#### **CHAPTER 5**

### MATERIAL RESOURCE CONSERVATION AND EFFICIENCY

#### SECTION 501 GENERAL

**501.1 Scope.** The provisions of this chapter shall govern matters related to building material conservation, resource efficiency and environmental performance.

#### SECTION 502 CONSTRUCTION MATERIAL MANAGEMENT

**502.1 Construction material management.** Construction material management shall comply with Sections 502.1.1 and 502.1.2.

**502.1.1** Storage and handling of materials. Materials stored and handled onsite during construction phases shall comply with the applicable manufacturer's printed instructions. Where manufacturer's printed instructions are not available, *approved* standards or guidelines shall be followed.

**502.1.2** Construction phase moisture control. Porous or fibrous materials and other materials subject to moisture damage shall be protected from moisture during the construction phase. Material damaged by moisture or that are visibly colonized by fungi either prior to delivery or during the construction phase shall be cleaned and dried or, where damage cannot be corrected by such means, shall be removed and replaced.

#### SECTION 503 CONSTRUCTION WASTE MANAGEMENT

**503.1 Construction material and waste management requirements.** Not less than 50 percent of nonhazardous construction waste shall be diverted from disposal, by recycling or salvage of construction materials and waste.

The *owner*, contractor or *approved agency* shall maintain receipts and other documentation through the course of construction relating to diversion. The percentage of materials diverted shall be calculated by weight or volume, but not both. For the purposes of this section, construction materials and waste shall include, but are not limited to (1) all materials delivered to the site and intended for installation prior to the issuance of the certificate of occupancy, including related packaging; and (2) construction materials and waste removed during *demolition* or *razing*. Construction and waste materials shall not include land-clearing debris. Land-clearing debris shall include trees, stumps, rocks, and vegetation and shall be managed in accordance with Section 406.1.

**503.2 Verification.** Prior to issuance of the first certificate of certificate of occupancy for occupiable space in a *story above grade plane*, or prior to final inspection, if a new certificate of occupancy is not required, the *Department* is authorized to require the *owner*, contractor or an *approved agency* to pro-

vide verification of the project's compliance with Section 503.1. When requested by the *code official*, evidence of diversion shall be provided, which may include, but is not limited to, hauling receipts.

# SECTION 504 [RESERVED]

## SECTION 505 MATERIAL SELECTION

**505.1 Material selection and properties.** For projects that are 25,000 square feet (2323 m<sup>2</sup>) and larger, building materials shall conform to Section 505.2, 505.3 or 505.4.

**Exception:** Electrical, mechanical, plumbing, security and fire detection, and alarm equipment and controls, automatic fire sprinkler systems, elevators and conveying systems shall not be required to comply.

**505.2 Reduced impact materials.** The *building project* shall comply with any two of the following: Section 505.2.1, 505.2.2, or 505.2.3. Calculations shall only include materials *permanently installed* in the project. A value of 45 percent of the total construction cost shall be permitted to be used in lieu of the actual total cost of materials.

**505.2.1 Recycled content and salvaged material content.** The sum of the *recycled content* and the *salvaged material* content shall constitute a minimum of 30 percent, based on cost, of the total materials in the *building project*.

**505.2.1.1 Recycled content.** The *recycled content* of a material shall be the *postconsumer recycled content* plus one-half of the *preconsumer recycled content*, determined by weight (mass). The recycled fraction of the material in a product or an assembly shall then be multiplied by the cost of the product or assembly to determine its contribution to the requirement.

The annual average industry values, by country of production, for the *recycled content* of steel products manufactured in basic oxygen furnaces and electric arc furnaces shall be permitted to be used as the *recycled content* of the steel. For the purpose of calculating the *recycled content* contribution of concrete, the constituent materials in concrete (e.g., the cementitious materials, aggregates, and water) shall be permitted to be treated as separate components and calculated separately.

**505.2.1.2 Salvaged material content.** The *salvaged material* content shall be determined based on the actual cost of the *salvaged material* or the cost of a comparable alternative component material.