

CONSTRUCTION MANUAL

(2019)

**Greater Fox Cities Area
Habitat For Humanity**

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17		3/15/2019				
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20		3/15/2019				
21		3/15/2019				
22		3/15/2019				
23		3/15/2019				
24		3/15/2019				

TABLE OF CONTENTS

CHAPTER 1 BEAM AND SILL PLATES

- Establishing Square Sill Plate Chalk Lines
- Installing Treated Sill Plates
- Installing Laminate Beam

CHAPTER 2 CAP FOUNDATION

- Installing I-Joists And Sillbox
- Framing Stair Opening
- Installing Foamboard In Sillbox
- Installing Floor Sheathing (Decking)
- Basement Preparation

CHAPTER 3 WALL LAYOUT

- Laying Out Exterior Walls
- Cutting Exterior Wall Plates
- Marking Window And Door Locations On Exterior Wall Plates
- Marking Studs On Exterior Wall Plates
- Laying Out Interior Walls
- Cutting Interior Wall Plates
- Marking Door Locations On Interior Wall Plates
- Marking Studs On Interior Wall Plates

CHAPTER 4 COMPONENTS AND STAIRS

- Building Window And Door Components
- Building Stairs

CHAPTER 5 BUILD MAIN FLOOR WALLS

- Framing Exterior Walls
- Squaring Exterior Long Walls
- Sheathing Exterior Long Walls
- Erecting Exterior Long Walls
- Sheathing & Erecting Short Walls
- Completing Exterior Walls
- Straightening Exterior Walls
- Framing Interior Walls
- Erecting Full-Height Interior Walls
- Erecting Half-Height Interior Walls
- Installing Top Plates

CHAPTER 6 PORCH, STAIRWAY AND BASEMENT WALLS

- Framing Porch
- Framing Basement Walls
- Cutting Angle Stairway Wall
- Framing Stairway Closet Platform

CHAPTER 7 ROOF FRAMING

- Roofing Prep Work**
- Installing Roof Trusses**
- Installing Porch Trusses**
- Sheathing Roof**
- Installing Sub-Fascia**
- Building And Installing Scuttle Box**
- Installing Laterals And X-Bracing**
- Installing Truss Timber Screws And L-Clips**

CHAPTER 8 ROOFING

- Installing Gutter Apron**
- Installing Ice And Water Shield**
- Installing Roofing Felt**
- Installing Drip Edge**
- Installing Starter Strip**
- Installing Shingles**
- Installing Ridge Vent**
- Installing Cap Shingles**

CHAPTER 9 WINDOWS AND EXTERIOR DOORS

- Installing Windows**
- Installing Exterior House Doors**
- Installing Shed Door**
- Installing Basement Egress Components**

CHAPTER 10 VENTS, ATTIC SCUTTLE AND BLOCKING

- Installing Bath Fan And End Cap**
- Installing Range Plenum And End Cap**
- Installing Proper Vents**
- Installing Wind Washing Baffle Guard**
- Installing Blocking**

CHAPTER 11 SIDING AND SOFFIT

- Siding Prep**
- Installing House Siding**
- Installing Shed Siding**
- Installing Soffit**
- Installing Fascia**
- Installing Shutters**
- Site Cleanup**

CHAPTER 12 AIR SEALING AND INSULATION

Building Science Facts
Preparation
Air Sealing
Installing Insulation In Wall Cavities
Installing Poly Vapor Barrier

CHAPTER 13 CEILING SHEETROCK

Preparation
Planning
General Installation Rules
Installing Ceiling Sheetrock
Assembling Scuttle Box Cover
Finishing Scuttle Box Cover

CHAPTER 14 WALL SHEETROCK

Preparation
Planning
General Installation Rules
Installing Wall Sheetrock
Finishing And Cleanup

CHAPTER 15 PAINTING

Preparation
Priming And Painting
Staining
Clean-up
Preparation For Next Build Day

CHAPTER 16 SUBFLOOR, DRICORE AND FINISH STAIRS

Installing Subfloor & DRICore
Finishing Stairs

CHAPTER 17 CABINETS

Laying Out Kitchen Cabinet Upper Units
Installing Kitchen Cabinet Support Strips
Installing Kitchen Cabinet Upper Units
Installing Range Hood
Installing Kitchen Cabinet Floor Units
Kitchen Countertop Preparation
Installing Kitchen Countertop
Installing Bathroom Cabinets

