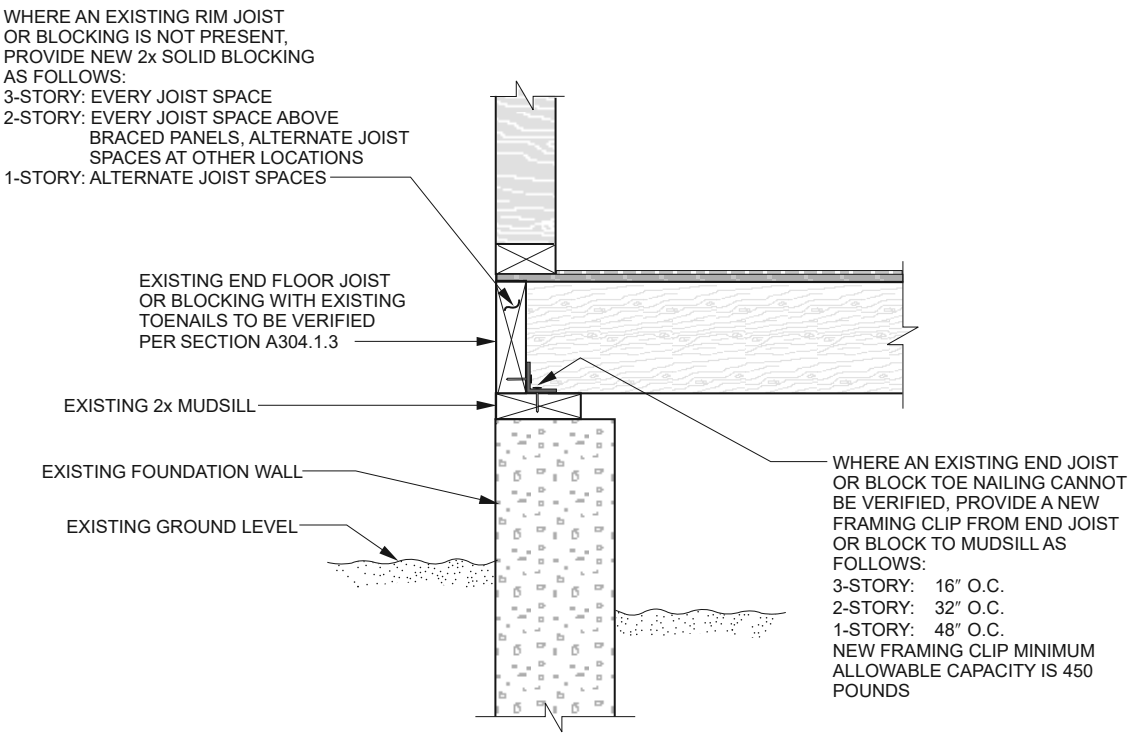
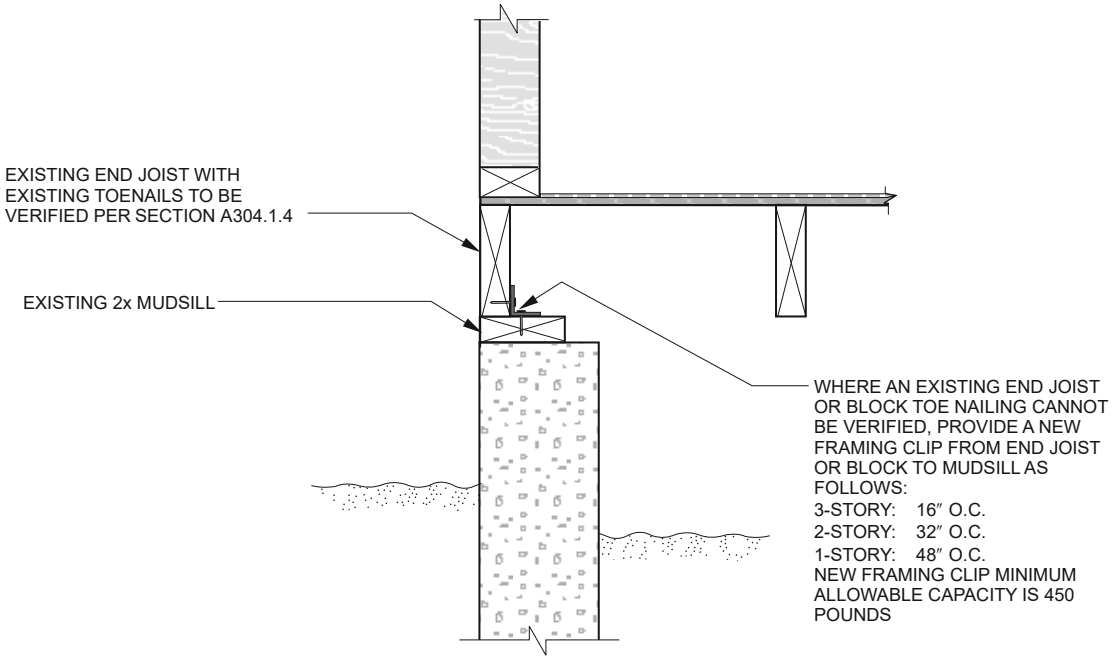
APPENDIX A



