

TABLE E-1
6" POLYSTEEL® PS•3600 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 0 inches (Roof on Top of Wall)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet			
		10'	12'	14'	16'
18.0	70	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.
20.6	75	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C.
23.4	80	#4 @24" O.C.	#4 @24" O.C."	#4 @24" O.C."	#4 @12" O.C.
26.4	85	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.
29.7	90	#4 @24" O.C.	#4 @24" O.C."	#5 @24" O.C.	#5 @12" O.C.
33.0	95	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C."	#5 @12" O.C.
36.6	100	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C.	Special Design Required
40.3	105	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.	Special Design Required
44.3	110	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.	Special Design Required

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table assumes a 10 psf roof dead load and a 30 psf roof live load.
3. This table is for roof spans up to 80 feet maximum.
4. Place #4 rebar horizontally at 32" o.c.
5. Place vertical rebar as detailed in the table above at 12" or 24" on center.
6. The reinforcement must be placed in the center of the wall.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. This table assumes the roof load is uniformly distributed along the wall.
10. Table is for Seismic Design Categories A, B, and C only.
11. These tables are based upon the PolySteel computer design program and ACI 318-99.
12. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.

TABLE E-2
6" POLYSTEEL® PS•3600 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 6 inches (Roof on Ledger)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet			
		10'	12'	14'	16'
18.0	70	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C.	#4 @12" O.C.
20.6	75	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.
23.4	80	#4 @24" O.C.	#4 @24" O.C."	#4 @12" O.C."	#5 @12" O.C.
26.4	85	#4 @24" O.C.	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.
29.7	90	#4 @24" O.C.	#5 @24" O.C."	#5 @12" O.C.	Special Design Required
33.0	95	#4 @24" O.C.	#4 @12" O.C.	#4 @12" O.C."	Special Design Required
36.6	100	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.	Special Design Required
40.3	105	#4 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.	Special Design Required
44.3	110	#4 @24" O.C.	#4 @12" O.C.	Special Design Required	Special Design Required

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table assumes a 10 psf roof dead load and a 30 psf roof live load.
3. This table is for roof spans up to 80 feet maximum.
4. Place #4 rebar horizontally at 32" o.c.
5. Place vertical rebar as detailed in the table above at 12" or 24" on center.
6. The reinforcement must be placed in the center of the wall.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. This table assumes the roof load is uniformly distributed along the wall.
10. Table is for Seismic Design Categories A, B, and C only.
11. These tables are based upon the PolySteel computer design program and ACI 318-99.
12. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.

TABLE E-3
8" POLYSTEEL® PS•3800 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 0 inches (Roof on Top of Wall)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet							
		10'	12'	14'	16'	18'	20'	22'	24'
18.0	70	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.
20.6	75	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.
23.4	80	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.
26.4	85	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#5 @12" O.C.	#6 @12" O.C.
29.7	90	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.
33.0	95	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.
36.6	100	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.
40.3	105	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.	#7 @12" O.C.
44.3	110	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.	Special Design Required

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table assumes a 10 psf roof dead load and a 30 psf roof live load.
3. This table is for roof spans up to 80 feet maximum.
4. Place #4 rebar horizontally at 32" o.c.
5. Place vertical rebar as detailed in the table above at 12" or 24" on center.
6. The reinforcement must be placed in the center of the wall.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. This table assumes the roof load is uniformly distributed along the wall.
10. Table is for Seismic Design Categories A, B, and C only.
11. These tables are based upon the PolySteel computer design program and ACI 318-99.
12. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.

