Orchard layout depends on:
• Cultivar (upright varieties such as Reed and Lamb Hass can be planted closer than other varieties such as Hass and Shepard)
• Amount of land available and slope of the site
• Growing conditions (soil and environment)
• Machinery access (safe machinery operation e.g. tractors, cherrypickers and pruners)
• Canopy management system to be used during the life of the orchard.

Tree Spacing

Low Density Plantings
e.g. 12 x 12m; 10 x 10m and 10 x 8m (69 - 125 trees/hectare):
• Provide lower early returns per hectare
• Lower establishment costs and less pruning and tree removal costs in later years
• Results in large trees with increased harvesting costs, reduced picker safety and more difficult to spray for effective pest and disease control.

Medium Density Plantings
e.g. 8 x 7m; 9 x 6m; 10 x 5m; 7 x 7m and 8 x 5m (178 - 250 trees/hectare):
• Tree width and height will need to be controlled as crowding occurs to maintain orchard access, allow effective pest and disease control and improve light penetration.

High and Ultra-High Density Plantings
e.g. 8 x 4m; 6 x 5m and 7 x 3m (312 - 476 trees/hectare) and 6 x 3m and 2.25 x 2.25m (555 - 1975 trees/hectare):
• Provide higher early returns per hectare
• Higher establishment costs
• Tree width and height will need to be controlled or trees removed as crowding occurs
• Ultra high densities are more suitable for upright varieties such as Reed and Lamb Hass and in environmental conditions where tree vigour is less.

Row Direction
To maximise light penetration into the orchard it is recommended that trees are planted in rows running in a north-south direction. However, row direction needs to suit the slope of the site. On slopes greater than 15% rows should run up and down the slope to allow safe machinery operation. Ensure appropriate erosion control measures are in place in orchards where rows are running up and down the slope.

Planting Configuration
Trees are planted either on a square or rectangle configuration. A rectangle configuration where trees are spaced closer within the row than between the rows is favoured and allows the creation of hedgerows.

Trees can also be planted in a regular or alternate arrangement.

The regular planting arrangement is more common particularly in hedgerow systems. However an alternate planting arrangement may allow better light penetration into the orchard.