



MCH Framing Specifications

A. Purpose of this Document

This document defines both MCH's and contractor's responsibilities as they relate to the framing phase of construction. It is intended as a checklist that will define MCH's standard of quality and professionalism. The framing contractor's work will not be considered complete until all specifications contained herein are fully met.

B. Relationship to other Documents

Additional information and/or requirements regarding Framing Contractor may be defined in the following documents. In no case shall the framing contractor proceed with the contractor's work without MCH consent if the contractor believes that conflicts exist between these phase specifications and the following documents:

1. Architectural & Structural Plans
2. Proposed Site / Grading Plan showing all house options
3. Proposed Elevation Certificate
4. Elevator Specifications and Cut Sheet
5. MCH Master Subcontractor Agreement
6. MCH Water Infiltration Best Practices and Procedures document.
7. Approved truss shop drawings
8. Approved steel shop drawings
9. Window and door order referencing all rough openings

C. Safety Requirements, General

1. Framing Contractor is required to have a competent person that is able to verbally communicate with MCH Project Manager on site at all times. A competent person is one that can identify safety hazards and has the authority to stop work until known hazards have been eliminated before proceeding.
2. Contractor's employees and contractors must adhere to all Federal and State Occupational Safety & Health (OSHA) Regulations.
3. All accidents and injuries must be immediately reported to the MCH Director of Construction.
4. Any and all penalties assessed against MCH due to safety violations of Framing Contractor shall be the liability of the Framing Contractor and subject to reimbursement and possible additional fines from MCH. MCH may issue verbal and/or written warnings, with fines, for safety violations that MCH employees identify on its job sites on which Framing Contractor provides Work, Materials and/or Supplies. In addition, Framing Contractor shall comply with all MCH procedures and policies relative to safety violation enforcement and fines. Additionally, Framing Contractor acknowledges receipt of these procedures and policies.

5. If a safety device must be removed, the contractor must take immediate remedial measures to protect all workers from the hazard. The devices must be replaced as soon as the work is completed or a permanent safety device has replaced it.

D. Safety Requirements, Specific

1. Personal Protective Equipment (PPE) must be worn as applicable and required at all times while on MCH job sites.
 - A. Safety glasses/goggles are to be worn when drilling, cutting, hammering, soldering or gluing.
 - B. Proper work boots are to be worn at all times
 - C. Hearing protection is to be worn when cutting or drilling.
 - D. Gloves are to be worn when working with sharp objects
 - E. Respirator is to be worn when working with solvents or soldering.
2. Fall protection will be a daily responsibility and priority for the framing contractor. Decks, stairs, landings, floor systems, etc. will not be constructed without fall protections installed simultaneously.
3. The framing contractor shall be responsible for installing all fall protection while the house is being framed. Specifically: guard rails and hand rails shall be installed as the stairs are built, elevator shafts shall be protected when the walls are erected, access to decks shall be restricted as the decks are built, etc.

E. Warranty in Labor and Materials:

The contractor shall guarantee workmanship and materials provided by the contractor to be free of defects and deficiencies for one year minimum. If any part of the work is found to be incomplete, incorrect, deficient, or cause damage to other work, the contractor will be responsible for all material and labor costs and damage incurred.

F. Specifications, General:

Construction must be completed in conformance with all specifications contained herein. It is the responsibility of the Framing Contractor to proactively protect their work, the project property, and adjacent properties. The Framing Contractor is expected to supply all labor, tools, and equipment to erect the house according to the plans and specifications as well as applicable building codes.

Responsibilities include the following at a minimum:

- Complete review of all associated documents with MCH Project Manager prior to and throughout the construction process. Documents may include the following: Architectural & Structural Plans, Proposed Site / Grading Plan, Proposed Elevation Certificate, Elevator Specifications and Cut Sheet, MCH Water Infiltration Best Practices and Procedures document. Approved truss shop drawings, Approved steel shop drawings, and Window and door order referencing all rough openings
- Allowable working hours and community specific restrictions will be posted by MCH and followed by the Framing Contractor.
- Frame home, roof, decks, interior stairs, exterior stairs to grade, and porches in compliance with the approved plans and applicable building codes.
- All nails, screws, and fasteners to be provided by the framing contractor at their expense.

