

# In-Floor Wire Management System Products



Conventional Underfloor Duct Flush Activation Underfloor Duct Casino/Heavy Duty Underfloor Duct





## Multi-Compartment Underfloor Duct Saves Time and Money in Your In-Slab Wire Management System











The Hubbell Underfloor Duct system is an in-slab wire management product for delivering power, voice and data services for applications that include retail facilities, open office workstations, fitness centers, casinos, medical facilities and libraries. This system is uniquely designed with multiple compartments, allowing unlimited design options and cost savings in labor and materials from other single-compartment systems. Matched with our strong national distribution and complete technical/application support, the Hubbell Underfloor Duct System is the perfect solution for your underfloor wire management needs.

### Key Features and Benefits

- Eight duct profiles available to accommodate numerous in-slab wire management for power and communications.
- One-piece design multi-compartment duct, drastically reducing installation and material costs.
- Standard insert heights ranging from 1 to 3 inches (other heights available).
- Inclusive tile trim in square-top junction boxes, providing the installer the on-site option of using the trim or leaving it recessed.
- Combination duct coupler/support, reducing material and labor costs using the same part to join raceway sections together and to support/ level the duct.
- Activation inserts are pre-assembled to the duct, or the inserts can be purchased separately for field installation only where you need them.
- Heavy duty junction boxes are available for areas requiring highconcentrated floor loads.
- Meets or exceeds UL 884 specifications, assuring a fully UL Listed system from one manufacturer.

#### Flush Insert Duct Benefits

- Provides an aesthetic wire management solution for delivering power and communications services.
- Unique multi-gang flush inserts with removable voltage dividers provide the flexibility of installing multiple gangs of the same service at each insert location.
- Individual gangs can be activated as needed keeps costs down.
- Activation trims accept standard Hubbell floor box covers for power and data, available in aluminum and brass.

### **Ordering Information Note:**

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### Conventional, Flush and Blank Underfloor Duct Profiles



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- All duct comes in standard 10 ft. lengths
- 14 gauge, G90 galvanized steel
- 2 Inch IPS (Iron Pipe Size) round inserts are die-cast zinc
- Rectangular inserts are 14 gauge, G90 galvanized steel

#### Catalog Number System

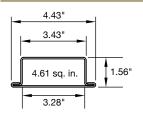
	SP202F -	. 2	- 12	
	Profile	Insert Height	Insert Spacing	
Round Insert Duct and Blank Duct	201 201W 202 SP202 202W 203 204	B = Blank 1 = 1" (201 only) 15 = 1 ½" 2 = 2" 25 = 1 ½" 3 = 3"*	12 = 12" 24 = 24" (consult factory for special preset spacing) n/a for Blank Duct	TI TR
Flush Insert Duct	201F 201WF 202F SP202F 202WF 203F	1 = 1" (201F only) 15 = 1 ½"** 2 = 2" 25 = 2 ½" 3 = 3"*	12 = 12" 24 = 24" (consult factory for special preset spacing)	

Note: \* consult factory for heights greater than 3"

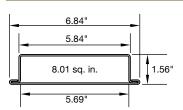
\*\* 1 ½" min. required for duplex receptacles

#### **Dimensions**

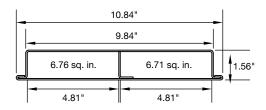
#### 201 & 201F



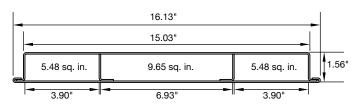
#### 201W & 201WF



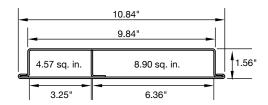
#### 202 & 202F



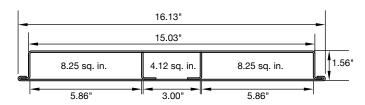
#### 203



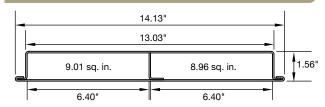
### SP202 & SP202F



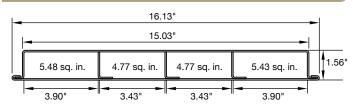
#### 203F



#### 202W & 202WF



#### 204





### **Technical Information and Wire Fill Capacity Chart**



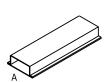
#### **Ordering Information Note:**

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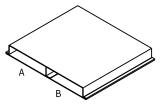
Duct Profile		201W 201WF	20 20	)2 2F	SP2		202 202	2W !WF		203			203F			20	04	
Channel Cross Sectional Area (sq. in.)	4.61	8.01	6.76	6.71	4.57	8.9	9.01	8.96	5.48	9.65	5.48	8.25	4.12	8.25	5.48	4.77	4.77	5.43
Channel	Α	Α	Α	В	А	В	Α	В	Α	В	С	Α	В	С	Α	В	С	D