CHAPTER 18 INTERIOR DOORS

Swinging Doors

Sliding Doors

Bifold Doors

CHAPTER 19 INTERIOR FINISH WORK

Installing Floor Trim

Installing Closet Shelves And Poles

Installing Bathroom Accessories

Hanging Mini-Blinds

Installing Appliances

Installing Basement Stair Grip Strips

Completing Caulking

Completing Air Sealing

Installing HVAC Vent Covers

Installing Scuttle Cover

CHAPTER 20 EXTERIOR FINISH WORK

Installing Storm Doors

Installing Toe Kick Board

Installing Porch Rails

Installing House Numbers

Installing Mailbox

Air Sealing Exterior Penetrations

CHAPTER 21 CLEAN HOUSE

Completing Punchlist

Cleaning House

Installing HVAC Warm Air Vent Covers

Installing Clean Furnace Filter

Finishing Touches

CHAPTER 22 SHED CONSTRUCTION

Building Shed Floor

Building Shed Walls

Building Shed Roof

Assembling Shed

Finishing Shed

CHAPTER 23 GARAGE CONSTRUCTION

Establishing Chalk Lines

Measuring And Cutting Wall Plates

Marking Window & Door Locations On Exterior Wall Plates

Marking Studs On Exterior Wall Plates

Erecting Garage Walls

Straightening Garage Walls

Installing Top Plates And Sheathing Walls

CHAPTER 24 PICNIC TABLE CONSTRUCTION

Cutting Picnic Table Components

Assembling Picnic Table

Finishing Touch

Materials Sheet

Construction Glossary

Term	Definition
3-4-5 system	a method for squaring a corner by ensuring the creation of a 90° angle. Based on the Pythagorean Theorem, in a triangle with sides in the ratio of 3:4:5, the angle formed by the intersection of the shorter two sides is 90°.
16d nail	a 3.5" nail, often referred to as a sixteen penny nail, commonly used to attach 2x4 or 2x6 lumber together
8d nail	a 2.5" nail, often referred to as an eight penny nail, commonly used to attach roofing or deck sheathing and other OSB material to trusses, joists and studs
air seal	the use of caulk, spray foam, foam board, and sheets of poly to seal every penetration and hole in the house in order to prevent air flow from exterior to interior, interior to exterior and from one level of the house to another
back bend	see hem
baffle	a panel or other device designed to direct the flow of air
batt	a unit of flat-wrapped insulation designed to be installed between framing members
beam	a horizontal structural member designed to support loads (e.g., floor joists) that are typically positioned at a 90° angle to the beam
bevel cut	any cut made at an angle other than a right angle
blocking	short lengths of 2x4 or 2x6 (sometimes OSB) installed between studs and joists or on the tops or ends of walls to provide a nailing base for cabinets, shelving, wall rock and ceiling rock. When installed between studs, the 2x lumber face is positioned vertically and located on the side of the framing where the support is required.
brickmold	trim used primarily for exterior doors
buttlock	the bottom lip of a piece of vinyl siding, shaped like a "J", that, when snapped up tightly against the top lock of the lower course of siding, secures the two pieces of siding together
C-clamp	a device in the shape of a "C" designed to hold two work pieces together
casing	see door trim, floor trim, or window trim
ceiling rock	see sheetrock
common truss	one of a number of identical trusses of uniform size placed at regular intervals along the top plates of eave side walls
cope	to cut the end of one piece of molding to match the surface of a second piece, thus forming a tight-fitting corner (preferred to using a 45-deg. miter for interior corners)

Term	Definition
corner post	formed plastic piece attached to each outside house corner; used to provide a finished edge to the corners and to conceal the ends of siding
course	a continuous range of material, as in a row of siding, floor decking or roof sheathing
crown	the upward arch observed when looking down the narrowest edge of a piece of lumber
crude opening	see R.O.
deadbolt	locking mechanism where the bolt is moved into position by turning a knob or key rather than by spring action
door trim	finish woodwork used to decorate door openings
DRCore	a free-floating tongue and groove underlayment with a patented moisture barrier that is installed directly onto concrete basement floors
drywall	see sheetrock
duct boot	the terminal section of a home's HVAC ductwork that directs the airflow into a room
duplex nail	a double headed nail designed for temporary attachment and easy removal
eave	the lower edge of a roof that hangs over the side of a house; it consists of both the soffit and the fascia and is where the gutters are attached
egress well	excavated area outside a basement window providing an escape route in case of an emergency
fascia	metal trim placed over the sub-fascia to protect and improve the aesthetics of the underlying wood structure
F-channel	aluminum trim, roughly shaped like an "F", installed in a single horizontal course under the eaves in order to anchor one edge of the aluminum soffit
factory edge	edge of siding or drywall that has never been cut
field cut	measure and cut material to fit at the time of assembly
foam board	4'x8' sheet of extruded polystyrene foam (of varying thicknesses), also known as blue board, applied to exterior surfaces of a house and around the foundation to provide insulation against heat loss
foundation	the entire sub-structure below the first floor or frame of a building upon which the building rests; usually, partly or wholly below the surface of the ground.