- Delivery and operation of a fork lift on site (provided by and maintained by the Framing Contractor). Care will be taken to protect the property under construction as well as adjacent properties. Any damage(s) will be the responsibility of the Framing Contractor to repair or replace. The discretion to repair or replace damages will be held solely with the MCH Director of Construction.
- All framing below “Base Flood Elevation” (AKA “Design Flood Elevation” AKA “Freeboard”) must be flood resistant (treated) material. The framing contractor must confirm Base Flood Elevation with the MCH Project Manager *before* starting construction on the house.
- Cut and notch pilings for girders as required. The framing contractor must confirm elevations with the MCH Project Manager *before* notching the piles. This should be cross referenced with the on site benchmark.
- Install interior and exterior safety railings immediately following the construction of each element. MCH will supply the materials for safety rails.
- All elevator shafts to be protected per the MCH Detail as each level of the home is constructed. MCH Detail consists of temporary platforms constructed with 2x6 joists and hangers and safety rails on door jambs with surface mounted hangers. MCH will supply the detail and materials for elevator protection.
- Installation of all structural strapping, hurricane strapping, bolts and other fasteners.
- Installation of self-adhering weather resistant barrier and associated flashings. Review current MCH Water Infiltration Best Practices and Procedures document.
- Installation of all exterior doors and windows according to manufacturer and/or architectural and/or applicable building code specifications.
- Crane services provided for and maintained by the framing contractor (unless noted otherwise).
- Installation of sleepers (where applicable) and finished decking.
- Construction of elevated mechanical platforms (i.e. HVAC, elevator platform)
- Installation of all blocking for drywall, cabinets, handrails, soffit, porch ceilings, TV’s, paper holders, towel bars, etc.
- Installation of roof fascia and roof deck fascia - assume screwed and plugged PVC 1x material provided by MCH.
- Return trip after mechanicals for frame punch out
- Return trip after mechanicals for framing and fire stopping bulkheads and chases
- Return trip after mechanicals to frame outdoor showers
- Trash box to be left on site for finish trim and siding. Framing Contractor to confirm dimensions and design with MCH Project Manager.
- Return trip to correct all deficiencies identified by the structural engineer in performing their structural certification.
- Return trip to correct all deficiencies identified by the local code enforcement officer in performing the framing inspection.
- Daily maintenance of the job site to include:
 - House to be broom swept. Trash in the house and on the property to be disposed of on a daily basis at a minimum. All trash to be put in the dumpster on site
 - Material management - lumber and framing materials will be kept neat and orderly and protected from elements where possible. Material will not be stored in

the street or on adjacent properties for any period of time. MCH, framing contractor, and material supplier will work cooperatively to maintain an efficient flow of materials.

G. Specifications, Detailed:

Columns and Beams:

1. Confirm you are working with and referencing the most current and complete set of architectural, structural, and MCH “red-line” plans.
2. Consideration will be taken to ensure beams and columns do not result in uneven floor or wall surfaces – particularly at the intersection(s) of these materials.
3. Steel Columns and Beams:
 - a. Columns and beams should not project into living spaces where possible. If any are found to be projecting, the condition should be brought to the attention of the MCH project Manager immediately.
 - b. Beams are to be shimmed where necessary. Only steel shims shall be used.
 - c. Continuous bead of construction adhesive shall be applied in a serpentine pattern to the top of the steel beam prior to setting the wood plate.
 - d. Welds and steel inspections to be performed by a third party coordinated by MCH.
 - e. Framing Contractor to provide the labor for steel beam pack-out as necessary.
4. Wood Columns and Beams:
 - a. Columns and beams should not project into living spaces where possible. If these are found to be projecting, the condition should be brought to the attention of the MCH project Manager immediately.
 - b. Structural columns are to be installed prior to setting the beam. For instance, LVL beams should not be set in place without the corresponding columns for support.

Floor Systems:

1. Framing contractor to review complete floor truss plans with the MCH Project Manager prior to setting floor trusses.
2. Sill plates must be anchored to the foundation in accordance with the plans, local codes, and manufacturer’s specifications.
3. All fasteners must be ACQ compatible.
4. Plate insulation (sill sealer) shall be installed along the entire perimeter of the foundation and be free of voids.
5. Plate insulation (sill sealer) shall be installed along interior walls that are adjacent to unconditioned spaces (i.e. garage walls)
6. All floor trusses, headers, and hangers shall be handled, cut, and installed in accordance with manufacturer’s details and specifications. Floor trusses shall not be modified in the field without the approval of the MCH Director of Construction.
7. Squash blocks, web stiffeners, web fillers, and strong backs shall be installed as designated in drawings. These shall be installed as the floor system is being installed, not after the house has been framed.
8. Consideration will be taken to ensure the intended mechanical spreads and chases are maintained without obstruction.
9. Consideration will be taken to ensure recessed shower plans and toilets are appropriately sized and located and do not interfere with structural floor systems.