TABLE E-4
8" POLYSTEEL® PS•3800 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 7 inches (Roof on Ledger)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet							
		10'	12'	14'	16'	18'	20'	22'	24'
18.0	70	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#5 @12" O.C.
20.6	75	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#6 @12" O.C.
23.4	80	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.
26.4	85	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.
29.7	90	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.
33.0	95	#4 @24" O.C.	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.
36.6	100	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @24" O.C.	#5 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.	#7 @12" O.C.
40.3	105	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#5 @24" O.C.	#6 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.	Special Design Required
44.3	110	#4 @24" O.C.	#4 @24" O.C.	#5 @24" O.C.	#4 @12" O.C.	#6 @12" O.C.	#6 @12" O.C.	#7 @12" O.C.	Special Design Required

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table assumes a 10 psf roof dead load and a 30 psf roof live load.
3. This table is for roof spans up to 80 feet maximum.
4. Place #4 rebar horizontally at 32" o.c. (every other course).
5. Place vertical rebar as detailed in the table above at 12" or 24" on center.
6. The reinforcement must be placed in the center of the wall.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. This table assumes the roof load is uniformly distributed along the wall.
10. Table is for Seismic Design Categories A, B, and C only.
11. These tables are based upon the PolySteel computer design program and ACI 318-99.
12. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.

TABLE E-5
10" POLYSTEEL® PS•3100 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 0 inches (Roof on Top of Wall)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet				
		24'	28'	32'	36'	40'
18.0	70	#4	#4	#5	#6	(2) #4
20.6	75	#4	#4	#5	#6	(2) #4
23.4	80	#4	#4	#6	(2) #4	(2) #4
26.4	85	#4	#5	(2) #4	(2) #4	(2) #5
29.7	90	#4	#5	(2) #4	(2) #4	(2) #5
33.0	95	#4	#5	(2) #4	(2) #4	(2) #5
36.6	100	#4	#6	(2) #4	(2) #5	(2) #6
40.3	105	#5	(2) #4	(2) #4	(2) #5	(2) #6
44.3	110	#5	(2) #4	(2) #4	(2) #5	(2) #7

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table is based on a Live Load of 800 plf and a Dead Load of 600 plf.
4. Place #4 rebar horizontally at 16 O.C. (every course).
5. Place vertical rebar as detailed in the table above at 12" on center.
6. (2) #4 indicates one #4 on each face of the cell with 3/4" cover.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. Table is for Seismic Design Categories A, B, and C only.
10. These tables are based upon the PolySteel computer design program and ACI 318-99.
11. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.

TABLE E-6
10" POLYSTEEL® PS•3100 WAFFLE GRID
COMMERCIAL AND INDUSTRIAL BUILDING
REBAR REQUIREMENTS

Roof Load Eccentricity = 8 inches (Roof on Ledger)

VERTICAL (Grade 60) REBAR TABLE

Maximum Design Pressure "P"	Wind Speed MPH	Unsupported Wall Height in Feet				
		24'	28'	32'	36'	40'
18.0	70	#4	#5	#6	(2) #4	(2) #4
20.6	75	#4	#5	#6	(2) #4	(2) #4
23.4	80	#4	#5	#6	(2) #4	(2) #4
26.4	85	#4	#5	#6	(2) #4	(2) #5
29.7	90	#5	#5	(2) #4	(2) #4	(2) #5
33.0	95	#5	#5	(2) #4	(2) #4	(2) #6
36.6	100	#5	#6	(2) #4	(2) #5	(2) #6
40.3	105	#6	(2) #4	(2) #4	(2) #5	(2) #6
44.3	110	(2) #4	(2) #4	(2) #4	(2) #5	(2) #7

NOTES:

1. This table is for estimating purposes only. The final design should be done by a professional registered structural engineer.
2. This table is based on a Live Load of 800 plf and a Dead Load of 600 plf.
4. Place #4 rebar horizontally at 16 O.C. (every course).
5. Place vertical rebar as detailed in the table above at 12" on center.
6. (2) #4 indicates one #4 on each face of the cell with 3/4" cover.
7. These reinforcements are based on 60,000 psi deformed steel rebar and 3,000 psi concrete.
8. Where openings are required, additional rebar should be added per design and code requirements.
9. Table is for Seismic Design Categories A, B, and C only.
10. These tables are based upon the PolySteel computer design program and ACI 318-99.
11. Every effort has been made to assure that this information is accurate; however, American PolySteel, LLC cannot accept responsibility for misinterpretation or misuse of this information or improper construction technique in the field.