Term	Definition
floor trim	finish woodwork used to decorate the bottom of interior walls
flush sliding door	a sliding closet door built into an interior wall, one end of which intersects with an exterior wall
gable	the upper triangular-shaped portion of the end wall of a house above the eave line of a double sloped roof.
gypsum board	see sheetrock
H-Channel	aluminum trim, roughly shaped like an "H", for attaching diagonally cut soffit where porch and house soffit meet
head jamb	the top of a door frame
header	a horizontal beam that sits on top of jack studs over door and window frames to provide support and strength to those openings
hem	folding the edge of a metal sheet back on itself in order to create a finished edge
hinge jamb	the side of a door frame where the door's hinges will be attached
I-joist	a beam whose cross-section is in the shape of an "I", with flanges at the top and bottom; typically used to support the first floor of the house
insulation	material inserted inside exterior walls and above ceilings to prevent loss of heat from the house
J-block	vinyl trim piece used to mount exterior lights, outlets and other protrusions through the exterior walls
J-channel	vinyl trim, roughly shaped like a "J", installed around doors, vents and under gable end soffit to hide the edges of siding
jack stud	inner stud of a door or window frame that runs up to support the header at the top of the frame; sometimes referred to as the "shoulder"
jamb	typically refers to the top and two sides of a door frame, including hinge jamb and strike jamb where door latches; sometime refers to the 2x4 or 2x6 framing to which the door jambs are attached.
joist	a beam typically used to span widely-spaced supports; for example, to support the first floor of the house
joist hanger	metal fastener used to attach joists or other lumber when they abut a cross beam or end surface
king stud	outer stud of a door or window frame that runs the entire height of the wall

Term	Definition
laminated beam	two members, each consisting of layers of wood veneer glued together, are nailed face-to-face to create a strong beam running the length of the house down the center; this "lam beam" supports the floor joists and is in turn supported by several floor jacks
lateral bracing	two to three rows of long 2x4's, running the entire length of the house, nailed across the tops of the bottom cords of the trusses to maintain 24" spacing of the cords for ceiling sheetrock installation
level	(1) to make level or to cause to conform to a specified grade; (2) any instrument that can be used to indicate a horizontal line or plane; (3) any surface or line with zero slope.
lockset	door locking mechanism usually comprised of a handle, latch bolt, (optional) dead bolt, and plates
LVL	Laminated Veneer Lumber is an engineered wood product with multiple layers of thin wood bonded together with adhesive
Mason's line	see string line
miter	to create a joint by beveling the ends of two pieces to be joined together; for a 90° corner, each piece is typically cut at a 45° angle
molding	see trim
nailing flange	slotted plastic extension of window frame through which nails are inserted to attach window to rough opening
non-flush sliding door	a sliding closet door built into an interior wall with a King stud/Jack stud pair at each end
o.c.	"on center", indicating a measurement is to be taken from the midpoint of one structural element (e.g., stud) to the next structural element
OSB	Oriented Strand Board is made from thin layers of wood strips arranged in specific orientations and bonded together with wax and resin.
Paslode nailer	brand of a cordless nail gun that uses a pressurized gas cylinder and a battery to drive sleeves of nails; framing nailers can handle 8d or 16d nails while finish nailers can handle 1¼" and 2¼" finish nails
pipe clamp	a device consisting of a pipe that is usually threaded at both ends, two clamp heads or jaws, and a screw mechanism for tightening the jaws together

