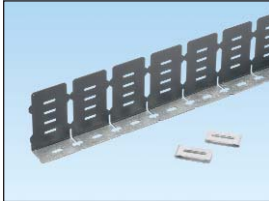




Panduct® PanelMax™ Noise Shield

- Metal noise barrier reduces EMI noise coupling between noise emitting and sensitive cabling within a control panel; provides up to 20dB reduction in noise which is equivalent to 6 inches of air spacing
- Installs directly to metal panel surface or within 2, 3, or 4 inch height Panduit wiring duct (when shield is installed with supplied bonding clips)
- Perforated and pre-scored sections speed installation by allowing sections of the shield to be snapped off at pre-scored locations to easily cut to length with minimal deburring required

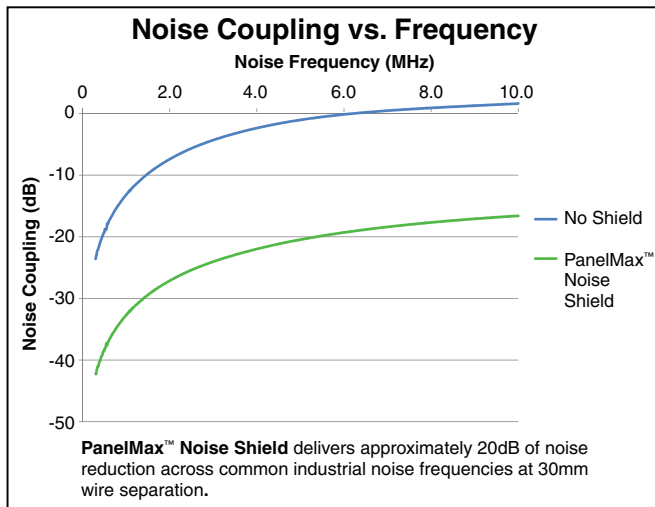
- Vertical wall slots allow wires to cross the barrier at 90° when necessary, providing greater design flexibility
- Horizontal cable tie slots allow cable bundles to be held in place using cable ties so cabling is kept near barrier for greater reliability and optimal aesthetics
- Zinc plated steel surface in contact areas with sub-panel and bonding clip ensures continuity and is corrosion resistant
- Black powder coated vertical surface for smooth edges
- Meets UL 508/508A requirements as a barrier between conductors



Part Number	Part Description	Std. Pkg. Qty.
SD2EMI	EMI Noise Shield kit for 2" height Panduit Wiring Duct; (2) three foot sections, bonding clips, and anti-oxidizing paste.	1
SD3EMI	EMI Noise Shield kit for 3" height Panduit Wiring Duct; (2) three foot sections, bonding clips, and anti-oxidizing paste.	1
SD4EMI	EMI Noise Shield kit for 4" height Panduit Wiring Duct; (2) three foot sections, bonding clips, and anti-oxidizing paste.	1

Performance Characteristics

Relative noise reduction in dB over frequency range of the PanelMax™ Noise Shield is shown below.



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B1.
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B2.
Cable
Accessories

