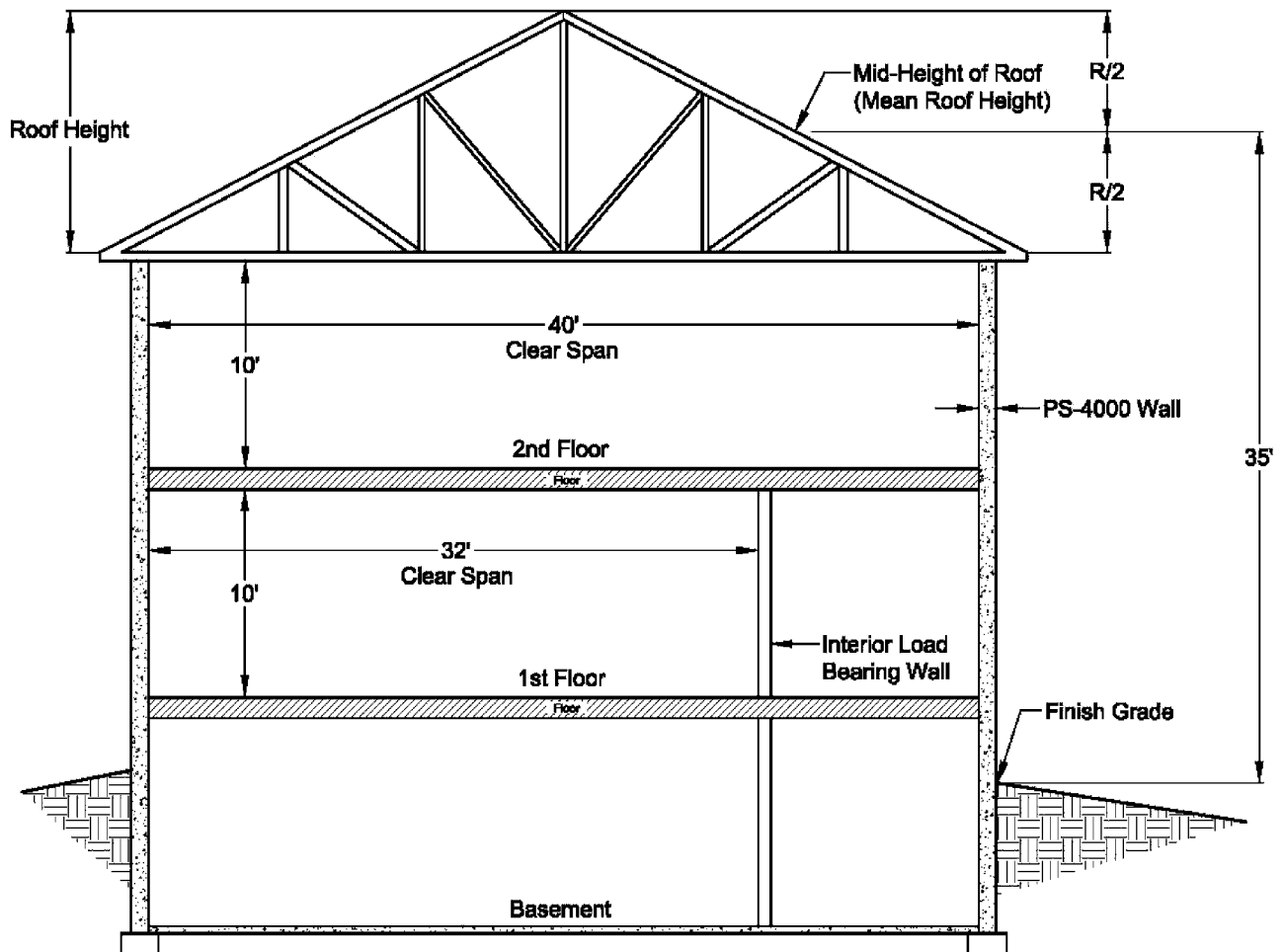


TABLE D-1
POLYSTEEL® RESIDENTIAL REBAR REQUIREMENTS
Applicability Limits

Given:

Grade 40 Rebar ($F_y = 40,000$ psi)

Concrete Strength, $f'_c = 2,500$ psi for Seismic Design Category A, B, and C



Building Section

TABLE D-1
POLYSTEEL® RESIDENTIAL REBAR REQUIREMENTS

Given:

Grade 40 Rebar ($F_y = 40,000$ psi)

Concrete Strength, $f'_c = 2,500$ psi for Seismic Design Category A, B, and C

FOR 1- STORY OR 2-STORY RESIDENTIAL BUILDINGS
(NOT FOR BASEMENTS)

