CITY OF MANTECA
COMMUNITY DEVELOPMENT DEPARTMENT
1001 West Center Street • Manteca, CA 95337 • FAX (209) 923-8949
Building Safety Division (209) 456-8551 • Community Development/Planning Division (209) 456-8500

Detached Residential Garage or Accessory Building
~ Includes Garage Conversion to Habitable Space ~

NOTE: Check with your homeowners' association and architectural review committee for Conditions, Covenants & Restrictions (CC&R's). The City of Manteca has no regulatory authority to enforce or notify permit applicants of CC&R requirements, nor deny permits for non-compliance of CC&Rs.

DESIGN CRITERIA/APPLICABLE CODES

- Seismic Design Category D
- Basic wind speed (93 mph) Exposure C
- Climate Zone 12
- Codes: —2019 CBC: Building
  —2019 CPC: Plumbing
  —2019 CMC: Mechanical
  —2019 CEC: Electrical
  —2019 CFC: Fire
  —2019 Building Energy Efficiency Standards

DRAWING CRITERIA

- It is preferred that drawings be limited in size to a MINIMUM of 18"x24" and a MAXIMUM of 30"x42"
- Plans must be clear, complete, and legible; illegible or incomplete plans will not be accepted.
- Preferred scale: 1/4 inch per foot for structural and architectural; 1 inch = 20 feet for site plans

WHAT'S INCLUDED IN THIS HANDOUT

SUBMITTAL REQUIREMENTS

- *Effective 7/1/2020, City of Manteca will transition to electronic plan review. All documents must be submitted through goPost.*
- *Incomplete submittals will not be accepted*
- *Plan check fees must be paid at the time of submittal*

THE FOLLOWING ITEMS MAY BE REQUIRED BASED ON PROJECT TYPE, SCOPE, AND/OR LOCATION:

- Manteca Unified School District certificate of fees paid (garage conversions only)
- Special Inspection Agreement
- Soils Report
- Electrical Load Calculations (based upon project type and/or location)
- Plumbing Calculations
- Sound Attenuation Details

NEW GARAGE or SHED

Plans (minimum 18"x24") must be to scaled and to include the following: (Refer to page 3 for details):

- ☐ COMPLETED BUILDING PERMIT APPLICATION
- ☐ COVER SHEET
- ☐ SITE PLAN
- ☐ FLOOR PLAN
- ☐ ELEVATIONS
- ☐ ARCHITECTURAL & STRUCTURAL SHEETS
- ☐ PLUMBING/MECHANICAL/ELECTRICAL SHEETS
- ☐ STRUCTURAL CALCULATIONS
- ☐ TRUSS CALCULATIONS (If applicable)
- ☐ GRADING PLAN (if applicable)

GARAGE CONVERSION to HABITABLE SPACE

PLANNING DIVISION:

Approval from the Planning Division is required before any garage is converted to habitable space. Please contact the Planning Division at (209) 456-8500.

BUILDING SAFETY DIVISION:

Plans (minimum 18"x24") must be to scaled and to include the following:

1) Site plan drawn to scale showing property lines, north arrow, easements, well, septic tank, leach field, all existing and proposed structures with distances to property lines and between structures, and proposed parking spaces.
2) Floor plan (include plumbing and electrical fixture locations and heating information). Show window sizes and method of opening.
3) Framing layout of garage door opening frame-in, cross-section of wall showing ceiling joist size and spacing, and insulation size.
4) Detail of foundation curb of garage door frame-in.
5) Title 24 Energy report.
6) If the floor is to be raised using a wood structure over the concrete floor and code clearances cannot be provided, it shall be totally of pressure-treated wood or be underlain by a two-ply, hot-mopped membrane or other suitable membrane, and underfloor ventilation shall be provided. The ceiling height shall be a minimum of 7' 6".
7) When converting a tandem garage (the parking space behind a front parking space), engineering will be required for any new opening provided in an existing exterior wall.

INFORMATION REQUIRED ON PLAN SUBMITTALS

COVER SHEET:

- Legal address of project site
- Assessor's Parcel Number (APN)
- Name, address, phone number of owner, contractor and contact person
- Name, address, phone number, title and registration information of project design professional
- Written description of work to be undertaken
- Current applicable codes and edition dates
- Occupancy classification and type of construction
- Zoning
- Gross square footage area by floor
- Index of drawings
- Scale used for any drawings on cover sheet

SITE PLAN *(see sample on pg. 7)*:

- North arrow
- Lot dimensions & boundaries, showing entire parcel
- Scale used
- Legal address of job site
- Existing and proposed structures, including solid covered patios, porches, sheds, etc., and their areas in square feet and number of stories; include building walls on adjoining properties that are within 10 feet of the subject property
- Distances of all existing and proposed structures from property lines and other structures
- Utility lines and connection points (water, sewer, electrical, gas, cable, fire hydrants, etc.)
- Adjoining streets
- Driveways and parking areas (min. 20' path of travel to garage structure)
- Number of parking stalls
- All easements
- Existing trees and plantings on property; note those to be removed
- Fence bollards, barriers or walls; indicate material of construction and height
- Patios, walkways, existing and proposed sidewalks
- Proposed pad and finished floor elevations
- Signature of preparer

