

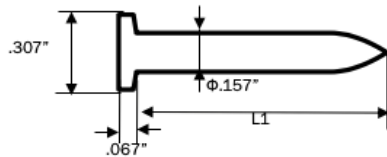


CP-C8##X0SP .157" Pins for Concrete and Steel



Product data

Dimensions



Item name	L1	Guide	Pins/Coil	Case Qty.
CP-C815X0SP AL-ICC	1/2"+.079"	Aluminum	50	1,000 Pins
CP-C821X0SP-ICC	3/4"+.079"	Plastic	50	1,000 Pins
CP-C828X0SP-ICC	1"+.079"	Plastic	50	1,000 Pins
CP-C834X0SP-ICC	1-1/4"+.079"	Plastic	50	1,000 Pins
CP-C840X0SP-ICC	1-1/2"+.079"	Plastic	50	1,000 Pins

General Information

Material : Carbon Steel "SP"
 Hardness : $\geq$ HRC56
 Electrogalvanized with a zinc cromate : $\geq 2\mu\text{m}$

Tool

PowerLite® HN120
 Concrete/ Steel Pinner



Approvals

ICC-ES
 ESR-4320
 ESR-4320 LABC / LARC Supplement



Applications

Metal Track to Concrete



Metal track for outside wall

Metal Track or Metal Clip to Steel I-beam



Metal clip for outside wall



Fastening to Concrete (CP-C821X0SP, CP-C828X0SP, CP-C834X0SP & CP-C840X0SP)

Allowable Loads

- Normal weight concrete -

Allowable Loads (lbf)							
	Concrete Compressive Strength	2,500psi		4,000psi		6,000psi	
	Load Direction	Tension	Shear	Tension	Shear	Tension	Shear
Minimum embedment depth	3/4"	170	85	170	200	120	110
	1"	220	245	235	300	185	265
	1 1/4"	375	415	405	425	345	345
	1 1/2"	300	410	—	—	—	—

- Concrete masonry -

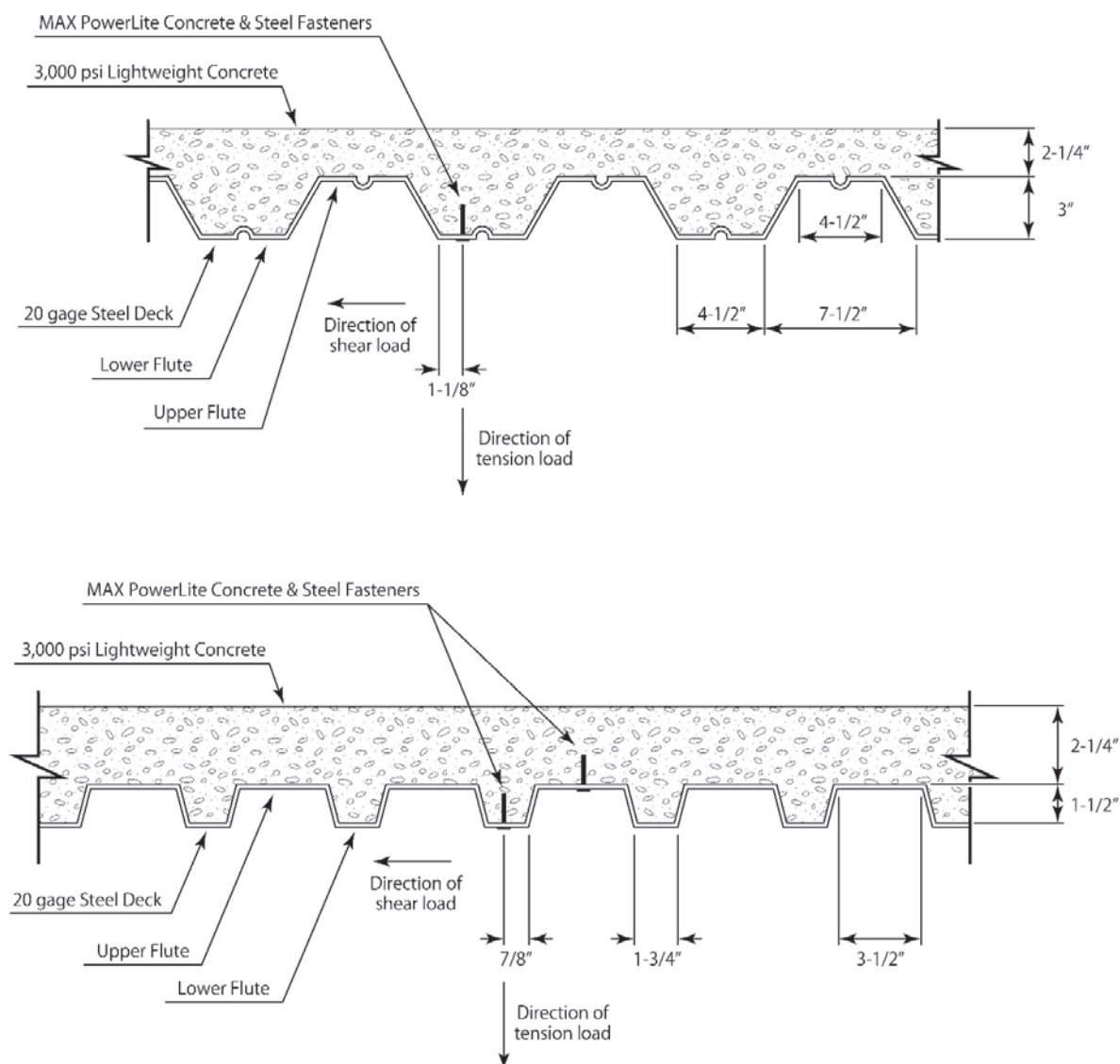
Embedment depth	Allowable Loads (lbf)									
	Hollow CMU				Grouted CMU					
	Face Shell		Horizontal Mortar Joint		Face Shell		Horizontal Mortar Joint		Top of Grouted Cell	
	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
1"	75	70	45	285	160	215	250	300	145	270

