

PBR, 26ga

Substrate		Fastener		Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft ²)																	
		Nom. Size	Attach. Pattern	Attachment Spacing, (ft-in)																	
				2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"									
				ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW		
Material / Grade	Thick-ness			ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD		
		Steel (Gr 50 min.)	≥10ga (.1350")	#12	36/6	355	532	241	382	167	265	123	195	94	149	60	96	42	66	31	49
#12	36/3			177	266	142	213	118	177	101	152	89	133	60	96	42	66	31	49	24	37
12ga (.1050")	#12		36/6	355	532	241	382	167	265	123	195	94	149	60	96	42	66	31	49	24	37
	#12		36/3	177	266	142	213	118	177	101	152	89	133	60	96	42	66	31	49	24	37
14ga (.0700")	#12		36/6	278	418	223	334	167	265	123	195	94	149	60	96	42	66	31	49	24	37
	#12		36/3	139	209	111	167	93	139	80	119	70	104	56	84	42	66	31	49	24	37
16ga (.0590")	#12		36/6	235	352	188	282	156	235	123	195	94	149	60	96	42	66	31	49	24	37
	#12		36/3	117	176	94	141	78	117	67	101	59	88	47	70	39	59	31	49	24	37
18ga (.0459")	#12		36/6	183	274	146	219	122	183	104	157	91	137	60	96	42	66	31	49	24	37
	#12		36/3	91	137	73	110	61	91	52	78	46	68	37	55	30	46	26	39	23	34
20ga (.0354")	#12		36/6	141	211	113	169	94	141	80	121	70	106	56	84	42	66	31	49	24	37
	#12		36/3	70	106	56	84	47	70	40	60	35	53	28	42	23	35	20	30	18	26
22ga (.0294")	#12		36/6	117	175	94	140	78	117	67	100	58	88	47	70	39	58	31	49	24	37
	#12		36/3	58	88	47	70	39	58	33	50	29	44	23	35	19	29	17	25	15	22
Steel (Gr 33 min.)	≥10ga (.1350")	#12	36/6	355	532	241	382	167	265	123	195	94	149	60	96	42	66	31	49	24	37
		#12	36/3	177	266	142	213	118	177	101	152	89	133	60	96	42	66	31	49	24	37
	12ga (.1050")	#12	36/6	289	434	231	347	167	265	123	195	94	149	60	96	42	66	31	49	24	37
		#12	36/3	145	217	116	174	96	145	83	124	72	108	58	87	42	66	31	49	24	37
	14ga (.0700")	#12	36/6	193	289	154	231	129	193	110	165	94	145	60	96	42	66	31	49	24	37
		#12	36/3	96	145	77	116	64	96	55	83	48	72	39	58	32	48	28	41	24	36
	16ga (.0590")	#12	36/6	162	244	130	195	108	162	93	139	81	122	60	96	42	66	31	49	24	37
		#12	36/3	81	122	65	97	54	81	46	70	41	61	32	49	27	41	23	35	20	30
	18ga (.0459")	#12	36/6	126	190	101	152	84	126	72	108	63	95	51	76	42	63	31	49	24	37
		#12	36/3	63	95	51	76	42	63	36	54	32	47	25	38	21	32	18	27	16	24
20ga (.0354")	#12	36/6	97	146	78	117	65	97	56	84	49	73	39	58	32	49	28	42	24	37	
	#12	36/3	49	73	39	58	32	49	28	42	24	37	19	29	16	24	14	21	12	18	
22ga (.0294")	#12	36/6	81	121	65	97	54	81	46	69	40	61	32	49	27	40	23	35	20	30	
	#12	36/3	40	61	32	49	27	40	23	35	20	30	16	24	13	20	12	17	10	15	
Plywood & OSB	15/32"	#14	36/6	105	141	84	113	70	94	60	81	52	71	42	57	35	47	30	40	24	35
		#14	36/3	52	71	42	57	35	47	30	40	26	35	21	28	17	24	15	20	13	18
	19/32"	#14	36/6	133	179	106	143	88	119	76	102	66	90	53	72	42	60	31	49	24	37
		#14	36/3	66	90	53	72	44	60	38	51	33	45	27	36	22	30	19	26	17	22
	23/32"	#14	36/6	161	217	128	173	107	145	92	124	80	108	60	87	42	66	31	49	24	37
		#14	36/3	80	108	64	87	54	72	46	62	40	54	32	43	27	36	23	31	20	27
Lumber (DFL)	1" min	#9	36/6	194	262	155	209	129	174	111	149	94	131	60	96	42	66	31	49	24	37
		#9	36/3	97	131	78	105	65	87	55	75	48	65	39	52	32	44	28	37	24	33
		#14	36/6	265	358	212	286	167	238	123	195	94	149	60	96	42	66	31	49	24	37
		#14	36/3	132	179	106	143	88	119	76	102	66	89	53	72	42	60	31	49	24	37

