With structural framing

				5psf	
	Member	Spacing (in) o.c.	L/120	L/240	L/360
		12	17' 6"	13' 10"	12' 1"
	250S137-33	16	15' 10"	12' 7"	11' 0"
		24	13' 10"	11' 0"	9' 7"
		12	19' 0"	15' 1"	13' 2"
	250S137-43	16	17' 3"	13' 8"	11' 11"
	2000101 10	24	15' 1"	11' 11"	10' 5"
		12	20' 3"	16' 1"	14' 1"
	250S137-54	16	18' 5"	14' 8"	12' 9"
	2000101 01	24	16' 1"	12' 9"	11' 2"
		12	21' 8"	17' 2"	15' 0"
	250S137-68	16	19' 8"	15' 7"	13' 8"
•••	2000107 00	24	17' 2"	13' 8"	11' 11"
		12	23' 8"	18' 10"	16' 5"
	250S137-97	16	21' 6"	17' 1"	14' 11"
	2000107 07	24	18' 10"	14' 11"	13' 0"
Structural Framing		<u>L</u> T	10 10	17 11	10 0
2		12	18' 4"	14' 7"	12' 9"
	250S162-33	16	16' 8"	13' 3"	11' 7"
N	2000102 00	24	14' 7"	11' 7"	10' 1"
711-7		12	19' 11"	15' 10"	13' 10"
	250S162-43	16	18' 1"	14' 4"	12' 7"
	2000102 10	24	15' 10"	12' 7"	11' 0"
-		12	21' 4"	16' 11"	14' 9"
	250S162-54	16	19' 4"	15' 5"	13' 5"
	2000102 04	24	16' 11"	13' 5"	11'9"
		12	22' 9"	18' 1"	15' 9"
	250S162-68	16	20' 8"	16' 5"	14' 4"
	2000102-00	24	18' 1"	10 3	12' 6"
		12	25' 0"	19' 10"	12 0
	250S162-97	12	23 0	18' 0"	15' 9"
	2000102-01	24	19' 10"	15' 9"	13' 9"
		∠4	19 10	15.8	13.9

	Member	Section (in)		5psf		
		Spacing (in) o.c.	L/120	L/240	L/360	
		12	19' 4"	15' 4"	13' 5"	
	250S200-33	16	17' 7"	13' 11"	12' 2"	
		24	15' 4"	12' 2"	10' 8"	
		12	21' 1"	16' 9"	14' 8"	
	250S200-43	16	19' 2"	15' 3"	13' 4"	
		24	16' 9"	13' 4"	11' 7"	
		12	22' 7"	17' 11"	15' 8"	
	250S200-54	16	20' 6"	16' 4"	14' 3"	
		24	17' 11"	14' 3"	12' 5"	
	250S200-68	12	24' 2"	19' 2"	16' 9"	
		16	21' 11"	17' 5"	15' 3"	
		24	19' 2"	15' 3"	13' 4"	
	250S200-97	12	26' 7"	21' 1"	18' 5"	
		16	24' 2"	19' 2"	16' 9"	
		24	21' 1"	16' 9"	14' 8"	
5						
		12	22' 4"	17' 9"	15' 6"	
	250S250-43	16	20' 4"	16' 1"	14' 1"	
·		24	17' 9"	14' 1"	12' 4"	
		12	23' 11"	19' 0"	16' 7"	
	250S250-54	16	21' 9"	17' 3"	15' 1"	
		24	19' 0"	15' 1"	13' 2"	
		12	25' 8"	20' 4"	17' 9"	
	250S250-68	16	23' 4"	18' 6"	16' 2"	
		24	20' 4"	16' 2"	14' 1"	
		12	28' 4"	22' 6"	19' 8"	
	250S250-97	16	25' 9"	20' 5"	17' 10"	
		24	22' 6"	17' 10"	15' 7"	

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- 3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

