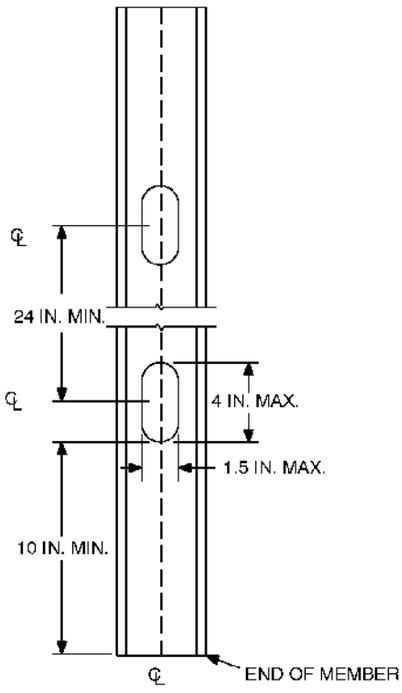
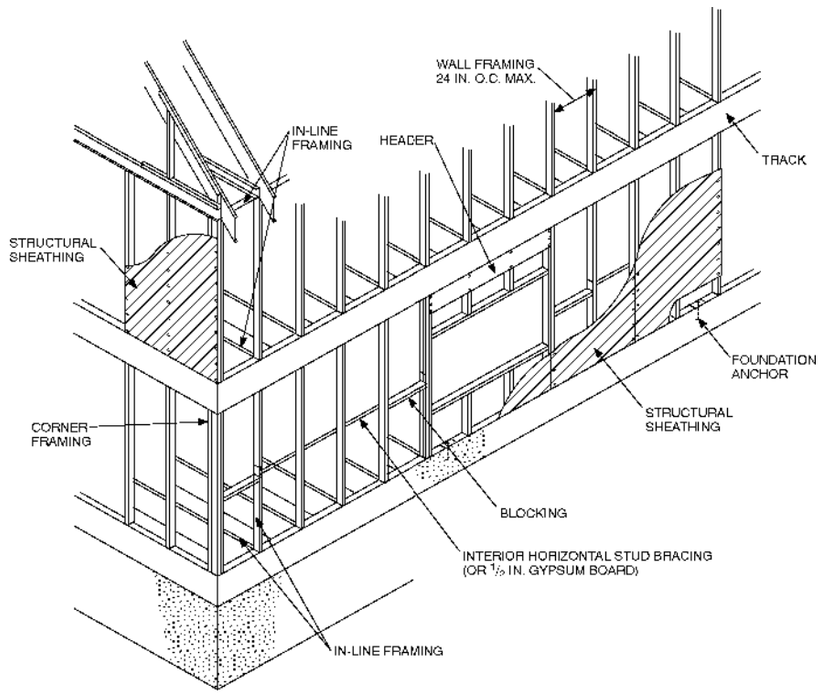
780 CMR FIGURE 5603.2(3)
WEB HOLES



For SI: 1 inch = 25.4 mm.

780 CMR FIGURE 5603.3
STEEL WALL CONSTRUCTION



For SI: 1 inch = 25.4 mm.

780 CMR TABLE 5603.3.1
WALL TO FOUNDATION OR FLOOR CONNECTION REQUIREMENTS[a,b,c]

FRAMING CONDITION	BASIC WIND SPEED (mph) AND EXPOSURE		
	85 A/B	85 C or less than 110 A/B	Less than 110 C
Wall bottom track to floor joist or track	1-No. 8 screw at 12" o.c.	1-No. 8 screw at 12"o.c.	2-No. 8 screw at 12" o.c.
Wall bottom track to wood sill per 780 CMR Figure 5603.3.1(2)	Steel plate spaced at 4' o.c., with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 3' o.c., with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 2' o.c., with 4-No. 8 screws and 4-10d or 6-8d common nails
Wall bottom track to foundation per 780 CMR Figure 5603.3.1(1)	½" minimum diameter anchor bolt at 6" o.c.	½" minimum diameter anchor bolt at 6" o.c.	½" minimum diameter anchor bolt at 4" o.c.
Wind uplift connector capacity for 16-inch stud spacing[c]	N/R	N/R	65 lbs.
Wind uplift connector capacity for 24-inch stud spacingc	N/R	N/R	100 lbs.