B3.
Stainless
Steel Ties

C1.
Wiring
Duct

C2.
Surface
Raceway

C3.
Abrasion
Protection

C4.
Cable
Management

D1.
Terminals

D2.
Power
Connectors

D3.
Grounding
Connectors

E1.
Labeling
Systems

E2.
Labels

E3.
Pre-Printed
& Write-On
Markers

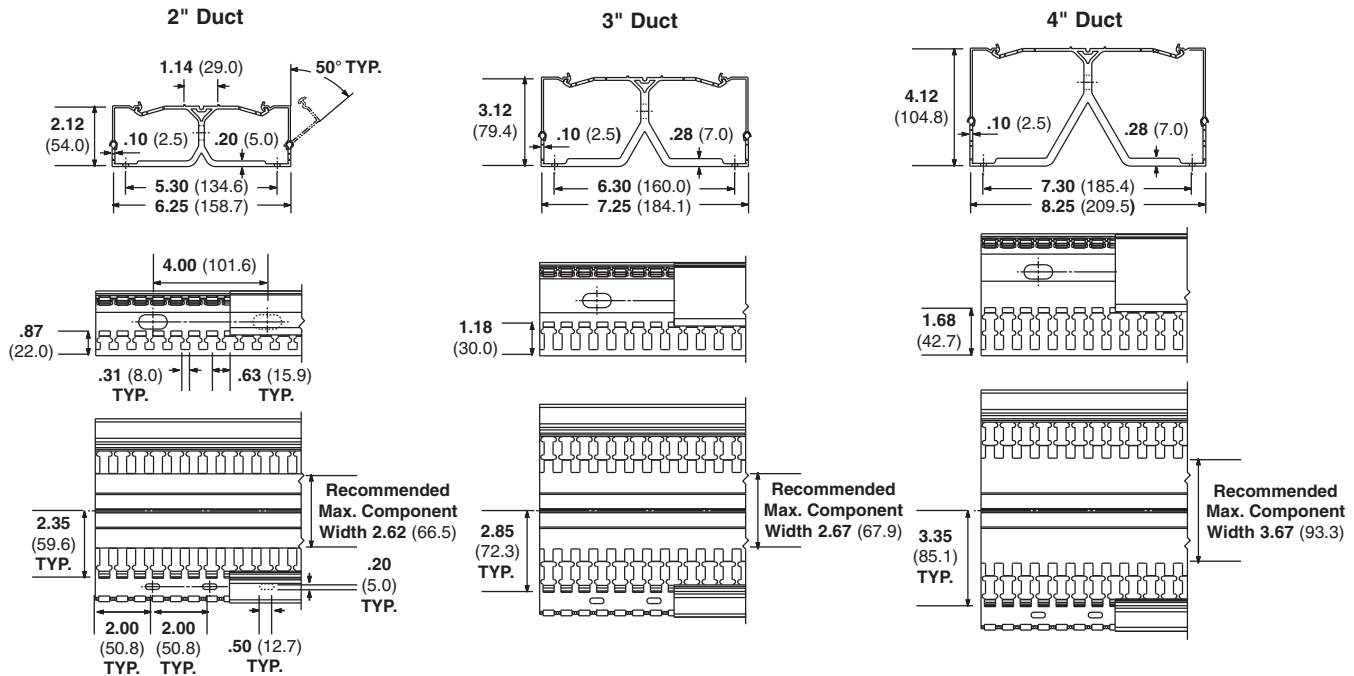
E4.
Permanent
Identification

E5.
Lockout/
Tagout
& Safety
Solutions

F.
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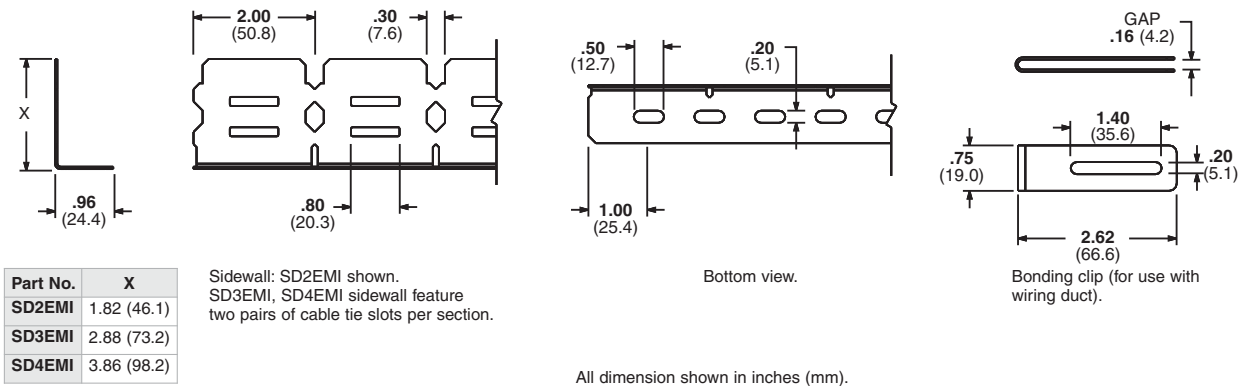
Panduit® PanelMax™ DIN Rail Wiring Duct Dimensions

Dimensions are shown for reference only. Contact Panduit Customer Service at 800-777-3300 for specific dimensional needs.