With structural framing

Member	Second (in) a c	5psf			
Intemper	Spacing (in) o.c.	L/120	L/240	L/360	
	12	22' 7"	17' 11"	15' 8"	
350S137-33	16	20' 7"	16' 4"	14' 3"	
	24	17' 2"	14' 3"	12' 5"	
	12	24' 7"	19' 6"	17' 1"	
350S137-43	16	22' 4"	17' 9"	15' 6"	
	24	19' 6"	15' 6"	13' 6"	
	12	26' 4"	20' 11"	18' 3"	
350S137-54	16	23' 11"	19' 0"	16' 7"	
	24	20' 11"	16' 7"	14' 6"	
	12	28' 2"	22' 4"	19' 6"	
350S137-68	16	25' 7"	20' 3"	17' 9"	
	24	22' 4"	17' 9"	15' 6"	
	12	30' 11"	24' 7"	21' 5"	
350S137-97	16	28' 1"	22' 4"	19' 6"	
	24	24' 7"	19' 6"	17' 0"	
350S137-97					
	12	23' 9"	18' 10"	16' 5"	
350S162-33	16	21' 7"	17' 1"	14' 11"	
	24	18' 5"	14' 11"	13' 1"	
	12	25' 10"	20' 6"	17' 11"	
350S162-43	16	23' 5"	18' 7"	16' 3"	
	24	20' 6"	16' 3"	14' 2"	
	12	27' 8"	21' 11"	19' 2"	
350S162-54	16	25' 1"	19' 11"	17' 5"	
	24	21' 11"	17' 5"	15' 2"	
	12	29' 7"	23' 6"	20' 6"	
350S162-68	16	26' 10"	21' 4"	18' 7"	
	24	23' 6"	18' 7"	16' 3"	
	12	32' 7"	25' 10"	22' 7"	
350S162-97	16	29' 7"	23' 6"	20' 6"	
	24	25' 10"	20' 6"	17' 11"	

	A.4. 1	S : (1)		5psf		
	Member	Spacing (in) o.c.	L/120	L/240	L/360	
		12	24' 11"	19' 10"	17' 4"	
	350S200-33	16	22' 8"	18' 0"	15' 9"	
		24	19' 4"	15' 9"	13' 9"	
		12	27' 3"	21' 8"	18' 11"	
	350S200-43	16	24' 9"	19' 8"	17' 2"	
		24	21' 8"	17' 2"	15' 0"	
		12	29' 3"	23' 2"	20' 3"	
	350S200-54	16	26' 6"	21' 1"	18' 5"	
		24	23' 2"	18' 5"	16' 1"	
	350S200-68	12	31' 3"	24' 10"	21' 8"	
		16	28' 5"	22' 7"	19' 8"	
		24	24' 10"	19' 8"	17' 3"	
	350S200-97	12	34' 7"	27' 5"	24' 0"	
		16	31' 5"	24' 11"	21' 9"	
		24	27' 5"	21' 9"	19' 0"	
		12	28' 9"	22' 10"	19' 11"	
	350S250-43	16	26' 1"	20' 9"	18' 1"	
	0000200 40	24	22' 10"	18' 1"	15' 10"	
		12	30' 9"	24' 5"	21' 4"	
	350S250-54	16	27' 11"	22' 2"	19' 4"	
	0000200 01	24	24' 5"	19' 4"	16' 11"	
		12	33' 1"	26' 3"	22' 11"	
	350S250-68	16	30' 0"	23' 10"	20' 10"	
		24	26' 3"	20' 10"	18' 2"	
		12	36' 7"	29' 1"	25' 5"	
	350S250-97	16	33' 3"	26' 5"	23' 1"	
		24	29' 1"	23' 1"	20' 2"	