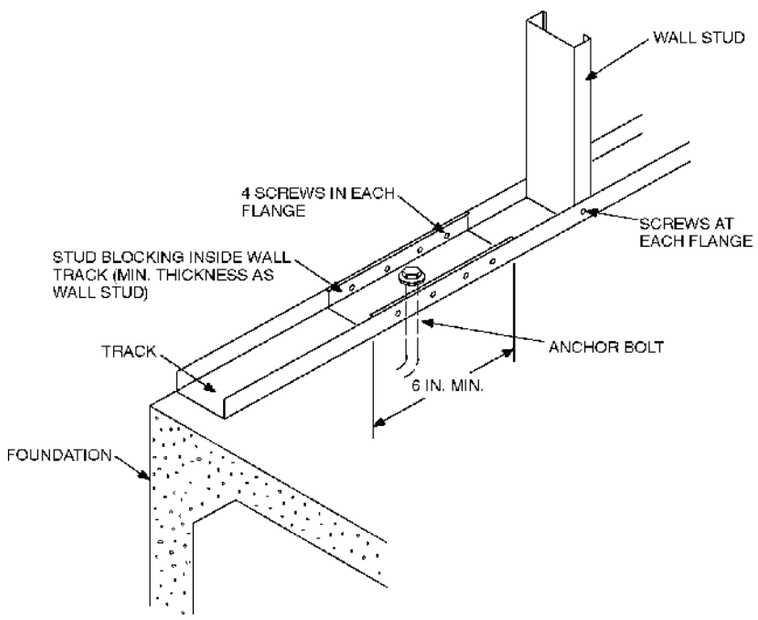
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 1.609 km/hr, 1 pound = 4.4 N.

a. Anchor bolts shall be located not more than 12 inches from corners or the termination of bottom tracks (e.g., at door openings or corners). Bolts shall extend a minimum of seven inches into concrete or masonry.

b. All screw sizes shown are minimum.

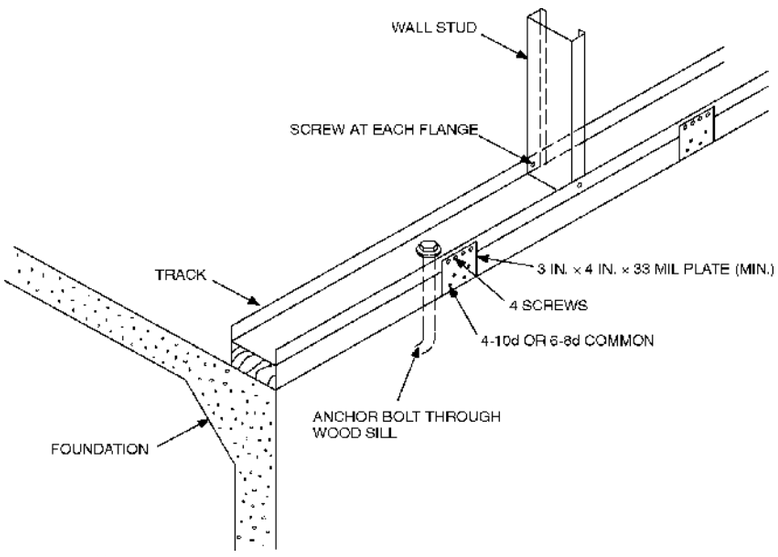
c. N/R = uplift connector not required. Uplift connectors are in addition to other connection requirements and shall be applied in accordance with 780 CMR 5603.8.

