

Chapter 17 – Cabinets

Laying Out Kitchen Upper Cabinets	<ol style="list-style-type: none"> 1. Unpack. Inspect. Compare sizes and number to Cabinet Plan (Plan). 2. If Plan has a microwave, cabinet above stove must be a 12" unit. If not both cabinets above stove and frig. must be = ht. 3. Remove doors. Protect vinyl floors 4. Set up a temporary workbench to hold materials and tools 5. Layout support strips. Draw lines for bottom of strip locations. 6. Locate stud centers intersecting strip locations and 38" above the floor. Tack 2 ½" finish nails at strip line intersections 7. Temporarily assemble countertop (CRTP) and install toggle bolts snugly (if corner arrangement) Measure CRTP length and confirm base cabinets will end req'd distance from the end(s). Rip fillers, if required, to lengthen cabinet run to the Plan
Installing Kitchen Cabinet Support Strips	<ol style="list-style-type: none"> 8. Determine lengths of 2 7/8" plywood strips required per Plan and cut to length. Butt at studs if piecing strips Rest strips on nails. Transfer stud locations to strips. Drill (2) 3/16" clearance holes at each stud location. Or prepare for toggle bolt, ¾" from strip edges. Attach w/ 2 ½" exterior screw; 3 ½" SR screw in corner.
Installing Kitchen Upper Cabinets	<ol style="list-style-type: none"> 9. Drill (2) 3/16" clearance holes at top and bottom on ea. cabinet, 1" from sides, 1 ½" from top and bottom, but first ensure holes are at least ½" inside of strip edges. Double units need 3 holes top and bottom. 10. Install the corner cabinet first. Use 2x4 x 54" for cabinet support. Attach to strips w/1 ¼" Wafer Head Screws (WHDS) in top holes after leveling across top & plumbing sides. Shim as req'd. Install remaining screws 11. Check Plan. Filler strips req'd? Proceed accordingly. Adjust spacing to be equal on each side of window. Ensure upper cabinets will end s even with base cabinets. Adjust filler(s) as needed 12. If fillers are req'd, attach to stile adjacent to corner cabinet. Keep ends and face flush, clamp and install appropriate length construction screws through filler into stile 13. Hold up adjacent cabinet next to corner unit with 2 x 4 x 54". Quick clamp stiles and or/side panels. Adjust to flush. Screw top to support strip, (but not too tight) Check for level and plumb and adjust 14. Attach adjoining units to corner w/ 1 5/8" construct. screws thru top & bot. of corner unit SIDE PANEL into adjacent unit stiles. Drill a 1/8" pilot hole thru side panel at an angle and attach, check for level, plumb and secure bottom w/1 ¼" WHDS 15. Continue with adjacent cabinets. Get stiles close to flush, check for level and attach top to plywood w/ 1 ¼" WHDS 16. Recheck stiles for flush, clamp, drill a 1/8" pilot hole and join with 2 ½" trim screws 17. Use tapered shims between plywood and cabinet to keep cabinet fronts flush. Recheck for level & install remaining WHDS.
Installing Range Hood	<ol style="list-style-type: none"> 18. Remove knockout & determine hole location for cord. Drill 1 ¼" spade bit hole 19. Drill (4) 3/16" clearance holes about 2" from each end, and 2" from front & back. Glue & screw 1 x 4 pine strips to cabinet underside with 1 ¼" WHDS 20. Remove vent extension screws. Re-secure extension to range hood with 2" wide flashing tape. Check for gaps. 21. Draw a 4" x 11" rectangle centered ½" below cabinet. Cut sheetrock and plenum on the lines and remove 22. Check w/ Const. Super. I Spacer frame needed? If so, align inside edges of frame with sheetrock cutout and secure in place with flashing tape. Completely seal space between metal, sheetrock and spacer with flashing tape 23. Install weatherstripping on face of spacer perimeter. Check for gaps 24. Lift range hood in place, sliding vent extension into range plenum cutout 25. Fit back of range hood tight to spacer frame. Ensure no gaps between back of hood and weatherstripping 26. Fasten hood to pine strips with 1 ¼" WHDS
Installing Kitchen Base Cabinets	<ol style="list-style-type: none"> 27. Remove shelves, drawers, doors, and shipping protectors 28. Install ¼" x 1" shims to floor at front and back cabinet positions, except where the range & frig will be located 29. Set corner cabinet in place per Fig 17-3. Assemble cabinets between range and corner 30. Center sink base beneath the window. Cut out for water lines, drain and electrical box from inside sink base back 31. Check Plan to determine filler width between corner unit and sink base. Attach filler to cabinet stile adjacent corner unit 32. Check CRTP length. Refer to Plan. Ensure end of CRTP adjacent range is flush with cabinet above 33. Assemble cabinets between corner cabinet and range. Clamp and secure with 1 ¼" WHDS 34. Place above assembly next to corner unit. Use level to align end opposite corner flush to upper cabinet next to range hood 35. Measure gap between corner unit and adjacent unit and rip filler to that width. Attach to stile adjacent corner unit. Repeat on refrigerator end 36. Check top of assembled cabinets for level. Check face for straightness. Shim as required. Attach to wall w/2 ½" WHDS 37. If range, frig or dishwasher are adjacent to floor corner cabinet, install a cabinet end cap between appliance & cabinet (Cut two pieces of 1 x 4 x 21" pine scrap and refer to Section 17.6.14 & .15) 38. Standalone cabinet on one end? If yes, install to wall then to a scrap 2x cleat on floor. Mark outside of corners of unit on the floor. Refer to further instructions in Section 17.6.16 Install toe kicks w/ 1 ¼" collated finish nails. Use a separate toe kick in front of future dishwasher cabinet 39. Draw a ref. line from each corner for CNRTP corner support . 40. Attach 2 x 4 x ~26" to corner. Hold top even with drawn line and attach with 3 ½" SRS into studs 41. Dry fit mitered CNRTP by setting it in place. Check for gaps between splash & wall. If any > 1/8", scribe and remove excess 42. Double check fit. If not correct, remove more material 43. Verify 30 1/8" clearance front & back for range <p>(continued on next page)</p>