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- **3** Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

clarkdietrich.com

ALLOWABLE WALL HEIGHTS

With structural framing

			5psf		
	Member	Spacing (in) o.c.	L/120	L/240	L/360
		12	23' 3"	18' 5"	16' 1"
	362S137-33	16	21' 1"	16' 9"	14' 8"
		24	17' 6"	14' 8"	12' 10"
		12	25' 3"	20' 1"	17' 6"
	362S137-43	16	23' 0"	18' 3"	15' 11"
		24	20' 1"	15' 11"	13' 11"
		12	27' 1"	21' 6"	18' 9"
	362S137-54	16	24' 7"	19' 6"	17' 1"
		24	21' 6"	17' 1"	14' 11"
		12	28' 11"	22' 11"	20' 1"
	362S137-68	16	26' 3"	20' 10"	18' 3"
e E		24	22' 11"	18' 3"	15' 11"
<u> </u>		12	31' 10"	25' 3"	22' 1"
Ľ.	362S137-97	16	28' 11"	22' 11"	20' 1"
Structural Framing		24	25' 3"	20' 1"	17' 6"
t.					
ž		12	24' 4"	19' 4"	16' 11"
Š	362S162-33	16	22' 2"	17' 7"	15' 4"
8		24	18' 9"	15' 4"	13' 5"
3-5/8"		12	26' 6"	21' 0"	18' 5"
	362S162-43	16	24' 1"	19' 1"	16' 8"
		24	21' 0"	16' 8"	14' 7"
		12	28' 5"	22' 6"	19' 8"
	362S162-54	16	25' 10"	20' 6"	17' 11"
		24	22' 6"	17' 11"	15' 7"
		12	30' 5"	24' 1"	21' 1"
	362S162-68	16	27' 7"	21' 11"	19' 2"
		24	24' 1"	19' 2"	16' 9"
		12	33' 6"	26' 7"	23' 3"
	362S162-97	16	30' 5"	24' 2"	21' 1"
		24	26' 7"	21' 1"	18' 5"

	Member	5		5psf			
		Spacing (in) o.c.	L/120	L/240	L/360		
		12	25' 8"	20' 4"	17' 9"		
	362S200-33	16	23' 3"	18' 6"	16' 2"		
		24	19' 8"	16' 2"	14' 1"		
		12	28' 0"	22' 3"	19' 5"		
	362S200-43	16	25' 5"	20' 2"	17' 8"		
		24	22' 3"	17' 8"	15' 5"		
		12	30' 0"	23' 10"	20' 10"		
	362S200-54	16	27' 3"	21' 8"	18' 11"		
		24	23' 10"	18' 11"	16' 6"		
0		12	32' 2"	25' 6"	22' 3"		
	362S200-68	16	29' 2"	23' 2"	20' 3"		
		24	25' 6"	20' 3"	17' 8"		
	362S200-97	12	35' 6"	28' 3"	24' 8"		
		16	32' 3"	25' 8"	22' 5"		
		24	28' 3"	22' 5"	19' 7"		
		12	29' 6"	23' 5"	20' 6"		
	362S250-43	16	26' 10"	21' 3"	18' 7"		
		24	23' 5"	18' 7"	16' 3"		
		12	31' 7"	25' 1"	21' 11"		
	362S250-54	16	28' 8"	22' 9"	19' 11"		
		24	25' 1"	19' 11"	17' 4"		
		12	33' 11"	26' 11"	23' 6"		
	362S250-68	16	30' 10"	24' 6"	21' 5"		
		24	26' 11"	21' 5"	18' 8"		
		12	37' 7"	29' 10"	26' 1"		
	362S250-97	16	34' 2"	27' 1"	23' 8"		
		24	29' 10"	23' 8"	20' 8"		

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- 3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