Notes:

1. Panel capacities based on fastener pullout, pullover, fastener tension, panel outward bending strength, and IBC deflection limits.
2. Fastener capacities in steel based on AISI S100-16; fastener capacities in wood substrates based on ANSI/AWC NDS-2015.
3. Panel capacities presented in both ASD and LRFD. If design method is not known, use ASD (most conservative).



PBR, 24ga

Substrate		Fastener		Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft ²)																	
		Nom. Size	Attach. Pattern	Attachment Spacing, (ft-in)																	
				2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"									
				ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW		
Material / Grade	Thick-ness			ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD		
		Steel (Gr 50 min.)	≥10ga (.1350")	#12	36/6	377	566	243	386	169	268	124	197	95	151	61	96	42	67	31	49
#12	36/3			189	283	151	226	126	189	108	162	94	141	61	96	42	67	31	49	24	38
12ga (.1050")	#12		36/6	377	566	243	386	169	268	124	197	95	151	61	96	42	67	31	49	24	38
	#12		36/3	189	283	151	226	126	189	108	162	94	141	61	96	42	67	31	49	24	38
14ga (.0700")	#12		36/6	278	418	223	334	169	268	124	197	95	151	61	96	42	67	31	49	24	38
	#12		36/3	139	209	111	167	93	139	80	119	70	104	56	84	42	67	31	49	24	38
16ga (.0590")	#12		36/6	235	352	188	282	156	235	124	197	95	151	61	96	42	67	31	49	24	38
	#12		36/3	117	176	94	141	78	117	67	101	59	88	47	70	39	59	31	49	24	38
18ga (.0459")	#12		36/6	183	274	146	219	122	183	104	157	91	137	61	96	42	67	31	49	24	38
	#12		36/3	91	137	73	110	61	91	52	78	46	68	37	55	30	46	26	39	23	34
20ga (.0354")	#12		36/6	141	211	113	169	94	141	80	121	70	106	56	84	42	67	31	49	24	38
	#12		36/3	70	106	56	84	47	70	40	60	35	53	28	42	23	35	20	30	18	26
22ga (.0294")	#12		36/6	117	175	94	140	78	117	67	100	58	88	47	70	39	58	31	49	24	38
	#12		36/3	58	88	47	70	39	58	33	50	29	44	23	35	19	29	17	25	15	22
Steel (Gr 33 min.)	≥10ga (.1350")	#12	36/6	372	558	243	386	169	268	124	197	95	151	61	96	42	67	31	49	24	38
		#12	36/3	186	279	149	223	124	186	106	159	93	139	61	96	42	67	31	49	24	38
	12ga (.1050")	#12	36/6	289	434	231	347	169	268	124	197	95	151	61	96	42	67	31	49	24	38
		#12	36/3	145	217	116	174	96	145	83	124	72	108	58	87	42	67	31	49	24	38
	14ga (.0700")	#12	36/6	193	289	154	231	129	193	110	165	95	145	61	96	42	67	31	49	24	38
		#12	36/3	96	145	77	116	64	96	55	83	48	72	39	58	32	48	28	41	24	36
	16ga (.0590")	#12	36/6	162	244	130	195	108	162	93	139	81	122	61	96	42	67	31	49	24	38
		#12	36/3	81	122	65	97	54	81	46	70	41	61	32	49	27	41	23	35	20	30
	18ga (.0459")	#12	36/6	126	190	101	152	84	126	72	108	63	95	51	76	42	63	31	49	24	38
		#12	36/3	63	95	51	76	42	63	36	54	32	47	25	38	21	32	18	27	16	24
20ga (.0354")	#12	36/6	97	146	78	117	65	97	56	84	49	73	39	58	32	49	28	42	24	37	
	#12	36/3	49	73	39	58	32	49	28	42	24	37	19	29	16	24	14	21	12	18	
22ga (.0294")	#12	36/6	81	121	65	97	54	81	46	69	40	61	32	49	27	40	23	35	20	30	
	#12	36/3	40	61	32	49	27	40	23	35	20	30	16	24	13	20	12	17	10	15	
Plywood & OSB	15/32"	#14	36/6	105	141	84	113	70	94	60	81	52	71	42	57	35	47	30	40	24	35
		#14	36/3	52	71	42	57	35	47	30	40	26	35	21	28	17	24	15	20	13	18
	19/32"	#14	36/6	133	179	106	143	88	119	76	102	66	90	53	72	42	60	31	49	24	38
		#14	36/3	66	90	53	72	44	60	38	51	33	45	27	36	22	30	19	26	17	22
23/32"	#14	36/6	161	217	128	173	107	145	92	124	80	108	61	87	42	67	31	49	24	38	
	#14	36/3	80	108	64	87	54	72	46	62	40	54	32	43	27	36	23	31	20	27	
Lumber (DFL)	1" min	#9	36/6	194	262	155	209	129	174	111	149	95	131	61	96	42	67	31	49	24	38
		#9	36/3	97	131	78	105	65	87	55	75	48	65	39	52	32	44	28	37	24	33
		#14	36/6	265	358	212	286	169	238	124	197	95	151	61	96	42	67	31	49	24	38
		#14	36/3	132	179	106	143	88	119	76	102	66	89	53	72	42	60	31	49	24	38