Cable Type	Size	Approx. Diameter (in.)	Approx. Area (sq in.)																		
	14 AWG	0.111	0.0097	190	331	279	277	188	367	372	370	226	398	226	341	170	341	226	197	197	224
Power	12 AWG	0.130	0.0133	138	241	203	202	137	268	271	270	165	290	165	248	124	248	165	143	143	163
(THHN)	10 AWG	0.164	0.0211	87	151	128	127	86	168	170	169	103	182	103	156	78	156	103	90	90	102
	8 AWG	0.216	0.0366	50	87	73	73	49	97	98	97	59	105	59	90	44	90	59	52	52	59
Coax	RG-6/U	0.270	0.0573	32	55	47	46	31	62	62	62	38	67	38	57	28	57	38	33	33	37
Cables	RG-6/UQ	0.298	0.0697	26	45	38	38	26	51	51	51	31	55	31	47	23	47	31	27	27	31
	Cat 5e	0.210	0.0346	53	92	78	77	52	102	104	103	63	111	63	95	47	95	63	55	55	62
LAN Cables	Cat 6	0.250	0.0491	37	65	55	54	37	72	73	73	44	78	44	67	33	67	44	38	38	44
	Cat 6A	0.350	0.0962	19	33	28	27	18	37	37	37	22	40	22	34	17	34	22	19	19	22
Fiber Optic	2-6 Strand	0.190	0.0284	65	113	95	94	64	125	127	126	77	136	77	116	58	116	77	67	67	76
Distribution	8-12 Strand	0.230	0.0415	44	77	65	64	43	85	86	86	52	92	52	79	39	79	52	45	45	52
Cables	16-24 Strand	0.350	0.0962	19	33	28	27	18	37	37	37	22	40	22	34	17	34	22	19	19	22

Note: Cable quantities shown in this chart are based on a 40% wire fill capacity. Sizes of COAX, LAN and Fiber Optic cables are provided for example only. Consult cable manufacturer's specification for exact cable sizes.



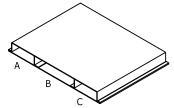
201 and 201F Series Single Compartment



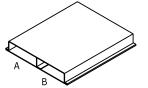
202W and 202WF Series Two Equal Compartments



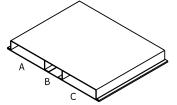
201W and 201WF Series Single Wide Compartment



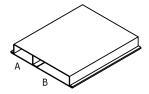
203 Series Three Compartments



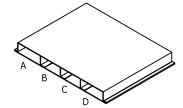
202 and 202F Series Two Equal Compartments



203F Series Three Compartments



SP202 and SP202F Series Modified Two Compartments



204 Series Four Compartments

### Applicable Codes & Standards

- TIA/EIA 569-C "Commercial Building Standard for Telecommunications Pathways and Spaces"
- NEC Article 390 "Underfloor Raceways"
- Ampacity derating rules of NEC Article 310.15 (B)(3) applies to conductors installed in Underfloor Raceways and Trench Duct
- UL Standard UL 884 "Underfloor Raceways and Fittings"
- UL Listed E75939 (Underfloor Raceway) & E304554 (Underfloor raceway Fittings)





### **Underfloor Duct Raceway Fittings**



### **Ordering Information Note:**

Floor Duct part numbers are for reference only. All Floor Duct orders are lot billed with a generic FD prefix project specific part numbers. Please contact your local Hubbell Territory Manager for all Hubbell Duct quotations.