With structural framing

	lember	Second and Contract	5psf		
IV	lember	Spacing (in) o.c.	L/120	L/240	L/360
		12	25' 1"	19' 11"	17' 5"
400	400S137-33	16	22' 7"	18' 1"	15' 10"
		24	18' 6"	15' 10"	13' 10"
		12	27' 4"	21' 8"	18' 11"
400	S137-43	16	24' 10"	19' 8"	17' 2"
		24	21' 8"	17' 2"	15' 0"
		12	29' 3"	23' 2"	20' 3"
400	S137-54	16	26' 7"	21' 1"	18' 5"
		24	23' 2"	18' 5"	16' 1"
		12	31' 3"	24' 10"	21' 8"
400	S137-68	16	28' 5"	22' 7"	19' 8"
		24	24' 10"	19' 8"	17' 2"
		12	34' 5"	27' 4"	23' 11"
400	S137-97	16	31' 3"	24' 10"	21' 8"
		24	27' 4"	21' 8"	18' 11"
		· · · · · ·			
		12	26' 3"	20' 10"	18' 3"
400	S162-33	16	23' 11"	18' 11"	16' 7"
		24	19' 10"	16' 7"	14' 6"
		12	28' 7"	22' 8"	19' 10"
400	S162-43	16	26' 0"	20' 7"	18' 0"
		24	22' 8"	18' 0"	15' 9"
		12	30' 8"	24' 4"	21' 3"
400	S162-54	16	27' 10"	22' 1"	19' 4"
		24	24' 4"	19' 4"	16' 10"
		12	32' 10"	26' 0"	22' 9"
400	S162-68	16	29' 10"	23' 8"	20' 8"
		24	26' 0"	20' 8"	18' 1"
		12	36' 3"	28' 9"	25' 1"
400	S162-97	16	32' 11"	26' 1"	22' 10"
		24	28' 9"	22' 10"	19' 11"

	Member	5		5psf	
		Spacing (in) o.c.	L/120	L/240	L/360
		12	27' 8"	21' 11"	19' 2"
	400S200-33	16	25' 1"	19' 11"	17' 5"
		24	20' 10"	17' 5"	15' 2"
		12	30' 2"	23' 11"	20' 11"
	400S200-43	16	27' 5"	21' 9"	19' 0"
		24	23' 11"	19' 0"	16' 7"
		12	32' 4"	25' 8"	22' 5"
	400S200-54	16	29' 5"	23' 4"	20' 5"
		24	25' 8"	20' 5"	17' 10"
	400S200-68	12	34' 8"	27' 6"	24' 0"
o l		16	31' 6"	25' 0"	21' 10"
		24	27' 6"	21' 10"	19' 1"
	400S200-97	12	38' 5"	30' 6"	26' 7"
		16	34' 10"	27' 8"	24' 2"
5		24	30' 6"	24' 2"	21' 1"
5		12	31' 9"	25' 3"	22' 0"
	400S250-43	16	28' 10"	22' 11"	20' 0"
		24	25' 3"	20' 0"	17' 6"
		12	34' 0"	27' 0"	23' 7"
	400S250-54	16	30' 10"	24' 6"	21' 5"
		24	27' 0"	21' 5"	18' 8"
		12	36' 7"	29' 0"	25' 4"
	400S250-68	16	33' 3"	26' 4"	23' 0"
		24	29' 0"	23' 0"	20' 1"
		12	40' 7"	32' 2"	28' 1"
	400S250-97	16	36' 10"	29' 3"	25' 7"
		24	32' 2"	25' 7"	22' 4"

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- 3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