Notes:

1. Panel capacities based on fastener pullout, pullover, fastener tension, panel outward bending strength, and IBC deflection limits.
2. Fastener capacities in steel based on AISI S100-16; fastener capacities in wood substrates based on ANSI/AWC NDS-2015.
3. Panel capacities presented in both ASD and LRFD. If design method is not known, use ASD (most conservative).

PBR, 22ga

Substrate		Fastener		Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft ²)																	
		Nom. Size	Attach. Pattern	Attachment Spacing, (ft-in)																	
				2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"									
				ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW	ASD W/Ω	LRFD φW		
Steel (Gr 50 min.)	≥10ga (.1350")	#12	36/6	478	717	341	540	236	375	174	276	133	211	85	135	59	94	43	69	33	53
		#12	36/3	239	358	191	287	159	239	137	205	119	179	85	135	59	94	43	69	33	53
	12ga (.1050")	#12	36/6	418	627	334	501	236	375	174	276	133	211	85	135	59	94	43	69	33	53
		#12	36/3	209	313	167	251	139	209	119	179	104	157	84	125	59	94	43	69	33	53
	14ga (.0700")	#12	36/6	278	418	223	334	186	278	159	239	133	209	85	135	59	94	43	69	33	53
		#12	36/3	139	209	111	167	93	139	80	119	70	104	56	84	46	70	40	60	33	52
	16ga (.0590")	#12	36/6	235	352	188	282	156	235	134	201	117	176	85	135	59	94	43	69	33	53
		#12	36/3	117	176	94	141	78	117	67	101	59	88	47	70	39	59	34	50	29	44
	18ga (.0459")	#12	36/6	183	274	146	219	122	183	104	157	91	137	73	110	59	91	43	69	33	53
		#12	36/3	91	137	73	110	61	91	52	78	46	68	37	55	30	46	26	39	23	34
	20ga (.0354")	#12	36/6	141	211	113	169	94	141	80	121	70	106	56	84	47	70	40	60	33	53
		#12	36/3	70	106	56	84	47	70	40	60	35	53	28	42	23	35	20	30	18	26
	22ga (.0294")	#12	36/6	117	175	94	140	78	117	67	100	58	88	47	70	39	58	33	50	29	44
		#12	36/3	58	88	47	70	39	58	33	50	29	44	23	35	19	29	17	25	15	22
Steel (Gr 33 min.)	≥10ga (.1350")	#12	36/6	372	558	297	446	236	372	174	276	133	211	85	135	59	94	43	69	33	53
		#12	36/3	186	279	149	223	124	186	106	159	93	139	74	112	59	93	43	69	33	53