	<p>44. Determine at what areas of the cabinets the CNRTP will be secured. With CNRTP in place, draw lines from below along cabinet walls. Look for corner blocks</p> <p>45. Glue & screw 1" x 4" x cabinet width pine strip behind CNRTP lip where dishwasher will or might be installed. Use (4) 1 ¼" WHDS</p>
Installing Kitchen Countertop, Installation	<p>46. Turn over CNRTP) and glue & screw 1" x 4" x 24" pine to underside, mirroring corner block locations except over sink base. Locate pine boards to lie on top of cabinet walls, but outside the walls of the sink base. Drill (3) 3/16" clearance holes at center and 1" from each end & secure to underside of CNRTP with 1 ¼" WHDS.</p> <p>47. Rip a 1" x 4" x ~ 10" pine to ¾" x ¾". Glue & clamp to front edge of sink base cabinet, centered on sink location</p> <p>48. Glue & clamp a 1" x 4" x ~ 6"-10" on top of lazy susan at front of corner miter joint. NO BLOCKING INSIDE SINK BASE CABINET!</p> <p>49. Drill 3/16" clearance holes in each diagonal corner support blocks where pine boards will be located Disassemble the dry fit & glue both edges and spline. Re-assemble & bolt units together and continue checking that tops are flush along joint while tightening. Wipe off excess glue</p> <p>50. Fasten CNRTP to cabinets from bottom corner supports into pine strips with 1 ¼" WHDS. Verify screw length first</p> <p>51. If a pantry cabinet is to be placed next to the CNRTP, it may be necessary to carefully chisel a notch in the proud edge of the cabinet stile to fit around the CNRTP. Use a SHARP chisel.</p> <p>52. Re-install all doors and drawers. Use hinge adjustment screws to plumb and align the doors. Remove shipping pins from the lazy susan & adjust to align the door edges with the stiles to provide a uniform gap.</p>
Installing Bathroom Vanity	<p>53. Determine location from Plan. Drill 1" holes for water supply lines & a 2 ½" hole for drain.</p> <p>54. Level & fasten to wall studs with 2 ½" WHDS (or ¾" x 3" winged toggle bolts if no studs)</p> <p>55. Dry fit CNRTP to determine if scribing & sanding are req'd. If so, see Section 17.6.1.3 & 4.</p> <p>56. Turn CNRTP over. Glue & screw 1" x 4" pine strips to underside, attach with 1 ¼" WHDS</p> <p>57. Set CNRTP in place & fasten to cabinet same as kitchen CNRTP with 1 ¼" WHDS. Verify screw length first</p> <p>58. If a linen closet is to be placed next to the CNRTP, it may be necessary to carefully chisel a notch in the proud edge of the cabinet stile to fit around the CNRTP.</p>