10. Consideration will be taken to ensure flush transition from interior finished floor to exterior finished decking.

Subfloor Installation:

1. Confirm you are working with and referencing the most current and complete set of architectural, structural, and MCH “red-line” plans.
2. Treated material must be used below Base Flood Elevation (AKA “Design Flood Elevation” AKA “Freeboard”). Non-treated floor trusses should never be installed below base flood elevation. The bottom of subfloor sheathing should never be installed below base flood elevation.
3. Subfloor shall ¾” Advantech T&G and be secured with construction adhesive and screws. Reference manufacturer specifications to determine the appropriate screw.
4. Screws to be installed immediately following the placement of the subfloor to prevent the glue from drying. No more than two sheets of subfloor should be laid at a time to prevent the glue from setting in between installing the screws. 5 minutes is the absolute maximum allowance of time between applying the glue and installing the fasteners.
5. A continuous ¼” bead of construction adhesive is to be applied in a serpentine pattern to the top cord of the floor truss.
6. A continuous ¼” bead of construction adhesive is to be applied to the grooved side of the subfloor.
7. Apply two beads of adhesive where the butt ends of the OSB sheets meet on a single joist.
8. Maintain 1/8” gap between two adjacent boards to allow for expansion. Beater blocks and sledge hammers are not to be utilized.
9. Screw pattern to be 6” on center on the edge and 10” on center in the field
10. All broken T&G joints are to be blocked from below, glued and screwed on both sides of the T&G joint.
11. Floor squeaks, damaged subfloor, and uneven floors are the responsibility of the framing contractor and will be corrected at their expense.

Wall Systems:

1. Confirm you are working with and referencing the most current and complete set of architectural, structural, and MCH “red-line” plans. Private kitchen designs should also be referenced at this time (these plans may not be represented on the architectural plans).
2. All ceiling and door heights should be confirmed with the MCH Project Manager prior to starting framing. Distinction should be made between finished product dimensions and rough dimensions.
3. Framing Contractor to confirm the use of gypcrete with the MCH Project Manager prior to framing. Gypcrete requires a double bottom plate and relative adjustment to interior and exterior door and window heights.
4. Framing Contractor to review approved window and door schedule with the MCH Project Manager prior to framing.
5. The Shanz Rule will be utilized to ensure door, window, and cased opening finishes align. Specifically, 2”, 2.75”, 3”, 4.5” head height rule (AKA the Shanz rule) will ensure that the interior trim lines up as closely as possible. For example, if we are planning to use 8’-0” interior doors we should set window head heights at 98” (8’ + 2”), exterior door

heads at 98.75" (8' + 2.75"), interior door heads at 99" (8' + 3"), and pocket door heads at 100.5" (8' + 4.5").

6. Sill plates must be anchored to the foundation in accordance with the plans, local codes, and manufacturer's specifications.
7. All fasteners must be ACQ compatible.
8. Plate insulation (sill sealer) shall be installed along the entire perimeter of the foundation and be free of voids.
9. Plate insulation (sill sealer) shall be installed along interior walls that are adjacent to unconditioned spaces (i.e. garage walls)
10. Treated material must be used below Base Flood Elevation (AKA "Design Flood Elevation" AKA "Freeboard").
11. Walls shall be glued to the subfloor with a 3/8" continuous bead of construction adhesive and nailed directly into the floor truss (or blocking) below.
12. All walls and partitions are to be set, plumbed, and squared per plan.
13. Wall sheathing shall be 7/16" Green Zip system. MCH does not require the use of Zip tape.
14. Kitchen and bathrooms to be dimensionally accurate and framed according to the most current set of plans – whether that be architectural plans or private kitchen designer plans.
15. LSL studs will be used for all interior and exterior kitchen and bathroom walls.
16. All walls shall be braced as necessary to reduce / eliminate the risk of them falling or being blown over.
17. All holes in exterior wall sheathing shall be patched with sheathing on the interior portion of the wall. The patch shall be secured with a continuous bead of construction adhesive around the perimeter and screws.
18. Bowed studs must be replaced.
19. Flood vents to be provided by MCH and installed by the framing contractor when the flood vents are to be installed in wood framed walls.
20. Install solid blocking under all header jacks between joists and under point loads.

