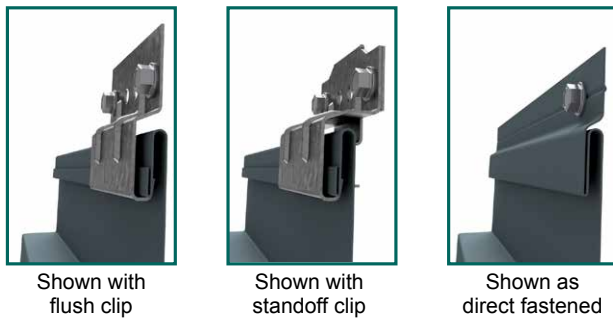


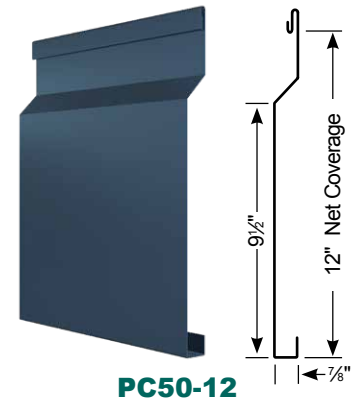
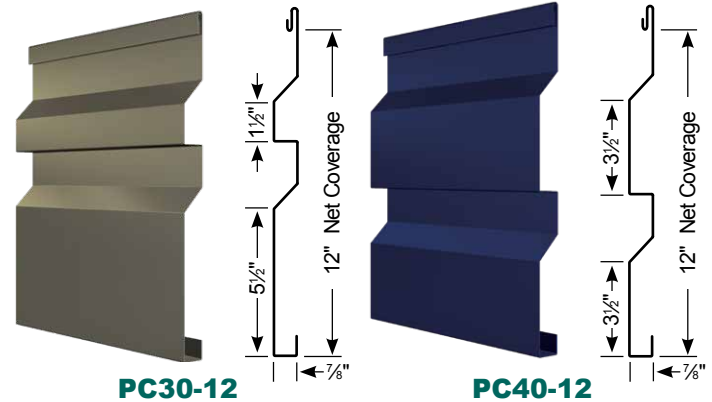
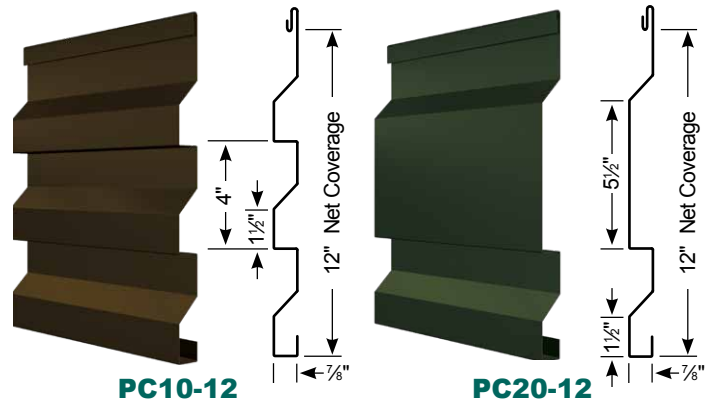
Perception Collection is a set of concealed fastened metal wall panels, each with unique geometric angles and rib patterns which can be combined to create a distinct design. Whether used in a vertical or horizontal wall application, the shadow effect evolves, building texture and changing the perception of the design as the day progresses. Ideal for fascia and equipment screen applications as well.

Perception Collection panels are available with a high performance clip, offering unlimited thermal movement while reducing chances of oil canning.



standard features

- Available in 22ga in standard finishes. 20ga available by special order.
- Refer to AEP Span Color Charts for full range of color options, prints, textures, finishes and paint systems.
- Custom colors, thick film primer and/or clear coat paint finishes available. Subject to 3,000 square feet minimum order.
- Custom manufactured sheet lengths from 5'-0" to 25'-0" maximum.
- ASTM E1592 (wind uplift), ASTM E283 (air infiltration), ASTM E331 (water infiltration) tested.
- Available in two attachment configurations - a directly attached fastening flange or clip interlocking hem. Two clip options enable panels to be installed flush to substrate or with a 1/2" standoff.
- Panels can be used in a rainscreen system.
- Panel evaluated by accredited third party. All structural performance data is contained within an IBC/IRC 2018 code compliance report (#ER-0309).