Quality Points

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- Cabinets have been inspected and any damage has been reported to the Construction Supervisor
- Vinyl floors have been protected with broken down cabinet shipping boxes
- Plywood support strip heights have been verified as correct prior to installation
- Support strips ends have been installed with toggle bolts (if no stud behind strip) & bolt holes have been sealed with caulk
- Corner cabinet is installed level across the top front and sides are plumb.
- Cabinet Plan has been checked. Filler piece need adjacent corner cabinet has been determined
- Upper cabinet spacing on either side of window has been checked. Fillers adjusted as required for equal spacing
- Upper cabinet clearance holes for mounting are at least ½" away from support strip edges
- Upper cabinets have been installed 54" above the floor
- Upper cabinet stiles are flush and cabinets are level across top and front
- Supervisor has verified if a range hood spacer is required
- If using a range hood spacer, the space between range plenum, the sheetrock & spacer is completely sealed with flashing tape
- Weatherstripping between the wall and back of range hood is installed and checked to ensure seal is not leaking
- Plastic shipping protection clips have been removed from corners of base cabinets
- ¼" x 1" variable length strips have been nailed to the floor at front & back cabinet locations (not range or refrigerator locations)
- Holes have been cut out of sink unit for drain, water lines and electrical box
- Sink is centered under the window and Cabinet Plan has been checked to assess filler needs between adjacent cabinets
- Countertop length has been checked with a level to ensure end of countertop is flush with upper cabinet
- Base cabinets adjacent range and refrigerator are flush with upper cabinets
- Tops of base cabinets are level and front faces are straight
- If there is a standalone cabinet at one end of the countertop, it is fastened with a cleat
- Toe kicks are installed and if there is a cabinet in a future dishwasher location, toe kick is butt-spliced for easy future removal
- 2 x 4 x 26" countertop corner supports have been installed
- Countertop has been dry-fitted to the wall, its fit assessed for gaps, and sanded if required
- ¼ x 1" pine strip has been added where dishwasher (or future dishwasher) has been installed behind countertop lip
- A 1 x 4 x ~ 10" pine has been ripped to ¾" square and glued and clamped to the front edge of the sink base
- A 1 x 4 x 6" -10" has been glued and clamped to the top of the lazy susan at the front of the corner miter joint
- No blocking exists inside of sink cabinet
- Clearance for range (30 1/8") has been verified @ front & back
- Countertop spline has been glued and pieces reassembled tight with top corner surfaces flush
- Countertop has been secured to base cabinets
- Doors have been plumbed and aligned. Shipping pins have been removed from the lazy susan & door edges aligned with stiles
- Bathroom vanity location verified by Cabinet Plan and drain and waterlines cut from back of cabinet
- Vanity has been leveled and fastened to the wall
- Countertop was dry fitted to wall to determine need for sanding
- 1 x 4 pine mounting strips have been glued and screwed
- Countertop has been secured to base cabinets