FLOOR JOISTS NOT PARALLEL TO FOUNDATIONS



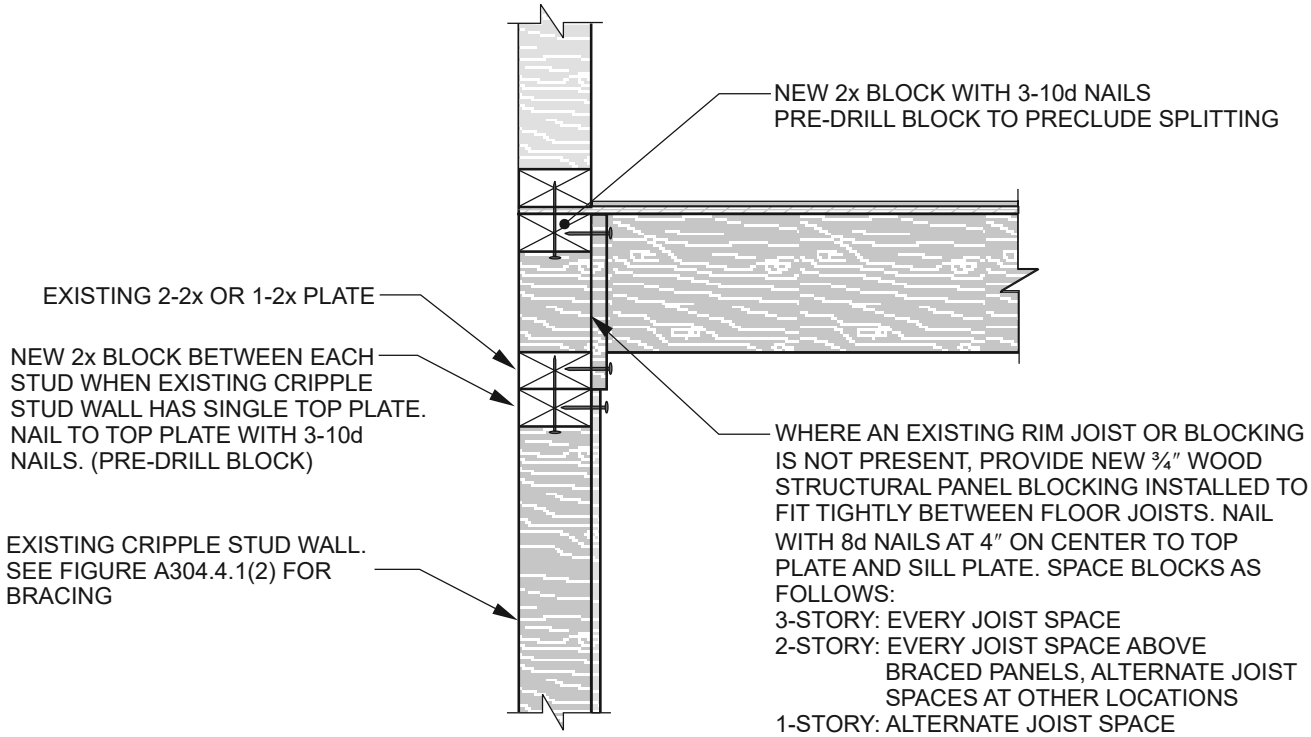
FLOOR JOISTS PARALLEL TO FOUNDATIONS

For SI: 1 inch = 25.4 mm.

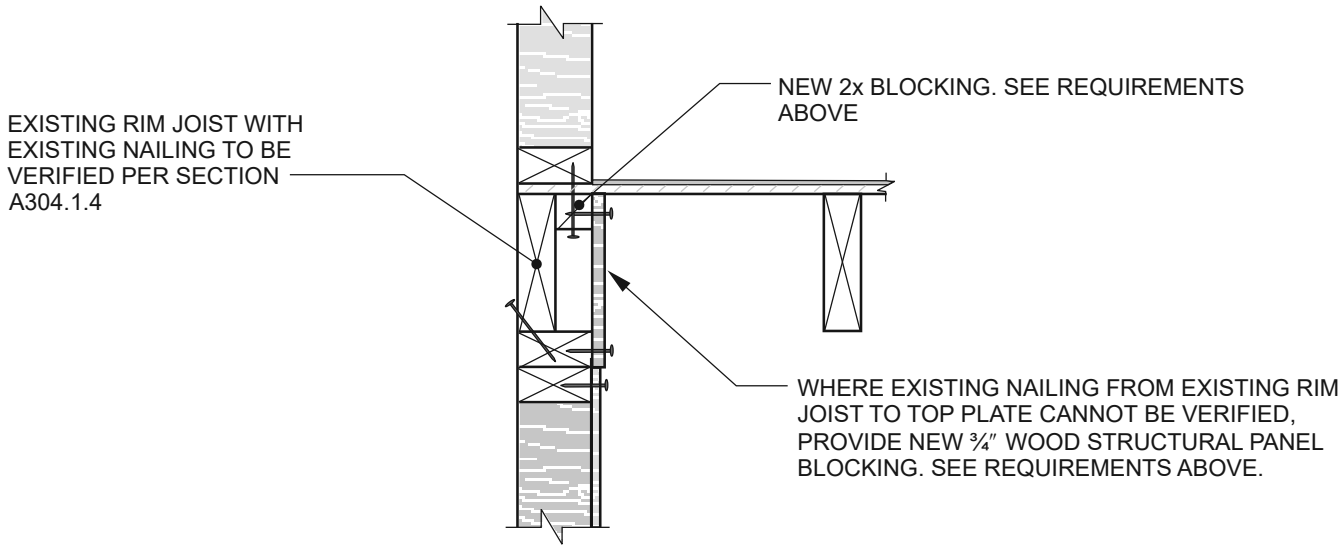
NOTES:

1. See Section A304.3 for sill plate anchorage.
2. See manufacturing instructions for nail sizes associated with metal framing clips.

[BS] FIGURE A304.1.4(2)
TYPICAL FLOOR TO MUDSILL CONNECTIONS



FLOOR JOISTS NOT PARALLEL TO FOUNDATION



FLOOR JOISTS PARALLEL TO FOUNDATION

For SI: 1 inch = 25.4 mm, 1 pound = 4.4 N.

NOTE: See Section A304.4 for cripple wall bracing.