Patented panel design.

Outward Load Capacity

Panel / Gauge	Maximum* Negative (Outward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
PC10-12d, 20-24ga (DIRECT FASTENED)	93	85	77	69	62	54	46
PC20/30/40/50-12d, 20-24ga (DIRECT FASTENED)	92	83	75	67	59	50	42
PC10/20/30/40/50-12c, 24ga (CLIP ATTACHED)	85	78	70	62	55	47	39
PC10/20/30/40/50-12c, 20-22ga (CLIP ATTACHED)	101	93	85	76	68	60	52

* Maximum allowable outward load capacities are shown and dependent upon fastener-to-substrate capacities. Refer to IAPMO-UES report #ER-0309 for specific product system capacities.

PC10-12

Properties									Standard Finishes	
Gauge	Base Steel Thickness (in)	Yield (ksi)	Tensile (ksi)	Wt. (lbs/ft ²)	I+ (in ⁴ /ft)	S+ (in ³ /ft)	I- (in ⁴ /ft)	S- (in ³ /ft)	Metallic Coating	Paint System
24	0.0232	50	65	1.49	0.0553	0.0855	0.0535	0.0959	AZ50	Cool Dura Tech™ 5000 or
22	0.0294	50	65	1.87	0.0711	0.1194	0.0692	0.1327	AZ50	
20	0.0354	40	55	2.24	0.0860	0.1610	0.0853	0.1632	G90	Cool Dura Tech™ mx

Gauge	Span	Condition	Positive (Inward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
			2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	427	190	107	68	47	35	27
		L/180	605	179	76	39	22	14	9
	Double Span	ASD, W/Ω	271	181	116	74	52	38	29
		L/180	1456	432	182	93	54	34	23
	Triple Span	ASD, W/Ω	308	206	143	93	65	48	37
		L/180	1141	338	143	73	42	27	18
22	Single Span	ASD, W/Ω	596	265	149	95	66	49	37
		L/180	777	230	97	50	29	18	12
	Double Span	ASD, W/Ω	419	278	159	104	72	52	41
		L/180	1872	555	234	120	69	44	29
	Triple Span	ASD, W/Ω	476	317	197	128	90	66	50
		L/180	1467	435	183	94	54	34	23
20	Single Span	ASD, W/Ω	643	286	161	103	71	52	40
		L/180	940	278	117	60	35	22	15
	Double Span	ASD, W/Ω	471	273	157	101	71	52	40
		L/180	2263	671	283	145	84	53	35
	Triple Span	ASD, W/Ω	535	333	193	125	88	65	50
		L/180	1773	525	222	113	66	41	28

PC20-12

Properties									Standard Finishes	
Gauge	Base Steel Thickness (in)	Yield (ksi)	Tensile (ksi)	Wt. (lbs/ft ²)	I+ (in ⁴ /ft)	S+ (in ³ /ft)	I- (in ⁴ /ft)	S- (in ³ /ft)	Metallic Coating	Paint System
24	0.0232	50	65	1.40	0.0481	0.0600	0.0540	0.0752	AZ50	Cool Dura Tech™ 5000 or
22	0.0294	50	65	1.76	0.0632	0.0852	0.0708	0.1067	AZ50	
20	0.0354	40	55	2.11	0.0790	0.1190	0.0877	0.1498	G90	Cool Dura Tech™ mx