clarkdietrich.com

ALLOWABLE WALL HEIGHTS

With structural framing

Member 550S137-33	Spacing (in) o.c.	L/120	5psf L/240	L/360
	12		L/240	1/360
550S137-33				
550S137-33		31' 7"	25' 7"	22' 5"
	16	27' 4"	23' 3"	20' 4"
	24	22' 4"	20' 4"	17' 9"
	12	35' 2"	27' 11"	24' 4"
550S137-43	16	31' 11"	25' 4"	22' 2"
	24	26' 9"	22' 2"	19' 4"
	12	37' 8"	29' 11"	26' 1"
550S137-54	16	34' 3"	27' 2"	23' 9"
	24	29' 11"	23' 9"	20' 9"
	12	40' 4"	32' 0"	28' 0"
550S137-68	16	36' 8"	29' 1"	25' 5"
	24	32' 0"	25' 5"	22' 2"
	12	44' 7"	35' 5"	30' 11"
550S137-97	16	40' 6"	32' 2"	28' 1"
	24	35' 5"	28' 1"	24' 6"
				-
	12	33' 8"	26' 9"	23' 4"
550S162-33	16	29' 5"	24' 4"	21' 3"
	24	24' 0"	21' 3"	18' 6"
	12	36' 8"		25' 5"
550S162-43	16	33' 4"	26' 5"	23' 1"
	24	29' 1"		20' 2"
	12	39' 4"	31' 3"	27' 3"
550S162-54	16	35' 9"	28' 5"	24' 9"
	24	31'3"		21' 8"
				29' 3"
550\$162-68				26' 7"
				23' 3"
				32' 5"
550\$162-97				29' 5"
0000102 01				25' 8"
	550S137-54 550S137-68 550S137-97	550S137-43 16 24 12 550S137-54 16 24 12 550S137-68 16 24 12 550S137-68 16 24 12 550S137-68 16 24 12 550S137-97 16 24 12 550S162-33 16 24 12 550S162-43 16 24 12 550S162-54 16 24 12 550S162-68 16 24 12	$\begin{array}{c ccccc} 550S137-43 & 16 & 31' 11'' \\ \hline 24 & 26' 9'' \\ \hline 24 & 26' 9'' \\ \hline 12 & 37' 8'' \\ \hline 550S137-54 & 16 & 34' 3'' \\ \hline 12 & 40' 4'' \\ \hline 550S137-68 & 16 & 36' 8'' \\ \hline 24 & 32' 0'' \\ \hline 12 & 44' 7'' \\ \hline 550S137-97 & 16 & 40' 6'' \\ \hline 24 & 35' 5'' \\ \hline \\ 550S162-33 & 16 & 29' 5'' \\ \hline 24 & 24' 0'' \\ \hline \\ 550S162-43 & 16 & 33' 4'' \\ \hline \\ 550S162-54 & 16 & 33' 4'' \\ \hline \\ 550S162-54 & 16 & 35' 9'' \\ \hline \\ 12 & 39' 4'' \\ \hline \\ 550S162-68 & 16 & 38' 4'' \\ \hline \\ 550S162-97 & 16 & 42' 5'' \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

	Manakan	Service (in)		5psf			
	Member	Spacing (in) o.c.	L/120	L/240	L/360		
		12	35' 4"	28' 0"	24' 6"		
	550S200-33	16	31' 4"	25' 5"	22' 3"		
		24	25' 7"	22' 3"	19' 5"		
		12	38' 7"	30' 7"	26' 9"		
	550S200-43	16	35' 1"	27' 10"	24' 4"		
		24	30' 6"	24' 4"	21' 3"		
		12	41' 5"	32' 10"	28' 8"		
	550S200-54	16	37' 7"	29' 10"	26' 1"		
		24	32' 10"	26' 1"	22' 9"		
	550S200-68	12	44' 5"	35' 3"	30' 10"		
Ē		16	40' 4"	32' 0"	28' 0"		
E		24	35' 3"	28' 0"	24' 5"		
-	550S200-97	12	49' 3"	39' 1"	34' 2"		
2		16	44' 9"	35' 6"	31' 1"		
Structural Framing		24	39' 1"	31' 1"	27' 1"		
5							
7/1-6		12	40' 5"	32' 1"	28' 1"		
2	550S250-43	16	36' 9"	29' 2"	25' 6"		
n		24	31' 4"	25' 6"	22' 3"		
		12	43' 3"	34' 4"	30' 0"		
	550S250-54	16	39' 3"	31' 2"	27' 3"		
		24	34' 4"	27' 3"	23' 10"		
		12	46' 7"	37' 0"	32' 4"		
	550S250-68	16	42' 4"	33' 7"	29' 4"		
		24	37' 0"	29' 4"	25' 8"		
		12	51' 10"	41' 2"	35' 11"		
	550S250-97	16	47' 1"	37' 4"	32' 8"		
		24	41' 2"	32' 8"	28' 6"		

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- 3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Complies with AISI S100-16 (2020) w/S2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