780 CMR FIGURE 5603.3.1(1)
WALL TO FOUNDATION CONNECTION



For SI: 1 inch = 25.4 mm.

780 CMR FIGURE 5603.3.1(2)
WALL TO WOOD SILL CONNECTION



For SI: 1 inch = 25.4 mm, 1 mil = 0.0254 mm.

780 CMR TABLE 5603.3.2(1)
WALL FASTENING SCHEDULE[a]

DESCRIPTION OF BUILDING ELEMENT	NUMBER AND SIZE OF FASTENERS[a]	SPACING OF FASTENERS
Floor joist to track of load-bearing wall	2-No. 8 screws	Each joist
Wall stud to top or bottom track	2-No. 8 screws	Each end of stud, one per flange
Structural sheathing to wall studs	No. 8 screw	6" o.c. on edges and 12" o.c. at intermediate supports
Roof framing to wall	Approved design or tie down in accordance with 780 CMR 5802.11	

For SI: 1 inch = 25.4 mm.
a. All screw sizes shown are minimum.

780 CMR TABLE 5603.3.2(2)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	43	43	33	33	43	43	33	43	43	43	43	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	54	43	43	54	54	43	43	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
130 mph	120 mph	350S162	16	33	33	43	43	33	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	68	54	54	68	68	54	54	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	33	43	33	33	43	43
—	130 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	54	43	43	43	54
			24	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a, Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

d. 68-mil-thick stud is allowed if wall is fully sheathed per 780CMR 5603.3.2.

780 CMR TABLE 5603.3.2(3)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	43	33	33	33	43
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	33	43	43	54
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
			24	43	43	43	54	43	43	54	54	54	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	54
110 mph	100 mph	350S162	16	33	33	33	33	33	33	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	68	54	54	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	43	43	43	43	43	43	43	43	43	54
120 mph	110 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
			24	54	54	54	68	54	68	68	68	68	68	68	68	68	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
130 mph	120 mph	350S162	16	43	43	43	54	43	54	54	54	54	54	54	54	54	54	54	54
			24	68	68	68	68	68	68	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	43	43	43	43	43	43	43	54	43	43	54	54	54	54	54	54
—	130 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	68	54	54	68	68
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	43
			24	43	43	54	54	54	54	54	54	54	54	54	54	54	54	54	54

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

d. 68-mil-thick stud is allowed used if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(4)
COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	43	43	33	33	43	43	33	43	43	43	43	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	43	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	43	33	33	43	43	33	33	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
130 mph	120 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	54	43	43	43	54
			24	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
—	130 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	43	54

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(5)
COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
Exp. A/B	Exp. C			20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	43	43	43	43	43	43	43	54	43	43	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	33	33	43	43
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	43	33	43	43	43	43	43	43	43
			24	43	54	54	54	54	54	54	54	54	54	54	54	54	54	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	43
110 mph	100 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	43	43	43	43	43	43	43	43	43	43	43	43	43	54
120 mph	110 mph	350S162	16	43	43	43	43	43	43	43	54	43	43	54	54	54	54	54	54
			24	68	68	68	68	68	68	68	68	68	68	68	(d)	68	68	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
130 mph	120 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	68	54	54	68	68
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	43	33	33	43	43	33	43	43	43
			24	43	43	54	54	54	54	54	54	54	54	54	54	54	54	54	54
—	130 mph	350S162	16	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	—	(d)	(d)	—	—	—	—	—	—
		550S162	16	33	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	68	54	54	68	68