ELEVATIONS SHALL SHOW ALL SIDES OF BUILDING, INCLUDING:

- Windows, doors
- Rooftop equipment
- Types of siding and roofing materials
- Dimensions of all elements, including height of structures
- Roof vents: show compliance with Sec. 1202.2 CBC

FLOOR PLAN *(see sample on pg. 8)*:

- Dimensions and use of all existing and proposed rooms and/or areas inside buildings
- Locations of any/all windows and doors

TRUSS PLANS & CALCULATIONS (if applicable):

- Truss layout plan with truss member identification corresponding to each truss
- Connection details
- Lateral bracing details
- Project designer approval

ARCHITECTURAL & STRUCTURAL PLANS:

- Foundation and structural floor framing plans; include details of footings, piers, and grade beams
- Architectural floor plan(s), dimensioned, will all openings listed as to size and operation.
- Roof plan; show eaves, overhangs, rakes and gables, size of rafters, sheathing material, roofing material, etc.
- A cross-section of each structural system, detailing all structural connections
- Structural systems and materials listing
- Concrete specifications for driveway and any curb cuts which may be required

PLUMBING, MECHANICAL & ELECTRICAL SHEETS:

- Location of all plumbing fixtures
- Location of all mechanical units, ducts, and registers
- Location of all electrical outlets, switches, lights, arc fault and G.F.C.I. outlets, smoke detectors, and service and sub-panel locations and sizes
- Location of concrete-encased electrode (UFER ground) if more than one electrical circuit serves the garage or shed
- Electrical load calculations may be required based upon the project type and/or location.

GRADING PLAN (if required):

- Existing and proposed grading plans
- Pad elevations ground slope drainage scheme and topographic plan drawn to 1'-0" contours
- Retaining walls and drainage systems, existing and proposed

SETBACK AND LOT COVERAGE REQUIREMENTS

This overview is provided for reference only. *Prior to building any structure or making an addition or modification to any existing structure, check with the Community Development Department at (209) 456-8500 regarding minimum required distances from property lines and other structures, as well as finding the location of any easements.*

LOT COVERAGE:

The maximum area of a lot that may be covered by roof structures (house, patio, garage, carport, sheds, etc.) is (60) sixty percent.

PROPERTY LINE:

Contact the Planning Division for property line setbacks. The back edge of the sidewalk is NOT the property line. The property line is typically 2 feet in back of the sidewalk. Check with Public Works for property line locations.

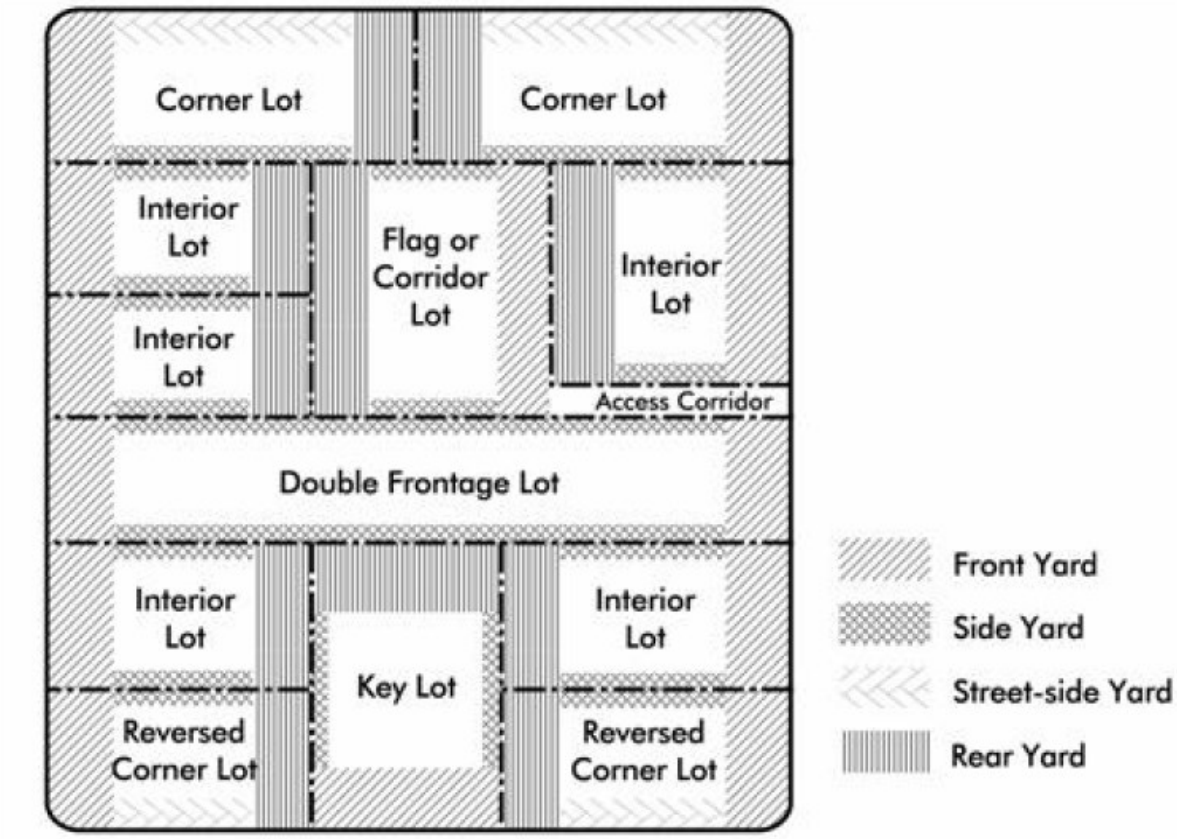
DRIVEWAYS:

Driveways shall be a minimum of 20 feet in length, from carport or garage to property line.

