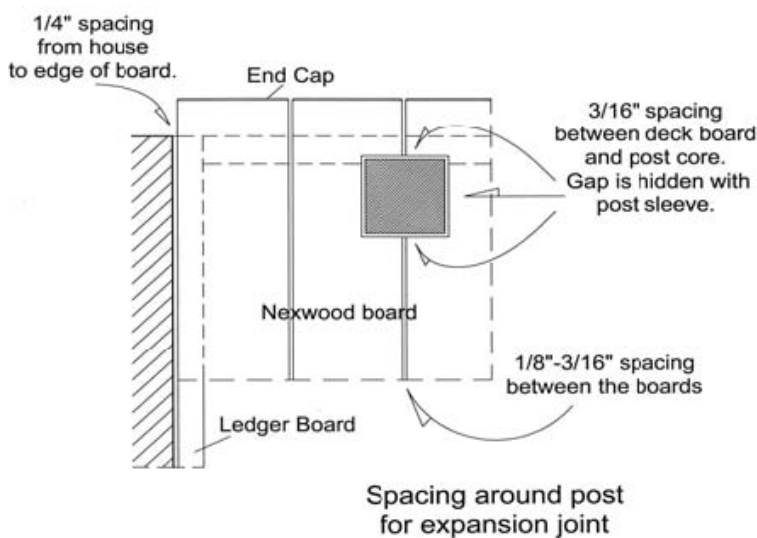




Technical Advisory:

Understanding Thermal Movement

Nexwood composite decking will experience some degree of expansion and contraction with changes in the surface temperature. When a heat source (the sun) is applied to the surface of a Nexwood deck board the plastic component expands in thickness, width and length.



During a 50 degree surface temperature increase the thickness expansion is so small it is virtually not measurable. The width expansion with a 50 degree surface temperature increase is also very small and measures about 1/64". Length changes with a 50 degree surface temperature increase measures about 1/4". That would be approximately 1/8" on each end. When the surface temperature drops 50 degrees the product will return to the previous thickness, width and length. Be aware as the framing lumber cures any joist movement can be seen in the deck surface in the form of bumps or dips in the surface or if the joist spread wider apart any butt joints will show the movement.

Measures can be taken to ensure an attractive finished project. Avoiding traditional butt joint installation is one way to minimize the visible effect of product board size changes. Using perpendicular accent boards is an option to butt joint installation (See diagram 2). Being aware that composite plastic products will expand and contract differently than wood is a big part of keeping customers happy. Proper installation with correct fasteners will also retard size change during peak hot and cold periods. See installation instructions for proper fastener patterns.