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(6)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	43	33	33	43	43	33	33	43	43	33	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	54	43	43	43	54	43	43	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	43	33	33	43	43	33	33	43	43	33	33	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
120 mph	110 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
			24	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	43	43	33	33	43	43	33	43	43	43	43	43	43	43
130 mph	120 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	54	43	43	54	54	43	43	54	54
—	130 mph	350S162	16	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
			24	(d)	(d)	(d)	—	(d)	(d)	—	—	(d)	(d)	—	—	(d)	—	—	—
		550S162	16	33	33	33	43	33	33	43	43	33	33	43	43	33	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(7)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	43	33	33	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	68	54	54	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	54
100 mph	85 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
			24	54	54	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	43	43	43	43	43	43	43	43	43	43	43	43	43	54
110 mph	100 mph	350S162	16	43	43	43	43	43	43	54	54	43	54	54	54	54	54	54	54
			24	68	68	68	68	68	68	68	(d)	68	68	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
120 mph	110 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
			24	43	43	43	54	43	54	54	54	54	54	54	54	54	54	54	54
130 mph	120 mph	350S162	16	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)
			24	(d)	(d)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		550S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	68	54	68	68	68	68	68	68	68
—	130 mph	350S162	16	68	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
			24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		550S162	16	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
			24	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(8)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	43	33	33	43	43	33	33	43	43	33	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
130 mph	120 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	43	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
—	130 mph	350S162	16	33	33	33	33	33	33	33	43	33	33	43	43	33	33	43	43
			24	43	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(9)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	33	33	33	43	33	33	43	43	43	43	43	43	43	43	43	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	43	43	43	43	43	43	43	43	43	43	54	54	43	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	43	33	33	43	43	33	43	43	43
			24	43	43	43	54	43	54	54	54	54	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
130 mph	120 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	68	54	54	68	68	68	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	33	33	33	43	33	43	43	43	43	43	43	43	43	43	43	43
—	130 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
			24	54	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(10)
COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	33	43	33	33	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
130 mph	120 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
			24	43	43	54	54	43	54	54	54	54	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
—	130 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	68	54	54	54	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	33	33	43	43

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780CMR 5603.3.2.

780CMR TABLE 5603.3.2(11)
COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	43	33	43	43	43	43	43	43	43	43	43	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	43	33	33	33	43	43
			24	43	43	43	43	43	43	43	54	43	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
120 mph	110 mph	350S162	16	33	33	33	43	33	33	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	43
130 mph	120 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
			24	54	54	68	68	68	68	68	68	68	68	68	68	68	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
—	130 mph	350S162	16	43	43	43	54	43	43	54	54	54	54	54	54	54	54	54	54
			24	68	68	68	68	68	68	68	68	68	68	(d)	(d)	68	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780CMR TABLE 5603.3.2(12)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	43	33	33	33	43	33	33	43	43	33	33	43	43
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
110 mph	100 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
120 mph	110 mph	350S162	16	33	33	33	33	33	33	33	33	33	33	33	43	33	33	33	43
			24	43	43	54	54	43	43	54	54	43	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
130 mph	120 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	68	54	54	68	68	54	54	68	68	54	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	43	33	33	43	43	33	33	43	43	33	43	43	43
—	130 mph	350S162	16	43	43	54	54	43	43	54	54	43	54	54	54	54	54	54	54
			24	68	68	68	68	68	68	68	(d)	68	68	68	(d)	68	68	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

a. Deflection criteria: 1/240.
b. Building width is in the direction of horizontal framing members supported by the wall studs.
c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780 CMR 5603.3.2.