CORNER LOT DRIVEWAYS:

Driveways shall not be closer than 20 feet to radius return.

FIGURE 17.100.060-3 LOT TYPES



MISCELLANEOUS RESIDENTIAL STANDARDS

ACCESSORY BUILDINGS

LOCATION: Accessory buildings (other than landscape features-see below) may not be located in the required front yard setback (20 feet back from the front property line).

CORNER LOT: A minimum of (10) ten feet inclusive of roof covering from street side lot line is required.

REAR YARD LOT COVERAGE: Accessory buildings may occupy no more than 30% of a required rear yard.

UNDER 120 SQ. FT.: A detached accessory building with 120 square feet or less of gross floor area and less than or equal to 8 feet in height, does not require a building permit and has no setback requirements. If an accessory building exceeds (8) eight feet in height, the structure may not be located closer than five (5) feet from the side or rear lot line (inclusive of roof covering).

OVER 120 SQ. FT.: A detached accessory building with more than 120 square feet of gross floor area requires a building permit and may not be located closer than five (5) feet from the side or rear lot line (inclusive of roof covering). The detached accessory building shall be no closer than (10) ten feet to the main building, (may extend up to (5) five feet, inclusive of roof covering, provided it has 1-hour fire wall rating).

DECORATIVE LANDSCAPE FEATURES

Notwithstanding any other regulations, incidental decorative landscape features such as an arbor or trellis shall be permitted within the front yard setback area of single family residential lots. Such features shall not be closer than (10) ten feet from the street side lot line and (3) three feet from the side or rear lot line. Maximum height for landscape feature is (16) sixteen feet.

CORNER LOT:

On a corner lot such feature shall not obstruct the vision of vehicular traffic.

INSPECTIONS

When you are ready for an inspection, call the Building Safety Division's 24-hour inspection recorder at (209) 456-8552. You will be asked to leave your permit number, job site address, type of inspection being requested, date for which you wish to schedule the inspection, and your contact information. Please speak slowly and clearly. Requests left by 4:00 p.m. will be scheduled for the next business day; requests left after 4:00 p.m. will be scheduled for the second following business day.

The approved set of plans, including structural calculations, truss calculations, and/or energy calculations, must be on-site for each inspection. The Inspection Record card must be available for the inspector's signature.

If the inspector approves the work, the Inspection Record card will be initialed and dated. If the work is not approved, the inspector will leave a correction notice stating which corrections are needed. It is the permit-holder's responsibility to make the required corrections and request a re-inspection of the work.

TYPICAL ORDER OF ON-SITE INSPECTIONS—NEW GARAGE/SHED:

1. UNDER-SLAB PLUMBING:

Required if plumbing is being installed in the garage/shed

Drain lines must be plugged and filled with water through a 10' vertical riser. Water lines must be tested with a pressure of 50 psi or City water street pressure for a minimum of 15 minutes. Property lines should be clearly marked.

2. FOUNDATION:

Trenches must be excavated and reinforcing in place. Forms erected and hold-downs held in place. Property lines should be clearly marked. If more than a single 20-amp circuit goes to the garage/shed, the concrete-encased (UFER) electrode should be bent to above the concrete slab.

3. SLAB:

Gravel, compacted sand or soil must be in place. Mesh or reinforcement must be placed over moisture barrier if required. Pipes penetrating slab must be protected from expansion and breakage.

4. DIAPHRAGM & ROOF NAILING:

A nailing inspection is required prior to covering the roof sheathing and wall shear panels. All metal connectors must be installed. Plans to state exact size and spacing of nails. Trusses should be completed and ready for inspection at the time of the roof nail inspection and truss plans on the job site. *All framing should be completed prior to this inspection.*

5. ROUGH FRAME:

All rough plumbing, mechanical and electrical must be complete. Windows, roofing and siding installed (stucco lath installed without stucco).

6. SHEETROCK NAILING:

Prior to taping, all sheetrock must be in place and must be inspected and approved.

7. LATH:

Sheetrock must be installed prior to lath inspection. All tears and holes in lath must be patched or sealed.

8. FINAL INSPECTION:

Structure must be completely finished.

TYPICAL ORDER OF ON-SITE INSPECTIONS—GARAGE CONVERSION:

1. UNDER-SLAB PLUMBING:

Required if plumbing is being installed.

Drain lines must be plugged and filled with water through a 10' vertical riser. Water lines must be tested with a pressure of 50 psi or City water street pressure for a minimum of 15 minutes. Property lines should be clearly marked.

2. FOUNDATION/SLAB:

Required if making any changes to existing foundation or slab.

3. ROUGH FRAME:

All rough plumbing, mechanical and electrical must be complete. Windows, roofing and siding installed (stucco lath installed without stucco).