[BS] FIGURE A304.1.4(3)
ALTERNATIVE FLOOR FRAMING TO CRIPPLE WALL CONNECTION

APPENDIX A

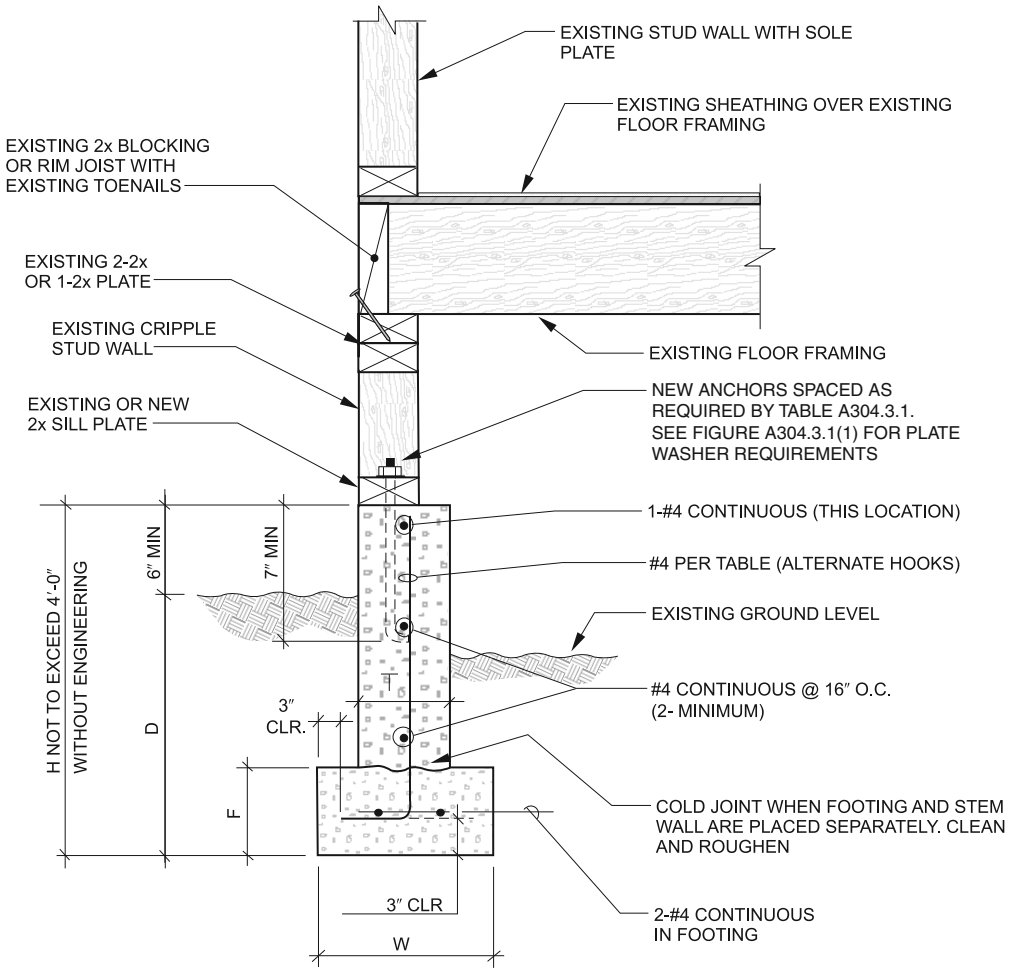
MINIMUM FOUNDATION DIMENSIONS						MINIMUM FOUNDATION REINFORCING	
NUMBER OF STORIES	W	F	D[a, b, c]	T	H	VERTICAL REINFORCING	
						Single-pour wall and footing	Footing placed separate from wall
1	12 inches	6 inches	12 inches	6 inches	≤ 24 inches	#4 @ 48 inches on center	#4 @ 32 inches on center
2	15 inches	7 inches	18 inches	8 inches	≥ 36 inches	#4 @ 48 inches on center	#4 @ 32 inches on center
3	18 inches	8 inches	24 inches	10 inches	≥ 36 inches	#4 @ 48 inches on center	#4 @ 18 inches on center

For SI: 1 inch = 25.4 mm.

a. Where frost conditions occur, the minimum depth shall extend below the frost line.

b. The ground surface along the interior side of the foundation may be excavated to the elevation of the top of the footing.

c. Where the soil is designated as expansive, the foundation depth and reinforcement shall be approved by the code official.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

[BS] FIGURE A304.2.3(1)
NEW REINFORCED CONCRETE FOUNDATION SYSTEM

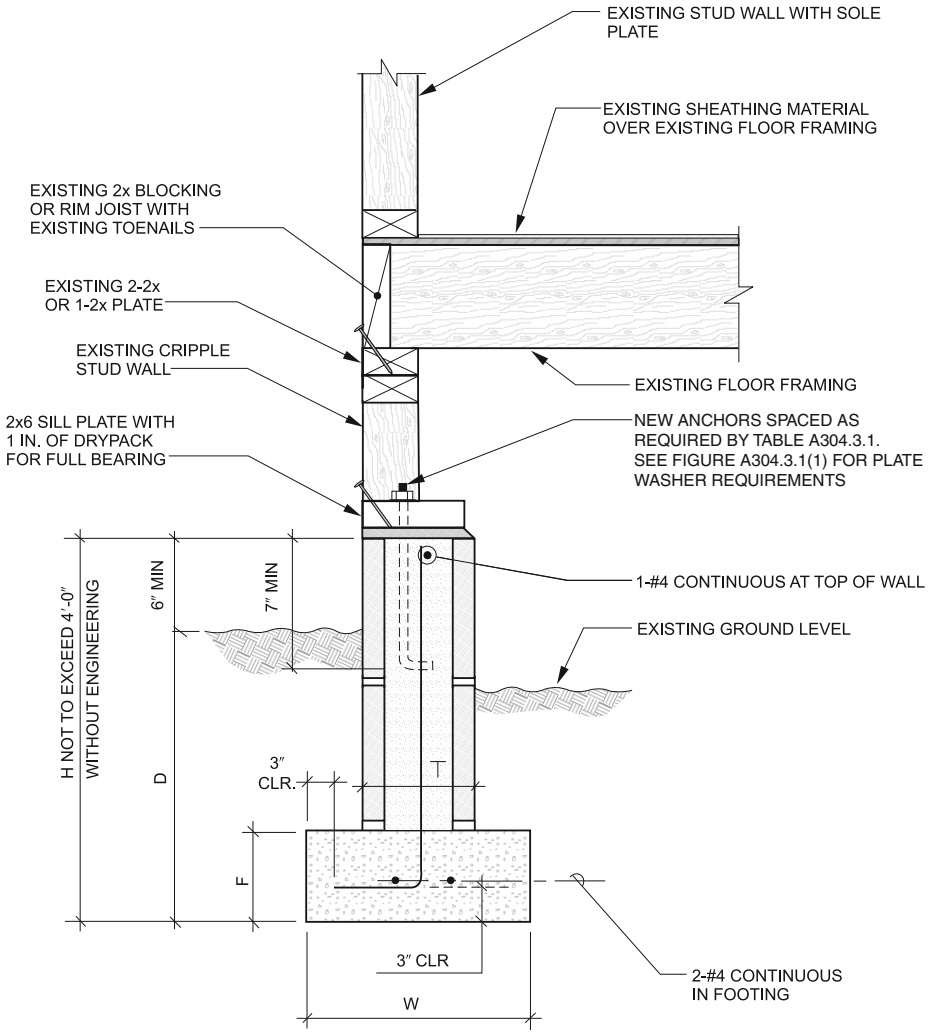
MINIMUM FOUNDATION DIMENSIONS					MINIMUM FOUNDATION REINFORCING		
NUMBER OF STORIES	W	F	D[a, b, c]	T	H	VERTICAL REINFORCING	HORIZONTAL REINFORCING
1	12 inches	6 inches	12 inches	6 inches	≤ 24 inches	#4 @ 24 inches on center	#4 continuous at top of stem wall
2	15 inches	7 inches	18 inches	8 inches	≥ 24 inches	#4 @ 24 inches on center	#4 @16 inches on center
3	18 inches	8 inches	24 inches	10 inches	≥ 36 inches	#4 @ 24 inches on center	#4 @16 inches on center

For SI: 1 inch = 25.4 mm.

a. Where frost conditions occur, the minimum depth shall extend below the frost line.