CMU Type: Normal weight CMU, Mortar Type: Type S mortar

- Minimum 3,000 psi light weight concrete and light weight concrete filled steel deck panel -

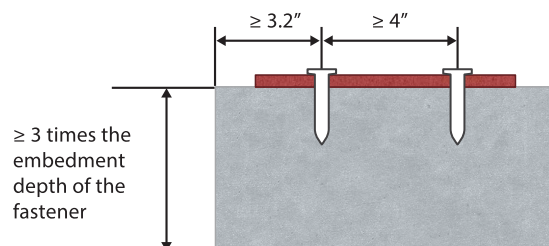
Allowable Loads (lbf)								
	Deck Type	Fasteners Installed Directly into Concrete		Fasteners Installed Through Steel Deck Panel into Concrete				
		n/a		3" Deep Steel Deck		1 1/2" Deep Steel Deck		
		Tension	Shear	Lower Flute		Upper Flute	Lower Flute	
				Tension	Shear	Tension	Tension	Shear
Minimum embedment depth	3/4"	90	190	44	295	100	75	405
	1"	200	265	125	295	245	190	425
	1 1/4"	285	370	260	315	—	—	—
	1 1/2"	440	480	260	255	—	—	—

Deck panels must be minimum 0.0347-inch-thick with a specified yield strength of 50 ksi, and a minimum specified tensile strength of 65 ksi.



Application requirements

Thickness of Concrete :	≥ 3 times the embedment depth of the fastener
Edge distance (Concrete) :	≥ 3.2 inches
Edge distance (3" Steel deck panel) :	≥ 1 1/8 inches
Edge distance (1 1/2" Steel deck panel) :	≥ 7/8 inches
Spacing :	≥ 4.0 inches



Fastening to Steel (CP-C815X0SP AL)

Allowable Loads

	Allowable Loads (lbf)					
Steel Base Material	ASTM A36					
Steel Thickness	3/16"		1/4"		3/8"	
Minimum Point Penetration	0.26"		0.18"		0.03"	
Load Direction	Tension	Shear	Tension	Shear	Tension	Shear
	290	490	285	430	375	455
Steel Base Material	ASTM A572 Grade 50 or A992					
Steel Thickness	3/16"		1/4"		3/8"	
Minimum Point Penetration	0.26"		0.18"		0.03"	
Load Direction	Tension	Shear	Tension	Shear	Tension	Shear
	310	525	310	465	400	490

Fasteners must be driven to such an extent that the tabulated minimum point penetration is achieved.

ASTM A36 steel base material must have minimum yield and tensile strengths equal to 36 ksi and 58 ksi, respectively.

ASTM A572 or A992 steel base material must have minimum yield and tensile strengths equal to 50 ksi and 65 ksi, respectively.

Application requirements

Thickness of Steel :	≤ 3/8 inch
Edge distance :	≥ 0.5 inch
Spacing :	≥ 1.0 inch