Couples duct sections together and supports the duct. To be used every 5 feet of duct run.  201-DCS 202W-DCS 203-DCS 201W-ECS 201W-ECS 202W-ECS 202W-ECS 202W-ECS 201W-ECS 201	
Couples duct sections together and supports the duct. To be used every 5 feet of duct run.  201W-DCS 202W-DCS 203-DCS 201-ECS 201W-ECS 202W-ECS 203-ECS 203-ECS 201-VEL 201-VEL 201-VEL 201-VEL 201-VEL 202-VEL 202W-VEL 202-VEL 202-VEL 203-VEL	•
Supports and closes unused duct ends.  Supports and closes unused every and the closes unused duct ends.  Supports and closes unused every and the closes unused every and the closes unused duct ends.	•
Supports and closes unused duct ends.  Supports and closes unused duct ends.  Supports and closes 202-ECS 203-ECS 203-ECS 203-ECS 201W-VEL 201W-VEL 201W-VEL 201W-VEL 202-VEL 202W-VEL 202W-VEL 203-VEL 203-VEL 203-VEL	•
Supports and closes unused duct ends.  Supports and closes unused duct ends.  Supports and closes unused duct ends.  Supports and closes 202-ECS 203-ECS 203-ECS 203-ECS 203-ECS 201W-VEL 201W-VEL 201W-VEL 201W-VEL 202-VEL SP202-VEL 202W-VEL 202W-VEL 203-VEL 203-VEL 203-VEL 203-VEL	•
Supports and closes unused duct ends.  Supports and closes 202-ECS 202W-ECS 203-ECS 201W-VEL 201W-VEL 201W-VEL 201W-VEL 201W-VEL 202-VEL SP202-VEL SP202-VEL SP202-VEL 203-VEL 203-VEL 203-VEL 203-VEL 203-VEL	•
Supports and closes unused duct ends.  Supports and closes unused duct ends.  201W-ECS 202W-ECS 203-ECS 201-VEL 201W-VEL 201W-VEL 201W-VEL 202-VEL SP202-VEL SP202-VEL 203-VEL 203-VEL 203-VEL 203-VEL 203-VEL 203-VEL	•
Transitions from duct embedded in concrete floor to vertical duct or may be used for direct connection to a Universal Conduit Adapter (UCA). Coupler / Supports (DCS) are required to attach to duct and UCA.	•
Transitions from duct embedded in concrete floor to vertical duct or may be used for direct connection to a Universal Conduit Adapter (UCA). Coupler / Supports (DCS) are required to attach to duct and UCA.	•
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required to attach to duct and oca.	
required to attach to duct and oca.	
required to attach to duct and oca.	
204-VEL	•
201-UCA	
Transitions from duct to conduit.	
A blank 14 gauge steel plate is 202-UCA	
provided for field punched conduit openings. For use with up to 2 ½"  SP202-UCA  SP202-UCA	
trade size conduits. Consult factory	
for larger conduit accommodations. (may also be inserted directly into	
Transitions from duct to conduit. A blank 14 gauge steel plate is provided for field punched conduit openings. For use with up to 2 ½" trade size conduits. Consult factory for larger conduit accommodations. (may also be inserted directly into Junction Boxes)  201W-UCA 202-UCA SP202-UCA 202W-UCA 203F-UCA 203F-UCA 203F-UCA	
5 204-UCA	•
201-HB90	
Provides a horizontal 90 degree turn in floor duct. No hand access	
angles. SP202-HB90-NIR	
SP202-HB90-NIR SP202-HB90-NOR	
SP202-HB90's must be specified either with the Narrow Compartment 202W-HB90	
located at the inside radius (-NIR)	
or at the outside radius (-NOR) as	
SP202-HB90-NOR Snown in illustration.	•
201-DCC • • •	
Provides a means for connecting duct to an electrical cabinet  201W-DCC  202-DCC  202W-DCC	
Provides a means for connecting duct to an electrical cabinet  201W-DCC  202-DCC  202W-DCC	
203-DCC • •	•



### **Underfloor Duct Raceway Junction Boxes and Accessories**



Conventional Duct

Flush Insert Duct

02F

#### **Ordering Information Note:**

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Please contact your local Hubbell Territory

x = Preset Insert Height

1 = 1" (201 & 201F only)

15 = 1 ½" (min. required for duplex recept.)