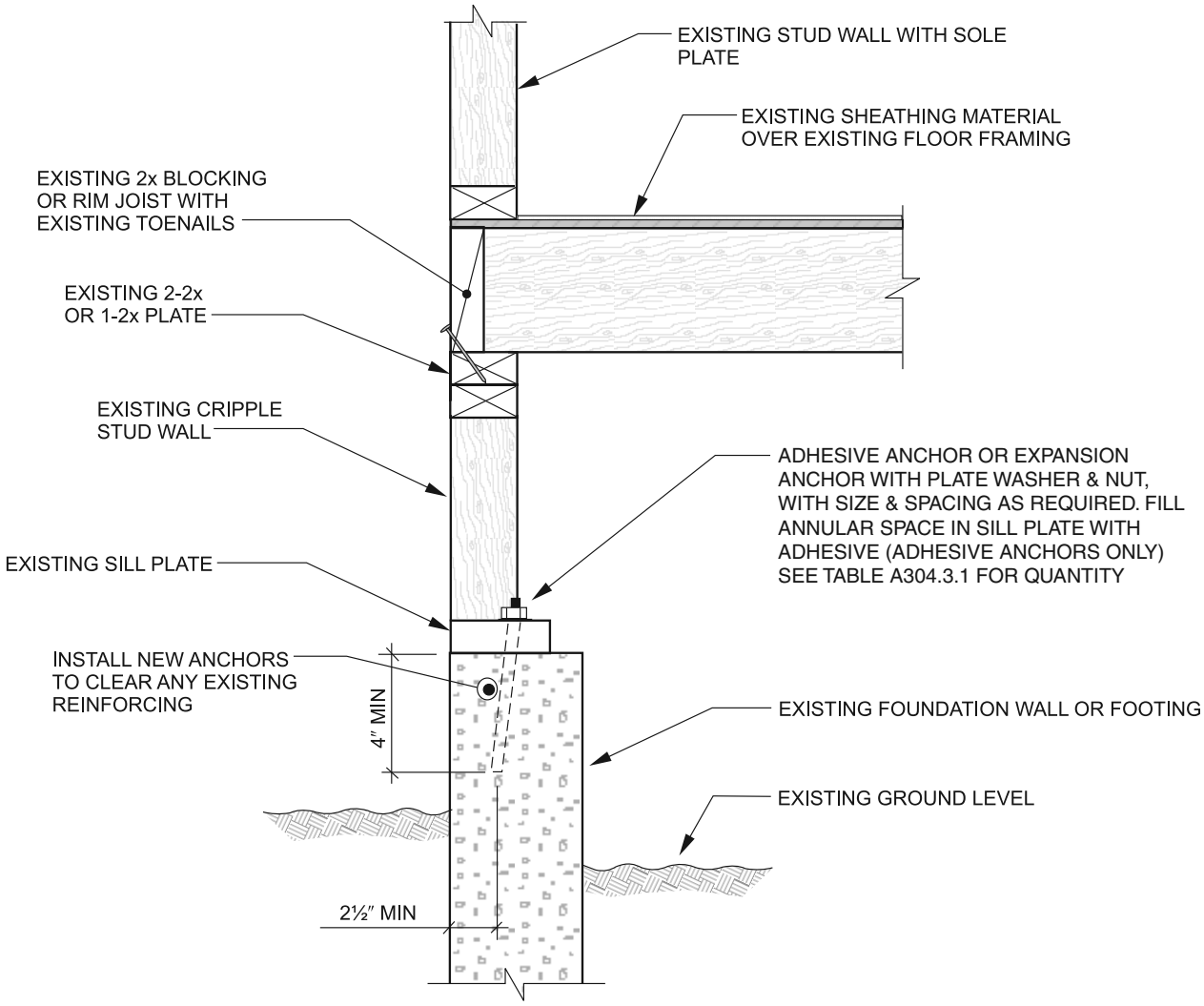
b. The ground surface along the interior side of the foundation may be excavated to the elevation of the top of the footing.

c. Where the soil is designated as expansive, the foundation depth and reinforcement shall be approved by the code official.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

[BS] FIGURE A304.2.3(2)
NEW MASONRY CONCRETE FOUNDATION



For SI: 1 inch = 25.4 mm.

a. Plate washers shall comply with the following:

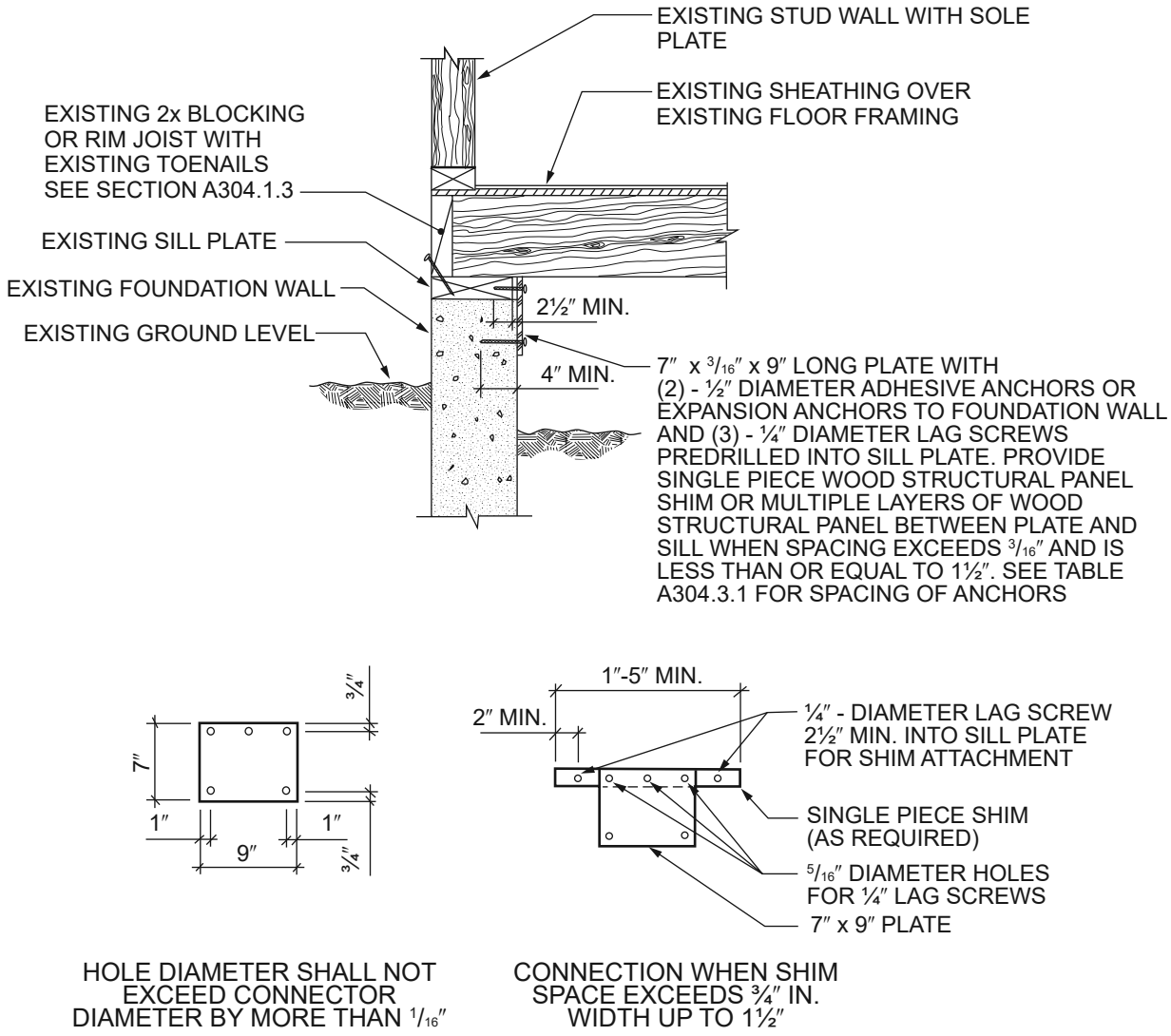
$^{1}/_{2}$-inch anchor or bolt—3 inches × 3 inches × 0.229 inch minimum.

$^{5}/_{8}$-inch anchor or bolt—3 inches × 3 inches × 0.229 inch minimum.

A diagonal slot in the plate washer is permitted in accordance with Table A304.3.1, Note b.

b. See Figure A304.4.1(1) or A304.4.1(2) for cripple wall bracing.

[BS] FIGURE A304.3.1(1)
SILL PLATE *ANCHORING* TO EXISTING FOUNDATION[a, b]

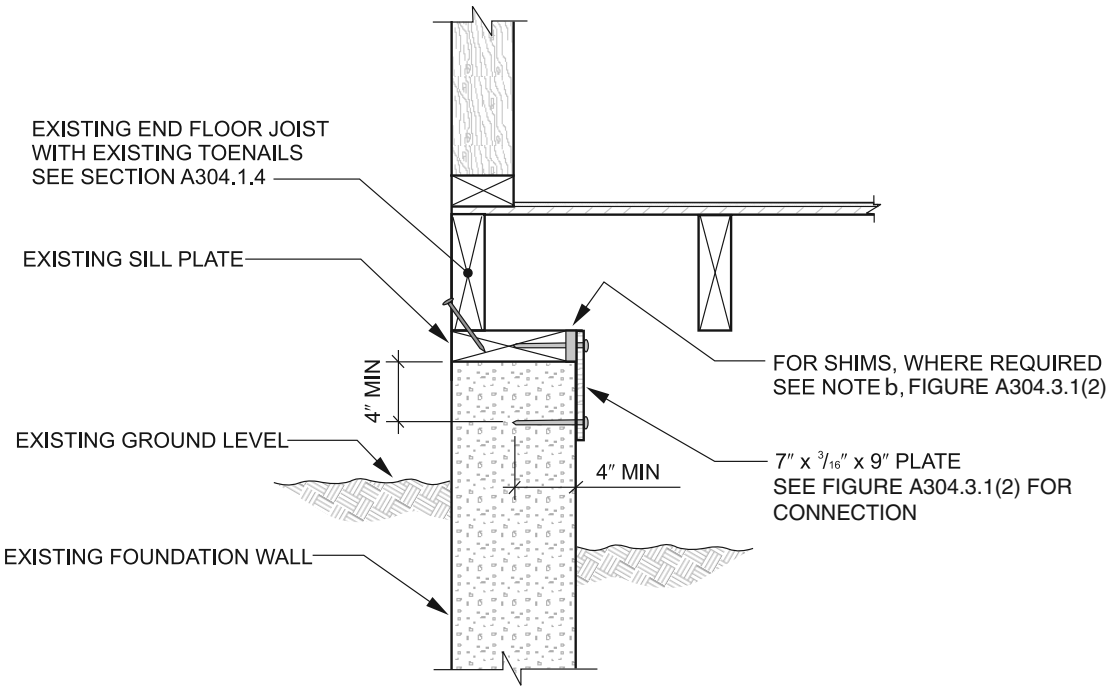


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. If shim space exceeds $1^1/_2$ inches, alternative details will be required.

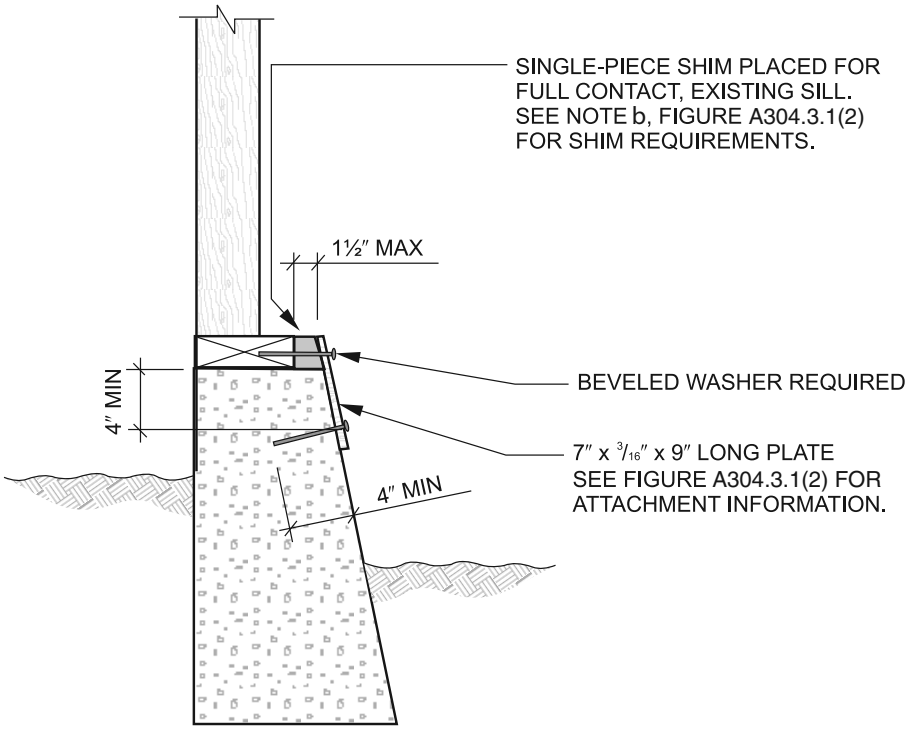
b. Where required, single piece shim shall be naturally durable wood or preservative-treated wood. If preservative-treated wood is used, it shall be isolated from the foundation system with a moisture barrier.