	12ga (.1050")	#12	36/6	289	434	231	347	193	289	165	248	133	211	85	135	59	94	43	69	33	53
		#12	36/3	145	217	116	174	96	145	83	124	72	108	58	87	48	72	41	62	33	53
	14ga (.0700")	#12	36/6	193	289	154	231	129	193	110	165	96	145	77	116	59	94	43	69	33	53
		#12	36/3	96	145	77	116	64	96	55	83	48	72	39	58	32	48	28	41	24	36
	16ga (.0590")	#12	36/6	162	244	130	195	108	162	93	139	81	122	65	97	54	81	43	69	33	53
		#12	36/3	81	122	65	97	54	81	46	70	41	61	32	49	27	41	23	35	20	30
	18ga (.0459")	#12	36/6	126	190	101	152	84	126	72	108	63	95	51	76	42	63	36	54	32	47
		#12	36/3	63	95	51	76	42	63	36	54	32	47	25	38	21	32	18	27	16	24
20ga (.0354")	#12	36/6	97	146	78	117	65	97	56	84	49	73	39	58	32	49	28	42	24	37	
	#12	36/3	49	73	39	58	32	49	28	42	24	37	19	29	16	24	14	21	12	18	
22ga (.0294")	#12	36/6	81	121	65	97	54	81	46	69	40	61	32	49	27	40	23	35	20	30	
	#12	36/3	40	61	32	49	27	40	23	35	20	30	16	24	13	20	12	17	10	15	
Plywood & OSB	15/32"	#14	36/6	105	141	84	113	70	94	60	81	52	71	42	57	35	47	30	40	26	35
		#14	36/3	52	71	42	57	35	47	30	40	26	35	21	28	17	24	15	20	13	18
	19/32"	#14	36/6	133	179	106	143	88	119	76	102	66	90	53	72	44	60	38	51	33	45
		#14	36/3	66	90	53	72	44	60	38	51	33	45	27	36	22	30	19	26	17	22
	23/32"	#14	36/6	161	217	128	173	107	145	92	124	80	108	64	87	54	72	43	62	33	53
		#14	36/3	80	108	64	87	54	72	46	62	40	54	32	43	27	36	23	31	20	27
Lumber (DFL)	1" min	#9	36/6	194	262	155	209	129	174	111	149	97	131	78	105	59	87	43	69	33	53
		#9	36/3	97	131	78	105	65	87	55	75	48	65	39	52	32	44	28	37	24	33
		#14	36/6	265	358	212	286	177	238	151	204	132	179	85	135	59	94	43	69	33	53
		#14	36/3	132	179	106	143	88	119	76	102	66	89	53	72	44	60	38	51	33	45

Notes:

1. Panel capacities based on fastener pullout, pullover, fastener tension, panel outward bending strength, and IBC deflection limits.
2. Fastener capacities in steel based on AISI S100-16; fastener capacities in wood substrates based on ANSI/AWC NDS-2015.
3. Panel capacities presented in both ASD and LRFD. If design method is not known, use ASD (most conservative).

