### Example Calculation of Irrigation Water Requirement:
- **Soil:** Silt Loam
- **AWC** = 2.0 in./ft.
- **Root Zone:** 0 – 24”
- **LF** = 10%
- **MAD** = 50% at 0 – 6” depth

### Calculated Values

<table>
<thead>
<tr>
<th>Soil Textural Class</th>
<th>AWC (in./ft.)</th>
<th>0 – 12 inch depth (Shallow Roots)</th>
<th>0 – 24 inch depth (Medium Roots)</th>
<th>0 – 36 inch depth (Deep Roots)</th>
<th>% Leaching Fraction (LF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse Texture</td>
<td></td>
<td>0.17</td>
<td>0.19</td>
<td>0.2</td>
<td>0.34</td>
</tr>
<tr>
<td>Sands</td>
<td>0.5</td>
<td>0.34</td>
<td>0.38</td>
<td>0.41</td>
<td>0.69</td>
</tr>
<tr>
<td>Loamy Sands</td>
<td>1.0</td>
<td>0.43</td>
<td>0.47</td>
<td>0.51</td>
<td>0.86</td>
</tr>
</tbody>
</table>
| Fine Sands          | 1.25         | 0.52 | 0.56 | 0.61 | 1.03 | 1.13 | 1.22 | 1.55 | 1.69 | 1.83 | 40 Root Zone Depth: 0 – 6” Moisture Used: 0.5
| V. F. Sands         |              | 0.69 | 0.75 | 0.81 | 1.38 | 1.5  | 1.63 | 2.06 | 2.25 | 2.44 | 30 6 – 12” Moisture Used: 0.375
| Loamy V. F. Sands   |              |      |      |      |      |      |      |      |      |      | 20 12 – 18” Moisture Used: 0.25
| Loamy F. Sands      |              |      |      |      |      |      |      |      |      |      | 10 18 – 24” Moisture Used: 0.125

*Calculated values were based on the following Crop Root soil moisture extraction patterns (i.e., % of total soil moisture extracted at given depths) for the following root zones:*
- 1 ft. depth:
  - 40% at 0 – 3”
  - 30% at 3 – 6”
  - 20% at 6 – 9”
  - 10% at 9 – 12”
- 2 ft. depth:
  - 40% at 0 – 6”
  - 30% at 6 – 12”
  - 20% at 12 – 18”
  - 10% at 18 – 24”
- 3 ft. depth:
  - 40% at 0 – 9”
  - 30% at 9 – 18”
  - 20% at 18 – 27”
  - 10% at 27 – 36”

**NOTE:** Site-specific data is needed to estimate actual irrigation water requirements; therefore, this TABLE should be used as a **GUIDE**.

**AWC = Available Water-Holding Capacity**