780 CMR TABLE 5603.3.2(13)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

WIND SPEED		MEMBER SIZE[c]	MEMBER SPACING (inches)	STUD THICKNESS (mils)[a,b]															
				Building width (feet)[d]															
				24				28				32				36			
Exp. A/B	Exp. C			Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)				Ground snow load (psf)			
				20	30	50	70	20	30	50	70	20	30	50	70	20	30	50	70
85 mph	—	350S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	43	43	43	43	43	43	43	43	43	43	54	54	43	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	33	43
100 mph	85 mph	350S162	16	33	33	33	33	33	33	33	43	33	33	43	43	43	43	43	43
			24	43	43	54	54	54	54	54	54	54	54	54	54	54	54	54	54
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	33	33	33	33	43	33	33	43	43
110 mph	100 mph	350S162	16	33	33	43	43	43	43	43	43	43	43	43	43	43	43	43	43
			24	54	54	54	54	54	54	54	54	54	54	68	68	54	68	68	68
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	33	33	33	33	33	33	33	43	33	43	43	43	43	43	43	43
120 mph	110 mph	350S162	16	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
			24	54	54	68	68	68	68	68	68	68	68	68	68	68	68	68	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
			24	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
130 mph	120 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
			24	68	68	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	43
			24	43	43	43	43	43	43	43	43	43	43	43	54	43	43	54	54
—	130 mph	350S162	16	54	54	54	54	54	54	54	54	54	54	68	68	54	68	68	68
			24	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
		550S162	16	33	33	33	33	33	33	43	43	33	43	43	43	43	43	43	43
			24	43	43	54	54	54	54	54	54	54	54	54	54	54	54	54	54

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 mile per hour = 1.609 km/h, 1 pound per square foot = 0.0479kN/m^2,
1 kilogram per square inch = 6.895 MPa.

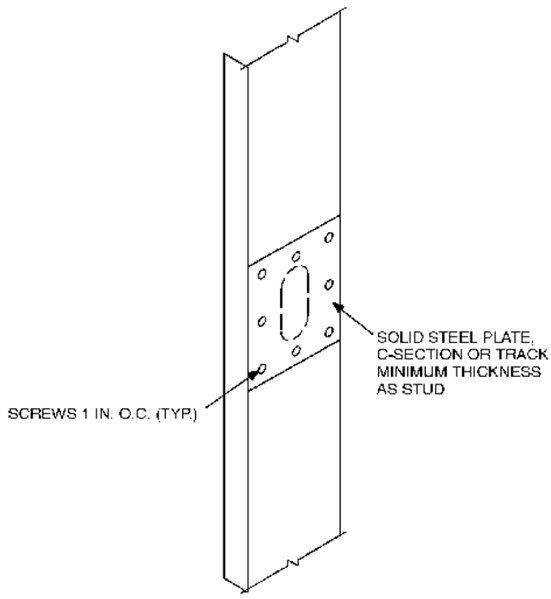
a. Deflection criteria: 1/240.

b. Building width is in the direction of horizontal framing members supported by the wall studs.

c. Design load assumptions:
Roof dead load is 12 psf.
Attic live load is 10 psf.

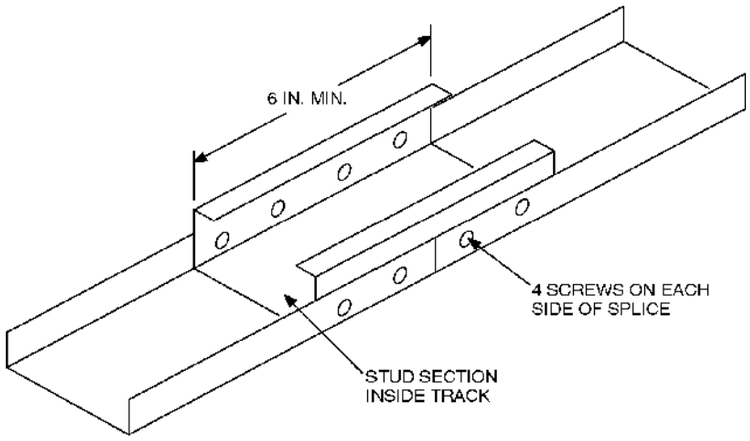
d. 68-mil-thick stud is allowed if wall is fully sheathed per 780CMR 5603.3.2.

780 CMR FIGURE 5603.3.5
HOLE PATCH



For SI: 1 inch = 25.4 mm.

780 CMR FIGURE 5603.3.6
TRACK SPLICE



For SI: 1 inch = 25.4 mm.