[BS] FIGURE A304.3.1(2)
ALTERNATIVE SILL PLATE ANCHORING IN EXISTING FOUNDATION—
WITHOUT CRIPPLE WALLS AND FLOOR FRAMING NOT PARALLEL TO FOUNDATIONS[a, b]



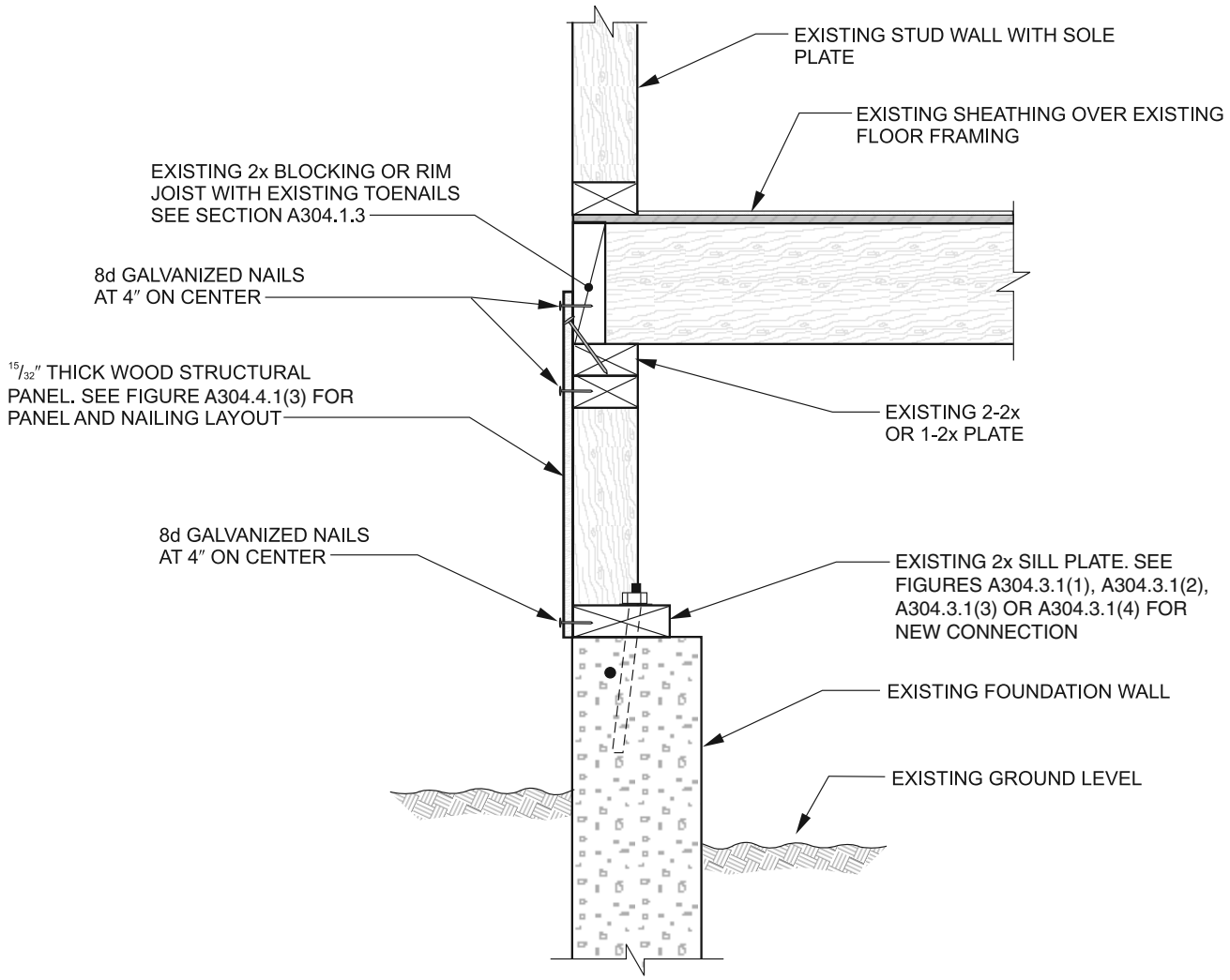
For SI: 1 inch = 25.4 mm.

[BS] FIGURE A304.3.1(3)
ALTERNATIVE SILL PLATE ANCHOR TO EXISTING FOUNDATION WITHOUT CRIPPLE WALL AND FLOOR FRAMING PARALLEL TO FOUNDATIONS



For SI: 1 inch = 25.4 mm.

