CHAPTER 3 GREEN BUILDING

SECTION 3.1 SCOPE

3.1.1.1 In addition to the green building standards specified in the California Green Building Standards Code, the water usage efficiency for all residential buildings, as defined in the California Building Code, is also addressed in this section. This includes provisions for water conservation, water efficiency, and water usage reduction.

3.1.2 Low-rise and high-rise residential buildings shall provide water conservation measures as specified in Table 3.1.2.1. These measures include:

- Water-efficient fixtures
- Water-efficient landscaping
- Water-efficient appliances
- Water-efficient irrigation systems

3.1.3 The provisions of this section shall apply to all residential buildings, including new construction, additions, and alterations. This includes both single-family and multifamily dwellings.

SECTION 3.2 MIXED OCCUPANCY BUILDINGS

3.2.1 Mixed occupancy buildings shall be designed and constructed to meet the provisions of this code. This includes provisions for water conservation, water efficiency, and water usage reduction.

3.2.2 Mixed occupancy buildings shall provide water conservation measures as specified in Table 3.2.2.1. These measures include:

- Water-efficient fixtures
- Water-efficient landscaping
- Water-efficient appliances
- Water-efficient irrigation systems

3.2.3 The provisions of this section shall apply to all mixed occupancy buildings, including new construction, additions, and alterations. This includes both low-rise and high-rise residential buildings.

ABBREVIATION DEFINITIONS

- GBD: Green Building Code
- RAB: Residential Applications Board
- USGBC: United States Green Building Council
- LEED: Leadership in Energy and Environmental Design

CHAPTER 4 RESIDENTIAL MANDATORY MEASURES

DIVISION 4.1 PLANNING AND DESIGN

SECTION 4.1.1.1 In addition to the green building standards specified in the California Green Building Standards Code, the water usage efficiency for all residential buildings, as defined in the California Building Code, is also addressed in this section. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.1.2 Storm water management and discharge reduction (Chapter 4.1.2) is addressed in Table 4.1.2.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.1.3 Section 4.1.3.1 includes a list of materials and equipment that are not to be used in the construction of residential buildings. This includes both new construction and additions.

4.1.4 The provisions of this section shall apply to all residential buildings, including new construction, additions, and alterations. This includes both single-family and multifamily dwellings.

4.1.5 The provisions of this section shall apply to all mixed occupancy buildings, including new construction, additions, and alterations. This includes both low-rise and high-rise residential buildings.

DIVISION 4.2 ENERGY EFFICIENCY

4.2.1.1 A complete water usage efficiency plan for all residential buildings, as defined in the California Building Code, is also addressed in this section. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.2.2 The provisions of this section shall apply to all residential buildings, including new construction, additions, and alterations. This includes both single-family and multifamily dwellings.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.3.1.1 Water-efficient fixtures and fittings (Chapter 4.3.1.1) are addressed in Table 4.3.1.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.3.2.1 Water-efficient appliances and other water-using equipment (Chapter 4.3.2.1) are addressed in Table 4.3.2.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.3.3.1 Water-efficient irrigation systems (Chapter 4.3.3.1) are addressed in Table 4.3.3.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.3.4.1 Landscape water conservation (Chapter 4.3.4.1) is addressed in Table 4.3.4.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE RECOVERY

4.4.1.1 General material conservation (Chapter 4.4.1.1) is addressed in Table 4.4.1.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.4.2.1 Recycled building products (Chapter 4.4.2.1) are addressed in Table 4.4.2.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.4.3.1 Water conservation in construction (Chapter 4.4.3.1) is addressed in Table 4.4.3.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

DIVISION 4.5 ENVIRONMENTAL QUALITY

4.5.1.1 General environmental quality (Chapter 4.5.1.1) is addressed in Table 4.5.1.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.

4.5.2.1 Recycling of construction waste (Chapter 4.5.2.1) is addressed in Table 4.5.2.1.1. This includes provisions for water conservation, water efficiency, and water usage reduction.
TABLE 4.8.4.1 - ADHERENT VOCL LIMIT

<table>
<thead>
<tr>
<th>VOC LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 g/L for coatings and 5.0 g/L for adhesives.</td>
</tr>
</tbody>
</table>

TABLE 4.8.4.2 - SEALANT VOC LIMIT

<table>
<thead>
<tr>
<th>SEALANT TYPE</th>
<th>VOC LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylate</td>
<td>150</td>
</tr>
<tr>
<td>Silicone</td>
<td>900</td>
</tr>
<tr>
<td>Polyurethane</td>
<td>300</td>
</tr>
<tr>
<td>Polyvinyl</td>
<td>400</td>
</tr>
<tr>
<td>Epoxy</td>
<td>50</td>
</tr>
</tbody>
</table>

TABLE 4.8.5 - FORMALDEHYDE LIMITS

<table>
<thead>
<tr>
<th>LIMIT</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MELAMINE PAPER</td>
<td>100 ppm</td>
</tr>
<tr>
<td>MDF</td>
<td>100 ppm</td>
</tr>
<tr>
<td>HPL</td>
<td>100 ppm</td>
</tr>
<tr>
<td>OSB</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Engineered wood</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.5.3.3.2 Vapor barrier. A vapor barrier shall be installed in accordance with Table 4.5.3.3.2.