4. SHEETROCK NAILING:

Prior to taping, all sheetrock must be in place and must be inspected and approved.

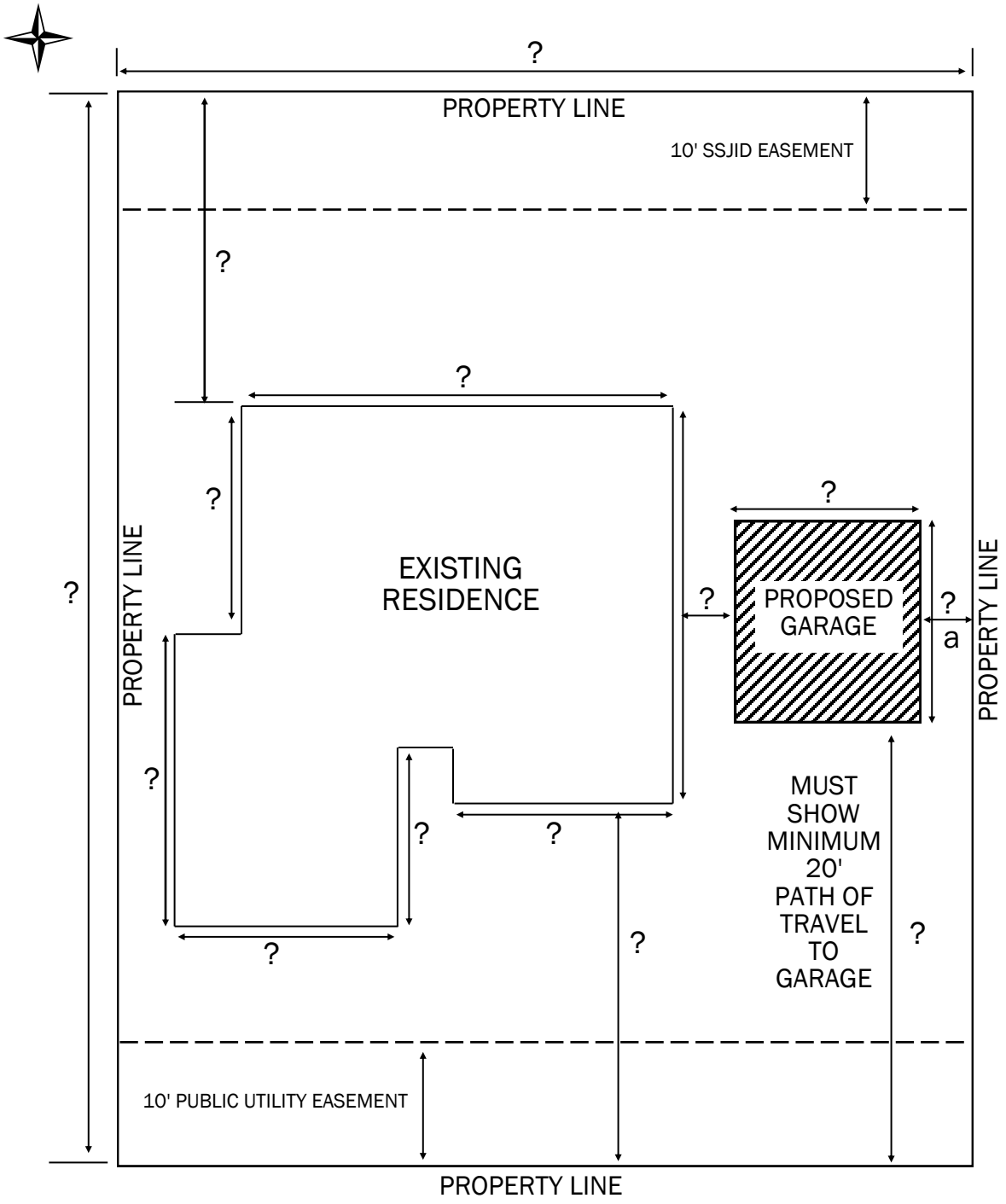
5. LATH:

Sheetrock must be installed prior to lath inspection. All tears and holes in lath must be patched or sealed.

6. FINAL INSPECTION:

Structure must be completely finished. Slab to be sealed against hydraulic pressure.