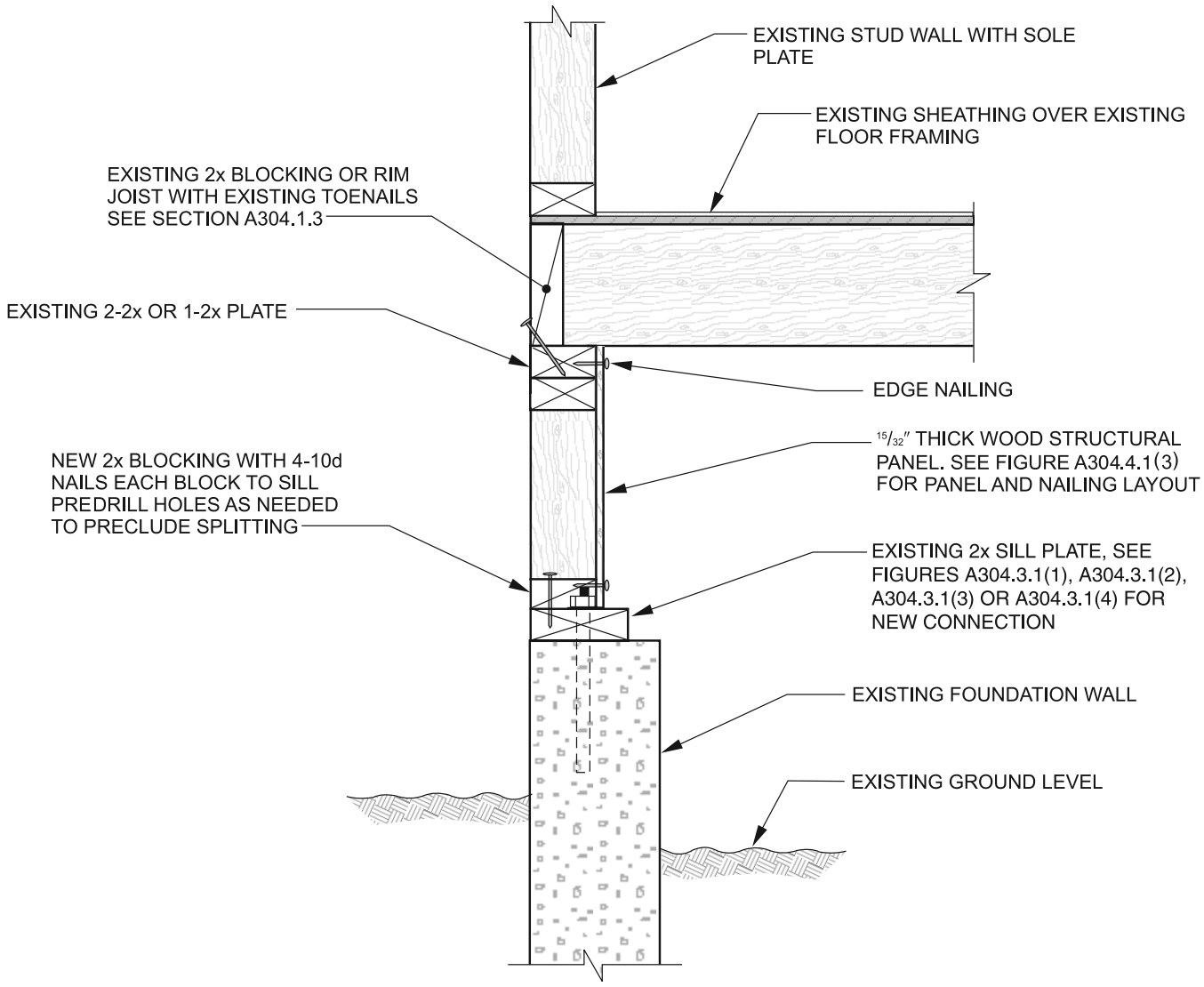
[BS] FIGURE A304.3.1(4)
SILL PLATE ANCHORING TO EXISTING FOUNDATION—ALTERNATIVE CONNECTION FOR BATTERED FOOTING



For SI: 1 inch = 25.4 mm.

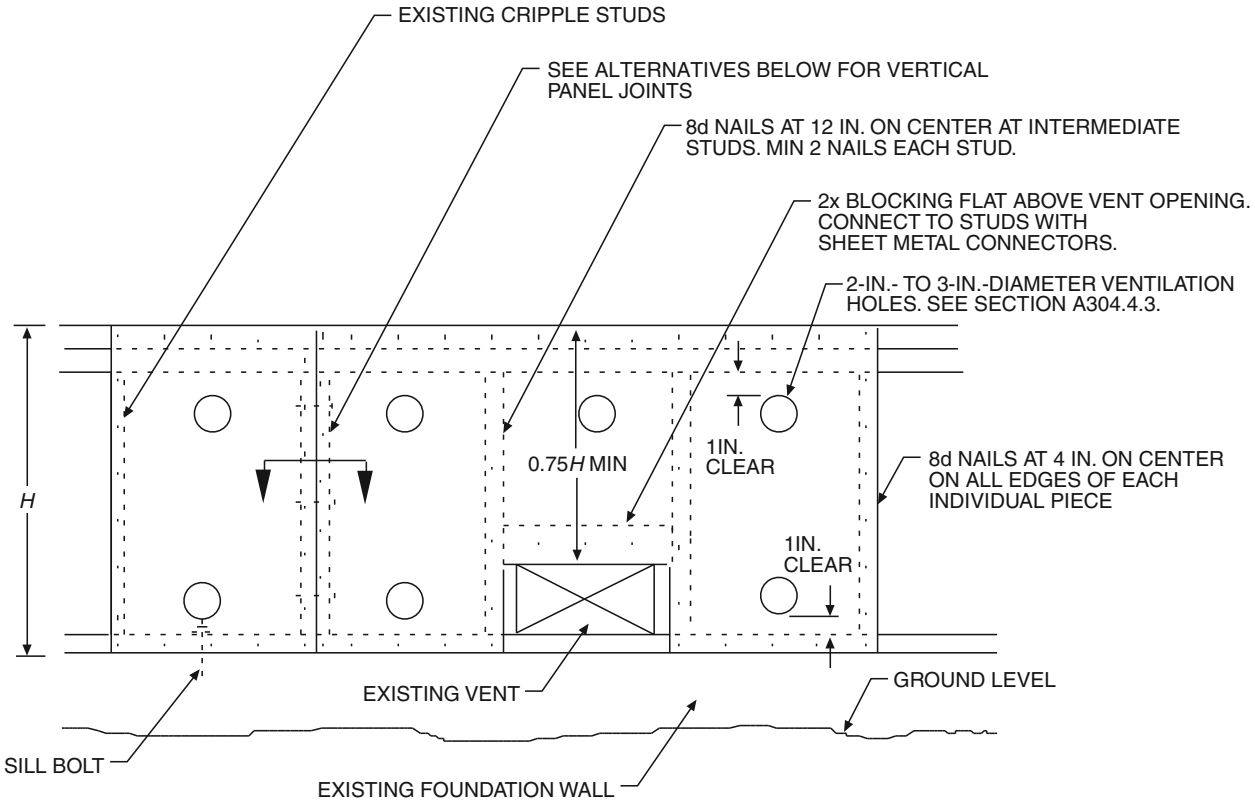
NOTE: See Figure A304.3.1(1) for sill plate anchoring.

