits for VOC content when calculated according to 40 CFR 59, subpart D (EPA method 24):

| **PRODUCT TYPE** | **VOC Limit G/L** |
|---|---|
| ***Sealants:*** | |
| Architectural | 250 |
| Porous Architectural Sealant Primer | 775 |
| Non-porous Architectural Sealant Primer | 250 |
| ***Architectural Adhesives Applications*** | |
| Indoor Carpet Adhesives | 50 |
| Carpet Pad Adhesives | 50 |
| Outdoor Carpet Adhesives | 150 |
| Wood Flooring Adhesives | 100 |
| Rubber Floor Adhesives | 60 |
| Subfloor Adhesives | 50 |
| Ceramic Tile installation | 65 |
| VCT and Asphalt Tile Adhesives | 50 |
| Dry Wall and Panel Adhesives | 50 |
| Cove base installation | 50 |
| Multipurpose Construction Adhesive | 70 |
| Structural Glazing Adhesives | 100 |
| ***Substrates*** | |
| Metal to metal | 30 |
| Plastic foams | 50 |
| Porous material except wood | 50 |
| Wood | 30 |
| Fiberglass | 80 |
| ***Welding & Installation*** | |
| PVC welding | 510 |
| CPVC welding | 490 |

| | |
|---|---|
| ABS welding | 325 |
| Plastic cement welding | 250 |
| Adhesive primer for plastic | 550 |
| Contact Adhesive | 80 |
| Special Purpose Contact Adhesives | 250 |
| Structural Wood Member Adhesives | 140 |
| Sheet Applied Rubber Lining Operations | 850 |
| Top and Trim Adhesive | 250 |
| Sealant Primer: | |
| Architectural (non-porous) | 250 |
| Architectural (porous) | 775 |
| Other | 750 |
| ***Aerosol Adhesives*** | |
| General purpose mist spray | 65% VOCs by weight |
| General purpose web spray | 55% VOCs by weight |
| Special purpose aerosol adhesives (all types) | 70% VOCs by weight |
| Waterproofing concrete/masonry sealers | |

B. For interior applications use paints that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA method 24).

| | **VOC Limit (g/L)** |
|---|---|
| ***Interior Coatings*** | |
| Non-flat | 150 |
| Flat | 50 |
| ***Exterior Coatings*** | |
| Non-flat | 200 |
| Flat | 100 |
| ***Anti-Corrosive*** | |
| Gloss | 250 |
| Semi-Gloss | 250 |

C. Provide carpets that comply with the following limits as established by the Carpet and Rug Institute:

| | **Emission factor limit (mg/m2/hr)** |
|---|---|
| **Carpets** | |
| Total VOCs | 0.5 |
| 4 – Phenylcyclohexane | 0.05 |
| Formaldehyde | 0.05 |
| Styrene | 0.4 |

| | |
|---|---|
| **Cushion** | |
| Total VOCs | 1 |
| 4 – Phenylcyclohexane | 0.3 |
| Formaldehyde | 0.05 |
| Styrene | 0.05 |
| **Adhesives** | |
| Total VOCs | 10 |
| Formaldehyde | 0.05 |
| 2 - Ethyl - 1 – Hexanol | 3 |

D. For all interior applications, do not use wood or agri-fiber products that contain urea-formaldehyde resin.

PART 3 EXECUTION

NOT USED

END OF SECTION 01352