SAMPLE SITE PLAN: NEW DETACHED GARAGE



HOUSE NUMBER AND STREET NAME

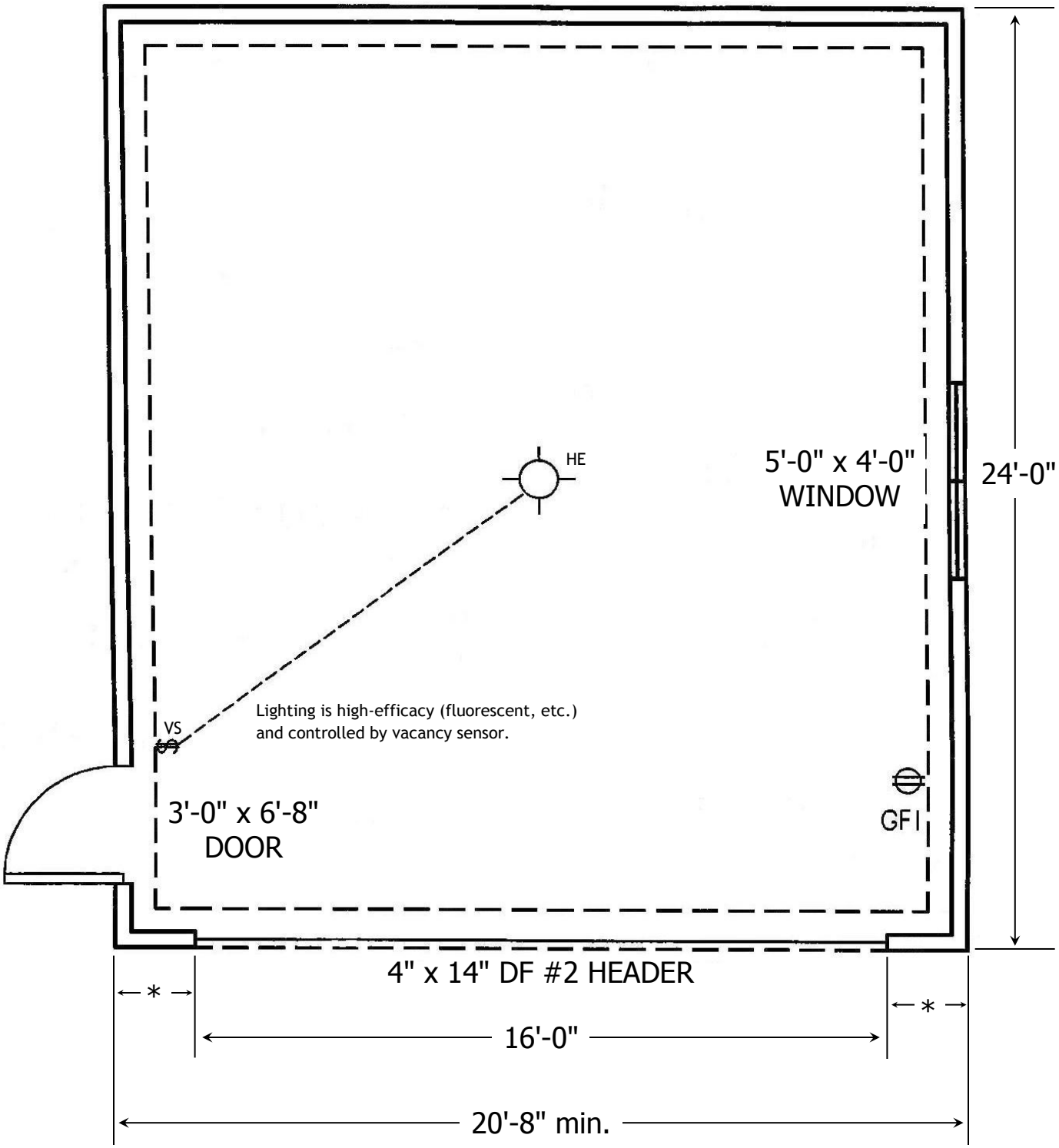
1) Show lot dimensions and total square footage of all covered areas.
2) Check with the Planning Division for building setback requirements.
3) Check with the Engineering Division for location of any utility easements.

NOTES:

a) Must be a minimum of 5 feet away from property line, inclusive of roof overhangs, except corner lots and reversed corner lots (refer to page 5 for setbacks).