With structural framing

				-	
	Member	Spacing (in) o.c.	5psf		
	Member	Spacing (iii) o.c.	L/120	L/240	L/360
		12	33' 1"	27' 3"	23' 10"
	600S137-33	16	28' 7"	24' 9"	21' 8"
		24	23' 4"	21' 8"	18' 11"
		12	37' 8"	29' 11"	26' 2"
	600S137-43	16	34' 3"	27' 2"	23' 9"
		24	28' 1"	23' 9"	20' 9"
		12	40' 5"	32' 1"	28' 0"
	600S137-54	16	36' 9"	29' 2"	25' 6"
		24	32' 1"	25' 6"	22' 3"
		12	43' 4"	34' 4"	30' 0"
	600S137-68	16	39' 4"	31' 3"	27' 3"
		24	34' 4"	27' 3"	23' 10"
•		12	47' 11"	38' 0"	33' 2"
	600S137-97	16	43' 6"	34' 6"	30' 2"
		24	38' 0"	30' 2"	26' 4"
		12	35' 6"	28' 8"	25' 0"
	600S162-33	16	30' 9"	26' 0"	22' 9"
		24	25' 2"	22' 9"	19' 10"
		12	39' 4"	31' 2"	27' 3"
	600S162-43	16	35' 9"	28' 4"	24' 9"
		24	31' 1"	24' 9"	21' 8"
		12	42' 2"	33' 6"	29' 3"
	600S162-54	16	38' 4"	30' 5"	26' 7"
		24	33' 6"	26' 7"	23' 3"
		12	45' 3"	35' 11"	31' 4"
	600S162-68	16	41' 1"	32' 7"	28' 6"
		24	35' 11"	28' 6"	24' 11"
		12	50' 1"	39' 9"	34' 9"
	600S162-97	16	45' 6"	36' 2"	31' 7"
		24	39' 9"	31' 7"	27' 7"

	A4 1	S : (1)		5psf		
	Member	Spacing (in) o.c.	L/120	L/240	L/360	
		12	37' 9"	30' 0"	26' 2"	
	600S200-33	16	32' 10"	27' 3"	23' 10"	
		24	26' 10"	23' 10"	20' 10"	
		12	41' 3"	32' 9"	28' 7"	
	600S200-43	16	37' 6"	29' 9"	26' 0"	
		24	32' 0"	26' 0"	22' 9"	
		12	44' 4"	35' 2"	30' 9"	
	600S200-54	16	40' 3"	32' 0"	27' 11"	
		24	35' 2"	27' 11"	24' 5"	
	600S200-68	12	47' 7"	37' 9"	33' 0"	
٥		16	43' 2"	34' 4"	29' 11"	
		24	37' 9"	29' 11"	26' 2"	
	600S200-97	12	52' 10"	41' 11"	36' 7"	
		16	48' 0"	38' 1"	33' 3"	
		24	41' 11"	33' 3"	29' 1"	
		12	43' 3"	34' 4"	30' 0"	
	600S250-43	16	39' 3"	31' 2"	27' 3"	
		24	32' 11"	27' 3"	23' 10"	
		12	46' 3"	36' 8"	32' 1"	
	600S250-54	16	42' 0"	33' 4"	29' 1"	
		24	36' 8"	29' 1"	25' 5"	
		12	49' 10"	39' 7"	34' 7"	
	600S250-68	16	45' 3"	35' 11"	31' 5"	
		24	39' 7"	31' 5"	27' 5"	
		12	55' 5"	44' 0"	38' 5"	
	600S250-97	16	50' 4"	40' 0"	34' 11"	
		24	44' 0"	34' 11"	30' 6"	

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- **3** Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.