4.5.3.3.3 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.3.3.3.

4.5.3.4 RESIDENTIAL TIGHTNESS SYSTEMS (continued)

4.5.3.6.1.4 Construction joints. Construction joints shall be constructed in accordance with Table 4.5.3.6.1.4.

4.5.3.7 INDOOR AIR QUALITY AND TREATMENT

4.5.3.7.1 General. The indoor air quality of a building shall be maintained in accordance with Table 4.5.3.7.1.

4.5.4 INDOOR AIR QUALITY AND TREATMENT

4.5.4.1.1 General. The indoor air quality of a building shall be maintained in accordance with Table 4.5.4.1.1.

4.5.4.1.2.1 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.4.1.2.1.

4.5.4.1.3.1 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.4.1.3.1.

4.5.4.1.4.1 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.4.1.4.1.

4.5.4.1.5.1 MDF. MDF shall be utilized in accordance with Table 4.5.4.1.5.1.

4.5.4.1.6.1 OSB. OSB shall be utilized in accordance with Table 4.5.4.1.6.1.

4.5.4.1.7.1 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.4.1.7.1.

4.5.4.2 RESIDENTIAL TIGHTNESS SYSTEMS (continued)

4.5.4.2.1.1 Construction joints. Construction joints shall be constructed in accordance with Table 4.5.4.2.1.1.

4.5.4.2.2.1 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.4.2.2.1.

4.5.4.2.3.1 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.4.2.3.1.

4.5.4.2.4.1 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.4.2.4.1.

4.5.4.2.5.1 MDF. MDF shall be utilized in accordance with Table 4.5.4.2.5.1.

4.5.4.2.6.1 OSB. OSB shall be utilized in accordance with Table 4.5.4.2.6.1.

4.5.4.2.7.1 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.4.2.7.1.

4.5.5.1.1.1 General. The indoor air quality of a building shall be maintained in accordance with Table 4.5.5.1.1.1.

4.5.5.1.1.2 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.5.1.1.2.

4.5.5.1.1.3 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.5.1.1.3.

4.5.5.1.1.4 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.5.1.1.4.

4.5.5.1.1.5 MDF. MDF shall be utilized in accordance with Table 4.5.5.1.1.5.

4.5.5.1.1.6 OSB. OSB shall be utilized in accordance with Table 4.5.5.1.1.6.

4.5.5.1.1.7 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.5.1.1.7.

4.5.5.2 RESIDENTIAL TIGHTNESS SYSTEMS (continued)

4.5.5.2.1.1 Construction joints. Construction joints shall be constructed in accordance with Table 4.5.5.2.1.1.

4.5.5.2.2.1 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.5.2.2.1.

4.5.5.2.3.1 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.5.2.3.1.

4.5.5.2.4.1 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.5.2.4.1.

4.5.5.2.5.1 MDF. MDF shall be utilized in accordance with Table 4.5.5.2.5.1.

4.5.5.2.6.1 OSB. OSB shall be utilized in accordance with Table 4.5.5.2.6.1.

4.5.5.2.7.1 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.5.2.7.1.

4.5.6.1.1.1 General. The indoor air quality of a building shall be maintained in accordance with Table 4.5.6.1.1.1.

4.5.6.1.1.2 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.6.1.1.2.

4.5.6.1.1.3 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.6.1.1.3.

4.5.6.1.1.4 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.6.1.1.4.

4.5.6.1.1.5 MDF. MDF shall be utilized in accordance with Table 4.5.6.1.1.5.

4.5.6.1.1.6 OSB. OSB shall be utilized in accordance with Table 4.5.6.1.1.6.

4.5.6.1.1.7 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.6.1.1.7.

4.5.6.2 RESIDENTIAL TIGHTNESS SYSTEMS (continued)

4.5.6.2.1.1 Construction joints. Construction joints shall be constructed in accordance with Table 4.5.6.2.1.1.

4.5.6.2.2.1 Air-entrained concrete. Air-entrained concrete shall be utilized in accordance with Table 4.5.6.2.2.1.

4.5.6.2.3.1 Epoxy. Epoxy shall be utilized in accordance with Table 4.5.6.2.3.1.

4.5.6.2.4.1 Formaldehyde. Formaldehyde shall be utilized in accordance with Table 4.5.6.2.4.1.

4.5.6.2.5.1 MDF. MDF shall be utilized in accordance with Table 4.5.6.2.5.1.

4.5.6.2.6.1 OSB. OSB shall be utilized in accordance with Table 4.5.6.2.6.1.

4.5.6.2.7.1 Engineered wood. Engineered wood shall be utilized in accordance with Table 4.5.6.2.7.1.