Quick Reference Guide

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Chapter 4 – Building Exterior Window, Door Components

Identify & Sort Component Lumber	1. Before marking and cutting any component pieces, crown, mark and sort general 2x6 lumber. a. Mark and set aside very straight pieces for use in the kitchen, tub wall, and ends of sliding closet doors. b. Do not use twisted studs for any component pieces. c. Set aside any unusable lumber for return. 2. Locate and confirm separate Component Package expressly intended for component construction. It should consist of 2x10's, 2x6's, and 2x4's along with one 8'1x6. 3. Determine window and door sizes and dimensions from House Plan Supporting Documents.
Cut Pre-Defined Component Pieces	4. Referring to the Component Cut List, cut pre-defined pieces of 2x10" and 2x6" header pieces, 2x6" window sill pieces, and 2x6" Jack studs. a. Locate the set of cutting diagrams and package of Component Assembly Drawings in a 3-ring binder in the site support box. b. From the Component Package, select a lumber piece of the specific length shown on the bar chart—e.g., a 12' or 16' piece. c. Cut the individual pieces to the exact lengths shown. (This system is designed to minimize waste) d. Label each piece with its length and set aside for assembly. e. Make a check mark on the cutting diagram to record each piece has been cut.
Assemble Exterior wall Components	5. Refer to the Component Assembly Drawings showing the specific number of windows and doors required for that house, including the dimensions of individual pieces. 6. Work on a flat surface (e.g., porch, deck, pile of OSB). If on concrete, work on a piece of OSB to protect the concrete from protruding nails. 7. Obtain 3" Collated nails from the Construction Supervisor for use when assembling headers and assembling King/Jack studs. If 3" nails are not available, use 3-1/4" Collated nails instead, taking care to bend over any protruding nails when assembling headers and assembling King/Jack studs. 8. When assembling headers and King/Jack studs, angle the nailer about 10-20 degrees from perpendicular in the direction of the wood grain before inserting nails. 9. Carefully align pairs of 2x10 pieces to create an exterior door or window header (windows greater than six feet may require three 2x10 pieces). a. Ensure that both ends and at least one long edge are flush. Trim end if necessary. b. Nail with three rows of 3" Collated nails, 1" from each edge and middle, no more than 12" apart, and staggered on the opposite side. 10. Select two stud-length 2x6's from the pre-sorted pile and nail to the ends of the 2x10 header assembly with the crown down. These are the King studs. Be sure that a flush, long edge of the header is positioned "down" towards where the Jack studs will be located. Take care that both the tops and sides of the King studs are flush with the ends of the header. Nail with three **3¼" Collated** nails into each header piece (six nails per King Stud). 11. Place the matching-length 2x6 header piece between the King studs and tack to the long, flush edge of the header. Square each end of the 2x6 to the adjoining King stud and nail through the King Stud into the end of the 2x6 with three **3¼" Collated** nails. Finish nailing the 2x6 to the header. (The 2x6 must be square to the surface of the header to ensure a proper load bearing joint with the Jack Stud.) 12. Select two precut 82" 2x6's for use as the exterior Jack Studs. These pieces are specifically cut long to allow trimming to match the length of the King Studs. (This is necessary since the width of the 2x10 headers may vary) a. Place each 82" piece next to one of the King Studs, tight to the underside of the header assembly, mark, and field cut to length. b. Check the crowns of the King and Jack Studs and pair them to match a "crown up" with a "crown down" and any "bows" opposite. 13. **For exterior doors,** a. Place the field cut Jack Stud tight to the header, flush the edges with the King Stud, clamp and nail from the Jack stud into the King Stud with pairs of 3" Collated nails 12" apart, staggered on opposite edges. b. Cut a 38-1/2" length of 1x6 and nail to the underside of the header with 8d nails. 14. **For windows**, a. Place the field cut Jack Stud tight to the header, flush with the King Stud, clamp and nail from the Jack Stud into the King Stud with pairs of 3" Collated nails no more than 12" apart and staggered on opposite edges. b. Mark the location of the window sill on the edges of the Jack studs and secure the matching 2x6 sill piece to each King/Jack pair with three 6" exterior screws, obtained from the Construction Supervisor. 15. When complete, label the face of the header with window or door size—e.g. 3040 or 3068—and set aside with labeled surface of the header is face up.

Quality Points

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- Verify correct # of each component and that they are properly labeled with type and size
- All king/Jack pairs are properly nailed (tight together, no gaps) from Jack stud into King stud and are flush at the bottom and along the edges and with top of header and exterior surface of header
- All exterior headers are properly nailed (tight together, no gaps) on both sides and flush at ends and along the top and bottom edges
- Exterior door header includes the 1x6 filler board underneath header
- Header bottom 2x6 is installed square to jack stud/king stud
- All Window headers contain the sill plate
- All components are labeled with size-e.g. 3040, 3068, etc.