**NOTE:**
FOR CONSTRUCTION NOT CONSISTENT WITH THE FRAMING METHODS SHOWN ABOVE, APPROVAL MUST BE OBTAINED FROM BUILDING AND SAFETY DIVISION OFFICE BEFORE STARTING ANY WORK.

<table>
<thead>
<tr>
<th>Size and Grade</th>
<th>Spacing on Center</th>
<th>Horizontal Projection</th>
<th>BEAM SPANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot; x 4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 2</td>
<td>12&quot;</td>
<td>8' - 9&quot;</td>
<td>4x4 will span 4' - 0&quot;</td>
</tr>
<tr>
<td></td>
<td>16&quot;</td>
<td>7' - 11&quot;</td>
<td>4x6 will span 6' - 0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot;</td>
<td>6' - 11&quot;</td>
<td>4x8 will span 8' - 0&quot;</td>
</tr>
<tr>
<td>2&quot; x 6&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 2</td>
<td>12&quot;</td>
<td>13' - 9&quot;</td>
<td>4x10 will span 10' - 0&quot;</td>
</tr>
<tr>
<td></td>
<td>16&quot;</td>
<td>12' - 6&quot;</td>
<td>4x12 will span 12' - 0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot;</td>
<td>10' - 11&quot;</td>
<td></td>
</tr>
<tr>
<td>2&quot; x 8&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 2</td>
<td>12&quot;</td>
<td>18' - 1&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16&quot;</td>
<td>16' - 6&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24&quot;</td>
<td>14' - 4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Based on maximum horizontal rafter span of 12' - 0" using Doug Fir No. 2 grade wood.

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**ROOFING:**  For slopes of 1:12 or steeper, use 90# cap over 2-15# felt. For lesser pitch or for use of aluminum or fiberglass, see Building Inspector for approval prior to installation.

(1) **LATERAL:** For existing buildings, use 30# cap over 2-15# felt. For lesser pitch or for use of aluminum or fiberglass, see Building Inspector for approval prior to installation.

(2) **LATERAL:** Roofing may be placed over stucco. See Building Inspector for prior approval and when studs are carefully located.

(3) Under certain conditions, the Building Inspector may approve lesser foundations.

(4) On two plot plans show location of all existing buildings with dimensions to lot lines and between buildings.
**DETAIL A**

- Flashing
- Approved Roof Covering
- 1" Solid Sheathing
- or 1/8" CD
- Base

**Existing Stucco**

**DETAIL B**

- 2" x 4" Post
- Drainage
- 2" Air Space
- Slope

- 2 - 12" x 12" Deep Concrete Pad
- Based on maximum 120 psf, pt. of patio
- Cover around post w/ 100 psf soil pressure

**DETAIL C**

- Approved Post Cap

- 12 gauge 1 1/2" x 12" steel straps
  one on each side with total of
  four 1/2" machine bolts.

- Recommended 2" x 4" Kneebrace
  with 5-16d Nails
  Each End
SECTION 3116 — PATIO COVERS DEFINED

Patio covers are one-story structures not exceeding 12 feet (3657 mm) in height. Enclosure walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below a minimum of 6 feet 8 inches (2032 mm) of each wall, measured from the floor. Openings may be enclosed with insect screening or plastic that is readily removable translucent or transparent plastic not more than 0.125 inch (3.2 mm) in thickness.

Patio covers may be detached or attached to other buildings as accessories to Group U; Group R, Division 3; or single dwelling units in Group R, Division 1 Occupancies. Patio covers shall be used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms.

SECTION 3117 — DESIGN LOADS

Patio covers shall be designed and constructed to sustain the loads required by Chapter 16, combined in accordance with Section 1612.2 for load and resistance factor design or Section 1612.3 for allowable stress design, except that the live load, L, shall not be taken as less than 10 pounds per square foot (0.48 kN/m²) and, where less than 12 feet (3658 mm) high, the horizontal wind load shall be as indicated in Table A-31-A. In addition, they shall be designed to support a minimum wind uplift equal to the horizontal wind load acting vertical upward normal to the roof surface, except that for structures not more than 10 feet (3048 mm) above grade the uplift may be three fourths of the horizontal wind load. When enclosed with insect screening or plastic that is readily removable translucent or transparent plastic not more than 0.125 inch (3.2 mm) in thickness, wind loads shall be applied to the structure, assuming it is fully enclosed.

SECTION 3118 — LIGHT AND VENTILATION

Exterior openings required for light and ventilation may open into a patio structure conforming to Section 3116.

SECTION 3119 — FOOTINGS

A patio cover may be supported on a concrete slab on grade without footings, provided the slab is not less than 3½ inches (89 mm) thick and further provided that the columns do not support live and dead loads in excess of 750 pounds (3.34 kN) per column.

### TABLE A-31-A — DESIGN WIND PRESSURES FOR PATIO COVERS

<table>
<thead>
<tr>
<th>HEIGHT ZONE IN FEET</th>
<th>WIND SPEED—MAP AREAS (miles per hour)</th>
<th>\times 1.61 for km/h</th>
<th>\times 0.048 for kN/m² (paf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>10</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

1 See Chapter 16, Figure 16-1, for basic wind speeds.