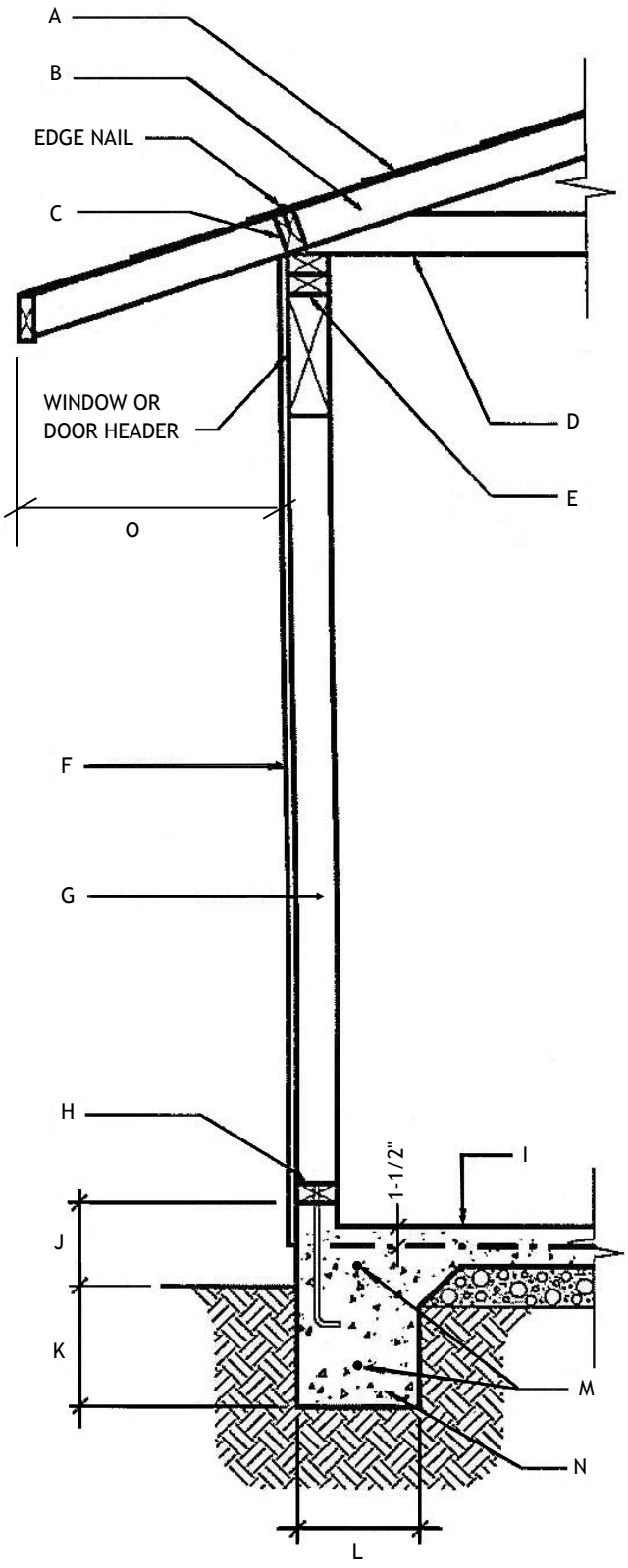
SAMPLE FLOOR PLAN

New detached garage



*See page 10 for Alternate Braced Wall (ABW)

FRAMING AND FOOTING DETAILS



A. ROOF COVERING ON 15# FELT PAPER ON PLYWOOD OR 1" x 4" SKIP SHEATHING (WOOD SHAKE OR WOOD SHINGLE ONLY). PLYWOOD EDGE NAIL 8d @ 6" O.C.
_____" THICK, _____ SHEATHING

B. MANUFACTURED TRUSSES OR RAFTERS.
IF TRUSSES ARE USED, PROVIDE TRUSS CALCULATIONS.
RAFTERS: 2" x _____" @ _____ O.C.
(REFER TO ALLOWABLE SPAN FOR RAFTERS)

C. BLOCKING OR EAVE VENTS WITH 16d NAILS @ 8" O.C. TO DBL. TOP PLATE. REFER TO FASTENING SCHEDULE.

D. CEILING JOIST: 2" x _____" @ _____ O.C.
(REFER TO ALLOWABLE SPAN FOR CEILING JOIST)

E. DOUBLE TOP PLATE (MIN. 48" SPLICE) WITH 12 (16d) NAILS @ EACH SIDE OF SPLICE

F. SIDING MATERIAL: _____

G. STUD WALL WITH 2" x _____" STUDS @ 16" O.C.

H. BOTTOM PLATE (PRESSURE-TREATED WHEN IN CONTACT WITH CONCRETE) WITH 1/2" x 10" ANCHOR BOLT @ 6' O.C. MAX (MIN. TWO BOLTS PER SILL SECTION). MINIMUM 3" x 3" WASHERS.