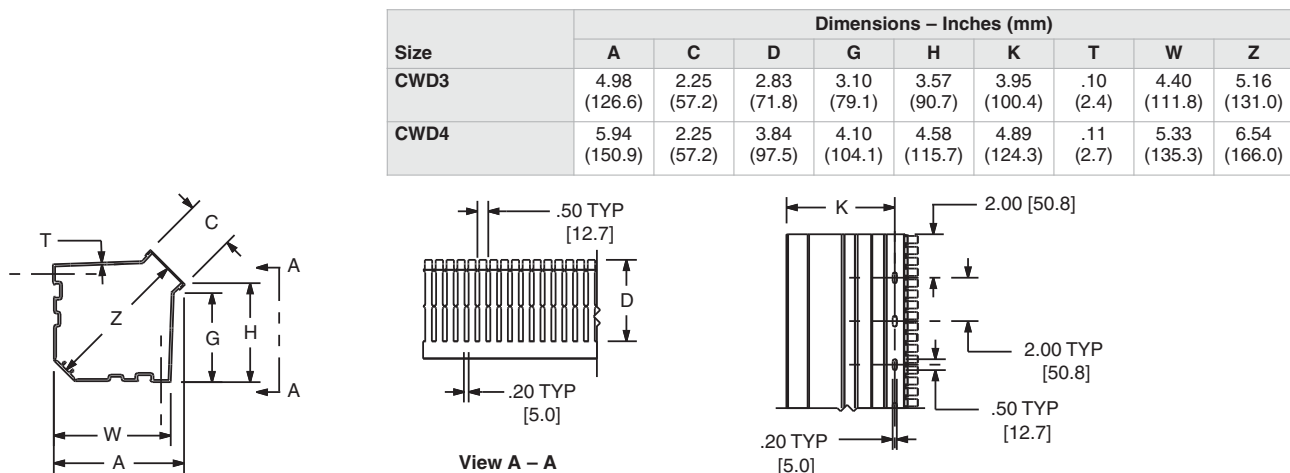
Panduit® PanelMax™ Noise Shield Dimensions

Dimensions are shown for reference only. Contact Panduit Customer Service at 800-777-3300 for specific dimensional needs.



Panduit® PanelMax™ Corner Wiring Duct Dimensions

Dimensions are shown for reference only. Contact Panduit Customer Service at 800-777-3300 for specific dimensional needs.



A.
System
Overview

Panduct® Type FL Wiring Duct Dimensions

Dimensions are shown for reference only.

Dimensions are in mm (in.). Contact Panduit Customer Service at 800-777-3300 for specific dimensional needs.

B1.
Cable Ties

B2.
Cable
Accessories

B3.
Stainless
Steel Ties

C1.
Wiring
Duct

C2.
Surface
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C3.
Abrasion
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C4.
Cable
Management