Gauge	Span	Condition	Positive (Inward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
			2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	133	75	48	33	24	19
		L/180	525	156	66	34	19	12	8
	Double Span	ASD, W/Ω	181	121	90	58	41	30	23
		L/180	1265	375	158	81	47	30	20
	Triple Span	ASD, W/Ω	206	137	103	72	50	37	28
		L/180	991	294	124	63	37	23	15
22	Single Span	ASD, W/Ω	425	189	106	68	47	35	27
		L/180	690	204	86	44	26	16	11
	Double Span	ASD, W/Ω	279	186	126	82	58	42	33
		L/180	1662	493	208	106	62	39	26
	Triple Span	ASD, W/Ω	317	212	155	102	71	53	40
		L/180	1302	386	163	83	48	30	20
20	Single Span	ASD, W/Ω	475	211	119	76	53	39	30
		L/180	863	256	108	55	32	20	13
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		L/180	2079	616	260	133	77	48	32
	Triple Span	ASD, W/Ω	357	238	171	113	80	59	45
		L/180	1629	483	204	104	60	38	25

PC30-12

Properties									Standard Finishes	
Gauge	Base Steel Thickness (in)	Yield (ksi)	Tensile (ksi)	Wt. (lbs/ft ²)	I+ (in ⁴ /ft)	S+ (in ³ /ft)	I- (in ⁴ /ft)	S- (in ³ /ft)	Metallic Coating	Paint System
24	0.0232	50	65	1.40	0.0481	0.0600	0.0540	0.0752	AZ50	Cool Dura Tech™ 5000 or Cool Dura Tech™ mx
22	0.0294	50	65	1.76	0.0632	0.0852	0.0708	0.1066	AZ50	
20	0.0354	40	55	2.11	0.0793	0.1190	0.0877	0.1498	G90	

Gauge	Span	Condition	Positive (Inward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
			2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	133	75	48	33	24	19
		L/180	526	156	66	34	19	12	8
	Double Span	ASD, W/Ω	181	121	89	58	41	30	23
		L/180	1266	375	158	81	47	30	20
	Triple Span	ASD, W/Ω	206	137	103	72	50	37	28
		L/180	992	294	124	63	37	23	15
22	Single Span	ASD, W/Ω	425	189	106	68	47	35	27
		L/180	690	204	86	44	26	16	11
	Double Span	ASD, W/Ω	279	186	127	82	57	42	33
		L/180	1662	493	208	106	62	39	26
	Triple Span	ASD, W/Ω	317	212	156	102	71	53	40
		L/180	1302	386	163	83	48	30	20
20	Single Span	ASD, W/Ω	475	211	119	76	53	39	30
		L/180	867	257	108	55	32	20	14
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		L/180	2088	619	261	134	77	49	33
	Triple Span	ASD, W/Ω	357	238	171	113	80	59	45
		L/180	1636	485	204	105	61	38	26

PC40-12

Properties									Standard Finishes	
Gauge	Base Steel Thickness (in)	Yield (ksi)	Tensile (ksi)	Wt. (lbs/ft ²)	I+ (in ⁴ /ft)	S+ (in ³ /ft)	I- (in ⁴ /ft)	S- (in ³ /ft)	Metallic Coating	Paint System
24	0.0232	50	65	1.40	0.0500	0.0614	0.0540	0.0752	AZ50	Cool Dura Tech™ 5000 or Cool Dura Tech™ mx
22	0.0294	50	65	1.76	0.0667	0.0881	0.0708	0.1066	AZ50	
20	0.0354	40	55	2.11	0.0846	0.1253	0.0877	0.1497	G90	

Gauge	Span	Condition	Positive (Inward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
			2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	136	77	49	34	25	19
		L/180	547	162	68	35	20	13	9
	Double Span	ASD, W/Ω	181	121	89	58	41	30	23
		L/180	1317	390	165	84	49	31	21
	Triple Span	ASD, W/Ω	206	137	103	72	51	37	28
		L/180	1032	306	129	66	38	24	16
22	Single Span	ASD, W/Ω	440	195	110	70	49	36	27
		L/180	729	216	91	47	27	17	11
	Double Span	ASD, W/Ω	279	186	127	82	57	42	33
		L/180	1755	520	219	112	65	41	27
	Triple Span	ASD, W/Ω	317	212	155	102	71	53	41
		L/180	1375	407	172	88	51	32	21
20	Single Span	ASD, W/Ω	493	222	125	80	56	41	31
		L/180	924	274	116	59	34	22	14
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		L/180	2227	660	278	143	82	52	35
	Triple Span	ASD, W/Ω	357	238	170	113	79	59	46
		L/180	1744	517	218	112	65	41	27