Design Wind Speed (3-sec. gust)	Design Wind Pressure	6" PS-4600		8" PS-4800	
		Seismic Design Category A,B,C	Seismic Design Category D1 & D2	Seismic Design Category A,B,C	Seismic Design Category D1 & D2
85 mph	24 psf	#4 @ 48"		#4 @ 48"	
90 mph	27 psf	#4 @ 48"		#4 @ 48"	
100 mph	34 psf	#4 @ 48"		#4 @ 48"	
110 mph	41 psf	#4 @ 46"		#4 @ 48"	
120 mph	48 psf	#4 @ 38"	See Footnote 3	#4 @ 48"	See Footnote 3
130 mph	56 psf	#4 @ 32"	(below)	#4 @ 48"	(below)
140 mph	65 psf	#4 @ 28"		#4 @ 42"	
150 mph	75 psf	#4 @ 24"		#4 @ 36"	
200 mph	133 psf	#4 @ 12"		#4 @ 18"	
250 mph	207 psf	#5 @ 12"		#5 @ 18"	

NOTES:

1. This table is for load-bearing and non-load-bearing walls in a 1-story or 2-story residential structure. Do not use this table for basement walls.
2. Place vertical rebar as specified in the table with the rebar positioned in the center of the wall.
3. Rebar requirements for Seismic Design Category D1 and D2 do not permit the use of Grade 40 steel. Grade 60 rebar is required for Seismic Design Category D1 and D2. See Table D-2 for design requirements.
4. Minimum horizontal rebar requirements are in accordance with PCA Prescriptive Method, 2nd Edition, Section 4.1:
 - Seismic Design Category A, B, and C: #4 @ 48" o.c.
5. Table is applicable to one and two family detached dwellings.
6. Table assumes maximum roof clear span of 40 feet and floor clear span of 32 feet (see accompanying sketch of Applicability Limits)
7. Table assumes unsupported wall height does not exceed 10 feet from floor to ceiling.
8. Table assumes the following gravity design loads: (lbs/ft² = psf)
 - Roof Live (Snow) Load = 70 lbs/ft²
 - Attic Live Load = 20 lbs/ft²
 - Floor Live Load = 40 lbs/ft²
 - Roof and Floor Dead Load = 15 lbs/ft²
9. The design wind speed and corresponding design wind pressures are based on ASCE 7-98, "components and cladding" using a mean roof height of 35 feet and a tributary area of 10 ft², enclosed building classification, exposure "C" category, importance factor $I = 1.0$ and $K_d = 1.0$
10. Where openings occur, additional rebar is required around openings per ACI-318 design code requirements
11. This table is in accordance with ACI 318, Section 14.8 "Alternative Design of Slender Walls"

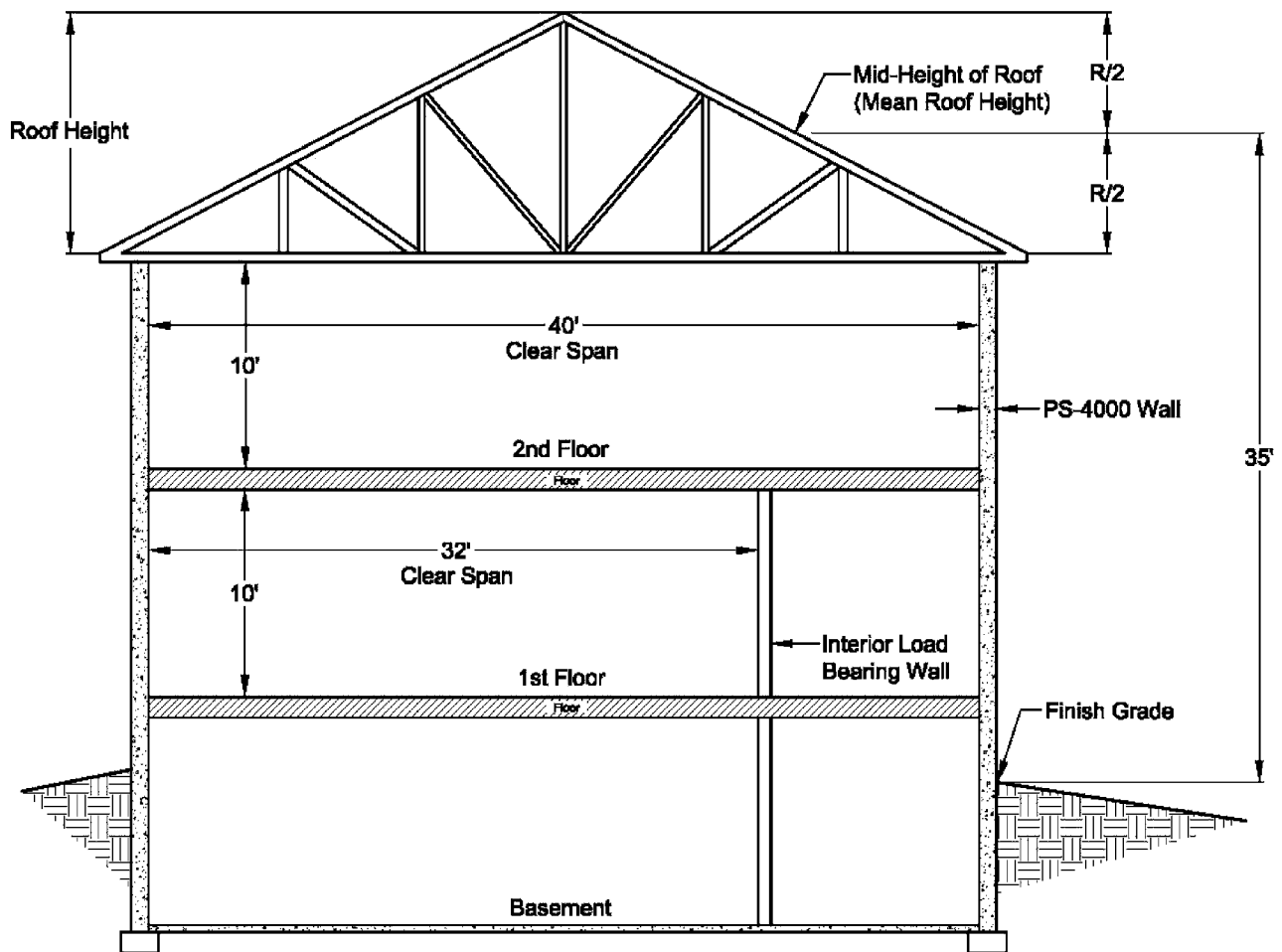
TABLE D-2
POLYSTEEL® RESIDENTIAL REBAR REQUIREMENTS
Applicability Limits