D1.
Terminals

D2.
Power
Connectors

D3.
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Connectors

E1.
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Systems

E2.
Labels

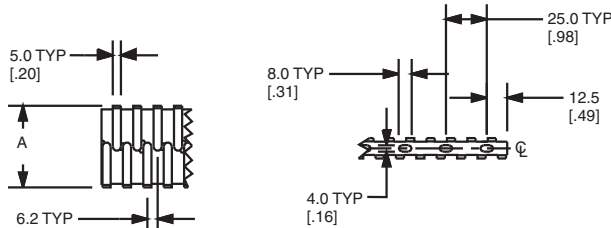
E3.
Pre-Printed
& Write-On
Markers

E4.
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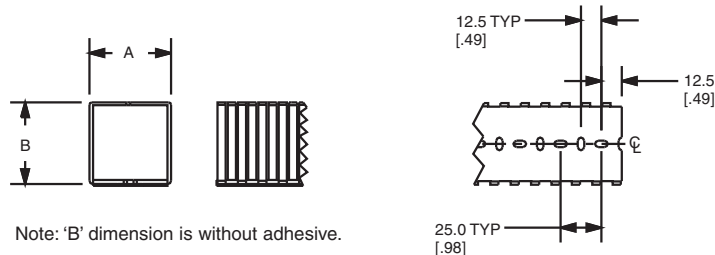
E5.
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Mounting Hole Dimensions
For FL12X12LG-A



For FL25X25LG-A and FL50X50LG-A



Note: 'B' dimension is without adhesive.

Nominal Duct Size (W x H) mm	Dimensions – mm (In.)	
	A	B
12 x 12 (.49) x (.49)	12.4 (.49)	12.4 (.49)
25 x 25 (.98) x (.98)	24.9 (.98)	24.9 (.98)
50 x 50 (1.97) x (1.97)	50 (1.97)	50 (1.97)

Note: Type FL wiring duct has factory applied adhesive. For 50 x 50 two strips of tape are used; otherwise, only one strip is centered on the part.

Panduct® PanelMax™ DIN Rail Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) In.		Area per channel In. ²	Electrical															Communication				
			8 AWG	10 AWG	12 AWG			14 AWG			16AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
			.216	.164	.130	.141	.152	.111	.124	.133	.096	.111	.118	.084	.100	.106	.085	.298	.289	.250	.187	.118
			THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Cat. 6A	Cat. 6	Cat. 5e	3.0 mm	
DRD22	6.25 x 2.15	4.760	51	88	140	119	103	193	154	134	258	193	170	337	238	211	329	26	28	38	68	170
DRD33	7.25 x 3.16	6.536	70	121	193	164	141	265	212	184	354	265	234	463	326	290	452	36	39	52	93	234
DRD44	8.25 x 4.16	9.180	98	170	271	230	198	372	298	259	498	372	329	650	459	408	635	51	54	73	131	329

Table shows maximum wirefill per channel based on 50% of duct internal cross sectional area. Formula = internal area/2.00 x D².

Panduct® PanelMax™ Corner Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) In.		Area In. ²	Electrical															Communication			
			8 AWG	10 AWG	12 AWG		14 AWG		16 AWG			18 AWG			22 AWG	23 AWG	23/24 AWG	24 AWG	Fiber Cable		
			.216	.164	.130	.141	.152	.111	.124	.133	.096	.111	.118	.084	.100	.106	.085	.330	.250	.190	.118
			THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Cat. 6A	Cat. 6	Cat. 5e	3.0 mm
CWD3	4.4 x 3.6	17.580	188	326	520	442	380	713	571	496	953	713	631	1245	879	782	1216	80	140	243	630
CWD4	5.4 x 4.6	26.920	288	500	796	677	582	1092	875	760	1460	1092	966	1907	1346	1197	1862	123	215	372	964

Table shows maximum wirefill based on 50% of duct internal cross sectional area. Formula = area/2.00 x D².