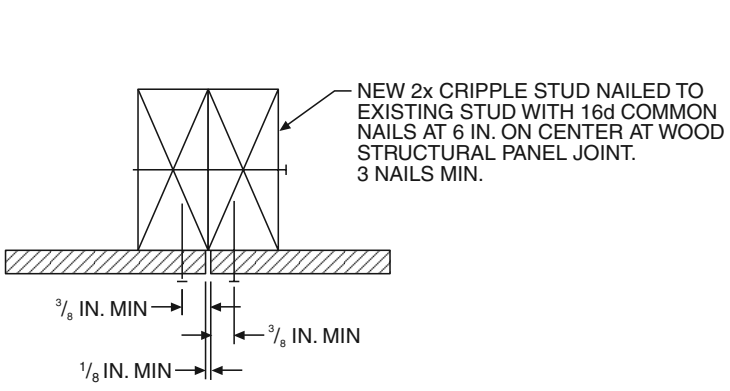
[BS] FIGURE A304.4.1(1)
CRIPPLE WALL BRACING WITH NEW WOOD STRUCTURAL PANEL ON EXTERIOR FACE OF CRIPPLE STUDS



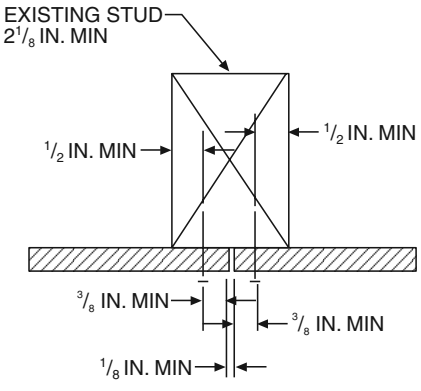
For SI: 1 inch = 25.4 mm.

[BS] FIGURE A304.4.1(2)
CRIPPLE WALL BRACING WITH WOOD STRUCTURAL PANEL ON INTERIOR FACE OF CRIPPLE STUDS





VERTICAL SPLICE AT DOUBLE STUD

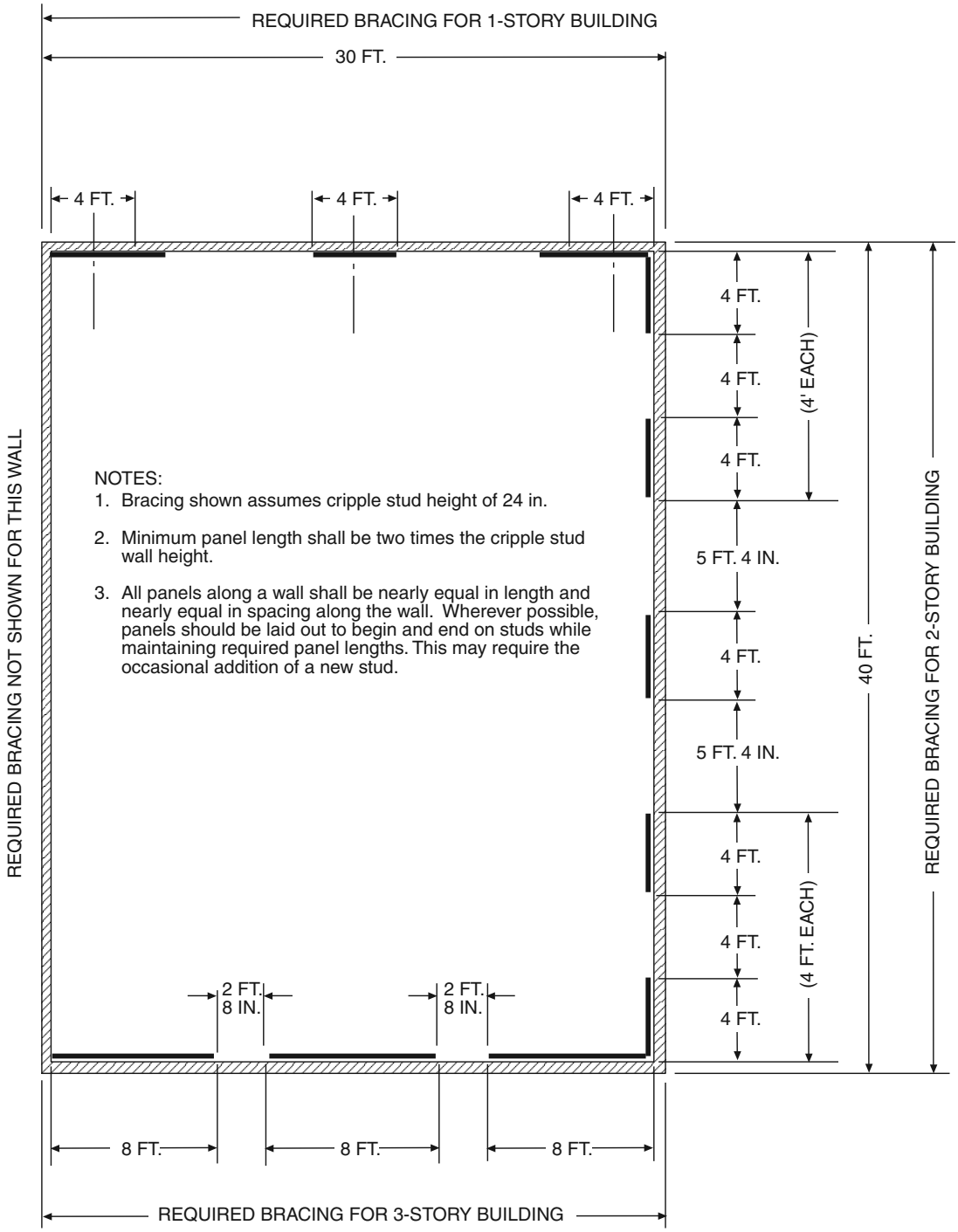


VERTICAL SPLICE AT SINGLE STUD

For SI: 1 inch = 25.4 mm.

[BS] FIGURE A304.4.1(3)
PARTIAL CRIPPLE STUD WALL ELEVATION

APPENDIX A



Bracing determination:
1-story building—each end and not less than 40% of wall length.[a]
Transverse wall—30 ft. × 0.40 = 12 ft. minimum panel length = 4 ft. 0 in.
2-story building—each end and not less than 50% of wall length.[a]
Longitudinal wall—40 ft. × 0.50 = 20 ft. 0 in. minimum of bracing.
3-story building—each end and not less than 80% of wall length.[a]
Transverse wall —30 ft. × 0.80 = 24 ft. 0 in. minimum of bracing.
[a]See Table A304.3.1 for buildings with both plaster walls and roofing exceeding 6 psf.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 42.88 N/m^2.

[BS] FIGURE A304.4.2
FLOOR PLAN-CRIPPLE WALL BRACING LAYOUT