Caution Always wear gloves, a dust mask and eye protection when sawing, sanding or machining wood.

Important Always consult local building codes prior to construction to ensure that your project is compliant and meets all safety requirements. Fasteners Use hot-dipped galvanized, stainless steel, or exterior coated nails, fasteners, screws, or bolts when building all components for your deck. Drill pilot holes to prevent splitting the wood, this is especially important when nailing or fastening near the edge of any components.

Guard Rails Common building codes require that all guard rails are at least 36” high off of the deck or porch surface. For secure connections use a bracket specifically designed to work with your railing. Otherwise, it is important to use exterior grade fasteners that are long enough to secure the rail to the deck post. Bottom rails frequently require a crush block between the bottom rail and the deck surface to prevent sagging and provide additional strength. Underneath the railing, also known as the sweep, must remain less than 4" off of the deck surface.

Balusters Baluster spacing typically needs to be less than 4" in order to prevent a 4" sphere from fitting between each of the balusters.

Deck Posts Do not notch the 4x4 railing posts. Notching will reduce the strength of the post and could result in railing collapse or failure. Determine the positions of the rail posts by measuring the runs of the project and placing the posts at the desired spacing. Keep in mind rails commonly come in 8’ and 6’ lengths. Position, plumb with a level and clamp the rail post on the interior face of the joist. Plumb again. The 4x4 railing post should be bolted to the inside of the joists using two ½”x6” galvanized carriage bolts. Corner posts use a third carriage bolt inserted through the adjacent joist. Additional blocking and connections might be required, check with your local regulatory agency for special code requirements in your area.

Stair Stringers

1 Choose proper number of steps
   - Stringers have 6-3/4" rise, 10" run
   - Check precut sizes in stock

2 Develop a parts list
   - Buy enough stringers to match joist
   - Check precut sizes in stock

3 Assemble
   - Attach stringer to deck or porch rim board with common joist hanger
   - Toe nail bottom of stringer to lower tier decks
   - Finish with step treads