I. 3-1/2" CONCRETE SLAB

J. 6" MINIMUM CLEARANCE TO GRADE

K. 12" DEEP BELOW UNDISTURBED SOIL

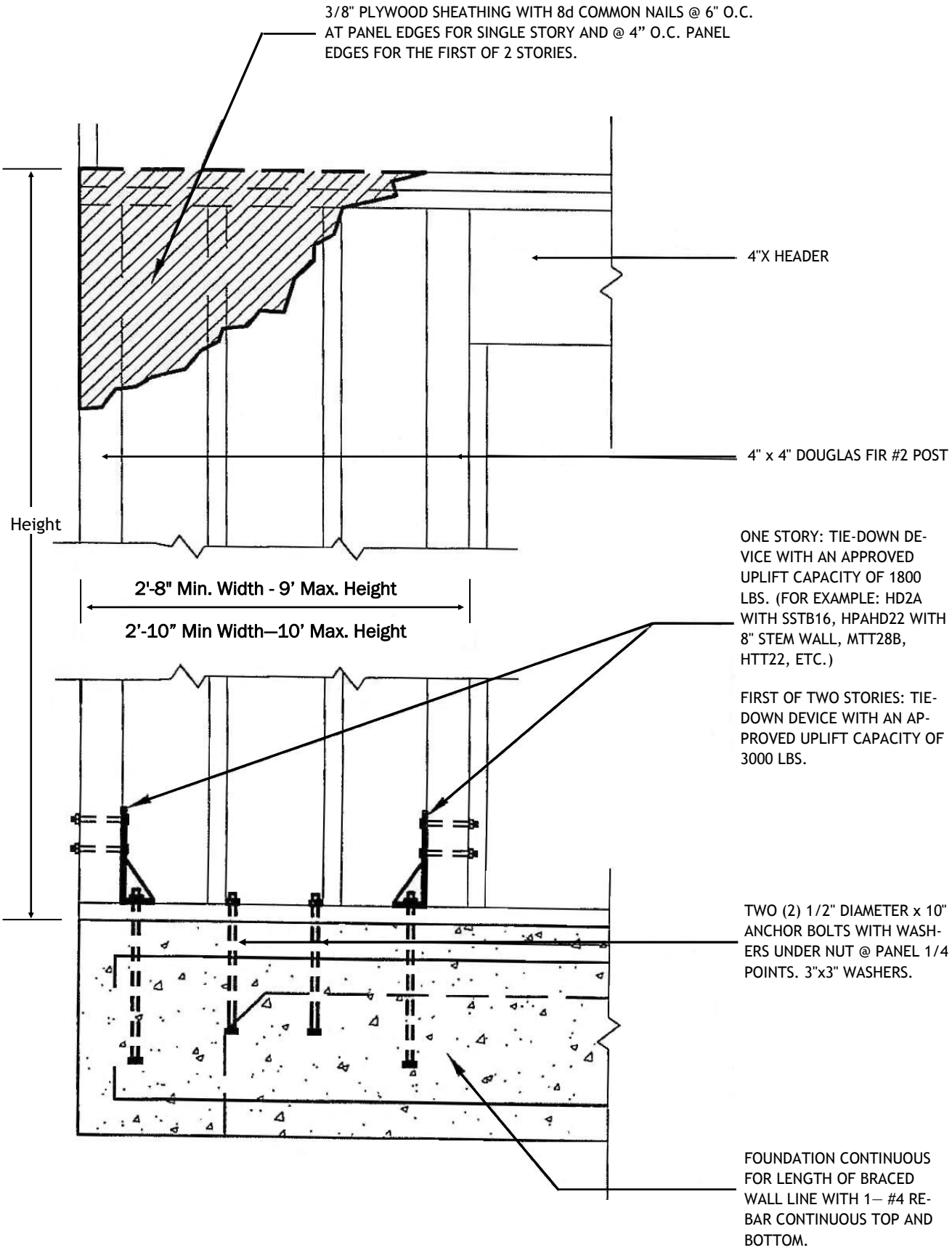
L. 12" WIDE

M. (2) #4 REINFORCING BARS (CONTINUOUS)

N. CONCRETE FOUNDATION

O. EAVE DIMENSION: _____

2’-8”/2’-10” ALTERNATE BRACED WALL (ABW) DETAIL



SPAN TABLES AND ALLOWABLE LOADS

2019 CRC FOR RESIDENTIAL LIGHT-FRAME ONLY

FLOOR JOISTS
Table R502.3.1(2), LL=40psf/DL=10psf

SIZE & SPACING		GRADE #1	GRADE #2
2 x 6	@ 12" O.C.	10' 11"	10' 9"
	@ 16" O.C.	9' 11"	9' 9"
	@ 24" O.C.	8' 8"	8' 3"
2 x 8	@ 12" O.C.	14' 5"	14' 2"
	@ 16" O.C.	13' 1"	12' 9"
	@ 24" O.C.	11' 0"	10' 5"
2 x 10	@ 12" O.C.	18' 5"	18' 0"
	@ 16" O.C.	16' 5"	15' 7"
	@ 24" O.C.	13' 5"	12' 9"
2 x 12	@ 12" O.C.	22' 0"	20' 11"
	@ 16" O.C.	19' 1"	18' 1"
	@ 24" O.C.	15' 7"	14' 9"

CEILING JOISTS
Table R802.5.1(1), LL=10psf/DL=5psf

SIZE & SPACING		GRADE #1	GRADE #2
2 x 4	@ 12" O.C.	12' 8"	12' 5"
	@ 16" O.C.	11' 6"	11' 3"
	@ 24" O.C.	10' 0"	9' 10"
2 x 6	@ 12" O.C.	19' 11"	19' 6"
	@ 16" O.C.	18' 1"	17' 8"
	@ 24" O.C.	15' 9"	15' 0"
2 x 8	@ 12" O.C.	Note A	25' 8"
	@ 16" O.C.	23' 10"	23' 4"
	@ 24" O.C.	20' 1"	19' 1"
2 x 10	@ 12" O.C.	Note A	Note A
	@ 16" O.C.	Note A	Note A
	@ 24" O.C.	24' 6"	23' 3"

RAFTERS
Table R802.4.1(1), LL=20psf/DL=10psf

SIZE & SPACING		GRADE #1	GRADE #2
2 x 6	@ 12" O.C.	17' 4"	16' 10"
	@ 16" O.C.	15' 4"	14' 7"
	@ 24" O.C.	12' 6"	11' 11"
2 x 8	@ 12" O.C.	22' 5"	21' 4"
	@ 16" O.C.	19' 5"	18' 5"
	@ 24" O.C.	15' 10"	15' 1"
2 x 10	@ 12" O.C.	Note A	26' 0"
	@ 16" O.C.	23' 9"	22' 6"
	@ 24" O.C.	19' 5"	18' 5"
2 x 12	@ 12" O.C.	Note A	Note A
	@ 16" O.C.	Note A	26' 0"
	@ 24" O.C.	22' 6"	21' 4"

Note A: Span exceeds 26 feet in length. Check sources for availability of lumber in lengths greater than 20 feet.