**25** = 2 ½"

Manage	For providing square opening access at intersections of Feeder Duct and Distribution Duct  For providing round opening access at intersections of Feeder Duct and Distribution Duct		onsult factory for heights er than 3")	201F	201	202F	SP2(	202	203F	201	201	202	SP2(	202	203	204
			201-JB-x	•						•						
			201W-JB-x		•						•					
ox			202-JB-x			•						•				
Acc		For providing square opening access	SP202-JB-x				•						•			
are			202W-JB-x					•						•		
Jur			203-JB-x												•	
			203F-JB-x						•							
			204-JB-x													•
			201-JB-x-RCB*	•						•						
		For providing round opening access	201W-JB-x-RCB*		•						•					
sox			202-JB-x-RCB*			•						•				
nction E			SP202-JB-x-RCB*				•						•			
		or Stainless Steel Carpet Hing	202W-JB-x-RCB*					•						•		
July Bou		*Available in Stainless Steel. To order replace B with SS	203-JB-x-RCB*												•	
		Teplace B WILLT 33	203F-JB-x-RCB*						•							
			204-JB-x-RCB*													•
3ox uty		Same as above except cover plates are 3/8" thick and after-pour height	202-JB-x-HD-ADJ			•						•				
Junction Box Heavy Duty Round Access		adjustable. Carpet Rings and Closure Caps must be ordered separately.	SP202-JB-x-HD-ADJ				•						•			
Jur He Rou		Duct Entrance Cap- HDJBDC Corner Cap- HDJBCC	202W-JB-x-HD-ADJ					•						•		
ling Duty		1/8" thick Carpet Trim for Heavy Duty	RD-BRASS*-202-ADJ			•						•				
Carpet Ring for Heavy Duty Junction Boxes		Junction Boxes. *Available in Stainless Steel. To order	RD-BRASS*-SP202-ADJ				•						•			
for F June		replace BRASS with SS	RD-BRASS*-202W-ADJ					•						•		
ner			JB-CCA													

### **Hubbell Trench Duct is commonly used as a feeder** system for Underfloor Duct Raceway systems.

opening. All other adapters are

factory punched.

Provides attachment point for conduit

to each corner of all junction boxes.

JB-CCA is provided with 14 gauge

steel plate for field punched conduit



Factory assembled Trench/Underfloor duct intersect units allow unrestricted capacity by the elimination of tunnels. Side mounted Underfloor duct is available for shallow concrete pours. Consult factory for details.

• High capacity design supports large cables for single and multiple service requirements.

JB-CCA-1/2

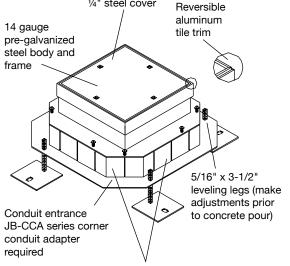
JB-CCA-3/4

JB-CCA-1-1/2

JB-CCA-1

JB-CCA-2

- · Open top design allows cables to be easily laid in duct.
- Cover plates are removable and adjust horizontally to any point along the duct.
- · Custom lengths of trench and fittings are available.
- Multiple compartments allow complete separation of services.
- Innovative duct support assembly allows for pre-pour leveling and acts as a splice for duct sections.



1/4" steel cover

Removable pry-out sections for corner conduit adapters and duct entrances. Additional blanking plates not required for unused junction box entrances. Blanking plates must be ordered separately for heavy duty junction boxes.



Junction Box Cor Conduit Adapte

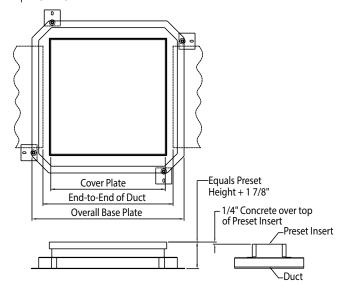


### **Underfloor Duct Junction Box Dimensions**



### **Ordering Information Note:**

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Junction Box Catalog Number	Cover Plate	End-To-End Of Duct	Overall Base Plate				
201-JB-x 201-JB-x-RCx	<b>6</b> <sup>5</sup> /16"	8"	10 ½"				
201W-JB-x 201W-JB-x-RCx							
202-JB-x 202-JB-x-RCx	<b>12</b> <sup>9</sup> /16"	14 ½"	<b>17</b> <sup>13</sup> /16"				
SP202-JB-x SP202-JB-x-RCx							
202W-JB-x 202W-JB-x-RCx							
203-JB-x 203-JB-x-RCx	17"	19 <sup>5</sup> /8"	<b>22</b> <sup>11</sup> / <sub>16</sub> "				
203F-JB-x 203F-JB-x-RCx		19 /8	22 /16				
204-JB-x 204-JB-x-RCx							
202-JB-x-HD-ADJ SP202-JB-x-HD-ADJ 202W-JB-x-HD-ADJ	Consult Factory For Dimensions						