Panduct® Type H, HN, and HS Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) In.	Nominal Area In. ²	Electrical															Communication				
		8 AWG	10 AWG	12 AWG		14 AWG		16 AWG		18 AWG			22 AWG	23 AWG	23/24 AWG	24 AWG	Fiber Cable				
		.216	.164	.130	.141	.152	.111	.124	.133	.096	.111	.118	.084	.100	.106	.085	.330	.250	.190	.118	
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Cat. 6A	Cat. 6	Cat. 5e	3.0 mm	
1.50 x 2.00	3.000	34	60	95	81	70	131	105	91	175	131	116	229	162	144	224	14	25	44	116	
1.50 x 3.00	4.500	52	90	143	122	105	197	158	137	263	197	174	344	243	216	336	22	38	67	174	
2.00 x 2.00	4.000	46	80	127	108	93	175	140	122	234	175	155	306	216	192	299	19	34	59	154	
2.00 x 3.00	6.000	69	120	191	163	140	263	210	183	351	263	232	459	324	288	448	29	51	89	232	
2.00 x 4.00	8.000	92	160	255	217	187	350	281	244	469	350	310	612	432	384	598	39	69	119	309	
3.00 x 3.00	9.000	104	180	287	244	210	394	316	275	527	394	349	689	486	432	673	44	77	134	348	
3.00 x 4.00	12.000	139	241	383	326	280	526	421	366	703	526	465	919	648	577	897	59	103	179	464	
4.00 x 4.00	16.000	185	321	511	435	374	701	562	488	938	701	621	1225	864	769	1197	79	138	239	619	

Table shows maximum wirefill based on 50% of duct internal cross sectional area. Formula = nominal area/1.85 x D². See page C1.48 for wiring duct color and size availability. AWG dimensions represent typical outer cable diameter in inches.

Panduct® Wiring Duct and Raceway – Material Specifications

Properties	Units	Test Method	Lead-Free PVC	Halogen-Free Modified PPO (NNC, NE)	Polypropylene (FL)
General					
Specific gravity	g/cc	ASTM D 792	1.45	1.09	0.95
Heat deflection temperature @264 psi	°F	ASTM D 648	156	215	117
Thermal expansion	10-5 in/in/°F	ASTM D 696	3.7	3.8	N/A
Thermal conductivity	(BTU-in/hr-ft²)°F	ASTM C 177	1.3	1.3	N/A
Burning Characteristics					
Flammability class	—	UL 94	V-0	V-0	V-2
Smoke density @ 4 minutes	—	ASTM E 662	538	513	N/A
Limited oxygen index (LOI)	—	ASTM D 2863	35	30	25
Peak heat release rate	kW/m2	ASTM E 1354	N/A	N/A	N/A
Hardness					
Durometer hardness	"D"	ASTM D 2240	78	N/A	N/A
Rockwell hardness	"R"	ASTM D 785	111	116	N/A
Tensile					
Yield Strength	psi	ASTM D 638	6,200	7,700	3,770
Modulus	psi	ASTM D 638	390,000	350,000	172,000
Flexural					
Yield Strength	psi	ASTM D 790	8,700	11,500	4,350
Modulus	psi	ASTM D 790	325,000	340,000	181,250
Impact strength					
Notched Izod (.125")					
23°C (73°F)	ft-lb/in	ASTM D 256	4.0	5.0	1.8
0°C (32°F)	ft-lb/in		1.6	2.0	N/A
Electrical Properties					
Power factor:					
60 Hz @30°C (86°F)	—	ASTM D 150	2.90	N/A	N/A
1 MHz @30°C (86°F)	—		4.00	N/A	N/A
Dielectric constant:					
60 Hz @30°C (86°F)	—	ASTM D 150	3.90	N/A	N/A
1 MHz @30°C (86°F)	—		3.30	N/A	N/A
Dielectric strength:					
Unconditioned	volts/mil	ASTM D 149	690	N/A	N/A
Conditioned	volts/mil		700	N/A	N/A

Note: To the best of our knowledge the above information is accurate.
Panduit assumes no liability for the accuracy or completeness of this information.

Rigid Polyvinyl Chloride (PVC)

A general purpose material for use in indoor applications. PVC has a UL 94 flammability rating of V-0 and is UL Recognized for continuous use temperatures up to 122°F (50°C). PVC is an economical wiring duct material.

Halogen-Free (Modified Polyphenylene Oxide)

A special purpose material for use in halogen-free or high temperature applications. Modified PPO has a UL 94 flammability rating of V-0 and is UL Recognized for continuous use temperatures up to 203°F (95°C), and is 20% lighter than PVC.

Polypropylene

A flexible material with a UL 94 flammability rating of V-2 and UL Recognized for continuous use temperatures up to 149°F (65°C).

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