Term	Definition
plasterboard	see sheetrock
plumb	a condition where a vertical component is perfectly perpendicular to a level surface
poly	see vapor barrier
proper vent	a baffle installed between trusses near the eaves to allow proper ventilation and to prevent windwashing of the blown insulation
range plenum	an assembly connected to the range hood used to exhaust warm cooking air to the exterior of the house
reveal	a visual feature created when the trim around a door or window is set back (typically 3/16") to reveal the edge of the casing
rim board	laminated board 1 1/8" x 9 1/2" installed around the entire perimeter of the foundation, nailed to the ends of the floor joists and end blocking, thereby completing the sillbox
rip	to saw lumber parallel to the grain; also called flat cutting
riser	the vertical component between each tread on the stair
R.O.	"rough opening", the dimensions framed by lumber to provide an approximate opening large enough for a window or door unit to be installed
scuttle hole	an opening providing access through the ceiling into the attic; usually located inside the entrance to one of the bedrooms
sheathing	typically refers to 4'x8' sheets of OSB used to cover the roof (1/2"), as sub-floor decking (3/4") and on exterior walls (1/2")
sheetrock	a panel of gypsum plaster pressed between two thick sheets of paper; used to cover interior walls and ceilings
shim	a thin piece or wedge of metal or wood; often inserted around doors or windows during installation to help square them or beneath a piece of lumber to level it
shingling	method of applying overlapping layers of material (e.g., tape, roofing material) such that material located vertically higher is applied after the layer of material that is vertically lower; this orientation ensures proper water drainage
short stud	a structural member that is cut less than full length, such as a studding piece beneath a window; typically designated with an "SX" on when laying out the bottom exterior wall plates
siding	finish covering of the outside walls of a house; may be made of vinyl, metal or other material

Term	Definition
sill	framing member that forms the lower side of a window or door opening
sill plate	horizontal length of treated 2x6 laid directly on a foundation on which the framework of the building is erected
sill seal	foam material about 1/8" thick and 4" wide that is placed between the sill plate and the foundation in order to air seal that gap
sillbox	the framework created by the combination of the sill plate, floor joists and rim boards which forms the foundation for remainder of the house structure
skirtboard	decorative piece of 1"x wood (usually pine or oak) nailed to the wall and running the length of the stairs
skirting	aluminum sheet about 12" wide attached about 1" below the starter strip around the entire house; serves to provide protection to the foundation wall exterior insulating foam and for esthetics
soffit	covering, usually aluminum, for the underside of an overhang
spike	see 16d nail
stacked framing	the positioning of roof trusses directly over wall studs
starter strip	a metal strip attached near the foundation around the entire house; used to anchor the bottom edge of the first course of siding securely to the house
strike jamb	the side of a door frame where the door latches
strike plate	metal plate attached to a door jamb with a hole for the bolt of the locking mechanism
string line	a high-strength cord that will not sag when pulled taut; used to create straight lines and level surfaces
stringer	the structural element (usually 2x12 lumber) that supports the treads and risers of a stair; typically, there are three stringers, one on each side of the stairs and one in the middle
stud	a vertical framing member, usually 2x4 or 2x6, cut by the supplier to a standard length of 92 5/8"; used to construct walls
sub-fascia	2x6 lumber attached horizontally to the ends of roof trusses

Term	Definition
sub-floor decking	¾"x4'x8' sheets of tongue-and-groove OSB nailed to the sillbox
swing	the direction in which a door opens (e.g., "open's right" or "opens left")
tack	to partially drive a nail only far enough to secure work pieces together in order to make it easier to remove later
timber screw	a heavy-duty wood screw that can be used in place of lag screws. When driven through both top plates and into the truss from below, they hold the roof firmly to the walls of the house
toenail	drive a nail obliquely (on a slant) to attach two pieces of lumber
tread	the horizontal component of a stair (i.e., the part that is stepped on)
trim	see door trim, floor trim, or window trim
Truslock	a spacing tool designed to lock trusses in place when erecting the roof
truss	a structural frame, based on the geometric rigidity of the triangle, designed to support a roof
undersill trim	vinyl trim, roughly in the shape of a "U", for locking vinyl siding under soffit "F" channel on eave side of house and under windows
vapor barrier	material used to retard the flow of vapor or moisture into walls and thus prevent condensation within them; the vapor barrier must be a part of the warm side of the wall
wallboard	see sheetrock
wall jack	metal framework attached to the exterior of wall studs; used to support planking on which workers stand while erecting the roof
wall rock	see sheetrock
wind bracing	4'x8' sheet of OSB attached to the wall framing on the corners of the house and some central locations in order to strengthen and stabilize the structure
window trim	finish woodwork used to decorate window openings
windwashing	the rearrangement of blown insulation due to movement of air through the attic
x-bracing	pairs of long 2x4's nailed from the peak of the end truss diagonally down one side of the top chords of the common trusses; nailed in an "X" pattern, this bracing prevents lateral movement of the truss system