### **Underfloor Duct Raceway Aftersets and Marker Caps**

	Flush Insert Duct			Description	Catalog Number
				1 1/2" Insert Height	DAIFA-1G-15
	~*	-	1-Gang	2" Insert Height	DAIFA-1G-2
	<u>(*)</u>			3" Insert Height	DAIFA-1G-3
t et			1 1/2" Insert Height	DAIFA-2G-15	
Afterset Insert		Provides means to add activation inserts in the field where needed prior to concrete pour. 14 gauge steel.	2" Insert Height	DAIFA-2G-2	
¥		whole heeded phor to controle pour. 14 gaage deed.	3" Insert Height	DAIFA-2G-3	
				1 1/2" Insert Height	DAIFA-3G-15
			2" Insert Height	DAIFA-3G-2	
				3" Insert Height	DAIFA-3G-3
ər	^i	Marker caps are used in place of standard insert caps in (a	a) each	Insert Marker Cap:	
Marker Cap	(1)	insert adjacent to junction box, (b) inserts on each side of		Zinc Screw	FA-DMC-Z
	· · ·	nent wall, and (c) the last insert in each run of duct.		Brass Screw	FA-DMC-B
Compartment Cover	•	Used for abandoning preset opening (one per gang). 18 gauge steel,	Blank Cover	FA-MC	
	Round Insert Duct			Description	Catalog Number
				1 " Insert Height	DAI-1
Afterset Insert		Provides means to add activation inserts in the field where	)	2 " Insert Height	DAI-2
Afte Ins		needed prior to or after concrete pour. Zinc die cast.		3 " Insert Height	DAI-3
	0			4 " Insert Height	DAI-4
er	P	Marker caps are used in place of standard insert caps in (a	a) each	Insert Marker Cap:	
Marker Cap		insert adjacent to junction box, (b) inserts on each side of	a perma-	Zinc Screw	DMC-Z
2		nent wall, and (c) the last insert in each run of duct.		Brass Screw	DMC-B
Reducing Bushing		Reduces threaded 2" IPS insert opening to either 3/4" NP NPT threaded opening for attachment of conduit fitting or		2" to 3/4"	RB-162
Redi		fitting chase nipple.		2" to 1"	RB-163

### **Underfloor Duct Raceway Activation Kits**





- Available in brass and brushed aluminum to meet aesthetic requirements
- · Available in one, two and three-gang options
- ScrubShield® Complies with UL514A scrub water requirements
- Flanged design may be used in tile, wood, carpet, terrazzo and bare concrete applications
- Uniform look when used in same areas where Hubbell floor boxes are installed.

	Flush Insert Underfloor Duct	Finish	1-Gang 6" x 4.85"	2-Gang 6" x 8.13"	3-Gang 6" x 11.34"	
	Flanges are provided	Brass	SB3083W-UFD	SB3084W-UFD	SB3085W-UFD	
Se	with adapter plates and	Aluminum	SA3083W-UFD	SA3084W-UFD	SA3085W-UFD	
Flanges	accessories required for installing to rectangular Underfloor Duct preset inserts and aftersets.		200			
			Duplex Flap	Duplex Screw	Style Line Decorator Opening	Combination 2½" x <sup>3</sup> /4"
		Brass	S3825	S3625	S3826	S2425
		Aluminum	SA3825	SA3625	SA3826	SA2425
ers	All Covers		3			(D)
Covers	4.15" x 2.99"		Combination 21/8" x 1"	2 <sup>1</sup> /8" Single Receptacle	2 <sup>3</sup> /8" Single Receptacle	Blank
		Brass	S2625	S2825	S3425	S3813
		Aluminum	SA2625	_	1-	SA3813
			0			* *

	Rour	Round Insert Underfloor Duct												
ng	brushe	st aluminum frame, ed aluminum housing,	1" Chase Nipple 34" Chase Nipple	SC3099A SC3098A		A								
Housing	chase	nipple, without plates	,, chao mppio											
S		Duplex Receptacle	Single Receptacle 1.39 in. (35.3 mm) opening	Style Line Decorator	Blank	Telephone bushing 1 in. I.D. and (2) <sup>3</sup> /8" KO for coax	Furniture Feed aluminum plate with <sup>3</sup> /4" trade size KO	Furniture Feed aluminum plate, blank						
Plates		SS309D	SS309S	SS309DS	SS309B	SS309T	SS309SF	SS309BF						
а.			303	, ,	5 5		. 0.							



www.hubbell-wiring.com