Given:

Grade 60 Rebar ($F_y = 60,000$ psi)

Concrete Strength, $f'_c = 2,500$ psi for Seismic Design Category A, B, and C

Concrete Strength, $f'_c = 3,000$ psi for Seismic Design Category D1 and D2



Building Section

TABLE D-2 POLYSTEEL® RESIDENTIAL REBAR REQUIREMENTS

Given:

Grade 60 Rebar ($F_y = 60,000$ psi)

Concrete Strength, $f'_c = 2,500$ psi for Seismic Design Category A, B, and C

Concrete Strength, $f'_c = 3,000$ psi for Seismic Design Category D1 and D2

FOR 1- STORY OR 2-STORY RESIDENTIAL BUILDINGS (NOT FOR BASEMENTS)

Design Wind Speed (3-sec. gust)	Design Wind Pressure	6" PS-4600		8" PS-4800	
		Seismic Design Category A,B,C	Seismic Design Category D1 & D2	Seismic Design Category A,B,C	Seismic Design Category D1 & D2
85 mph	24 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
90 mph	27 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
100 mph	34 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
110 mph	41 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
120 mph	48 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
130 mph	56 psf	#4 @ 48"	#4 @ 12"	#4 @ 48"	#4 @ 12"
140 mph	65 psf	#4 @ 42"	#4 @ 12"	#4 @ 48"	#4 @ 12"
150 mph	75 psf	#4 @ 36"	#4 @ 12"	#4 @ 48"	#4 @ 12"
200 mph	133 psf	#4 @ 18"	#4 @ 12"	#4 @ 28"	#4 @ 12"
250 mph	207 psf	#4 @ 12"	#4 @ 12"	#4 @ 16"	#4 @ 12"

NOTES:

1. This table is for load-bearing and non-load-bearing walls in a 1-story or 2-story residential structure. Do not use this table for basement walls.
2. Place vertical rebar as specified in the table with the rebar positioned in the center of the wall.
3. Vertical rebar requirements for Seismic Design Category D1 and D2 are in accordance with PCA Prescriptive Method, 2nd Edition, Section 4.1. Grade 60 rebar must comply with ASTM A 706 for low-alloy steel.
4. Minimum horizontal rebar requirements are in accordance with PCA Prescriptive Method, 2nd Edition, Section 4.1:
 - Seismic Design Category A, B, and C: #4 @ 48" o.c.
 - Seismic Design Category D1 and D2: #5 @ 18" o.c. or #4 @ 12" o.c.
5. Table is applicable to one and two family detached dwellings.
6. Table assumes maximum roof clear span of 40 feet and floor clear span of 32 feet (see accompanying sketch of Applicability Limits)
7. Table assumes unsupported wall height does not exceed 10 feet from floor to ceiling.
8. Table assumes the following gravity design loads: (lbs/ft² = psf)
 - Roof Live (Snow) Load = 70 lbs/ft²
 - Attic Live Load = 20 lbs/ft²
 - Floor Live Load = 40 lbs/ft²
 - Roof and Floor Dead Load = 15 lbs/ft²
9. The design wind speed and corresponding design wind pressures are based on ASCE 7-98, "components and cladding" using a mean roof height of 35 feet and a tributary area of 10 ft², enclosed building classification, exposure "C" category, importance factor $I = 1.0$ and $K_d = 1.0$
10. Where openings occur, additional rebar is required around openings per ACI-318 design code requirements
11. This table is in accordance with ACI 318, Section 14.8 "Alternative Design of Slender Walls"