Stairs (Interior and Exterior):

1. Framing Contractor to build permanent stairs and landings.
2. Framing Contractor to confirm finished flooring elevations and riser heights prior to starting to frame the stairs.
3. Framing Contractor to confirm elevation of stair landings prior to starting to frame the stairs.
4. Break Away and retractable wood framed stairs to be included in the Framing Contractor's proposal
5. Stairs that extend below base flood must be constructed with pressure treated material.
6. Steel Flitch plates will be templated and installed by the framing contractor (when applicable)

Roof Systems:

1. Framing Contractor to confirm maximum peak of roof elevation relative to the existing benchmark elevation with the MCH Project Manager prior to starting to frame the roof system. A minimum of 2" below maximum peak of roof elevation shall be maintained to allow for the roof products.

2. Trusses and Rafters shall be set per the layout on the roof framing plan.
3. The framing contractor shall supply a crane at their expense if necessary.
4. Trusses and rafters are to be blocked and secured to prevent blow over.
5. Roof Sheathing shall be 5/8" Red Zip system.
6. Installation of roof fascia and roof deck fascia - assume screwed and plugged PVC 1x material provided by MCH.
7. MCH best practice is to leave all ceilings vaulted to their maximum height until review with management and home owner. Framing Contractor may be asked to return following mechanicals to underframe the rafters.

Windows and Exterior Doors:

1. Windows and Doors to be installed per manufacturer's guidelines and MCH Water Infiltration Best Practices and Procedures document.
2. Windows must be handled and stored in an effort to prevent any damage.
3. All accessory pieces that are not installed or attached at the time of window and door installation should be labeled, bundled, and given to the MCH Project Manager.

H. Construction in Inclement Weather

1. It is the responsibility of the contractor to proactively protect their work and this includes but is not limited to following appropriate cold weather procedures. When weather conditions dictate, contractor is expected to take precautionary measures to protect the home and materials against damage (from wind, flooding, freezing temperatures, hail, sleet, rain, etc.).

I. Clean-Up & Damage

1. Contractor must remove dirt or mud left on streets adjacent to the site as a result of his work on a daily basis. The street is expected to be broom swept as necessary. Any disturbed silt fence (removed, knocked down, ran over) is the contractor's responsibility to replace /repair at their expense.
2. The MCH Project Manager, Framng Contractor, and suppliers will direct delivery truck(s) to the designated storage / delivery area on jobsite. At no time will deliveries be unloaded or stored anywhere other than the property that is under construction.
3. The contractor shall be responsible for all damages to street, curbs, site, and adjacent properties incurred as a result of contractor negligence. The contractor shall be responsible for any future charges resulting from the repair/replacement of those items.

J. Responsibilities

MCH Responsibilities

1. To supply the most timely and accurate information possible.
2. To provide regular supervision and direction from the MCH Project Manager.
3. To provide the following plans / drawings / information:
 - a. Architectural & Structural Plans
 - b. Proposed Site / Grading Plan showing all house options
 - c. Proposed Elevation Certificate
 - d. Elevator Specifications and Cut Sheet
 - e. MCH Water Infiltration Best Practices and Procedures document.
 - f. Approved truss shop drawings

- g. Approved steel shop drawings
- h. Window and door order referencing all rough openings
- 4. Provide an adequate construction access and curb protection.
- 5. Notify contractor immediately of any dimensional or tolerance discrepancies discovered.
- 6. Allowable working hours and community specific restrictions will be posted by MCH.

Framing Contractor's Responsibilities

- 1. To act in every way possible in an effort to protect and preserve their own work, work that has already been completed, the property and adjacent properties.
- 2. To comply with all OSHA regulations and requirements.
- 3. To check accuracy of plans, selections, and redlines with MCH Project Manager before proceeding and to conform completely to all labor and materials specifications.
- 4. Contractor is expected to meet MCH's construction schedule as provided.
- 5. To complete and sign the Framing Checklist upon job completion, and submit attached to invoice with MCH Project Manager's signature
- 6. To confirm locations of hold downs needed per hold down plans. To provide a generator for electricity if necessary and not available on site. Using electric from adjacent properties is never an acceptable option.
- 7. To provide water source as necessary. Using water from adjacent properties is never an acceptable option.
- 8. Contractor will respond and attempt to resolve customer service work, including Punch List items, within 24 hours from date of request and if necessary will attend to customer work before attending to new production work. Notice with explanation must be provided to MCH immediately if contractor cannot resolve service issues within 24 hours due to mobilization, weather, equipment failure, or other extenuating circumstances.

Company: _____
Signature: _____
Print Name: _____
Review Date: _____

Dustin Burkett
Director of Construction
302.217.2577
dustin@marniehomes.com

Effective Date: 1/17/2024