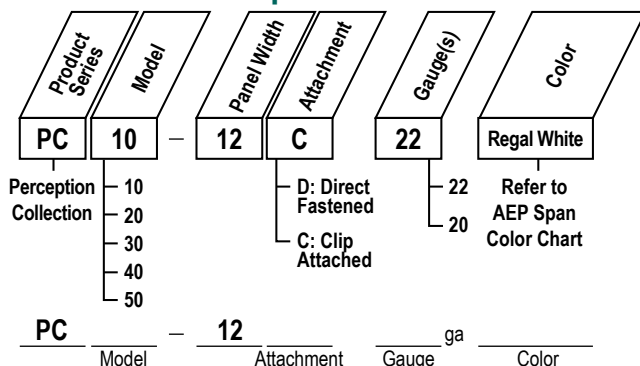
PC50-12

Properties									Standard Finishes	
Gauge	Base Steel Thickness (in)	Yield (ksi)	Tensile (ksi)	Wt. (lbs/ft ²)	I+ (in ⁴ /ft)	S+ (in ³ /ft)	I- (in ⁴ /ft)	S- (in ³ /ft)	Metallic Coating	Paint System
24	0.0232	50	65	1.30	0.0358	0.0322	0.0446	0.0479	AZ50	Cool Dura Tech™ 5000 or Cool Dura Tech™ mx
22	0.0294	50	65	1.64	0.0483	0.0467	0.0603	0.0686	AZ50	
20	0.0354	40	55	1.97	0.0630	0.0677	0.0770	0.0979	G90	

Gauge	Span	Condition	Positive (Inward) Uniform Load Capacity (lbs/ft ²) / Span (ft. - in.)						
			2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	144	72	40	26	18	13	10
		L/180	391	116	49	25	14	9	6
	Double Span	ASD, W/Ω	90	60	45	36	25	19	14
		L/180	942	279	118	60	35	22	15
	Triple Span	ASD, W/Ω	103	69	51	41	31	23	18
		L/180	738	219	92	47	27	17	12
22	Single Span	ASD, W/Ω	221	104	58	37	26	19	15
		L/180	527	156	66	34	20	12	8
	Double Span	ASD, W/Ω	140	93	70	52	36	27	21
		L/180	1270	376	159	81	47	30	20
	Triple Span	ASD, W/Ω	159	106	79	63	44	33	26
		L/180	995	295	124	64	37	23	16
20	Single Span	ASD, W/Ω	246	120	68	43	30	22	17
		L/180	688	204	86	44	25	16	11
	Double Span	ASD, W/Ω	157	105	78	58	41	31	24
		L/180	1658	491	207	106	61	39	26
	Triple Span	ASD, W/Ω	178	119	89	71	51	38	29
		L/180	1299	385	162	83	48	30	20

Inward Loads	Single Span		NOTES: Tabulated values are for positive (inward) loading only. The W/Ω (ASD) values are based on allowable panel strength. L/180 values based on allowable service load deflections. The moments of inertia, I+ and I-, presented for determining deflection are: $(2I_{\text{Effective}} + I_{\text{Gross}})/3$ Values are based on AISI S100-16/S1-18 Specifications subject to change without notice.
	Double Span		
	Triple Span		

Product Specification Guide



Oil Canning : All flat metal surfaces can display waviness commonly referred to as "oil canning". "Oil canning" is an inherent characteristic of steel products, not a defect, and therefore is not a cause for panel rejection.