clarkdietrich.com

ALLOWABLE WALL HEIGHTS

With structural framing

	Member		Spsf					
		Spacing (in) o.c.	L/120	L/240	L/360			
	800S137-33 ¹	12	37' 10"	34' 0"	29' 8"			
		16	32' 9"	30' 11"	27' 0"			
		24	26' 9"	26' 9"	23' 7"			
	800S137-43	12	45' 11"	37' 5"	32' 8"			
		16	39' 9"	34' 0"	29' 9"			
		24	32' 5"	29' 9"	25' 11"			
	800S137-54	12	50' 9"	40' 3"	35' 2"			
		16	46' 1"	36' 7"	31' 11"			
		24	40' 3"	31' 11"	27' 11"			
	800S137-68	12	54' 10"	43' 6"	38' 0"			
		16	49' 10"	39' 6"	34' 6"			
		24	43' 6"	34' 6"	30' 2"			
	800S137-97	12	60' 10"	48' 4"	42' 2"			
		16	55' 4"	43' 11"	38' 4"			
		24	48' 4"	38' 4"	33' 6"			
	800S162-331	12	41' 0"	35' 5"	30' 11"			
		16	35' 6"	32' 2"	28' 1"			
		24	29'0" e	28' 1"	24' 7"			
	800S162-43	12	49' 1"	38' 11"	34' 0"			
		16	42' 10"	35' 4"	30' 11"			
		24	35' 0"	30' 11"	27' 0"			
	800S162-54	12	52' 9"	41' 10"	36' 7"			
		16	47' 11"	38' 1"	33' 3"			
		24	41' 10"	33' 3"	29' 0"			
	800S162-68	12	57' 0"	45' 3"	39' 6"			
		16	51' 10"	41' 1"	35' 11"			
		24	45' 3"	35' 11"	31' 5"			
	800S162-97	12	63' 5"	50' 4"	43' 11"			
		16	57' 7"	45' 9"	39' 11"			
		24	50' 4"	39' 11"	34' 11"			

	Member	Spacing (in) o.c.	5psf					
			L/120	L/240	L/360			
	800S200-331	12	44' 0"	37' 9"	33' 0"			
		16	38' 1"	34' 3"	29' 11"			
		24	31' 1" e	29' 11" e	26' 2"			
	800S200-43	12	51' 10"	41' 1"	35' 11"			
		16	45' 10"	37' 4"	32' 8"			
		24	37' 5"	32' 8"	28' 6"			
	800S200-54	12	55' 8"	44' 2"	38' 7"			
		16	50' 7"	40' 2"	35' 1"			
		24	44' 2"	35' 1"	30' 8"			
	800S200-68	12	59' 9"	47' 5"	41' 5"			
e l		16	54' 4"	43' 1"	37' 8"			
		24	47' 5"	37' 8"	32' 11"			
	800S200-97	12	66' 6"	52' 9"	46' 1"			
		16	60' 5"	47' 11"	41' 11"			
		24	52' 9"	41' 11"	36' 7"			
	800S250-43	12	54' 0"	42' 11"	37' 6"			
		16	47' 0"	39' 0"	34' 0"			
		24	38' 4"	34' 0"	29' 9"			
	800S250-54	12	57' 10"	45' 11"	40' 1"			
		16	52' 7"	41' 8"	36' 5"			
		24	45' 11"	36' 5"	31' 10"			
	800S250-68	12	62' 4"	49' 6"	43' 3"			
		16	56' 8"	44' 11"	39' 3"			
		24	49' 6"	39' 3"	34' 4"			
	800S250-97	12	69' 6"	55' 2"	48' 2"			
		16	63' 2"	50' 1"	43' 9"			
		24	55' 2"	43' 9"	38' 3"			

Notes:

- 1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
- 2 A 1/3 stress increase is not used.
- 3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
- 4 Listed limiting heights are based on steel properties only.
- 5 End reactions must be checked for web crippling separately.
- 6 Web crippling check based on 1-inch end bearing. Where limiting heights are followed by "e", web stiffeners are required.
- 7 Allowable moment is the lesser of local and distortional buckling. Stud distortional buckling based on an assumed Kφ = 0.
- 8 Members marked with an 1 have h/t > 200, and thus require end stiffeners.
- 9 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A 1-1/2" by 4" knockout spaced no closer than 24" o.c. is assumed. (3/4" for 2-1/2" studs).
- 10 All values are based on Fy=33ksi for 33mil and 43mil Studs, and Fy=50ksi for 54mil, 68mil and 97mil Studs.
- 11 For deflection calculations, interior wall loads have been multiplied by 1.0 per AISI S240.

Pub. No. CD-STR-TechGuide 6/24

Complies with AISI \$100-16 (2020) w/\$2-20 • IBC 2024

The technical content of this literature is effective 06/01/24 and supersedes all previous information.