TABLE R602.3(1) - FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
		Roof	
1	Blocking between ceiling joists or rafters to top plate	4-8d box ($2^1/_2$″× 0.113″); or 3-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 3-3″× 0.131″nails	Toe nail
2	Ceiling joists to top plate	4-8d box ($2^1/_2$″× 0.113″); or 3-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 3-3″× 0.131″nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions [see Section R802.5.2 and Table R802.5.2	4-10d box (3″× 0.128″); or 3-16d common ($3^1/_2$″× 0.162″); or 4 -3″× 0.131″nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) [see Section R802.5.2 and Table R802.5.2	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or $1^1/_4$″× 20 ga. ridge strap to rafter	4-10d box (3″× 0.128″); or 3-10d common (3″× 0.148″); or 4-3″× 0.131″nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails ($3^1/_2$″× 0.135″); or 3 -10d common nails (3″× 0.148″); or 4-10d box (3″× 0.128″); or 4-3″× 0.131″nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss[1]
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2″ ridge beam	4-16d ($3^1/_2$″× 0.135″); or 3-10d common ($3^1/_2$″× 0.148″); or 4 -10d box (3″× 0.128″); or 4-3″× 0.131″nails	Toe nail
		3-16d box $3^1/_2$″× 0.135″); or 2-16d common ($3^1/_2$″× 0.162″); or 3 -10d box (3″× 0.128″); or 3-3″× 0.131″nails	End nail
		Wall	
8	Stud to stud (not at braced wall panels)	16d common ($3^1/_2$″× 0.162″)	24″b.c. face nail
		10d box (3″× 0.128″); or 3″× 0.131″nails	16″b.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box ($3^1/_2$″× 0.135″); or 3″× 0.131″nails	12″b.c. face nail
		16d common ($3^1/_2$″× 0.162″)	16″b.c. face nail
10	Built-up header (2″ to 2″ header with $^1/_2$″ spacer)	16d common ($3^1/_2$″× 0.162″)	16″b.c. each edge face nail
		16d box ($3^1/_2$″× 0.135″)	12″b.c. each edge face nail
11	Continuous header to stud	5-8d box ($2^1/_2$″× 0.113″); or 4-8d common ($2^1/_2$″× 0.131″); or 4 -10d box (3″× 0.128″)	Toe nail
12	Top plate to top plate	16d common ($3^1/_2$″× 0.162″)	16″b.c. face nail
		10d box (3″× 0.128″); or 3″× 0.131″nails	12″b.c. face nail
13	Double top plate splice	8-16d common ($3^1/_2$″× 0.162″); or 12-16d box ($3^1/_2$″× 0.135″); or 12-10d box (3″× 0.128″); or 12-3″× 0.131″nails	Face nail on each side of end joint (minimum 24″lap splice length each side of end joint)

TABLE R602.3(1) - FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common ($3^1/_2$″× 0.162″)	16″o.c. face nail
		16d box ($3^1/_2$″× 0.135″); or 3″× 0.131″nails	12″o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box ($3^1/_2$″× 0.135″); or 2-16d common ($3^1/_2$″× 0.162″); or 4 -3″× 0.131″nails	3 each 16″o.c. face nail 2 each 16″o.c. face nail 4 each 16″o.c. face nail
16	Top or bottom plate to stud	4-8d box ($2^1/_2$″× 0.113″); or 3-16d box ($3^1/_2$″× 0.135″); or 4-8d common ($2^1/_2$″× 0.131″); or 4 -10d box (3″× 0.128″); or 4-3″× 0.131″nails	Toe nail
		3-16d box ($3^1/_2$″× 0.135″); or 2-16d common ($3^1/_2$″× 0.162″); or 3 -10d box (3″× 0.128″); or 3-3″× 0.131″nails	End nail
17	Top plates, laps at corners and intersections	3-10d box (3″× 0.128″); or 2-16d common ($3^1/_2$″× 0.162″); or 3 -3″× 0.131″nails	Face nail
18	1″brace to each stud and plate	3-8d box ($2^1/_2$″× 0.113″); or 2-8d common ($2^1/_2$″× 0.131″); or 2 -10d box (3″× 0.128″); or 2 staples $1^3/_4$″	Face nail
19	1″× 6″sheathing to each bearing	3-8d box ($2^1/_2$″× 0.113″); or 2-8d common ($2^1/_2$″× 0.131″); or 2 -10d box (3″× 0.128″); or 2 staples, 1″crown, 16 ga., $1^3/_4$″long	Face nail
20	1″× 8″and wider sheathing to each bearing	3-8d box ($2^1/_2$″× 0.113″); or 3-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 3 staples, 1″crown, 16 ga., $1^3/_4$″long	Face nail
		Wider than 1″× 8″ 4-8d box ($2^1/_2$″× 0.113″); or 3-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 4 staples, 1″crown, 16 ga., $1^3/_4$″long	
	Floor		
21	Joist to sill, top plate or girder	4-8d box ($2^1/_2$″× 0.113″); or 3-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 3-3″× 0.131″nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box ($2^1/_2$″× 0.113″)	4″o.c. toe nail
		8d common ($2^1/_2$″× 0.131″); or 10d box (3″× 0.128″); or 3″× 0.131″nails	6″o.c. toe nail
23	1″× 6″subfloor or less to each joist	3-8d box ($2^1/_2$″× 0.113″); or 2-8d common ($2^1/_2$″× 0.131″); or 3 -10d box (3″× 0.128″); or 2 staples, 1″crown, 16 ga., $1^3/_4$″long	Face nail